Review of the Protected Areas System in Oceania

REVIEW OF THE PROTECTED AREAS SYSTEM IN OCEANIA

Prepared by the

INTERNATIONAL UNION FOR CONSERVATION OF NATURE
AND NATURAL RESOURCES

COMMISSION ON NATIONAL PARKS AND PROTECTED AREAS

in collaboration with the

UNITED NATIONS ENVIRONMENT PROGRAMME

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TABLE OF CONTENTS

Tables

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FOREWORD

The International Union for Conservation of Nature and Natural Resources (IUCN) has long been involved in conservation activities in Oceania, dating back at least to the Regional Symposium on Conservation of Nature -- Reefs and Lagoons organized jointly with the South Pacific Commission (SPC) in Noumea, New Caledonia in 1971. Since that time the countries and territories of the region have made considerable progress in adopting conservation legislation and in beginning to establish protected areas.

At the Third South Pacific National Parks and Reserves Conference held in Apia, Western Samoa in 1985, the governments of the region adopted an Action Strategy for Protected Areas in the South Pacific Region which recognized the need to create a regional system of protected areas covering the rich diversity of species and ecosystems found in Oceania. IUCN, in partnership with UNEP, offered to prepare this review of the protected areas system in Oceania to assist governments in planning and adopting priorities in their conservation efforts.

At the same time an agreement was signed between SPC and IUCN formalizing and strengthening their long-standing working relationship. With the publication of this review and the stationing of an IUCN/WWF advisor with the South Pacific Regional Environment Programme at SPC, the foundations have been laid for a significant expansion in protected area coverage and other types of conservation activity in Oceania.

We have been very pleased to collaborate with UNEP in the preparation of this review and look forward to reviewing progress at the 4th South Pacific Parks Conference in 1989.

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SUMMARY

The area covered by this review is that served by the South Pacific Commission with some minor additions. It is a region of a few larger and many tiny islands, with diverse and often unique species and ecosystems, scattered across the world's largest ocean. This review aims to provide a basis for developing a protected areas system in Oceania. It looks at the conservation needs of the region as a whole, both to identify areas where rapid conservation action is needed now and to provide a basis for long-term planning.

The review is conducted on an island by island basis, with the available information for each island evaluated and rated in order to compare islands and to establish priorities. A first list of over a thousand islands is reduced to a shorter list of over 200 islands with particular natural richness, endemic species or protected areas. For these islands, the many different factors that contribute to the conservation interest of an island, to the threats to that interest, and to the practicality of taking some protective action are evaluated. Each island is rated for conservation importance on the basis of ecosystem and species richness, endemism, threatened and endangered species, special features, natural vulnerability, natural conservation status, practicality of conservation action, and reliability of data. The islands are also rated for human impacts such as population density and growth, resource use and economic development which can threaten their natural environments. Although such ratings are helpful in comparisons and rankings between islands, they must be used with caution because of the uncertainties involved in their calculation in a region where data are so uneven and imperfect.

While such a review can indicate international or regional priorities for protected areas, it cannot consider factors that are important at the national level, such as resource management, education, recreation, tourism, research and cultural preservation. These should be included by each country in their national conservation strategy which would be complementary to the present review.

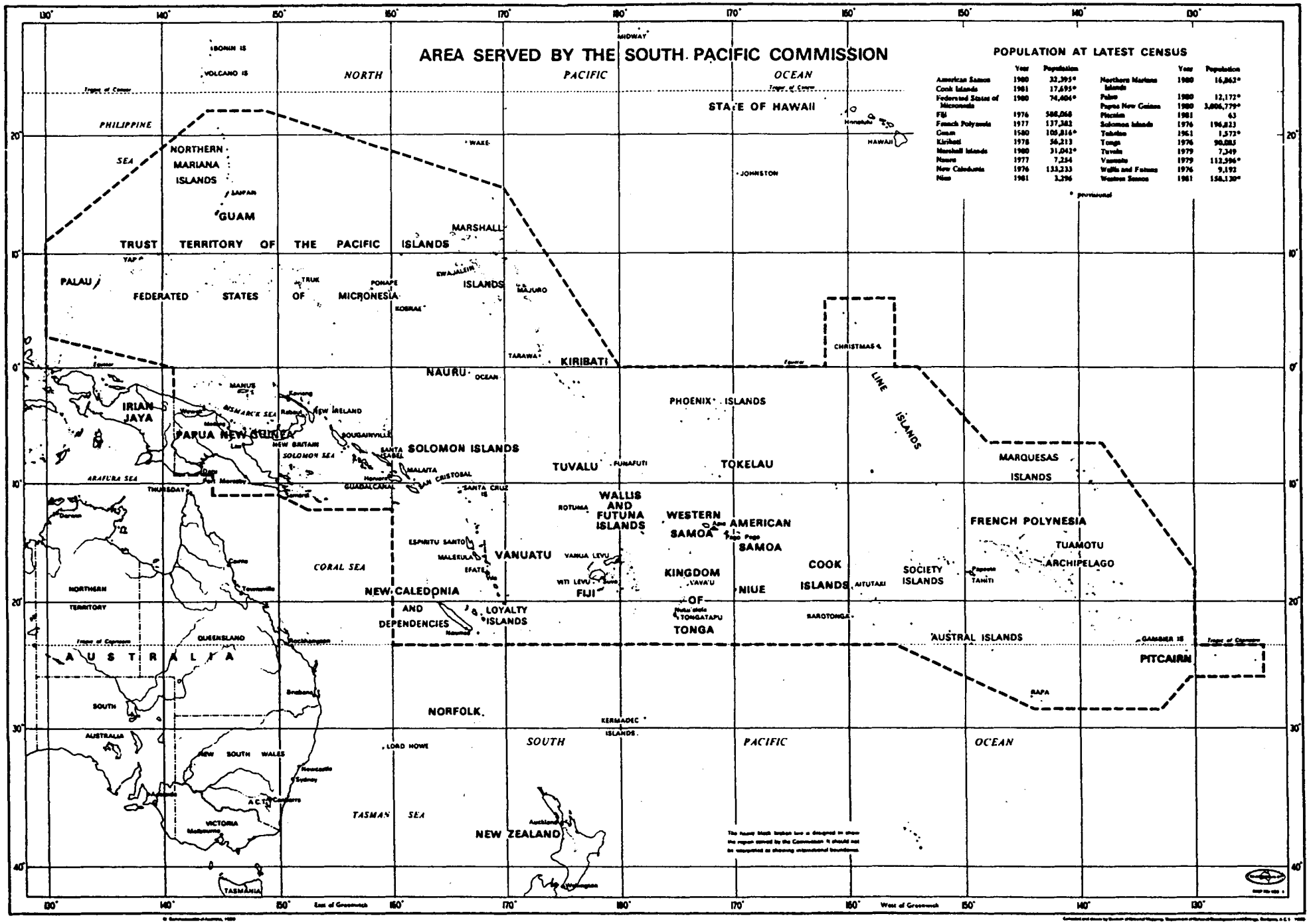
The conservation interest and status of knowledge of the major plant and animal groups are summarized, as well as the conservation approaches suitable for each major type of ecosystem.

The islands are then tabulated and ranked by country, by island type, and for the region as a whole. Tables also provide rankings by altitude, species endemism, human impact, and islands most at risk. Protected area coverage is listed by biogeographic province, by amount of area protected, and by percentage of the island protected as well as by country.

The protected area situation in each country is reviewed on the basis of the information collected. Suggestions for priority islands and habitats are given where appropriate, with a total of 77 islands identified for early action.

The Oceania Island List in the Annex summarizes available information for most of the islands in the region.

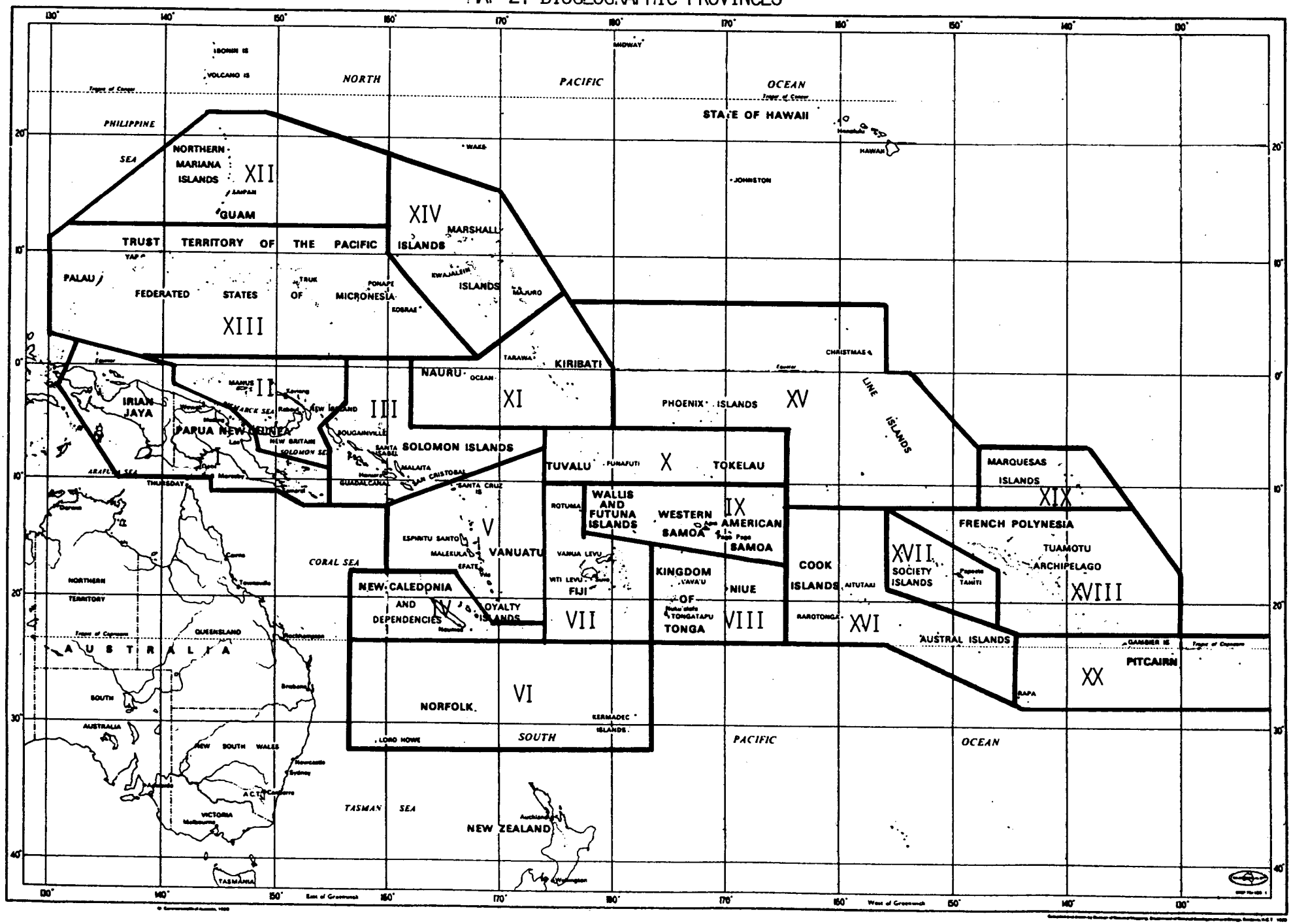
MAP 1



	Year	Population		Year	Population
American Samoa	1980	32,395*	Northern Mariana Islands	1980	16,862*
Cook Islands	1981	17,695*	Palau	1980	12,172*
Federated States of Micronesia	1980	74,404*	Papua New Guinea	1980	3,006,779*
Fiji	1976	588,068	Pitcairn	1981	63
French Polynesia	1977	137,382	Solomon Islands	1976	196,823
Guam	1980	105,816*	Tokelau	1961	1,573*
Kiribati	1978	56,213	Tonga	1976	90,085
Marshall Islands	1980	31,042*	Tuvalu	1979	7,349
Nauru	1977	7,254	Vanuatu	1979	112,596*
New Caledonia	1976	133,233	Wallis and Futuna	1976	9,192
Niue	1981	3,296	Western Samoa	1981	158,130*

* provisional

MAP 2: BIOGEOGRAPHIC PROVINCES



REVIEW OF THE PROTECTED AREAS SYSTEM IN OCEANIA

INTRODUCTION

Definition of the region

The region referred to as Oceania is centred on the islands of the tropical Pacific Ocean. However its boundaries vary depending on the criteria used to define it. Oceania can be defined anthropologically as the region peopled by the Micronesians, Melanesians and Polynesians. Geographically it may refer to the islands scattered across the tropical Pacific far from continental margins. Politically Oceania may be another term for what is usually called the South Pacific (even though including the parts of Micronesia north of the equator) and which corresponds to the area served by the South Pacific Commission (SPC) as shown in Map 1.

For the purposes of this review, Oceania is defined as the area served by the SPC and its South Pacific Regional Environment Programme (SPREP) with some minor additions. The reasons for this choice follow.

Hawaii and the other nearby islands belonging to the United States in the north Pacific (Wake, Johnston, Midway) would seem logically to be part of Oceania, but they are so much more developed and better known scientifically, and have so much greater access to resources for conservation action, that their inclusion in this review would throw it out of balance without adding to its usefulness.

Some Japanese islands apporach the region on the north, but their location north of the Tropic of Cancer justifies their exclusion.

The island of New Guinea is a special problem. It is unreasonable scientifically to split an island down the middle, but politically the western half, Irian Jaya, is best considered with the rest of Indonesia and is thus excluded here. While the eastern half is nearly an order of magnitude bigger than the rest of Oceania, the other islands of Papua New Guinea fit very well into the region, and it would not be logical to treat only part of the country. In addition Papua New Guinea's closest political ties are with the region through organizations such as SPC and the South Pacific Forum.

The sub-tropical islands and reefs at the southern fringe of the region, including Norfolk, Lord Howe and the Kermadecs, are not (or no longer in the case of Norfolk) part of the SPC area, but they are included since they share some common characteristics with nearby islands or with other sub-tropical islands such as Rapa and Pitcairn which are within the region.

Similarly, Easter Island on the east has been included on the basis of its Polynesian and biogeographic affinities even though it is politically apart. The other islands of the eastern Pacific (Galapagos, Juan Fernandez, etc.) have sometimes been included in Oceania, but they are biogeographically and politically much closer to the neo-tropics of South and Central America and are thus excluded here.

Special characteristics of Oceania

The region covered by this review is distinctive in a world dominated by continental areas. Its size and the great variety of islands scattered over enormous distances set it apart as a place where the various mechanisms of island biogeography and evolution have been able to work particularly clearly free of nearby continental influences. Each island is a kind of "micro-unit" of evolution, and has developed over centuries and millenia in its own unique way depending on its size, location and degree of isolation. The total land area of Oceania is very small, but the region has the world's highest proportions of endangered species (Dahl, 1984a, b), and probably endemic species, per unit of land area or per inhabitant.

The Pacific is also the world's great ocean and an important centre of marine evolution. While marine biogeography in the region is still in its infancy, it is also of great scientific interest. For example, coral reefs are an ancient and highly productive ecosystem that survived in the Pacific even during the ice ages. There are gradients of diminishing coral reef species from west to east and from the equator towards more temperate waters. In the eastern parts of Oceania, coral reef species diversity seems to decrease to the point that niches become available and species endemism increases. Each island coral reef may thus be different in some ways from the others across the region.

Reviewing the protected areas system

As development proceeds around the world, undisturbed natural environments continue to shrink, threatening the survival of much of the world's natural heritage of plants, animals and the ecosystems in which they live. Conserving viable samples of these natural systems, especially through protected areas such as national parks and reserves, has become urgent as an essential foundation for sound development in the future. However the human and material resources available for conservation action are very limited, and it is necessary to develop short- and long-term strategies and to define priorities, so that as much of this natural heritage as possible can be saved for future generations.

This review aims to provide a framework for the development of a protected areas system in Oceania. It looks at the conservation needs of the region as a whole, both to identify areas where rapid conservation action is needed now before it is too late, and to provide a basis for long-term planning. It should be seen as a compliment to national conservation strategies and plans, which alone can treat specific areas and islands in the necessary detail.

Since many species and types of ecosystems are shared among countries, only a regional review can show where conservation can be achieved most easily and effectively. Such a review can also identify areas whose conservation interest may not be sufficiently appreciated nationally.

The approach used in this review has necessarily been different from that used in the protected area system reviews of other regions. Where continents may have broad vegetation zones and vast land areas from which to select samples for protection, an island region like Oceania is made up of many discrete units, each with its own particularities. The fauna, flora and

natural systems of an island are determined by interactions between its origins and structure, its biogeographic location and proximity to other land areas, and its size, climate, vulnerability to natural disasters, and other factors. Each island thus represents a different set of variations on the island theme, and conservation requirements for land and nearshore environments can only be considered on an island basis.

Since open ocean protected areas do not yet have wide international acceptance, they are not considered in this review.

Methods

This review is based on an island by island compilation of data, since choices concerning the location of protected areas will have to be made in the first instance on the basis of individual islands. A first listing was made of all islands (and some reefs) of sufficient size and/or isolation to be potentially of some distinct conservation interest (see the Oceania Island List in the Annex). This list excludes islands that are so small and so close to other land areas that they can best be considered as mere extensions of that land. Based on this list, a second list was then prepared of 226 islands known to have features such as endemic species or protected areas which give them some conservation importance. The islands in the second list were then rated and sorted according to various factors as explained the Appendix. However, it should not be assumed that these are the only islands with conservation interest. Many islands not included on the shorter list may still have protected area potential, either for some special feature such as a seabird rookery, or as a typical and readily-preserved example of a more widespread ecosystem type. Islands may also not have been selected only because too little information about them was available to judge their importance. Any national conservation strategy should thus review all islands in the country, and not just those selected here.

The information used in this review has been drawn in part from several compilations and sources. The names of islands follow the list of islands prepared by the Pacific Scientific Information Center (1983) based on the most recent official usage in each country. There have been many recent changes in island names in some countries, often replacing earlier colonial names or spellings by ones reflecting local usage. Old names or variant spellings are shown in parentheses. Some smaller islands in archipelagos have been deleted to save space. The island descriptions and other geographic information have come in part from the Pacific Islands Checklist (Douglas, 1969) with extensive updating where more recent or complete information was available. This list thus largely replaces and expands on the checklist except for some references to the older scientific literature.

Four other sources should be seen as complimentary to this review, and should be referred to for further details on their particular topics. The Regional Ecosystems Survey of the Southe Pacific Area (Dahl, 1980) gives more information on the biomes and habitats in each biogeographic province (Map 2). It also includes lists of proposed and recommended protected areas or area types that have not been repeated here since most of those recommendations are still valid. The IUCN Directory of Protected Areas in Oceania (IUCN CMC, 1985a) provides more detail on most of the existing protected aeras which are therefore only listed here. It also gives information on conservation legislation ans protected areas administration for each country. The IUCN Directory of Coral Reefs of International Importance (IUCN CMC, 1985b)

gives more information on reefs generally and also references to the scientific literature describing reefs in the region. The indication "CRD" in the island list shows where specific reef descriptions are available in the IUCN directory. The IUCN and ICBP Red Data Books on threatened and endangered species provide detailed reports on many such species in the region. Species treated in one of these volumes are indicated by "RDB" in the list.

It has not been practical to cite the origins of all the information in the Oceania Island List. Complete references would have made the list unwieldy, and often the same (or contradictory) information was obtained from several sources. The principal sources are listed under References. More details on the island list are included in the introduction to the list in the Annex.

In order to permit comparisons and rankings between islands in Oceania for their conservation interest, as many pertinent factors as possible have been converted into simple numerical scales or ratings. Ratings have been calculated or estimated for ecosystem richness, species richness, endemism, economic pressure, human threat, natural vulnerability, natural conservation status, practicality of conservation action, and reliability of data. From these ratings and other data, two broad combined ratings have been calculated for each island listed in the tables. The Human Impact (HI) rating measures the threat presented to the natural environment by population density and growth, resource use and economic development. The Conservation Importance (CI) rating integrates information on ecosystem and species richness, endemism, threatened and endangered species, special features, natural vulnerability, natural conservation status, practicality of conservation action and reliability of data into a overall measure of the importance of the island for nature conservation. The fact that these ratings are numbers should not hide the fact that many involve an element of subjective judgement; they are used because they make those subjective elements explicit and thus open to review and modification. The detailed descriptions of these ratings and the methods used to calculate them are described in the Appendix.

While such numerical ratings can be useful in identifying islands of particular conservation significance and priority areas for action, care should be taken not to place too much weight on small differences in ratings, particularly since the data on which they are based are in many cases approximate or imperfect. Any such use of numbers tends to give an impression of accuracy which is often not justified, and they should be seen more as orders of magnitude than as precise and definitive measures. The problems with the data are discussed in detail in the introduction to the Oceania Island List in the Annex. The CI rating is also structured to favour greater ecological complexity, species diversity, endemism and larger numbers of threatened species. As such it undervalues smaller or simpler islands which may have great conservation interest for their simplicity and pristine state.

The CI rating is also sensitive to the amount of information available on an island. Better-known islands tend to rank higher because more species groups have been studied and more endemic or threatened species have been found. This is logical in that it favours action for known conservation problems over those that may just be suspected, but it hides the fact that many islands probably have serious problems that have not yet been identified. This dilemma cannot be avoided, but it is important to be aware of it.

While marine conservation is an important priority in the region, the coastal marine information available is inadequate for an island by island evaluation. Although the ratings used here are based solely on terrestrial data, some of the factors in the ratings also apply to the marine environment and similar biogeographic and evolutionary forces may be operating there. Thus in the absence of better information on coastal habitats, the ratings together with the marine data in the island list could be used with caution in suggesting priorities for marine conservation action. However reefs without land areas which have thus not been rated should not be overlooked. Since land and marine areas are often interrelated, any protected areas along coastlines should include both land and marine areas whenever possible.

Factors not considered in this regional synthesis

This regional approach to identifying islands in Oceania where conservation is most important or most needed does not take into account factors that may be of great national importance even if they carry less weight at the regional or international level. Some of these factors follow:

a) Protected areas and other conservation actions may be important in managing the natural resources of an island or country. A reserve may protect an important water supply catchment, or may maintain a breeding population of a bird hunted locally for food even if the bird is not a threatened species. A marine reserve may cushion a reef area from the damaging effects of overfishing.

b) Many other values of protected areas can be developed as part of a national conservation strategy or plan. A country's first park may not be in the area of greatest natural interest, but located where it can be accessible and demonstrate to the local people the importance of parks. Protected areas can be important for education, tourism development, recreation, and scientific research. None of these values enter into a regional survey, but they are extremely important at the national level.

c) Protected areas can be significant in maintaining traditional cultures and lifestyles. Many island cultures had sacred or taboo areas which often served a nature conservation function in addition to their spiritual significance. The modern use of protective measures can reinforce traditional techniques of resource management which have proven their worth over generations. Important cultural or historic sites, and even traditional collecting and hunting grounds can be safeguarded in appropriate types of protected areas where traditional uses can continue. Such culturally important sites should be inventoried at the national level.

d) In the selection of protected areas, the ideal of conservation importance may have to be subordinated to more practical questions. Land tenure or land ownership, public interest or opposition, political support, and legislative provisions are all of major importance. A protected area that is less than ideal but effective may achieve more for conservation than the perfect area that is never created or that cannot be enforced. While a rating for practicality of conservation action is included in calculating conservation importance, it may need to be given more weighting in particular circumstances.

RESULTS

Species dispersal in Oceania

Each group of plants and animals is spread or dispersed in different ways. Some are better adapted than others to crossing ocean barriers between islands. Some may be carried by the wind, others transported by migrating animals, and still others drift on the ocean surface, perhaps transported by a floating log. Not all these means of transport come from the same continental sources, go in the same directions or cover the same distances. The result in terms of biogeography in Oceania is that different groups of organisms are distributed in very different ways. Depending on what they found on an island, they may or may not have evolved into new and different forms, or radiated into a variety of available niches. The conservation interest of an island or island group may thus be very different depending on which kind of organisms are being considered.

Plants have reached the islands of Oceania by different routes. A few islands of continental origin such as New Caledonia have preserved remnants of the ancient flora inherited before they broke off from the main continental mass and preserved since in isolation. Others such as New Guinea may have been connected by land bridges over which plants could spread, or have been near enough to continents or other islands for many species to be transported over the short water gaps separating them. Some seeds may be carried in the stomachs of birds, others blown by the wind, and still others adapted for floating on the water. As a result each island may have a mixture of different plant types. Older and more mountainous islands may have old, long-established and sometimes unusual forms. Low coral islands and coastal areas generally have an atoll/beach forest or scrub of widespread water-dispersed species. Very remote high or raised coral islands may have been colonized sufficiently rarely to have evolved unique local forms.

Insects have not generally been well studied in Oceania. The butterflies are the only group for which a reasonable quantity of regional data are available. Since butterflies are both fragile and wind borne, their chance colonization of different islands has created some interesting distribution patterns, although they are heavily concentrated in the western Pacific where distances between islands are not so great.

Among the other invertebrates, the **land snails** have attracted particular attention because of the large numbers of endemic forms on certain Pacific islands. It is often the more remote islands such as some in French Polynesia that have seen the most explosive development of new land snail species.

While the **amphibians** are largely restricted to the larger western Pacific islands, certain groups of **reptiles** such as the geckos and skinks have reached islands across most of the region. In some places like New Caledonia they too have undergone an amazing adaptive radiation. There are no unique species of sea turtles in Oceania, but nesting areas for species considered threatened on a world basis are widespread in the region as indicated in the island list. As the numbers of turtles continue to decline with overhunting, the protection of all nesting sites becomes increasingly important.

The **birds** are the best known species group all across Oceania. Papua New Guinea is of course unique with its large number of species of both Asian and Australian origins. In much of the rest of Oceania, bird colonizations have been sufficiently rare for many different forms to evolve, often restricted to particular islands. Thus while the total number of bird species on an island may be small, the species present may be of considerable conservation interest. A few islands also have unusual bird species of ancient origin and uncertain relationships. In addition to the land birds, migrating shore birds frequently stop in the region, and many islands harbour populations of seabirds which, though wide ranging, depend on their remote and vulnerable island rookeries for reproduction and thus survival. Many islands with seabird rookeries are indicated in the island list in the Annex. Since seabirds are a regional resource ranging over many countries, it may be appropriate to plan for a regional network of reserves in these critical nesting habitats.

Apart from Papua New Guinea with its Australian connections, most **mammals** did not successfully cross the seas without the help of man and are thus of little conservation interest in the region. In fact, it was often the absence of predatory or grazing mammals that permitted many unique island forms to evolve as they did. Apart from the widespread Polynesian rat which may have travelled with early man, the only mammals that reached many islands are marine mammals such as the dugong in the western Pacific, and fruit bats or flying foxes which spread widely and in a few cases evolved local species or varieties.

The marine biogeography of the Pacific is even less well known than terrestrial biogeography, although coastal and shallow water marine species often face the same kinds of barriers to inter-island migration as land species. In general the greatest diversity of species is centred in the Indo-malayian region of the western Pacific, with the numbers of species decreasing eastward. However the poorer communities of the eastern Pacific islands also seem to show increased species endemism, at least in some groups, as the disappearence of some common species has allowed new forms to evolve. The islands in the somewhat cooler waters north and south of the equator also show significant admixtures of more temperate elements. Thus while there may be more of a biological continuum across Oceania in the marine environment than on land, the differences between island groups are such that each part of the region presents some conservation interest.

Ecosystem conservation strategies

One of the major goals of any conservation strategy is to preserve the diversity of species, ecosystems and genetic resources that has evolved on the planet. Since species can seldom be preserved without the ecosystems of which they are a part, most protected areas are created to preserve what are hoped to be viable samples of ecosystems. Since each type of ecosystem has its own characteristics, common species or features, and particular distribution among the islands of Oceania, it is worthwhile considering briefly the appropriate regional conservation strategy for each major ecosystem or biome type recognized in the Regional Ecosystems Survey (Dahl, 1980).

Lowland rain forests were originally one of the principal vegetation types on high islands. However, they have been the most disturbed by human activity since they are the first to be logged or cleared for agriculture and other development. They tend to be richer and more distinctive in the western Pacific, with different dominant species from province to province. In central

Oceania, widespread species tend to be the dominant elements. Because of the development pressures on these forests, representative examples of each type should be identified and protected relatively quickly in Papua New Guinea, the Solomon Islands and Vanuatu so that development can be directed elsewhere. In the rest of Oceania, lowland rain forests generally survive only as small fragments or in remote islands or areas. Wherever it is still possible, these remaining samples should be included in protected areas.

Limestone forests are a distinctive type of lowland rain forest with different species growing on raised coral substrates. Many of these forests have also been cleared for development, and the remaining undisturbed examples should be preserved whenever possible. Even many remote raised coral islands have been mined for phosphates, destroying their forest cover. Henderson and Rennell are isolated raised coral islands of particular conservation interest, and there are some smaller undisturbed islands in Belau and Fiji.

Montane and sub-montane rain forests at higher elevations are generally of considerable conservation interest wherever they occur, and may be the habitat for many endemic species. While they may be logged or cleared for agriculture on a few islands, the greatest threats on others may come from uncontrolled burning and grazing by feral animals. Their steep topography often provides some natural protection from human intrusion, and their lesser value for development and frequent importance for water catchment and erosion control may make it easier to include them in protected areas.

Cloud forest is a distinctive forest type of constantly wet mountain tops. It frequently contains rare and endemic species and should be protected wherever it occurs.

Special forest types such as **riverine forest, swamp and bog forest, bamboo forest** and **seasonal or semi-deciduous forest** may occur in specific localized areas. Samples of such types should be protected as part of any comprehensive conservation plan. Riverine and swamp forests may play an important part in erosion prevention and flood control, and may warrant protection for that reason.

Atoll/beach strand forest was common in Oceania on atolls, low coral islands and behind beaches on high islands, but it has frequently been cleared for coconut plantations and other development. While generally composed of widespread species of little conservation interest, it may be an important habitat for atoll birds and tree-nesting seabirds, and should be protected in such cases. It can also be important in protecting coastal areas from storm damage.

Mangrove forests are a common coastal ecosystem in the western Pacific but become increasingly scarce eastward and are absent in the eastern part of Oceania except where they have been introduced. The number of mangrove species also decreases from west to east. The principal conservation interest of mangroves lies in their importance as critical breeding habitats and food sources for many important marine species in coastal waters. Mangroves protect coastlines from erosion, supply firewood, and support significant subsistence fisheries. Since coastal land is scarce on islands, mangrove swamps are frequently filled in or otherwise developed. Where mangroves are scarce, they should be given some form of protection from overexploitation, pollution and development. Where large areas of mangrove

forests occur, some proportion can probably be developed, but sufficient areas should be protected to maintain their important role in coastal ecosystems and fisheries.

Various forms of **scrub** and other low woody vegetation are widespread in Oceania. They are frequently of secondary origin and little conservation interest, although on some islands they may provide habitat for birds and other species of importance. A special case is the scrub or "maquis" on ultrabasic or serpentine soils in New Caledonia composed almost entirely of endemic species, including many primitive species of great conservation importance. Wherever in the region such distinctive soil types occur, their floras should receive special conservation attention.

Grasslands and **savannas** with various proportions of trees cover large areas in Oceania, but in almost all cases they are secondary vegetation types resulting from frequent burning or grazing by feral or domestic animals. They consist largely of introduced grasses and are usually of little conservation interest.

Freshwater marshes, swamps and **bogs** occur frequently in localized areas, but many have been modified for taro cultivation. Any remaining natural marshes should be examined for their conservation importance.

Freshwater habitats such as **streams, rivers** and **lakes** are known in some areas to have unusual or endemic species, but in general they have been little studied in Oceania and their significance is thus unknown. Since they may be important for water supplies, and have scenic and recreational value, they should be included in protected areas whenever possible.

Desert-like areas such as sand dunes are very rare in Oceania and are thus features worth protecting. Barren areas resulting from volcanic activity are more frequent, and are often of scientific interest for studies of early colonization, as well as being potential tourist sites. They seldom have development potential and should thus be easy to include in protected areas.

Caves occur on many islands with raised limestone or in recent volcanic areas with lava tubes. They may be important for bats and other cave fauna, and in a few cases may harbour endemic species.

The shallow coastal environments are less well known than terrestrial island areas, but they are as subject to development and disturbance as the adjacent land.

Seagrass beds, like mangroves, become less frequent and poorer in species from west to east across Oceania. They are important feeding areas for fish and endangered species such as dugongs and sea turtles, and should be included in conservation planning.

Coral reefs are one of the most significant ecosystem types in the region, and are even responsible for building many of the islands of Oceania. They occur in a variety of forms including windward and leeward atoll reefs, barrier reefs, fringing reefs, and lagoon or patch reefs. They may also be built predominantly by corals or by coralline algae. They may stop growing if they have been submerged too quickly, or if the reef-building animals and plants have been replaced by other forms. Since coral reef species diversity and composition change across the region, appropriate examples of each reef

type should be protected in each biogeographic province. Spectacular or unusual reef features should also be included in protected areas, particularly if they are at risk from development, overfishing or heavy tourist use.

Beaches and **sandy or sedimentary bottoms** may also have a distinctive fauna and flora, and examples of these should be included in protected areas where they are common even though they may be less "spectacular" than many other ecosystems.

Rocky shorelines are much less common in Oceania than in other parts of the world, but where they occur they may be ecologically distinctive and support species not found elsewhere on the island. If they are at risk they may require some form of protection.

Oceania has a great variety of types of **lagoons** ranging from open lagoons little different from the surrounding ocean to completely closed lagoons with fresh or highly saline water, or to coastal lagoons and estuaries with heavy terrestrial influences. These conditions often result in unique combinations of species and ecosystems, sometimes with a small number of species occurring in great abundance. Some of the more extreme lagoon types may deserve special conservation action, and some examples of the more typical types should also be incorporated into comprehensive conservation plans. The few **marine lakes** in the region are unique and deserve protected area status.

Conservation significance of individual islands

The different types of information collected for this review have been used to give numerical ratings for conservation importance and human impact to the 226 most significant islands listed in the tables. While care should be taken not to put too much weight on such single ratings for various reasons explained below and elsewhere in this review, they can help to identify islands deserving priority attention for conservation action. The information can also be sorted according to different criteria to show, for instance, which islands are most important in each part of Oceania, or which are important for some particular characteristic. The following sections and the accompanying tables give the conclusions of some of these analyses.

The ratings in this review are based on presently available knowledge, and should this be considered as preliminary and very approximative. Changes in the values and relative positions of different islands can be expected as more information becomes available. Well-known islands tend to score higher that those that have not been fully studied, and information on such groups as insects, when available, can make a considerable difference in the ratings. It has unfortunately not been possible to remove entirely the bias introduced by the variations in the quantity and quality of the information available for each island.

While the analyses of conservation importance have been kept separate from the consideration of existing protected areas, it will be evident that islands with protected areas frequently score higher than those that have no protection. This in part reflects the actual conservation interest of the islands which led to the creation of the parks and reserves, but it is also in part an artifact due to the fact that such islands are better studied and more widely known because of their protected areas.

There is some problem in comparing single isolated islands with those clustered in archipelagos. Single island endemism may be higher for isolated islands, while islands in a group may share endemics with other nearby islands. This has been partly adjusted for in the ratings by including both island endemics and group endemics.

It cannot be emphasized too strongly that the comparison of islands across the region should not undermine the conservation efforts of any country based on any supposed lesser conservation value. Regional conservation interest is only one of many reasons for creating protected areas, and the wise management of whatever natural resources a country possesses can be just as important as regional or international significance.

The rankings of the islands in each country for **conservation importance (CI)** are shown in Table 1. Table 2 gives the CI rankings for the region as a whole, together with the values on which they are based. The abbreviations, definitions and methods of calculation are explained in the Appendix. New Caledonia comes out with the highest CI ranking (80) in the region, both because of its unique flora and fauna, and because of the high number of threatened species that have been identified. Lord Howe Island is in second place, although much smaller in size; its great isolation produced many endemic species, most of which are threatened. New Guinea is obviously the richest island in Oceania biologically, but it is only in third place in this rating of conservation importance because much of the island is still little disturbed and not many of its thousands of species are presently known to be in danger. Norfolk Island, in fourth place, is in a similar situation to Lord Howe. Viti Levu and New Britain, fifth and sixth, are both large and biologically diverse islands, and so on. The reasons for the position of each island in the ranking will usually be evident from the data columns and the descriptive information in the island list (see Annex). The column on the far right gives a numerical ranking for protected area coverage, so that this can be compared with conservation importance.

Each **type of island** is unique in its structure and the kinds of biological communities it can support. Table 3 therefore shows the rankings by conservation interest (CI) for each type of island, illustrating the best or most interesting examples of each type. Where islands are composites of several types, only the predominant type has been shown in this table. Among the few continental islands in the region (Table 3A), New Caledonia, New Guinea and Viti Levu (Fiji) obviously stand out. The volcanic islands (Table 3B) are both numerous (half the total list) and diverse in their size, age and structure. It is interesting that the top-ranking islands are from many different parts of the region, showing that no one part of Oceania has a monopoly on conservation importance. The atolls (Table 3C) are much simpler islands terrestrially, and this is reflected in their generally lower CI scores. Kiritimati and Ninigo Islands share the highest score, the former for its seabird populations, the latter because of an unusually high number of endemic land bird forms for an atoll. Among the low islands (Table 3D), the Talele Islands come out highest because they are already protected and share in the high group endemism of the Bismark Archipelago. The next five are all remote central Pacific islands. The raised coral islands (Table 3E) have their own special conservation interest, being generally much richer than atolls or low coral islands. Guam scores highest due to its large number of endangered species. Rennell and Henderson, in second and third places, are both relatively isolated, with high percentages of species endemism.

The mountain tops of high islands are particularly isolated environments which frequently harbour unique communities and species. Table 4 ranks by altitude the 50 islands (for which the altitude was known) reaching 700 metres or more.

Species endemism is one of the most important characteristics that give the islands of Oceania their conservation interest. While the data for endemic species are still variable and incomplete, the available information is summarized in Table 5, which ranks the islands by the number of endemic species. New Guinea and New Caledonia are obviously in first and second place. Lord Howe is surprisingly high for its size, probably because it is much better known in poorly-studied groups such as insects and other invertebrates. Since the birds are the best-known group all across the region, Table 6 ranks the islands by the number of single island endemic bird species or subspecies. While New Guinea and New Caledonia are highest as expected, Rennell is in third place, followed by New Britain, San Cristobal, Sunday (Kermadecs) and Futuna.

In determining priorities for conservation action, it is necessary not only to know what the conservation interest of an island is, but also how much that natural value is at risk. The **human impact (HI)** rating is intended to show the level of present and future risk to an island from its human population and their activities. Table 7 ranks the islands according to the amount of human impact. Those with a HI of 0 are generally uninhabited, or with a small or diminishing population. At the other extreme are islands with very high population densities and growth rates, where conservation action will be difficult given the high pressure on natural resources. This rating does not measure past human impact from activities which have now ceased, such as mining, warfare or previous habitation, so it does not show total disturbance, but only present risk.

Combining high values for human impact (5 or greater) and high values for conservation interest (10 or greater) produces a list of **islands most at risk** (Table 8). These are islands on which conservation action is particularly urgent because of the pressures of the human population.

Present protected areas in Oceania

Having reviewed the conservation interest of Oceania from different perspectives, it is necessary to see how much is already included in some kind of protected area. 101 protected areas are recorded for 50 islands on the list, covering a total land area of 7,821 square kilometres. However, this is less than a quarter of the islands with conservation interest, and only a small fraction of the surface area and ecosystems of those islands. At best less than 20% of the region's ecosystems are included in protected areas (Dahl, 1985b). The great majority of species and ecosystems still lack adequate protection.

The present protected area situation has been analyzed further using the data in the island list. Table 9 lists islands with protected areas by biogeographic province (Dahl, 1980 and Map 2). Three provinces have no protected areas: X: Tuvalu-Tokelau; XI: Kiribati-Nauru; and XVI: Cook-Austral Islands. The Society Islands (XVII) have only a marine reserve, and several others have only very small reserves. Only provinces VI: Norfolk-Lord Howe-Kermadec and XV: Phoenix-Line-Northern Cook Islands can be considered well covered by protected areas.

The situation is similar when the amount of area protected is considered (Table 10). Of the fifty islands with protected areas, only nineteen have parks and reserves totalling more than 10 square kilometers (1,000 hectares), and only five more than 100 square kilometres. Only Papua New Guinea has more than 5,000 square kilometres of protected areas, and this is still barely 1 percent of the land area of the island.

Looked at in terms of the percentage of the island that is protected (Table 11), half the islands with protected areas (25) are small islands that are entirely protected, many of them remote and uninhabited. Only five: Norfolk, Lord Howe, Easter and two in Papua New Guinea, have more than 10 percent of their area protected. Another five, including such important islands as New Caledonia, Guam, Taveuni (Fiji) and Upolu (Western Samoa) have 3 to 9 percent of their area protected. For the others 1 percent or less of the land has protected status.

These figures do not take into consideration the type of protection afforded in these areas. Some are only bird sanctuaries or provide for some protection and management of wildlife. The legislation in some countries does not provide complete protection against all kinds of development. Even where the legislation is adequate, enforcement is difficult, so that encroachments or illegal exploitation may occur, or the actual area protected may be less than the declared size of the park or reserve. Few if any protected areas in Oceania are well protected in fact as well as in law. Thus while some progress has been made, the present protected area system of Oceania is still far from adequate.

Obviously priority should be given to the strengthening of protective measures for existing reserves and the provision of adequate means for enforcement. In the small island situation, enforcement is only possible with wide public support, so education and public information are essential to any plan to improve protected area management.

Strategies for development of the protected areas system

No single strategy for developing protected areas will be appropriate for all islands or all countries in the region. Large islands with extensive undisturbed natural areas and low population densities need to develop a long-term conservation strategy which allows for careful selection of sites and gradual development of protected areas before the most significant natural features are threatened by development. Heavily populated islands, on the other hand, may need to take rapid steps to protect the few remaining natural areas before they disappear entirely. Where species are already in danger from predation or habitat destruction, steps may need to be taken to restore appropriate habitat types or to control introduced predators or competitors.

In the same way, there are many types of protected areas which can be adapted to local island needs, conservation requirements and land tenure situations. Protected areas are not just national parks and nature reserves, although these have their place. On a small island conservation of nature needs to be combined whenever possible with other uses of the limited space available. There is no reason why, for instance, a protected remnant of lowland rain forest cannot also serve educational or recreational uses which are compatible with its preservation. Some types of protected areas allow or encourage uses of resources or even the continuation of traditional lifestyles when this is in harmony with the basic goal of conservation. Further information on the many types of protected areas is available in various IUCN publications.

The Action Strategy for Protected Areas in the South Pacific Region (SPC, 1986) adopted at the Third South Pacific National Parks and Reserves Conference (1985) and accepted by the South Pacific Conference in October 1985 sets many objectives for protected area development, among which are the following targets for the next four years:

-- the establishment of at least one protected area in each country and territory of the region and the establishment of an additional 50 protected areas in the region as a whole; and

-- an increase to 40% in the number of ecosystems receiving some kind of protection.

To achieve such targets it is necessary to identify possible priority areas for action in each country of the region. This country perspective is particularly important since protected areas can only be created on a national basis. Ratings within a country are thus often more important than comparisons between countries in developing a national conservation strategy and in selecting sites for protected areas. Table 1 provides a country by country list of the islands identified in this survey as having the greatest conservation significance, together with existing protected area information, human impact (HI) ratings and conservation importance (CI) ratings. The following discussion of each country is based on this table and the information in the island list.

Northern Mariana Islands

The two islands protected under the constitution, Maug and Sarigan, should be supplemented by protected areas on the islands with the highest conservation interest, Ascuncion and Rota. Saipan may also be worthy of priority attention as one of the islands most at risk. The existing recommendations for marine sanctuaries provide a good selection of priority marine conservation areas.

Guam

Guam ranks highly for its endemism, and as one of the islands most at risk. The recent decline in endemic species populations shows that present protected areas and other measures are not sufficient. Attention should be focussed on improving the protection of remaining natural areas, particularly undisturbed forest, and possibly also on planting and restoration programmes to try to increase the area of appropriate habitats.

Belau

The Ngerukuid Reserve is too small to protect Belau's natural heritage adequately. Terrestrial reserves should be considered on Babeldaob and in the Chelbacheb Islands, including the marine lakes. The richness of the marine environment warrants protection in some significant marine reserves at sites such as Ngemlis. Helen should probably also be protected because of the problem with poaching.

Federated States of Micronesia

The complete lack of protected areas in the Federated States of Micronesia should be remedied as rapidly as possible. All the highly rated high islands for conservation importance (Pohnpei, Kosrae, Yap and Tol) are also among the islands most at risk. Pohnpei and Yap also rate highly for endemic species. Some of the islands with significant seabird rookeries and turtle nesting area should also be protected. Marine reserves should be selected in each state, both to represent the natural richness of the region and for their usefulness in fisheries management.

Marshall Islands

The old protected status of Bokaak and Bikar should be confirmed by appropriate legislation. New smaller reserves for birds and remaining areas of natural vegetation on other atolls should also be considered. At least one major coral reef protected area should be created.

Papua New Guinea

Only a comprehensive national conservation plan could identify the appropriate priorities for protected areas in Papua New Guinea. It is clear from the limited data available that more protected areas will eventually be needed to cover the great richness of life on the island of New Guinea, but attention should also be given to establishing or expanding significant protected areas on other large islands like New Britain, Goodenough, Bougainville, Fergusson, New Ireland and Manus. Smaller islands with significant endemism such as the Ninigo Islands and Luf (Hermit Islands) may actually be under greater relative human threat which could give them

priority for early action. The largely unexplored richness of Papua New Guinea's marine environments will eventually require a network of marine reserves.

Solomon Islands

The present protected area situation in the Solomon Islands is very weak, with much of the park on Guadalcanal degraded by subsistence gardens, and the Kolombangara forest reserve a 500 metre wide strip which may be unsustainable ecologically. Major protected areas should be considered for Rennell, San Cristobal, Guadalcanal, Malaita and Vanikolo, with smaller areas to protect interesting sites and species on other islands. Reforestation with native species might be considered alongside the Kolombangara reserve to reinforce it and buffer it from intrusions. As with Papua New Guinea, a national conservation plan should be developed and widely discussed to build the necessary public support for protected areas.

Vanuatu

Vanuatu presently has only one small marine reserve. A major protected area should be planned for Espirito Santo, and smaller reserves at least on Tanna, Anatom, and Erromango. A park that could also contribute to public recreation and tourism would be appropriate on Efate. Vanua Lava should receive some protection for its saltwater crocodile population.

New Caledonia

While New Caledonia already has an extensive series of reserves, they are still inadequate to protect the great richness of the island, which is among the islands most at risk. Additional reserves should perhaps be based on the requirements of individual species requiring further protection, such as the Kagu and certain restricted plants. Protected areas are also needed on the Isle of Pines, Mare, Ouvea and Lifou, and these will have to be developed with the support and under the control of the traditional land owners. Some of the remote islands and reefs with important seabird and turtle populations should also receive protection. New Caledonia already has the most important marine reserves in Oceania, but others will eventually be needed to cover the great diversity of reef and lagoon environments.

Australian and New Zealand territories in Oceania

Lord Howe, Norfolk and the Kermadec Islands all rank high in conservation interest, and all have already seen important recent efforts to strengthen their protected area status and reduce the threats to their endemic species. Norfolk Island National Park was established early in 1986. Some of the interesting Australian reefs in the region are already protected and others are under consideration.

Fiji

While there are only a few significant protected areas in Fiji at present, the government does have a comprehensive parks and reserves plan identifying the further protection measures needed. Unfortunately the existence of a plan is no guarantee that it will be implemented. The challenge for Fiji is to identify those areas or species most immediately at risk for priority conservation action, and to mobilize enough public support to make that action possible. Obviously further protected areas are needed on Viti Levu and Vanua Levu, but smaller islands with particular features should not be overlooked. Representative examples of each island type, and a selection of marine areas, should also be included in protected areas.

Tonga

Tonga has some marine reserves and tiny protected islands, so the major priority should be for the establishment of significant protected areas on land. These should include the planned national park on 'Eua, the protection of 'Ata, and some protected areas on Niuafo'ou and Kao. Other small reserves should be considered for particular features, as should an expanded role for coral reef reserves in managing coastal fisheries with the support of the local population.

Niue

Niue has one of the few remaining traditional (taboo) protected areas in Oceania. It should be maintained, and reinforced with legislation if necessary. Other sites may also need protection if they are being degraded.

Wallis and Futuna

The territory has no protected areas. Futuna and Uvea are both among the islands most at risk. Futuna and Alofi both have significant endemism, and the latter also has a significant area of undisturbed forest. An important protected area should be considered on Alofi, and the remaining forest on Futuna should also receive protection.

Western Samoa

Western Samoa already has a good start with a parks and reserves survey, and important protected areas on Upolu. The highest priority would be for a major park in the centre of Savai'i, possibly also including a sample of lowland forest. Protection for both land and marine areas in the Aleipata Islands should also be considered. Since Upolu is among the islands most at risk, priority action may be needed for other areas identified in the parks survey if they come under threat.

American Samoa

With one remote atoll and one marine reserve, the urgent need in American Samoa is for protected areas on Tau, Tutuila, and Ofu, the latter two being particularly at risk.

Tokelau

There are no protected areas in Tokelau, and the possibilities of creating them on small inhabited atolls are limited. The remaining areas of atoll forest on Nukunonu should be protected. If traditional fisheries management begins to break down, then selected marine reserves may be useful as a replacement measure.

Tuvalu

As with Tokelau, there are no protected areas in Tuvalu and the possibilities are limited. Marine protected areas might be considered on Funafuti and Vaitupu to help control overfishing.

Nauru

Nauru has no reserves but there are a few species of conservation interest. Any remaining forest areas not scheduled to be mined should be included in a protected area, perhaps along with Buada lagoon. Some habitat restoration would also be worth considering.

Kiribati

There are no protected areas in province XI which includes the Gilbert Islands; the small forested islets with seabird rookeries on Butaritari and Nonouti might be considered for reserves under local management. There may also be a role for marine reserves in fisheries management. Seven of the Kiribati islands in the Line and Phoenix Islands are already protected. The only unprotected island that stands out for its conservation value is Teraina (Washington), where the bogs and other natural habitats might be worth protecting.

United States territories in Oceania

The American islands in the central Pacific with conservation value are already protected except for Palmyra.

Cook Islands

Suwarrow is the only protected area at present in the Cook Islands, and it only has moderate terrestrial conservation interest. Priority should be given to a major protected area in central Rarotonga, which both has considerable endemism, and is considered at risk. Natural areas on Mangaia, Mitiaro and possibly other islands should also receive protection if necessary for their endemic forms. Coastal and marine reserves could contribute to better environmental management.

French Polynesia

The four French Polynesian islands with the highest conservation interest have no protected areas: Nuku Hiva has the highest rating, and Tahiti, Rapa and Moorea are all among the islands most at risk. All have important species endemism, and the establishment of appropriate protected areas should be a high priority. Some habitat restoration may be needed on Moorea and other islands. The territory covers a number of island groups and biogeographic provinces, and many of the islands are subject to human pressures and the damage of feral animals. There are no terrestrial reserves in the Society Islands despite their great significance; in addition to Tahiti and Moorea, protected areas should be considered at least on Raiatea and possible Huahine and Tahaa. In the Austral Islands, Rimatara and Raivavai should be given priority for their endemism, as should Mangareva in the Gambier Islands. The Tuamotu atolls are simpler island ecosystems, with one reserve at Taiaro; additional reserves are needed at least at Matureivavao, Niau, Napuka and the raised coral island of Makatea, which despite former mining damage retains some significant species. The Marquesas are so unique biologically that the four present island reserves are inadequate and protected areas on each island could easily be justified. In addition to Nuku Hiva, priority should be given to protected areas on Hiva Oa and Ua Pou, and to the general control of feral animals which are causing great destruction. A representative series of marine reserves across the great expanse of French Polynesia should also be developed.

Pitcairn

Apart from Pitcairn, the islands of the group are all of conservation interest for their remoteness and lack of disturbance. Henderson is obviously the high priority for protected status because of its endemism and its rareness as an undisturbed raised coral island.

Chilean territories in Oceania

A major part of Easter Island is already protected.

Conclusions

The above listing identifies 77 islands which should be given priority for protected area establishment in accordance with the principles and targets adopted by the governments of the region and the evaluation made in this review. Obviously protection should not be refused other islands because they are not mentioned, as there are many justifiable criteria for conservation, not all of which could be considered here. Also, certain recommendations may well change as new information becomes available. However, failure to take action to protect the significant species and ecosystems of the priority islands mentioned will almost certainly lead to the extinction of species, a reduction in the quality of the local environment, and the permanent loss of some of the rich natural heritage of Oceania.

While this review has tried to identify islands on which conservation action is needed, the precise areas to be protected can only be determined by up-to-date studies in the field and by consultation with the governments, traditional authorities and local inhabitants who are after all the ones most directly concerned. The intrinsic conservation interest of an island or area

may weigh less heavily in the final choice than the practicality of conservation action as reflected in government and public support. However this support can be modified through education, and it has thus not been given a larger place here. Indeed one of the principal aims of this review is to increase support for the conservation of the most important areas.

It should be emphasized again that the information on which this review is based is far from adequate, and the results should be treated with suitable caution. Hopefully this will be the last such review before the great steps forward in data collecting and analysis made possible by remote sensing and computer data processing revolutionize and bring up to date our knowledge of Oceania in ways never before possible. While such techniques cannot provide species information, they can give recent information on habitats that would be invaluable for such reviews, as well as for monitoring islands and protected areas.

With the plans to focus increased attention on island conservation problems over the next few years, it can be hoped that both information collecting and conservation action on islands will increase rapidly, so that great progress can be made in preserving the unique heritage of Oceania.

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This work is in some ways an extension and up-date of the Regional Ecosystems Survey of the South Pacific Area (Dahl, 1980), produced with the support of IUCN when I was with the South Pacific Commission. The SPC and its staff have made important contributions to the collection of information before and after the survey, as well as to conservation and environmental management throughout Oceania, most recently through the South Pacific Regional Environment Programme.

Other essential sources of information have been the Guide to Islands in the Tropical Pacific (Pacific Scientific Information Center, 1983) based on the work of the late E. H. Bryan, Jr., and the Draft Check List of Pacific Oceanic Islands (Douglas, 1969),

Many individuals have contributed unpublished information for this review, either directly or through the files of the IUCN Conservation Monitoring Centre. Their contributions are indicated in the references within square brackets [ ].

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Appendix

EXPLANATION OF ISLAND RATINGS

For a regional systems review, it is necessary to make comparisons between different islands or areas as a basis for determining relative importance and priorities for action. Given the large number of islands in Oceania, the diversity of their characteristics, and the inadequacies in the data, it seemed important to show as clearly as possible the bases on which choices were made, and the weightings that were given to different objective and subjective factors. To do this, a series of simple numerical measures were developed for features of conservation interest, for risks to that conservation interest, and for the feasibility of conservation action. These ratings are included in the island list and the various tables. They make it possible to reduce, or at least to make more consistent and explicit, the subjectivity of judgements as to relative conservation importance. They also can help to identify islands with particular characteristics.

While this approach using numerical values reduces the chances of personal bias or the drift in judgement that can occur between the beginning and the end of a long analysis, it does have its weaknesses. First among these is the tendency to see the numbers as having more accuracy or weight than is actually the case. The ratings only reflect present information, and can be expected to change as more data become available. A low overall rating including a low reliability of data rating can easily reflect a lack of information rather than a lack of conservation interest. At the same time, the system of ratings can be updated rapidly when appropriate.

Users of this review are cautioned not to place too much weight on these ratings without first studying their derivation to ensure that they are appropriate to the intended use of the information. Small differences between ratings should not be considered important, since there are too many uncertainties in the data base, and some ratings are derived from purely subjective judgements based on the author's long experience in the region. Where particular uses require other selection criteria, it is not difficult to modify the content and weighting of the ratings for such other uses.

For some of the calculations, essential figures were lacking for certain islands. In order to keep the analyses comparable across the region, it was necessary to use order of magnitude estimates for these figures in some of the tables. Round figures in the tables (i.e. 10, 100, 500) should not be relied upon for accuracy without confirming them in the island list where such estimations have not been included or have been specifically indicated. For similar reasons of uniformity in calculations, it was necessary to enter all figures to the same number of decimal places. This may give a greater impression of precision than appropriate for large figures.

For some ratings it would obviously be desirable to use real numbers rather than simple ordinal numbers for general catagories. However the range of such real numbers makes the relative weighting of different factors almost impossible in the combined ratings, and logorithmic transformations were beyond the possibilities of the programme used.

Despite these weaknesses in detail, the ratings do give a good overall picture of conservation needs and relative importance across the region, and should prove a useful tool in conservation planning if used wisely.

Natural Conservation Status (NC)

The natural conservation status is a measure of the protection afforded naturally to the island by its condition or situation. One point each is given for:
a) remoteness from significant population centres and transportation routes;
b) not presently inhabited;
c) considerable difficulty of access (high cliffs, few good landings or anchorages);
d) few or no introductions of predatory or competitor species such as feral animals, european rats and aggressive weeds. [Scale: 0 to 4]

Ecosystem Richness (ER)

The scale for ecosystem richness is based on the number of terrestrial ecosystem types or biomes, based on the categories and information in the Regional Ecosystems Survey (Dahl, 1980) or estimated from the island description and structure.
0 = less than 5 ecosystems or biomes, such as on impoverished low coral islands;
1 = 5 to 10 ecosystems, indicating some distinct vegetation types;
2 = 10 to 25 ecosystem types, such as on high islands with some habitat diversity and differentiation of biomes with altitude;
3 = 25 to 40 ecosystem types, showing considerable diversity of habitats;
4 = many (more than 40) biomes and ecosystems, approaching continental areas in richness.
Note that marine ecosystems are not included in this rating as the data are insufficient for reliable estimations.

Species Richness (SR)

The numbers of species that occur on an island are an important measure of its biological diversity. For Oceania, the figures most frequently available are for terrestrial plants and/or land birds, and these were used as the basis for the rating scale. Where individual island data were not available, estimates were made based on figures for the country or island group.

0 = few or no species (less than 20 plants and/or 4 land birds).
1 = poor in species (20-300 plants; 5-20 land birds).
2 = moderate species richness (300-1000 plants; 21-50 birds)
3 = rich in species (over 1000 plants and/or 50 birds).

Economic Pressure (EP)

This measures the level of economic development and thus of modern development impact on the environment. A rating was first calculated for each country, based on the Gross Domestic Product (SPC, 1984) divided by 2000, giving:
3 for French Polynesia, Nauru and New Caledonia;
2 for American Samoa and Guam;
1 for Cook Islands and Fiji; and
0 for all other countries.
These average ratings for each country were then decreased one point for rural islands with less development, and increased one point as appropriate for islands with urban centres or major development projects. Estimates were made for islands outside the SPC area for which separate statistics were not available.

Human Threat (HT)

A rating was needed for the pressure of the local population on the land and resources. Statistics for the percentage of the population in agriculture and mining (SPC, 1984) were divided by 30 and adjusted for under-reporting of subsistence activities in some countries, giving:
0 for Guam;
1 for Cook Islands, French Polynesia, Kiribati, New Caledonia, Niue, and Tuvalu;
2 for Fiji, Nauru, PNG, Solomons, Tonga and Western Samoa; and
3 for Wallis and Futuna.
Some adjustments were made for specific islands (such as uninhabited islands) where the situation was known to be different from the country average.

Natural Vulnerability (Vu)

One point was given for each of the major categories of natural threats to the island environment:
--- cyclones (hurricanes or typhoons);
--- volcanic eruptions;
--- earthquakes, tsunamis (tidal waves), landslides, etc.;
--- severe drought;
--- susceptibility to major fires.
This is a measure of the risk of natural catastrophes that could endanger an endemic species or single protected area, thus increasing the importance of adequate conservation action. [Scale: 0 to 5]

Practicality of Conservation Action (PC)

The successful creation of protected area requires a series of favourable conditions which are estimated in this rating. One point is given for each of the following:
--- government interest in and support for conservation;
--- public interest and support;
--- the existence of legislation for parks and reserves;
--- land tenure arrangements permitting or facilitating the creation of protected areas.
Inevitably this rating involves some subjective judgement based on past experience. It should be remembered that in particular cases support by the government and the general public can be considerably modified (one way or the other). Since this rating can be so easily modified, it has not been given a higher weighting in the combined rating. [Scale: 0 to 4]

Reliability of Data (Da)

It is important to know whether an island situation or local conservation problem is well documented and clearly understood, or only suspected on the basis of inadequate data. The following scale is used:
0 = no reliable data;
1 = poor data (both partial and out of date);
2 = data only partial or out of date
3 = good recent data (within the last 10 years).
This scale favours islands with problems that are well understood, and where conservation action can be clearly defined, over those that closer examination may show not to have problems, or to be irremediable. A low rating does not mean that conservation action is not needed, but that is should be preceded by further studies to determine the present situation. This rating can also be used to judge the overall accuracy of the combined ratings.

Other ratings have been derived from the information in the island list for use in the tables and calculations:

Population Trend

The population trend is based on the most recent five year estimate of the population growth rate (SPC, 1984), as follows:
1 = negative growth rate (declining population)
2 = growth rate 0 to 1% per year
3 = growth rate over 1% to 2%
4 = growth rate over 2% to 3%
5 = growth rate over 3% per year.

Urban areas (City)

One point is given if there are one or more urban areas on the island, since these tend to concentrate pressures on the surrounding natural resources.

Endemism

The endemism is rated both for island groups (GE) and individual islands (IE) on the basis of the number of endemic species and sub-species recorded, as follows:
0 = no endemic species;
1 = 1 to 4 endemic species;
2 = 5 to 15 endemic species;
3 = 16 to 100 endemic species;
4 = 101 to 1000 endemic species;
5 = over 1000 endemic species.
The two ratings permit identifying both individual islands with endemic species restricted to that island, and islands in a group which may share endemic species with other nearby islands.

Protected Area Coverage (CoPA)

The amount of an island covered by protected areas also required a rating for use in the evaluation.
0 = no protected areas;
1 = less than 1% of the island protected, or only marine areas;
2 = 1% to 10% of the island surface protected;
3 = 10% to 90% of the island protected;
4 = island entirely protected (over 90%).

The data for each island have been summarized in two composite ratings to give an overall evaluation and to permit comparisons and rankings.

Human Impact (HI)

The Human Impact rating measures the overall human pressure or impact on the island and therefore the potential threat to remaining natural areas or endemic species. Since it is based on the present situation and its potential for future change, it does not measure past changes (such as caused by former inhabitants or abandoned mines) which no longer represent a current threat, nor does it reflect the cummulative human impact of such past changes.

The HI rating is calculated as follows: the population density (for the island if known, or else for the country), divided by 50, is multiplied by the population trend rating divided by 2 (this produces a reduced figure for a declining population and a larger value for a fast-growing population). To this figure for the demographic pressure on resources is added the Human Threat rating (based on the percent of the population in agriculture and mining), the Economic Pressure rating (based on GDP), and an additional point for a city or urban area.

$$HI = \frac{density}{50} \times \frac{trend}{2} + HT + EP + city$$

[Range: 0 to 31]

Conservation Importance (CI)

The Conservation Importance rating is intended to give an overall numerical evaluation of the significance of the island for the conservation of nature. It consists of the sum of a series of measures of conservation interest weighted for their relative importance. Both measures of biological importance and measures influencing the effectiveness of conservation have been included, since both are important in the selection of sites for protected areas, although biological factors are given the heavier weighting. In a sense the formula tries to reflect the kind of evaluation process used by a protected area manager in selecting a protected area. The elements of the CI rating are:

the Ecosystem Richness (ER) rating and the Species Richness (SR) rating, both multiplied by 2 (scale: 0 to 14 points) as measures of the richness of natural communities;

the Island Endemism (IE) and Group Endemism (GE) ratings based on numbers of endemic species (maximum 10 points), and the percent endemism for the terrestrial flora and fauna, where known, divided by 10 to give a scale of 0 to 8 points;

measures of threatened species, including the number of Endangered Species (E) divided by 2 (up to 8 points), and the number of species classified as Vulnerable, Rare, Indeterminate or K (VRI) divided by 5 (up to 31 points in the exceptional case of New Caledonia);

one point each for Special Features (SpFe) of conservation interest that might warrant the creation of protected areas, such as seabird rookeries, sea turtle nesting areas or other critical habitats, lakes, unusual geological formations or other features deserving specific protection (generally 0 to 4 per island);

the Natural Vulnerability (Vu) rating (up to 5 points);

the Natural Conservation Status (NC) rating (0 to 4 points);

the Practicality of Conservation Action (PC) rating (0 to 4 points); and

the Reliability of Data (Da) rating (0 to 3 points).

$$CI = (ER+SR)x2 + IE+GE+\frac{\%end}{10} + \frac{E}{2}+\frac{VRI}{5} + SpFe + Vu + NC + PC + Da$$

The theoretical maximum value of the CI (for present numbers of endangered and threatened species) is 91.

This measure of Conservation Importance will thus favour islands with greater ecological complexity and species diversity, with more species endemism, with larger numbers of endangered and threatened species, with more special features of conservation interest, with greater vulnerability to natural disasters, with better natural protection and greater possibilities of creating protected areas, and with better data on their actual conservation status.

The CI does not measure importance for marine conservation, nor does it favour pristine but simple islands except for their natural conservation status. Protected areas for these should be identified using other measures.

There can be many reasons for creating protected areas, and the above choice of measures and weightings may be debatable in particular instances. Overall, however, a broadly-based measure such as CI should help to identify and rank the different islands in terms of priorities for conservation action.

Table 1
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			NORTHERN MARIANA ISLANDS					
9	Aguijan	XII	7.0				0 %	0
13	Alamagan	XII	11.0	744			0 %	1
13	Anatahan	XII	32.0	788			0 %	1
14	Pagan	XII	48.0	570			0 %	1
14	Tinian	XII	102.0	170			0 %	1
15	Maug	XII	2.0	227	1	2.0	100 %	0
15	Agrihan	XII	47.0	965			0 %	1
15	Sarigan	XII	4.9	549	1	4.9	100 %	0
16	Saipan	XII	122.9	474			0 %	7
17	Guguan	XII	4.0	301			0 %	0
17	Rota	XII	85.0	491			0 %	2
19	Ascuncion	XII	7.0	891			0 %	0
			GUAM					
27	Guam	XII	541.0	393	7	45.0	8 %	9
			BELAU					
8	Helen	XIII	1.9				0 %	0
10	Ngcheangel	XIII	1.7	2			0 %	2
11	Beliliou	XIII	12.7	30			0 %	1
13	Ngemlis	XIII	1.0				0 %	0
15	Oreor	XIII	9.3				0 %	10
15	Ngerekebesang	XIII	5.0				0 %	1
16	Chelbacheb Islands	XIII	80.0	207			0 %	0
16	Ngerukuid	XIII	2.6	30	1	2.6	100 %	0
17	Babeldaob	XIII	397.0	122			0 %	1

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
	FEDERATED STATES OF MICRONESIA							
9	Woleai	XIII	4.5				0 %	4
10	Fefan	XIII	13.2	298			0 %	13
10	Uman	XIII	4.7	244			0 %	26
10	Kapingamarangi	XIII	1.1				0 %	10
11	Fais	XIII	2.8	18			0 %	3
11	West Fayu	XIII	0.6				0 %	0
11	Moen	XIII	18.8	370			0 %	31
11	Ant	XIII	1.8				0 %	0
12	Namoluk	XIII	0.8				0 %	8
13	Gaferut	XIII	0.1	30			0 %	0
13	Pikelot	XIII	0.1				0 %	0
13	Tol	XIII	34.0	439			0 %	11
13	Fayu	XIII	0.4				0 %	0
13	Oroluk	XIII	0.5				0 %	1
17	Yap Islands	XIII	100.0	176			0 %	6
18	Kosrae	XIII	110.0	628			0 %	5
19	Pohnpei	XIII	334.0	791			0 %	5
	MARSHALL ISLANDS							
5	Wotje	XIV	8.0				0 %	4
5	Arno	XIV	13.0	2			0 %	6
5	Ailinglaplap	XIV	15.0				0 %	5
5	Jaluit	XIV	3.6				0 %	18
6	Wotho	XIV	4.1				0 %	0
8	Ujelang	XIV	1.7				0 %	0
8	Enewetak	XIV	5.8	4			0 %	5
9	Jemo	XIV	0.2				0 %	0
10	Bikar	XIV	0.5	3	1	0.5	100 %	0
13	Bokaak	XIV	3.2	4	1	3.2	100 %	0

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			PAPUA NEW GUINEA					
13	Nanuk	II	0.1	4	1	0.1	100 %	0
15	Kiriwina (Trobriand)	I	440.0	30			0 %	3
15	Umboi (Rooke)	II	800.0				0 %	2
15	Talele Islands	II	0.4		1	0.4	100 %	0
15	Lavongai (N.Hanover)	II	1190.0	870			0 %	1
15	Luf (Hermit Islands)	II	7.9	260			0 %	5
17	Dyaul	II	100.0				0 %	2
17	St. Matthias Group	II	400.0				0 %	1
17	Ninigo Islands	II	3.0	3			0 %	8
17	Buka	III	829.0	500			0 %	4
18	Muyua (Woodlark)	I	1110.0	370			0 %	2
19	Normanby (Duau)	I	1040.0	1100	1	7.0	1 %	2
19	Sudest (Tagula)	I	803.0	910			0 %	2
20	Karkar	I	400.0		1	137.6	34 %	2
20	Manus	II	1640.0	719			0 %	2
21	Long	I	500.0		1	419.2	84 %	3
21	New Ireland	II	8500.0	2290			0 %	2
23	Fergusson (Moratau)	I	1340.0	1830	1	50.0	4 %	1
25	Bougainville	III	10619.0	3123			0 %	3
26	Goodenough (Morata)	I	751.0	2545			0 %	3
28	New Britain	II	36500.0	2438	2	170.0	0 %	3
45	New Guinea	I	400000.	4694	12	5914.9	1 %	3
			SOLOMON ISLANDS					
12	Three Sisters Is.	III	50.0				0 %	1
14	Vella Lavella	III	677.0				0 %	3
15	Shortland	III	300.0				0 %	3
15	Ranongga (Ghanongga)	III	200.0				0 %	3
15	Ghizo	III	35.0				0 %	4
15	Arnavon Islands	III	10.0		1		0 %	2
15	Nendo (Santa Cruz)	V	647.0	550			0 %	2
15	Tinacula (Volcano)	V	100.0	670			0 %	0
15	Utupua	V	69.0	380			0 %	1
16	Vanguna	III	600.0	1120			0 %	2
16	Santa Isabel	III	4014.0	1219			0 %	2
16	Vanikolo (Vanikoro)	V	174.0				0 %	2
17	Choiseul (Lauru)	III	3454.0	1067			0 %	2
17	New Georgia	III	2330.0	1010			0 %	2
20	Kolombangara (Nduke)	III	700.0		1	5.0	1 %	3
21	Malaita	III	4243.0	1432			0 %	3
24	Guadalcanal	III	5336.0	2446	1	60.8	1 %	4
24	San Cristobal	III	3125.0	1250			0 %	2
26	Rennell	III	675.0	92			0 %	1

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			VANUATU					
13	Reef Islands (Rowa)	V	10.0	6			0 %	0
16	Pentecost	V	324.0	946			0 %	3
16	Malakula	V	1165.0	863			0 %	3
17	Efate (Vate)	V	777.0	647			0 %	5
17	Erromango	V	855.0	886			0 %	2
17	Anatom (Aneityum)	V	154.0	852			0 %	1
19	Vanua Lava	V	298.0	946			0 %	2
19	Tanna	V	390.0	1084			0 %	4
20	Espiritu Santo	V	3937.0	1879	1		0 %	4
			NEW CALEDONIA					
8	Chesterfield Isles	IV	1.0				0 %	0
8	D'Entrecasteaux Reef	IV	10.0	4			0 %	0
10	Walpole	IV	1.2	100			0 %	0
12	Matthew	IV	0.1	140			0 %	0
14	Yande	IV	10.0	301			0 %	2
14	Hunter	IV	0.4	300			0 %	0
15	Lifou	IV	1196.0	104			0 %	4
16	Ouvea	IV	132.0	46			0 %	5
16	Mare	IV	642.0	138			0 %	4
19	Isle of Pines	IV	152.0	262			0 %	3
80	New Caledonia	IV	16890.0	1628	18	621.8	4 %	5
			AUSTRALIAN TERRITORIES					
15	Philip Island	VI	2.6	280			0 %	0
35	Norfolk Island	VI	36.0	319	1	4.6	13 %	3
46	Lord Howe	VI	14.6	875	1	8.0	55 %	4
			NEW ZEALAND TERRITORIES					
24	Sunday (Raoul)	VI	29.0	305	1	33.5	116 %	0

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			FIJI					
11	Qelelevu	VII	1.0	18			0 %	1
11	Mabualau	VII	10.0	27			0 %	1
11	Makogai	VII	8.0	267			0 %	1
11	Wakaya	VII	8.0	152			0 %	1
11	Fulaga (Fulanga)	VII	10.0	82			0 %	2
12	Rotuma	VII	44.0	256			0 %	4
12	Vatulele	VII	31.6	34			0 %	2
12	Wailagi Lala	VII	1.0				0 %	0
12	Ogea Levu	VII	10.0	82			0 %	2
13	Sovu	VII	1.0	70			0 %	0
13	Lakeba (Lakemba)	VII	57.0	219			0 %	2
14	Beqa	VII	36.0	457			0 %	2
15	Qamea	VII	34.0	304			0 %	2
15	Gau (Ngau)	VII	140.0	715			0 %	2
16	Kadavu	VII	408.0	838	1	0.1	0 %	3
16	Vanua Balavu	VII	53.0	283			0 %	2
17	Namena Lala	VII	1.0	98			0 %	1
17	Ovalau	VII	139.0	626			0 %	4
20	Yadua Taba	VII	0.7	100	1	0.7	100 %	1
24	Vanua Levu	VII	5535.0	835	2	0.4	0 %	4
24	Taveuni	VII	435.0	1224	1	40.2	9 %	4
28	Viti Levu	VII	10544.0	1323	7	21.2	0 %	6
			TONGA					
14	Tafahi	VIII	3.4	610			0 %	2
14	Tongatapu	VIII	257.0	82	3	0.2	0 %	10
17	Kao	VIII	12.0	1030			0 %	1
18	Eua	VIII	88.0	329			0 %	6
18	Ata	VIII	2.3	355			0 %	0
19	Niuafo'ou	VIII	35.0	260			0 %	1
			NIUE					
12	Niue	VIII	259.0	67	1	2.0	1 %	0
			WALLIS AND FUTUNA					
10	Uvea	IX	96.0	149			0 %	8
12	Futuna	IX	80.0	762			0 %	6
12	Alofi	IX	32.0	366			0 %	3
			WESTERN SAMOA					
18	Upolu	IX	1114.0	1100	4	29.2	3 %	6
20	Aleipata Islands	IX	1.8				0 %	1
22	Savai'i	IX	1821.0	1857			0 %	3

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			AMERICAN SAMOA					
14	Aunuu	IX	2.6	61			0 %	4
14	Rose Atoll	IX	0.1	3	1	0.1	100 %	0
17	Ofu	IX	8.0	488			0 %	5
22	Tutuila	IX	135.0	653	1		0 %	11
22	Tau	IX	44.0	931			0 %	4
			TOKELAU					
6	Nukunonu	X	5.4	4			0 %	3
			TUVALU					
5	Vaitupu	X	5.6				0 %	6
5	Funafuti	X	2.8				0 %	24
			NAURU					
9	Nauru	XI	20.7	65			0 %	22
			KIRIBATI					
6	Butaritari	XI	11.7				0 %	4
7	Nonouti	XI	25.0				0 %	4
10	Enderbury	XV	5.1	7	0		0 %	0
10	Tabuaeran (Fanning)	XV	33.7	4			0 %	2
10	Starbuck	XV	16.2	5	1	16.2	100 %	0
10	Vostok	XV	0.2	5	1	0.2	100 %	0
11	Caroline	XV	2.3	6			0 %	0
12	Orona (Hull)	XV	3.9	9			0 %	0
12	McKean	XV	0.6	5	1	0.6	100 %	0
13	Birnie	XV	0.2	4	1	0.2	100 %	0
14	Rawaki (Phoenix)	XV	0.5	6	1	0.5	100 %	0
14	Teraina (Washington)	XV	7.4	5			0 %	3
14	Malden	XV	39.3	8	1	39.3	100 %	0
17	Kiritimati	XV	321.0	13	6	321.0	100 %	2
			UNITED STATES TERRITORIES					
5	Palmyra	XV	3.0	2			0 %	1
13	Howland	XV	1.5	7	1	1.5	100 %	0
14	Jarvis	XV	4.5	8	1	4.5	100 %	0
14	Baker	XV	1.2	8	1	1.2	100 %	0

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			COOK ISLANDS					
6	Pukapuka	XV	5.0				0 %	6
10	Suwarrow (Suvarov)	XV	0.4		1	0.4	100 %	0
11	Aitutaki	XVI	18.1	137			0 %	6
11	Atiu	XVI	27.0	91			0 %	4
11	Mauke	XVI	18.4	30			0 %	3
12	Mitiaro	XVI	22.3				0 %	1
12	Mangaia	XVI	51.0	169			0 %	2
23	Rarotonga	XVI	64.0	652			0 %	5
			FRENCH POLYNESIA					
8	Tikehau	XVIII	10.0				0 %	2
8	Nukutavake	XVIII	10.0				0 %	1
9	Tupuai (Tubuai)	XVI	49.0	399			0 %	5
10	Rangiroa	XVIII	43.0				0 %	4
10	Takapoto	XVIII	23.0				0 %	4
10	Niau	XVIII	10.0				0 %	4
10	Kauehi	XVIII	10.0				0 %	2
10	Anaa	XVIII	10.0				0 %	4
10	Marutea (South)	XVIII	10.0				0 %	1
11	Rurutu	XVI	31.0	396			0 %	4
11	Motu One	XVII	2.3				0 %	2
11	Maupihaa (Mopelia)	XVII	2.6				0 %	3
11	Makatea	XVIII	28.0	111			0 %	2
11	Tahuata	XIX	52.0	999			0 %	4
13	Raivavae	XVI	21.0	436			0 %	4
13	Manuae (Scilly)	XVII	3.5		1		0 %	3
13	Tetiaroa	XVII	6.4	3			0 %	4
13	Napuka	XVIII	10.0				0 %	2
13	Matureivavao	XVIII	10.0				0 %	0
13	Motu One	XIX	1.0	3	1	1.0	100 %	0
14	Rimatara	XVI	18.0	95			0 %	4
14	Tahaa	XVII	98.0	579			0 %	4
14	Ua Huka	XIX	78.0	855			0 %	2
14	Fatu Huku	XIX	1.3	360			0 %	0
14	Fatuhiva	XIX	78.0	1118			0 %	4
15	Huahine	XVII	78.0	456			0 %	5
15	Taiaro	XVIII	20.0	5	1	20.0	100 %	0
16	Raiatea	XVII	202.0	1033			0 %	5
16	Mangareva	XX	13.0	441			0 %	6
17	Ua Pou	XIX	104.0	1231			0 %	4
18	Hiva Oa	XIX	241.0	1259			0 %	4
19	Hatutaa	XIX	18.1	428	1	18.1	100 %	0
20	Mohotani	XIX	15.5	518	1	15.5	100 %	0
23	Eiao	XIX	51.8	609	1	51.8	100 %	0
24	Moorea	XVII	132.0	1121			0 %	5
24	Rapa	XX	22.0	633			0 %	5
25	Tahiti	XVII	1042.0	2237			0 %	6
26	Nuku Hiva	XIX	337.0	1185			0 %	4

Table 1, continued
ISLANDS AND PROTECTED AREAS BY COUNTRY

CI	Island	Prov.	Area (sq.km)	Alt. (m)	Protected area coverage No.	Area	%	HI
			PITCAIRN					
11	Ducie	XX	0.7	4			0 %	0
12	Oeno	XX	0.7	4			0 %	0
22	Henderson	XX	32.0	33			0 %	0
			CHILEAN TERRITORIES					
15	Easter (Rapa Nui)	XX	166.0	600	1	68.0	41 %	1

Table 2
ISLANDS BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Richness Prov.	ER	SR	IE	GE	%	Endemism End	Threat VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
5	Wotje	XIV	0	1	0	0	0		1		1	1	0	1	5	0
5	Arno	XIV	0	1	0	0	0		1		0	1	0	2	5	0
5	Ailinglaplap	XIV	0	1	0	0	0				1	1	0	1	5	0
5	Jaluit	XIV	0	1	0	0	0				1	1	0	1	5	0
5	Vaitupu	X	0	1	0	0	0				1	1	0	1	5	0
5	Funafuti	X	0	1	0	0	0				0	1	0	2	5	0
5	Palmyra	XV	0	0	0	0	0			1	1	0	1	2	5	0
6	Wotho	XIV	0	1	0	0	0			1	1	1	0	1	6	0
6	Nukunonu	X	0	1	0	0	0			1	1	1	0	1	6	0
6	Butaritari	XI	0	1	0	0	0			1	0	0	1	2	6	0
6	Pukapuka	XV	0	0	0	0	0			2	1	1	1	1	6	0
7	Nonouti	XI	0	1	0	0	0			2	0	1	1	1	7	0
8	Helen	XIII	0	0	0	0	0			1	3	1	1	2	8	0
8	Ujelang	XIV	0	1	0	0	0			1	2	1	1	1	8	0
8	Enewetak	XIV	0	1	1	0	4				0	1	1	3	8	0
8	Chesterfield Isles	IV	0	0	0	0	0			1	3	1	2	1	8	0
8	D'Entrecasteaux Reef	IV	0	0	0	0	0			2	2	1	2	1	8	0
8	Tikehau	XVIII	0	1	0	3	0		1		1	1	0	1	8	0
8	Nukutavake	XVIII	0	1	0	3	0		1		2	1	0	0	8	0
9	Aguijan	XII	0	1	0	3	0		1	0	1	1	1	1	9	0
9	Woleai	XIII	0	1	0	4	0				1	1	0	1	9	0
9	Jemo	XIV	0	1	0	0	0			2	3	1	0	1	9	0
9	Nauru	XI	0	1	1	1	3	1		1	0	1	0	2	9	0
9	Tupuai (Tubuai)	XVI	1	1	0	3	0				0	1	0	1	9	0
10	Ngcheangel	XIII	0	1	0	4	0		1	1	0	1	0	2	10	0
10	Fefan	XIII	1	1	0	4	0				0	1	0	1	10	0
10	Uman	XIII	1	1	0	4	0		1		0	1	0	1	10	0
10	Kapingamarangi	XIII	0	1	1	4	1				1	1	0	1	10	0
10	Bikar	XIV	0	0	0	0	0			2	3	1	2	2	10	4
10	Walpole	IV	0	1	0	0	0			1	2	1	2	2	10	0
10	Uvea	IX	1	1	0	2	0			1	0	1	0	2	10	0
10	Enderbury	XV	0	0	0	0	0			2	2	1	3	2	10	0
10	Tabuaeran (Fanning)	XV	0	1	1	0	6			1	1	0	2	2	10	0
10	Starbuck	XV	0	0	0	0	0			2	2	1	3	2	10	4
10	Vostok	XV	0	0	0	0	0			2	3	0	3	2	10	4
10	Suwarrow (Suvarov)	XV	0	0	0	0	0			2	2	1	3	2	10	4
10	Rangiroa	XVIII	0	1	0	3	0		2	2	0	1	0	2	10	0
10	Takapoto	XVIII	0	1	0	3	0			1	0	1	0	3	10	0
10	Niau	XVIII	0	1	1	3	4				1	1	0	2	10	0
10	Kauehi	XVIII	0	1	0	3	0		1	2	2	1	0	0	10	0
10	Anaa	XVIII	0	1	1	3	4				1	1	0	2	10	0
10	Marutea (South)	XVIII	0	1	0	3	0		1		3	1	0	1	10	0
11	Beliliou	XIII	1	1	0	4	0	1	1		0	1	0	1	11	0
11	Fais	XIII	0	1	1	4	0			1	1	1	0	1	11	0
11	West Fayu	XIII	0	0	0	4	0			2	3	1	0	1	11	0
11	Moen	XIII	1	1	0	4	0		1	1	0	1	0	1	11	0
11	Ant	XIII	0	1	0	4	0			1	1	1	0	2	11	0
11	Gelelevu	VII	0	1	0	4	0			1	1	1	1	1	11	0
11	Mabualau	VII	0	1	0	4	0			1	1	1	1	1	11	0
11	Makogai	VII	0	1	0	4	0			1	0	1	1	2	11	0
11	Wakaya	VII	0	1	0	4	0			1	0	1	1	2	11	0
11	Fulaga (Fulanga)	VII	0	1	1	4	0		1	1		1	1	1	11	0

Table 2, continued
ISLANDS BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	IE	GE	Endemism %	End	Threat VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
11	Caroline	XV	0	1	0	0	0			2	2	0	3	2	11	0
11	Aitutaki	XVI	1	1	0	3	0		1		0	1	1	2	11	0
11	Atiu	XVI	1	1	1	3	1				0	1	1	1	11	0
11	Mauke	XVI	1	1	1	3	0				0	1	1	1	11	0
11	Rurutu	XVI	1	1	0	3	0			1	0	2	0	1	11	0
11	Motu One	XVII	0	1	0	4	0		1	2	1	1	0	1	11	0
11	Maupihaa (Mopelia)	XVII	0	1	0	4	0		1	2	1	1	0	1	11	0
11	Makatea	XVIII	1	1	1	3	1		1		0	1	0	2	11	0
11	Tahuata	XIX	1	1	0	4	0		1		0	1	1	1	11	0
11	Ducie	XX	0	0	0	3	0			1	3	0	2	2	11	0
12	Namoluk	XIII	0	1	0	4	0			1	1	2	0	2	12	0
12	Three Sisters Is.	III	1	1	0	4	0	1		1	0	2	0	0	12	0
12	Matthew	IV	0	0	0	0	0			2	4	2	2	2	12	0
12	Rotuma	VII	0	2	1	4	2				0	1	0	2	12	0
12	Vatulele	VII	1	1	0	4	0			1	0	1	1	1	12	0
12	Wailagi Lala	VII	0	1	0	4	0			1	1	1	1	2	12	0
12	Ogea Levu	VII	0	1	1	4	0		1	2	0	1	1	1	12	0
12	Niue	VIII	1	1	1	1	0			1	0	1	2	2	12	1
12	Futuna	IX	1	2	2	2	2		1		0	1	0	1	12	0
12	Alofi	IX	1	1	1	2	1			1	1	1	0	2	12	0
12	Orona (Hull)	XV	0	1	0	0	0			2	2	1	3	2	12	0
12	McKean	XV	0	1	0	0	0			1	3	1	3	2	12	4
12	Mitiaro	XVI	1	1	1	3	1			1	0	1	1	1	12	0
12	Mangaia	XVI	1	1	1	3	1			1	0	1	1	1	12	0
12	Oeno	XX	0	0	1	2	12			1	3	0	2	2	12	0
13	Alamagan	XII	1	1	1	3	1		1	1	1	1	1	1	13	0
13	Anatahan	XII	1	1	0	3	0		1	2	1	1	1	1	13	0
13	Ngemlis	XIII	1	1	0	4	0			1	1	1	0	2	13	0
13	Gaferut	XIII	0	1	0	4	0			2	2	1	1	1	13	0
13	Pikelot	XIII	0	1	0	4	0			2	3	1	0	1	13	0
13	Tol	XIII	1	1	1	4	0	2	1	1	0	1	0	1	13	0
13	Fayu	XIII	0	1	0	4	0			1	3	1	1	1	13	0
13	Oroluk	XIII	0	1	0	4	0			2	2	1	0	2	13	0
13	Bokaak	XIV	0	0	1	1	5			2	3	1	2	2	13	4
13	Nanuk	II	0	1	0	4	0				0	1	4	2	13	4
13	Reef Islands (Rowa)	V	0	1	0	4	0			1	2	2	0	2	13	0
13	Sovu	VII	0	1	1	4	1		1	1	2	1	1	1	13	0
13	Lakeba (Lakemba)	VII	1	1	0	4	0			1	0	1	1	2	13	0
13	Birnie	XV	0	1	0	0	0			2	3	1	3	2	13	4
13	Howland	XV	0	1	0	0	0			2	2	1	3	3	13	4
13	Raivavae	XVI	1	1	2	3	5			1	0	1	0	1	13	0
13	Manuae (Scilly)	XVII	0	1	0	4	0		1	2	1	1	1	2	13	1
13	Tetiaroa	XVII	0	1	0	4	0			1	0	1	2	3	13	0
13	Napuka	XVIII	0	1	1	3	3		1	2	2	1	0	1	13	0
13	Matureivavao	XVIII	0	1	0	3	0		2	2	3	1	0	2	13	0
13	Motu One	XIX	0	0	0	4	0			2	3	1	3	0	13	4
14	Pagan	XII	1	1	0	3	0		2	2	1	2	1	1	14	0
14	Tinian	XII	1	1	1	3	1	1	2	2	0	1	1	1	14	0
14	Vella Lavella	III	2	2		4	0				0	2	0	0	14	0
14	Yande	IV	1	1	1	5	5		1		1	1	1	0	14	0
14	Hunter	IV	0	1	0	0	0			2	4	2	2	2	14	0
14	Beqa	VII	1	2	0	4	0		1		0	1	1	2	14	0

Table 2, continued
ISLANDS BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	%	Threat End	VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
14	Tafahi	VIII	1	2	0	2	0				2	2	1	1	14	0
14	Tongatapu	VIII	1	2	0	2	0			1	0	2	1	2	14	1
14	Aunuu	IX	1	1	0	4	0			2	0	1	1	2	14	0
14	Rose Atoll	IX	0	0	0	0	0			3	3	1	4	3	14	4
14	Rawaki (Phoenix)	XV	0	2	0	0	0			3	2	0	3	2	14	4
14	Teraina (Washington)	XV	1	1	1	1	2			3	1	0	2	2	14	0
14	Malden	XV	0	1	0	0	0			3	2	1	3	3	14	4
14	Jarvis	XV	0	1	0	0	0			2	3	1	3	3	14	4
14	Baker	XV	0	1	0	0	0			2	3	1	3	3	14	4
14	Rimatara	XVI	1	1	3	3	18				0	1	0	1	14	0
14	Tahaa	XVII	1	2	0	4	0			1	0	1	0	2	14	0
14	Ua Huka	XIX	1	1	1	4	1		1	2	0	1	0	2	14	0
14	Fatu Huku	XIX	0	1	0	4	0		1	1	3	2	1	1	14	0
14	Fatuhiva	XIX	1	1	2	4	4		2		0	1	1	1	14	0
15	Maug	XII	0	1	0	3	0		1	1	3	1	3	2	15	4
15	Agrihan	XII	1	1	0	3	0		2	1	1	2	2	2	15	0
15	Sarigan	XII	1	1	0	3	0		1	1	2	1	3	1	15	4
15	Oreor	XIII	2	2	0	4	0	1	1		0	1	0	1	15	0
15	Ngerekebesang	XIII	2	2	0	4	0	1	1		0	1	0	1	15	0
15	Kiriwina (Trobriand)	I	1	2	0	5	0				0	1	2	1	15	0
15	Umboi (Rooke)	II	2	2	0	4	0				0	1	2	0	15	0
15	Talele Islands	II	0	1	0	4	0			2	0	1	4	2	15	4
15	Lavongai (N.Hanover)	II	2	2	0	4	0				0	1	2	0	15	0
15	Luf (Hermit Islands)	II	1	2	0	4	0				0	1	2	2	15	0
15	Shortland	III	1	2	1	4	3		1		0	2	0	1	15	0
15	Ranongga (Ghanongga)	III	2	2	1	4	0				0	2	0	0	15	0
15	Ghizo	III	1	2	1	4	0	1			0	2	0	1	15	0
15	Arnavon Islands	III	1	2	0	4	0			1	0	2	1	1	15	3
15	Nendo (Santa Cruz)	V	2	2	1	4	3				0	2	0	0	15	0
15	Tinacula (Volcano)	V	1	1	0	4	0			1	2	3	0	1	15	0
15	Utupua	V	2	2	0	4	0				1	2	0	0	15	0
15	Lifou	IV	1	2	1	3	5				0	1	1	2	15	0
15	Philip Island	VI	0	1	1	3	6	1		1	1	1	3	2	15	0
15	Qamea	VII	2	2	0	4	0				0	1	1	1	15	0
15	Gau (Ngau)	VII	1	2	1	4	0		2		0	1	1	2	15	0
15	Huahine	XVII	1	2	1	4	0			2	0	1	0	1	15	0
15	Taiaro	XVIII	0	1	0	3	0			1	2	1	3	3	15	4
15	Easter (Rapa Nui)	XX	0	1	2	2	11	1		2	0	0	3	2	15	3
16	Saipan	XII	1	1	1	3	1	1	3	3	0	1	1	2	16	0
16	Chelbacheb Islands	XIII	1	2	0	4	0	1	2	1	2	1	0	1	16	0
16	Ngerukuid	XIII	1	1	0	4	0		2		2	1	3	2	16	4
16	Vanguna	III	2	2	0	4	0				0	2	1	1	16	0
16	Santa Isabel	III	2	3	0	4	0				0	2	0	0	16	0
16	Vanikolo (Vanikoro)	V	2	2	1	4	2				1	2	0	0	16	0
16	Pentecost	V	2	2	1	4	0				0	2	0	1	16	0
16	Malakula	V	2	2	0	4	0			1	0	2	0	1	16	0
16	Ouvea	IV	1	2	1	3	5	1			0	2	1	2	16	0
16	Mare	IV	2	2	1	3	0				0	1	1	2	16	0
16	Kadavu	VII	1	2	1	4	0			1	0	1	1	2	16	1
16	Vanua Balavu	VII	1	2	0	4	0			3	0	1	1	1	16	0
16	Raiatea	XVII	2	2	1	4	1			1	0	1	0	1	16	0
16	Mangareva	XX	1	1	3	3	28	2			0	1	0	1	16	0

Table 2, continued
ISLANDS BY CONSERVATION IMPORTANCE (CI)

Sorted by			Richness				Endemism		Threat	Sp							Co
CI	Island	Prov.	ER	SR	IE	GE	%	End	VRI	Fe	NC	Vu	PC	Da	CI	PA
17	Guguan	XII	1	1	0	3	0		1	2	3	2	2	1	17	0
17	Rota	XII	1	2	1	3	1	3	4	1	0	1	1	2	17	0
17	Babeldaob	XIII	3	2	0	4	0	1	3		0	1	0	1	17	0
17	Yap Islands	XIII	2	2	2	4	2		1	1	0	1	0	1	17	0
17	Dyaul	II	2	2	1	4	0		1		0	1	3	0	17	0
17	St. Matthias Group	II	2	2	1	4	0		2		0	1	3	0	17	0
17	Ninigo Islands	II	1	1	1	4	18		1	1	0	1	2	2	17	0
17	Buka	III	2	2	0	4	0				0	2	2	1	17	0
17	Choiseul (Lauru)	III	2	3	1	4	0				0	2	0	0	17	0
17	New Georgia	III	2	3	0	4	0			1	0	2	0	0	17	0
17	Efate (Vate)	V	2	2	0	4	0		1	2	0	2	0	1	17	0
17	Erromango	V	2	2	1	4	0			1	0	2	0	1	17	0
17	Anatom (Aneityum)	V	2	2	1	4	0			2	0	2	0	0	17	0
17	Namena Lala	VII	1	2	0	4	0			2	0	1	1	3	17	0
17	Ovalau	VII	2	2	0	4	0		1	1	0	1	1	2	17	0
17	Kao	VIII	1	2	0	2	0			2	2	3	1	1	17	0
17	Ofu	IX	1	1	1	4	33			1	0	1	1	2	17	0
17	Kiritimati	XV	1	2	1	0	3			3	0	1	3	3	17	4
17	Ua Pou	XIX	1	1	2	4	4		8	2	0	1	1	1	17	0
18	Kosrae	XIII	2	2	1	4	1	1		2	0	1	0	1	18	0
18	Muyua (Woodlark)	I	2	2	1	5	0		1		0	1	2	1	18	0
18	Eua	VIII	2	2	1	2	1			1	0	2	2	2	18	0
18	Ata	VIII	1	2	0	2	0			1	4	2	2	1	18	0
18	Upolu	IX	2	2	1	4	0		2		0	1	2	2	18	2
18	Hiva Oa	XIX	1	1	2	4	8	2	14	1	0	0	1	1	18	0
19	Ascuncion	XII	1	1	1	3	1		1	2	3	2	2	2	19	0
19	Pohnpei	XIII	2	2	2	4	4		3	1	0	1	0	2	19	0
19	Normanby (Duau)	I	2	2	1	5	0		1		0	1	3	1	19	2
19	Sudest (Tagula)	I	2	2	1	5	0		2		0	2	2	1	19	0
19	Vanua Lava	V	2	2	0	4	0	1		1	1	3	0	1	19	0
19	Tanna	V	2	2	0	4	0			3	0	3	0	1	19	0
19	Isle of Pines	IV	2	2	0	5	0		1	2	0	1	1	2	19	0
19	Niuafo'ou	VIII	1	2	1	2	0		1	2	3	3	1	1	19	0
19	Hatutaa	XIX	0	1	1	4	6		3	1	4	1	3	2	19	4
20	Karkar	I	2	2	0	5	0			1	0	1	4	1	20	3
20	Manus	II	2	2	1	4	0		4	1	0	2	3	0	20	0
20	Kolombangara (Nduke)	III	2	3	1	4	0		1	1	0	2	0	2	20	2
20	Espiritu Santo	V	3	2	1	4	2		1	1	0	2	1	1	20	1
20	Yadua Taba	VII	1	1	0	4	0	1		1	1	2	4	3	20	4
20	Aleipata Islands	IX	1	2	0	4	0			3	2	1	2	2	20	0
20	Mohotani	XIX	1	1	1	4	4	1	1	1	1	2	3	3	20	4
21	Long	I	2	2	0	5	0			2	0	1	4	1	21	3
21	New Ireland	II	2	2	2	4	1		5		0	2	3	1	21	0
21	Malaita	III	3	3	1	4	4		3		0	2	0	1	21	0
22	Savai'i	IX	2	2	2	4	2	1	2	1	0	2	2	2	22	0
22	Tutuila	IX	2	2	2	4	3		4	2	0	1	1	3	22	0
22	Tau	IX	1	1	2	4	56			2	0	1	1	2	22	0
22	Henderson	XX	0	1	3	3	35		2	2	4	0	2	2	22	0
23	Fergusson (Moratau)	I	2	2	1	5	0		1	2	0	2	4	1	23	2
23	Rarotonga	XVI	2	2	3	3	4	1	1	1	0	2	2	3	23	0
23	Eiao	XIX	1	1	2	4	14	1	6	2	2	2	3	1	23	4
24	Guadalcanal	III	3	3	2	4	5	1	3	1	0	2	0	1	24	1

Table 2, continued
ISLANDS BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	%	Threat End	VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
24	San Cristobal	III	3	3	2	4	16		8		0	2	0	1	24	0
24	Sunday (Raoul)	VI	1	1	3	3	19	4	2	3	1	1	3	2	24	4
24	Vanua Levu	VII	3	3	1	4	0	2		2	0	2	1	1	24	1
24	Taveuni	VII	3	3	1	4	0		1	2	0	2	1	2	24	2
24	Moorea	XVII	1	2	2	4	3	12	1	2	0	1	0	2	24	0
24	Rapa	XX	1	1	4	4	80		1	1	0	1	1	1	24	0
25	Bougainville	III	3	2	3	4	16		2		0	2	3	1	25	0
25	Tahiti	XVII	2	2	4	4	18	1	1	3	0	2	0	1	25	0
26	Goodenough (Morata)	I	3	2	4	5	2		1	1	0	2	2	2	26	0
26	Rennell	III	2	3	2	4	27		4	1	1	1	1	2	26	0
26	Nuku Hiva	XIX	2	1	3	4	14	8	12	1	0	1	1	2	26	0
27	Guam	XII	2	2	3	3	3	7	5	3	0	1	1	3	27	2
28	New Britain	II	3	2	2	4	1		12	3	0	2	3	1	28	1
28	Viti Levu	VII	3	3	4	4	11	2	2	1	0	1	1	2	28	1
35	Norfolk Island	VI	1	1	3	3	28	15	35	1	0	1	3	3	35	3
45	New Guinea	I	4	3	5	5	52	1	28	3	0	3	3	1	45	2
46	Lord Howe	VI	2	2	4	4	42	4	75	2	0	0	4	3	46	3
80	New Caledonia	IV	3	3	5	5	74	16	156	4	0	2	3	2	80	2

RECORDS SELECTED 226

Key:
CI = Conservation Importance rating
Prov. = Biogeographic province
ER = Ecosystem Richness rating
SR = Species Richness rating
IE = Island Endemism rating
GE = Group Endemism rating
% = percent endemism
End = number of Endangered species
VRI = number of Vulnerable, Rare and Indeterminate species
Sp Fe = number of Special Features
NC = Natural Conservation status rating
Vu = natural Vulnerability rating
PC = Practicality of Conservation action rating
Da = reliability of Data rating
Co PA = Coverage of Protected Areas rating
(see Appendix for explanation)

Table 3A

CONTINENTAL ISLANDS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	IE	GE	Endemism %	End	Threat VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
14	Yande	IV	1	1	1	5	5		1		1	1	1	0	14	0
17	Babeldaob	XIII	3	2	0	4	0	1	3		0	1	0	1	17	0
17	Yap Islands	XIII	2	2	2	4	2		1	1	0	1	0	1	17	0
19	Isle of Pines	IV	2	2	0	5	0		1	2	0	1	1	2	19	0
28	Viti Levu	VII	3	3	4	4	11	2	2	1	0	1	1	2	28	1
45	New Guinea	I	4	3	5	5	52	1	28	3	0	3	3	1	45	2
80	New Caledonia	IV	3	3	5	5	74	16	156	4	0	2	3	2	80	2

RECORDS SELECTED 7

Table 3B
VOLCANIC ISLANDS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	%	Threat End	VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
9	Tupuai (Tubuai)	XVI	1	1	0	3	0				0	1	0	1	9	0
10	Fefan	XIII	1	1	0	4	0				0	1	0	1	10	0
10	Uman	XIII	1	1	0	4	0		1		0	1	0	1	10	0
10	Uvea	IX	1	1	0	2	0			1	0	1	0	2	10	0
11	Moen	XIII	1	1	0	4	0		1	1	0	1	0	1	11	0
11	Makogai	VII	0	1	0	4	0			1	0	1	1	2	11	0
11	Aitutaki	XVI	1	1	0	3	0		1		0	1	1	2	11	0
11	Atiu	XVI	1	1	1	3	1				0	1	1	1	11	0
11	Mauke	XVI	1	1	1	3	0				0	1	1	1	11	0
11	Rurutu	XVI	1	1	0	3	0			1	0	2	0	1	11	0
11	Tahuata	XIX	1	1	0	4	0		1		0	1	1	1	11	0
12	Matthew	IV	0	0	0	0	0			2	4	2	2	2	12	0
12	Rotuma	VII	0	2	1	4	2				0	1	0	2	12	0
12	Futuna	IX	1	2	2	2	2		1		0	1	0	1	12	0
12	Alofi	IX	1	1	1	2	1			1	1	1	0	2	12	0
12	Mitiaro	XVI	1	1	1	3	1			1	0	1	1	1	12	0
12	Mangaia	XVI	1	1	1	3	1			1	0	1	1	1	12	0
13	Alamagan	XII	1	1	1	3	1		1	1	1	1	1	1	13	0
13	Anatahan	XII	1	1	0	3	0		1	2	1	1	1	1	13	0
13	Tol	XIII	1	1	1	4	0	2	1	1	0	1	0	1	13	0
13	Lakeba (Lakemba)	VII	1	1	0	4	0			1	0	1	1	2	13	0
13	Raivavae	XVI	1	1	2	3	5			1	0	1	0	1	13	0
14	Pagan	XII	1	1	0	3	0		2	2	1	2	1	1	14	0
14	Vella Lavella	III	2	2		4	0				0	2	0	0	14	0
14	Hunter	IV	0	1	0	0	0			2	4	2	2	2	14	0
14	Beqa	VII	1	2	0	4	0		1		0	1	1	2	14	0
14	Tafahi	VIII	1	2	0	2	0				2	2	1	1	14	0
14	Aunuu	IX	1	1	0	4	0			2	0	1	1	2	14	0
14	Rimatara	XVI	1	1	3	3	18				0	1	0	1	14	0
14	Tahaa	XVII	1	2	0	4	0			1	0	1	0	2	14	0
14	Ua Huka	XIX	1	1	1	4	1		1	2	0	1	0	2	14	0
14	Fatu Huku	XIX	0	1	0	4	0		1	1	3	2	1	1	14	0
14	Fatuhiva	XIX	1	1	2	4	4		2		0	1	1	1	14	0
15	Maug	XII	0	1	0	3	0		1	1	3	1	3	2	15	4
15	Agrihan	XII	1	1	0	3	0		2	1	1	2	2	2	15	0
15	Sarigan	XII	1	1	0	3	0		1	1	2	1	3	1	15	4
15	Oreor	XIII	2	2	0	4	0	1	1		0	1	0	1	15	0
15	Ngerekebesang	XIII	2	2	0	4	0	1	1		0	1	0	1	15	0
15	Lavongai (N.Hanover)	II	2	2	0	4	0				0	1	2	0	15	0
15	Luf (Hermit Islands)	II	1	2	0	4	0				0	1	2	2	15	0
15	Shortland	III	1	2	1	4	3		1		0	2	0	1	15	0
15	Ranongga (Ghanongga)	III	2	2	1	4	0				0	2	0	0	15	0
15	Ghizo	III	1	2	1	4	0	1			0	2	0	1	15	0
15	Nendo (Santa Cruz)	V	2	2	1	4	3				0	2	0	0	15	0
15	Tinacula (Volcano)	V	1	1	0	4	0			1	2	3	0	1	15	0
15	Philip Island	VI	0	1	1	3	6	1		1	1	1	3	2	15	0
15	Qamea	VII	2	2	0	4	0				0	1	1	1	15	0
15	Gau (Ngau)	VII	1	2	1	4	0		2		0	1	1	2	15	0
15	Huahine	XVII	1	2	1	4	0			2	0	1	0	1	15	0
15	Easter (Rapa Nui)	XX	0	1	2	2	11	1		2	0	0	3	2	15	3
16	Saipan	XII	1	1	1	3	1	1	3	3	0	1	1	2	16	0
16	Vanguna	III	2	2	0	4	0				0	2	1	1	16	0

Table 3B, continued
VOLCANIC ISLANDS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	%	Threat End	VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
16	Santa Isabel	III	2	3	0	4	0				0	2	0	0	16	0
16	Vanikolo (Vanikoro)	V	2	2	1	4	2				1	2	0	0	16	0
16	Pentecost	V	2	2	1	4	0				0	2	0	1	16	0
16	Malakula	V	2	2	0	4	0			1	0	2	0	1	16	0
16	Kadavu	VII	1	2	1	4	0			1	0	1	1	2	16	1
16	Raiatea	XVII	2	2	1	4	1			1	0	1	0	1	16	0
16	Mangareva	XX	1	1	3	3	28	2			0	1	0	1	16	0
17	Guguan	XII	1	1	0	3	0		1	2	3	2	2	1	17	0
17	Rota	XII	1	2	1	3	1	3	4	1	0	1	1	2	17	0
17	Buka	III	2	2	0	4	0				0	2	2	1	17	0
17	Choiseul (Lauru)	III	2	3	1	4	0				0	2	0	0	17	0
17	New Georgia	III	2	3	0	4	0			1	0	2	0	0	17	0
17	Efate (Vate)	V	2	2	0	4	0		1	2	0	2	0	1	17	0
17	Erromango	V	2	2	1	4	0			1	0	2	0	1	17	0
17	Anatom (Aneityum)	V	2	2	1	4	0			2	0	2	0	0	17	0
17	Namena Lala	VII	1	2	0	4	0			2	0	1	1	3	17	0
17	Ovalau	VII	2	2	0	4	0		1	1	0	1	1	2	17	0
17	Kao	VIII	1	2	0	2	0			2	2	3	1	1	17	0
17	Ofu	IX	1	1	1	4	33			1	0	1	1	2	17	0
17	Ua Pou	XIX	1	1	2	4	4		8	2	0	1	1	1	17	0
18	Kosrae	XIII	2	2	1	4	1	1		2	0	1	0	1	18	0
18	Eua	VIII	2	2	1	2	1			1	0	2	2	2	18	0
18	Ata	VIII	1	2	0	2	0			1	4	2	2	1	18	0
18	Upolu	IX	2	2	1	4	0		2		0	1	2	2	18	2
18	Hiva Oa	XIX	1	1	2	4	8	2	14	1	0	0	1	1	18	0
19	Ascuncion	XII	1	1	1	3	1		1	2	3	2	2	2	19	0
19	Pohnpei	XIII	2	2	2	4	4		3	1	0	1	0	2	19	0
19	Sudest (Tagula)	I	2	2	1	5	0		2		0	2	2	1	19	0
19	Vanua Lava	V	2	2	0	4	0	1		1	1	3	0	1	19	0
19	Tanna	V	2	2	0	4	0			3	0	3	0	1	19	0
19	Niuafo'ou	VIII	1	2	1	2	0		1	2	3	3	1	1	19	0
19	Hatutaa	XIX	0	1	1	4	6		3	1	4	1	3	2	19	4
20	Karkar	I	2	2	0	5	0			1	0	1	4	1	20	3
20	Manus	II	2	2	1	4	0		4	1	0	2	3	0	20	0
20	Kolombangara (Nduke)	III	2	3	1	4	0		1	1	0	2	0	2	20	2
20	Espiritu Santo	V	3	2	1	4	2		1	1	0	2	1	1	20	1
20	Yadua Taba	VII	1	1	0	4	0	1		1	1	2	4	3	20	4
20	Aleipata Islands	IX	1	2	0	4	0			3	2	1	2	2	20	0
20	Mohotani	XIX	1	1	1	4	4	1	1	1	1	2	3	3	20	4
21	Long	I	2	2	0	5	0			2	0	1	4	1	21	3
21	New Ireland	II	2	2	2	4	1		5		0	2	3	1	21	0
21	Malaita	III	3	3	1	4	4		3		0	2	0	1	21	0
22	Savai'i	IX	2	2	2	4	2	1	2	1	0	2	2	2	22	0
22	Tutuila	IX	2	2	2	4	3		4	2	0	1	1	3	22	0
22	Tau	IX	1	1	2	4	56			2	0	1	1	2	22	0
23	Fergusson (Moratau)	I	2	2	1	5	0		1	2	0	2	4	1	23	2
23	Rarotonga	XVI	2	2	3	3	4	1	1	1	0	2	2	3	23	0
23	Eiao	XIX	1	1	2	4	14	1	6	2	2	2	3	1	23	4
24	Guadalcanal	III	3	3	2	4	5	1	3	1	0	2	0	1	24	1
24	San Cristobal	III	3	3	2	4	16		8		0	2	0	1	24	0
24	Sunday (Raoul)	VI	1	1	3	3	19	4	2	3	1	1	3	2	24	4
24	Vanua Levu	VII	3	3	1	4	0	2		2	0	2	1	1	24	1

Table 3B, continued
VOLCANIC ISLANDS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	%	Threat End	VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
24	Taveuni	VII	3	3	1	4	0		1	2	0	2	1	2	24	2
24	Moorea	XVII	1	2	2	4	3	12	1	2	0	1	0	2	24	0
24	Rapa	XX	1	1	4	4	80		1	1	0	1	1	1	24	0
25	Bougainville	III	3	2	3	4	16		2		0	2	3	1	25	0
25	Tahiti	XVII	2	2	4	4	18	1	1	3	0	2	0	1	25	0
26	Goodenough (Morata)	I	3	2	4	5	2		1	1	0	2	2	2	26	0
26	Nuku Hiva	XIX	2	1	3	4	14	8	12	1	0	1	1	2	26	0
28	New Britain	II	3	2	2	4	1		12	3	0	2	3	1	28	1
35	Norfolk Island	VI	1	1	3	3	28	15	35	1	0	1	3	3	35	3
46	Lord Howe	VI	2	2	4	4	42	4	75	2	0	0	4	3	46	3

RECORDS SELECTED 114

Table 3C
ATOLLS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	% End	Threat VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
5	Wotje	XIV	0	1	0	0	0	1		1	1	0	1	5	0
5	Arno	XIV	0	1	0	0	0	1		0	1	0	2	5	0
5	Ailinglaplap	XIV	0	1	0	0	0			1	1	0	1	5	0
5	Jaluit	XIV	0	1	0	0	0			1	1	0	1	5	0
5	Funafuti	X	0	1	0	0	0			0	1	0	2	5	0
5	Palmyra	XV	0	0	0	0	0		1	1	0	1	2	5	0
6	Wotho	XIV	0	1	0	0	0		1	1	1	0	1	6	0
6	Nukunonu	X	0	1	0	0	0		1	1	1	0	1	6	0
6	Butaritari	XI	0	1	0	0	0		1	0	0	1	2	6	0
6	Pukapuka	XV	0	0	0	0	0		2	1	1	1	1	6	0
7	Nonouti	XI	0	1	0	0	0		2	0	1	1	1	7	0
8	Helen	XIII	0	0	0	0	0		1	3	1	1	2	8	0
8	Ujelang	XIV	0	1	0	0	0		1	2	1	1	1	8	0
8	Enewetak	XIV	0	1	1	0	4			0	1	1	3	8	0
8	D'Entrecasteaux Reef	IV	0	0	0	0	0		2	2	1	2	1	8	0
8	Tikehau	XVIII	0	1	0	3	0	1		1	1	0	1	8	0
9	Woleai	XIII	0	1	0	4	0			1	1	0	1	9	0
10	Ngcheangel	XIII	0	1	0	4	0	1	1	0	1	0	2	10	0
10	Kapingamarangi	XIII	0	1	1	4	1			1	1	0	1	10	0
10	Bikar	XIV	0	0	0	0	0		2	3	1	2	2	10	4
10	Tabuaeran (Fanning)	XV	0	1	1	0	6		1	1	0	2	2	10	0
10	Suwarrow (Suvarov)	XV	0	0	0	0	0		2	2	1	3	2	10	4
10	Rangiroa	XVIII	0	1	0	3	0	2	2	0	1	0	2	10	0
10	Takapoto	XVIII	0	1	0	3	0		1	0	1	0	3	10	0
10	Niau	XVIII	0	1	1	3	4			1	1	0	2	10	0
10	Kauehi	XVIII	0	1	0	3	0	1	2	2	1	0	0	10	0
10	Anaa	XVIII	0	1	1	3	4			1	1	0	2	10	0
10	Marutea (South)	XVIII	0	1	0	3	0	1		3	1	0	1	10	0
11	West Fayu	XIII	0	0	0	4	0		2	3	1	0	1	11	0
11	Ant	XIII	0	1	0	4	0		1	1	1	0	2	11	0
11	Qelelevu	VII	0	1	0	4	0		1	1	1	1	1	11	0
11	Caroline	XV	0	1	0	0	0		2	2	0	3	2	11	0
11	Motu One	XVII	0	1	0	4	0	1	2	1	1	0	1	11	0
11	Maupihaa (Mopelia)	XVII	0	1	0	4	0	1	2	1	1	0	1	11	0
11	Ducie	XX	0	0	0	3	0		1	3	0	2	2	11	0
12	Namoluk	XIII	0	1	0	4	0		1	1	2	0	2	12	0
12	Wailagi Lala	VII	0	1	0	4	0		1	1	1	1	2	12	0
12	Orona (Hull)	XV	0	1	0	0	0		2	2	1	3	2	12	0
12	Oeno	XX	0	0	1	2	12		1	3	0	2	2	12	0
13	Oroluk	XIII	0	1	0	4	0		2	2	1	0	2	13	0
13	Bokaak	XIV	0	0	1	1	5		2	3	1	2	2	13	4
13	Manuae (Scilly)	XVII	0	1	0	4	0	1	2	1	1	1	2	13	1
13	Tetiaroa	XVII	0	1	0	4	0		1	0	1	2	3	13	0
13	Napuka	XVIII	0	1	1	3	3	1	2	2	1	0	1	13	0
13	Matureivavao	XVIII	0	1	0	3	0	2	2	3	1	0	2	13	0
14	Rose Atoll	IX	0	0	0	0	0		3	3	1	4	3	14	4
15	Taiaro	XVIII	0	1	0	3	0		1	2	1	3	3	15	4
16	Ouvea	IV	1	2	1	3	5	1		0	2	1	2	16	0
17	Ninigo Islands	II	1	1	1	4	18	1	1	0	1	2	2	17	0
17	Kiritimati	XV	1	2	1	0	3		3	0	1	3	3	17	4

Table 3D
LOW ISLANDS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	IE	GE	Endemism % End	Threat VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
5	Vaitupu	X	0	1	0	0	0			1	1	0	1	5	0
8	Chesterfield Isles	IV	0	0	0	0	0		1	3	1	2	1	8	0
8	Nukutavake	XVIII	0	1	0	3	0	1		2	1	0	0	8	0
9	Jemo	XIV	0	1	0	0	0		2	3	1	0	1	9	0
10	Enderbury	XV	0	0	0	0	0		2	2	1	3	2	10	0
10	Starbuck	XV	0	0	0	0	0		2	2	1	3	2	10	4
10	Vostok	XV	0	0	0	0	0		2	3	0	3	2	10	4
12	McKean	XV	0	1	0	0	0		1	3	1	3	2	12	4
13	Pikelot	XIII	0	1	0	4	0		2	3	1	0	1	13	0
13	Fayu	XIII	0	1	0	4	0		1	3	1	1	1	13	0
13	Nanuk	II	0	1	0	4	0			0	1	4	2	13	4
13	Reef Islands (Rowa)	V	0	1	0	4	0		1	2	2	0	2	13	0
13	Birnie	XV	0	1	0	0	0		2	3	1	3	2	13	4
13	Howland	XV	0	1	0	0	0		2	2	1	3	3	13	4
13	Motu One	XIX	0	0	0	4	0		2	3	1	3	0	13	4
14	Rawaki (Phoenix)	XV	0	2	0	0	0		3	2	0	3	2	14	4
14	Teraina (Washington)	XV	1	1	1	1	2		3	1	0	2	2	14	0
14	Malden	XV	0	1	0	0	0		3	2	1	3	3	14	4
14	Jarvis	XV	0	1	0	0	0		2	3	1	3	3	14	4
14	Baker	XV	0	1	0	0	0		2	3	1	3	3	14	4
15	Talele Islands	II	0	1	0	4	0		2	0	1	4	2	15	4

RECORDS SELECTED 21

Table 3E
RAISED CORAL ISLANDS
RANKED BY CONSERVATION IMPORTANCE (CI)

Sorted by CI	Island	Prov.	Richness ER	SR	Endemism IE	GE	%	Threat End	VRI	Sp Fe	NC	Vu	PC	Da	CI	Co PA
9	Aguijan	XII	0	1	0	3	0		1	0	1	1	1	1	9	0
9	Nauru	XI	0	1	1	1	3	1		1	0	1	0	2	9	0
10	Walpole	IV	0	1	0	0	0			1	2	1	2	2	10	0
11	Beliliou	XIII	1	1	0	4	0	1	1		0	1	0	1	11	0
11	Fais	XIII	0	1	1	4	0			1	1	1	0	1	11	0
11	Mabualau	VII	0	1	0	4	0			1	1	1	1	1	11	0
11	Fulaga (Fulanga)	VII	0	1	1	4	0		1	1		1	1	1	11	0
11	Makatea	XVIII	1	1	1	3	1		1		0	1	0	2	11	0
12	Vatulele	VII	1	1	0	4	0			1	0	1	1	1	12	0
12	Ogea Levu	VII	0	1	1	4	0		1	2	0	1	1	1	12	0
12	Niue	VIII	1	1	1	1	0			1	0	1	2	2	12	1
13	Ngemlis	XIII	1	1	0	4	0			1	1	1	0	2	13	0
13	Gaferut	XIII	0	1	0	4	0			2	2	1	1	1	13	0
13	Sovu	VII	0	1	1	4	1		1	1	2	1	1	1	13	0
14	Tinian	XII	1	1	1	3	1	1	2	2	0	1	1	1	14	0
14	Tongatapu	VIII	1	2	0	2	0			1	0	2	1	2	14	1
15	Kiriwina (Trobriand)	I	1	2	0	5	0				0	1	2	1	15	0
15	Lifou	IV	1	2	1	3	5				0	1	1	2	15	0
16	Chelbacheb Islands	XIII	1	2	0	4	0	1	2	1	2	1	0	1	16	0
16	Ngerukuid	XIII	1	1	0	4	0		2		2	1	3	2	16	4
16	Mare	IV	2	2	1	3	0				0	1	1	2	16	0
16	Vanua Balavu	VII	1	2	0	4	0			3	0	1	1	1	16	0
22	Henderson	XX	0	1	3	3	35		2	2	4	0	2	2	22	0
26	Rennell	III	2	3	2	4	27		4	1	1	1	1	2	26	0
27	Guam	XII	2	2	3	3	3	7	5	3	0	1	1	3	27	2

RECORDS SELECTED 25

Table 4
ISLANDS OVER 400 METRES ALTITUDE

Sorted by ALT	Island	Country	Prov.	Area (sq. km)	Alt. (m)	Is. Type	HI	CI
428	Hatutaa	French Polynesia	XIX	18.1	428	V	0	19
436	Raivavae	French Polynesia	XVI	21.0	436	VL	4	13
439	Tol	Fed.S. Micronesia	XIII	34.0	439	V	11	13
441	Mangareva	French Polynesia	XX	13.0	441	V	6	16
456	Huahine	French Polynesia	XVII	78.0	456	VR	5	15
457	Beqa	Fiji	VII	36.0	457	V	2	14
474	Saipan	Northern Marianas	XII	122.9	474	VR	7	16
488	Ofu	American Samoa	IX	8.0	488	V	5	17
491	Rota	Northern Marianas	XII	85.0	491	VR	2	17
500	Buka	Papua New Guinea	III	829.0	500	V	4	17
518	Mohotani	French Polynesia	XIX	15.5	518	V	0	20
549	Sarigan	Northern Marianas	XII	4.9	549	V	0	15
550	Nendo (Santa Cruz)	Solomon Islands	V	647.0	550	V	2	15
570	Pagan	Northern Marianas	XII	48.0	570	V	1	14
579	Tahaa	French Polynesia	XVII	98.0	579	V	4	14
600	Easter (Rapa Nui)	Chile	XX	166.0	600	V	1	15
609	Eiao	French Polynesia	XIX	51.8	609	V	0	23
610	Tafahi	Tonga	VIII	3.4	610	V	2	14
626	Ovalau	Fiji	VII	139.0	626	V	4	17
628	Kosrae	Fed.S. Micronesia	XIII	110.0	628	V	5	18
633	Rapa	French Polynesia	XX	22.0	633	V	5	24
647	Efate (Vate)	Vanuatu	V	777.0	647	VR	5	17
652	Rarotonga	Cook Islands	XVI	64.0	652	VR	5	23
653	Tutuila	American Samoa	IX	135.0	653	V	11	22
670	Tinacula (Volcano)	Solomon Islands	V	100.0	670	V	0	15
715	Gau (Ngau)	Fiji	VII	140.0	715	VR	2	15
719	Manus	Papua New Guinea	II	1640.0	719	V	2	20
744	Alamagan	Northern Marianas	XII	11.0	744	V	1	13
762	Futuna	Wallis and Futuna	IX	80.0	762	V	6	12
788	Anatahan	Northern Marianas	XII	32.0	788	V	1	13
791	Pohnpei	Fed.S. Micronesia	XIII	334.0	791	V	5	19
835	Vanua Levu	Fiji	VII	5535.0	835	VR	4	24
838	Kadavu	Fiji	VII	408.0	838	V	3	16
852	Anatom (Aneityum)	Vanuatu	V	154.0	852	V	1	17
855	Ua Huka	French Polynesia	XIX	78.0	855	V	2	14
863	Malakula	Vanuatu	V	1165.0	863	VR	3	16
870	Lavongai (N.Hanover)	Papua New Guinea	II	1190.0	870	V	1	15
875	Lord Howe	Australia	VI	14.6	875	V	4	46
886	Erromango	Vanuatu	V	855.0	886	VR	2	17
891	Ascuncion	Northern Marianas	XII	7.0	891	V	0	19
910	Sudest (Tagula)	Papua New Guinea	I	803.0	910	V	2	19
931	Tau	American Samoa	IX	44.0	931	V	4	22
946	Vanua Lava	Vanuatu	V	298.0	946	V	2	19
946	Pentecost	Vanuatu	V	324.0	946	VR	3	16
965	Agrihan	Northern Marianas	XII	47.0	965	V	1	15
999	Tahuata	French Polynesia	XIX	52.0	999	V	4	11
1010	New Georgia	Solomon Islands	III	2330.0	1010	VR	2	17
1030	Kao	Tonga	VIII	12.0	1030	V	1	17
1033	Raiatea	French Polynesia	XVII	202.0	1033	V	5	16
1067	Choiseul (Lauru)	Solomon Islands	III	3454.0	1067	V	2	17
1084	Tanna	Vanuatu	V	390.0	1084	VR	4	19
1100	Normanby (Duau)	Papua New Guinea	I	1040.0	1100		2	19

Table 4, continued
ISLANDS OVER 400 METRES ALTITIDE

Sorted by ALT	Island	Country	Prov.	Area (sq. km)	Alt. (m)	Is. Type	HI	CI
1100	Upolu	Western Samoa	IX	1114.0	1100	V	6	18
1118	Fatuhiva	French Polynesia	XIX	78.0	1118	V	4	14
1120	Vanguna	Solomon Islands	III	600.0	1120	V	2	16
1121	Moorea	French Polynesia	XVII	132.0	1121	V	5	24
1185	Nuku Hiva	French Polynesia	XIX	337.0	1185	V	4	26
1219	Santa Isabel	Solomon Islands	III	4014.0	1219	VR	2	16
1224	Taveuni	Fiji	VII	435.0	1224	V	4	24
1231	Ua Pou	French Polynesia	XIX	104.0	1231	V	4	17
1250	San Cristobal	Solomon Islands	III	3125.0	1250	V	2	24
1259	Hiva Oa	French Polynesia	XIX	241.0	1259	V	4	18
1323	Viti Levu	Fiji	VII	10544.0	1323	CV	6	28
1432	Malaita	Solomon Islands	III	4243.0	1432	VR	3	21
1628	New Caledonia	New Caledonia	IV	16890.0	1628	CR	5	80
1830	Fergusson (Moratau)	Papua New Guinea	I	1340.0	1830	V	1	23
1857	Savai'i	Western Samoa	IX	1821.0	1857	V	3	22
1879	Espiritu Santo	Vanuatu	V	3937.0	1879	VR	4	20
2237	Tahiti	French Polynesia	XVII	1042.0	2237	V	6	25
2290	New Ireland	Papua New Guinea	II	8500.0	2290	V	2	21
2438	New Britain	Papua New Guinea	II	36500.0	2438	V	3	28
2446	Guadalcanal	Solomon Islands	III	5336.0	2446	V	4	24
2545	Goodenough (Morata)	Papua New Guinea	I	751.0	2545	V	3	26
3123	Bougainville	Papua New Guinea	III	10619.0	3123	V	3	25
4694	New Guinea	Papua New Guinea	I	400000.	4694	C	3	45

RECORDS SELECTED 75

Key:
Prov. = Biogeographic province
Alt. = Altitude (metres)
Is. Type = Island Type
C = continental
V = volcanic
A = atoll
L = low island
R = raised coral island
HI = Human Impact rating
CI = Conservation Importance rating
(see Appendix for explanations)

Table 5
ISLANDS RANKED BY
TOTAL NUMBER OF ENDEMIC SPECIES

Sorted by END	Number of endemic species							% Rating				
Island	Plant	Insect	Inv.	R-A	Bird	Mam.	Total	End	Is.	Gr.	HI	CI
Ascuncion	1						1	1	1	3	0	19
Alamagan	1						1	1	1	3	1	13
Saipan					1		1	1	1	3	7	16
Tinian					1		1	1	1	3	1	14
Rota					1		1	1	1	3	2	17
Tol					1		1	0	1	4	11	13
Kapingamarangi				1			1	1	1	4	10	10
Kosrae					1		1	1	1	4	5	18
Bokaak	1						1	5	1	1	0	13
Muyua (Woodlark)						1	1	0	1	5	2	18
Fergusson (Moratau)					1		1	0	1	5	1	23
Normanby (Duau)					1		1	0	1	5	2	19
Dyaul					1		1	0	1	4	2	17
Shortland				1			1	3	1	4	3	15
Choiseul (Lauru)				1			1	0	1	4	2	17
Ranongga (Ghanongga)					1		1	0	1	4	3	15
Ghizo					1		1	0	1	4	4	15
Vanikolo (Vanikoro)					1		1	2	1	4	2	16
Espiritu Santo					1		1	2	1	4	4	20
Pentecost				1			1	0	1	4	3	16
Yande					1		1	5	1	5	2	14
Ouvea					1		1	5	1	3	5	16
Gau (Ngau)					1		1	0	1	4	2	15
Sovu	1						1	1	1	4	0	13
Fulaga (Fulanga)	1						1	0	1	4	2	11
Ogea Levu					1		1	0	1	4	2	12
Niuafo'ou					1		1	0	1	2	1	19
Niue					1		1	0	1	1	0	12
Upolu			1				1	0	1	4	6	18
Nauru	1						1	3	1	1	22	9
Teraina (Washington)					1		1	2	1	1	3	14
Mauke					1		1	0	1	3	3	11
Anaa					1		1	4	1	3	4	10
Napuka					1		1	3	1	3	2	13
Sudest (Tagula)					2		2	0	1	5	2	19
St. Matthias Group					2		2	0	1	4	1	17
Kolombangara (Nduke)					2		2	0	1	4	3	20
Erromango	1			1			2	0	1	4	2	17
Anatom (Aneityum)	1			1			2	0	1	4	1	17
Lifou					2		2	5	1	3	4	15
Rotuma				1	1		2	2	1	4	4	12
Vanua Levu					2		2	0	1	4	4	24
Kadavu					2		2	0	1	4	3	16
Alofi					2		2	1	1	2	3	12
Ofu			2				2	33	1	4	5	17
Tabuaeran (Fanning)	2						2	6	1	0	2	10
Kiritimati	1				1		2	3	1	0	2	17
Atiu					2		2	1	1	3	4	11
Mitiaro	1			1			2	1	1	3	1	12
Mangaia					2		2	1	1	3	2	12
Raiatea	2						2	1	1	4	5	16
Makatea					2		2	1	1	3	2	11

Table 5, continued
ISLANDS RANKED BY
TOTAL NUMBER OF ENDEMIC SPECIES

Sorted by END	Number of endemic species							% Rating				
Island	Plant	Insect	Inv.	R-A	Bird	Mam.	Total	End	Is.	Gr.	HI	CI
Niau					2		2	4	1	3	4	10
Hatutaa					2		2	6	1	4	0	19
Ua Huka					2		2	1	1	4	2	14
Oeno	2						2	12	1	2	0	12
Manus			1		2		3	0	1	4	2	20
Ninigo Islands					3		3	18	1	4	8	17
Nendo (Santa Cruz)				1	2		3	3	1	4	2	15
Philip Island	3						3	6	1	3	0	15
Taveuni	1				1	1	3	0	1	4	4	24
Enewetak	4						4	4	1	0	5	8
Malaita				1	3		4	4	1	4	3	21
Eua	4						4	1	1	2	6	18
Mohotani	2				2		4	4	1	4	0	20
New Ireland					5		5	1	2	4	2	21
Guadalcanal				3	2		5	5	2	4	4	24
Tau			5				5	56	2	4	4	22
Easter (Rapa Nui)	5						5	11	2	2	1	15
Yap Islands	5				2		7	2	2	4	6	17
Eiao	5				2		7	14	2	4	0	23
San Cristobal					8		8	16	2	4	2	24
Futuna	3				5		8	2	2	2	6	12
Ua Pou	6				2		8	4	2	4	4	17
Fatuhiva	6				2		8	4	2	4	4	14
Raivavae	10						10	5	2	3	4	13
New Britain					11		11	1	2	4	3	28
Savai'i	10				1		11	2	2	4	3	22
Tutuila	2		11				13	3	2	4	11	22
Moorea			11		2		13	3	2	4	5	24
Pohnpei	8			1	5		14	4	2	4	5	19
Hiva Oa	14				1		15	8	2	4	4	18
Bougainville				13	3		16	16	3	4	3	25
Rennell				1	15		16	27	2	4	1	26
Rimatara	20				1		21	18	3	3	4	14
Rarotonga	20				3		23	4	3	3	5	23
Guam	20	1		1	2	1	25	3	3	3	9	27
Nuku Hiva	24				4		28	14	3	4	4	26
Mangareva	2		25		1		28	28	3	3	6	16
Sunday (Raoul)	23				6		29	19	3	3	0	24
Henderson	10	11	4		4	0	29	35	3	3	0	22
Norfolk Island	48				5	2	55	28	3	3	3	35
Goodenough (Morata)	100				5	1	106	2	4	5	3	26
Viti Levu	100			3	4		107	11	4	4	6	28
Tahiti	100	1	79		1		181	18	4	4	6	25
Rapa	100		98		2		200	80	4	4	5	24
Lord Howe	75	69	62	2	4		212	42	4	4	4	46
New Caledonia	2474	61		23	20		2578	74	5	5	5	80
New Guinea	6000	367		220	195	7	6789	52	5	5	3	45

Table 6
ISLANDS RANKED BY NUMBER OF
ENDEMIC BIRD SPECIES

Sorted by ENDBI	Number of endemic species							% Rating				
Island	Plant	Insect	Inv.	R-A	Bird	Mam.	Total	End	Is.	Gr.	HI	CI
Saipan					1		1	1	1	3	7	16
Tinian					1		1	1	1	3	1	14
Rota					1		1	1	1	3	2	17
Tol					1		1	0	1	4	11	13
Kosrae					1		1	1	1	4	5	18
Fergusson (Moratau)					1		1	0	1	5	1	23
Normanby (Duau)					1		1	0	1	5	2	19
Dyaul					1		1	0	1	4	2	17
Ranongga (Ghanongga)					1		1	0	1	4	3	15
Ghizo					1		1	0	1	4	4	15
Vanikolo (Vanikoro)					1		1	2	1	4	2	16
Espiritu Santo					1		1	2	1	4	4	20
Yande					1		1	5	1	5	2	14
Ouvea					1		1	5	1	3	5	16
Rotuma				1	1		2	2	1	4	4	12
Taveuni	1				1	1	3	0	1	4	4	24
Gau (Ngau)					1		1	0	1	4	2	15
Ogea Levu					1		1	0	1	4	2	12
Niuafo'ou					1		1	0	1	2	1	19
Niue					1		1	0	1	1	0	12
Savai'i	10				1		11	2	2	4	3	22
Teraina (Washington)					1		1	2	1	1	3	14
Kiritimati	1				1		2	3	1	0	2	17
Mauke					1		1	0	1	3	3	11
Rimatara	20				1		21	18	3	3	4	14
Tahiti	100	1	79		1		181	18	4	4	6	25
Anaa					1		1	4	1	3	4	10
Napuka					1		1	3	1	3	2	13
Hiva Oa	14				1		15	8	2	4	4	18
Mangareva	2		25		1		28	28	3	3	6	16
Guam	20	1		1	2	1	25	3	3	3	9	27
Yap Islands	5				2		7	2	2	4	6	17
Sudest (Tagula)					2		2	0	1	5	2	19
St. Matthias Group					2		2	0	1	4	1	17
Manus			1		2		3	0	1	4	2	20
Kolombangara (Nduke)					2		2	0	1	4	3	20
Guadalcanal				3	2		5	5	2	4	4	24
Nendo (Santa Cruz)				1	2		3	3	1	4	2	15
Lifou					2		2	5	1	3	4	15
Vanua Levu					2		2	0	1	4	4	24
Kadavu					2		2	0	1	4	3	16
Alofi					2		2	1	1	2	3	12
Atiu					2		2	1	1	3	4	11
Mangaia					2		2	1	1	3	2	12
Moorea			11		2		13	3	2	4	5	24
Makatea					2		2	1	1	3	2	11
Niau					2		2	4	1	3	4	10
Hatutaa					2		2	6	1	4	0	19
Eiao	5				2		7	14	2	4	0	23
Ua Huka					2		2	1	1	4	2	14
Ua Pou	6				2		8	4	2	4	4	17
Mohotani	2				2		4	4	1	4	0	20

Table 6, continued
ISLANDS RANKED BY NUMBER OF
ENDEMIC BIRD SPECIES

Sorted by ENDBI	Number of endemic species							% Rating				
Island	Plant	Insect	Inv.	R-A	Bird	Mam.	Total	End	Is.	Gr.	HI	CI
Fatuhiva	6				2		8	4	2	4	4	14
Rapa	100		98		2		200	80	4	4	5	24
Ninigo Islands					3		3	18	1	4	8	17
Bougainville				13	3		16	16	3	4	3	25
Malaita				1	3		4	4	1	4	3	21
Rarotonga	20				3		23	4	3	3	5	23
Lord Howe	75	69	62	2	4		212	42	4	4	4	46
Viti Levu	100			3	4		107	11	4	4	6	28
Nuku Hiva	24				4		28	14	3	4	4	26
Henderson	10	11	4		4	0	29	35	3	3	0	22
Pohnpei	8			1	5		14	4	2	4	5	19
Goodenough (Morata)	100				5	1	106	2	4	5	3	26
New Ireland					5		5	1	2	4	2	21
Norfolk Island	48				5	2	55	28	3	3	3	35
Futuna	3				5		8	2	2	2	6	12
Sunday (Raoul)	23				6		29	19	3	3	0	24
San Cristobal					8		8	16	2	4	2	24
New Britain					11		11	1	2	4	3	28
Rennell				1	15		16	27	2	4	1	26
New Caledonia	2474	61		23	20		2578	74	5	5	5	80
New Guinea	6000	367		220	195	7	6789	52	5	5	3	45

RECORDS SELECTED 73

Key:
Plant = number of plant endemic species
Insect = number of insect endemic species
Inv. = number of other invertebrate endemic species (land snails)
R-A = number of Reptile and Amphibian endemic species
Bird = number of bird endemic species
Mam. = number of mammal endemic species
Total = total number of endemic species
% End = average percent endemism
Is. = Island endemism rating
Gr. = Group endemism rating
HI = Human Impact rating
CI = Conservation Importance rating
(see Appendix for explanation)

Table 7
HUMAN IMPACT (HI)

Sorted by HI	Island	Prov.	Population Density	Trend	Human Econ Threat	Pr	Urb	HI
0	Maug	XII	0		0	0		0
0	Ascuncion	XII	0		0	0		0
0	Guguan	XII	0		0	0		0
0	Sarigan	XII	0		0	0		0
0	Aguijan	XII	0		0	0		0
0	Chelbacheb Islands	XIII	0		0	0		0
0	Ngerukuid	XIII	0		0	0		0
0	Ngemlis	XIII	0		0	0		0
0	Helen	XIII	0		0	0		0
0	Gaferut	XIII	0		0	0		0
0	West Fayu	XIII	0		0	0		0
0	Pikelot	XIII	0		0	0		0
0	Fayu	XIII	0		0	0		0
0	Ant	XIII	0		0	0		0
0	Bokaak	XIV	0		0	0		0
0	Bikar	XIV	0		0	0		0
0	Jemo	XIV	0		0	0		0
0	Ujelang	XIV	0		0	0		0
0	Wotho	XIV	19	2	0	0		0
0	Talele Islands	II	0		0	0		0
0	Nanuk	II	0		0	0		0
0	Tinacula (Volcano)	V	0		0	0		0
0	Reef Islands (Rowa)	V	0		0	0		0
0	Chesterfield Isles	IV	0		0	0		0
0	D'Entrecasteaux Reef	IV	0		0	0		0
0	Walpole	IV	0		0	0		0
0	Matthew	IV	0		0	0		0
0	Hunter	IV	0		0	0		0
0	Philip Island	VI	0		0	0		0
0	Sunday (Raoul)	VI	0	2	0	0		0
0	Wailagi Lala	VII	0		0	0		0
0	Sovu	VII	0		0	0		0
0	Ata	VIII	0		0	0		0
0	Niue	VIII	12	0	0	0		0
0	Rose Atoll	IX	0		0	0		0
0	Enderbury	XV	0		0	0		0
0	Birnie	XV	0		0	0		0
0	Rawaki (Phoenix)	XV	0		0	0		0
0	Orona (Hull)	XV	0		0	0		0
0	McKean	XV	0		0	0		0
0	Malden	XV	0		0	0		0
0	Starbuck	XV	0		0	0		0
0	Vostok	XV	0		0	0		0
0	Caroline	XV	0		0	0		0
0	Jarvis	XV	0		0	0		0
0	Howland	XV	0		0	0		0
0	Baker	XV	0		0	0		0
0	Suwarrow (Suvarov)	XV	0		0	0		0
0	Taiaro	XVIII	1	2	0	0		0
0	Matureivavao	XVIII	0		0	0		0
0	Motu One	XIX	0		0	0		0
0	Hatutaa	XIX	0		0	0		0

Table 7, continued
HUMAN IMPACT (HI)

Sorted by HI	Island	Prov.	Population Density	Trend	Human Threat	Econ Pr	Urb	HI
0	Eiao	XIX	0		0	0		0
0	Fatu Huku	XIX	0		0	0		0
0	Mohotani	XIX	0		0	0		0
0	Oeno	XX	0		0	0		0
0	Henderson	XX	0		0	0		0
0	Ducie	XX	0		0	0		0
1	Agrihan	XII	2	5	1	0		1
1	Pagan	XII	2	5	1	0		1
1	Alamagan	XII	9	5	1	0		1
1	Anatahan	XII	3	5	1	0		1
1	Tinian	XII	7	5	1	0		1
1	Babeldaob	XIII	8	1	1	0		1
1	Ngerekebesang	XIII	20	2	0	1		1
1	Beliliou	XIII	49	1	1	0		1
1	Oroluk	XIII	20	2	1	0		1
1	Fergusson (Moratau)	I	10	4	1	0		1
1	Lavongai (N.Hanover)	II	6	4	1	0		1
1	St. Matthias Group	II	9	4	1	0		1
1	Rennell	III	2	5	1	0		1
1	Three Sisters Is.	III	0		1	0		1
1	Utupua	V	4	5	1	0		1
1	Anatom (Aneityum)	V	3	5	1	0		1
1	Qelelevu	VII	20	2	1	0		1
1	Namena Lala	VII	10	3	0	1		1
1	Yadua Taba	VII	0		1	0		1
1	Mabualau	VII	0		1	0		1
1	Makogai	VII	13	3	1	0		1
1	Wakaya	VII	13	3	1	0		1
1	Niuafo'ou	VIII	16	3	1	0		1
1	Kao	VIII	8	3	1	0		1
1	Aleipata Islands	IX	0		1	0		1
1	Palmyra	XV	13	2	1	0		1
1	Mitiaro	XVI	15	3	1	0		1
1	Nukutavake	XVIII	20	2	1	0		1
1	Marutea (South)	XVIII	0		1	0		1
1	Easter (Rapa Nui)	XX	7	3	1	0		1
2	Rota	XII	13	5	1	0		2
2	Ngcheangel	XIII	82	1	1	0		2
2	Karkar	I	9	4	2	0		2
2	Muyua (Woodlark)	I	2	4	2	0		2
2	Normanby (Duau)	I	10	4	2	0		2
2	Sudest (Tagula)	I	2	4	2	0		2
2	Umboi (Rooke)	II	4	4	2	0		2
2	New Ireland	II	6	4	2	0		2
2	Dyaul	II	35	4	1	0		2
2	Manus	II	6	4	2	0		2
2	Choiseul (Lauru)	III	3	5	2	0		2
2	New Georgia	III	4	5	2	0		2
2	Vanguna	III	5	5	2	0		2
2	Arnavon Islands	III	0		2	0		2
2	Santa Isabel	III	3	5	2	0		2
2	San Cristobal	III	4	5	2	0		2

Table 7, continued
HUMAN IMPACT (HI)

Sorted by HI	Island	Prov.	Population Density	Trend	Human Threat	Econ Pr	Urb	HI
2	Nendo (Santa Cruz)	V	8	5	2	0		2
2	Vanikolo (Vanikoro)	V	2	5	2	0		2
2	Vanua Lava	V	3	5	2	0		2
2	Erromango	V	1	5	2	0		2
2	Yande	IV	8	3	1	1		2
2	Qamea	VII	29	3	1	0		2
2	Beqa	VII	28	3	1	0		2
2	Vatulele	VII	32	3	1	0		2
2	Gau (Ngau)	VII	7	3	1	1		2
2	Vanua Balavu	VII	38	3	1	0		2
2	Lakeba (Lakemba)	VII	37	3	1	0		2
2	Fulaga (Fulanga)	VII	40	3	1	0		2
2	Ogea Levu	VII	30	3	1	0		2
2	Tafahi	VIII	18	3	1	0		2
2	Tabuaeran (Fanning)	XV	13	4	1	0		2
2	Kiritimati	XV	4	4	2	0		2
2	Mangaia	XVI	41	3	1	0		2
2	Motu One	XVII	0		1	1		2
2	Tikehau	XVIII	0		1	1		2
2	Makatea	XVIII	1	1	1	1		2
2	Kauehi	XVIII	10	3	1	1		2
2	Napuka	XVIII	30	2	1	0		2
2	Ua Huka	XIX	6	3	1	1		2
3	Fais	XIII	75	2	1	0		3
3	New Guinea	I	8	4	2	0	1	3
3	Long	I	14	4	2	0		3
3	Kiriwina (Trobriand)	I	29	4	2	0		3
3	Goodenough (Morata)	I	15	4	2	0		3
3	New Britain	II	7	4	2	0	1	3
3	Bougainville	III	7	4	2	1		3
3	Shortland	III	10	5	2	0		3
3	Vella Lavella	III	17	5	2	0		3
3	Ranongga (Ghanongga)	III	10	5	2	0		3
3	Kolombangara (Nduke)	III	7	5	3	0		3
3	Malaita	III	14	5	2	0		3
3	Pentecost	V	29	5	2	0		3
3	Malakula	V	13	5	2	0		3
3	Isle of Pines	IV	8	3	1	2		3
3	Norfolk Island	VI	51	2	1	1		3
3	Kadavu	VII	20	3	1	1		3
3	Alofi	IX	0	5	3	0		3
3	Savai'i	IX	33	2	2	0		3
3	Nukunonu	X	93	2	1	0		3
3	Teraina (Washington)	XV	56	4	1	0		3
3	Mauke	XVI	47	3	1	1		3
3	Manuae (Scilly)	XVII	6	3	1	2		3
3	Maupihaa (Mopelia)	XVII	0		1	2		3
4	Woleai	XIII	160	2	1	0		4
4	Wotje	XIV	66	4	1	0		4
4	Buka	III	39	4	2	0		4
4	Ghizo	III	29	5	2	1		4
4	Guadalcanal	III	9	5	2	1	1	4

Table 7, continued
HUMAN IMPACT (HI)

Sorted by HI	Island	Prov.	Population Density	Trend	Human Threat	Econ Pr	Urb	HI
4	Espiritu Santo	V	4	5	2	1	1	4
4	Tanna	V	40	5	2	0		4
4	Lifou	IV	6	3	2	2		4
4	Mare	IV	6	3	2	2		4
4	Lord Howe	VI	68	2	1	2		4
4	Rotuma	VII	64	3	2	0		4
4	Vanua Levu	VII	18	3	2	1		4
4	Taveuni	VII	46	3	2	1		4
4	Ovalau	VII	36	3	1	1	1	4
4	Aunuu	IX	77	3	1	1		4
4	Tau	IX	23	3	1	2		4
4	Butaritari	XI	85	4	1	0		4
4	Nonouti	XI	80	4	1	0		4
4	Atiu	XVI	52	3	1	1		4
4	Rimatara	XVI	44	3	2	1		4
4	Rurutu	XVI	41	3	2	1		4
4	Raivavae	XVI	37	3	2	1		4
4	Tahaa	XVII	34	3	1	2		4
4	Tetiaroa	XVII	3	3	1	3		4
4	Rangiroa	XVIII	16	3	1	3		4
4	Takapoto	XVIII	17	3	1	2		4
4	Niau	XVIII	50	3	1	1		4
4	Anaa	XVIII	50	2	1	2		4
4	Nuku Hiva	XIX	3	3	2	2		4
4	Ua Pou	XIX	5	3	2	2		4
4	Hiva Oa	XIX	2	3	2	2		4
4	Tahuata	XIX	10	3	2	2		4
4	Fatuhiva	XIX	4	3	2	2		4
5	Pohnpei	XIII	61	5	0	1	1	5
5	Kosrae	XIII	50	5	1	0	1	5
5	Enewetak	XIV	94	4	1	0		5
5	Ailinglaplap	XIV	93	4	1	0		5
5	Luf (Hermit Islands)	II	63	4	2	0		5
5	Efate (Vate)	V	24	5	2	1	1	5
5	New Caledonia	IV	8	3	1	3	1	5
5	Ouvea	IV	18	3	2	2		5
5	Ofu	IX	63	3	1	2		5
5	Rarotonga	XVI	78	3	1	1	1	5
5	Tupuai (Tubuai)	XVI	20	3	2	2		5
5	Raiatea	XVII	24	3	1	3		5
5	Huahine	XVII	32	3	1	3		5
5	Moorea	XVII	27	3	1	3		5
5	Rapa	XX	45	3	2	2		5
6	Yap Islands	XIII	52	5	1	1	1	6
6	Arno	XIV	115	4	1	0		6
6	Viti Levu	VII	47	3	2	2	1	6
6	Eua	VIII	136	3	2	0		6
6	Futuna	IX	54	5	3	0		6
6	Upolu	IX	81	2	2	1	1	6
6	Vaitupu	X	179	3	1	0		6
6	Pukapuka	XV	160	3	1	0		6
6	Aitutaki	XVI	160	3	1	0		6

Table 7, continued
HUMAN IMPACT (HI)

Sorted by HI	Island	Prov.	Population Density	Trend	Human Threat	Econ Pr	Urb	HI
6	Tahiti	XVII	48	3	1	3	1	6
6	Mangareva	XX	54	3	2	2		6
7	Saipan	XII	101	5	0	1	1	7
8	Namoluk	XIII	329	2	1	0		8
8	Ninigo Islands	II	167	4	1	0		8
8	Uvea	IX	84	5	3	1		8
9	Guam	XII	198	3	0	2	1	9
10	Oreor	XIII	826	1	0	1	1	10
10	Kapingamarangi	XIII	464	2	1	0		10
10	Tongatapu	VIII	195	3	2	1	1	10
11	Tol	XIII	199	5	0	1		11
11	Tutuila	IX	222	3	1	2	1	11
13	Fefan	XIII	235	5	0	1		13
18	Jaluit	XIV	413	4	1	0		18
22	Nauru	XI	391	4	2	3	1	22
24	Funafuti	X	714	3	1	1	1	24
26	Uman	XIII	494	5	0	1		26
31	Moen	XIII	552	5	1	1	1	31

RECORDS SELECTED 226

Key:
HI = Human Impact rating
Prov. = biogeographic province
Density = human population density (persons per square kilometre)
Trend = rating for rate of population increase
Human Threat = Human Threat rating
Econ Pr = Economic Pressure rating
Urb = urban areas or cities present
(seen Appendix for explanations)

Table 8
ISLANDS MOST AT RISK
HIGH CONSERVATION INTEREST (CI) AND HIGH HUMAN IMPACT (HI)

Sorted by CI	Island	Prov.	Population Density	Trend	Human Threat	Econ Pr	Urb	HI
10	Fefan	XIII	235	5	0	1		13
10	Uman	XIII	494	5	0	1		26
10	Kapingamarangi	XIII	464	2	1	0		10
10	Uvea	IX	84	5	3	1		8
11	Moen	XIII	552	5	1	1	1	31
11	Aitutaki	XVI	160	3	1	0		6
12	Namoluk	XIII	329	2	1	0		8
12	Futuna	IX	54	5	3	0		6
13	Tol	XIII	199	5	0	1		11
14	Tongatapu	VIII	195	3	2	1	1	10
15	Oreor	XIII	826	1	0	1	1	10
15	Luf (Hermit Islands)	II	63	4	2	0		5
15	Huahine	XVII	32	3	1	3		5
16	Saipan	XII	101	5	0	1	1	7
16	Ouvea	IV	18	3	2	2		5
16	Raiatea	XVII	24	3	1	3		5
16	Mangareva	XX	54	3	2	2		6
17	Yap Islands	XIII	52	5	1	1	1	6
17	Ninigo Islands	II	167	4	1	0		8
17	Efate (Vate)	V	24	5	2	1	1	5
17	Ofu	IX	63	3	1	2		5
18	Kosrae	XIII	50	5	1	0	1	5
18	Eua	VIII	136	3	2	0		6
18	Upolu	IX	81	2	2	1	1	6
19	Pohnpei	XIII	61	5	0	1	1	5
22	Tutuila	IX	222	3	1	2	1	11
23	Rarotonga	XVI	78	3	1	1	1	5
24	Moorea	XVII	27	3	1	3		5
24	Rapa	XX	45	3	2	2		5
25	Tahiti	XVII	48	3	1	3	1	6
27	Guam	XII	198	3	0	2	1	9
28	Viti Levu	VII	47	3	2	2	1	6
80	New Caledonia	IV	8	3	1	3	1	5

RECORDS SELECTED 33

Table 9
PROTECTED AREA COVERAGE BY BIOGEOGRAPHIC PROVINCE

Sorted by PROV

Island	Country	Prov.	Protected area coverage No.	Area	%	Rating	HI	CI
New Guinea	Papua New Guinea	I	12	5914.9	1	2	3	45
Long	Papua New Guinea	I	1	419.2	84	3	3	21
Karkar	Papua New Guinea	I	1	137.6	34	3	2	20
Fergusson (Moratau)	Papua New Guinea	I	1	50.0	4	2	1	23
Normanby (Duau)	Papua New Guinea	I	1	7.0	1	2	2	19
New Britain	Papua New Guinea	II	2	170.0	0	1	3	28
Talele Islands	Papua New Guinea	II	1	0.4	100	4	0	15
Nanuk	Papua New Guinea	II	1	0.1	100	4	0	13
Kolombangara (Nduke)	Solomon Islands	III	1	5.0	1	2	3	20
Arnavon Islands	Solomon Islands	III	1		0	3	2	15
Guadalcanal	Solomon Islands	III	1	60.8	1	1	4	24
New Caledonia	New Caledonia	IV	18	621.8	4	2	5	80
Espiritu Santo	Vanuatu	V	1		0	1	4	20
Norfolk Island	Australia	VI	1	4.6	13	3	3	35
Lord Howe	Australia	VI	1	8.0	55	3	4	46
Sunday (Raoul)	New Zealand	VI	1	33.5	116	4	0	24
Vanua Levu	Fiji	VII	2	0.4	0	1	4	24
Taveuni	Fiji	VII	1	40.2	9	2	4	24
Yadua Taba	Fiji	VII	1	0.7	100	4	1	20
Viti Levu	Fiji	VII	7	21.2	0	1	6	28
Kadavu	Fiji	VII	1	0.1	0	1	3	16
Tongatapu	Tonga	VIII	3	0.2	0	1	10	14
Niue	Niue	VIII	1	2.0	1	1	0	12
Upolu	Western Samoa	IX	4	29.2	3	2	6	18
Tutuila	American Samoa	IX	1		0	0	11	22
Rose Atoll	American Samoa	IX	1	0.1	100	4	0	14
Maug	Northern Marianas	XII	1	2.0	100	4	0	15
Sarigan	Northern Marianas	XII	1	4.9	100	4	0	15
Guam	Guam	XII	7	45.0	8	2	9	27
Ngerukuid	Belau	XIII	1	2.6	100	4	0	16
Bokaak	Marshall Islands	XIV	1	3.2	100	4	0	13
Bikar	Marshall Islands	XIV	1	0.5	100	4	0	10
Birnie	Kiribati	XV	1	0.2	100	4	0	13
Rawaki (Phoenix)	Kiribati	XV	1	0.5	100	4	0	14
McKean	Kiribati	XV	1	0.6	100	4	0	12
Kiritimati	Kiribati	XV	6	321.0	100	4	2	17
Malden	Kiribati	XV	1	39.3	100	4	0	14
Starbuck	Kiribati	XV	1	16.2	100	4	0	10
Vostok	Kiribati	XV	1	0.2	100	4	0	10
Jarvis	United States	XV	1	4.5	100	4	0	14
Howland	United States	XV	1	1.5	100	4	0	13
Baker	United States	XV	1	1.2	100	4	0	14
Suwarrow (Suvarov)	Cook Islands	XV	1	0.4	100	4	0	10
Manuae (Scilly)	French Polynesia	XVII	1		0	1	3	13
Taiaro	French Polynesia	XVIII	1	20.0	100	4	0	15
Motu One	French Polynesia	XIX	1	1.0	100	4	0	13
Hatutaa	French Polynesia	XIX	1	18.1	100	4	0	19
Eiao	French Polynesia	XIX	1	51.8	100	4	0	23
Mohotani	French Polynesia	XIX	1	15.5	100	4	0	20
Easter (Rapa Nui)	Chile	XX	1	68.0	41	3	1	15

Key: Prov.= Biogeographic province. Protected areas: Number; Area (sq. km); % of total island area; Rating (CoPA). HI= Human Impact. CI= Conservation Importance.

Table 10
PROTECTED AREA COVERAGE BY ISLAND
RANKED BY AMOUNT OF AREA PROTECTED

Sorted by ARPA Island	Country	Prov.	Protected area coverage No.	Area	%	Rating	HI	CI
Arnavon Islands	Solomon Islands	III	1		0	3	2	15
Espiritu Santo	Vanuatu	V	1		0	1	4	20
Tutuila	American Samoa	IX	1		0	0	11	22
Manuae (Scilly)	French Polynesia	XVII	1		0	1	3	13
Nanuk	Papua New Guinea	II	1	0.1	100	4	0	13
Kadavu	Fiji	VII	1	0.1	0	1	3	16
Rose Atoll	American Samoa	IX	1	0.1	100	4	0	14
Tongatapu	Tonga	VIII	3	0.2	0	1	10	14
Birnie	Kiribati	XV	1	0.2	100	4	0	13
Vostok	Kiribati	XV	1	0.2	100	4	0	10
Talele Islands	Papua New Guinea	II	1	0.4	100	4	0	15
Vanua Levu	Fiji	VII	2	0.4	0	1	4	24
Suwarrow (Suvarov)	Cook Islands	XV	1	0.4	100	4	0	10
Bikar	Marshall Islands	XIV	1	0.5	100	4	0	10
Rawaki (Phoenix)	Kiribati	XV	1	0.5	100	4	0	14
McKean	Kiribati	XV	1	0.6	100	4	0	12
Yadua Taba	Fiji	VII	1	0.7	100	4	1	20
Motu One	French Polynesia	XIX	1	1.0	100	4	0	13
Baker	United States	XV	1	1.2	100	4	0	14
Howland	United States	XV	1	1.5	100	4	0	13
Maug	Northern Marianas	XII	1	2.0	100	4	0	15
Niue	Niue	VIII	1	2.0	1	1	0	12
Ngerukuid	Belau	XIII	1	2.6	100	4	0	16
Bokaak	Marshall Islands	XIV	1	3.2	100	4	0	13
Jarvis	United States	XV	1	4.5	100	4	0	14
Norfolk Island	Australia	VI	1	4.6	13	3	3	35
Sarigan	Northern Marianas	XII	1	4.9	100	4	0	15
Kolombangara (Nduke)	Solomon Islands	III	1	5.0	1	2	3	20
Normanby (Duau)	Papua New Guinea	I	1	7.0	1	2	2	19
Lord Howe	Australia	VI	1	8.0	55	3	4	46
Mohotani	French Polynesia	XIX	1	15.5	100	4	0	20
Starbuck	Kiribati	XV	1	16.2	100	4	0	10
Hatutaa	French Polynesia	XIX	1	18.1	100	4	0	19
Taiaro	French Polynesia	XVIII	1	20.0	100	4	0	15
Viti Levu	Fiji	VII	7	21.2	0	1	6	28
Upolu	Western Samoa	IX	4	29.2	3	2	6	18
Sunday (Raoul)	New Zealand	VI	1	33.5	116	4	0	24
Malden	Kiribati	XV	1	39.3	100	4	0	14
Taveuni	Fiji	VII	1	40.2	9	2	4	24
Guam	Guam	XII	7	45.0	8	2	9	27
Fergusson (Moratau)	Papua New Guinea	I	1	50.0	4	2	1	23
Eiao	French Polynesia	XIX	1	51.8	100	4	0	23
Guadalcanal	Solomon Islands	III	1	60.8	1	1	4	24
Easter (Rapa Nui)	Chile	XX	1	68.0	41	3	1	15
Karkar	Papua New Guinea	I	1	137.6	34	3	2	20
New Britain	Papua New Guinea	II	2	170.0	0	1	3	28
Kiritimati	Kiribati	XV	6	321.0	100	4	2	17
Long	Papua New Guinea	I	1	419.2	84	3	3	21
New Caledonia	New Caledonia	IV	18	621.8	4	2	5	80
New Guinea	Papua New Guinea	I	12	5914.9	1	2	3	45

Table 11
PROTECTED AREA COVERAGE BY ISLAND
RANKED BY PERCENTAGE OF ISLAND PROTECTED

Sorted by PA% Island	Country	Prov.	Protected area coverage No.	Area	%	Rating	HI	CI
New Britain	Papua New Guinea	II	2	170.0	0	1	3	28
Arnavon Islands	Solomon Islands	III	1		0	3	2	15
Espiritu Santo	Vanuatu	V	1		0	1	4	20
Vanua Levu	Fiji	VII	2	0.4	0	1	4	24
Viti Levu	Fiji	VII	7	21.2	0	1	6	28
Kadavu	Fiji	VII	1	0.1	0	1	3	16
Tongatapu	Tonga	VIII	3	0.2	0	1	10	14
Tutuila	American Samoa	IX	1		0	0	11	22
Manuae (Scilly)	French Polynesia	XVII	1		0	1	3	13
New Guinea	Papua New Guinea	I	12	5914.9	1	2	3	45
Normanby (Duau)	Papua New Guinea	I	1	7.0	1	2	2	19
Kolombangara (Nduke)	Solomon Islands	III	1	5.0	1	2	3	20
Guadalcanal	Solomon Islands	III	1	60.8	1	1	4	24
Niue	Niue	VIII	1	2.0	1	1	0	12
Upolu	Western Samoa	IX	4	29.2	3	2	6	18
Fergusson (Moratau)	Papua New Guinea	I	1	50.0	4	2	1	23
New Caledonia	New Caledonia	IV	18	621.8	4	2	5	80
Guam	Guam	XII	7	45.0	8	2	9	27
Taveuni	Fiji	VII	1	40.2	9	2	4	24
Norfolk Island	Australia	VI	1	4.6	13	3	3	35
Karkar	Papua New Guinea	I	1	137.6	34	3	2	20
Easter (Rapa Nui)	Chile	XX	1	68.0	41	3	1	15
Lord Howe	Australia	VI	1	8.0	55	3	4	46
Long	Papua New Guinea	I	1	419.2	84	3	3	21
Maug	Northern Marianas	XII	1	2.0	100	4	0	15
Sarigan	Northern Marianas	XII	1	4.9	100	4	0	15
Ngerukuid	Belau	XIII	1	2.6	100	4	0	16
Bokaak	Marshall Islands	XIV	1	3.2	100	4	0	13
Bikar	Marshall Islands	XIV	1	0.5	100	4	0	10
Talele Islands	Papua New Guinea	II	1	0.4	100	4	0	15
Nanuk	Papua New Guinea	II	1	0.1	100	4	0	13
Yadua Taba	Fiji	VII	1	0.7	100	4	1	20
Rose Atoll	American Samoa	IX	1	0.1	100	4	0	14
Birnie	Kiribati	XV	1	0.2	100	4	0	13
Rawaki (Phoenix)	Kiribati	XV	1	0.5	100	4	0	14
McKean	Kiribati	XV	1	0.6	100	4	0	12
Kiritimati	Kiribati	XV	6	321.0	100	4	2	17
Malden	Kiribati	XV	1	39.3	100	4	0	14
Starbuck	Kiribati	XV	1	16.2	100	4	0	10
Vostok	Kiribati	XV	1	0.2	100	4	0	10
Jarvis	United States	XV	1	4.5	100	4	0	14
Howland	United States	XV	1	1.5	100	4	0	13
Baker	United States	XV	1	1.2	100	4	0	14
Suwarrow (Suvarov)	Cook Islands	XV	1	0.4	100	4	0	10
Taiaro	French Polynesia	XVIII	1	20.0	100	4	0	15
Motu One	French Polynesia	XIX	1	1.0	100	4	0	13
Hatutaa	French Polynesia	XIX	1	18.1	100	4	0	19
Eiao	French Polynesia	XIX	1	51.8	100	4	0	23
Mohotani	French Polynesia	XIX	1	15.5	100	4	0	20
Sunday (Raoul)	New Zealand	VI	1	33.5	116	4	0	24

Table 12
ALPHABETICAL LIST OF ISLANDS IN THE TABLES

Sorted by ISLAND	Island	Country	Prov.	Area (sq. km)	Alt. (m)	Is. Type	HI	CI
Agrihan		Northern Marianas	XII	47.0	965	V	1	15
Aguijan		Northern Marianas	XII	7.0		R	0	9
Ailinglaplap		Marshall Islands	XIV	15.0		A	5	5
Aitutaki		Cook Islands	XVI	18.1	137	VL	6	11
Alamagan		Northern Marianas	XII	11.0	744	V	1	13
Aleipata Islands		Western Samoa	IX	1.8		V	1	20
Alofi		Wallis and Futuna	IX	32.0	366	VR	3	12
Anaa		French Polynesia	XVIII	10.0		A	4	10
Anatahan		Northern Marianas	XII	32.0	788	V	1	13
Anatom (Aneityum)		Vanuatu	V	154.0	852	V	1	17
Ant		Fed.S. Micronesia	XIII	1.8		A	0	11
Arnavon Islands		Solomon Islands	III	10.0			2	15
Arno		Marshall Islands	XIV	13.0	2	A	6	5
Ascuncion		Northern Marianas	XII	7.0	891	V	0	19
Ata		Tonga	VIII	2.3	355	V	0	18
Atiu		Cook Islands	XVI	27.0	91	VR	4	11
Aunuu		American Samoa	IX	2.6	61	V	4	14
Babeldaob		Belau	XIII	397.0	122	CVR	1	17
Baker		United States	XV	1.2	8	L	0	14
Beliliou		Belau	XIII	12.7	30	R	1	11
Beqa		Fiji	VII	36.0	457	V	2	14
Bikar		Marshall Islands	XIV	0.5	3	A	0	10
Birnie		Kiribati	XV	0.2	4	L	0	13
Bokaak		Marshall Islands	XIV	3.2	4	A	0	13
Bougainville		Papua New Guinea	III	10619.0	3123	V	3	25
Buka		Papua New Guinea	III	829.0	500	V	4	17
Butaritari		Kiribati	XI	11.7		A	4	6
Caroline		Kiribati	XV	2.3	6	A	0	11
Chelbacheb Islands		Belau	XIII	80.0	207	R	0	16
Chesterfield Isles		New Caledonia	IV	1.0		L	0	8
Choiseul (Lauru)		Solomon Islands	III	3454.0	1067	V	2	17
D'Entrecasteaux Reef		New Caledonia	IV	10.0	4	A	0	8
Ducie		Pitcairn	XX	0.7	4	A	0	11
Dyaul		Papua New Guinea	II	100.0			2	17
Easter (Rapa Nui)		Chile	XX	166.0	600	V	1	15
Efate (Vate)		Vanuatu	V	777.0	647	VR	5	17
Eiao		French Polynesia	XIX	51.8	609	V	0	23
Enderbury		Kiribati	XV	5.1	7	L	0	10
Enewetak		Marshall Islands	XIV	5.8	4	A	5	8
Erromango		Vanuatu	V	855.0	886	VR	2	17
Espiritu Santo		Vanuatu	V	3937.0	1879	VR	4	20
Eua		Tonga	VIII	88.0	329	V	6	18
Fais		Fed.S. Micronesia	XIII	2.8	18	R	3	11
Fatu Huku		French Polynesia	XIX	1.3	360	V	0	14
Fatuhiva		French Polynesia	XIX	78.0	1118	V	4	14
Fayu		Fed.S. Micronesia	XIII	0.4		L	0	13
Fefan		Fed.S. Micronesia	XIII	13.2	298	V	13	10
Fergusson (Moratau)		Papua New Guinea	I	1340.0	1830	V	1	23
Fulaga (Fulanga)		Fiji	VII	10.0	82	R	2	11
Funafuti		Tuvalu	X	2.8		A	24	5
Futuna		Wallis and Futuna	IX	80.0	762	V	6	12
Gaferut		Fed.S. Micronesia	XIII	0.1	30	R	0	13

Table 12, continued
ALPHABETICAL LIST OF ISLANDS IN THE TABLES

Sorted by ISLAND Island	Country	Prov.	Area (sq. km)	Alt. (m)	Is. Type	HI	CI
Gau (Ngau)	Fiji	VII	140.0	715	VR	2	15
Ghizo	Solomon Islands	III	35.0		V	4	15
Goodenough (Morata)	Papua New Guinea	I	751.0	2545	V	3	26
Guadalcanal	Solomon Islands	III	5336.0	2446	V	4	24
Guam	Guam	XII	541.0	393	RV	9	27
Guguan	Northern Marianas	XII	4.0	301	V	0	17
Hatutaa	French Polynesia	XIX	18.1	428	V	0	19
Helen	Belau	XIII	1.9		A	0	8
Henderson	Pitcairn	XX	32.0	33	R	0	22
Hiva Oa	French Polynesia	XIX	241.0	1259	V	4	18
Howland	United States	XV	1.5	7	L	0	13
Huahine	French Polynesia	XVII	78.0	456	VR	5	15
Hunter	New Caledonia	IV	0.4	300	V	0	14
Isle of Pines	New Caledonia	IV	152.0	262	CR	3	19
Jaluit	Marshall Islands	XIV	3.6		A	18	5
Jarvis	United States	XV	4.5	8	L	0	14
Jemo	Marshall Islands	XIV	0.2		L	0	9
Kadavu	Fiji	VII	408.0	838	V	3	16
Kao	Tonga	VIII	12.0	1030	V	1	17
Kapingamarangi	Fed.S. Micronesia	XIII	1.1		A	10	10
Karkar	Papua New Guinea	I	400.0		V	2	20
Kauehi	French Polynesia	XVIII	10.0		A	2	10
Kiritimati	Kiribati	XV	321.0	13	A	2	17
Kiriwina (Trobriand)	Papua New Guinea	I	440.0	30	R	3	15
Kolombangara (Nduke)	Solomon Islands	III	700.0		V	3	20
Kosrae	Fed.S. Micronesia	XIII	110.0	628	V	5	18
Lakeba (Lakemba)	Fiji	VII	57.0	219	VR	2	13
Lavongai (N.Hanover)	Papua New Guinea	II	1190.0	870	V	1	15
Lifou	New Caledonia	IV	1196.0	104	R	4	15
Long	Papua New Guinea	I	500.0		V	3	21
Lord Howe	Australia	VI	14.6	875	V	4	46
Luf (Hermit Islands)	Papua New Guinea	II	7.9	260	V	5	15
Mabualau	Fiji	VII	10.0	27	R	1	11
Makatea	French Polynesia	XVIII	28.0	111	R	2	11
Makogai	Fiji	VII	8.0	267	V	1	11
Malaita	Solomon Islands	III	4243.0	1432	VR	3	21
Malakula	Vanuatu	V	1165.0	863	VR	3	16
Malden	Kiribati	XV	39.3	8	L	0	14
Mangaia	Cook Islands	XVI	51.0	169	VR	2	12
Mangareva	French Polynesia	XX	13.0	441	V	6	16
Manuae (Scilly)	French Polynesia	XVII	3.5		A	3	13
Manus	Papua New Guinea	II	1640.0	719	V	2	20
Mare	New Caledonia	IV	642.0	138	RV	4	16
Marutea (South)	French Polynesia	XVIII	10.0		A	1	10
Matthew	New Caledonia	IV	0.1	140	V	0	12
Matureivavao	French Polynesia	XVIII	10.0		A	0	13
Maug	Northern Marianas	XII	2.0	227	V	0	15
Mauke	Cook Islands	XVI	18.4	30	VR	3	11
Maupihaa (Mopelia)	French Polynesia	XVII	2.6		A	3	11
McKean	Kiribati	XV	0.6	5	L	0	12
Mitiaro	Cook Islands	XVI	22.3		VR	1	12
Moen	Fed.S. Micronesia	XIII	18.8	370	V	31	11

Table 12, continued
ALPHABETICAL LIST OF ISLANDS IN THE TABLES

Sorted by ISLAND	Island	Country	Prov.	Area (sq. km)	Alt. Is. (m)	Type	HI	CI
Mohotani		French Polynesia	XIX	15.5	518	V	0	20
Moorea		French Polynesia	XVII	132.0	1121	V	5	24
Motu One		French Polynesia	XVII	2.3		A	2	11
Motu One		French Polynesia	XIX	1.0	3	L	0	13
Muyua (Woodlark)		Papua New Guinea	I	1110.0	370		2	18
Namena Lala		Fiji	VII	1.0	98	V	1	17
Namoluk		Fed.S. Micronesia	XIII	0.8		A	8	12
Nanuk		Papua New Guinea	II	0.1	4	L	0	13
Napuka		French Polynesia	XVIII	10.0		A	2	13
Nauru		Nauru	XI	20.7	65	R	22	9
Nendo (Santa Cruz)		Solomon Islands	V	647.0	550	V	2	15
New Britain		Papua New Guinea	II	36500.0	2438	V	3	28
New Caledonia		New Caledonia	IV	16890.0	1628	CR	5	80
New Georgia		Solomon Islands	III	2330.0	1010	VR	2	17
New Guinea		Papua New Guinea	I	400000.	4694	C	3	45
New Ireland		Papua New Guinea	II	8500.0	2290	V	2	21
Ngcheangel		Belau	XIII	1.7	2	A	2	10
Ngemlis		Belau	XIII	1.0		R	0	13
Ngerekebesang		Belau	XIII	5.0		V	1	15
Ngerukuid		Belau	XIII	2.6	30	R	0	16
Niau		French Polynesia	XVIII	10.0		A	4	10
Ninigo Islands		Papua New Guinea	II	3.0	3	A	8	17
Niuafo'ou		Tonga	VIII	35.0	260	V	1	19
Niue		Niue	VIII	259.0	67	R	0	12
Nonouti		Kiribati	XI	25.0		A	4	7
Norfolk Island		Australia	VI	36.0	319	V	3	35
Normanby (Duau)		Papua New Guinea	I	1040.0	1100		2	19
Nuku Hiva		French Polynesia	XIX	337.0	1185	V	4	26
Nukunonu		Tokelau	X	5.4	4	A	3	6
Nukutavake		French Polynesia	XVIII	10.0		L	1	8
Oeno		Pitcairn	XX	0.7	4	A	0	12
Ofu		American Samoa	IX	8.0	488	V	5	17
Ogea Levu		Fiji	VII	10.0	82	R	2	12
Oreor		Belau	XIII	9.3		VR	10	15
Oroluk		Fed.S. Micronesia	XIII	0.5		A	1	13
Orona (Hull)		Kiribati	XV	3.9	9	A	0	12
Ouvea		New Caledonia	IV	132.0	46	AR	5	16
Ovalau		Fiji	VII	139.0	626	V	4	17
Pagan		Northern Marianas	XII	48.0	570	V	1	14
Palmyra		United States	XV	3.0	2	A	1	5
Pentecost		Vanuatu	V	324.0	946	VR	3	16
Philip Island		Australia	VI	2.6	280	V	0	15
Pikelot		Fed.S. Micronesia	XIII	0.1		L	0	13
Pohnpei		Fed.S. Micronesia	XIII	334.0	791	V	5	19
Pukapuka		Cook Islands	XV	5.0		A	6	6
Qamea		Fiji	VII	34.0	304	V	2	15
Qelelevu		Fiji	VII	1.0	18	AR	1	11
Raiatea		French Polynesia	XVII	202.0	1033	V	5	16
Raivavae		French Polynesia	XVI	21.0	436	VL	4	13
Rangiroa		French Polynesia	XVIII	43.0		A	4	10
Ranongga (Ghanongga)		Solomon Islands	III	200.0		VR	3	15
Rapa		French Polynesia	XX	22.0	633	V	5	24

Table 12, continued
ALPHABETICAL LIST OF ISLANDS IN THE TABLES

Sorted by ISLAND Island	Country	Prov.	Area (sq. km)	Alt. Is. (m)	Type	HI	CI
Rarotonga	Cook Islands	XVI	64.0	652	VR	5	23
Rawaki (Phoenix)	Kiribati	XV	0.5	6	L	0	14
Reef Islands (Rowa)	Vanuatu	V	10.0	6	L	0	13
Rennell	Solomon Islands	III	675.0	92	R	1	26
Rimatara	French Polynesia	XVI	18.0	95	VR	4	14
Rose Atoll	American Samoa	IX	0.1	3	A	0	14
Rota	Northern Marianas	XII	85.0	491	VR	2	17
Rotuma	Fiji	VII	44.0	256	V	4	12
Rurutu	French Polynesia	XVI	31.0	396	VR	4	11
Saipan	Northern Marianas	XII	122.9	474	VR	7	16
San Cristobal	Solomon Islands	III	3125.0	1250	V	2	24
Santa Isabel	Solomon Islands	III	4014.0	1219	VR	2	16
Sarigan	Northern Marianas	XII	4.9	549	V	0	15
Savai'i	Western Samoa	IX	1821.0	1857	V	3	22
Shortland	Solomon Islands	III	300.0		VR	3	15
Sovu	Fiji	VII	1.0	70	R	0	13
St. Matthias Group	Papua New Guinea	II	400.0			1	17
Starbuck	Kiribati	XV	16.2	5	L	0	10
Sudest (Tagula)	Papua New Guinea	I	803.0	910	V	2	19
Sunday (Raoul)	New Zealand	VI	29.0	305	V	0	24
Suwarrow (Suvarov)	Cook Islands	XV	0.4		A	0	10
Tabuaeran (Fanning)	Kiribati	XV	33.7	4	A	2	10
Tafahi	Tonga	VIII	3.4	610	V	2	14
Tahaa	French Polynesia	XVII	98.0	579	V	4	14
Tahiti	French Polynesia	XVII	1042.0	2237	V	6	25
Tahuata	French Polynesia	XIX	52.0	999	V	4	11
Taiaro	French Polynesia	XVIII	20.0	5	A	0	15
Takapoto	French Polynesia	XVIII	23.0		A	4	10
Talele Islands	Papua New Guinea	II	0.4		L	0	15
Tanna	Vanuatu	V	390.0	1084	VR	4	19
Tau	American Samoa	IX	44.0	931	V	4	22
Taveuni	Fiji	VII	435.0	1224	V	4	24
Teraina (Washington)	Kiribati	XV	7.4	5	L	3	14
Tetiaroa	French Polynesia	XVII	6.4	3	A	4	13
Three Sisters Is.	Solomon Islands	III	50.0			1	12
Tikehau	French Polynesia	XVIII	10.0		A	2	8
Tinacula (Volcano)	Solomon Islands	V	100.0	670	V	0	15
Tinian	Northern Marianas	XII	102.0	170	R	1	14
Tol	Fed.S. Micronesia	XIII	34.0	439	V	11	13
Tongatapu	Tonga	VIII	257.0	82	R	10	14
Tupuai (Tubuai)	French Polynesia	XVI	49.0	399	VL	5	9
Tutuila	American Samoa	IX	135.0	653	V	11	22
Ua Huka	French Polynesia	XIX	78.0	855	V	2	14
Ua Pou	French Polynesia	XIX	104.0	1231	V	4	17
Ujelang	Marshall Islands	XIV	1.7		A	0	8
Uman	Fed.S. Micronesia	XIII	4.7	244	V	26	10
Umboi (Rooke)	Papua New Guinea	II	800.0			2	15
Upolu	Western Samoa	IX	1114.0	1100	V	6	18
Utupua	Solomon Islands	V	69.0	380		1	15
Uvea	Wallis and Futuna	IX	96.0	149	VL	8	10
Vaitupu	Tuvalu	X	5.6		L	6	5
Vanguna	Solomon Islands	III	600.0	1120	V	2	16

Table 12, continued
ALPHABETICAL LIST OF ISLANDS IN THE TABLES

Sorted by ISLAND Island	Country	Prov.	Area (sq. km)	Alt. Is. (m)	Type	HI	CI
Vanikolo (Vanikoro)	Solomon Islands	V	174.0		V	2	16
Vanua Balavu	Fiji	VII	53.0	283	RV	2	16
Vanua Lava	Vanuatu	V	298.0	946	V	2	19
Vanua Levu	Fiji	VII	5535.0	835	VR	4	24
Vatulele	Fiji	VII	31.6	34	RV	2	12
Vella Lavella	Solomon Islands	III	677.0		VR	3	14
Viti Levu	Fiji	VII	10544.0	1323	CV	6	28
Vostok	Kiribati	XV	0.2	5	L	0	10
Wailagi Lala	Fiji	VII	1.0		A	0	12
Wakaya	Fiji	VII	8.0	152		1	11
Walpole	New Caledonia	IV	1.2	100	R	0	10
West Fayu	Fed.S. Micronesia	XIII	0.6		A	0	11
Woleai	Fed.S. Micronesia	XIII	4.5		A	4	9
Wotho	Marshall Islands	XIV	4.1		A	0	6
Wotje	Marshall Islands	XIV	8.0		A	4	5
Yadua Taba	Fiji	VII	0.7	100	V	1	20
Yande	New Caledonia	IV	10.0	301	C	2	14
Yap Islands	Fed.S. Micronesia	XIII	100.0	176	CV	6	17

RECORDS SELECTED 226

REVIEW OF THE PROTECTED AREAS SYSTEM IN OCEANIA

Annex

OCEANIA ISLAND LIST

Prepared for

International Union for Conservation
of Nature and Natural Resources

by

Arthur Lyon Dahl
Consulting Ecologist

July 1986

Review of the Protected Areas System of Oceania
Annex: Oceania Island List

CONTENTS

OCEANIA ISLAND LIST

Introduction

This list includes over a thousand of the significant islands of Oceania. It has been designed both to summarize what is known (or at least is readily available) concerning each island, and also to indicate gaps in knowledge that need to be filled in. Headings without any data indicate where more such information is desirable.

Previous compilations have listed islands from south to north, north to south, or even in circular fashion. This list tries as far as possible to list islands from north to south and from west to east (although some parts of Papua New Guinea do not follow this pattern). The islands are grouped by biogeographic provinces as described in the Regional Ecosystems Survey (Dahl, 1980), although the order of the provinces has been rearranged to keep all the islands in the same country together even when included in more than one province. Some appropriate information on each country or territory, such as the land area, sea area within the exclusive economic zone, population, population density and estimated growth rate (based in most cases on statistics from the South Pacific Commission, 1984) is provided under the country heading at appropriate places in the island list.

Where information was available only on a country or island group basis, it has been included at the beginning of the country or island group. Remember that such information may need to be added to that listed under specific islands within the group, although group information does not necessarily apply to all islands within the group.

Kinds of information

Several kinds of information were collected for the list when they were available:

a) Basic descriptive information on each island, such as its area (in square kilometres) and maximum altitude or elevation (in metres), and the island type (continental, volcanic, atoll, low island, raised coral limestone, or some combination of these).

b) The major natural threats which could endanger an already vulnerable population or feature, such as cyclones (hurricanes or typhoons); volcanic eruptions; earthquakes, tsunamis (tidal waves), landslides and other effects of geological instability; severe drought; and susceptibility to major fires.

c) The human population (with the year of the census or estimate), types of development, urban areas and other indicators of human impact on the island. In the absence of a population figure, an island should be assumed to be inhabited unless otherwise stated.

d) A brief list of the major ecosystem types or biomes on and around the island, where this information was available. For some areas these data are very incomplete, and the failure to mention an ecosystem does not mean that it is not present, but only not recorded.

e) Features of special interest for conservation, such as seabird rookeries, sea turtle nesting areas, lakes or other unusual habitats, active volcanoes, and other information on the island's conservation importance.

f) Information on introduced or feral species known to cause major conservation problems.

g) The size and diversity of the flora and fauna, such as the total numbers of species, at least in the best-known groups, where such figures were available.

h) The numbers of endemic species (those species occurring only on a particular island or island group) and/or the percent endemism in the different plant and animal groups, as a convenient measure of evolutionary interest or uniqueness.

i) The scientific and common names of endemic species and other species of conservation interest, with brief information on their habitats and population sizes, and their status (Endangered, Vulnerable, Rare, Indeterminate, or K - insufficiently known). The status is capitalized if determined by the IUCN Conservation Monitoring Centre or indicated in a Red Data Book, and in lower case if obtained from other sources. An asterisk (*) after the name shows that there is some question concerning the taxonomic status of the species. For Papua New Guinea, time and space did not permit including complete lists of threatened species such as the bird list by Schodde (1978).

j) The names of protected areas on the island, with their IUCN catagory if known, and their land area in hectares. If the protected area is wholly or partly marine, the sea area is shown in parentheses () and not included in the totals. Further information on these areas is available in the IUCN Directory of Protected Areas in Oceania (IUCN CMC, 1985a). Recent official proposals for protected areas are also listed for some countries.

For islands with some demonstrated conservation interest, the entry in the island list is concluded with a series of ratings used to evaluate certain island characteristics. These include the natural conservation status or protection provided by the island's inherent situation, the ecosystem richness reflecting the number of types of ecosystems present, the species richness based on the number of species, the economic pressure related to the level of development and material lifestyle of the population, the human threat measuring the pressure of the people on the land and resources, the natural vulnerability based on the kinds of risks of natural catastrophes, the practicality of conservation action related to the factors facilitating the creation of parks and reserves, the reliability of the data on which the listing and evaluation are based, and two composite ratings for the potential for human impact on the island, and for the conservation importance of the island. The details of the basis for and calculation of all of these ratings are given in the Appendix to the main report. The ratings are intended to put the largely qualitative information about the islands into a form permitting some comparisons between and rankings of the islands of the region.

Problems with the data

This list is a preliminary attempt to synthesize so much information on an island by island basis in Oceania. As such it contains many weaknesses, and the results should be used with suitable caution.

a) The quantity of available information is highly variable from one part of the region to another, and even from one island to another. A few islands happen to have been studied in detail, perhaps by some scientific expedition, while others may never have been visited by a scientist. For many islands in Papua New Guinea, for instance, there was not even basic descriptive information in the sources available. Inevitably the better known islands stand out in such a regional survey, and this may in part be an artifact of the data available.

b) The region is still rather poorly known scientifically, partly because work on one island cannot be easily generalized to others. New species are still being discovered in obvious and well-known groups such as birds and reptiles. Other groups such as some types of insects have hardly been looked at at all.

c) Information on species was often only available at larger geographic scales such as island groups, countries or biogeographic provinces. This can make it difficult to know what specifically occurs on any given island. The regional distribution of many species is known or mapped, but islands are sufficiently variable that it is not possible to assume that a species occurs there just because the island is within the species' known range. Distributions can be highly irregular or spotty depending on chance dispersal or local conditions.

d) The data may be patchy in different ways. An island may be well known for birds or land snails, but hardly at all botanically, or vice versa. This can have a particular effect on measures such as the percent endemism, which may vary greatly from one type of organism to another. Hopefully this list will help to identify such gaps and encourage others to fill them.

e) The cross-checking of data from different sources revealed many errors, to the point that it sometimes seemed doubtful that the same island was being described. Even figures such as the island surface area or altitude differed by up to 50%. The type of island or the existence of specific features also sometimes varied between sources. Some errors were obviously typographical or due to incorrect (or even double) conversion between units of measure. In other instances the alternate figures have been included in parentheses in the list to show that a doubt needs to be resolved, as it was seldom possible to determine which source of information was correct. Unfortunately errors such as these tend to be perpetuated from one compilation or study to another, and some have probably been unwittingly carried over into this one where cross-checking with authoritative sources was not possible.

f) Much of the available information is seriously out of date. No island stays still in time, and conditions or features may change from the time when they were described. Many sources fail to give the dates for their data, and old information may be assumed to be current. Much island information dates from expeditions early in this century, or from World War II, and it should be confirmed or revised from up-to-date surveys before using it as the basis for important decisions or conservation actions. Dates have been added where

known to the types of information in the island list where this may be critical, as with population figures or the status of a species.

In spite of all these problems and sources of error, it should be possible to have reasonable confidence in the overall content of the list and the results of the review and analysis based on it. Enough different types of information have been brought together to diminish the impact of any single error or data variable.

OCEANIA ISLAND LIST - MODEL FORMAT

Province Number
PROVINCE NAME

Group information:
Species of conservation interest
Plants, etc. (Names) reported for island group

COUNTRY NAME (Status)

Land area in km^2 Sea area in km^2
Population 00,000 (year) Density in persons/km^2 Growth rate (est.) 0.0%/yr

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Island Group
Island Name (Former Name)
Area sq. km Altitude m
Island type:
Natural threats:
Human impact:
Ecosystems:
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	0	0	0%	0	0
Insects					
Other invert.					
Rept-Amph.					
Birds	0	0	0%	0	0
Mammals					
Marine life					

Species of conservation interest
Plants
Genus species (Common Name) endemism, habitat, Status, population.
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Protected areas
Name (IUCN category) size ha
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 0
Reliability of data 0
Human Impact 0
Conservation Importance 00

Province XII
MARIANA ISLANDS

The Mariana Islands include both the Northern Mariana Islands and the largest and most southerly island of Guam which is a separate United States territory.

Species of conservation interest

Plants

64 native ferns, 3 endemic; 1 native cycad

478 dicotyledon taxa, 221 natives, 78 endemics, including:

Serianthes nelsonii (Leguminosae) endemic to Guam and Rota, Endangered (RDB)

Heritiera longipetiolata (Sterculiaceae) group endemic, Endangered (RDB)

Tabernaemontana rotensis endemic to Rota and Guam, rare

Insects

2 butterflies

Other invertebrates

4 Partulidae (land snails)

Reptiles-amphibians

10 species, 1 endemic (not including Guam)

Birds

111 species, 28 resident, 5 introduced (not including Guam)

Anas oustaleti (Marianas Mallard) group endemic, southern Marianas (extinct on Guam), Endangered (RDB) *

Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)

Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Pagan, Saipan, Tinian, Guam, Rare (RDB)

Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Aguijan, Vulnerable (RDB)

Corvus kubaryi (Marianas Crow) group endemic, Rota and Guam, Endangered

Acrocephalus luscinia (Nightingale Reed Warbler) Marianas, Carolines and Nauru, extinct on Guam and uncommon on Saipan

Mammals

Pteropus mariannus mariannus (Marianas Fruit Bat) group endemic

Marine life

1 endemic soft coral

3 endemic gastropods on southern islands

2 endemic fish

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS (United States Commonwealth)

Land area 471 km^2 Sea area 1,823,000 km^2
Population 17,600 (1981) Density 37 persons/km^2 Growth rate (est.) 4.4%/yr

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Northern Mariana Islands

Farallon de Pajaros (Uracas)

Area 2 sq. km Altitude 319 m
Island type: high volcanic cone
Natural threats: volcanic eruptions, cyclones
Human impact: uninhabited, seldom visited
Ecosystems: recent colonisers of fresh volcanic material
Special features: active volcano, several recent eruptions including 1943; seabird rookery.

Maug Islands

Area 2 sq. km Altitude 227 m
Island type: 3 islet remnants of volcanic cone, North (227 m), East (215 m) and West (178 m), with steep cliffs of columnar basalt; submerged coral limestone terrace at 25 m depth off West Island.
Natural threats: cyclones
Human impact: former Japanese weather station and fish processing plant 1939-1944; otherwise uninhabited since 1695.
Ecosystems: scrub and grasses, coconuts on East Island; rocky shore and lagoon with algal mat and scattered corals; fringing reef off West Island.
Special features: seabird rookery; proposed as marine sanctuary
Species of conservation interest
Plants
59 species including several group endemics but no island endemics
Lysimachia mauritiana
Insects
Other invertebrates
Reptiles-amphibians
Birds
11 seabirds, 2 shore birds, 3 land birds:
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)
Aplonis opacus aeneus (Micronesian starling) subspecies endemic to northernmost Mariana Islands
Halcyon chloris owstoni (White-collared Kingfisher) subspecies endemic to the northernmost Mariana Islands
Mammals
Pteropus mariannus (Marianas Fruit Bat) group endemic
Marine life
232 fish species, 130 invertebrate species including 24 opisthobranchs, 60 algae
Protected Area:
Protected under the constitution (strict nature reserve I) 200 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 15

Ascuncion Island

Area 7 sq. km Altitude 891 m
Island type: high volcanic cone, radially dissected
Natural threats: volcanic eruptions, cyclones
Human impact: coconut plantations on lower slopes, visited occasionally
Ecosystems: rain forest in ravines, grasslands and fernlands on upper slopes
Special features: active volcano; best forest development in northern islands, of considerable conservation interest; proposed as marine sanctuary.
Species of conservation interest
Plants
new endemic tree
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), locally not threatened by introduced predators
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 19

Agrihan

Area 47 sq. km Altitude 965 m
Island type: high volcanic cone, radially dissected
Natural threats: cyclones, volcano
Human impact: small resident population; coconuts, lower slopes cultivated
Ecosystems: rain forest in ravines, Miscanthus grasslands on upper slopes
Special features: dormant volcano; forest of conservation interest, summit unexplored botanically.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)
Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Pagan, Saipan, Tinian, Guam, Rare (RDB), local status unknown.
Mammals
Marine life

Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 1
Conservation Importance 15

Pagan

Area 48 sq. km Altitude 570 m
Island type: cluster of volcanoes, linked by lava and ash
Natural threats: volcanic eruptions (1981), cyclones
Human impact: small population, some cultivation
Ecosystems: light forest and scrub, grasslands, swamp
Special features: active volcanoes with eruption continuing since 1981; freshwater lake with hot sulfur springs, brackish lake; some forest of conservation interest; proposed as marine sanctuary.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB)
Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 14

Alamagan

Area 11 sq. km Altitude 744 m
Island type: high volcanic
Natural threats: cyclones, volcano
Human impact: small resident population
Ecosystems: rain forest on lava flows, grasslands on ash slopes, tree ferns on upper slopes.
Special features: dormant volcano; upper slopes of conservation interest
Species of conservation interest
Plants
Cyathea alamagensis (tree fern) group? endemic
Styphelia mariannensis only Micronesian locality
Insects

Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, probably present, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosyste n richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 13

Guguan

Area 4 sq. km Altitude 301 m
Island type: 2 volcanic cones, deep ravines, coastal cliffs
Natural threats: volcanic eruptions, cyclones
Human impact: uninhabited
Ecosystems: northern cone bare cinders and other volcanic material, southern cone with lowland rain forest.
Special features: 1 active and 1 dormant volcano; seabird rookery; proposed as marine sanctuary.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), possibly present
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 1
Human Impact 0
Conservation Importance 17

Sarigan

Area 4.9 sq. km Altitude 549 m
Island type: volcanic cone, radially dissected, coastal cliffs
Natural threats: cyclones
Human impact: formerly inhabited
Ecosystems: rain forest in ravines, Miscanthus grassland on upper slopes
Special features: archaeological sites; feral goats and pigs; proposed as marine sanctuary.

Species of conservation interest
Plants
128 species recorded
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB) 10-15 reported 1978
Mammals
Marine life
Protected area
Protected under the constitution (strict nature reserve, 1)500 ha
Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 1
Human Impact 0
Conservation Importance 15

Anatahan

Area 32 sq. km Altitude 788 m
Island type: high volcanic cone, dissected with ravines and ridges
Natural threats:cyclones
Human impact: disturbed by Japanese colonists and W.W.II military activities; small resident population.
Ecosystems: rain forest, grassland on upper slopes
Special features: crater with grassy floor and intermittent lake; forest of some conservation interest.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse laperouse (Marianas Megapode) group endem
subspecies, Rare (RDB), possibly present
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 13

Farallon de Medinilla

Area 0.9 sq. km Altitude 81 m
Island type: raised coral ridge with flat top, coastal cliffs and chasm between two parts.
Natural threats: cyclones
Human impact: uninhabited; formerly totally undisturbed; used as a military bombing range since 1971.
Ecosystems: limestone scrub
Special features: signs of frequent landslides

Saipan

Area 122.9 sq. km Altitude 474 m
Island type: high volcanic surrounded by raised coral platforms
Natural threats: cyclones
Human impact: pop. 12,366 (1973); heavily colonized and cultivated by Japanese 1914-1944; stripped of vegetation by W.W.II fighting; reseeded with Acacia; former administrative centre of U.S. Trust Territory, population centre and capital of Northern Marianas.
Ecosystems: scrub and secondary vegetation of Acacia confusa, Casuarina and coconuts; grasslands; possibly cloud forest on Mt. Tapachau; many introduced species.
Special features: Lake Susepe; enclosed marine grotto; green turtle nesting on Tanapag beach; Tanapag Lagoon proposed as marine sanctuary.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
- Anas oustaleti (Marianas Mallard)* group endemic, Lake Susupe and mangrove area north of Garapan, Endangered (RDB), not sighted since 1979.
- Megapodius laperouse laperouse (Marianas Megapode) group endemic subspecies, Rare (RDB), possible recolonization in late 1970s.
- Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Lake Susupe, Rare (RDB), 2 reported on Lake Susupe (1975).
- Cleptornis marchei (Golden Honeyeater) endemic
- Acrocephalus luscinia luscinia (Nightingale Reed Warbler) 6 colonies at Lake Susupe, uncommon
- Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Vulnerable (RDB), uncommon locally (1977).

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1

Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 7
Conservation Importance 16

Tinian

Area 102 sq. km Altitude 170 m
Island type: raised coral
Natural threats: cyclones
Human impact: pop. 714 (1973); formerly heavily cultivated by Japanese; some cultivation; large airstrip; proposed military development.
Ecosystems: limestone forest and scrub, mostly secondary growth; many introduced plants.
Special features: small Lake Hagoi in centre; important archaeological sites; patch reef south of harbour proposed as marine sanctuary.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Lake Hagoi and Marpo Swamp, Rare (RDB), only 1 observed locally (1974).
Monarcha takatsukasae (Tinian Monarch) endemic
Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Vulnerable (RDB), rare on Tinian
Anas oustaleti (Marianas Mallard)* group endemic, Endangered (RDB), possibly present, Lake Hagoi.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 14

Aguijan

Area 7 sq. km Altitude m
Island type: steep cliffs to north
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems:
Special features: feral goats and pigs; proposed as marine sanctuary
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus luscinia rigor (Nightingale Reed Warbler)
Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Vulnerable (RDB).
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 9

Rota

Area 85 sq. km Altitude 491 m
Island type: high volcanic surrounded by raised coral terraces
Natural threats: cyclones
Human impact: pop. 1,104 (1973); market gardening
Ecosystems: rain forest on upper terraces with rare and endemic plants; grasslands and scrub on volcanic slopes; fringing reef.
Special features: vegetation of considerable conservation interest; parts of fringing reef and submarine terrace proposed as marine sanctuary.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds				1	
Mammals					
Marine life					

Species of conservation interest
Plants
Serianthes nelsonii (Leguminosae) endemic to Rota and Guam, Endangered (RDB)
Tabernaemontana rotensis, rare on Rota, one tree on Guam
Hernandia labyrinthica group endemic, rare
Boerlagiodendron sp., group endemic
Heritiera longipetiolata (Sterculiaceae) group endemic, Endangered (RDB)
Xylosoma nelsonii Rota and Guam

Insects
Other invertebrates
Reptiles-amphibians
Birds

Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, Guam, Rota, Tinian, Saipan, Vulnerable (RDB), common locally (1977).

Zosterops conspicillata rotensis (Rota Bridled White-eye) endemic subspecies, forest on Sabana plateau, Indeterminate (RDB)

Corvus kubaryi (Marianas Crow) endemic to Rota and Guam, Endangered (RDB), less than 100 (1976).

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 2
Conservation Importance 17

GUAM (Unincorporated Territory of the United States)

Land area 541 (402, 450) km^2 Sea area 218,000 km^2
Population 107,000 (1981) Density 197 persons/km^2 Growth rate (est.) 2.0%/yr

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Guam

Area 541 sq. km Altitude 393 m
Island type: raised coral in north (152 m); old weathered volcanic in south
Natural threats: cylcones
Human impact: heavy damage during W.W.II; extensive urban development around Agana and elsewhere; major military bases; some agriculture.
Ecosystems: lowland rainforest on limestone with considerable endemism (remaning fragment along extreme northern rim); some ravine and beach forests; possible cloud forest on Mt. Lamlam; savanna and grasslands, scrub; poor mangroves; marsh, reed swamp and other aquatic habitats; fringing reef, lagoons and barrier reef (CRD).
Special features: Lake Fena (man-made); seabird rookeries at Anae islet and Orote Point; former sea turtle nesting beaches; caves in south with endangered swiftlet; feral pigs and other domestic animals, introduced giant African snail (Achatina fulica), elk, monitor lizard (Varanus indicus) and Philippine Rat Snake (Boiga irregularis, 1947) with effects on native flora and fauna.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	330	20	6%	2	
Insects	15	1	7%		
Other invert.	9				
Rept-Amph.	10	1	10%		4
Birds	12	2	17%	3	
Mammals	4	1	25%	2	1
Marine life					

Species of conservation interest

Plants

931 [or 530] species of flowering plants and ferns, of which at least 330 are native, 69 are endemic to the Mariana Islands; 20 endemics and more than 30 non-endemics threatened on Guam, including:

Serianthes nelsonii (Leguminosae) endemic to Guam and Rota (4 remaining trees on Guam), Endangered (RDB)

Heritiera longipetiolata (Sterculiaceae) group endemic, Endangered (RDB)

Tabernaemontana rotensis (Apocynaceae) one remaining tree on Guam

Hernandia ovigera (Hernandiaceae)

Merrilliodendron megacarpum (Icacinaceae) known from two areas

Xylosoma nelsonii (Flacourtaceae)

Fagraea galilai (Loganiaceae) two sites including Mt. Lamlam

Solanum guamense few plants known

Ceratopteris gaudichaudii from freshwater areas

Potamogeton mariannensis from freshwater, Cotal area

Insects

15 species of butterfly, 1 only on Guam

Neptis guamensis endemic, not seen since type collection in 1916

Other invertebrates

9 native land snails, including 4 Partulidae (tree snails):

Partula gibba

Partula salifana

Partula radiolata

Samoana fragilis

Reptiles-amphibians

Ramphotyphlops (?) pseudosaurus (Typhlopidae) endemic?

Birds

95 species, 17 resident, 7 introduced

12 indigenous terrestrial bird species, 2 endemic

Rallus owstoni (Guam Rail) endemic, Vulnerable (RDB), fewer than 100 (1984), declining.

Ptilinopus roseicapilla (Marianas Fruit Dove) group endemic, northwest forest, Vulnerable (RDB), estimate of 241 on Guam (1981).

Myiagra freycineti (Guam Flycatcher or Broadbill) endemic, endangered, fewer than 100 (1983).

Gallinula chloropus guami (Marianas Gallinule or Common Moorhen) group endemic subspecies, Rare (RDB), 100-200 (1983)

Gallicolumba xanthonura xanthonura (White-throated Ground Dove), 150-200 (1983).

Aerodramus vanikorensis bartshi (Vanikoro Swiftlet), less than 50 (1983).

Halcyon cinnamomina cinnamomina (Guam Micronesian Kingfisher) endemic subspecies, Endangered (RDB) or vulnerable, conflicting reports of 3000 or 250-300 remaining (1982-83).

Rhipodura rufifrons uraniae (Rufous-fronted Fantail), less than 200 (1983).

Zosterops conspicillata conspicillata (Bridled White-eye), vulnerable, less than 50 (1984).
Myzomela cardinalis saffordi (Cardinal Honeyeater), estimated 250-300 (1983).
Apolinis opaca guami (Micronesian Starling), 1000 birds (1983).
Corvus kubaryi (Mariana Crow) Endangered (RDB), 150-200 birds (1983).
at least 4 bird species or subspecies are now extinct on Guam

Mammals

Pteropus marianus marianus (Mariana Fruit Bat) endangered by poaching.
Pteropus tokudae (Little Marianas Fruit Bat) only in northern mature forest, may be extinct
Emballonura semicaudata (Sheath-tailed Bat) may be extinct
Dugong dugon (Dugong), Vulnerable (RDB), very rare locally

Marine life

Protected areas

Anao Conservation Reserve	263 ha
Pati Point Natural Area	112 ha
Haputo Ecological Reserve Area (102 ha including reef and coastal waters)	73 ha
Orote Peninsula Ecological Reserve Area (66 ha including water area)	12 ha
Masso River Reservoir Area	67 ha
Guam Territorial Seashore Park (V) (6,075 ha including reef and coastal waters)	3,645 ha
War in the Pacific National Historical Park (V) (779 ha including water and coral reef areas)	374 ha

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 2
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 3
Human Impact 9
Conservation Importance 27

Province XIII
CAROLINE ISLANDS

The Caroline Islands were all formerly part of the United States Trust Territory of the Pacific Islands under the United Nations. Their present political evolution is leading to two separate countries, the Republic of Belau and the Federated States of Micronesia, both retaining ties of free association with the United States. While the United Nations trusteeship had still not been terminated officially (as of early 1986), the new entities already function in fact.

Species of conservation interest

Plants

201 native ferns, 26 endemic; 1 native cycad

922 dicotyledons, including 609 native taxa, 267 endemics, 4 listed as endangered.

Insects

Other invertebrates

important land snail genera

Reptiles-amphibians

24 species including 4 endemics, 1 endemic genus

Birds

Gallicolumba kubaryi (Caroline or Truk Islands Ground Dove) group endemic, Pohnpei and Truk

Aerodramus vanikorensis (Island Swiftlet)*, Belau, Truk, Pohnpei, Kosrae.

Mammals

Marine life

REPUBLIC OF BELAU [PALAU] (in free association with the United States)

[The new spellings of Belau and its place names are gradually coming into official usage, although Palau is still retained in some international contexts.]

Land area 494 km^2 Sea area 629,000 km^2
Population 12,400 (1981) Density 25 persons/km^2 Growth rate (est.) -0.3%/yr

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Belau (Palau Islands)

Species of conservation interest

Plants

rich flora, many endemics including:

Gulubia palauensis (Rock Island Palm) group endemic

Ptychosperma palauensis (Belau Palm) group endemic

Insects

2 butterflies

Other invertebrates

Videna spp. (Trochomorphidae, land snails), remarkable species radiation.

3 Partulidae (tree snails)

Reptiles-amphibians

endemic species of ranid frog

Aulacoplax leptosoma (Scincidae, Pandanus Skink) monospecific genus, group endemic

Crocodylus porosus (Estuarine or Saltwater Crocodile), Endangered

Eretmochelys imbricata (Hawksbill Turtle) common
Dermochelys coriacea (Leatherback Turtle) common

Birds

149 species, 43 resident, 4 introduced (including outer islands)
31 land birds, including 8 endemics
Gallicolumba canifrons (Belau Ground Dove) group endemic, endangered
Ptilinopus pelewensis (Belau Fruit Dove) group endemic
Pyrroglaux podargina (Belau Scops Owl) group endemic, endangered
Psamathia annae (Belau Bush Warbler) group endemic
Myiagra erythrops (Belau Broadbill or Mangrove Flycatcher) group endemic
Rhipidura lepida (Belau Fantail) group endemic
Pitohui tenebrosus (Morning Bird) group endemic
Megazosterops palauensis (Belau White-eye) monospecific genus, group endemic
Anas superciliosa pelewensis (Belau Grey Duck) group endemic subspecies, endangered
Megapodius laperouse senex group endemic subspecies, Rare (RDB)
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Babeldaob, Ngerekebesang, Chelbacheb Islands, Indeterminate (RDB) or Rare.
Artamus leucorhynchus pelewensis (Belau White-breasted Wood-swallow) group endemic subspecies, Rare (RDB).

Mammals

Dugong dugon (Dugong), Vulnerable (RDB), 50 (1978)

Marine life

one of the highest levels of species diversity in the Pacific Islands

Ngeruangel (Ngaruangl Reef)

Coral islet (0.2 ha; 1 m), coral reef, seabird rookery; no vegetation or inhabitants

Ngcheangel (Kayangel)

Area 1.7 sq. km Altitude 2 m
Island type: small atoll with 4 sandy islets along east side, lagoon 4-6 m deep, small pass.
Natural threats: cyclones
Human impact: pop. 140 (1980); some cultivation; reef pass enlarged with explosives.
Ecosystems: atoll forest and scrub, coconuts (31 plant species); atoll reefs and lagoon with patch reefs, high species diversity (CRD).
Special features: some seabirds and turtles; introduced Bufo marinus (Cane Toad) and Varanus indicus (Monitor Lizard).
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds

Megapodius laperouse senex group endemic subspecies, Rare (RDB), high densities on part of the atoll.

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0

Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 2
Conservation Importance 10

Babeldaob (Babelthuap)

Area 397 sq. km Altitude 122 (210) m
Island type: old weathered volcanic or continental, with some raised coral to south.
Natural threats: cyclones
Human impact: pop. 3,336 (1980); subsistence agriculture; heavily colonized by Japanese before W.W.II.
Ecosystems: lowland rain forest rich in species, riverine, swamp and beach forests; mangroves; scrub, savanna and grasslands; freshwater habitats; fringing reefs, barrier reefs, seagrass beds and lagoons.
Special features: feral pigs
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB), precarious.
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Indeterminate (RDB) or Rare.
Artamus leucorhynchus pelewensis (Belau White-breasted Wood-swallow) group endemic subspecies, savanna woodlands, Rare (RDB) several hundred (1978).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 1
Conservation Importance 17

Oreor (Koror)

Area 9.3 sq. km Altitude m
Island type: volcanic to west and raised coral to east
Natural threats: cyclones
Human impact: pop. 7,685 (1980); Japanese town of 20,000 destroyed in W.W.II; capital of Belau, with some urbanization, port facilities, aquaculture
Ecosystems: lowland rain forest, mangroves, coral reefs and lagoons
Special features:

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB), locally rare.
Gallicolumba canifrons (Belau Ground Dove) group endemic
Pyrroglaux podargina (Belau Scops Owl) group endemic
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB), small flock observed (1980).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 10
Conservation Importance 15

Ngerekebesang (Arakabesan)
Area 5 sq. km Altitude m
Island type: volcanic
Natural threats: cyclones
Human impact: large resort
Ecosystems:
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Indeterminate (RDB) or Rare.
Mammals
Marine life
117 corals in 40 genera
bivalves abundant
125 fish species
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1

Human Impact 1
Conservation Importance 15

Ngerchaol (Ngargol)

Ngemelachel (Malakal)

163 corals in 48 genera, 66 fish species in one area

Chelbacheb (Rock Islands)

Ulebsechel (Auluptagel)(41 sq. km); **Ngeteklou** (Gologugeul); **Bukrrairong** (Kamori); **Ngeruktabel** (Urukthapel)(19 sq. km; 207 m); **Tlutkaraguis** (Adorius); **Butottoribo; Ongael; Ngebedangel** (Ngobasangel); **Ulong** (Aulong); **Macharchar** (Eil Malk)(9 sq. km); **Bablomekang** (Abappaomogan)

All raised coral islands with rugged surface, dense limestone forest, fringing reefs, some unique marine lakes

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Megapodius laperouse senex group endemic subspecies, Rare (RDB), still common on Ngeruktabel and Macharchar (1980).

Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Ngeruktabel, Macharchar, Endangered (RDB)

Erythrura trichroa pelewensis (Belau Blue-faced Parrot Finch) group endemic subspecies, Indeterminate (RDB) or Rare.

Mammals

Marine life

Ratings

Natural conservation status 2
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 16

Ngerukuid (Orukuizu, Seventy Islands)

Area 2.59 sq. km Altitude 30 m

Island type: many small raised coral islands with undercut shores

Natural threats: cyclones

Human impact: uninhabited; formerly protected by taboo; illegal poaching and dynamiting for fish.

Ecosystems: limestone rain forest, coastal scrub, coral reefs (CRD)

Special features:

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Pyrroglaux [Otus] podargina (Belau Scops Owl) group endemic
Megapodius laperouse endemic to Marianas and Belau, Rare

Mammals

Dugong dugon (Dugong) Vulnerable (RDB)

Marine life
Protected area
Ngerukuid Islands Wildlife Reserve 259 ha
Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 16

Ngemlis (Ngemelis Islands)
Area sq. km Altitude m
Island type: slightly raised coral
Natural threats: cyclones
Human impact: proposals for phosphate mining in area
Ecosystems: limestone forest and scrub; fringing reefs with high species diversity.
Special features: spectacular submarine cliffs off fringing reef
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 0
Conservation Importance 13

Ngercheu (Ngergoi)
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB)
Mammals
Marine life

Ngedbus (Ngesebus)
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB)
Mammals
Marine life

Ngerchong (Ngeregong)

Ngebad (Ngabad)

Beliliou (Peleliu)

Area 12.7 sq. km Altitude 30 m
Island type: raised coral
Natural threats: cyclones
Human impact: pop. 617 (1980) decreasing; phosphates mined after 1935; heavy fighting during W.W.II.
Ecosystems: limestone forest (mostly secondary regrowth), scrub; 2 tidal creeks with mangroves; fringing and barrier reefs.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Pyrroglaux podargina (Belau Scops Owl) group endemic
Megapodius laperouse senex group endemic subspecies, Rare (RDB), still common locally (1980).
Caloenas nicobarica pelewensis (Belau Nicobar Pigeon) group endemic subspecies, Endangered (RDB), low numbers (1980).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 1
Conservation Importance 11

Ngeaur (Angaur)

Area 8.4 sq. km Altitude 61 m
Island type: raised coral, no surface water
Natural threats: cyclones
Human impact: pop. 243 (1980), decreasing; heavily mined for phosphate until 1955, abandoned mining facilities; large airstrip.
Ecosystems: secondary limestone forest and scrub; fringing reefs
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius laperouse senex group endemic subspecies, Rare (RDB), still common locally (1980).
Mammals
Marine life

Sonsorol Islands

Fana

Sonsorol

Area 1.9 sq. km Altitude m
Island type: two low coral islands on reef, no lagoon
Natural threats: cyclones
Human impact: pop. 79 (1980, including Pulo Anna)
Ecosystems: dense vegetation, fringing reef
Special features:

Pulo Anna

Low coral islet (0.9 sq. km), no lagoon; dense vegetation and fringing reef; pop. 16 (1960s, see Sonsorol)

Merir

Atoll with 1 islet (0.9 sq. km), lagoon?; coconuts; coral reef; visited occasionally; green turtle nesting area.

Tobi

Low coral islet (0.65 sq. km), no lagoon; fringing reef; pop. 73 (1980); phosphate mined 1940.

Helen (Helen Reef)

Area 1.94 sq. km (216 sq. km including reef and lagoon) Altitude m
Island type: atoll with one islet to north, lagoon 60 m deep
Natural threats: cyclones
Human impact: remote and uninhabited; visited by poaching fishing boats
Ecosystems: coconuts and atoll scrub; lagoon and wide atoll reefs (1,200 m) (CRD).
Special features: poaching of giant clams and other reef life; otherwise undisturbed; green turtle nesting area.

Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 0
Conservation Importance 8

[Province XIII, continued]

FEDERATED STATES OF MICRONESIA (in free association with the United States)

Land area 701 km^2 Sea area 2,978,000 km^2
Population 79,500 (1981) Density 113 persons/km^2 Growth rate (est.) 3.3%/yr

Species of conservation interest
Plants
Insects
4 species of butterflies
Other invertebrates
Reptiles-amphibians
Birds
28 land birds including 9 endemics
Mammals
Marine life

[YAP STATE]

Ngulu

Atoll with 8 islets (0.43 sq, km); coconuts and breadfruit; small population; turtle nesting area.

Yap Islands (Waqab)

Yap (56 sq. km; 176 m; pop. 3443); **Gagil Tamil** (Gagil-Tomil) (29 sq. km; pop. 1336); **Maap** (Map) (11 sq. km; pop. 317); **Rumung** (4 sq. km; pop. 131)

Area 100 sq. km Altitude 176 m
Island type: continental (metamorphic) and old volcanic; 4 main islands within broad reef and lagoon
Natural threats: cyclones
Human impact: pop. 5,227 (1980); state government centre at Colonia; subsistence agriculture, coconuts.
Ecosystems: mostly disturbed: lowland rain forest, savanna and grasslands, Pandanus; mangroves, seagrasses, lagoons and broad fringing reefs with high species diversity.
Special features: strong cultural traditions

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		?			
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
several endemic plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
76 species, 19 resident, 3 introduced (including outer islands)
Monarcha godeffroyi (Yap Monarch) endemic
Rukia oleaginea (Yap White-eye) endemic
Mammals
Dugong dugon (Dugong), Vulnerable (RDB), very rare locally
Marine life
190 species of corals
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 6
Conservation Importance 17

Ulithi

Area 4.7 sq. km Altitude m
Island type: atoll with 40 islets, largest in Caroline Islands
Natural threats: cyclones
Human impact: pop. 720 (1980), decreasing; naval staging post in W.W.II, several ships sunk in lagoon; airstrip.
Ecosystems: atoll lagoon and reefs
Special features: turtle nesting area

Fais

Area 2.8 sq. km Altitude 18 m
Island type: raised coral platform, phosphate deposits
Natural threats: cyclones
Human impact: pop. 210 (1980); phosphate mined; coconuts
Ecosystems: limestone forest, 3 native ferns, 117 angiosperms, including 59 introduced; coconuts; fringing reef
Special features: possibly some endemic species
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 2
Conservation Importance 11

Sorol

Atoll with 11 islets (0.9 sq. km), closed lagoon; pop. 7 (1980)

Eauripik

Atoll with 6 small islets (0.23 sq. km): 5 with coconuts, 1 awash at high tide; pop. 122 (1980).

Woleai

Area 4.5 sq. km Altitude m
Island type: atoll with 21 islets
Natural threats: cyclones
Human impact: pop. 720 (1980); coconuts and breadfruit
Ecosystems: atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
84 plant species
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus luscinia (Nightingale Reed Warbler)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 9

Ifalik (Ifaluk)

Atoll with 3 islets (1.5 sq. km); coconuts and breadfruit; pop. 391 (1980); well studied.

Faraulep

Atoll with 3 small islets (0.4 sq. km); pop. 135 (1980), decreasing

Gaferut

Area 0.11 sq. km Altitude 30 m
Island type: raised coral
Natural threats: cyclones
Human impact: uninhabited; phosphate mined 1935, buildings remain
Ecosystems: forest with Tournefortia; fringing reef
Special features: important seabird rookery; sea turtle nesting area
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 13

Olimarao

Atoll with 2 islets (0.22 sq. km) on reef surrounded by lagoon, coconuts; uninhabited but visited occasionally.

Elato

Atoll with 2 groups of islets (0.5 sq. km); coconuts and mangroves; pop. 51 (1980); turtle nesting area.

Lamotrek

Atoll with 3 islets (0.98 sq. km); pop. 243 (1980)

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Acrocephalus luscinia (Nightingale Reed Warbler)

Mammals

Marine life

West Fayu

Area 0.62 (or 0.06?) sq. km Altitude m

Island type: atoll with 1 islet, no lagoon, extensive reef

Natural threats: cyclones

Human impact: visited occasionally

Ecosystems: coral reefs

Special features: important seabird rookery; turtle nesting area

Ratings

Natural conservation status 3

Ecosystem richness 0

Species richness 0

Economic pressure 0

Human threat 0

Natural vulnerability 1

Practicality of conservation action 0

Reliability of data 1

Human Impact 0

Conservation Importance 11

Satawal

Low coral island (1.3 sq. km; 5 m); coconuts and scrub (6 native ferns, 97 angiosperms including 46 introduced); fringing reef; pop. 386 (1980).

Pikelot

Area 0.1 sq. km Altitude m

Island type: low coral islet, extensive fringing reef

Natural threats: cyclones

Human impact: visited occasionally

Ecosystems: atoll forest and scrub; fringing reefs

Special features: important seabird rookery; turtle nesting area

Ratings

Natural conservation status 3

Ecosystem richness 0

Species richness 1

Economic pressure 0

Human threat 0

Natural vulnerability 1

Practicality of conservation action 0

Reliability of data 1

Human Impact 0

Conservation Importance 13

[TRUK STATE]

Pulusuk

Low coral island (2.6 sq. km) with central depression, fringing reef; pop. 214 (1980), decreasing.

Manila Reef

Puluwat

Atoll with 2 large and 3 small islets (3.4 sq. km); breadfruit and coconuts; pop. 495 (1980).

Pulap

Atoll with 3 islets (0.85 sq. km); coconuts and breadfruit; pop. 432 (1980).

Namonuito

Atoll with 10 islets (4.4 sq. km); coconuts and some fringing atoll forest, atoll reefs; pop. 440 (1960s).

Neoch (Kuop)

Atoll with 4 islets (0.5 sq. km)

Truk Islands (Chuk)

Volcanic and coral islands enclosed in large lagoon and barrier reef; many ships sunk in lagoon in W.W.II; fishing with explosives common.

Species of conservation interest

Plants

Clinostigma carolinensis (Truk Palm) endangered

Semecarpus kraemeri (Truk Poison Tree) endangered

Insects

Other invertebrates

Reptiles-amphibians

Birds

73 species, 28 resident, 2 introduced (including outer islands)

Myiagra oceanica (Truk or Oceanic Flycatcher) group endemic

Gallicolumba kubaryi (Truk Islands Ground Dove) endemic to Carolines

Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Moen, Uman, Udot, Tol, Rare (RDB)

Ducula oceanica teraokai (Truk Micronesian Pigeon) Endangered (RDB)

Acrocephalus luscinia (Nightingale Reed Warbler) uncommon

Mammals

Marine life

Tol group

Polle

Pata

Wonei

Tol

Area 34 sq. km Altitude 439 (480) m

Island type: high volcanic, indented coastline

Natural threats: cyclones

Human impact: pop. 6,781 (1980); former Japanese settlement

Ecosystems: disturbed lowland vegetation; 12 ha of montane rain forest on top of Mt. Winibot with endemic plants; mangroves; fringing reefs.

Special features: top 100 m of Mt. Winibot of considerable conservation interest.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Rukia ruki (Truk Greater White-eye) endemic, top of Mt. Winibot, Endangered (RDB)
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Ducula oceanica teraokai (Truk Micronesian Pigeon) Endangered (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 11
Conservation Importance 13

Fanapanges (Fala-Beguets)
(1.6 sq. km; 61 m), fringing reef; pop. 411 (1980)

Romonum (Ulalu)
Low island (75 ha), fringing reef; pop. 422 (1980)

Udot
Area 4.9 sq. km Altitude 152 m
Island type: volcanic
Natural threats: cyclones
Human impact: pop. 1,083 (1980)
Ecosystems: fringing reef
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Mammals
Marine life

Eot
(49 ha; 61 m), fringing reef shared with Udot; pop. 189 (1980)

Totiu (Tarik)

Parem (Param)
(61 m), fringing reef and mangroves; pop. 226 (1980)
Siis (Tsis)
(65 ha; 91 m), fringing reef and beach; pop. 324 (1980)
Fefan (Fefen)
Area 13.2 sq. km Altitude 298 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 3,096 (1980), increasing
Ecosystems: montane rain forest on Mt. Chukusou; some mangroves; fringing reef.
Special features:
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 13
Conservation Importance 10

Uman
Area 4.7 sq. km Altitude 244 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 2,320 (1980), increasing
Ecosystems: montane rain forest on Mt. Uroras; some mangroves; fringing reef.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 24
Conservation Importance 10

Etten (Eten)

Dublon (Tonowas)
Area 8.8 sq. km Altitude 349 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 3,233 (1980); former Japanese headquarters with large settlement; little undisturbed vegetation.
Ecosystems: former lowland rain forest; montane rain forest on Mt. Tolomen; some mangroves; fringing reef.
Special features:

Moen (Wono)
Area 18.8 sq. km Altitude 370 m
Island type: high volcanic
Natural threats: cyclones
Human impact: pop. 10,374 (1980), up from 3,800 in 1960s; state administrative centre; airport dredged from reef flat.
Ecosystems: former lowland rain forest; montane rain forest on Mt. Teroken; savanna; mangroves; fringing reef.
Special features: savanna of some conservation interest
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Metabolus rugensis (Truk Monarch) monospecific genus, group endemic, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 30
Conservation Importance 11

Hall Islands
Fayu (East Fayu)
Area 0.39 sq. km Altitude m
Island type: coral island with central depression that collects water
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems: fringing reef
Special features: important seabird rookery; recommended for protection
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1

Reliability of data 1
Human Impact 0
Conservation Importance 13

Nomwin

Atoll with 9 islets (1.8 sq. km) on circular reef, coconuts; pop. 324 (1980).

Murilo

Atoll with 5 islets (1.3 sq. km) north of reef, coconuts; pop. 328 (1980)

Nama

Low coral island (0.8 sq. km), coconuts and breadfruit; pop. 1,021 (1980)

Losap

Atoll with 8 islets (1 sq. km) on semicircular reef, coconuts and breadfruit; pop. over 827 (1980).

Namoluk

Area 0.834 sq. km Altitude m
Island type: triangular atoll with 4 islets, very deep (77 m) closed lagoon
Natural threats: cyclones (1958); tsunamis (1972)
Human impact: pop. 263 (1973), stable; subsistence agriculture
Ecosystems: atoll forest and scrub, coconuts; mangroves; atoll reefs and lagoon
Special features: green and hawksbill turtle nesting area
Species of conservation interest
Plants
119 species
Insects
Other invertebrates
Reptiles-amphibians
5 geckos, 5 skinks
Birds
21 bird species (11 breeding) including:
Acrocephalus luscinia (Nightingale Reed Warbler) 400-500
Aplonis opacus (Micronesian Starling) numerous
Myzomela cardinalis (Cardinal Honeyeater) common
Mammals
6 mammals (Pteropus fruit bat, 2 rats, domestic animals)
Marine life
67 molluscs
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 2
Human Impact 8
Conservation Importance 12

Mortlock Islands (Nomoi)

Etal

Atoll with 13 islets (1.8 sq. km) enclosing small lagoon; pop. 440 (1980)

Lukunor

Atoll with 6 islets (2.8 sq. km) on oval lagoon, coconuts; pop. 668 (1980)

Satawan

Large atoll with 11 main islets, numerous small islets (4.6 sq. km); coconuts; pop. 766 (1980), down from 1,800 (1960s).

[POHNPEI STATE)

Kapingamarangi

Area 1.1 sq. km Altitude m
Island type: circular atoll with 33 islets
Natural threats: cyclones
Human impact: pop. 510 (1980); coconuts
Ecosystems: atoll scrub as windbreak; atoll reefs and lagoon
Special features: turtles have become scarce
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Perochirus scutellatus (Gekkonidae) endemic
Birds
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 11
Conservation Importance 10

Nukuoro

Circular atoll with over 40 islets (1.7 sq. km); coconuts; pop. 308 (1980)

Minto Reef

Oroluk

Area 0.5 sq. km Altitude m
Island type: atoli 30 km by 23 km with 1 islet to northwest
Natural threats: cyclones
Human impact: pop. 10, only inhabited since mid-1970s; coconut plantations
Ecosystems: coconuts, atoll lagoon and reefs
Special features: important seabird rookery; sea turtle nesting area; recommended for protection
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 1
Conservation Importance 13

Ngatik

Atoll with 3 large and several small islets (1.7 sq. km); coconuts; pop. 564 (1980).

Pohnpei Islands (Ponape)

Pakin

Atoll with 5 islets (1.1 sq. km), good atoll reefs and lagoon; coconuts; visited occasionally

Ant

Area 1.8 sq. km Altitude m
Island type: atoll with several islets
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems: coconuts; excellent atoll reefs with up to 100% coral coverage, lagoon.
Special features: possible green turtle nesting area
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 0
Conservation Importance 11

Pohnpei (Ponape)

Area 334 sq. km Altitude 791 m
Island type: high volcanic with deeply indented coast, high rainfall
Natural threats: cyclones
Human impact: pop. 20,318 (1980); former colonization by Japanese; urban development at Kolonia, capital of Federated States of Micronesia; agricultural development in lowlands.
Ecosystems: lowland and montane rain forests, cloud forest, river and swamp forests; mangroves; savanna and grasslands; mountain streams and other freshwater habitats; barrier reef and lagoon, seagrass beds.
Special features: Ruins on Nan Madol islet; archaeological sites.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	249	8	3%		
Insects					
Other invert.					
Rept-Amph.		1			
Birds	28	5	18%		3
Mammals					
Marine life					

Species of conservation interest
Plants
249 native angiosperms, including 8 endemic species
Insects
Other invertebrates
2 Partulidae (1 ground snail, 1 tree snail)
Reptiles-amphibians
Emoia ponapea (Scincidae) endemic

Birds
62 species, 31 resident, 3 introduced (including outer islands)
Gallicolumba kubaryi (Caroline or Truk Islands Ground Dove) group endemic, Pohnpei and Truk
Trichoglossus rubiginosus (Pohnpei Lory) endemic
Myiagra pluto (Pohnpei Broadbill or Flycatcher) endemic
Rukia longirostra (Pohnpei White-eye) endemic, mountainous interior, Rare (RDB).
Aplonis pelzelni (Pohnpei Mountain Starling) endemic, in forests above 200 m, Vulnerable (RDB).
Asio flammeus ponapensis (Pohnpei Short-eared Owl) endemic subspecies, Rare (RDB), 50 counted (1956), single individuals seen 1975 and 1977.
Acrocephalus luscinia (Nightingale Reed-warbler)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 5
Conservation Importance 19

Mokil
Atoll with 3 islets (1.3 sq. km) on rectangular reef, small lagoon, coconuts; pop. 289 (1980), decreasing.

Pingelap
Atoll with 2 large and 1 small islets (1.7 sq. km) on square reef, small lagoon, coconuts, a few mangroves (57 plant species, 32 indigenous); pop. 368 (1980), down from 1,000 (1960s).

[KOSRAE STATE]

Kosrae (Kusaie)
Area 110 sq. km Altitude 628 m
Island type: high volcanic, deeply dissected chain of mountains to south, isolated peak to north (592 m), narrow coastal plain.
Natural threats: cyclones
Human impact: pop. 5,522 (1980), coastal plain cultivated
Ecosystems: lowland and montane rain forests, cloud forest, mangroves, fringing reef.
Special features: archaeological sites, ruins on Lele Island; small green and hawksbill turtle nesting area.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds	11	1	9%	1(2)	
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
1 ground-living Partulidae (land snail)
Reptiles-amphibians
Birds
41 species, 13 resident, 2 introduced
Ptilinopus porphyraceus hernsheimi (Crimson-crowned or Purple-capped Fruit Dove) endangered.
Ducula oceanica oceanica (Micronesian Pigeon) Kosrae, Ailinglaplap and Jaluit
[Asio flammeus ponapensis (Short-eared owl) vagrant]
Acrocephalus luscinia (Nightingale Reed-warbler)
2 extinct species:
Porzana monasa (Kosrae Rail)
Aplonis corvina
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 18

Province XIV
MARSHALL ISLANDS

MARSHALL ISLANDS (in free association with the United States)

Land area 181 km^2 Sea area 2,131,000 km^2
Population 31,800 (1981) Density 176 persons/km^2 Growth rate (est.) 3.0%/yr

Species of conservation interest
Plants
10 native ferns, 1 native cycad, 293 dicotyledon taxa including 88 natives
1 endemic grass on Bokaak
4 endemic Pandanus ssp. on Eniwetak
Insects
1 species of butterfly
Other invertebrates
Reptiles-amphibians
7 species of lizards
Birds
78 species, 18 resident, 2 introduced
Ducula oceanica ratakensis (Ratak Micronesian Pigeon), group endemic subspecies, Wotje and Arno, Indeterminate (RDB)
Zosterops conspicillata (Bridled White-eye) threatened
Mammals
Marine life

Ratak Chain
Bokaak (Taongi)
Area 3.24 sq. km Altitude 4 m
Island type: crescent-shaped atoll with 14 islets, dry and stony
Natural threats: cyclones
Human impact: uninhabited, formerly taboo; Japanese relay station and bomb dump destroyed in 1944.
Ecosystems: atoll scrub and grasslands with 8-9 species; atoll reefs and lagoon.
Special features: important seabird rookery (20 species, including 14 breeding); turtle nesting area.

Endemism:	Total sp.	No. endemic	% endemic	E	ViRI
Plants	9	1	11%		
Insects					
Other invert.					
Rept-Amph.		1			
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
Lepturus gas[sa]paricensis (grass) endemic (also reported on Wake Island)
Insects
Other invertebrates

Reptiles-amphibians
Endemic race of lizards
Birds
Major breeding colonies of Puffinus pacificus, Sterna fuscata, Sula sula and Fregata minor.
Mammals
Marine life
Protected area: protected by order since 1958 324 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 13

Bikar
Area 0.5 sq. km Altitude 3 m
Island type: diamond-shaped atoll with 3 islets, dry, phosphates present
Natural threats: cyclones
Human impact: visited occasionally; uninhabited, formerly taboo
Ecosystems: atoll forest (30 ha) with Pisonia, atoll scrub and vines
Special features: seabird rookery (18 species, including 14 breeding); important turtle (Chelonia mydas) nesting area.
Protected area: protected by order since 1958 52 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 10

Utrik (Utirik)
Area 0.5 sq. km Altitude m
Island type: atoll with 1 large and 4 small islets
Natural threats: cyclones (1951)
Human impact: pop. 328 (1980), coconut plantation
Ecosystems: atoll forest and scrub on Ealuk Is., atoll reefs and lagoon
Special features: 10 bird species

Taka
Area 3.4 sq. km Altitude m
Island type: atoll with 6 islets, dry
Natural threats: cyclones (1951)
Human impact: visited occasionally; coconut plantation on part of islet
Ecosystems: low atoll forest, atoll scrub and grasses, atoll reef and lagoon.
Special features: seabird rookery on Etuk Is.; 7 bird species

Mejit

Area 1.8 sq. km Altitude m
Island type: low coral island, central pond with channel to sea
Natural threats: cyclones
Human impact: pop. 329 (1980); well cultivated
Ecosystems: coconuts and breadfruit; mangroves in channel; fringing reef
Special features:

Ailuk

Area 5.4 sq. km Altitude m
Island type: elongate atoll with 57 islets
Natural threats: cyclones (1951)
Human impact: pop. 420 (1980), coconut plantation
Ecosystems: coconuts, atoll scrub as windbreaks, atoll reefs and lagoon
Special features: 11 bird species

Jemo

Area 0.16 sq. km Altitude m
Island type: egg-shaped low coral islet on linear reef
Natural threats: cyclones
Human impact: visited occasionally, coconut plantation
Ecosystems: atoll forest and scrub as windbreak, large Pisonia trees; fringing reef.
Special features: 8 bird species, abundant; seabird rookery; green turtle nesting area; potential for protection.
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 9

Likiep

Area 10 sq. km Altitude m
Island type: atoll with 112 islets
Natural threats: cyclones
Human impact: pop. 487 (1980); coconut plantations
Ecosystems: atoll scrub, atoll reefs and lagoon
Special features: 5 bird species, not abundant

Wotje

Area 8 sq. km Altitude m
Island type: atoll with 56 islets
Natural threats: cyclones
Human impact: pop. 524 (1980); large Japanese garrison in W.W.II, much destruction
Ecosystems: coconuts; remnant atoll forest; grasses on smaller islets; atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
Possible remnant population of Ducula oceanica ratakensis (Ratak Micronesian Pigeon), Indeterminate (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 5

Erikub (Erikup)
Area 1.6 sq. km Altitude m
Island type: atoll with 13 islets, no fresh water
Natural threats: cyclones
Human impact: uninhabited, occasional visits
Ecosystems: atoll forest, atoll scrub, some coconuts; atoll reefs and lagoon
Special features:

Maloelap
Area 10 sq. km Altitude m
Island type: triangular atoll with 60 islets
Natural threats: cyclones
Human impact: pop. 627 (1980), coconut plantations; airstrip
Ecosystems: atoll forest and scrub, coconuts and breadfruit, atoll reefs and lagoon.
Special features:

Aur
Area 5.6 sq. km Altitude m
Island type: square atoll with 32 islets
Natural threats: cyclones
Human impact: pop. 449 (1980), coconut plantations
Ecosystems: atoll scrub, atoll reefs and lagoon
Special features: 22 native plant species, 10 introduced

Majuro
Area 9 sq. km Altitude m
Island type: atoll with over 60 islets
Natural threats: cyclones
Human impact: pop. 11,893 (1980), capital with urban development, airport; causeway construction; coconut plantations
Ecosystems: coconuts and breadfruit, atoll scrub (30 native plants, 31 introduced); atoll reefs and lagoon (33 algae, 33 fish) (CRD).
Special features:

Arno
Area 13 sq. km Altitude 2.4 m
Island type: atoll with over 100 islets
Natural threats: cyclones
Human impact: pop. 1500 (1980), coconut plantations
Ecosystems: coconuts and breadfruit, atoll scrub, Casuarina; mangroves; atoll reefs and lagoon (CRD).
Special features:

Species of conservation interest
Plants
44 native plant species, 81 introduced
Insects
Other invertebrates
Reptiles-amphibians
Birds
possible remnant population of Ducula oceanica ratakensis (Ratak Micronesian Pigeon) Indeterminate (RDB).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 6
Conservation Importance 5

Mili

Area 16 sq. km Altitude m
Island type: atoll with over 90 islets, poor soil
Natural threats: cyclones
Human impact: pop. 762 (1980), coconut plantations; Japanese airfield
Ecosystems: coconuts, Casuarina, atoll reefs and lagoon
Special features:
Knox (Narik)

Ralik Chain

Ujelang

Area 1.7 sq. km Altitude m
Island type: elongate atoll with over 35 islets on narrow reef
Natural threats: cyclones
Human impact: German coconut plantation, no original population, resettled from Enewetak in 1947, pop. 390 (1960s), now uninhabited since late 1970s.
Ecosystems: coconuts on largest islet; grasses on smaller islets; atoll reefs and lagoon
Special features: 14 bird species, abundant; seabird rookery
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 8

Enewetak (Eniwetok)
Area 5.8 sq. km Altitude 4 m
Island type: atoll with 30 islets
Natural threats: cyclones
Human impact: pop. 548 (1980); population evacuated 1946 to mid-1970s; nuclear weapons test site from 1947, barren areas and bomb craters, some restoration; site of active marine laboratory, now closed.
Ecosystems: atoll scrub, atoll reefs and lagoon (CRD)
Special features: 42 native and 53 introduced plant taxa, 4 endemic Pandanus varieties; extensively studied.
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 3
Human Impact 5
Conservation Importance 8

Bikini
Area 7.3 sq. km reduced to 6 sq. km by tests Altitude m
Island type: atoll with over 23 islets
Natural threats: cyclones
Human impact: population evacuated 1946 to 1970s, returned for a few years (pop. 125 in 1977), then evacuated again; nuclear weapons test site, 1947, extensive blast and radiation damage, continuing contamination makes islands uninhabitable despite some cleanup.
Ecosystems: secondary scrub thickets, atoll reefs and lagoon
Special features: turtle nesting area

Ailinginae
Area 3.3 sq. km Altitude m
Island type: atoll with a few islets
Natural threats: cyclonts planted on one islet
Ecosystems: atoll forest and scrub, grasses on smaller islets, Casuarina on eastern islets; atoll reefs and lagoon
Special features: 5 bird species

Rongelap
Area 7.8 sq. km Altitude m
Island type: atoll with 50 islets, dry, poor soil
Natural threats: cyclones
Human impact: pop. 233 (1980), coconut plantations in south
Ecosystems: atoll forest with Pisonia, and grasses in north; atoll reefs and lagoon.
Special features: 7 bird species

Rongrik (Rongerik)
Area 2.1 sq. km Altitude m
Island type: elongate atoll with 13 islets
Natural threats: cyclones
Human impact: settled from Bikini in 1946 but later evacuated; damaged by radioactive fallout in 1954.
Ecosystems: atoll forest, coconuts, grasses on smaller islets; atoll reefs and lagoon
Special features: few birds (4 species); turtles formerly plentiful

Wotho

Area 4.1 sq. km Altitude m
Island type: atoll with over 13 islets, fairly wet
Natural threats: cyclones
Human impact: small population, 76 (1980); coconut plantations
Ecosystems: considerable atoll forest with Ochrosia and Pisonia, atoll reefs and lagoon.
Special features: 15 bird species; seabird rookery; coconut crabs common
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 6

Ujae

Area 1.6 sq. km Altitude m
Island type: elongated atoll with 15 islets, fairly wet
Natural threats: cyclones
Human impact: pop. 309 (1980); coconut plantations
Ecosystems: atoll forest with Ochrosia and Pisonia; atoll reefs and lagoon
Special features: 14 bird species; seabird rookery

Lae

Area 1.6 sq. km Altitude m
Island type: atoll with many islets
Natural threats: cyclones
Human impact: pop. 237 (1980); coconut plantations
Ecosystems: atoll forest with Ochrosia and Pisonia; atoll reefs and lagoon
Special features: 10 bird species

Kwajalein

Area 16 sq. km Altitude m
Island type: very large atoll with 92 islets
Natural threats: cyclones
Human impact: large population; W.W.II Japanese naval base with heavy fighting; major military installations and missile test site, airfield; large overcrowded civilian population only on Ebeye, pop. 6,629 (1980), density 21,329 persons/km^2.
Ecosystems: atoll forest on smaller islets; atoll reefs and lagoon.
Special features: Enewetak islet inside lagoon with excellent Pisonia forest taboo area; 15 bird species; seabird rookery; introduced Mynah.

Lib

Area 0.8 sq. km Altitude m
Island type: low coral sand island, central depression with freshwater pond, fertile.
Natural threats: cyclones
Human impact: pop. 99 (1980); heavily cultivated (coconuts, breadfruit and pineapples).
Ecosystems: fringing reef
Special features:

Namu

Area 6.2 sq. km Altitude m
Island type: atoll with over 50 islets on northeast rim
Natural threats: cyclones
Human impact: pop. 656 (1980); coconut plantations
Ecosystems: atoll reefs and lagoon
Special features:

Jabwot (Jabat)

Area 0.6 sq. km Altitude m
Island type: low coral island, phosphates present
Natural threats: cyclones
Human impact: pop. 72 (1980)
Ecosystems: fringing reefs
Special features:

Ailinglaplap (Ailinglapalap)

Area 15 sq. km Altitude m
Island type: atoll with over 50 islets on almost continuous reef rim
Natural threats: cyclones
Human impact: pop. 1,400 (1980), coconut plantations
Ecosystems: coconuts; mangroves in small depressions; atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Ducula oceanica oceanica (Micronesian Pigeon) Ailinglaplap, Jaluit and Kosrae
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 5

Jaluit

Area 3.6 sq. km Altitude m
Island type: large diamond-shaped atoll with over 80 islets, nearly continuous land rim.
Natural threats: cyclones
Human impact: pop. 1485 (1980); former German administrative centre; coconut plantations.
Ecosystems: coconuts; atoll scrub and grasslands; mangroves in small depressions; atoll reefs and lagoon
Special features: 40 native and 19 introduced plant species
Species of conservation interest
Plants
Insects

Other invertebrates
Reptiles-amphibians
Birds
Ducula oceanica oceanica (Micronesian Pigeon) Jaluit, Ailinglaplap and Kosrae.
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 16
Conservation Importance 5

Kili

Area 0.9 sq. km Altitude m
Island type: low coral island
Natural threats: cyclones
Human impact: pop. 492 (1980) of resettled Bikini islanders; German coconut plantations.
Ecosystems: coconuts; fringing reef
Special features:

Namorik

Area 2.6 sq. km Altitude m
Island type: atoll with 2 main islands, closed lagoon
Natural threats: cyclones
Human impact: pop. 629 (1980); cultivation of coconuts and bananas
Ecosystems: atoll reefs and lagoon
Special features:

Ebon

Area 5.8 sq. km Altitude m
Island type: atoll with 23 islets, 12 main islands; some phosphates
Natural threats: cyclones
Human impact: pop. 858 (1980); heavily cultivated
Ecosystems: coconuts, breadfruit, Pandanus and Casuarina; atoll reefs and lagoon.
Special features: crimson crowned fruit dove now extinct

PAPUA NEW GUINEA (independent state since 1975)

Land area 462,243 km^2 Sea area 3,120,000 km^2
Population 3,329,000 (1982) Density 7 persons/km^2 Growth rate (est.) 2.2%/yr

The main island of New Guinea has by far the largest area of any in Oceania. Only the eastern half belonging to Papua New Guinea is included in the survey area, but much biological data is available only for the island as a whole, and thus some data specific to Irian Jaya may be included inadvertantly.

The country includes all or part of three biogeographic provinces. Province I. NEW GUINEA covers the eastern half of the main island and the smaller volcanic and coral islands in its surrounding coastal waters. Province II. BISMARCK ARCHIPELAGO includes the volcanic high islands and low reef islands of New Britain, New Ireland, the Admiralty Islands and their outliers. Bougainville and the other North Solomon islands are biogeographically part of Province III. SOLOMON ISLANDS.

Province I
NEW GUINEA

New Guinea group

New Guinea

Area ca. 400,000 sq. km Altitude 4694 m

Island type: Large continental island of great complexity and recent geological activity.

Natural threats: Earthquakes and accompanying landslides are common. Tsunamis have damaged coastal areas. Southern New Guinea is in the cyclone belt. Drier areas susceptible to fires.

Human impact: Large areas of fire-maintained grassland. Land clearing for subsistence agriculture affects 2500 sq. km/year, especially in more densely-populated areas. Some major logging, mining and other development projects, but only a small proportion of natural areas have so far been affected (220 sq. km/yr). Low population density but relatively rapid population growth. Heavy migration to urban areas including Port Moresby (pop. 135,000 in 1983) and Lae.

Ecosystems: The great diversity of biomes and ecosystems throughout the island has not yet been studied completely. The Regional Ecosystems Survey (Dahl, 1980) outlined 5 types of lowland rain forest (34% of surface), 13 types of montane rain forest (25% of surface), 5 types of palm swamp and swamp forest (6.5%), 3 types of mangrove forest (1.5%, 4,116 sq. km), savanna (7%), swamps and marshes (6%), and other types of terrestrial vegetation totalling 80% of the surface. There are also many fresh water and marine aquatic habitats for which little data are available. Most of the terrestrial biomes should be considered unique to New Guinea. The disturbed 20% of the land surface includes grasslands (8%), gardens and plantations (7%), and degraded forest (5%) (percentages from Beehler, 1985). Very rich Papuan barrier reef, fringing reefs on much of north coast, and other reef areas.

Special features: Caves in highlands with distinctive faunas. Important altitudinal gradients in ecosystems and species composition. High mountain habitats unique in Oceania.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	11,000	ca 6000	55-90%		
Insects	455	367	80%		
Other invert.	400				
Rept-Amph.	440	ca 220	50%	1	
Birds	570	195	50%		20
Mammals		7			8
Marine life					

Species of conservation interest

Plants

ca. 2000 fern species and 9,000 angiosperm species on the island of New Guinea; 1450 genera of which 124 are endemic; estimates of species endemism range from 55 to 90%.

Schefflera sp. (Araliaceae) endemic to Mt. Fublian copper mine site

Insects

455 species of butterflies, including 367 just in PNG, with high level of endemism and great variation between regions; in particular:

Orthinoptera allotei (birdwing butterfly)
Orthinoptera alexandrae (birdwing butterfly) Endangered (RDB)
Orthinoptera chimaera (birdwing butterfly) Indeterminate (RDB)
Orthinoptera goliath (birdwing butterfly)
Orthinoptera meridionalis (birdwing butterfly) Vulnerable (RDB)
Orthinoptera paradisea (birdwing butterfly) Indeterminate (RDB)
Ornithoptera priamus poseidon (birdwing butterfly) ranched for trade, not threatened
Orthinoptera victoriae (birdwing butterfly)
Troides oblongomaculatus papuensis (birdwing butterfly) ranched for trade, not threatened
Delias spp. (Pieridae)
Taenaris spp. (Morphinae)
Mycalesis spp. (Satyrinae)
Arhopala spp., Danis spp. and other blues (Lycaenidae)

Other invertebrates

over 400 taxa of land snails
6 Partulidae
Xesta citrina, Huon Peninsula, traded

Reptiles-amphibians

ca 170-200 species of frogs, more than half endemic
ca 170-200 species of lizards, nearly half endemic
Crocodylus porosis (Estuarine or Saltwater Crocodile) Endangered
ca 70 species of snakes
Liasis boeleni (Boelen's python) protected

Birds

570 species of nonmarine breeding birds, including 445 rain forest birds; 195 bird species endemic to the island of New Guinea and 87 additional species endemic to New Guinea and adjacent islands.

potentially threatened birds (Beehler, 1985; ICBP, 1986)) include:

Megatriorchis doriae (Doria's Goshawk) lowland primary rain forest, Rare
Accipiter buergersi (Buerger's or Chestnut-shouldered Sparrow Hawk) endemic, hill rain forest in eastern New Guinea, Rare
Harpyopsis novaeguineae (New Guinea Eagle) endemic, Indeterminate
Aquila gurneyi (Gurney's Eagle), rain forest and coastal areas, Rare

Rallicula mayri (Mayr's Chestnut Rail) endemic, montane rain forest, Cyclops-Torricelli Mountains, Rare
Goura cristata (Masked or Common Crowned Pigeon) group endemic
Goura scheepmakeri (Southern Crowned Pigeon) endemic
Goura victoria (Victoria Crowned Pigeon) group endemic
Probosciger aterrimus (Palm Cockatoo)
Psittrichas fulgidus (Pesquet's or Vulturine Parrot) endemic, Vulnerable
Melampitta gigantea (Greater Melampitta) endemic, nests in limestone sinkholes, Rare.
Cinclosoma ajax (Painted or Ajax Quail Thrush) endemic, patchy distribution on southern lowlands.
Pitohui incertus (Mottled Pitohui) endemic, restricted to flooding alluvial forest, 3 known localities.
Melanocharis arfakiana (Obscure Berrypecker) endemic, montane forest, Vogelkop and southeast, Rare, known from 2 specimens
Philemon brassi (Brass's Friarbird) endemic
Melidectes princeps (Long-bearded Honeyeater) endemic, cloud forest and thickets, Central Highlands, Rare
Lonchura nevermanni (White- or Grey-crowned Mannekin) endemic, savanna and swamp grasslands, Fly River region, Rare
Lonchura stygia (Black Mannekin) endemic, swamp grasslands, Fly River region, Rare
Lonchura monticola (Alpine Mannekin) endemic, alpine grasslands in south-east, Rare
Archboldia [papuensis] sanfordi (Sanford's Bowerbird) endemic, montane forest on Mt. Hagen and Mt. Giluwe, Vulnerable
Sericulus bakeri (Golden-maned or Adelbert Bowerbird) endemic, Rare or vulnerable, montane rain forest of Adelbert Mountains above 1100 m.
Macgregoria pulchra (MacGregor's Bird of Paradise) endemic, feeds on fruit of one subalpine tree species.
Epimachis [Drepanornis] bruijnii (White-billed Sicklebill) endemic
Epimachis fastuosus (Black Sicklebill) endemic, rare
Astrapia mayeri (Ribbon-tailed Astrapia or Bird of Paradise) endemic, cloud forest of Hagen-Strickland Mountains, Rare.
Astrapia rothschildi (Huon Astrapia or Bird of Paradise) endemic, montane forest on Huon Peninsula, Rare
Parotia wahnesi (Wahnes' Parotia) endemic, montane forest of Huon Peninsula and Adelbert Mountains, Rare
Paradisaea guilielmi (Emperor [of Germany] Bird of Paradise) endemic, hill rain forest on Huon Peninsula, Rare
Paradisaea rudolphi (Blue Bird of Paradise) endemic, montane forest edges at 1300-1800 m, south-eastern mountains, Rare

Mammals

Zaglossus bruijni (Long-beaked Echidna) endemic, mid-montane forest, central cordillera and Huon Peninsula, Vulnerable (RDB)
Dendrolagus dorianus notatus (Doria's Tree-kangaroo) endemic, montane forest above 2400 m, Central Highlands, Vulnerable (RDB)
Dendrolagus goodfellowi shawmayeri (Goodfellow's Tree-kangaroo) endemic, Castanopsis and Nothofagus forest at 1200-2750 m, north slopes of central cordillera and Owen Stanley Range, Vulnerable (RDB)
Dorcopsulus macleayi (Papuan Dorcopsis) endemic, lowland hill forest, southwestern slopes of Wharton and Owen Stanley Ranges and northern slopes of Owen Stanley Range in Milne Bay Province, Rare (RDB)

Phalanger interpositus (Stein's Cuscus) endemic, Lithocarpus forests at 1200-1500 m, Rare (RDB)
Phalanger rufoniger (Black-spotted Cuscus) endemic, northern lowland forest east to Huon Peninsula, Rare (RDB)
Echymipera clara (Clara Bandicoot) endemic, northern lowland rain forest below 1200 m, Rare (RDB)
Dugong dugon (Dugong) widespread in coastal waters, Vulnerable (RDB) some populations collapsing from overexploitation

Marine life

Protected areas

Cape Wom International Memorial Park (V)	105 ha
McAdam National Park (II)	2,080 ha
Mount Gahavisuka Provincial Park	77 ha
Mount Wilhelm National Park (II)	
Varirata National Park (II)	1,063 ha
Baiyer River Sanctuary (V)	120 ha
Balek Wildlife Sanctuary	
Maza Wildlife Management Area (marine)	(184,230 ha)
Mojirau Wildlife Management Area	5,074 ha
Siwi-Utame Wildlife Management Area	12,540 ha
Tonda Wildlife Management Area	590,000 ha
Zo-Oimago Wildlife Management Area	1,488 ha

Proposed protected areas

Horseshoe Reef-Tihara (Aioro) Marine Park (CRD)	396 ha
Motupore Island Wildlife Management Area (CRD)	
Salamaua Peninsula (CRD)	

Ratings
Natural conservation status 0
Ecosystem richness 4
Species richness 3
Economic pressure 0
Human threat 2
Natural vulnerability 3
Practicality of conservation action 3
Reliability of data 1
Human Impact 3
Conservation Importance 45

Logeia (Rogeia)
Samarai
Sariba
Sideia
Basilaki
Engineer Group
Nuakata
Sakar
Tolokiwa (Lokep)

Long

Area ca. 500 sq. km Altitude m
Island type: volcanic
Natural threats:
Human impact: some pressures for logging
Ecosystems:
Special features: crater lake resulting from volcanic explosion; turtle breeding area.

Protected area
Ranba Wildlife Management Area 41,922 ha
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 4
Reliability of data 1
Human Impact 2
Conservation Importance 21

Crown
Hankow Reef
Bagabag
Karkar

Area ca. 400 sq. km Altitude m
Island type: volcanic high island
Natural threats: volcanic eruptions
Human impact: dense population; some deforestation and soil erosion, hunting, overfishing.
Ecosystems: forests, coral reefs.
Special features: active volcano
Protected area
Bagiai Wildlife Management Area 13,760 ha
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 4
Reliability of data 1
Human Impact 2
Conservation Importance 20

Manam
High volcanic island, active volcano
Schouten Islands
Bam, Kadovar, Blup Blup, Wei (Viai), **Koil, Vokeo**
Muschu
Dugong common, possible reserve area
Kairiru
Dugong common, possible reserve area
Walis (Valif)
Dugong common, possible reserve area
Tarawai
Dugong common, possible reserve area

SOLOMON SEA ISLANDS
Lusancay Islands

Trobriand Islands
Species of conservation interest
Plants
Insects
Other invertebrates
trade in land snails
Reptiles-amphibians
Birds
Manucodia comrii (Bird of Paradise) endemic to Trobriands and D'Entrecasteaux
Mammals
Marine life

Kiriwina (Trobriand)
Area 440 sq. km Altitude 30 m
Island type: raised coral
Natural threats:
Human impact: pop. 12,700 (1971)
Ecosystems: limestone rain forest; mangroves
Special features:
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 1
Human Impact 3
Conservation Importance 15

Vakuta
Kitava
Muwo
Kaileuna

Marshall Bennett Islands
Kwaiawata, Gawa, Iwa (Jouveney), **Dugumenu**
Egum Atoll
Alcester
Madau
Muyua (Woodlark)
Area 1,110 (550) sq. km Altitude 370 m
Island type: raised coral?
Natural threats:
Human impact: pop. 2,000 (1971), low but increasing
Ecosystems: half of island primary lowland rainforest (1978), remainder secondary forest, some grasslands.
Special features:
Species of conservation interest
Plants
Insects
Ornithoptera priamus boisduvali (birdwing butterfly) endemic. Rare (RDB), ranched for trade
Other invertebrates
Reptiles-amphibians
Birds

Mammals
Phalanger lullulae (Woodlark Island Cuscus) endemic, lowland forest, Rare (RDB)
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 1
Human Impact 2
Conservation Importance 18

Nasai

Budibudi Islands (Laughlan Islands, Nada Islands)

Pocklington Reef

D'Entrecasteaux Islands
Species of conservation interest
Plants
Insects
Other invertebrates
endemic land snails
Reptiles-amphibians
Birds
Paradisaea decora (Goldie's Bird of Paradise) endemic, Fergusson and Normanby, Rare
Manucodia comrii (Bird of Paradise) endemic to D'Entrecasteaux and Trobriands
Mammals
Dorcopsis atrata (Black Dorcopsis Wallaby) endemic to Goodenough, possibly also on Fergusson and Normanby, Rare (RDB)
Dugong dugon (Dugong) Vulnerable (RDB) possible reserve area
Marine life

Goodenough (Morata)
Area 751 sq. km Altitude 2,545 (2,590) m
Island type: high volcanic
Natural threats: volcanic eruptions from nearby Fergusson; susceptible to fires in dry season.
Human impact: pop. 8-10,000 (1971); subsistence agriculture inland up to 1100 m, coconut plantations along coast; wartime airfield; occasional fires.
Ecosystems: remnant lowland rain forest (disturbed); montane rain forest; cloud forest; anthropogenic grasslands and savanna with forest remnants along streams on seasonally dry east side; coastal Casuarina; mangroves.
Special features: reserve potential on mountain and west side
Species of conservation interest
Plants
many endemics
Insects
Other invertebrates
Reptiles-amphibians

Birds
104 indigenous species
Manucodia comrii (Bird of Paradise) endemic to D'Entrecasteaux and Trobriands
5 endemic montane subspecies
Mammals
about 30 species, including:
Dorcopsis atrata (Black Dorcopsis Wallaby) endemic, Castanopsus and Nothophagus forests, 900-1800 m, Rare (RDB)
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 3
Conservation Importance 26

Amphlett Group
Wamea (Dum Dum), **Wawiwa**

Fergusson (Moratau)
Area 1,340 sq. km Altitude 1,830 m
Island type: high volcanic
Natural threats: volcanic eruptions
Human impact: pop. 13,000 (1971)
Ecosystems: large (1600 ha) lake
Special features: active volcano; Lake Lavu with abundant wildlife.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Paradisaea decora (Goldie's Bird of Paradise) endemic, Fergusson and Normanby, Rare
Mammals
Marine life
Protected area
Lake Lavu Wildlife Management Area 5,000 ha
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 4
Reliability of data 1
Human Impact 1
Conservation Importance 23

Uama

Sanaroa (Welle)

Dobu

Normanby (Duau)

Area 1,040 sq. km Altitude 1,100 m
Island type:
Natural threats:
Human impact: pop. 10,000 (1971); plantations; some hunting and burning
Ecosystems: forest, mangroves
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
rich bird fauna including:
Paradisaea decora (Goldie's Bird of Paradise) endemic, Fergusson and Normanby, Rare
Mammals
Marine life
Protected area
Sawataetae Wildlife Management Area 700 ha
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 1
Human Impact 2
Conservation Importance 19

Louisiade Archipelago

Human impact: pop. 12,000 (1971)
Species of conservation interest
Plants
Insects
Ornithoptera (priamus) caelestis (birdwing butterfly) endemic, ranched for trade, not threatened
Other invertebrates
endemic land snails
Reptiles-amphibians
Birds
Myzomela albigula (White-chinned Honeyeater) endemic to Louisiade Archipelago
Mammals
Marine life

Conflict Group

Deboyne Islands

Panaeati

Misima

Area ca. 100 sq. km Altitude m
Island type: volcanic
Natural threats:
Human impact:
Ecosystems: rain forest; fringing reefs

Special features:

Calvados Chain

Bagaman, Panawina, Panatinane

Yeina (Piron)

Sudest (Tagula)

Area 803 sq. km Altitude 910 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 2,000 (1971)
Ecosystems: rain forest; fringing reefs
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest

Plants

no information

Insects

Other invertebrates

Reptiles-amphibians

Birds

Meliphaga vicina (Louisiades Honeyeater) endemic, lowland forest, Rare.

Cracticus louisiadensis (White-rumped Butcher Bird) endemic, lowland forest, Rare.

Mammals

Marine life

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 1
Human Impact 2
Conservation Importance 19

Rossel (Yela)

Area ca. 200 sq. km Altitude m
Island type: volcanic
Natural threats:
Human impact:
Ecosystems: rain forest; fringing reefs
Special features:

Eastern Fields Reef

Spectacular deep water lagoon

Province II
BISMARCK ARCHIPELAGO

[PAPUA NEW GUINEA, continued]

Bismarck Archipelago
- Species of conservation interest
- Plants
- Insects
  - Ornithoptera (priamus) urvillianus (birdwing butterfly) ranched for trade, not threatened
- Other invertebrates
- Reptiles-amphibians
- Birds
  - Accipiter luteoschistaceus (Bismark Slate-mantled Goshawk) group endemic, New Britain and Umboi
  - Henicophaps foersteri (New Britain Bronzewing) group endemic, New Britain and Umboi
  - Ducula finschii (Band-tailed Imperial Pigeon) group endemic
  - Ducula melanochroa (Black Imperial Pigeon) group endemic
  - Reinwardtoena browni (Giant Pied Cuckoo Dove) group endemic, New Britain and New Ireland
  - Cacatua opthalmica (Blue-eyed Cockatoo) group endemic
  - Loriculus tener (Bismark Hanging Parrot) group endemic *
  - Centropus ateralbus (Pied Coucal) group endemic
  - Centropus violaceus (Bare-eyed Coucal) group endemic
  - Ninox variegata (Bismark Hawk Owl) group endemic, New Ireland and Lavongai
  - Ceyx websteri (Webster's Kingfisher) group endemic
  - Rhipidura dahli (Dahl's Fantail) group endemic
  - Monarcha verticalis (Bismark Pied Monarch) group endemic
  - Dicaeum eximium (Beautiful Flowerpecker) group endemic
  - Myzomela cineracea (New Britain Dusky Myzomela) group endemic
  - Myzomela pammelaena (Bismark Dusky Myzomela) group endemic
  - Philemon cockerelli (New Britain Friarbird) group endemic
  - Lonchura forbesi (Ireland Manakin) group endemic
  - Artamus insignis (Bismark Wood Swallow) group endemic
- Mammals
  - Dugong dugon (Dugong), Vulnerable (RDB)
- Marine life

Umboi (Rooke)
- Area ca. 800 sq. km Altitude m
- Island type: volcanic
- Natural threats: earthquakes
- Human impact:
- Ecosystems:
- Special features:
- Species of conservation interest
- Plants
- Insects
- Other invertebrates
- Reptiles-amphibians

Birds
Accipiter luteoschistaceus (Blue and Grey Sparrowhawk) endemic to New Britain and Umboi
Henicophaps foersteri (New Britain Bronzewing) New Britain and Umboi
Zoothera talaseae (New Britain Ground Thrush) Umboi, New Britain and Bougainville
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 0
Human Impact 2
Conservation Importance 15

New Britain

Area 36,520 (3,780) sq. km Altitude 2438 m
Island type: volcanic high island.
Natural threats: volcanic eruptions and associated ash falls common; earthquakes.
Human impact: pop. 150,000 (1970); subsistence agriculture and plantations; urban development at Rabaul.
Ecosystems: Extensive lowland rainforest and Eucalyptus deglupta forest; submontane Agathis forest above 900 m; montane Nothofagus forest above 1,500 m, with some mixed montane forest in center; probably cloud forest; a range of other vegetation types including swamp forest with Campnosperma and Terminalia, beach forest, mangroves, and large areas of coastal grasslands; marine ecosystems rich but little documented.
Special features: Active volcanoes; Lake Dakataua (crater lake) proposed National Park; Lake Hargy.

Endemism:	Total sp.	No. endemic	% endemic	E	VIRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		11			12
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Ornithoptera priamus bornemanni (birdwing butterfly) endemic, ranched for trade, not threatened
Other invertebrates
several land snails in international trade, including:
Forcatia glogula, west New Britain
Papustyla chancei, east New Britain
Papustyla hindei, east New Britain
Papustyla novae-pommerania
Reptiles-Amphibians

Birds

Puffinus heinrothi (Heinroth's Shearwater) known from a few specimens from the northeast coast of New Britain and the Solomon Islands, Indeterminate (RDB).

Henicopernis infuscata (Black Honey Buzzard) endemic, primary rain forest, Rare.

Accipiter brachyurus (New Britain Sparrowhawk) endemic, rain forest, Rare.

Accipiter luteoschistaceus (Blue and Grey Sparrowhawk) endemic to New Britain and Umboi, Indeterminate.

Accipiter princeps (New Britain Grey-headed Goshawk) endemic, rain forest, Rare, known from 4 specimens

Habropteryx insignis (New Britain Rail) endemic, Rare

Henicophaps foersteri (New Britain Bronzewing) New Britain and Umboi, Rare.

Reinwardtoena browni (Giant Pied Cuckoo Dove) group endemic, New Britain and New Ireland

Tyto aurantia (New Britain Barn Owl) endemic, Rare

Ninox odiosa (New Britain Hawk Owl) endemic, Rare

Halcyon albonotata (White-backed Kingfisher) endemic

Zoothera talaseae (New Britain Ground Thrush) New Britain, Umboi and Bougainville

Cichlornis grosvenori (Whiteman Mountains Warbler) endemic, montane rain forest, Rare, known from 2 specimens

Ortygocichla rubiginosa (Rufous-faced Thicket Warbler) endemic, montane rain forest, Rare.

Myzomela erythromelas (Black-bellied Myzomela) endemic

Vosea whitemanensis (New Britain or Gilliard's Honeyeater) endemic, montane forest, Rare, known from less than 10 specimens

Lonchura melaena (New Britain Finch) endemic to New Britain and Buka

Mammals

Dugong dugon (Dugong), Vulnerable (RDB), common on north coast and Siassi Islands.

Marine life

Protected areas

Garu Wildlife Management Area	16,997 ha
Pokilli Wildlife Management Area	

Ratings

Natural conservation status 0
Ecosystem richness 3
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 1
Human Impact 3
Conservation Importance 28

Talele Islands

Area 0.4 sq. km Altitude m
Island type: low coral islands
Natural threats:
Human impact: some gardening
Ecosystems: mangroves and beach forest; fringing and lagoon reefs.
Special features: lizards; seabird rookery; turtle nesting area.

Protected area
Talele Islands Nature Reserve (IV) 40 ha
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 4
Reliability of data 2
Human Impact 0
Conservation Importance 15

Witu Islands (Vitu Islands)
Garove, Mundua Islands, Narage, Unea (Bali), Ottilean Reef, Whirlwind Reefs

Lolobau

Watom

Duke of York Group
Duke of York, Makada, Ulu
Species of conservation interest
Plants
Insects
Ornithoptera priamus miokensis (birdwing butterfly) Endangered (RDB), ranched for trade
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Nanuk

Area 0.04 sq. km Altitude 40 m
Island type: low coral island.
Natural threats: near active volcanoes.
Human impact: coconut plantations, fishing.
Ecosystems: fringe of beach forest (Casuarina) and scrub.
Special features: recreation area, beaches.
Protected area
Nanuk Island Provincial Park (II) 4 ha (14 ha)
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 4
Reliability of data 2
Human Impact 0
Conservation Importance 13

New Ireland

Area 8,500 (8,650) sq. km Altitude 2,290 m
Island type: volcanic high island.
Natural threats:
Human impact: pop. 50,522 (1973)

Ecosystems: lowland rain forest types, montane forest with Nothofagus above 500 m at eastern end, mangroves.

Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		5			5
Mammals					
Marine life					

Species of conservation interest

Plants

Insects

Papilio moerneri (butterfly) Vulnerable (RDB)

Other invertebrates

Reptiles-Amphibians

Birds

Reinwardtoena browni (Giant Pied Cuckoo Dove) group endemic, New Britain and New Ireland

Lorius albidinuchus (White-naped Lory) endemic, hill and montane forest, Rare.

Ninox variegata (Bismark Hawk Owl) group endemic, New Ireland and Lavongai

Myzomela pulchella (New Ireland Honeyeater) endemic, hill and montane forest, Rare.

Philemon eichhorni (New Ireland Friarbird) endemic, lowland and hill forest, Rare.

Lonchura forbesi (New Ireland Finch) endemic, grasslands and clearings, Rare.

Dicrurus megarhynchus (New Ireland Drongo) endemic, lowland forest, Rare.

Mammals

Marine life

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 1
Human Impact 2
Conservation Importance 21

Feni Islands (Anir Islands)

Ambitle, Babase, Balum

Tanga Islands

Boang, Malendok, Lif, Tefa

Lihir Group

Lihir
Mali
Masahet
Mahur

Megalacron tabarensis mahurensis (land snail) endemic subspecies, traded internationally.

Tabar Islands

Tabar, Tatau, Mabua, Simberi

Lyra Reef

Tench (Enus)

Dyaul (Djaul)

Area ca. 100 sq. km Altitude m

Island type:

Natural threats:

Human impact:

Ecosystems:

Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-Amphibians

Birds

Monarcha ateralba (Dyaul or Bismark Monarch) endemic, Rare

Mammals

Marine life

Ratings

Natural conservation status 0

Ecosystem richness 2

Species richness 2

Economic pressure 0

Human threat 1

Natural vulnerability 1

Practicality of conservation action 3

Reliability of data 0

Human Impact 1

Conservation Importance 17

Lavongai (New Hanover)

Area 1,190 sq. km Altitude 870 m

Island type: volcanic

Natural threats:

Human impact: pop. 7,000 (1971)

Ecosystems: mangroves

Special features:

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Ninox variegata (Bismark Hawk Owl) group endemic, New Ireland and Lavongai

Mammals

Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 0
Human Impact 1
Conservation Importance 15

Tingwon Group

St. Matthias Group

Mussau, Eloaua, Emananus, Emirau

Area ca. 400 sq. km Altitude m
Island type: volcanic?
Natural threats:
Human impact:
Ecosystems:
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2			2
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Monarcha menckei (St. Matthias Monarch) endemic, Rare
Rhipidura matthiae (St. Matthias Rufous Fantail) endemic, Rare
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 0
Human Impact 1
Conservation Importance 17

Admiralty Islands

Species of conservation interest
Plants
Insects
Ornithoptera priamus admiralitatus (birdwing butterfly) endemic, ranched for trade, not threatened
Other invertebrates
Reptiles-Amphibians
Birds
Ninox meeki (Admiralty Islands Hawk Owl) group endemic, Rare
Philemon albitorques (White-naped Friarbird) group? endemic, lowland and hill forest, Rare.
Monarcha infelix (Admiralty Islands Monarch) group endemic
Pitta superba (Superb Pitta) group? endemic, Rare
Mammals
Marine life

Manus

Area 1,640 sq. km Altitude 719 m
Island type: volcanic
Natural threats:
Human impact: pop. ca. 10,000
Ecosystems:
Special features: south coast of interest for Dugong conservation

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Papilio weymeri (butterfly) Rare (RDB)
Other invertebrates
several land snails traded internationally, including:
Papustyla pulcherrima (Manus Green Tree Snail) endemic, rain forest, Rare (RDB).
Megalacron klaarwateri
Megalacron admiralitatis
Megalacron novaeguinensis
Megalacron melanesia localized distribution
Reptiles-Amphibians
Birds
Pitta superba (Superb Pitta) endemic or group endemic, Rare
Philemon albitorques (White-naped Friarbird) endemic or group endemic, Rare.
Mammals
Dugong dugon (Dugong) Vulnerable (RDB), common locally
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0

Human threat 2
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 0
Human Impact 2
Conservation Importance 20

Los-Negros
Papilio weymeri (butterfly) Rare (RDB)
Pak
Tong
Los Reyes Islands
Nauna
Rambutyo
Horno Islands
San Miguel Islands
Fedars Islands
Dugong dugon (Dugong) Vulnerable (RDB), common locally
Lou
Dugong dugon (Dugong) Vulnerable (RDB), common locally
St. Andrew Islands
Dugong dugon (Dugong) Vulnerable (RDB), common locally
Pam Islands (Pom Islands)
Dugong dugon (Dugong) Vulnerable (RDB), common locally
Baluan
Dugong dugon (Dugong) Vulnerable (RDB), common locally
Papialou Islands
Alim
Circular Reef
Sherburne Reef
Johnston Islands
Mbuke Islands
Mbuke, Vogali
Purdy Islands
Mole, Mouse, Rat, Bat
Peterson Reefs
Western
Sabben Islands
Bipi
Massong Islands

Northwestern Islands
Kaniet Islands
Atoll
Sae Islands
Hermit Islands
Circular reef enclosing 2 volcanic and 2 coral islands:
Luf
Area 7.9 sq. km Altitude 260 m
Island type: volcanic
Natural threats:
Human impact: pop. ca. 500 (1970); former German plantation, half of island planted to coconuts.
Ecosystems: dense single-layered rain forest on half of island
Special features: introduced Cervus rusa ca. 100
Species of conservation interest
Plants

Insects
Other invertebrates
Reptiles-amphibians
Birds
18 species including:
Halcyon saurophaga anchoreta subspecies endemic to Hermit, Ninigo and Anchorites.
Monarcha cinerascens perpallidus subspecies endemic to Hermit, Ninigo and Anchorites.
Ducula pacifica several hundred
Myzomela pammelaena (Bismark Dusky Myzomela) virtually eliminated since 1934 by Nectarinia jugularis.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 5
Conservation Importance 15

Akib

Low coral (10 m); atoll forest with Casuarina, Pisonia and coconuts; coral reef

Maron

Volcanic island (50 m) with grass and coconuts; sheep or goats

Jalun (Djalon)

Low coral (10 m); atoll forest with Casuarina, Pisonia and coconuts; coral reef

Ninigo Islands

Heina, Pelelun (Pelleluhu), **Ninigo, Sama, Sumasuma, Awin, Liot**

Area ca. 3 sq. km Altitude 3 m
Island type: all atolls
Natural threats:
Human impact: pop. ca. 500 (1970) Micronesians
Ecosystems: atoll forest mostly cleared for coconuts, dense ferns; mangroves; atoll reefs and lagoons
Special features: small brackish ponds in forest
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
17 species of birds including:
Aplonis feadensis heureka endemic subspecies
Myzomela pammalaena [nigrita] ernstmayri (Bismark Dusky Myzomela) endemic subspecies, threatened by recent colonization by Nectarinia jugularis.
Trichoglossus haematodus nesophilus endemic subspecies

Halcyon saurophaga anchoreta subspecies endemic to Hermits, Ninigo and Anchorites.
Monarcha cinerascens perpallidus subspecies endemic to Hermits, Ninigo and Anchorites.
Ducula pacifica 150 on Menam alone
Mammals
1 fruit bat
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 8
Conservation Importance 17

Manu (Allison)
Aua (Durour)
Wuvulu (Maty)

Province III
SOLOMON ISLANDS

The archipelago of the Solomon Islands includes both the North Solomons Province of Papua New Guinea (Bougainville and adjacent islands) and the independent country of the Solomon Islands.

Species of conservation interest

Plants

Insects

Ornithoptera (priamus) urvillianus (birdwing butterfly) ranched for trade, not threatened

Other invertebrates

several land snails traded internationally, including:

Papustyla xanthochila

Papuina adonis

Placostylus palmarum

Reptiles-amphibians

Birds

Pterodroma (rostrata) becki (Beck's Petrel), Indeterminate (RDB), known from 2 specimens taken at sea in 1928, may breed in Solomon Islands.

Puffinus heinrothi (Heinroth's Shearwater) known from a few specimens from the northeast coast of New Britain and the Solomon Islands, Indeterminate (RDB).

41 species are endemic to more than one island in the archipelago:

Haliaeetus sanfordi (Sanford's Sea Eagle) group endemic, Rare

Accipiter imitator (Imitator Sparrowhawk) group endemic, northern islands, rain forest, Rare.

Nesoclopeus woodfordi (Woodford's or Solomon Islands Rail)* group endemic, Bougainville, Santa Isabel, Guadalcanal, Rare.

Reinwardtoena crassirostris (Crested Long-tailed Pigeon) group endemic.

Ptilinopus richardsii (Silver-capped Fruit Dove) group endemic

Ducula brenchleyi (Chestnut-bellied Pigeon) group endemic

Gymnophaps solomonensis (Pale Mountain Pigeon) group endemic

Lorius chlorocercus (Yellow-bibbed Lory) group endemic

Charmosyna meeki (Meek's Lorikeet) group endemic

Charmosyna margarethae (Duchess Lorikeet) group endemic

Cacatua ducorpsii (Ducorp's Cockatoo) group endemic

Centropus milo (Buff-headed Coucal) group endemic

Ninox jacquinoti (Solomon Islands Hawk Owl) group endemic

Nesasio solomonensis (Fearful Owl) group endemic, Bougainville, Choiseul, Santa Isabel, Rare.

Halcyon leucopygia (Ultramarine Kingfisher) group endemic

Halcyon bougainvillei (Moustached Kingfisher) group endemic, not recorded for 50 years.

Pitta anerythra (Black-faced Pitta) group endemic

Coracina holopolia (Black-bellied Cuckoo-shrike) group endemic

Monarcha erythrosticta (Bougainville Monarch) group endemic

Monarcha castaneiventris (Chestnut-bellied Monarch) group endemic

Monarcha richardsii (Richard's Monarch) group endemic

Monarcha barbatus (Pied Monarch) group endemic

Monarcha browni (Kolombangara Monarch) group endemic

Myiagra ferrocyanea (Solomon Broadbill) group endemic

Rhipidura drownei (Mountain Fantail) group endemic

Rhipidura cockerelli (Cockerell's Fantail) group endemic

Pachycephala implicata (Mountain Whistler) group endemic
Dicaeum aeneum (Solomon Islands Flowerpecker) group endemic
Zosterops metcalfii (Yellow-throated White-eye) group endemic
Zosterops rendovae (Solomon Islands White-eye) group endemic
Zosterops vellalavella (Vella Lavella White-eye) group endemic
Zosterops ugiensis (Grey-throated White-eye) group endemic
Myzomela lafargei (Small Bougainville Honeyeater) group endemic
Myzomela melanocephala (Black-headed Honeyeater) group endemic
Myzomela eichhorni (Yellow-vented Honeyeater) group endemic
Myzomela tristrami (Tristram's Honeyeater) group endemic
Aplonis grandis (Large Glossy Starling) group endemic
Aplonis brunneicapilla (White-eyed Starling) group endemic
Corvus woodfordi (White-billed Crow) group endemic

Mammals

Dugong dugon (Dugong) Vulnerable (RDB)

Marine life

[PAPUA NEW GUINEA, continued]

North Solomon Islands

Bougainville

Area 10,619 sq. km Altitude 3,123 (2,743) m

Island type: volcanic high island

Natural threats: volcanic eruptions

Human impact: pop. 77,880 (1970); large copper mine at Panguna polluting Jaba River; plantations and other agriculture.

Ecosystems: various lowland and montane forest types, including lowland Calophyllum kajewskii forest, and Neonauclea/Sloanea forest at 450-750 m; swamp forest in south; beach forest; mangroves; scrub and grasslands.

Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.	64	13	20%		1
Birds		3			1
Mammals					
Marine life					

Species of conservation interest

Plants

Insects

Graphium meeki (butterfly) Rare (RDB)
Graphium mendana (butterfly) Rare (RDB)
Papilio toboroi (butterfly) Rare (RDB)

Other invertebrates

Reptiles-Amphibians

13 endemic species, 1 endemic genus
20 species of frogs including:
Batrachylodes elegans (ranid frog) endemic
Batrachylodes gigas (ranid frog) endemic
Batrachylodes mediodiscus (ranid frog) endemic to Bougainville and Buka.
Batrachylodes minutus (ranid frog) endemic
Batrachylodes montanus (ranid frog) endemic
Batrachylodes trossulus (ranid frog) possibly also on Choiseul

Batrachylodes wolfi (ranid frog) endemic to Bougainville and Buka
Platymantis myersi (ranid frog) endemic
Platymantis neckeri (ranid frog) endemic
8 species of geckos including:
Lepidodactylus mutahi (Gekkonidae) endemic
27 species of skink including:
Corucia zebrata (Scincidae) endemic to Solomon Islands and Bougainville
Sphenomorphus fragosus (Scincidae) endemic
Sphenomorphus taylori (Scincidae) endemic, rare
Sphenomorphus transversus (Scincidae) endemic, single specimen
Tribolonotus pseudoponceleti (Scincidae) endemic to Bougainville and Buka
9 species of snakes including:
Parapistocalamus hedigeri (Elapidae) endemic monospecific genus
Solomonelaps par (Elapidae) monospecific genus, endemic to Bougainville, Buka and Solomon Islands

Birds
Puffinus heinrothi (Heinroth's Shearwater) endemic
Cichlornis llaneae (Bougainville Thicket Warbler) endemic
Melilestes bougainvillei (Bougainville Honeyeater) endemic, montane and hill forest, Rare.
Zoothera talaseae (New Britain Ground Thrush) New Britain, Umboi and Bougainville, endemic subspecies

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 2
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 1
Human Impact 3
Conservation Importance 25

Bakawari (Pok Pok)
Taiof (Toiokh)

Buka

Area 829 sq. km Altitude 500 m
Island type:
Natural threats:
Human impact: pop. 32,000 (1971)
Ecosystems:
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Batrachylodes mediodiscus (ranid frog) endemic to Buka and Bougainville
Batrachylodes wolfi (ranid frog) endemic to Buka and Bougainville

Solomonelaps par (Elapidae) monospecific genus, endemic to Bougainville, Buka and Solomon Islands

Birds

Lonchura melaena (New Britain Finch) endemic to New Britain and Buka

Mammals

Marine life

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 1
Human Impact 2
Conservation Importance 17

Green Islands (Nissan Islands)

Nissan, Pinipel

Tulun (Carteret Group, Kilinailau)

Atoll

Nuguria

Atoll

Malum

Atoll

Takuu (Tauu)

Atoll

Nukumanu

Atoll

SOLOMON ISLANDS (independent state)

Land area 27,556 km^2 Sea area 1,340,000 km^2
Population 235,000 (1981) Density 9 persons/km^2 Growth rate (est.) 3.3%/yr

The Solomon Islands are a double chain of volcanic and raised coral islands. The political boundaries do not correspond to the biogeographic boundaries. The North Solomons, which are biogeographically contiguous with the rest of the chain in province III, belong to Papua New Guinea. Conversely the Santa Cruz Islands in the south, which are politically part of the Solomon Islands, have closer biogeographic ties with the northern islands of Vanuatu in province V.

Species of conservation interest

Plants

ca. 400 fern species and 1,750 flowering plants; endemism low, only 3 endemic genera.

estimated 230 orchids, likely to double with further field work

Insects

130 species of butterflies, of which 35 occur only in Solomon Islands and 54 are shared with Papua New Guinea.

Graphium meeki (butterfly) Choiseul, Santa Isabel and Bougainville, Rare (RDB)

Graphium mendana (butterfly) Rare (RDB)

Papilio toboroi (butterfly) Rare (RDB)

Other invertebrates

high generic endemicity of land snails

15 species of Papuina (Camaenidae)

8 species of Partulidae

Reptiles-amphibians

72 species, including 8 endemic species and 1 endemic genus

Corucia zebrata (Scincidae) endemic to Solomon Islands and Bougainville

Sphenomorphus bignelli (Scincidae) group endemic, Guadalcanal, Kolombangara, Nggela, Russell Islands?

Crocodylus porosus (Estuarine or Saltwater Crocodile), Endangered

Loveridgelaps elapoides monospecific genus, group endemic, Gizo, Guadalcanal, Santa Isabel, Malaita, Nggela, very rare, Insufficiently Known.

Solomonelaps par (Elapidae) monospecific genus, endemic to Bougainville, Buka and Solomon Islands

Birds

126 species, including 40 endemics (32%)

Gallicolumba salamonis (San Cristobal or Thick-billed Ground Dove) group endemic, San Cristobal group, rain forest, Rare.

Mammals

Uromys (Giant Rats) 3 endemic species

Dugong dugon (Dugong) Vulnerable (RDB)

Marine life

87 hard corals in 33 genera

Indispensable Reefs
Ontong Java (Luangiua)
Atoll
Roncador Reef (Keuopua)
Sikaiana (Stewart Islands)
Atoll

Shortland Islands
Area 413 sq. km
Human impact: pop. 2,101 (1976); density 5.1 persons/km^2
Oema Atoll
Oema
Ovau
Narrow fringing reef
Masamasa
Piru
Asie
Fauro
Volcanic island, fringing reefs
7 species of frogs
Mania
Balalai
Pirumeri
Poporang
Magusaiai
Shortland (Alu)
Area ca. 300 sq. km Altitude m
Island type: volcanic and some raised coral, barrier reef with islets
Natural threats: cyclones, earthquakes
Human impact:
Ecosystems: fringing reefs, barrier reefs and lagoon
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
4 frogs, 1 lizard, 4 geckos, 20 skinks including:
Tribolonotus ponceleti (Scincidae) endemic, Indeterminate
Birds
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 3
Conservation Importance 15

Treasury Islands

Mono

Volcanic surrounded by raised coral, narrow fringing reef
7 species of frogs

Stirling

Volcanic surrounded by raised coral, narrow fringing reef

- - - - - -

Choiseul (Lauru)

Area 3,454 (3,100) sq. km Altitude 1,067 m
Island type: volcanic high island
Natural threats: Cyclones, earthquakes
Human impact: pop. 10,349 (1976); density 3 persons/km^2
Ecosystems: Various forest types; some serpentine woodland; narrow fringing reefs, some barrier reefs off northeast coast.
Special features:
Species of conservation interest
Plants
Insects
Graphium meeki (butterfly) Rare (RDB)
Graphium mendana (butterfly) Rare (RDB)
Other invertebrates
Reptiles-Amphibians
7 species of frogs, 1 possibly endemic
Birds
Microgoura meeki (Solomon Islands Ground Pigeon) extinct 1904 (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 3
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 2
Conservation Importance 17

Vealaviru (Robroy)

Vaghena

Raised coral island, extensive reef and lagoon complexes

Silapasope (Haycock)

New Georgia Group

Vella Lavella (Mbilua)

Area 677 sq. km Altitude m
Island type: volcanic with some raised coral
Natural threats: cyclones, earthquakes
Human impact: pop. 11,402 (1976); density 17 persons/km^2
Ecosystems: narrow fringing reefs, wide reefs and lagoons to northwest, barrier reefs to northeast.
Special features: 3 species of frogs

Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 3
Conservation Importance 14

Mbava

Fringing reef

Ranongga (Ghanongga)

Area ca. 200 sq. km Altitude m
Island type: volcanic with raised coral
Natural threats:
Human impact:
Ecosystems: narrow fringing reef
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
2 species of frogs
Birds
Zosterops splendida (Ranongga White-eye) endemic sp. (or ssp.)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 3
Conservation Importance 15

Simbo

Volcanic, active volcano, fringing reef

Ghizo

Area 35 sq. km Altitude m
Island type: volcanic
Natural threats: Cyclones, earthquakes
Human impact: (population of Roviana Lagoon area 10, 911 in 1976); most forest logged
Ecosystems: lowland Callophyllum kajewskii forest; mangroves; barrier reef off north coast, fringing reef (250 m wide) on south coast.
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1		1	
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Zosterops luteirostris luteirostris (Ghizo White-eye) endemic species (or subspecies), Endangered (RDB).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 15

Kolombangara (Nduke)
Area ca. 700 sq. km Altitude m
Island type: volcanic high island, single cone
Natural threats: cyclones, earthquakes
Human impact: all lower slopes logged except for one 500 m strip; soil compaction and erosion.
Ecosystems: formerly several types of rich lowland and montane rain forest; narrow fringing reef but corals killed by sedimentation.
Special features: forest well studied and of particular natural interest (before being logged).

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2		1	
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
4 species of frogs

Birds
Phylloscopus amoenus (Kolombangara Warbler) endemic
Zosterops murphyi (Kolombangara Mountain White-eye) endemic, montane forest, Rare
Mammals
Marine life
Protected area
Kolombangara Forest Reserve (Controlled Forest)
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 3
Economic pressure 0
Human threat 3
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 2
Human Impact 3
Conservation Importance 20

Vonavona (Parara)

Kohinggo (Arundel)

Raised coral and some volcanic, double barrier reef along north coast, fringing reefs.

Rendova

Narrow fringing reefs, some barrier reefs
2 species of frogs

Tetepare

Raised coral, fringing reef

New Georgia

Area 2,330 sq. km Altitude 1,010 m
Island type: old volcanic high island and raised barrier reefs; numerous offshore islands, lagoons 37-55 m deep, shallower to north.
Natural threats: cyclones, earthquakes
Human impact: extensive logging
Ecosystems: rain forest including Dillenia/Calophyllum/Campnosperma type; mangroves; fringing reefs, double barrier reefs outside Marovo Lagoon, variety of reef types and lagoon complexes (CRD).
Special features: best-defined double barrier reef in the world at Marovo Lagoon; flourishing reefs at Matiu Island.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
6 species of frogs
Birds
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 3
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0

Reliability of data 0
Human Impact 2
Conservation Importance 17

Vanguna

Area ca. 600 sq. km Altitude 1,000 m
Island type: volcanic, with several cones, barrier reefs and lagoons with many small islets, extensive Marovo Lagoon between New Georgia and Vanguna, mostly 25 m deep, maximum 80 m.
Natural threats: cyclones (1951, 1982), earthquakes (1939)
Human impact: (population of Marovo Lagoon area 5,561 in 1976); proposals for logging and mining projects.
Ecosystems: rain forest; mangroves; estuaries; barrier and submerged barrier reefs, fringing reefs, lagoons (CRD).
Special features: 3 species of frogs
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 16

Nggatokae

Volcanic, fringing reefs, southeast of Marovo Lagoon (CRD)
1 species of frog

Mbulo

Raised coral; narrow fringing reef; west coast with series of lagoons

Kavachi

Active submarine volcano 20 km southwest of Vanguna

Arnavon Islands

Arnavon (Maleivon), **Kerehikapa, Sikopo**
Area sq. km Altitude m
Island type:
Natural threats: cyclones, earthquakes
Human impact:
Ecosystems: beaches and coral reefs
Special features: 2 species of frogs; turtle nesting areas
Protected area
Arnavon Wildlife Sanctuary
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 15

Santa Isabel (Bughotu, Santa Ysabel)
Area 4,014 sq. km Altitude 1,219 m
Island type: volcanic with some raised coral
Natural threats: cyclones, earthquakes
Human impact: pop. 10,420 (1976); density 2.6 persons/km^2
Ecosystems: serpentine Casuarina woodland; mangroves; reef complex off northwest coast.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
9 species of frogs
Birds
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 3
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 2
Conservation Importance 16

Mbero
Nidero
Barora Ite
Malakobi
Popu
Ghaghe
Barora Fa
Volcanic
Omona
Papatura Fa
Papatura Ite
Sulei
Fera

San Jorge
Ramos

Russell Islands
Area 210 sq. km; barrier reef along north coast, no reefs to south
Human impact: pop. 3,070 (1976); density 14.6 persons/km^2
2 species of frogs

Mborokua
Volcanic cone; rain forest; narrow fringing reef
Mane
Leru
Marulaon

Pavuvu
Intermittent barrier reef off north coast
1 species of frog
Alokan
Taina
Hoi
Hae
Mbanika
Fringing reef dead except for corals in outermost moat
Ufaon
Faila
Loun
Telin
Moe
Lologhan
Laumuan

Florida Islands
Kombuana (Poumbuana)
Danisavo (Hanesavo)
Buena Vista (Vatilau)
Soghonara
Mangalonga
Mbokonimbeti (Sandfly)
Flourishing fringing reefs at Haroro and Tetel Island
Tulaghi (Tulagi)
Coral reefs
6 species of frogs
Nggela
Nggela Sule, Nggela Pile
Area 386 sq. km
Human impact: pop. 7,044 (1976); density 18 persons/km^2
3 species of frogs

Savo
Area 30 sq. km Altitude m
Island type: volcanic
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: pop. 1,569 (1976); density 52 persons/km^2
Ecosystems:
Special features: 1 species of frog

Guadalcanal
Area 5,336 sq. km Altitude 2,331 (2,446) m
Island type: old volcanic high island
Natural threats: cyclones, earthquakes (1961, 1978)
Human impact: pop. 46,619 (1976); density 6 persons/km^2 in rural areas; large-scale agricultural development; mining; fires; Honiara urban area (pop. 15,000).
Ecosystems: lowland rain forest including Pometia/Vitex/Calophyllum type in upland areas; fire-maintained grassland; some serpentine vegetation; barrier reefs up to 2 km wide; fringing reefs (many elevated and eroding), flourishing reef north of Parura, Marau Sound.
Special features: lake; introduced Bufo marinus (Cane Toad); 1961 earthquake raised reefs in Marau Sound 0.6 m; 1978 earthquake raised submerged reef south of Guadalcanal 10m.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.	36	3	8%	1	
Birds		2			3
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
6 species of frogs
12 species of geckos including:
Cyrtodactylus biordinis (Gekkonidae) endemic, fairly common
Lepidodactylus shebae (Gekkonidae) endemic, known from 1 specimen
17 species of skinks including:
Tribolonotus schmidti (Scincidae) endemic
Crocodylus porosus (Estuarine or Saltwater Crocodile), particularly in Laura Lagoon, Endangered
Birds
Cichlornis whitneyi (Thicket Warbler) montane rain forest, Guadalcanal and Espiritu Santo (Vanuatu), Rare
Collocalia orientalis (Guadalcanal Swiftlet) endemic, Rare
Meliphaga inexpectata (Guadalcanal Honeyeater) endemic, montane and hill forest, Rare.
Mammals
Marine life
Protected area
Queen Elizabeth National Park 6080 ha?
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 24

Nughu
Rua Sura
Nudha
Marapa
Korasahalu Reef

Dai

Malaita (Mala)

Area 4,243 (4,530) sq. km Altitude 1,432 m
Island type: volcanic high island, submerged east coast, west coast with raised barrier reef.
Natural threats: cyclones, earthquakes
Human impact: pop. 60,043 (1976); density 14 persons/km^2; subsistence agriculture, fishing

Ecosystems: lowland and montane rain forest types, coral reefs
Special features: introduced Bufo marinus (Cane Toad)

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.		1			
Birds		3			3
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
8 species of frogs
endemic fresh water turtle
Birds
Rhipidura malaitae (Malaita Rufous Fantail) endemic, montane rain forest, Rare.
Zosterops stressmanni (Malaita White-eye) endemic, lowland and hill forest, Rare.
Myzomela malaitae (Malaita Honeyeater) endemic, lowland and hill forest, Rare.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 3
Conservation Importance 21

Alite Reef
Mbathakana (Basakana)
Maanaoba (Ngwalulu)
Leli

Maramasike (Small Malaita)
Ulawa

Area 63 sq. km Altitude m
Island type:
Natural threats: cyclones, earthquakes
Human impact: pop. 1,857 (1976); density 30 persons/km^2
Ecosystems:
Special features:

San Cristobal (Makira)

Area 3,125 (3,500) sq. km Altitude 1,250 m

Island type: volcanic

Natural threats: cyclones, earthquakes

Human impact: pop. 13,034 (1976); density 4.2 persons/km^2; proposed major logging project (1983).

Ecosystems: forest, some serpentine vegetation; slightly elevated and eroding fringing reefs.

Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		8			8
Mammals					
Marine life					

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-Amphibians

2 species of frogs

Birds

Edithornis [Pareudiastes] silvestris (San Cristobal Mountain Rail)* endemic, central mountains and valleys of Naghasi Ridge, Indeterminate (RDB), known from only one specimen.

Gallicolumba salamonis (San Cristobal Ground Dove) endemic to San Cristobal group, rain forest, Rare.

Ptilinopus eugeniae (White-headed Fruit Dove) San Cristobal and Uki Ni Masa, lowland and hill rain forest, Rare

Vitia parens (Shade Warbler) endemic, montane forest, Rare

Zoothera margaretae (San Cristobal Ground Thrush) group? endemic, Rare

Monarcha vidua (San Cristobal Monarch) endemic, San Crisobal and Uki Ni Masa, Rare

Rhipidura tenebrosa (Dusky Fantail) endemic, hill/montane forest, Rare

Dicaeum tristrami (San Cristobal Flowerpecker) endemic, lowland forest, Rare

Meliarchus sclateri (San Cristobal Honeyeater) endemic, lowland/hill forest, Rare

Aplonis dichroa (San Cristobal Starling) endemic, forest edges, Rare

Mammals

Marine life

Ratings

Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 2
Conservation Importance 24

Pio
1 species of frog
Uki Ni Masi (Uki, Ugi)
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
2 species of frogs
Birds
Edithornis silvestris (San Cristobal Mountain Rail) endemic to San Cristobal, reportedly present on Uki Ni Masa
Gallicolumba salamonis (San Cristobal Ground Dove) group endemic
Ptilinopus eugeniae (White-headed Fruit Dove) San Cristobal and Uki Ni Masa, lowland and hill rain forest, Rare
Monarcha vidua (San Cristobal Monarch) endemic, San Cristobal and Uki Ni Masa, Rare
Mammals
Marine life
Three Sisters Islands (Olu Malau)
Malaupaina, Malaulalo, Ali'ite
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
1 species of frog
Crocodylus porosus (Estuarine or Saltwater Crocodile), main Solomon Islands population, Endangered
Birds
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 1
Conservation Importance 12
Santa Ana (Owa Rafa)
2 species of frogs
Santa Catalina (Owa Riki)

Bellona (Mu Ngiki)
Raised coral island (79 m), karstic surface and central depression; 20 fish species.

Rennell (Mu Nggava)

Area 675 sq. km Altitude 91.5 (110) m

Island type: raised coral island with coastal cliffs, central depression, lake and karstic surface.

Natural threats: cyclones

Human impact: pop. 1,200 (1969), (1,893 with Bellona in 1976); proposals for bauxite mining and logging over much of island; mining test plots planted in pine.

Ecosystems: lowland rain forest over 90% of island with Terminalia sepicana, Elaeocarpus and Endospermum and endemic bird fauna.

Special features: brackish Lake Tegano (largest in Pacific Islands) with

Endemism:

	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.	17	1	6%		1
Birds	43	15	12%		3
Mammals	10				
Marine life					

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-Amphibians

17 species including 4 sea snakes

Laticauda crockeri (sea snake in lake) endemic, Rare

Birds

43 (36) species, including 5 endemic species and 10 endemic subspecies:

Clytorhynchus hamlini (Rennell Shrikebill) endemic, Rare

Rhipidura rennelliana (Rennell Fantail) endemic, Rare

Zosterops rennelliana (Rennell Island White-eye) endemic

Woodfordia superciliosa (Woodford's White-eye) endemic, Rare

Aplonis insularis (Rennell Starling) endemic

Mammals

10 species of bats

Rattus exulans subspecies

Marine life

118 molluscs

79 fish

Ratings

Natural conservation status 1

Ecosystem richness 2

Species richness 3

Economic pressure 0

Human threat 1

Natural vulnerability 1

Practicality of conservation action 1

Reliability of data 2

Human Impact 1

Conservation Importance 26

Province V
VANUATU-SANTA CRUZ

[SOLOMON ISLANDS, continued]

Santa Cruz Islands
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Gallicolumbia sanctaecrucis (Santa Cruz Ground Dove) endemic to Santa Cruz Islands and Espiritu Santo
Mammals
Marine life

Nendo (Santa Cruz, Ndeni)
Area 647 sq. km Altitude 550 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 4,854 (1976); density 7.5 persons/km^2; logging; interior uninhabited
Ecosystems: dense lowland Agathis macrophylla forest except to west
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	ViRI
Plants					
Insects					
Other invert.					
Rept-Amph.		1			
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
Agathis macrophylla (kaori) endemic: Nendo, Vanikolo, Espiritu Santo
Insects
Other invertebrates
Reptiles-Amphibians
Emoia rufilabialis (Scincidae) endemic
Birds
Zosterops sanctaecrucis (Santa Cruz White-eye) group? endemic
Woodfordia lacertosa (Sanford's White-eye) group? endemic
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 2
Conservation Importance 15

Tomotu Neo (Trevanion)
Tomotu Noi (Lord Howe)

Tinakula (Volcano)
Area sq. km Altitude 670 m
Island type: volcano
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: uninhabited
Ecosystems: vegetated at base
Special features: active volcano
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Gallicolumba sanctaecrucis (Santa Cruz Ground Dove) endemic to Tinakula, Utupua and Espiritu Santo
Mammals
Marine life
Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 3
Practicality of conservation action 0
Reliability of data 1
Human Impact 0
Conservation Importance 15

Forrest Reef
Nupani
Atoll
Nukapu (Nipwa)

Reef Islands (Swallow Islands)
Makalom, Pileni (Nimibile), **Great Reef, Nifiloli, Fenualoa** (Ngasinue), **Matema** (Nodua), **Lomlom** (Ngalo), **Gnimbanga Temoa, Gnimbanga Nende**
Area 29 sq. km Altitude 60 m
Island type: fragments of raised coral atoll
Natural threats: cyclones, earthquakes
Human impact: pop. 4255 (1976); density 147 persons/km^2; mission station
Ecosystems:
Special features:
Duff Islands [volcanic]
Tuleki (Anula)
Elingi
Te Ako
Lakao
Ulaka

Taumako
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Emoia taumakoensis (Scincidae) endemic
Birds
Mammals
Marine life
Bass Islands
Lua, Kaa, Loreva

Utupua
Area 69 sq. km Altitude 380 m
Island type:
Natural threats: cyclones, earthquakes
Human impact: pop. 300 (1976); density 4.4 persons/km^2
Ecosystems: sunken fringing reef
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Gallicolumba sanctaecrucis (Santa Cruz Ground Dove) endemic to Utupua, Tinakula, and Espiritu Santo
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 1
Conservation Importance 15

Vanikolo (Vanikoro)
Area 174 sq. km Altitude m
Island type: recent volcano
Natural threats: cyclones, earthquakes
Human impact: pop. 267 (1976); density 1.5 persons/km^2
Ecosystems: lowland Agathis macrophylla forest
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Mayrornis schistaceus (Small Slaty Flycatcher) endemic
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 2
Conservation Importance 16

Te Anu

Tikopia
Area 4 sq. km Altitude 374 m
Island type: volcanic crater
Natural threats: cyclones, earthquakes
Human impact: pop. 1115 (1976); density 279 persons/km^2; decreasing
Ecosystems: forest; swamp; fringing reef
Special features: crater lake

Anuta
Area 3 sq. km Altitude 65 m
Island type:
Natural threats: cyclones, earthquakes
Human impact: pop. 154 (1976); density 51 persons/km^2; decreasing
Ecosystems: fringing reef
Special features:

Fatutaka (Fataka)
Area sq. km Altitude m
Island type: two steep hills and a rock
Natural threats: cyclones, earthquakes
Human impact: visited for seabirds
Ecosystems: barren
Special features: seabird rookery

VANUATU (independent republic since 1980)

Land area 11,880 (14,763) km^2 Sea area 680,000 km^2
Population 119,900 (1981) Density 10 persons/km^2 Growth rate (est.) 4.2%/yr

The islands of Vanuatu are mostly volcanic in origin, with some raised reef areas and a few low coral islands. There are active volcanoes, and an earthquake in 1965 lifted parts of some islands by up to 6 metres. There is a biogeographic discontinuity between the northern islands and the five southern islands below 18°S latitude.

Species of conservation interest

Plants

ca. 1,000 vascular plants, including 150 endemics

Insects

71 species of butterflies, with 5 only in Vanuatu, 26 shared with PNG and/or Solomon Islands; southern islands with distinctive fauna.

Other invertebrates

76 species of land snails, including 57 endemics, high generic endemicity.

6 Partulidae

3 freshwater molluscs

Reptiles-Amphibians

22 species, including 4 endemic lizards

Perochirus guentheri (Saw-tailed Gecko) group endemic, Efate and Anatom, known from 4 specimens.

Emoia speiseri (Speiser's Skink) group endemic, Ambrym, Anatom, Efate, Malakula.

Birds

53 species of land birds, 2 endemic genera and 4 other endemic species

Ptilinopus tannensis (Silver-shouldered Fruit Dove) group endemic

Ducula bakeri (Baker's Pigeon) group endemic

Halcyon farquhari (Chestnut-bellied Kingfisher) group endemic

Neolage banksiana (New Hebrides Flycatcher) monospecific genus, group endemic

Phylidonyris notabilis (White-bellied Honeyeater) group endemic

Zosterops flavifrons (Yellow-fronted White-eye) group endemic

Mammals

endemic bats

Dugong dugon (Dugong) Vulnerable (RDB)

Marine life

Torres Islands

Hiu

Area sq. km Altitude 366 (373) m
Island type: raised coral in three terraces
Natural threats: cyclones, earthquakes
Human impact: pop. 84 (1979)
Ecosystems: limestone forest; patches of reef
Special features:

Metoma
Area sq. km Altitude 126 m
Island type: raised coral
Natural threats: cyclones, earthquakes
Human impact: uninhabited
Ecosystems: dense forest; fringing reef
Special features:

Tegua
Area sq. km Altitude 254 (195) m
Island type: raised coral with central plateau
Natural threats: cyclones, earthquakes
Human impact: pop. 9 (1979); mission station
Ecosystems: forest; fringing reef
Special features:

Linua

Loh (Lo)
Area sq. km Altitude 155 (119) m
Island type: two areas of raised coral separated by mangroves
Natural threats: cyclones, earthquakes
Human impact: pop. 84 (1979); mission station
Ecosystems: dense forest; swamps and mangroves; fringing reef
Special features:

Toga
Area sq. km Altitude 240 (273) m
Island type: raised coral plateau with narrow coastal plain
Natural threats: cyclones, earthquakes
Human impact: pop. 140 (1979); water scarce
Ecosystems: dense forest; fringing reef
Special features:

Banks Islands

Vot Tande (Vat Ganai)
Area sq. km Altitude 64 (75) m
Island type: two rocks
Natural threats: cyclones, earthquakes
Human impact: uninhabited
Ecosystems: trees
Special features:

Ureparapara
Area 49.2 sq. km Altitude 764 (743) m
Island type: volcanic (breached crater)
Natural threats: cyclones, earthquakes
Human impact: pop. 239 (1979); mission station
Ecosystems: forest, narrow fringing reef
Special features: 26 bird species

Reef Islands (Rowa)
Area sq. km Altitude 6 m
Island type: slightly raised reef island and 15 islets on curved reef, central lagoon.
Natural threats: cyclones (1939, 1972), earthquakes
Human impact: village until 1939 when devastated by cyclone
Ecosystems: atoll scrub and Casuarina; pond with mangroves; lagoon with seagrasses; coral reefs (CRD).
Special features: possible reserve area; turtles feed in lagoon

Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 2
Human Impact 0
Conservation Importance 13

Mota Lava

Area sq. km Altitude 411 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 1,139 (with Ra, 1979); old plantation
Ecosystems: wide fringing reefs with islet to west
Special features:

Vanua Lava

Area 298 sq. km Altitude 946 m
Island type: volcanic
Natural threats: cyclones, earthquakes, volcanic activity
Human impact: pop. 1,007 (1979); mission station, large coconut plantation
Ecosystems: forest; fringing reef
Special features: fumaroles in centre of island
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Crocodylos porosus (Estuarine or Saltwater Crocodile), Endangered. main Vanuatu population.
Birds
34 bird species
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 3
Practicality of conservation action 0
Reliability of data 1
Human Impact 2
Conservation Importance 19

Mota

Area sq. km Altitude 411 m
Island type: volcanic peak (sugar loaf) with steep cliffs
Natural threats: cyclones, earthquakes
Human impact: pop. 398 (1979); mission station
Ecosystems: forest; fringing reef
Special features:

Gaua (Santa Maria)
Area 332 sq. km Altitude 797 m
Island type: volcanic
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: pop. 783 (1979), increasing rapidly, densely populated
Ecosystems: forests, lake; fringing reef
Special features: active volcano, large crater lake with hot springs; 36 bird species.

Merig
Area sq. km Altitude 125 (61) m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 44 (1979)
Ecosystems:
Special features:

Mere Lava
Area 8.9 sq. km Altitude 1030 (883) m
Island type: volcanic cone
Natural threats: cyclones, earthquakes
Human impact: pop. 970 (1979); mission station; cultivated terraces
Ecosystems:
Special features: 22 bird species

New Hebrides

Espiritu Santo (Santo)
Area 3,937 (3,885) sq. km Altitude 1,879 (1,811) m
Island type: volcanic chain to west, raised coral plateau to east
Natural threats: cyclones, earthquakes (1965, 1971)
Human impact: pop. 15,478 (1979); plantations in southeast; extensive clearing for pastures; Santo urban area
Ecosystems: dense rainforest including lowland Agathis macrophylla forest to west; Licuala fan palm forest; limestone forest; montane rain forest 1000-1500 m; cloud forest with Metrosideros above 1500 m; scrub; swamp forest, marshes, lake and other freshwater habitats; fringing reefs and lagoons, coral islands.
Special features: northwest coast reefs subject to rapid tectonic uplift (1965 and 1971 earthquakes).

Endemism:

	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds	50	1	2%		1
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians

Birds
50 species
Aplonis santovestris (Santo Mountain Starling) endemic, above 1160 m, Tabwemassana Massif and Mount Wataimasan, Rare and local (RDB).
Cichlornis whitneyi (Thicket Warbler), montane rain forest, Santo and Guadalcanal, Rare.
Mammals
Marine life
Protected area
President Coolidge and Million Dollar Point Reserve (CRD)
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 2
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 20

Tutuba

Area sq. km Altitude 73 m
Island type: raised coral
Natural threats:cyclones, earthquakes
Human impact: pop. 243 (1979)
Ecosystems: forest
Special features:

Aore

Area sq. km Altitude 122 m
Island type: raised coral
Natural threats: cyclones, earthquakes
Human impact: pop. 335 (1979)
Ecosystems: forest; fringing reef
Special features:

Malo

Area 176 sq. km Altitude 326 (341) m
Island type: central volcanic plateau surrounded by raised coral (120 m)
Natural threats: cyclones, earthquakes
Human impact: pop. 2,312 (1979)
Ecosystems: dense forest; fringing reef
Special features: 41 bird species

Aoba (Omba)

Area 272 (410) sq. km Altitude 1496 (1200) m
Island type: volcanic cone
Natural threats: cyclones, earthquakes
Human impact: pop. 7,772 (1979); subsistence agriculture and small-scale coconuts
Ecosystems: forest with tree ferns
Special features: crater lake with fumaroles; 40 bird species

Maewo (Aurora)

Area 263 (233) sq. km Altitude 791 (610) m
Island type: volcanic and raised coral, very wet
Natural threats: cyclones, earthquakes
Human impact: pop. 1,845 (1979)
Ecosystems: rain forest; fringing reefs
Special features: 34 bird species

Pentecost (Raga)

Area 324 (448) sq. km Altitude 946 (934) m
Island type: volcanic and raised coral, very wet
Natural threats: cyclones, earthquakes
Human impact: pop. 9,403 (1979); few plantations
Ecosystems: rainforest; some fringing reef
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.		1			
Birds	35				
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Emoia nigromarginata (Black-fringed Skink) endemic, collected only once
Birds
35 species
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 3
Conservation Importance 16

Malakula (Malekula)

Area 1,165 (2,034) sq. km Altitude 863 (891) m
Island type: volcanic and raised coral
Natural threats: cyclones; earthquakes (1965, 1971)
Human impact: pop. 15,296 (1979); few plantations
Ecosystems: dense rainforest with epiphytes; fringing reefs with small islands.
Special features: northwest coast raised up to 6 m in 1965 earthquake; 45 bird species.
Ratings
Natural conservation status 0
Ecosystem richness 2

Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 3
Conservation Importance 16

Ambrym

Area 414 (663) sq. km Altitude 1,270 (1,335) m
Island type: truncated volcanic cone
Natural threats: volcanic eruptions; cyclones; earthquakes
Human impact: pop. 6,260 (1979); coconut plantations
Ecosystems: forest
Special features: two active volcanoes; 38 bird species

Paama

Area 32.3 sq. km Altitude 544 (549) m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 2,242 (1979)
Ecosystems: dense forest
Special features: 28 bird species

Lopevi (Ulveah)

Area 29 sq. km Altitude 1413 (1450) m

Island type: volcanic cone
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: pop. 200 (1960s), now uninhabited
Ecosystems:
Special features: active volcano; 28 bird species

Epi

Area 260 (439) sq. km Altitude 833 (850) m
Island type: volcanic and raised coral, very wet
Natural threats: volcanic activity, cyclones, earthquakes
Human impact: pop. 2,636 (1979)
Ecosystems: dense forest; fringing reefs
Special features: two submarine volcanoes 5 km offshore; 39 bird species

Shepherd Islands

Tefala

(93 m)

Laika

(108 m)

Tongoa (Kuwae)

Area 38.7 sq. km Altitude 487 (563) m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 2,852 (1979), high population density, mission station
Ecosystems: forest, fringing reef
Special features: 33 bird species

Ewose (Awoh)

Area sq. km Altitude 319 (327) m
Island type:
Natural threats: cyclones, earthquakes
Human impact: inhabited
Ecosystems:
Special features:

Falea
(112 m)
Tongariki
Area sq. km Altitude 521 (513) m
Island type:
Natural threats: cyclones, earthquakes
Human impact: pop. 347 (1979), decreasing; mission station
Ecosystems: thick forest; fringing reef
Special features:
Buninga
Area sq. km Altitude 220 m
Island type:
Natural threats: cyclones, earthquakes
Human impact: pop. 145 (1979)
Ecosystems: thick forest
Special features:
Emae (Emai)
Area 33.1 sq. km Altitude 644 (661) m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 726 (1979); mission station
Ecosystems: thick forest; fringing reef and coral reef
Special features: 35 bird species
Cook Reef
Area 0 sq. km Altitude 0 m
Island type: triangular atoll reef without islets, lagoon 5-10 m deep with internal partitions, 1 pass.
Natural threats: cyclones, earthquakes
Human impact:
Ecosystems: atoll reefs and lagoon
Special features:
Makura (Makir)
Area sq. km Altitude 297 m
Island type: volcanic islet
Natural threats: cyclones, earthquakes
Human impact: pop. 258 (1979)
Ecosystems:
Special features:
Mataso (Matah)
Area sq. km Altitude 494 m
Island type:
Natural threats: cyclones, earthquakes
Human impact: pop. 114 (1979)
Ecosystems: forest; fringing reef
Special features:
Etarik (Monument Rock, Wot)

Efate (Vate)
including **Eretoka, Lelepa, Moso**
Area 777 (877) sq. km Altitude 647 (702) m
Island type: volcanic and raised coral
Natural threats: cyclones, earthquakes
Human impact: pop. 18,329 (1979), increasing over 5%/year; capital of Port Vila; plantations and pastures; past mining
Ecosystems: forest; grassland; coral reefs and lagoons, nearly closed Erakor internal lagoon.

Special features: lake, marshes, hot spring with algae; introduced Achatina fulica (Giant African Snail) and Euglandina rosea (carniverous snail, 1975).
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Brachylophus fasciatus (Banded Iguana) introduced in 1970s, Vulnerable
Perochirus guentheri (Saw-tailed Gecko) endemic to Efate and Anatom, known from only 4 specimens.
Birds
43 bird species
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 17

Nguna

Area 27.4 sq. km Altitude 614 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 972 (1979)
Ecosystems:
Special features: 34 bird species

Pele

(202 m), pop. 208 (1979)

Emao

Area 8.3 sq. km Altitude 437 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 844 (1979)
Ecosystems:
Special features: 31 bird species

Erromango (Eromanga)

Area 855 (898) sq. km Altitude 886 (914) m
Island type: volcanic with raised coral terraces to 250 m.
Natural threats: cyclones, earthquakes; volcanic eruptions from submarine volcano.
Human impact: pop. 936 (1979): logging of kaori
Ecosystems: rain forest with Agathis obtusa, Calophyllum, Hernandia in SE; cloud forest above 500 m; Acacia spirorbis woodland and dry grasslands in W; marshes; fringing reef of variable width.
Special features: remaining unlogged stand of endemic Agathis; nearby active submarine volcano.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.		1			
Birds	40				
Mammals					
Marine life					

Species of conservation interest
Plants
Agathis obtusa (Kaori) endemic to Erromango and Anatom
Insects
Other invertebrates
Reptiles-Amphibians
Perochirus guentheri (Saw-tailed gecko) endemic
Birds
40 species
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 2
Conservation Importance 17

Aniwa

Area sq. km Altitude 120-150 m
Island type: raised coral
Natural threats: cyclones, earthquakes
Human impact: pop. 331 (1979); mission station
Ecosystems: forest; fringing reef
Special features:

Tanna

Area 390 (550) sq. km Altitude 1,084 (970) m
Island type: volcano with raised coral fringe
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: pop. 15,593 (1979)
Ecosystems: rain forest in SE; cloud forest above 500 m; marsh; dry grasslands in W; fringing reef poorly developed.
Special features: active volcano with crater lake; some coastal areas raised 20 m in last 200 years; shearwaters nest in interior; 34 bird species.
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 3
Practicality of conservation action 0
Reliability of data 1

Human Impact 4
Conservation Importance 19

Futuna (Erronan)

Area 11 sq. km Altitude 543 (589) m
Island type: volcanic cone
Natural threats: cyclones, earthquakes
Human impact: pop. 354 (1979)
Ecosystems:
Special features: 20 bird species

Anatom (Aneityum)

Area 154 (104) sq. km Altitude 852 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 516 (1979)
Ecosystems: rain forest with Agathis obtusa, Calophyllum, Hernandia; cloud forest above 500 m; marsh; fringing reefs including Intao reef 2.7 km wide with islet.
Special features: best fringing reefs in Vanuatu; shearwaters nest in interior

Endemism:

	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.		1			
Birds	32				
Mammals					
Marine life					

Species of conservation interest
Plants
Agathis obtusa (Kaori) endemic to Erromango and Anatom
Insects
Other invertebrates
Reptiles-Amphibians
Perochirus guentheri (Saw-tailed Gecko) endemic to Efate and Anatom, known from only 4 specimens.
Emoia aneityumensis (Anatom Skink) endemic
Birds
32 species
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 0
Human Impact 1
Conservation Importance 17

Province IV
NEW CALEDONIA

NEW CALEDONIA AND DEPENDENCIES (Overseas Territory of France)

Land area 19,103 km^2 Sea area 1,740,000 km^2
Population 145,000 (1983) Density 8 persons/km^2 Growth rate (est.) 1.2%/yr

The islands of New Caledonia rest on a fragment of continental plate whose long isolation has resulted in the preservation of many relic forms, particularly plants. The group is thus biogeographically very distinct from the other islands of Oceania. The extensive barrier reef encircling the main islands has created a variety of rich marine habitats that have been little explored scientifically.

The Loyalty Islands and other dependencies are volcanic or coral-capped volcanic islands more typical of Oceania.

Species of conservation interest

Plants

ca. 3250 vascular plant species, including ca. 300 fern species, 2474 endemic species
44 species of conifers, all endemic
70-80 species of Cunoniaceae, all endemic
43 species of Proteaceae, all endemic
31 species of palms, all endemic
5 endemic families: Amborellaceae (1 sp.), Oncothecaceae (2 spp.), Paracryphiaceae (1-2 spp.), Phellineaceae (10 spp.), Strasburgeriaceae (1 sp.).
a large number of primitive relict species

Insects

little studied but high endemism can be expected

Other invertebrates

estimated 200-400 land snails of which 153 described, entirely endemic, often with localized distributions, including:
11 fresh-water species
23 land prosobranchs
20 bulimulids
49 endodontids
24 paryphantids
19 miscellaneous endemic pulmonates
there are 18 introduced land snails, including Achatina fulica and Euglandina rosa

Reptiles-amphibians

13 species of geckos including:
Bavayia cyclura (Gekkonidae) group endemic genus
Bavayia sauvagii (Gekkonidae) group endemic genus
Eurydactylodes symmetricus (Gekkonidae) endemic genus
Eurydactylodes vieillardi (Gekkonidae) endemic genus
7 species of skinks including:
Anotis gracilis (Scincidae) group endemic genus
Anotis mariae (Scincidae) group endemic genus
Anotis slevini (Scincidae) group endemic genus
Eugongylus garnieri (Scincidae) group endemic, known by 3 specimens

Birds
1 endemic family, 4 endemic genera
Drepanoptila holosericea (Cloven-feathered Dove, Pigeon Vert) monospecific genus, group endemic, New Caledonia and Isle of Pines, Vulnerable (RDB)
Eunymphicus cornutus (Horned Parakeet) group endemic monospecific genus, subspecies on New Caledonia and Ouvea.
Eopsaltria flaviventris (Yellow-bellied Robin) group endemic, New Caledonia and Isle of Pines
Pachcephala caledonica (New Caledonian Whistler) group endemic, New Caledonia and Isle of Pines
Erythrura psittacea (Red-throated Parrot-Finch) group endemic, New Caledonia and Isle of Pines
Zosterops xanthocroa (New Caledonia White-eye) group endemic, New Caledonia, Mare? and Isle of Pines
Mammals
Dugong dugon (Dugong) Vulnerable (RDB)
Marine life
252 species of marine algae, including at least 8 endemics

Chesterfield Isles
Bampton Reefs, Avon, Long, Loop
Area sq. km Altitude m
Island type: extensive coral reefs with some low coral islets
Natural threats: cyclones
Human impact:
Ecosystems: coral reefs and lagoons
Special features: important seabird rookery, probably largest populations in the Coral Sea.
Species of conservation interest
Plants
20 species of vascular plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Cymbiolacea thatcheri (volute mollusc) endemic
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 1
Human Impact 0
Conservation Importance 8
Bellona Reefs
Fairway Reef

New Caledonia (Grand Terre)

Area 16,890 sq. km Altitude 1628 m

Island type: continental, with small areas of raised coral along the south-east coast.

Natural threats: cyclones; frequent fires in drier areas

Human impact: extensive deforestation, pasture and agricultural development, only 10% of forest undisturbed and still diminishing; widespread surface mining and mineral exploration at higher elevations along ridges with pollution of watersheds; urban development around Noumea.

Ecosystems: coastal forest (remnants); lowland rain forest with relict species, largely disturbed; submontane rain forest at 400-1,000m; dry coniferous forest with Araucaria and other gymnosperms; cloud forest; riverine and swamp forests; many types of ultrabasic/serpentine vegetation almost entirely endemic; fire-maintained grasslands and savannas with Melaleuca; many fresh-water habitats; extensive mangroves (200 sq. km); rich and diverse coral reefs and lagoons with extensive barrier reefs.

Special features: botanically unique, many endemic species of great scientific interest, small population sizes and localized distributions. Fauna numerically small but of great interest, including cagou selected by IUCN as world's most important priority for bird conservation. Islets in south of lagoon with seabird rookeries; petrel and shearwater colonies breeding at high altitude. Introduced deer, Achatina fulica (Giant African Snail), Euglandina rosea (carniverous snail) 1974.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	3250	2474	76%	15	153
Insects	120	61	50%		
Other invert.					
Rept-Amph.	29	23	79%		
Birds	68	20	29%	1(2)	3
Mammals					
Marine life	252	8	3%		

Species of conservation interest

Plants

partial list of threatened taxa includes:

Blechnum obtusatum francii (Blechnaceae) endemic variety, Indeterminate

Doodia gracilis (Blechnaceae) endemic, Rare

Cyathea cicatricosa (Cyatheaceae) endemic, Rare

Cyathea stelligera (Cyatheaceae) endemic, Indeterminate

44 endemic species of gymnosperm, including:

Agathis montana (Araucariaceae) endemic, Rare

Araucaria luxurians (Araucariaceae) endemic, Rare

Araucaria nemorosa (Araucariaceae) endemic, Vulnerable

Araucaria schmidii (Araucariaceae) endemic, Vulnerable

Callitris sulcata (Cupressaceae) endemic, Vulnerable

Libocedrus chevalieri (Cupressaceae) endemic, Vulnerable

Libocedrus yateensis (Cupressaceae) endemic, Vulnerable

Neocallitropsis pancheri (Cupressaceae) endemic, Vulnerable

Dacrydium guillauminii (Podocarpaceae) endemic, Endangered

Dacrydium lycopodioides (Podocarpaceae) endemic, Rare

Decussocarpus minor (Podocarpaceae) endemic, Rare

Podocarpus decumbens (Podocarpaceae) endemic, Vulnerable

Podocarpus longefoliolatus (Podocarpaceae) endemic, Rare

Podocarpus lucienii (Podocarpaceae) endemic, Rare

Podocarpus polyspermus (Podocarpaceae) endemic, Rare
Agathis lanceolata (Araucariaceae) endemic, exploited nearly to extinction in south
Parasitaxus ustus parasitic gymnosperm known from 15 sites
some threatened angiosperms include:
Graptophyllum balansae (Acanthaceae) endemic, Rare
Graptophyllum ophiolithicum (Acanthaceae) endemic, Rare
Hemigraphis neocaledonica (Acanthaceae) endemic, Rare
Semecarpus riparius (Anacardiaceae) endemic, Indeterminate
Unona tiebaghiensis (Annonaceae) endemic, Rare
Alyxia integricarpa (Apocynaceae) endemic, Rare
Alyxia spathulata (Apocynaceae) endemic, Rare
Alyxia vieillardii (Apocynaceae) endemic, Rare
Cerberiopsis neriifolia (Apocynaceae) endemic, Rare
Melodinus insulae-pinorum (Apocynaceae) endemic, Indeterminate
Neisosperma seventii (Apocynaceae) endemic, Vulnerable
Neisosperma thiollierei (Apocynaceae) endemic, Vulnerable
Rauvolfia spathulata (Apocynaceae) endemic, Rare
Pseudopanax scopoliae (Araliaceae) endemic, Rare
Marsdenia balansae (Asclepiadaceae) endemic, Rare
Balanops balansae (Balanopaceae) endemic, Rare
Canarium whitei (Burseraceae) endemic, Rare
Oceanopapaver neo-caledonicum (Capparaceae) endemic, Rare
Terminalia gatopensis (Combretaceae) endemic, Rare
Turbina inopinata (Convolvulaceae) endemic, Indeterminate
Weinmannia ouaiemensis (Cunoniaceae) endemic, Rare
Chorizandra gigantea (Cyperaceae) endemic, Endangered
Elaeocarpus biflorus (Elaeocarpaceae) endemic, Rare
Elaeocarpus castanaefolius (Elaeocarpaceae) endemic, Rare
Elaeocarpus colnettianus (Elaeocarpaceae) endemic, Rare
Elaeocarpus kaalensis (Elaeocarpaceae) endemic, Rare
Elaeocarpus moratii (Elaeocarpaceae) endemic, Rare
Sloanea koghiensis (Elaeocarpaceae) endemic, Rare
Sloanea lepida (Elaeocarpaceae) endemic, Rare
Sloanea suaveolens (Elaeocarpaceae) endemic, Rare
Dracophyllum alticola (Epacridaceae) endemic, Rare
Dracophyllum cosmelioides (Epacridaceae) endemic, Rare
Dracophyllum ouaiemense (Epacridaceae) endemic, Rare
Styphelia enervia (Epacridaceae) endemic, Rare
Agapetes neo-caledonica (Ericaceae) endemic, Indeterminate
Eriocaulon longipedunculatum (Eriocaulaceae) endemic, Vulnerable
Baloghia anisomera (Euphorbiaceae) endemic, Rare
Bocquillonia arborea (Euphorbiaceae) endemic, Rare
Cocconerion balansae (Euphorbiaceae) endemic, Rare
Nothofagus baumanniae (Fagaceae) endemic, Rare
Nothofagus discoidea (Fagaceae) endemic, Vulnerable
Casearia kaalaensis (Flacourtiaceae) endemic, Rare
Xylosoma gigantifolium (Flacourtiaceae) endemic, Rare
Xylosoma peltatum (Flacourtiaceae) endemic, Vulnerable
Cyrtandra mareensis (Gesneriaceae) endemic, Rare
Scaevola coccinea (Goodeniaceae) endemic, Endangered
Adenodaphne spathulata (Lauraceae) endemic, Rare
Cryptocarya bitriplinerva (Lauraceae) endemic, Endangered
Cryptocarya longifolia (Lauraceae) endemic, Rare
Endiandra lecardii (Lauraceae) endemic, Rare
Litsea imbricata (Lauraceae) endemic, Rare

Litsea longepedunculata (Lauraceae) endemic, Indeterminate
Litsea miana (Lauraceae) endemic, Rare
Serianthes germainii (Leguminosae) endemic, Endangered
Utricularia canacorum (Lentibulariaceae) endemic, Vulnerable
Ficus cataractarum (Moraceae) endemic, Rare
Streblus sclerophyllus (Moraceae) endemic, Rare
Rapanea grandifolia (Myrsinaceae) endemic, Rare
Tapeinosperma amplexicaule (Myrsinaceae) endemic, Rare
Tapeinosperma aragoense (Myrsinaceae) endemic, Rare
Cloezia deplanchei (Myrtaceae) endemic, Rare
Jambosa aff. longifolia (Myrtaceae) endemic, Vulnerable
Metrosideros dolichandra (Myrtaceae) endemic, Rare
Metrosideros humboldtiana (Myrtaceae) endemic, Rare
Tristaniopsis polyandra (Myrtaceae) endemic, Rare
Tristaniopsis vieillardii (Myrtaceae) endemic, Rare
Xanthostemon francii (Myrtaceae) endemic, Indeterminate
Xanthostemon glaucum (Myrtaceae) endemic, Indeterminate
Xanthostemon grisei (Myrtaceae) endemic, Rare
Xanthostemon gugerlii (Myrtaceae) endemic, Rare
Xanthostemon longipes (Myrtaceae) endemic, Vulnerable
Xanthostemon sebertii (Myrtaceae) endemic, Indeterminate
Xanthostemon sulfureum (Myrtaceae) endemic, Rare
Xanthostemon vieillardii (Myrtaceae) endemic, Rare
Dendrobium munificum (Orchidaceae) endemic, Indeterminate
Megastylis latissima (Orchidaceae) endemic, Rare
31 endemic species of palms:
Actinokentia divaricata (Palmae) endemic, Rare
Actinokentia huerlimannii (Palmae) endemic, Indeterminate
Alloschmidia glabrata (Palmae) endemic, Rare
Basselinia gracilis (Palmae) endemic, Rare
Basselinia pancheri (Palmae) endemic, Rare
Basselinia sp. (= Cyphokentia humboldtiana) (Palmae) endemic, Rare
Basselinia sp. nov. 1 [Mt. Ignambi] (Palmae) endemic, Indeterminate
Basselinia sp. nov. 2 [Mt. Boulinda] (Palmae) endemic, Rare
Basselinia sp. nov. 3 [Mt. des Sources, Nekando] (Palmae) endemic, Rare
Basselinia sp. nov. 4 [Mt. Nakada] (Palmae) endemic, Indeterminate
Basselinia surculosa (Palmae) endemic, Rare
Basselinia tomentosa (Palmae) endemic, Rare
Basselinia velutina (Palmae) endemic, Rare
Brogniartikentia lanuginosa (Palmae) endemic, Rare
Brogniartikentia vaginata (Palmae) endemic, Rare
Burretiokentia hapala (Palmae) endemic, Vulnerable (RDB)
Burretiokentia vieillardii (Palmae) endemic, Rare
Campecarpus fulcitus (Palmae) endemic, Rare
Chambeyronia lepidota (Palmae) endemic, Rare
Chambeyronia macrocarpa (Palmae) endemic, Rare
Clinosperma bractealis (Palmae) endemic, Rare
Cyphokentia macrostachys (Palmae) endemic, Rare
Cyphophoenix elegans (Palmae) endemic, Rare
Cyphophoenix nucele (Palmae) endemic, Rare (RDB)
Cyphosperma balansae (Palmae) endemic, Rare
Kentiopsis oliviformia (Palmae) endemic, Endangered
Lavoixia macrocarpa (Palmae) endemic, Endangered
Mackeea magnifica (Palmae) endemic, Rare
Moratia cerifera (Palmae) endemic, Rare

Pritchardiopsis jeanneneyi (Palmae) endemic, presumed Extinct until 1 individual found in 1983, Endangered
Veillonia alba (Palmae) endemic, Rare
Pandanus clandestinus (Pandanaceae) endemic, Rare
Pandanus lacuum (Pandanaceae) endemic, Vulnerable
Beauprea congesta (Proteaceae) endemic, Rare
Beauprea crassifolia (Proteaceae) endemic, Rare
Kermadecia pronyensis (Proteaceae) endemic, Indeterminate
Macadamia vieillardii (Proteaceae) endemic, Rare
Stenocarpus dumbeensis (Proteaceae) endemic, Indeterminate
Stenocarpus villosus (Proteaceae) endemic, Indeterminate
Alphitonia erubescens (Rhamnaceae) endemic, Rare
Bikkia kaalaensis (Rubiaceae) endemic, Vulnerable
Bikkia lenormandii (Rubiaceae) endemic, Vulnerable
Bikkia pachyphylla (Rubiaceae) endemic, Endangered
Captaincookia margaretae (Rubiaceae) endemic, Endangered, restricted to one small site
Cyclophyllum tenuipes (Rubiaceae) endemic, Vulnerable
Neofranciella pterocarpon (Rubiaceae) endemic, Vulnerable
Citrus neo-caledonica (Rutaceae) endemic, Vulnerable
Citrus oxanthera (Rutaceae) endemic, Endangered
Euodia wagapensis (Rutaceae) endemic, Rare
Geijera salicifolia (Rutaceae) endemic, Rare
Oxanthera undulata (Rutaceae) endemic, Indeterminate
Sarcomelicope sarcococca (Rutaceae) endemic, Endangered
Zieria chevalieri (Rutaceae) endemic, Endangered
Exocarpos baumannii (Santalaceae) endemic, Rare
Exocarpos spathulatus (Santalaceae) endemic, Rare
Cossinia trifoliolata (Sapindaceae) endemic, Endangered
Podonephelium parvifolium (Sapindaceae) endemic, Rare
Storthocalyx sordidus (Sapindaceae) endemic, Rare
Iteiluma leptostylidifolium (Sapotaceae) endemic, Rare
Iteiluma rheophytopsis (Sapotaceae) endemic, Rare
Planchonella contermina (Sapotaceae) endemic, Rare
Planchonella kaalaensis (Sapotaceae) endemic, Rare
Planchonella koumaciensis (Sapotaceae) endemic, Rare
Planchonella pronyensis (Sapotaceae) endemic, Rare
Planchonella vieillardii (Sapotaceae) endemic, Rare
Solanum hugonis (Solanaceae) endemic, Vulnerable
Solanum insulae-pinorum (Solanaceae) endemic, Vulnerable
Solanum pseuderanthemoides (Solanaceae) endemic, Indeterminate
Solanum vaccinioides (Solanaceae) endemic, Rare
Sphenostemon oppositifolium (Sphenostemonaceae) endemic, Indeterminate
Deltaria brachyblastophora (Thymelaeaceae) endemic, Endangered
Gmelina lignum-vitreum (Verbenaceae) endemic, Indeterminate
Oxera crassifolia (Verbenaceae) endemic, Rare

Insects

Micropterygidae (primitive moths)
Agathiphagidae (moths, seed miners on Agathis)
64 species of butterflies (including Loyalty Islands), 11 endemic
Euploea helcita endemic to New Caledonia and Loyalty Islands
Delias ellipsis (Pieridae) endemic, forest
Papilio montrouzieri (Papilionidae) endemic, forest
Polyura clitarchus (Charaxinae) endemic, forest
Polyura gamma (Charaxinae) endemic, forest, localized

Graphium gelon (Papilionidae) endemic, forest
Nacaduba deplorans (Lycaenidae) endemic, lateritic soils, infrequent
Psychonotis purpurea (Lycaenidae) endemic, rare
Elodina signata (Pieridae) endemic, forest and dry woodland
Paratisiphone lyrnessa (Satyrinae) endemic, southern vegetation
Austroypthima petersi (Satyrinae) endemic, southern vegetation
55 species of Odonata (dragonflies and damselflies), mostly endemic, in mountains

Other invertebrates

Reptiles-Amphibians

29 species of lizards, including 4 endemic genera, 23 endemic species:
13 geckos including:
Eurydactylodes symmetricus (Gekkonidae) endemic genus
Eurydactylodes vieillardi (Gekkonidae) endemic genus
Rhacodactylus auriculatus (Gekkonidae) endemic genus
Rhacodactylus chahoua (Gekkonidae) endemic genus
Rhacodactylus ciliatus (Gekkonidae) endemic genus
Rhacodactylus leachianus (Gekkonidae) endemic genus
Rhacodactylus sarasinorum (Gekkonidae) endemic genus
Rhacodactylus trachyrhynchus (Gekkonidae) endemic genus
15 skinks including:
Eugongylus bocourti (Scincidae) endemic, known by type only
Eugongylus haraldmeieri (Scincidae) endemic
Leiolopisma austrocaledonicum (Scincidae) endemic?
Leiolopisma atropunctatum (Scincidae) ?
Leiolopisma greeri (Scincidae) endemic
Leiolopisma nigrofasciolatum (Scincidae) endemic
Leiolopisma novaecaledoniae (Scincidae) endemic
Leiolopisma steindachneri (Scincidae) endemic
Leiolopisma tricolor (Scincidae) endemic
Leiolopisma variabile (Scincidae) endemic
no snakes

Birds

Rhynochetos jubatus (Kagu) monotypic endemic family, undisturbed forest in wetter areas, Endangered (RDB), 500-1000 (1984)
Drepanoptila holosericea (Cloven-feathered Dove, Pigeon Vert) monospecific genus, group endemic (also on Isle of Pines), forested hills, Vulnerable (RDB), common in north, reduced to small populations in south.
Ducula goliath (Notou, Giant Imperial Pigeon) endemic, montane forest (formerly also on Isle of Pines), Vulnerable (RDB)
Accipiter haplochrous (New Caledonian Sparrowhawk) endemic, common
Tricholimnas lafresnayanus (New Caledonian Wood Rail) endemic, probably extinct (not sighted for 100 years)
Charmosyna diadema (New Caledonian Lorikeet) endemic, probably extinct
Eunymphicus cornutus cornutus (New Caledonian Horned Parakeet) endemic subspecies, uncommon but widespread
Aegotheles savesi (New Caledonian Owlet-nightjar) endemic *
Megalurulus mariei (New Caledonian Grass Warbler) endemic genus, in scrub
Eopsaltria flaviventris (Yellow-bellied Robin) group endemic, forests
Pachycephala caledonica (New Caledonian Whistler) group endemic, forests
Gymnomyza aubryana (Red-faced or Crow Honeyeater, Meliphage Noir) endemic, little known and local, small population

Phylidonyris [Guadalcanaria] undulata (Barred Honeyeater) endemic, uncommon
Philemon diemenensis (Oiseau-Moine) endemic
Erythrura psittacea (Red-throated Parrot-Finch) group endemic
Coracina analis (New Caledonian Cuckoo-shrike or Greybird) endemic, Rare
Zosterops xanthocroa (New Caledonia White-eye) group endemic
Corvus moneduloides (New Caledonian Crow) endemic
Aplonis striatus striatus endemic subspecies

Mammals

Marine life
2 endemic volute molluscs
5 endemic cones

Protected areas

Rivière Bleue Territorial Park (II)	9,045 ha
Thy Territorial Park (II)	1,133 ha
Montagne des Sources Strict Nature Reserve (I)	5,870 ha
Yves Merlet Marine Reserve (I) (CRD)	(16,700 ha)
Aoupiné Fauna Reserve (IV)	5,400 ha
Haute Yaté Fauna Reserve (IV)	6,855 ha
Lepredour Islet Fauna Reserve (IV)	760 ha
Mont Humboldt Botanical Reserve (IV)	3,200 ha
Mont Mou Botanical Reserve (IV)	675 ha
Mont Panié Botanical Reserve (IV)	5,080 ha
Pam Island Faunal Reserve (IV)	460 ha
Southern Botanical Reserve (IV)	4,466 ha
Maître and Amédée Islets Reserve (V) (CRD)	774 ha
Marine Fauna Rotating Reserve (VIII) (CRD)	(30,000 ha)
Tangadiou Reafforestation Area	1016 ha
Col d'Amieu Table Unio Forest Reserve	12,000 ha
Tiponite Forest Reserve	1085 ha
Mont Mou Forest Reserve	4363 ha

Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 3
Human threat 1
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 2
Human Impact 5
Conservation Importance 80

D'Entrecasteaux Reefs

Huon, Fabre, Le Leizour, Surprise

Area sq. km Altitude 4 m

Island type: atoll-like reef complexes with low coral islands, northern extension of the New Caledonia barrier reef.

Natural threats: cyclones common

Human impact: former phosphate mining; turtle hunting

Ecosystems: coral reefs

Special features: seabird rookery; turtle nesting areas, including perhaps the largest in the Pacific on Huon.

Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 1
Human Impact 0
Conservation Importance 8

Belep Islands
Art, Pott
Area 67 sq. km Altitude 283 and 157 m
Island type: continental
Natural threats: cyclones
Human impact: pop. 692 (1974)
Ecosystems: serpentine scrub, coral reefs
Special features: turtle nesting

Yandé
(301 m) one village
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Turdus poliocephalus xanthopus endemic subspecies, last remaining population, probably extinct on New Caledonia
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 0
Human Impact 2
Conservation Importance 14

Baaba
(106 m)

Balabio
(277 m)

Ouen
(332 m)

Isle of Pines (Kounié)
Area 152 (134) sq. km Altitude 262 m
Island type: continental centre surrounded by raised coral
Natural threats: cyclones
Human impact: pop. 1,159 (1974); former penal colony; subsistence agriculture
Ecosystems: lowland limestone rain forest; serpentine scrub; coral reefs
Special features: coastal stands of Araucaria; particular scenic beauty

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Drepanoptila holosericea (Cloven-feathered Dove, Pigeon Vert) monospecific genus, group endemic (also on New Caledonia), Vulnerable (RDB) common locally.
Eopsaltria flaviventris (Yellow-bellied Robin) group endemic, New Caledonia and Isle of Pines
Pachcephala caledonica (New Caledonian Whistler) group endemic, New Caledonia and Isle of Pines
Erythrura psittacea (Red-throated Parrot-Finch) group endemic, New Caledonia and Isle of Pines
Zosterops xanthocroa (New Caledonia White-eye) group endemic, New Caledonia, and Isle of Pines
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 3
Conservation Importance 19

Koutoumo

Area sq. km Altitude m
Island type: low coral island
Natural threats: cyclones
Human impact:
Ecosystems: Araucaria forest; coral reefs
Special features:

Petrie Reef
Astrolabe Reefs
Gazelle Reef

Loyalty Islands
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Aplonis striatus ssp., group endemic subspecies
Mammals
Marine life

Beautemps-Beaupré

Atoll, 3 snakes

Ouvea

Area 132 sq. km Altitude 46 m
Island type: tilted atoll with some raised coral
Natural threats: cyclones, drought
Human impact: pop. 2,374 (1974); subsistence agriculture and fishing; bush fires.
Ecosystems: lowland limestone rain forest; mangroves, coral reefs and lagoons.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians
Birds
Eunymphicus cornutus uveaensis (Ouvea Horned Parakeet) endemic subspecies, Endangered (RDB) less than 200 (1974).
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 2
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 2
Human Impact 5
Conservation Importance 16

Lifou

Area 1196 sq. km Altitude 104 m
Island type: raised coral
Natural threats: cyclones
Human impact: pop. 7,215 (1974); subsistence agriculture; proposed wood-fired generating plant.
Ecosystems: lowland limestone forest; Araucaria coastal forest; fringing reefs
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds	40	2	5%		
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-Amphibians

Birds
40 species, including:
Zosterops inornata (Large Lifou White-eye) endemic
Zosterops minuta (Small Lifou White-eye) endemic
1 extinct subspecies Turdus poliocephalus pritzbueri
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 15

Vauvilliers

Tiga

Area sq. km Altitude 75 m
Island type: raised coral
Natural threats: cyclones
Human impact: inhabited
Ecosystems: limestone forest
Special features:

Uoa (Oua)

Léliogat

Dudune (Ndoundure)

Maré

Area 642 sq. km Altitude 138 m
Island type: raised coral with two small volcanic buttes in middle
Natural threats: cyclones
Human impact: pop. 3,789 (1974); subsistence agriculture
Ecosystems: lowland limestone forest; savanna; Araucaria coastal forest; fringing reef
Special features: 1 extinct bird subspecies Turdus poliocephalus mareensis
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 16

Walpole

Area 1.2 sq. km Altitude 100 m
Island type: raised coral
Natural threats: cyclones
Human impact: phosphate mined 1920-1940; feral animals
Ecosystems: scrub; fringing reef
Special features: 45 plant species; seabird rookery
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 10

Matthew

Area 0.12 sq. km Altitude 140 m
Island type: volcanic
Natural threats: volcanic eruptions, cyclones
Human impact: uninhabited
Ecosystems:
Special features: active volcano; 10 plant species; seabird rookery
Ratings
Natural conservation status 4
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 12

Hunter

Area 0.4 sq. km Altitude 300 m
Island type: volcanic
Natural threats: volcanic eruptions, cyclones
Human impact: uninhabited
Ecosystems: grass and some trees
Special features: intermittent active volcano; seabird rookery
Ratings
Natural conservation status 4
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 14

Province VI
NORFOLK-LORD HOWE-KERMADEC

Norfolk Island, nearby Philip Island, and the Coral Sea Island Territory are Australian External Territories, while Lord Howe Island is part of the Australian state of New South Wales. The Kermadec Islands come under New Zealand.

These islands and reefs on the fringes of Oceania share some characteristics both with their more tropical neighbors and with the countries to which they are politically attached.

TERRITORIES OF AUSTRALIA

Norfolk Island

Area 36 (34.5) sq. km Altitude 319 m

Island type: raised undulating platform of weathered volcanic material and small amount of limestone surrounded by cliffs.

Natural threats: cyclones possible

Human impact: pop. 1,849 (1981); most original forest cleared for settlement, much of the remainder cut over or disturbed; introduced species.

Ecosystems: subtropical rain forest with mixed hardwoods, palm/hardwood forest above 200 m, palm/tree fern forest along gulleys, and scattered patches of Araucaria heterophylla; scrub and grassland; small offshore coral patches.

Special features: seabird rookery

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	174	48	28%	11(5)	35
Insects					
Other invert.					
Rept-Amph.	0				
Birds	21	5	24%	4(5)	
Mammals	2	2	100		
Marine life					

Species of conservation interest

Plants

10 endemic ferns:

Lastreopsis calantha (Aspidiaceae) endemic, Vulnerable
Asplenium dimorphum (Aspleniaceae) endemic, Vulnerable
Asplenium stipitatum (Aspleniaceae) endemic, Extinct
Blechnum norfolkianum (Blechnaceae) doubtful endemic, Vulnerable
Cyathea australis norfolkensis (Cyatheaceae) endemic, Vulnerable
Cyathea brownii (Cyatheaceae) endemic, Vulnerable
Hypolepis dicksonioides (Dennstaediaceae) endemic, Endangered
Pteris brunoniana (Pteridaceae) endemic, Vulnerable
Pteris kingiana (Pteridaceae) endemic, Vulnerable
Tmesipteris forsteri (Tmesipteridaceae) endemic, Vulnerable

1 endemic gymnosperm:

Araucaria heterophylla (Norfolk Island Pine) endemic, Vulnerable

37 endemic flowering plants:

Achyranthes arborescens (Amaranthaceae) endemic, Endangered
Crinum norfolkianum (Amaryllidaceae) endemic, Vulnerable
Alyxia gynopogon (Apocynaceae) endemic, Vulnerable

Melodinus baueri (Apocynaceae) endemic, Vulnerable
Meryta angustifolia (Araliaceae) endemic, Vulnerable
Meryta latifolia (Araliaceae) endemic, Endangered
Capparis nobilis (Capparaceae) endemic, Vulnerable
Carex neesiana (Cyperaceae) endemic, Vulnerable
Euphorbia norfolkiana (Euphorbiaceae) endemic, Endangered
Euphorbia obliqua (Euphorbiaceae) endemic, Endangered
Panicum norfolkianum (Gramineae) endemic, Extinct
Pennantia endlicheri (Icacinaceae) endemic, Endangered
Cordyline obtecta (Liliaceae) endemic, Vulnerable
Korthalsella disticha (Loranthaceae) endemic, Vulnerable
Abutilon julianae (Malvaceae) endemic, Extinct on Norfolk, recently rediscovered on Philip
Dysoxylum patersonianum (Meliaceae) endemic, Vulnerable
Bulbophyllum argyropus (Orchidaceae) endemic, Endangered
Dendrobium brachypus (Orchidaceae) endemic, Vulnerable
Dendrobium macropus (Orchidaceae) endemic, Vulnerable
Oberonia titania (Orchidaceae) endemic, Endangered
Phreatia limenophylax (Orchidaceae) endemic, Vulnerable
Rhopalostylis baueri (Palmae)(Norfolk Island Cabbage Palm) endemic, Vulnerable
Freycinetia baueriana baueriana (Pandanaceae) endemic subspecies, Vulnerable
Pittosporum bracteolatum (Pittosporaceae) endemic, Vulnerable
Clematis cocculifolia (Ranunculaceae) doubtful endemic, Vulnerable
Coprosoma baueri (Rubiaceae) endemic, Vulnerable
Coprosoma pilosa (Rubiaceae) endemic, Vulnerable
Euodia littoralis (Rutaceae) endemic, Vulnerable
Ungeria floribunda (Sterculiaceae) endemic, Indeterminate
Wikstroemia australis (Thymelaeaceae) endemic, Vulnerable
Boehmeria australis (Urticaceae) endemic, Vulnerable
Elatostema montanum (Urticaceae) endemic, Endangered
Melicytus latifolius (Violaceae) endemic, Endangered
Melicytus ramifloris oblongifolius (Violaceae) endemic subspecies, Vulnerable
Callistopteris bauerana (Hymenophyllaceae), Vulnerable
Tylophora biglandulosa (Asclepiadaceae), Vulnerable
Elaeodendron curtipendulum (Celastraceae), Vulnerable
Solanum bauerianum (Solanaceae), Endangered (Vulnerable elsewhere)

Insects

9 flies (Diptera) endemic to Norfolk and Lord Howe

Other invertebrates

Reptiles-amphibians

Birds

21 breeding land birds, including:

Cyanoramphus novaeseelandiae cookii (Norfolk Island Parakeet or Green Parrot) Endangered (RDB), population estimated at 17-30 in December 1978, captive breeding effort underway and rat control being considered.

Ninox novaeseelandiae undulata (Norfolk Island Boobook owl) endemic subspecies, Indeterminate, now reported endangered (1983).

Turdus poliocephalus poliocephalus (Gray-headed Blackbird, Island Thrush) endemic subspecies, Endangered (RDB), less than 50 on Mt. Pitt in 1969, not seen since 1975.

Zosterops albogularis (White-breasted White-eye or Silver-eye) endemic, critically Endangered (RDB).

Zosterops tenuirostris (Slender-billed White-eye) endemic, forest and scrub.
many endemic land birds now extinct
Mammals
Tadarida norfolkensis (Norfolk Island Free-tail Bat) endemic (one specimen from 1839)
Chalinolobus gouldii (Gould's Wattled Bat) endemic?
Marine life
Protected Area
Norfolk Island National Park 457 ha
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 3
Human Impact 3
Conservation Importance 35

Nepean Island

Area sq. km Altitude 32 m
Island type: limestone islet
Natural threats:
Human impact: uninhabited
Ecosystems: grassland; fringing reef
Special features: seabird rookery; native gecko Phyllodactus guentheri

Philip Island

Area 2.6 sq. km Altitude 280 m
Island type: precipitous volcanic remnant
Natural threats:
Human impact: vegetation destruction and erosion by introduced feral animals
Ecosystems: formerly forest and scrub; fringing reef
Special features: formerly feral pigs, goats and rabbits, but control measures nearly complete; seabird rookery

Endemism:	Total sp.	No. endemic	% endemic	E	ViRI
Plants		3		1(2)	
Insects					
Other invert.					
Rept-Amph.	1				
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
Hibiscus insularis (Malvaceae) endemic, Endangered (RDB)
Abutilon julianae (Malvaceae) believed Extinct, recently rediscovered
Streblorrhiza speciosa (Leguminosae) (Philip Island Glory Pea) endemic genus, Extinct (RDB)
Agropyron kingianum (Gramineae) endemic, Extinct, last seen in 1912
Insects
Other invertebrates

Reptiles-amphibians
Phyllodactus guentheri gecko endemic to Phillip, Nepean, and Lord Howe
Birds
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 15

Middleton Chain

Middleton Reef

Ring of coral with lagoon, rubble bank with seabirds; being considered as marine reserve.

Elizabeth Reef

Ring of submerged coral, one sand islet (3 m) with seabirds; being considered as marine reserve.

Lord Howe

including **Ball's Pyramid** (554 m), and nearby islands and rocks
Area total 15.4 sq. km, Lord Howe 14.6 sq. km Altitude 875 m
Island type: eroded volcanic with 2 peaks, Mt. Gower (875 m) and Mt. Ligdbird (777 m) and some sedimentary deposits.
Natural threats:
Human impact: inhabited; tourism important; less than 20% of vegetation disturbed.
Ecosystems: lowland rain forest below 460 m in north with Drypetes and Cyptocarya, and below 530 m in south with Cleistocalyx and Chionanthus; palm forest on coral sandstone and basalt below 300 m with Howea; palm forest with Hedyscepe on Mount Gower and Mount Lidgbird, pure stands above 610 m and mixed down to 335 m; montane rain forest on summit plateau of Mount Gower above 760 m; scrub and grasslands; tiny mangrove areas in creeks; shallow lagoon (1-2 m) to west with coral reefs offshore built largely by coralline algae, 2 passes (CRD).
Special features: considerable endemism, many species threatened or with restricted distribution; world's most southerly coral reef; seabird rookery.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	219	75	33%	2	75
Insects		69	50%		
Other invert.		62			
Rept-Amph.	2	2	100%		
Birds	120	4	3%	2(1)	
Mammals	1				
Marine life	477	19	4%		

Species of conservation interest

Plants

379 vascular plant taxa, of which 219 are native

48 native ferns including 18 endemic ferns: 14 Rare species and:

Cyathea brevipinna (Cyatheaceae) endemic, Vulnerable

Cyathea howeana (Cyatheaceae) endemic, Vulnerable

Marattia salicina subsp. nov. (Marattiaceae) endemic subspecies, Endangered.

Leptopteris moorei (Osmundaceae) endemic, Vulnerable

171 flowering plants, including 57 endemics: 44 rare species and:

Corokia carpodetoides (Cornaceae) endemic, Indeterminate

Lepidium howei-insulae (Cruciferae) endemic, Vulnerable

Elaeocarpus costatus (Elaeocarpaceae) endemic, Indeterminate

Negria rhabdothamnoides (Gesneriaceae) endemic genus, Rare

Cryptocarya gregsonii (Lauraceae) endemic, Indeterminate

Carmichaelia exsul (Leguminosae) endemic, Vulnerable

Rapanea mccomishii (Myrsinaceae) endemic, Vulnerable

Dendrobium moorei (Orchidaceae) endemic, Vulnerable

Plectorrhiza erecta (Orchidaceae) endemic, Vulnerable

Hedyscepe canterburyana (Palmae) endemic genus, Vulnerable

Howea belmoreana (Palmae) endemic genus, Rare

Howea forsteriana (Palmae) endemic genus, Rare

Lepidorrhachis mooreana (Palmae) endemic genus, Rare

Passiflora herbertiana insulae-howei (Passifloraceae) endemic subspecies, Endangered

Melicytus novae-zelandiae centurionis (Violaceae) endemic subspecies, Vulnerable

Bubbia howeana (Winteraceae) endemic, Rare

Dietes sp. endemic, nearest relatives in southern Africa

Chionochloa conspicua (Poaceae) endemic subspecies restricted to one clump

Insects

5 endemic flies (Diptera) plus 9 endemic to Lord Howe and Norfolk

Dryococoelus australis (Lord Howe Phasmid) endemic, extinct on Lord Howe but still on Ball's Pyramid

Over 100 species of spider of which 50% probably endemic

3 endemic genera and 12 species of terrestrial isopod

endemic talitrid amphipod from the top of Mount Gower

Other invertebrates

over 50 endemic species of land snails, including:

9 endemic species and 16 subspecies of Hydrobiidae

Placostylus bivaricosus (giant land snail) some forms extinct but two colonies maintaining their numbers

Halicarcinus lacustris (freshwater crab)

Paratya (Xiphatyoida) howensis endemic freshwater prawn

1 endemic leech

10 endemic species of earthworms

Reptiles-amphibians

Leiolopisma lichenigera endemic skink, threatened on Lord Howe but common on smaller islands

Phyllodactys guentheri endemic gecko, threatened on Lord Howe but common on outer islands and Phillip Island near Norfolk

Birds
Pterodroma solandri (Providence or Solander's Petrel) endemic
Tricholimnas sylvestris (Lord Howe Wood Rail) endemic, Endangered (RDB), 30 birds remain on Mount Gower summit
Zosterops tephropleura (Lord Howe Silvereye) endemic?
Pachycephala pectoralis contempta (Lord Howe Golden Whistler) endemic subspecies
Strepera graculina crissalis (Lord Howe Pied Currawong) endemic subspecies, Endangered (RDB), 30-50 remained in 1974.
1 extinct subspecies: Turdus poliocephalus vinitinctus
Mammals
Eptesicus sagittula (large forest bat) only indigenous mammal
Marine life
57 coral species in 33 genera, 2 species undescribed
477 fish species in 107 families, of which 4% endemic to Norfolk - Middleton Reef - Lord Howe waters
Chaetodon tricinctus endemic
Pterois volitans (Lionfish) protected
Protected area
Designated World Heritage Site (1982)
Lord Howe Island Park and Preserve (II, X) 800 ha
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 2
Human threat 1
Natural vulnerability 0
Practicality of conservation action 4
Reliability of data 3
Human Impact 4
Conservation Importance 46

Coral Sea Islands Territory

Coringa Islets, Herald Cays, Magdelaine Cays

Area sq. km Altitude m
Island type: low coral islets and cays on coral reefs
Natural threats: cyclones
Human impact: occasional tourist visits, fishing
Ecosystems: atoll forest with Pisonia, atoll scrub, coral reefs
Special features: seabird rookeries
Protected area
Coringa-Herald National Nature Reserve

Lihou Reef

Area sq. km Altitude m
Island type: horseshoe-shaped reef system with numerous small vegetated islets and sand cays.
Natural threats: cyclones
Human impact: occasional tourist visits, fishing, illegal taking of turtles and clams.
Ecosystems: atoll scrub; coral reefs with spectacular and unusual underwater topography.
Special features: seabird rookery; turtle nesting area
Protected area
Lihou Reef National Nature Reserve

Diamond Islets
Seabird rookery; turtle nesting area; proposed reserve
Tregrosse Reef
Seabird rookery; turtle nesting area; proposed reserve

Boot Reef
Isolated near-equatorial coral reef; proposed reserve
Ashmore Reef
Isolated near-equatorial coral reef; proposed reserve

TERRITORIES OF NEW ZEALAND

Kermadec Islands
Raoul (Sunday)
Area 30 sq. km Altitude 516 m
Island type: volcanic with central crater, rich soil
Natural threats: volcanic eruptions, cyclones
Human impact: introduced plants and feral animals have had considerable impact; recent control measures.
Ecosystems: lowland dry forest with Metrosideros below 240 m; subtropical rain forest with Metrosideros kermadecensis and tree ferns; higher vegetation with tree ferns, palm Rhopalostylis and epiphytes; Myosporum scrub near coast.
Special features: important seabird rookeries with 3 endemic seabirds; three lakes; active volcano (eruption 1964).

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	113	23	20%	4(1)	2
Insects					
Other invert.					
Rept-Amph.					
Birds	30	4			
Mammals					
Marine life					

Species of conservation interest
Plants
195 vascular plant species, including 113 native species, 23 endemics
Doodia milnei (Blechnaceae) endemic, Rare
Cyathea kermadecensis (Cyatheaceae) endemic, endangered
Cyathea milnei (Cyatheaceae) endemic
Pseudopanax arboreus var kermadecensis (Araliaceae) endemic variety, Endangered
Senecio lautus var esperensis (Compositae) endemic variety, Rare
Homalanthus polyandrus (Euphorbiaceae) endemic, Endangered
Coprosma acutifolia (Rubiaceae) endemic, Endangered
Hebe breviracemosa (Scrophulariaceae) endemic, Endangered, one plant has been found
Boehmeria australis var dealbata (Urticaceae) endemic variety, Endangered
Lepidium oleraceum (Cruciferae) K, Vulnerable throughout range
Rorippa gigantea (Cruciferae) K, Vulnerable throughout range
Ipomoea pes-caprae ssp brasiliensis
Nephrolepis cordifolia rare
Christella dentata endangered
Insects

Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Protected area
Kermadec Islands Nature Reserve 3342 ha
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 24

Herald Isles

Meyer (12 ha with forest), **Napier, Nugent, Dayrell, N., S.** and **W. Chanter** islets off Raoul totalling 0.3 sq. km with abundant bird life and no introduced mammals.

Macauley

Area 3 sq. km Altitude 238 m
Island type: volcanic
Natural threats:
Human impact: feral goats ravaged vegetation before elimination in 1966; Rattus exulans introduced.
Ecosystems: former forest replaced by grassland with occasional bushes
Special features:

Hazard

High rock (7 ha)

Curtis

Active volcano with fumaroles (0.5 sq. km); no introduced mammals.

Cheeseman (L'Esperance)

Barren rock with seabirds (5 ha; 136 m)

Province VII
FIJI

FIJI (Independent state)

Land area 18,272 km^2 Sea area 1,290,000 km^2
Population 671,712 (1983) Density 37 persons/km^2 Growth rate (est.) 2.0%/yr

The Fiji Islands form a complex group of high islands of volcanic and probably continental origin, with barrier reefs, atolls and reef islands, and raised coral islands and areas. The two largest islands of Viti Levu and Vanua Levu include 87% of the total land area. The high islands have distinct wet and dry sides.

Species of conservation interest

Plants

ca. 1500 native vascular plant species, including 310 ferns, 40-50% endemic species, 1 endemic family and 11 endemic genera; about 1000 introduced flowering plants.

26 species of palms, all endemic (E:1, V:2, R:14, I:5)

Insects

Total over 3,500 species

39 species of butterflies, including 7 only in Fiji

Xois sesara (butterfly) endemic

Papilio schmeltzii (butterfly) endemic

Other invertebrates

high generic endemicity in land snails

3 Partulidae

Reptiles-amphibians

27 species, including 8 endemic species, 1 endemic genus (snake)

Platymantis vitianus (Fiji Ground Frog) group endemic, K

Platymantis vitiensis (Fiji Tree Frog) group endemic

Brachylophus fasciatus (Banded Iguana), genus endemic to Fiji and Tonga, Vulnerable

Brachylophus vitiensis (Crested Iguana) group endemic, Yadua Taba and several localities in the Yasawa and Mamanuca groups, Endangered.

Emoia concolor (Green Skink) endemic

Emoia parkeri group endemic, Kadavu, Ovalau, Taveuni, Viti Levu

Emoia sp. 'A', group endemic, Gau, Ovalau, Vatu Vara, Yadua Taba

Emoia sp. 'B', endemic

Leiolopisma n. sp., group endemic, southern Lau group

Birds

Pterodroma brevipes (Gould's Petrel) endemic to Fiji, Viti Levu?

Accipiter rufitorques (Fiji Goshawk) endemic to Fiji, common (1973)

Ptilinopus victor (Orange Dove) endemic to Fiji

Ptilinopus luteovirens (Golden Dove) endemic to Fiji

Ptilinopus layardi (Whistling Dove) endemic to Fiji

Ducula latrans (Peale's Pigeon) endemic to Fiji, common (1973)

Phigys solitarius (Collared Lory) endemic to Fiji

Charmosyna amabilis (Red-throated Lorikeet) endemic to Fiji

Lamprolia victoriae (Silktail) ancient origin, endemic to Taveuni and Vanua Levu.

Vitia ruficapilla (Fiji Warbler) endemic to Fiji, common (1973)

Trichocichla rufa (Long-legged Warbler) endemic genus, Viti Levu and Vanua Levu, Endangered (RDB) or indeterminate.
Rhiphidura spilodera (Spotted Fantail) endemic to Fiji, common (1973)
Mayrornis lessoni (Slaty Flycatcher) endemic to Fiji, abundant (1973)
Myiagra azurecapilla (Blue-crested Broadbill) endemic to Fiji, common (1973).
Zosterops explorator (Layard's White-eye) endemic to Fiji, abundant (1973).
Myzomela jugularis (Orange-breasted Honeyeater) endemic to Fiji, abundant (1973).
Gymnomyza viridis (Giant Forest Honeyeater) endemic to Fiji, common (1973).
Erythrura pealii (Fiji Parrot Finch) endemic to Fiji
5 extinct species of birds
Mammals
Marine life
Tridacna gigas (Giant Clam) now rare or locally extinct
Hippopus hippopus (Giant Clam) now rare or locally extinct

Rotuma Group
Rotuma

Area 44 sq. km Altitude 256 m
Island type: volcanic
Natural threats: cyclones, volcanic eruptions
Human impact: pop. 2800 (1980), density 64 persons/km^2; coconut plantations and agriculture
Ecosystems: some pockets of lowland rain forest; fringing reef
Special features: hot wet climate

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.		1			
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Nacaduba samoensis (butterfly) endemic of concern
Other invertebrates
1 Partulidae
Reptiles-amphibians
Lepidodactylus gardineri (Rotuman Gecko) endemic
Birds
Myzomela chermesina (Rotuma Myzomela) endemic
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1

Practicality of conservation action 0
Reliability of data 2
Human Impact 4
Conservation Importance 12

Uea

Volcanic cone (262 m), cliff bound without reef, less than 1 km^2

Hatana

Volcanic island (18 m), forest

Hofliua

Volcanic island (58 m), cliff bound

Ringgold Isles

Vetauua (Veitauua, Korotuna)

Area sq. km Altitude m
Island type: low coral island on coral reef
Natural threats: cyclones
Human impact: visited occasionally
Ecosystems: atoll scrub and coconuts; coral reef
Special features: important seabird rookery (6 species, 4 breeding); potential protected area for seabirds.

Qelelevu (Naqelelevu)

including **Qelelevu, Tauraria, Taininbeka**
Area sq. km Altitude 18 m
Island type: atoll with 3 raised coral islets at western end, large lagoon with 3 passes.
Natural threats: cyclones
Human impact: small village; fishing
Ecosystems: atoll forest and scrub on islets, atoll reefs and lagoon
Special features: seabird rookery (6 species, 4 nesting)
Proposed protected area: recommended for protection in 1980 Park Plan
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 11

Nukubasaga and **Nukubalati** (Nukupureti)

Area sq. km Altitude 21 m
Island type: coral reef with 2 rock bound islands, one large (21 m) and one small (3.2 ha, 8 m).
Natural threats: cyclones
Human impact: visited occasionally; proposed fish freezing station
Ecosystems: forest and coconuts, scrub, savanna; coral reefs
Special features: important seabird rookery; turtle nesting area; reserve recommended for seabirds.

Nukusemanu

Low coral islet on Nukusemanu Reefs, atoll scrub and coconuts; seabird rookery.

Budd Reef
Almost atoll with narrow barrier reef encircling deep (60-100 m) lagoon and islands.

Cobia (Thombia)
Circular breached volcanic crater rim (180 m, 1 km diameter) with steep slopes, rain forest.
Area 0.69 sq. km Altitude 173 m
Island type: circular breached volcanic crater rim (1 km diameter) with steep slopes, protected lagoon within crater.
Natural threats: cyclones
Human impact: recently introduced goat herd has stripped all undergrowth
Ecosystems: rain forest; mangrove fringe; fringing reef and lagoon
Special features: 15 land birds; Pteropus tonganus (Fruit Bat) colony, ca. 400; crater lagoon with rich marine life; severe habitat destruction by 150 feral goats.

Maqewa (Manggewa)
Volcanic (82 m), narrow and rocky; scrub

Yanuca (Yanutha)
Volcanic (137 m) with some forest and secondary growth, small village.

Yavu (Yabu, Iambu)
Volcanic (140 ha, 113 m), thick rain forest, coconuts; uninhabited but some cultivation.

Raranitiqa (Raranitingga)
Flat volcanic islet; scrub, Pandanus and Casuarina

Tovuka
Volcanic islet, rugged (45 m); coconuts and scrub; goats causing erosion.

Nanuku Reef (Nanuka)
including **Nanuku Levu, Nanuku Lailai**
Area sq. km Altitude m
Island type: reef with sand islets
Natural threats: cyclones
Human impact: planted in coconuts
Ecosystems: coral reef
Special features:
Proposed protected area: recommended for protection in 1980 Park Plan

Vanua Levu Group

Vanua Levu
Area 5,535 sq. km Altitude 835 m
Island type: volcanic with some limestone; mountain chain creates wet (south) side and dry (north-west) side.
Natural threats: cyclones, earthquakes
Human impact: most forest cleared except in mountains and wetter areas
Ecosystems: lowland and montane rain forest types, some with sandalwood and Agathis vitiensis; grasslands; rivers and other freshwater habitats; mangroves; barrier and fringing reefs.
Special features: Vakalaca lake with "floating island" of vegetation; Salt Lake; introduced Herpestes auropunctatus (Mongoose) affecting ground birds.
Species of conservation interest
Plants
Insects
Other invertebrates

Reptiles-amphibians
Platymantis vitianus (Fiji Ground Frog) group endemic, K
Platymantis vitiensis (Fiji Tree Frog) group endemic
Birds
Lamprolia victoriae kleinschmidti (Silktail) endemic subspecies, low forest on south side of Natewa Peninsula, endangered, less than 100.
Trichocichla rufa cluniei (Long-legged Warbler) endemic subspecies, Delanacau mountains, Endangered (RDB) or indeterminate.
Prosepeia tabuensis (Red-breasted Musk Parrot) endemic to Fiji
Ptilinopus victor (Orange Dove) endemic to Fiji
Mammals
Marine life
Protected areas
Koroutari Nature Reserve 18 ha
Vunimoli Nature Reserve 19 ha
Proposed protected areas: 1980 Parks and Reserves Plan recommends·
Bua Sandalwood Forest
Naselesele Falls Region
Dakua Roadside Reserve
Savusavu Hot Springs
Lesiaceva Point
Naidi Bay
Salt Lake
Rainbow Reef
Natewa Bay Peninsula
Waiqele Hot Springs
Vakalaca
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 24

Cikobia (Thikombia)

Narrow ridge (15 sq. km; 192 m) of raised coral; fringing reef; one village; seabird rookery (4 species, 1 or 2 breeding).

Rabi (Rambi)

Area 69 sq. km Altitude 466 m
Island type: volcanic with steep slopes
Natural threats: cyclones
Human impact: used to resettle population from Banaba (Ocean) Island on 1200 ha plus coconut plantations.
Ecosystems: rain forest, coral reefs
Special features:

Kioa

Volcanic cone (280 m) with sheer east face, forested.

Taveuni

Area 435 sq. km Altitude 1,224 (1,241) m
Island type: volcanic ridge of cones, younger to south, fertile soil
Natural threats: cyclones (1978), earthquakes (1979)

Human impact: large coconut plantations and other agriculture along leeward (western), northern and southern coast
Ecosystems: dense lowland and montane rain forest types in centre and east; cloud forest; lake, mountain stream and other freshwater habitats; rocky coasts; scattered fringing reefs.
Special features: SE has highest rainfall in Fiji (7000mm/yr); crater lake Tagimaucia mostly covered by vegetation.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		1			
Insects					
Other invert.					
Rept-Amph.					1
Birds	43	1			
Mammals		1			
Marine life					

Species of conservation interest
Plants
Medinilla waterhousei (Tagimaucia) endemic with distinctive flower
Insects
Other invertebrates
Reptiles-amphibians
Platymantis vitianus (Fiji Ground Frog) group endemic, K
Platymantis vitiensis (Fiji Tree Frog) group endemic
Birds
43 species, including:
Ptilinopus victor (Orange Dove) endemic to Fiji, common (1973)
Prosepeia tabuensis (Red-breasted Musk Parrot) endemic to Fiji, common (1973).
Myiagra azureocapilla (Blue-crested Broadbill) endemic to Fiji, common (1973).
Lamprolia victoriae vistoriae (Silktail) endemic subspecies, in southern rain forest above 500 m, common (1973).
Mammals
Pteralopex acrodonta (Monkey-faced Fruit Bat) endemic
Tadarida jobensis bregullae (Mastiff Bat) endemic subspecies
Marine life
Protected area
Ravilevu Nature Reserve 4,020 ha
Proposed protected areas: 1980 Parks and Reserves Plan recommends:
Tagimaucia Lake
Vurevure Bay
Mua Beach
Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 24

Qamea (Nggamea)

Area 34 sq. km Altitude 304 m
Island type: volcanic with deeply dissected coastline and steep-sided valleys.
Natural threats: cyclones
Human impact: inhabited, local forest clearing
Ecosystems: dense rain forest; mangroves in inlets; fringing and barrier reefs.
Special features: protected area potential
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 15

Matagi (Matangi)

Volcanic (93 ha; 134 m), covered with light forest

Laucala (Lauthala)

Volcanic (12 sq. km; 134 m), patches of forest, coconuts and grasslands

Namena Lala

Area sq. km Altitude 98 m
Island type: volcanic, narrow and steep with central ridge, in lagoon of barrier reef, no surface fresh water.
Natural threats: cyclones
Human impact: formerly inhabited; small tourist resort
Ecosystems: thick lowland rain forest, coral reefs
Special features: on Namena Barrier Reef; seabird rookery (6 species, 2 nesting); 14 land birds.
Proposed protected area: recommended for protection in 1980 Park Plan
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 1
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 3
Human Impact 1
Conservation Importance 17

Yadua (Yandua)

Volcanic (14 sq. km; 195 m), coarse grass, Casuarina and Pandanus

Yadua Taba (Yandua Tambu)

Area 0.7 sq. km Altitude 100 m
Island type: volcanic
Natural threats: cyclones
Human impact: uninhabited but used for goat grazing (until 1980) and small coconut plantations along coast; grassland burned frequently.
Ecosystems: dry beach forest with Vavaea amicorum; disturbed Casuarina forest; scrub and small trees on slopes and ridges; fire-maintained grasslands; fringing reef.

Special features: last substantial population (over 200) of endemic crested iguana.
Species of conservation interest
Reptiles-amphibians
Brachylophus vitiensis (Crested Iguana) endemic to Fiji, Endangered
Protected area
Yadua Taba Crested Iguana Sanctuary (IV) 70 ha
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 4
Reliability of data 3
Human Impact 1
Conservation Importance 20

Great Sea Reef
Area 0 sq. km Altitude m
Island type: barrier reef north of Vanua Levu, over 200 km long
Natural threats: cyclones
Human impact:
Ecosystems: barrier reef
Special features:
Proposed protected area: recommended for protection in 1980 Parks Plan

Kia
(160 ha; 238 m), cultivated

Yaqaga (Yangganga)
Rocky and barren (10 sq. km; 270 m), light forest and scrub

Galoa (Ngaloa)
(76 ha; 45 m), coconuts

Tavea
(16 ha), coconuts surrounded by mangroves

Macuata-i-Wai (Mathuata-i-Wai)
Stony (3 sq. km; 152 m), Casuarina and scrub

Vorovoro
(89 m)

Mali
Conical peak (6.5 sq. km; 171 m), dry with Casuarina, scrub and grasses

Kavewa
(84 ha), light forest and scrub

Gevo (Ngevo)
(76 ha; 141 m), scrub

Druadrua (Ndruandrua)
Flat topped rocky (3.8 sq. km; 134 m), scrub

Bekana (Mbekana)

Yasawa Group

Yasawa

Area 32 sq. km Altitude 244 m
Island type: volcanic ridge
Natural threats: cyclones
Human impact: population density 35 persons/km^2; lowland subsistence agriculture.
Ecosystems: rain forest remnants at higher elevations; mangroves; fringing reefs.
Special features:

Sawa-i-Lau

Area sq. km Altitude m
Island type: raised coral with sheer rock face
Natural threats: cyclones
Human impact:
Ecosystems: dense scrub
Special features: marine cave
Proposed protected area: 1980 Parks Plan recommends protection of Sawa-i-Lau Cave.

Nacula (Nathula)

Volcanic ridge (22 sq. km; 244 m) with mangroves on windward side

Tavewa

(160 ha) private plantation

Matacawa Levu (Matathawa Levu)

(9.5 sq. km; 300 m) with mangroves on windward coast

Yaqeta (Yanggeta)

(7.3 sq. km; 183 m), mangroves

Naviti

Volcanic and rugged (34 sq. km; 388 m), mangrove filled lagoon; resort hotel.

Drawaqa (Ndrawangga)

Nanuya Balavu (Nanuya Mbalavu)

Naukacuvu (Naukathuvu)

Narara

Viwa

Low coral island (80 ha; 2 m), coconuts, little water
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Platymantis vitianus (Fiji Ground Frog) group endemic, K
Birds
Mammals
Marine life

Waya

Volcanic (22 sq. km; 571 m) with steep west coast, rain forest and light forest.

Wayasewa

Volcanic plug (6.5 sq. km; 354 m), light forest and grasslands

Kuata

Volcanic (174 m), light forest and scrub

White Rock

Seabird rookery, recommended for protection in 1980 Parks Plan

Mamanuca Group (Mamanutha Group) (CRD)

Eori
Volcanic (76 m), light forest

Navadra (Navandra)
Volcanic (128 m), light forest and scrub

Vanua Levu
Volcanic (107 m), light forest

Kadomo (Kandomo)
Volcanic (101 m), light forest

Vomo
Flat topped (116 m), grasslands and few trees

Tokoriki
(94 m), plantations, fishing

Yanuya
(120 ha; 104 m), scrub with open forest to west, coconuts to east

Monu
(223 m), open forest; fishing; recommended for protection in 1980 Parks Plan.

Monuriki
(180 m), open forest; fishing; recommended for protection in 1980 Parks Plan.

Tavua
(188 ha; 171 m), open scrub with coconuts.

Nautanivono
(73 m) small

Matamanoa
(70 m) open forest

Mana
(73 m) open forest, scrub and coconuts; fringing reef with reserve potential; resort hotel.

Qalito (Ngqalito)
(119 m) open forest; resort development

Malolo
(10 sq. km; 229 m) hilly; grassland with scattered trees; resort development

Malolo Lailai
(2.35 sq. km; 70 m) open forest and coconuts; small barrier reef and lagoon with good coral growth; resort development, airstrip.

Tai
Fringing reef with reserve potential; resort development

Levuka
Resort development

Kadavu

Malamala
Island and reefs recommended for protection in 1980 Parks Plan

Viti Levu group

Viti Levu

Area 10,544 sq. km Altitude 1,323 m

Island type: continental and volcanic, with north-south mountain chain producing rainshadow to west, high plateau deeply dissected.

Natural threats: cyclones (1965, 1980)

Human impact: several urban and industrial centres including capital at Suva; extensive sugar cane and other agricultural development; tourism; mining; hydroelectric development; fires; introduced plants and animals including mongoose.

Ecosystems: lowland rain forest; several types of montane rain forest with Agathis, Dacrydium, Decussocarpus, etc.; cloud, riverine and swamp forests; 3 types of mangrove forest; limestone and beach forests; scrub, woodlands and grasslands; various freshwater habitats; many kinds of coral reef development, lagoons and estuaries.

Special features: sand dunes at Sigatoka; introduced Herpestes auropunctatus (Mongoose) affecting ground birds.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		1		1	
Insects					
Other invert.					
Rept-Amph.		3			1
Birds		4		1	1
Mammals					
Marine life					

Species of conservation interest

Plants

Neoveitchia storckii (Palmae) endemic genus, Endangered, single population of less than 200 trees (1972), declining.

Goniocladus petiolatus, rare

Taveunia trichospadix (Palmae)

Degeneria vitiensis (Degeneriaceae)

Readea spp. (Rubiaceae)

Pullea perryana (Cunoniaceae)

Insects

Hypolimnas inopinata (butterfly) Vulnerable (RDB)

Polyura caphontis (butterfly) Vulnerable (RDB)

Papilio schmeltzii (butterfly) Vulnerable

Utetheisa clarae (butterfly) Vulnerable (RDB)

Nacaduba samoensis (butterfly)

Other invertebrates

Reptiles-amphibians

Platymantis vitianus (Fiji Ground Frog) group endemic, K

Platymantis vitiensis (Fiji Tree Frog) group endemic

Ogmodon vitianus (Fiji Snake) monospecific endemic genus, Indeterminate, protected

Lepidodactylus manni (Mann's Gecko) endemic, abundant on rock faces

Candoia n. sp.?, endemic

Birds

Nesoclopeus poecilopterus (Barred-wing Rail) endemic, on Nadrau plateau, Endangered (RDB), last sighted 1973.

Prosopeia personata (Yellow-breasted Parrot) endemic, common

Erythrura kleinschmidti (Pink-billed Parrotfinch) endemic, Rare (RDB), 400.

Trichocichla rufa rufa (Long-legged Warbler) endemic subspecies, ridgetops in Namosi District, Endangered (RDB) or indeterminate.

Mammals
Marine life
Protected areas

Draunibota Nature Reserve	2 ha
Labiko Nature Reserve	1 ha
Nadarivatu Nature Reserve	93 ha
Naqaranibutuli Nature Reserve	279 ha
Tomaniivi Nature Reserve	1,322 ha
Vuo Nature Reserve	1 ha
Garrick Memorial Reserve	427 ha

Proposed protected areas; 1980 Parks and Reserves Plan recommends:

- Natadola Bay (CRD)
- Cuvu Bay
- Sigatoka Sand Dunes
- Coral Coast Reefs (CRD)
- Karobe Beach
- Navua Swamp
- Navua River
- Mt. Rama - Korobaba Range
- Suva Barrier Reef (CRD)
- Makuluva Island and Reefs (CRD)
- Sainabula River Mangroves
- Savura Creek Catchment Area
- Nasinu Caves
- Naulu-Lokia Swamps
- Mubulau Island
- Wailotua Caves
- Wainibuka River
- Waiqa Gorge
- Waidradra Agricultural Research Station (riverine forest with endangered palm Neoveitchia storckii)
- Sovi Gorge
- Mt. Voma-Korobasabasaqa Range
- Wainisavulevu Falls Area
- Nakauvadra Range
- Namuaimada Beach
- Tavua Bay
- Nadrau Plateau
- Sigatoka Valley Caves
- Nausori Highlands
- Naloto Range
- Nadi Bay Reefs
- Lomolomo Beach
- Saweni Beach and Dreketi Inlet

Ratings
Natural conservation status 0
Ecosystem richness 3
Species richness 3
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 6
Conservation Importance 28

Macuata (Mathuata)
(122 m), densely wooded

Tovu
Hilly (76 m), grassland and some woodland

Malake
Hilly (4.5 sq. km; 230 m), Casuarina and Pandanus, scrub, mangroves; grazing animals.

Nananu-i-Ra
Seabird rookery

Nananu-i-Cake (Nananu-i-Thake)
(73 m), dry grassland, scattered trees and shrubs; grazing animals

Vatu-i-Ra
Island and coral reef; seabird rookery; recommended for protection in 1980 Parks Plan

Naigani (Naingani)
High rounded volcanic island (1.9 sq. km; 157 m), scrub on upper slopes, grass and reeds on lower slopes; mangroves, fringing reef; resort hotel.

Vatu-i-Lami
Seabird rookery; recommended for protection in 1980 Parks Plan

Qoma (Nggoma)
(37 m), wooded

Nuku Levu
Low coral sand islets (9 m)

Cagalai (Thangalai)
Sand cay, scrub, coconuts; platform reefs; quarantine station

Qata (Nggata)
Small soapstone island, mangrove fringe

Tawainave
Small soapstone island, mangrove fringe

Leleuvia
Sand cay with beach forest, fringing reef; suitable for protection

Viwa
Soapstone (49 m), open forest

Bau (Mbau)
Soapstone (8 ha; 24 m); completely altered by man, home of major chiefs

Mabualau (Mambualau)
Raised reef (27 m), lowland rain forest; important seabird rookery; recommended for protection in 1980 Parks Plan.

Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 11

Nukulau
Makuluva
Sand cay with beach forest, with Nukulau on large reef; possible marine park, recommended for protection in 1980 Parks Plan.

Beqa Lagoon (Mbengga Lagoon)
Lagoon (390 sq. km) behind barrier reef; popular diving area; recommended for protection in 1980 Parks Plan.

Beqa (Mbengga)
Area 36 sq. km Altitude 457 m
Island type: volcanic, radially dissected with indented coast
Natural threats: cyclones
Human impact: inhabited; agricultural development
Ecosystems: beach forest; lowland rain forest; grasslands; mangroves; fringing reef
Special features: parts have protected area potential
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Platymantis vitianus (Fiji Ground Frog) group endemic, K
Birds
Ptilinopus luteovirens (Golden Dove)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 2
Conservation Importance 14

Ugaga (Unganga)

Yanuca (Yanutha)
Volcanic (1.5 sq. km; 137 m)

Nanuku
Low coral sand cay with scrub and coconuts

Bird Island (Cokanabuli)
Rock (1.2 m) with seabirds; recommended for protection in 1980 Parks Plan

Vatulele
Area 31.6 sq. km Altitude 34 m
Island type: flat raised coral with cliffs to west, some volcanic rock in northwest
Natural threats: cyclones
Human impact: inhabited
Ecosystems: dense scrub with Casuarina, Pandanus and coconuts; fringing reef extending into barrier reef and lagoon.
Special features: brackish tidal pools with red prawns
Proposed protected area: recommended for protection in 1980 Parks Plan
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0

Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 12

Vatu Savu
Rugged limestone islet (6 m) in Vatulele lagoon, wooded

Vatu Levu
Rugged limestone islet (9 m) in Vatalele lagoon, wooded

Vatu Lailai
Limestone islet (3 m) in Vatalele lagoon

Lomaiviti Group

Ovalau
Area 139 sq. km Altitude 626 m
Island type: old volcanic cone with central basin surrounded by rugged peaks and ridges; fertile soil.
Natural threats: cyclones
Human impact: town of Levuka (pop. 1,500), former capital of Fiji; agriculture; logging
Ecosystems: lowland rain forest and other forest types; mangroves; complex of fringing and patch reefs.
Special features: forest of some conservation interest; Balolo Point with reserve potential.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Platymantis vitianus (Fiji Ground Frog) group endemic, K
Platymantis vitiensis (Fiji Tree Frog) group endemic
Birds
Nesoclopeus poecilopterus (Barred-wing Rail) Endangered (RDB), formerly present.
Mammals
Marine life
Atherina ovalaua (Hardyhead) endemic fish
Engyprosopon fijiensis (Flatfish) endemic
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 17

Yanuca Lailai (Yanutha Lailai)
Hilly steep islet within Ovalau reef; former quarantine station

Yanuca Levu (Yanutha Levu)
Hilly steep islet within Ovalau reef

Moturiki

Area 10 sq. km Altitude 133 m
Island type: volcanic
Natural threats: cyclones
Human impact: inhabited
Ecosystems: light forest, scrub, coconuts; swamp forest and bog; mangroves; fringing reefs.
Special features: swamp forest and bog of conservation interest; land crab breeding area.

Koro

Area 104 sq. km Altitude 305 m
Island type: massive volcanic plateau with steep seaward faces
Natural threats: cyclones
Human impact: pop. 2500 (1960s); plantations; logging
Ecosystems: lowland rain forest; fringing reefs
Special features:

Makodroga (Makondronga)

High volcanic, dense lowland rain forest; feral goats subject to some recent control; possible turtle nesting area; protected area potential.

Makogai (Makongai)

Area 8 sq. km Altitude 267 m
Island type: volcanic with four summits
Natural threats: cyclones
Human impact: forest cleared; former leper colony; steep slopes denuded by goats.
Ecosystems: grasslands; mangroves; extensive coral reefs including barrier reef.
Special features: barrier reef joining with Wakaya; feral goats subject to some recent control.
Potential protected area: island and reefs recommended for protection in 1980 Parks Plan.
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 1
Conservation Importance 11

Wakaya

Area 8 sq. km Altitude 152 m
Island type: high bluffs to west, fault line scarp
Natural threats: cyclones
Human impact: coconut plantation
Ecosystems: fringing reefs; barrier reef with Makogai
Special features: archaeological evidence of former fortified villages; introduced red deer; reef affected by Acanthaster in 1960s.
Potential protected area: island and reefs including Makogai-Wakaya reef system recommended for protection in 1980 Parks Plan (CRD).
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1

Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 1
Conservation Importance 11

Cakau Momo (Thakau Momo, Horseshoe Reef)
Reef without land area, recommended for protection in 1980 Parks Plan

Batiki (Mbatiki)
Volcanic (9 sq. km; 183 m), forest and grassland, fringing reefs

Nairai
Area 24 sq. km Altitude 336 m
Island type: volcanic ridge
Natural threats: cyclones
Human impact: pop. 600 (1960s)
Ecosystems: extensive surrounding coral reefs
Special features: possible protected study area for giant clams

Gau (Ngau)
Area 140 sq. km Altitude 715 m
Island type: volcanic ridge with some limestone
Natural threats: cyclones
Human impact: inhabited; timber cutting; reforestation with exotic pine
Ecosystems: dense rain forest on high land and ridges; grasslands with Casuarina; coconuts along shore; mangroves on north coast; fringing reef, leeward barrier reef and lagoon.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Platymantis vitianus (Fiji Ground Frog) group endemic, K
Birds
Pterodroma macgillivrayi (MacGillivray's Petrel) endemic, Indeterminate (RDB), collected once in 1855, rediscovered 1984.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 2
Conservation Importance 15

Mabulica Reef (Mambulitha Reef)
Reef with shallow lagoon

Moala Group (Koro Sea Islands)

Moala

Area 62 sq. km Altitude over 300 m
Island type: volcanic, with 8 high peaks and rugged relief
Natural threats: cyclones
Human impact: pop. 1200 (1960s); agriculture; lower areas cleared
Ecosystems: forest in higher areas; lake; secondary growth lower; mangroves along coast; fringing reef and barrier reef.
Special features: small lake on Delaimoala peak with matted sedges, reed fringe.

Totoya

Area 28 sq. km Altitude 366 m
Island type: volcanic eroded crater rim almost completely closed
Natural threats: cyclones
Human impact: inhabited
Ecosystems: light forest, scrub, grassland; coconuts near shore; barrier reef well offshore.
Special features:

Matuku

Area 57 sq. km Altitude 385 m
Island type: old volcanic crater rim breached by sea, steep slopes
Natural threats: cyclones
Human impact: inhabited
Ecosystems: forest on windward slopes; grassland, reeds and Pandanus; fringing reef
Special features:

Kadavu Group (Kandavu Group)

Kadavu (Kandavu)

Area 408 sq. km Altitude 838 m
Island type: high volcanic ranges, irregular coast
Natural threats: cyclones
Human impact: inhabited, density 19 persons/km^2; hillside terraces for agriculture, coconut plantations; logging until 1975; reforestation with exotic pines.
Ecosystems: rain forest in centre and to windward; grasslands; coastal coconuts; mangroves; fringing reef
Special features: Mt. Washington petrel breeding area

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Rhipidura personata (Kadavu Fantail) endemic
Foulehaio provocator (Kadavu Honeyeater) endemic
Ptilinopus layardi (Whistling Dove) endemic to Fiji
Mammals

Marine life
Protected area
?Koba (or Kioba) Nature Reserve 14 ha
Proposed protected area: protection of Mt. Washington recommended in 1980 Parks Plan.
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 3
Conservation Importance 16

Galoa (Ngaloa)
Volcanic (116 m), covered with trees; intensely cultivated

Matanuku
(174 m), grassland, sand flat, coconuts and mangroves

Ono
Area 30 sq. km Altitude 354 m
Island type: volcanic peak with steep cliffs on west coast
Natural threats: cyclones
Human impact: inhabited; agriculture; reforestation with exotic pine
Ecosystems: rain forest on windward side; grasslands; coral reefs
Special features:

Vurolevu
(82 m), wooded

Yabu (Yambu)
Area sq. km Altitude 52 m
Island type:
Natural threats: cyclones
Human impact:
Ecosystems: lowland rain forest
Special features: seabird rookery
Proposed protected area: recommended for protection by 1980 Parks Plan

Bulia (Mbulia)
(1.7 sq. km; 22 m), grass with scattered trees; inhabited

Yaukuvelailai
(64 m), joined by reef with Yaukuvelevu

Yaukuvelevu
Volcanic (122 m), sublittoral fringe has rich and diverse corals

Namara
(70 m), grassy summit

Dravuni (Ndravuni)
Ridge (80 ha; 40 m), inhabited

Taqua Rocks (Tanggua Rocks)
Recommended for protection in 1980 Parks Plan

Vanuakula
Circular island (76 m)

Great Astrolabe Reef
Barrier Reef, recommended for protection in 1980 Parks Plan (CRD)

North Astrolabe Reef
Circular barrier reef or atoll, with volcanic rock (Solo) in middle of lagoon; recommended for protection in 1980 Parks Plan (CRD).

Solo

Volcanic rock (3 m), within North Astrolabe Reef; lighthouse

LAU GROUP

Wailagi Lala (Wailangi Lala)

Area sq. km Altitude m
Island type: atoll with 2 sandy islets
Natural threats: cyclones
Human impact: lighthouse; Tridacna gigas overfished to extinction
Ecosystems: windward and leeward atoll reefs, lagoon; scrub and coconuts on islets.
Special features: many pigeons in season; important seabird rookery
Proposed protected area: recommended for protection in 1980 Parks Plan
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 0
Conservation Importance 12

Kibobo (Kimbombo)

Coral reef with 3 islets in lagoon: volcanic islet (30m) densely wooded, and two raised limestone islets (30-37 m) with scrub and coconuts; visited for turtles and fishing.

Naitauba (Naitaumba)

Circular volcanic and raised limestone island (7.7 sq. km; 186 m), fertile and well wooded, fringing reef; copra plantation.

Malima

Coral reef with 3 islets in lagoon: south (40 m); middle low coral sand islet with coconuts; north steep rock with scrub and coconuts; recommended for protection in 1980 Parks Plan.

Nuku Cikobia Reef (Nuku Thikombia Reef)

Seabird rookery

Exploring Isles

Extensive reef system encircling the following islands:

Qilaqila (Nggilanggila)

Bay of islands, or 100 island area, with scenic undercut raised coral islets, recommended for protection in 1980 Parks Plan

Avea

Raised coral (183 m), densely wooded

Sovu

Area sq. km Altitude 70 m
Island type: 3 steep-sided raised coral masses
Natural threats: cyclones
Human impact: uninhabited
Ecosystems:
Special features: seabird rookery
Species of conservation interest
Plants
Pritchardia thurstonii (palm) rare
Insects

Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Proposed protected area: recommended for protection in 1980 Parks Plan
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 13

Cikobia-i-Lau (Thikombia-i-Lau)
Raised coral (168 m) deeply eroded karst topography, dense vegetation

Munia
Volcanic ridge (290 m) with steep sides, fertile with rich vegetation, fringing reef; copra plantation.

Susui
Raised coral (131 m) sloping to east, dense scrub and coconuts

Namalata
Raised coral ridge (128 m)

Vanua Balavu (Vanua Mbalavu)
Area 53 sq. km Altitude 283 m
Island type: rugged raised coral with steep undercut cliffs, and volcanic with fertile soil
Natural threats: cyclones
Human impact: inhabited; airfield; overfishing for giant clams
Ecosystems: dense limestone forest and scrub; grasslands and reeds on volcanic soils; mangroves; coral reefs
Special features: good fresh water; hot springs; 100 island area in bay to north (see Qilaqila); Masomo Lake with sacred fish "yawa".
Proposed protected area: Masomo Bay and Lake recommended for protection in 1980 Parks Plan.
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 16

Kanacea (Kanathea)
Volcanic (13 sq. km; 259 m) with 7 peaks, forest on summits and higher slopes, extensive coral reef and lagoon; copra plantation.

Kiabu (Kiambu)
Narrow raised coral ridge (46 m), rugged with dense scrub; fringing reef shared with Yacata.

Yacata (Yathata)
Raised coral and volcanic, with 5 terraces (256 m), densely wooded; coconuts, fringing reef.

Nukutolu
2 low coral sand islets with coral reefs, scrub and coconuts; important seabird rookery; turtle nesting area; recommended for protection in 1980 Parks Plan

Vatu Vara
Raised coral, flat-topped pyramid (320 m) above low terrace, cliff bound, dense vegetation, fringing reef

Mago (Mango)
Raised coral overlain by lava (21 sq. km; 34 (213) m), hills around central basin with well-watered karst areas; scrub, fringing reefs; plantation.

Katafaga (Katafanga)
Volcanic and raised coral (55 m), twin summits; coconuts, turtles

Vekai
Low coral islet on inner edge of reef; scrub, coconuts, turtles

Tuvuca (Tuvutha)
Raised coral (13 sq. km; 244 m) ridge with steep coastal cliffs, central hollow with 4-5 lakes, little fresh water, densely wooded; barrier reef with narrow lagoon.

Cicia (Thithia)
Raised coral and volcanic (34 sq. km; 165 m) central ridge, jagged limestone cliffs; dry scrub on volcanic areas; adequate fresh water; extensive coconut plantations; fringing reef.

Nayau
Raised coral rim (18 sq. km; 183 m) with undercut coastal cliffs, central basin; little water; dense scrub; fringing reef.

Reid Reef
Large coral reef around rocks:
Late-i-Toga (Late-i-Tonga) (18 m)
Late-i-Viti

Bukatatanoa Reefs
Vanuamasi
Barrier reef complex; poaching of giant clams by foreign fishing boats

Lakeba (Lakemba)
Area 57 (44) sq. km Altitude 219 m
Island type: volcanic centre surrounded by raised coral with 76 m cliffs, fertile and well-watered.
Natural threats: cyclones
Human impact: pop. 2,100; agriculture; reforestation with exotic pines; jetty and airfield; commercial fishing; overfishing for giant clams.
Ecosystems: limestone scrub; Casuarina and Pandanus; grassland on volcanic soils; mangroves; fringing reef, windward barrier reef and extensive lagoon (CRD).
Special features: Tubou Cave of geological interest; studied by MAB project; 65 hard corals, 218 molluscs, 145 fish.
Proposed protected area: Tubou Cave proposed for protection in 1980 Parks Plan.
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1

Practicality of conservation action 1
Reliability of data 2
Human Impact 2
Conservation Importance 13

Aiwa

2 narrow raised coral islets (61 m) on extensive coral reef, honeycombed low bluffs and cliffs; feral goats.

Oneata

Low raised coral ridge (49 m) in lagoon of large coral reef, swampy central depression, dense scrub with few sandalwoods; also **Loa** islet and mushroom rocks.

Cakau Lekaleka (Thakau Lekaleka)

Barrier reef and closed lagoon; recommended for protection in 1980 Parks Plan.

Moce (Mothe)

Volcanic cone (10 sq. km; 180 m), rain forest, fringing reef; cultivated

Karoni

Raised coral (37 m), dense limestone scrub; coral reef; uninhabited.

Komo

Narrow volcanic ridge (82 m) within lagoon, dry grassland with Casuarina, Pandanus and coconuts; offshore volcanic islet.

Olorua

Small steep remains of volcanic cone (76 m), desolate.

Vanua Vatu

Circular raised coral (9 m), karst surface with dense scrub; small village, "sacred" red prawns.

Tavu Na Sici (Tavu Na Sithi)

Vuaqava (Vuanggava)

Raised coral atoll (7.7 sq. km; 107 m), coastal cliffs, fringing reef, central basin with tidal saltwater used as turtle pen by Kabara islanders; recommended for protection in 1980 Parks Plan.

Kabara (Kambara)

Area 31 sq. km Altitude 143 m
Island type: raised coral platform with 100 m cliffs and 30 m karstic central basin, plus 143 m volcanic hill.
Natural threats: cyclones
Human impact: inhabited; trees used for wood carving
Ecosystems: forest, fringing reef
Special features: Intsia bijuga and Burckella sp. used for canoe building and wood carving; MAB study site.

Marabo (Marambo)

Oval raised coral with karst surface, steep undercut cliffs and dense vegetation; uninhabited.

Namuka-i-Lau

Raised coral ridge (13 sq. km; 79 m), densely wooded interior with Intsia bijuga used for canoe building.

Yagasa Cluster (Yangasa Cluster)

Barrier reef enclosing 4 raised coral islets with undercut cliffs; recommended for protection in 1980 Parks Plan:

Yagasalevu (Yangasa Levu)

Raised coral (122 m) rising in terraces

Navutu-i-Loma

Rugged karst surface, many mushroom islets

Navutu-i-Ra

(82 m) low cliffs and mushroom islets

Yavuca (Yavutha)
Very rugged

Nayabo (Nayambo)
Atoll with small sand cay, dense atoll forest

Fulaga (Fulanga)
Area sq. km Altitude 82 m
Island type: raised coral in crescent surrounding lagoon
Natural threats: cyclones, drought
Human impact: inhabited; commercial fishing
Ecosystems: dense limestone forest with Pritchardia, fringing and atoll reefs, seagrass beds with Halodule.
Special features: scenic lagoon with many mushroom islets
Species of conservation interest
Plants
Pritchardia thurstonii (palm) rare, Fulaga and Sovu
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Proposed protected area: Fulaga Bay of Islands proposed for protection in 1980 Parks Plan.
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 11

Ogea Levu (Ongea Levu)
Area sq. km Altitude 82 m
Island type: raised coral, within barrier reef shared with Ogea Driki
Natural threats: cyclones
Human impact: inhabited
Ecosystems: dense limestone forest, fringing reef
Special features: permanent stream; fringed with mushroom islets.
Endemism: Total sp. No. endemic % endemic E VRI
Plants
Insects
Other invert.
Rept-Amph.
Birds 1
Mammals
Marine life
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
Mayrornis versicolor (Ogea or Versicolour Flycatcher) endemic, little known, indeterminate.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 12

Ogea Driki (Ongea Ndriki)
Raised coral (91 m) with perpendicular cliffs topped by deeply weathered karstic limestone, some phosphate present; dense limestone forest, mangroves; important seabird rookery; uninhabited.

Vatoa
Raised coral (64 m) with caves, barrier reef.

Vuata Vatoa
Circular reef with deep lagoon; moderate population of giant clams

Mana
Island with fringing reef suitable for protection

Ono-i-Lau
Area sq. km Altitude 91 m
Island type: 3 volcanic islands remaining from breached crater, and 3 low coral sand islets, within barrier reef; volcanic islands fertile, wet and swampy.
Natural threats: cyclones
Human impact: gardens on volcanic islands, coconuts on reef islets; airfield.
Ecosystems: barrier reef
Special features: plenty of water

Vuata Ono
Circular reef, no land; high density of giant clams

Tuvana-i-Ra
Low coral sand islet, dense atoll forest

Tuvana-i-Colo (Tuvana-i-Tholo)
Atoll with small sand cay, dense atoll forest and coconuts

Conway Reef (Ceva-i-Ra, Theva-i-Ra)
Atoll with coral sand cay (2 m)

Province VIII
TONGA - NIUE

Tonga and Niue are grouped together in one biogeographic province because of their proximity and their similarity in island types: raised coral with or without overlying volcanic ash soil, and volcanic islands.

KINGDOM OF TONGA (independent)

Land area 699 km^2 Sea area 700,000 km^2
Population 98,400 (1981) Density 141 persons/km^2 Growth rate (est.) 2.0%/yr

Species of conservation interest
Plants
ca. 770 species of vascular plants
70 species of ferns, with 3 endemics:
Dryopteris macroptera (fern) endemic
Cyathea rugosula (Ponga, tree fern) endemic to Tonga
3 species of gymnosperms, with 1 endemic:
Podocarpus pallidus (Uhiuhi) endemic to Tonga
698 species of angiosperms, including 9 endemics
Freycinetia urvilleana (Kahikahi, liana) endemic to Tonga
Aglia heterotruka (Langakali) endemic to Tonga
Wickstroemia rotundifolia (Lala Vau) endemic to Tonga, widespread
Insects
24 species of butterflies, all shared with other island groups
Other invertebrates
2 species of Partulidae (land snails)
Reptiles-amphibians
6 species of lizards including:
Brachylophus fasciatus [brevicephalus] (Banded Iguana) genus endemic to Tonga and Fiji, Vulnerable
Birds
Pachycephala melanops (Tonga Whistler) endemic to Tonga
Mammals
Pteropus tonganus (Flying Fox)
Marine life

Niuafo'ou

Area 35 sq. km Altitude 260 m
Island type: volcanic crater with central lake, 20-30 m coastal cliffs.
Natural threats: volcanic eruptions (last in 1929 and 1946), cyclones
Human impact: pop. 566 (1960s); subsistence agriculture
Ecosystems: reed swamp with Cyperus in lake; rocky coast
Special features: active volcano; crater lake with hot springs

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Megapodius pritchardii (Pritchard's Megapode or Malau) endemic, vulnerable, 200-400 (1976).
Vini australis (Lorikeet) Tonga and Samoa, last remaining Tongan population.
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 3
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 19

Niuatoputapu Group

Tafahi

Area 3.4 sq. km Altitude 610 m
Island type: extinct volcanic cone
Natural threats: cyclones, earthquakes
Human impact: pop. 60 (1960s)
Ecosystems: lowland rain forest; cloud forest on summit
Special features:
Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 14

Niuatoputapu

Area 16 sq. km Altitude 107 m
Island type: volcanic
Natural threats: cyclones, earthquakes
Human impact: pop. 1,389 (1960s), most land cleared for cultivation
Ecosystems: fringing reefs, barrier reefs
Special features:

Fonualei

Active volcano (2 sq. km; 183 m) with breached crater, forest on south ridge, barren lava to west, fringing reef; erupted in 1846; formerly inhabited; seabird rookery.

Toku

Low flat-topped active volcano, forest, fringing reef; formerly inhabited.

'Ata

Vava'u Group

Vava'u

Area 86 sq. km Altitude 204 m
Island type: raised coral platform with coastal cliffs
Natural threats: cyclones, earthquakes
Human impact: pop. 9,400 (1960s); mainly cultivated; serious reef damage
Ecosystems: grasslands, swamp; extensive coral reefs
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Pachycephala melanops (Tongan Whistler) endemic to Tonga
Mammals
Marine life

Koloa

Raised coral (1.8 sq. km)

Pangaimotu

Raised coral (9 sq. km; 88 m), cultivated

'Utungake

Raised coral (1.9 sq. km; 88 m)

Kapa

Raised coral (6 sq. km; 96 m), coastal cliffs

Nuapapu

Raised coral platform (2.7 sq. km; 64 m), coastal cliffs, limestone forest; shallow reefs.

Hunga

Raised coral (4.8 sq. km; 75 m), coastal cliffs; lagoon to south

Ovaka

Raised coral (1.4 sq. km), coastal cliffs, fringing reef

Late

Area 16 sq. km Altitude 518 m
Island type: high volcanic with coastal cliffs
Natural threats: cyclones, earthquakes
Human impact: occasional human use
Ecosystems: forest to west, scrub elsewhere; corals in pools
Special features: pigeons, wild pigs

Kao

Area 12 sq. km Altitude 1,030 m
Island type: high volcanic, 2 craters
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: small population
Ecosystems: forest on lower slopes; cloud forest on summit; rocky shore with shallow coral patches.
Special features: active volcano; freshwater crater lake
Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 2

Economic pressure 0
Human threat 1
Natural vulnerability 3
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 17

Tofua

Area 55 sq. km Altitude 488 m
Island type: high volcanic
Natural threats: volcanic eruptions, cyclones, earthquakes
Human impact: population left in 1854 due to risk of eruption, some returned.
Ecosystems: forest to south and southwest
Special features: active volcano; feral pigs

Ha'apai Group

Ofolanga

Low coral, sandy coast, barrier reef and lagoon

Mo'unga'one

Raised coral platform (1.3 sq. km), rocky coast, fringing reef only southeast

Luahoko

Turtle nesting area

Ha'ano

Raised coral (6.3 sq. km; 27 m), population density over 200 persons/km^2

Nukunamo

Foa

Raised coral (13 sq. km; 30 m), low cliffs; dense population

Lifuka

Raised coral (11 sq. km; 30 m), low cliffs to east; population density about 300 persons/km^2, most of island cultivated.

Uoleva

Raised coral (2.6 sq. km), forest; formerly inhabited.

Tatafa

'Uiha

Raised coral (5.4 sq. km; 30 m); burial ground for chiefs.

Lofanga

Raised coral platform (1.5 sq. km; 46 m), coastal cliffs and fringing reef; forest

Nukupule

(3 ha)

Meama

(2 ha)

Niniva

Raised coral platform (48 ha), forest

Fotuha'a

Raised coral platform (1 sq. km; 27 m)

Kotu Group

Kotu

Raised coral platform (41 ha; 15 m), coastal cliffs, forest

Matuku

Low coral platform (34 ha), forest

Ha'afeva

Coral platform (2 sq. km), sandy shore with barrier reef; dense population

Tungua
Circular low coral platform (1.6 sq. km), dense population
'O'ua
(1 sq. km) low cliffs and extensive reefs, dense population
Lekeleka
Small low island
Fonuaika
Small low island, turtle nesting area

Nomuka Group
Nomuka
Raised coral (5.3 sq. km; 51 m), narrow fringing reef, salt water lagoon 1.5 m deep with some Cyperus; cultivated, coconuts.
Nomuka Iki
Volcanic and raised coral islet (45 m) with extensive coral reefs
Nukufaiau
Turtle nesting area
Mango
Volcanic and raised coral (80 ha; 43 m)
Tanoa
(17 m)
Fonoifua
(44 ha; 20 m)
Tonumea
(12 ha; 42 m), dense forest
Kelefesia
Raised coral and volcanic (12 ha; 37 m), forest

Otu Tolu Group
Fetokopunga
Telekivava'u
Low, flat, wooded
Lalona
Low, flat, wooded
Telekitonga
Low, flat, wooded

Fonuafo'ou (Falcon)
Active volcano forming submerged shoal and temporary pumice islands (1885, 1896, 1927, 1955), altitude up to 110 m (1927).
Hunga Tonga
Low volcanic (39 ha; 149 m), coastal cliffs; possibly some phosphate; seabird rookery.
Hunga Ha'apai
Low volcanic ridge (65 ha; 122 m), grasslands on west side, some bushes and a few coconuts; possibly some phosphate; seabird rookery.

Tongatapu Group

Tongatapu

Area 257 sq. km Altitude 82 m

Island type: Raised coral platform, sloping gently from cliffbound south with wave-cut platform, to low-lying north with many offshore islets and reefs.

Natural threats: cyclones, earthquakes

Human impact: population over 50,000, density about 200 persons/km^2; almost entirely cleared for cultivation; Nuku'alofa urban area (capital); overfishing.

Ecosystems: coastal forest and scrub along cliffs; one remaining patch of lowland forest; secondary regrowth and grasslands; mangroves; fringing, patch and barrier reefs; sea grass beds; lagoons.

Special features: nearly-enclosed Faga'uta lagoon complex important for fish breeding.

Species of conservation interest

Plants

Pittosporum yunckeri (Lauteau) endemic, Tongatapu and 'Eua

Insects

Other invertebrates

Reptiles-amphibians

Birds

1 extinct bird Pomaria nigra tabuensis

Mammals

Pteropus tonganus (Flying fox)

Marine life

Protected areas

Ha'atafu Beach Reserve (CRD)	(8 ha)
Fanga'uta and Fangakakau Lagoons (VIII)	(2830 ha)
Ha'amonga Trilithon (cultural site)	23 ha
Mui Hopohoponga (protected landscape)	

Ratings

Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 2
Human Impact 10
Conservation Importance 14

Atata

(52 ha) wooded, extensive reefs contiguous with Tongatapu; inhabited.

Hakaumama'o Reef

Isolated exposed reef without land area, relatively undisturbed.

Protected area

Hakaumama'o Reef Reserve (CRD) (126 ha)

Malinoa

Raised coral islet on isolated reef; historical interest

Protected area

Malinoa Island Park and Reef Reserve (CRD) (73 ha)

Fafa

Monuafe

Low coral sand islet with scrub on extensive coral reef

Protected area

Monuafe Island Park and Reef Reserve (CRD) (33 ha)

Pangaimotu

Islet on extension of Tongatapu reef, scrub and coconuts; coral reef somewhat degraded; tourism.

Protected area

Pangaimotu Reef Reserve (CRD) (49 ha)

Onevai

Motutapu

Fukave

Nuku

Important seabird rookery

Ata

All islets on reefs north of Tongatapu

'Euaiki

Raised coral (1 sq. km; 55 m); inhabited

'Eua

Area 88 sq. km Altitude 329 m

Island type: volcanic, two parallel ridges with cliffs and terraces on east coast.

Natural threats: cyclones, earthquakes

Human impact: agricultural development, forest cutting

Ecosystems: Lowland rain forest (best examples in Tonga) with Calophyllum vitense and Eilatostachys falcata, higher forest with Alphitonia ziziphoides and Rhus taitensis; grasslands; scrub in central valley; fringing reef.

Special features: deep ravine with tree ferns and lianas

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		4			
Insects					
Other invert.					
Rept-Amph.					
Birds					
Mammals					
Marine life					

Species of conservation interest

Plants

- Dryopteris euanensis (fern) endemic
- Dryopteris macroptera (fern) endemic
- Ixora yunckeri (Hunivau, flowering shrub) endemic
- Dysoxylum tongense (Mo'ota, kula) endemic
- Pittosporum yunckeri (Lauteau) endemic to 'Eua and Tongatapu
- Maniltou amoxium (Tamanu) endemic to 'Eua and Vava'u

Insects

Other invertebrates

Reptiles-amphibians

Birds

- Prosopeia tabuensis (Red-breasted Musk Parrot) possibly introduced from Fiji.

Mammals

Marine life

Proposed protected area: 'Eua National Park along eastern coast, ridge and summit.

Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 6
Conservation Importance 18

Kalau

'Ata

Area 2.3 sq. km Altitude 355 m
Island type: high volcanic, with 2 peaks, coastal cliffs, plateau at 180 m
Natural threats: cyclones, earthquakes
Human impact: inhabited until 1860's; no feral animals
Ecosystems: rain forest; coconuts
Special features: important seabird rookery; few land birds
Proposed protected area: proposed as bird sanctuary or Biosphere reserve
Ratings
Natural conservation status 4
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 1
Human Impact 0
Conservation Importance 18

NIUE (Self-governing in free association with New Zealand)

Land area 259 km^2 Sea area 390,000 km^2
Population 3,200 (1981) Density 13 persons/km^2 Growth rate (est.) -3.3%/yr

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Niue

Area 259 sq. km Altitude 67 m
Island type: Raised coral platform with terraced cliffs, higher rim and karst topography, thin soil partly of volcanic ash origin
Natural threats: cyclones; high natural radioactivity
Human impact: agricultural development; some timber cutting; much degraded land from past agricultural use.
Ecosystems: limestone rain forest; coastal forest on terraces; secondary forest; scrub and fern barrens; fringing reef.
Special features: numerous caves and scenic coastal areas; rapid increase in degraded land over last 40 years from development and shifting cultivation.
Species of conservation interest
Plants
629 vascular plant taxa, including 175 indigenous species and varieties
Insects
no butterflies recorded
Other invertebrates
Reptiles-amphibians
Birds
(Polynesian Triller) endemic subspecies
Mammals
Marine life
Protected area
Huvalu Tapu Forest (traditional protected area since pre-European times)
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 12

Province IX
SAMOA - WALLIS AND FUTUNA

The central Polynesian islands of Wallis and Futuna and the two Samoas are relatively near each other and all at the same latitude, so they are share many biogeographic features.

WALLIS AND FUTUNA (Overseas Territory of France)

Land area 211 (255) km^2 Sea area 300,000 km^2
Population 12,408 (1983) Density 59 persons/km^2 Growth rate (est.) 4.0%/yr

Species of conservation interest
Plants
over 400 vascular plants (250 indigenous), 5 endemic species
Insects
2 species of butterflies
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Wallis Islands (Iles Wallis)
Uvea

Area 96 (60) sq. km Altitude 149 m
Island type: volcanic, relatively flat, within lagoon and barrier reef with 18 low coral or small volcanic islets.
Natural threats: cyclones
Human impact: pop. 8,084 (1983); most land cleared for subsistence agriculture; administrative centre and airport.
Ecosystems: pockets of lowland rain forest (15% of island in 1983); some secondary forest and scrub, grasslands, fernlands, Casuarina and Pandanus; fringing reef, lagoon rich in algae; barrier reef.
Special features: lake in crater; great pressure on land and resources from rapid population growth and returning migrants.
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 3
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 8
Conservation Importance 10

Horne Islands (Iles de Horne)
Futuna

Area 80 (65) sq. km Altitude 762 m
Island type: high volcanic, deeply dissected with many streams
Natural threats: cyclones

Human impact: pop. 4,324 (1983); growing population pressure on limited resources, overfishing, soil erosion.
Ecosystems: wooded valleys, fernland and Casuarina on ridges, grasslands at 450-600 m; montane rain forest above 400 m; about 30% of the island is forested; fringing reefs up to 100 m wide (CRD).
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		3			1
Insects					
Other invert.					
Rept-Amph.					
Birds		5			
Mammals					
Marine life					

Species of conservation interest
Plants
3 endemic species
Acronychia retusa endemic to Futuna and Samoa, threatened
Insects
Other invertebrates
1 Partulidae (land snail)
Reptiles-amphibians
Birds
5 endemic subspecies, 2 shared with Alofi
(White-collared Kingfisher) endemic subspecies
(Polynesian Triller) endemic subspecies
(Fiji Shrikebill) endemic subspecies
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 3
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 6
Conservation Importance 12

Alofi

Area 32 sq. km Altitude 366 m
Island type: high volcanic with some raised coral
Natural threats: cyclones
Human impact: uninhabited?; timber cutting; extensive recent land clearing by returning migrants (1986).
Ecosystems: lowland rain forest; fringing reef
Special features: one of least disturbed high islands in western Polynesia, now subject to increasing clearing and burning.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
(Blue-crowned Lory)

Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 3
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 3
Conservation Importance 12

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SAMOA ISLANDS
Species of conservation interest
Plants
Insects
Papilio godeffroyi (butterfly) group endemic, rare or indeterminate
Hypolimnas thompsoni (butterfly) group endemic
Other invertebrates
many extinctions of ground-dwelling but not arboreal land snails
Reptiles-amphibians
Birds
Halcyon recurvirostris (Flat-billed Kingfisher)* group endemic
Lalage sharpei (Samoan Triller) group endemic
Rhipidura nebulosa (Samoan Fantail)
Myiagra albiventris (White-vented Flycatcher) group endemic
Pachycephala flavifrons (Yellow-fronted Whistler) group endemic
Gymnomyza samoensis (Black-breasted Honeyeater) group endemic, Rare
Aplonis atrifuscus (Samoan Starling) group endemic
Mammals
Marine life

WESTERN SAMOA (independent state since 1962)

Land area 2,935 (2,841) km^2 Sea area 120,000 km^2
Population 156,000 (1981) Density 54 persons/km^2 Growth rate (est.) 0.7%/yr

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants			25%		
Insects					
Other invert.					
Rept-Amph.					
Birds	33	10	30%		
Mammals					
Marine life					

Species of conservation interest
Plants
ca. 200 species of ferns
plant species endemism for Samoa estimated at 25%

Insects
21 species of butterflies, all shared with other island groups
Other invertebrates
8 Partulidae (land snails)
some possible land snail extinctions
Reptiles-amphibians
7 species of lizards, 1 snake
Birds
33 land birds, 10 endemic species
Didunculus strigirostris (Tooth-billed Pigeon, Manume'a) unique species of ancient origin, endemic to Savai'i and Upolu, Vulnerable (RDB), requires large forest areas
Gallicolumba stairii stairii (Samoan Friendly Ground Dove)
Mammals
Marine life

Savai'i

Area 1,821 sq. km Altitude 1,857 m
Island type: high volcanic shield
Natural threats: volcanic eruptions, cyclones
Human impact: subsistence agriculture and plantations in most coastal areas; extensive timber cutting.
Ecosystems: lowland and montane rain forests of different types depending on age of volcanic substrate; cloud forest with many endemics; scrub and grasslands on recent lava flows and uplands; crater marshes and swamp forest; mangroves; fringing reefs alonmg some of coast.
Special features: active volcano last erupted in 1905-1911, lava flows with different stages of colonization.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		?			
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
rich endemic flora at higher elevations
Insects
Other invertebrates
Reptiles-amphibians
Birds
Zosterops samoensis (Savaii White-eye) endemic
Pareudiastes pacificus (Samoan Wood Rail) probably extinct, but may persist in upland Savai'i
Erythrura cyaneovirens (Red-headed Parrot-finch) declining
Didunculus strigirostris (Tooth-billed Pigeon) endemic to Savai'i and Upolu, Vulnerable (RDB)
Gymnomyza samoensis (Black-breasted Honeyeater) group endemic, Rare
Mammals
Marine life

Proposed protected areas in the 1975 National Parks System report:
Mount Silisili National Park
Tafua National Park
Lata Forest Strict Nature Reserve
Cape Puava Forest Nature Reserve
Maugaloa Nature Reserve
Taupou's Grave Lava Nature Reserve
Lake Mafane Nature Reserve
Lake Mautalano Strict Nature Reserve
Tufutafoe Nature Reserve
Vailoa Strict Nature Reserve
Sato'alepai Nature Reserve
Leanamoea Nature Reserve
A'opo Cave Strict Nature Reserve
Satufia Coral Sanctuary

Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 2
Human Impact 3
Conservation Importance 22

Apolima

Volcanic cone (5 sq. km; 166 m)

Manono

Volcanic and low coral sand (60 m) with fringing reef; densely populated and cultivated.

Upolu ('Upolu)

Area 1,114 sq. km Altitude 1,100 m

Island type: high volcanic shield, with cones along E-W ridge

Natural threats: cyclones

Human impact: lower slopes largely cultivated; coconut plantations; increasing agricultural clearing at high elevations; some logging; capital and urban centre of Apia.

Ecosystems: several lowland and montane rain forest types; swamp forest; scrub and fernland; grasslands; crater lakes, streams and other freshwater habitats; mangroves; extensive fringing reefs and shallow lagoons with seagrasses along most of coast.

Special features:

Species of conservation interest

Plants

Insects

Other invertebrates

Thaumatodon hystrellicoides (land snail) only at high altitudes, threatened by ants.

Reptiles-amphibians

Birds

33 species including:

Didunculus strigirostris (Tooth-billed Pigeon) endemic to Savai'i and Upolu, Vulnerable (RDB)

Mammals

Marine life

Protected areas

O Le Pupu - Pu'e National Park (II)	2,857 ha
Palolo Deep Marine Reserve (IV) (CRD)	(22 ha)
Tusitala Historic and Nature Reserve	64 ha
Togitogiga Recreation Reserve	3 ha

Proposed protected areas in the 1975 National Parks System report:

Lake Lanoto'o National Park
Lake Olomaga National Park
Mount Vaea Nature Reserve (expansion)
Apolimafou Nature Reserve
Vaipu Nature Reserve
Tiavi Nature Reserve
Fuipisia/Sopo'aga Nature Reserve
Matautu Nature Reserve
Pata Nature Reserve
Fusi/Tafitoala Nature Reserve
Sa'anapu Strict Nature Reserve
Aganoa Nature Reserve
Nu'usafe'e Island Nature Reserve
Salamumu Nature Reserve
Satuimalufilufi/Fuailolo'o Coral Sanctuary
Fusi/Tafitoala Coral Sanctuary
Nu'usafe'e Island/Tafatafa Coral Sanctuary

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 2
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 6
Conservation Importance 18

Aleipata Islands

Nu'utele, Nu'ulua, Namu'a, Fanuatapu

Area 1.75 sq. km Altitude m

Island type: volcanic tuff cones within Upolu reef system

Natural threats: cyclones

Human impact: accessible and easily visited, some former habitation, coconuts.

Ecosystems: lowland rain forest with Dysoxylum; coastal forest with Diospyros; beach scrub; fringing reefs and lagoon with seagrasses.

Special features: distinctive flora; seabirds on Nu'ulua; green turtle nesting area.

Species of conservation interest

Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Gallicolumba stairii stairii (Samoan Friendly Ground Dove) on Nu'ulua
Mammals
Marine life

Proposed protected areas in the 1975 National Parks System report:
Nu'utele Island Group National Park
Namu'a/Fanuatapu Islands Coral Sanctuary

Ratings
Natural conservation status 2
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 2
Human Impact 1
Conservation Importance 20

AMERICAN SAMOA (unincorporated territory of the United States)

Land area 197 km^2 Sea area 390,000 km^2
Population 33,200 (1981) Density 169 persons/km^2 Growth rate (est.) 1.8%/yr

Species of conservation interest
Plants
489 vascular plant species (including introductions), 11 endemic species
140 fern species, including 16 endemic species
plant species endemism for all of Samoa 25%
Insects
22 species of butterflies
Other invertebrates
9 endemic land snails recently extinct or endangered
Reptiles-amphibians
Birds
Mammals
Marine life

Tutuila

Area 135 sq. km Altitude 653 m
Island type: high volcanic, with eroded mountain chain, steep slopes, and a more recent, relatively flat volcanic platform.
Natural threats: cyclones
Human impact: coastal urban development, particularly around Pago Pago Harbour; fish canneries; airport; subsistence agriculture and other disturbance have affected two thirds of the island and many coastal and reef areas.
Ecosystems: fragments of lowland rain forest (to 300 m) with Diospyros, Dysoxylum, Pometia and Syzygium; montane rain forest (remaining mostly on slopes 300-700 m) with Dysoxylum; montane scrub; swamps; mangroves; fringing reefs; submerged coral bank.
Special features: coral reefs well documented since 1917; upper part of Mt. Matafao of interest for land snails; introduced Bufo marinus (Cane Toad), Achatina fulica (Giant African Snail) 1975, Euglandina rosa (Carniverous Snail) 1979.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		2			
Insects					
Other invert.	19	11	58%	4	
Rept-Amph.					
Birds					
Mammals					
Marine life					

Species of conservation interest

Plants

Drypetes sp. (Euphorbiaceae) endemic, localized

Elatostema tutuilense (Urticaceae) endemic, collected once

Insects

Other invertebrates

19 land snails, 11 endemics, 4 presumed extinct or nearly extinct, including:

Diastole matafaoi endemic, on Mt. Matafao, indeterminate, possibly extinct.

Samoana abbreviata (Short Samoan Tree Snail, Partulidae) endemic, indeterminate, possibly extinct

Reptiles-amphibians

Birds

Mammals

Marine life

174 species of hard corals in 48 genera and subgenera

Protected area

Fagatele Bay National Marine Sanctuary (IV) (CRD) (66 ha)

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 3
Human Impact 11
Conservation Importance 22

Aunuu ('Aunu'u)

Area 2.6 sq. km Altitude 61 m

Island type: volcanic islet with cone

Natural threats: cyclones

Human impact: village, some cultivation

Ecosystems: Diospyros coastal forest; mangroves; Pandanus littoral scrub; freshwater marsh; fringing reef.

Special features: crater lake, and mud lake "quicksand"; introduced Bufo marinus (Cane Toad).

Ratings

Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2

Human Impact 4
Conservation Importance 14

Manua Islands (Manu'a Islands)

Ofu

Area 8 sq. km Altitude 488 m
Island type: volcanic ridge with rich soil
Natural threats: cyclones
Human impact: coastal areas cultivated
Ecosystems: Dysoxylum forest on slopes; scrub; fringing reef
Special features: seabird rookery on Nu'utele Islet
Species of conservation interest
Plants
Insects
Other invertebrates
6 land snails, 2 endemics, 1 apparently extinct endodontid
Reptiles-amphibians
Birds
Mammals
Marine life
Proposed protected area: fringing reef at Papalola Point recommended as Marine Sanctuary (CRD).
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 5
Conservation Importance 17

Olosenga

Area 5 sq. km Altitude 639 m
Island type: volcanic, with pyramidal peak
Natural threats: cyclones
Human impact: coastal areas cultivated
Ecosystems: forested slopes; fringing reef
Special features:

Tau (Ta'u)

Area 44 sq. km Altitude 931 m
Island type: volcanic peak with crater
Natural threats: cyclones
Human impact: coconuts and other cultivation along coast
Ecosystems: lowland and montane rain forest; montane scrub; cloud forest with Cyathea; fringing reef.
Special features: important bird habitat, especially petrels and shearwaters; intermittent lake in crater.
Species of conservation interest
Plants
Insects
Other invertebrates
9 land snails, including 5 endemic or restricted species, 4 not found in 1975 and probably extinct: 1 endodontid, 3 charopids
Reptiles-amphibians

Birds
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 22

Rose Atoll

Area 8 ha (650 ha including reef and lagoon) Altitude 3 m
Island type: low coral islet and sand bank on small atoll, lagoon with 1 small pass.
Natural threats: cyclones
Human impact: uninhabited; landing prohibited without permit
Ecosystems: atoll forest of Pisonia grandis; sand strand vegetation with Boerhavia and Portulacea (total 7 species); coralline algal reef with abundant corals on vertical surfaces; lagoon with sandy bottom and algae (CRD).
Special features: seabird rookery (11 breeding species) and turtle nesting area; one of the world's smallest, most isolated and least disturbed atolls.
Species of conservation interest
Plants
7 plant species
Insects
Other invertebrates
Reptiles-amphibians
4 species
Eretmochelys imbricata (Hawksbill Turtle) nesting
Chelonia mydas (Green Turtle) nesting
Birds
20 species of birds
Mammals
Marine life
over 200 species of fish
Protected area
Rose Atoll National Wildlife Refuge (CRD) 8 ha
(656 ha including reef and lagoon)
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 4
Reliability of data 3
Human Impact 0
Conservation Importance 14

Province X
TUVALU - TOKELAU

[AMERICAN SAMOA, continued]

Swains Island (Olosenga)
Area 2.1 (2.6) sq. km Altitude 6 (8) m
Island type: atoll with closed brackish or freshwater lagoon
Natural threats: cyclones
Human impact: pop. 50 (1980); cultivated
Ecosystems: some Hernandia atoll forest and scrub; atoll reefs (CRD)
Special features: brackish lagoon

TOKELAU (Territory associated with New Zealand)

Land area 10 km^2 Sea area 290,000 km^2
Population 1,600 (1981) Density 160 persons/km^2 Growth rate (est.) 0.0%/yr

Species of conservation interest
Plants
35 indigenous plant species and 16 introduced plants
Insects
1 species of butterfly
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Atafu
Atoll with 42 islets (2.2 sq. km; 4 m) on triangular reef; beach scrub and coconuts.

Nukunonu (erroneously spelled Nukunono)
Area 5.4 sq. km Altitude 4 m
Island type: atoll with 24 islets around large lagoon
Natural threats: cyclones
Human impact: cultivated, coconuts
Ecosystems: some atoll forest, scrub; atoll reefs and lagoon
Special features: remnant atoll forest on Tokelau and Long islets
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 3
Conservation Importance 6

Fakaofo

Atoll with 61 islets (2.6 sq. km; 4 m) around rectangular reef, beach scrub and coconuts.

TUVALU (independent state)

Land area 26 km^2 Sea area 900,000 km^2
Population 7,600 (1981) Density 292 persons/km^2 Growth rate (est.) 1.7%/yr

Species of conservation interest
Plants
Insects
3 species of butterflies
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Nanumea

Narrow elongate atoll with 2 main islets (3.9 sq. km); 2 villages

Niutao

Low coral island (2.6 sq. km) with small totally enclosed saltwater lagoon and mangrove swamp in centre; fringing reef; dense coconuts; highest population density in Tuvalu.

Nanumanga

Low coral island (2.8 sq. km) with small totally enclosed saltwater lagoons and mangroves; one village.

Nui

Elongate atoll with 8 large and several smaller islets (2 sq. km) at the two ends and along the eastern reef; one village.

Vaitupu

Area 5.6 sq. km Altitude m
Island type: low coral island with two small internal lagoons connected to the sea by small passes.
Natural threats: cyclones
Human impact: subsistence cultivation, coconuts; some overfishing
Ecosystems: some mangrove and swamp, lagoons, broad fringing reefs
Special features:
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 6
Conservation Importance 5

Nukufetau

Rectangular atoll with islets in corners, along southeast reef, and scattered elsewhere (2.8 sq. km) around large sheltered lagoon, one village.

Funafuti

Area 2.8 sq. km Altitude m
Island type: large atoll with about 30 islets
Natural threats: cyclones (1891, 1958, 1972); 1972 cyclone caused extensive reef damage and built storm ridge of coral rubble.
Human impact: capital of Tuvalu and major population centre; airstrip; borrow pits from airport construction; some overfishing.
Ecosystems: coconuts; atoll scrub; small mangrove swamp inside main islet; atoll reefs and lagoon (CRD).
Special features: 55 vascular plants recorded in 1904
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 23
Conservation Importance 5

Nukulaelae (Nukulailai)

Elongate oval atoll with 3 large and 16 small islets (1.8 sq. km) on all but the central southwestern reef; one village.

Niulakita (Nurakita)

Small coral island (0.4 sq. km) with small fully enclosed lagoon areas in center, fringing reef; small village.

Kosciusko Bank

Possible reef reserve

Province XI
KIRIBATI - NAURU

REPUBLIC OF NAURU (independent state)

Land area 20.7 km^2 Sea area 320,000 km^2
Population 8,100 (1981) Density 348 persons/km^2 Growth rate (est.) 2.4%/yr

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Nauru

Area 20.7 sq. km Altitude 65 (71) m
Island type: raised coral platform with low surrounding terrace
Natural threats: drought
Human impact: pop. 8,100 (1981); most of central island plateau is being mined for phosphates; phosphate processing plant; high per capita income; urban development on lower coastal terrace.
Ecosystems: remnants of limestone forest with Calophyllum on plateau; scrub; mangroves (2 ha); fringing reef.
Special features: small lake (Buada lagoon)

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		1			
Insects					
Other invert.					
Rept-Amph.					
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
4 native ferns
35 native and 52 introduced dicotyledon taxa, 1 endemic
Phyllanthus n. sp., endemic
Insects
no butterflies reported
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus rehsei (Finsch's Reed-warbler) reportedly endangered
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 3
Human threat 2
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 21
Conservation Importance 9

REPUBLIC OF KIRIBATI (independent state)

Land area 690 (684) km^2 Sea area 3,550,000 km^2
Population 59,900 (1981) Density 85 persons/km^2 Growth rate (est.) 2.1%/yr

The Republic of Kiribati includes both the Gilbert Islands in Province XI and the Phoenix Islands and some of the Line Islands in Province XV. All are atolls or raised coral islands.

Species of conservation interest
Plants
60 native and 40 introduced species
Insects
1 species of butterfly
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Gilbert Islands

Banaba (Ocean Island)

Raised coral island (6.5 sq. km; 81 m), scrub, fringing reef; most of island surface mined for phosphates, now abandoned (population moved to Rabi Island, Fiji).

Makin (Little Makin)

Low coral island (5.4 sq. km), relatively wet with dense vegetation, fringing reef; turtle nesting area on nearby Katangateman sandbank.

Butaritari

Area 11.7 sq. km Altitude m
Island type: atoll with 10 islets around deep lagoon
Natural threats:
Human impact: inhabited, coconut plantations and subsistence agriculture; some remnants of W.W.II.
Ecosystems: Pisonia atoll forest on two small islets; atoll reefs and lagoon
Special features: forest with small seabird rookeries on Kotabu and Nabini islets.

Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 0
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 6

Marakei

Atoll, 2 large islets (10 sq. km) around lagoon; coconuts

Abaiang

Area 28 sq. km Altitude m
Island type: atoll with 6 large and many small islets around large elongate lagoon.
Natural threats: drought
Human impact: inhabited; coconut plantations
Ecosystems: atoll reefs and lagoon
Special features: seabird rookery and turtle nesting on Teirio islet.

Tarawa

Area 20 sq. km Altitude m
Island type: atoll with more than 15 islets on south and northeast sides, sunken reef on northwest.
Natural threats: drought
Human impact: capital and administrative centre with high population density; lagoon circulation disturbed by causeways between islets, some lagoon pollution; site of heavy W.W.II fighting.
Ecosystems: coconuts; atoll scrub; mangroves; atoll reefs and lagoon, sunken reef.
Special features:

Maiana

Atoll, 1 main island and several smaller islets (27 sq. km) on two sides of rectangular lagoon; coconuts.

Abemama

Atoll, more than 6 islets (23 sq. km) in continuous rim northeast of rectangular lagoon; coconuts, mangroves.

Kuria

2 low coral islands (12.7 sq. km), dense cover of Pandanus, coconuts and atoll scrub, fringing reef.

Aranuka

Atoll with 2 islets (15.5 sq. km) on triangular reef with small shallow lagoon; mangroves; coconuts.

Nonouti

Area 25 sq. km Altitude m
Island type: atoll with more than 8 islets along northeast side of reef, no large passes into lagoon.
Natural threats: drought
Human impact: inhabited; coconuts and subsistence agriculture
Ecosystems: Pisonia atoll forest on 1 islet; atoll reefs and lagoon
Special features: forest and seabird rookery on Numatong islet; sandbank with turtle nesting area.
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 3
Conservation Importance 7

Tabiteuea

Area 49 sq. km Altitude m
Island type: 2 large coral islets connected by string of small islets along northeast side of elongated reef.
Natural threats: drought
Human impact: inhabited; coconuts and subsistence agriculture
Ecosystems: secondary vegetation; coral reefs
Special features: seabird rookery on Namauri islet.

Beru

Atoll with one main islet (21 sq. km) on small reef; coconuts.

Nikunau

Low coral island (18 sq. km) with small landlocked lagoon, fringing reef; coconuts.

Onotoa

Area 13.5 sq. km Altitude m
Island type: atoll with 3 large islets and shallow (15 m) reef-bordered lagoon (54 sq. km); dry
Natural threats: drought
Human impact: heavily populated; coconuts and subsistence agriculture
Ecosystems: atoll scrub; atoll reefs and lagoon (CRD)
Special features: studied by 1951 expedition
Species of conservation interest
Plants
60 species of flowering plantsInsects
Other invertebrates
Reptiles-amphibians
Birds
10 seabirds
Mammals
Marine life
50-60 species of corals in 26 genera
352 species of fish

Tamana

Low coral island (5.2 sq. km), fringing reef; coconuts.

Arorae

Low coral island (26 sq. km), fringing reef; coconuts.

Province XV
PHOENIX - LINE - NORTHERN COOK ISLANDS

[KIRIBATI continued]

Phoenix Islands

Winslow Reef

Kanton (Abariringa, Canton)

Area 9.1 sq. km Altitude 5 m

Island type: atoll with broken rim of land around elongated lagoon 2 m deep.

Natural threats: drought

Human impact: phosphate mined 1885-1886; military installations and airbase 1938-1979; channels blasted into lagoon; now uninhabited except for caretakers.

Ecosystems: some atoll forest with Cordia and Tournefortia, mostly atoll scrub and grasses; many introduced weeds, 129 plant species, 18 native; atoll reefs and lagoon with patch reefs.

Special features: seabird rookery (8 breeding species); green turtle nesting area; feral cats and dogs.

Enderbury

Area 5.1 sq. km Altitude 7 m

Island type: low coral island with shallow remnants of lagoon in centre.

Natural threats: drought

Human impact: phosphate mined 1860-1890, former settlement and lighthouse; small military installation 1970-1979; uninhabited since 1979.

Ecosystems: mostly atoll scrub and grasses with small groves of trees, 23 plant species, 18 native; 2 lizards; fringing reef 50-200 m wide.

Special features: important seabird rookery (11 breeding species); most important green turtle nesting area in Phoenix group; feral cats.

Ratings

Natural conservation status 2
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 10

Birnie

Area 0.2 sq. km Altitude 4 m

Island type: low coral island with shallow brackish/supersaline? lagoon which often dries out completely.

Natural threats: drought

Human impact: never inhabited, the least disturbed of the Phoenix Islands

Ecosystems: low atoll herbs (3 species); fringing reef

Special features: seabird rookery (22 species, with 6 breeding in small numbers); green turtle nesting area.

Protected area: wildlife sanctuary 20 ha

Ratings

Natural conservation status 3
Ecosystem richness 0
Species richness 1

Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 13

Rawaki (Phoenix)

Area 0.49 sq. km Altitude 6 m
Island type: low coral island, supersaline lagoon of 20 ha in centre
Natural threats: drought
Human impact: phosphate mined 1859-1871
Ecosystems: atoll scrub of 6 species (one, Triumfetta procumbens, apparently now extinct); 30-100 m fringing reef.
Special features: very important seabird rookery (26 species, with 18 breeding), 4 populations of international importance; small green turtle nesting area; feral rabbits; no introduced plants.
Protected area: wildlife sanctuary 49 ha
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 2
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 14

Manra (Sydney)

Area 4.36 sq. km Altitude 6 m
Island type: low coral island with landlocked saline lagoon
Natural threats: drought
Human impact: phosphate mining 1883-1885; settled 1937-1961 but abandoned due to drought; coconut plantation; lagoon partly modified for aquaculture.
Ecosystems: atoll forest and scrub, 14 native plant species, 2 lizards; fringing reef 50 m wide
Special features: seabird rookery (21 species, with 7 breeding), few remaining (1980s); green turtle nesting area; feral cats, dogs, pigs.

Orona (Hull)

Area 3.91 sq. km Altitude 9 m
Island type: atoll with more than 24 islets making broken rim around rectangular lagoon.
Natural threats: drought
Human impact: coconut plantations; settled 1938-1963 but abandoned due to drought; small military installation 1970-1979.
Ecosystems: atoll forest and scrub, 19 native plant species, 4 lizards; atoll reefs 80-240 m wide, lagoon
Special features: seabird rookery (24 species, with 10 breeding), 2 populations of international importance; green turtle nesting area (may be numerous); feral cats, dogs, pigs.
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1

Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 12

McKean

Area 0.57 sq. km Altitude 5 m
Island type: low coral island with central landlocked supersaline lagoon
Natural threats: drought
Human impact: phosphate mining 1859-1870 enlarged lagoon
Ecosystems: scrub, 7 plant species, 1 lizard; 100-200 m wide fringing reef
Special features: important seabird rookery (29 species, with 17 breeding), 6 populations of international importance.
Protected area: wildlife sanctuary 57 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 12

Nikumaroro (Gardner)

Area 4.14 sq. km Altitude m
Island type: atoll with 2 elongate islets almost enclosing lagoon
Natural threats: drought
Human impact: coconut plantations; settled 1937-1963 but abandoned due to drought.
Ecosystems: atoll forest and scrub, 35 plants including 17 native, 5 lizards; atoll reefs 100-300 m wide, lagoon with numerous coral heads and patch reefs.
Special features: small seabird rookery (21 species, with 8 breeding); green turtle nesting area.

Carondelet Reef

Line Islands

Teraina (Washington)

Area 7.37 sq. km (or 14.2 ha?) Altitude 5 m
Island type: low coral island with central freshwater lake of over 2 km^2; high rainfall.
Natural threats:
Human impact: pop. 416 (1978), settled since 1860s; coconut plantations; subsistence agriculture and fishing; canals cut through bogs
Ecosystems: Pisonia atoll forest with epiphytes and fern undergrowth, atoll scrub, bogs, lake, fringing reef.
Special features: two unique bogs covering 100 ha with Scirpus riparius and Cyrtosperma chamissonis; seabird rookery (19 species, with 10 breeding); small green turtle nesting area; feral cats and pigs.
Species of conservation interest
Plants
35 flowering plants

Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus aequinoctialis (Christmas Island Reed Warbler) endemic to Teraina, Kiritimati and Baker, common
Vini kuhlii (Scarlet-breasted Lorikeet) apparently introduced from Austral Islands, several hundred pairs
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 0
Practicality of conservation action 2
Reliability of data 2
Human Impact 3
Conservation Importance 14

Tabuaeran (Fanning)

Area 33.7 (34.5) sq. km Altitude 4 m
Island type: atoll with 3 principal islets almost encircling closed lagoon
Natural threats:
Human impact: pop. 434 (1978), settled since 1848; 19th century phosphate mining; old cable station; half planted to coconuts; subsistence agriculture and fishing.
Ecosystems: Pisonia and Messerschmidia atoll forest, atoll scrub; narrow fringing reef, lagoon
Special features: small seabird rookery (formerly 27 species, with 12 breeding, now 6 breeding in trees); feral cats and pigs.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	22	2			
Insects					
Other invert.					
Rept-Amph.	5				
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
102 species of plants, including 22 native, 2 endemic
Insects
Other invertebrates
Reptiles-amphibians
5 lizards
Birds
Vini kuhlii (Scarlet-breasted Lorikeet) introduced, small population
Mammals
Marine life
70 species of hard corals
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1

Economic pressure 0
Human threat 1
Natural vulnerability 0
Practicality of conservation action 2
Reliability of data 2
Human Impact 2
Conservation Importance 10

Kiritimati (Christmas)

Area 321 (365) sq. km Altitude 4 m, with dunes reaching 13 m

Island type: atoll with one large island and almost landlocked lagoon divided into areas of various salinities, many supersaline; dry climate.

Natural threats: drought, "el Nino" effects on seabird food supplies

Human impact: pop. 1,265 (1978), doubled from 1973, settled since 1882 by immigrant workers; coconut plantations 51.7 sq. km; nuclear weapons tests 1956-1962; military installations 1942-1967, now abandoned; projects for brine shrimp and salt production in lagoon; some tourism.

Ecosystems: 3 patches of Pisonia atoll forest; mostly scrub savanna and scrub; grasslands; some areas bare; lagoon, saline ponds, coral reefs (CRD).

Special features: world's largest atoll in land area; very important seabird rookery (33 species, with 18 breeding) with 12 populations of international importance; some green turtle nesting; feral cats threaten seabirds.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	41	1			
Insects					
Other invert.					
Rept-Amph.	3				
Birds	33				
Mammals					
Marine life					

Species of conservation interest

Plants

18-41 native species plus 50 introductions

Cuscuta campestris endemic

Insects

Other invertebrates

Reptiles-amphibians

3 lizards

Birds

Acrocephalus aequinoctialis (Christmas Island Reed Warbler) endemic to Kiritimati, Teraina and Baker, common (population 1000)

Sterna fuscata (Sooty Tern) largest known colony of 8 million

Pterodroma alba (Phoenix Petrel) largest known colony of 24,000

Puffinus pacificus (Wedge-tailed Shearwater) 1 million

Puffinus nativitatus (Christmas shearwater) 12,000

Mammals

Marine life

Protected areas

Wildlife Sanctuary status, plus specific closed areas:

Cook Islet (I)	22 ha
Motu Tabu (I)	4 ha
Ngaon te Taake (I)	26 ha
Northwest Point (I)	
Motu Upua (I)	19 ha

Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 0
Human threat 2
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 3
Human Impact 2
Conservation Importance 17

Malden

Area 39.3 sq. km Altitude 8 m
Island type: low coral island with enclosed saline lagoon of 13 km^2 with numerous small coral islets and underground connections to the sea; dry climate.
Natural threats: drought
Human impact: phosphate mined 1849-1927, low grade mineral remains; gypsum deposits; military airstrip and observation post 1958-1979; now uninhabited.
Ecosystems: atoll scrub and grasses (16 plant species, 9 indigenous) including Heliotropium anomalum, 2 lizards; saline lagoon, fringing reef.
Special features: archaeological remains of early Polynesian settlement; important seabird rookery (19 species, with 11-12 breeding); small green turtle nesting area; few feral cats.
Protected area: Wildlife Sanctuary and Closed Area (I) 3,930 ha
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 3
Human Impact 0
Conservation Importance 14

Starbuck

Area 16.2 sq. km Altitude 5 m
Island type: low coral island with several internal saline lagoons at times drying up completely; dry climate.
Natural threats: drought
Human impact: phosphate mining 1870-1893; uninhabited since 1920
Ecosystems: impoverished atoll scrub (7 plant species); salt ponds; fringing reef.
Special features: important seabird rookery (15 species, with 3 to 11 species breeding) including Sterna fuscata (Sooty Tern) 1.5-3 million pairs; green turtle nesting area; feral cats.
Protected area: Wildlife Sanctuary and Closed Area (I) 1,620 ha
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0

Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 10

Vostok

Area 0.24 sq. km Altitude 5 m
Island type: low coral island, peat soil up to 1 m thick over phosphatic hardpan.
Natural threats:
Human impact: uninhabited; least disturbed of the Line Islands
Ecosystems: pure Pisonia grandis forest reaching 30 m height on 10-15 ha, Boerhavia repens only other plant reported; one skink, coconut crabs and Polynesian rats; fringing and sunken reefs.
Special features: valuable for its unaltered state; small seabird rookery (8 breeding species) in trees.
Protected area: Wildlife Sanctuary 24 ha
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 10

Caroline

Area 2.27 (3.8) sq. km Altitude 6 m
Island type: atoll with more than 24 islets around long shallow lagoon.
Natural threats:
Human impact: 19th century phosphate mining; settled 1846 to 1930s; coconut plantations; visited occasionally.
Ecosystems: atoll forest with Calophyllum and Pisonia, woodland and scrub, 35 plants, 15 native, 3 lizards; coconuts; atoll reefs and lagoon.
Special features: important seabird rookery (9 breeding species); green turtle nesting area.
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 11

Flint

Elongated low coral island (2.6 sq. km; 7 m), fringing reef; former phosphate mining; large coconut plantation; little native vegetation.
Area 3.24 (2.6) sq. km Altitude 7 m
Island type: elongated low coral island
Natural threats:

Human impact: phosphate mining 1872-1890; large coconut plantation; visited occasionally.
Ecosystems: little native vegetation, 14 native plants; fringing reef
Special features: small seabird rookery (7 breeding species); green turtle nesting area; feral dogs (1975).

Filippo Reef

USA (unincorporated territories)

Three of the Line Islands are unincorporated territories of the United States, as are two islands north of the Phoenix Islands.

Kingman Reef

Triangular reef with 1 tiny coral islet (0.03 sq. km), rich lagoon and atoll reefs; used briefly as seaplane station 1937-1938, otherwise undisturbed.

Palmyra

Area 3 (6) sq. km Altitude 2 m
Island type: atoll with over 50 islets around lagoon complex, high rainfall
Natural threats:
Human impact: pop. 40 (since 1979); plantations; military base WWII to 1961 with considerable construction and dredging, causeway between main islets.
Ecosystems: dense vegetation, wet atoll forest with Pisonia (15 plant species); lagoon, atoll reefs.
Special features: seabird rookery (29 species, with 10 breeding)
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 1
Natural vulnerability 0
Practicality of conservation action 1
Reliability of data 2
Human Impact 1
Conservation Importance 5

Jarvis

Area 4.45 (4.1) sq. km Altitude 8 (3) m
Island type: low coral island with central depression
Natural threats: drought
Human impact: 19th century phosphate mining; settlement 1935; now uninhabited; feral cats eliminated 1983.
Ecosystems: atoll scrub of 8 plant species, fringing reef 100 m wide (CRD).
Special features: seabird rookery (14 species, with 8 breeding); green turtles reported.
Protected area
Jarvis Island National Wildlife Refuge (IV) 445 ha
(15,189 ha including reef and water)
Ratings
Natural conservation status 3
Ecosystem richness 0

Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 3
Human Impact 0
Conservation Importance 14

Howland

Area 1.46 (0.89) sq. km Altitude 7 (5.3) m
Island type: low coral island
Natural threats: drought
Human impact: phosphate mined 1859-1878; airfield constructed 1937; feral cats have decimated Pterodrama alba (Phoenix petrel).
Ecosystems: grass and low scrub with 6 vascular plants including Corda; 100 m fringing reef (CRD).
Special features: seabird rookery (26 species, with 6 breeding); green turtles reported.
Protected area
Howland Island National Wildlife Refuge 146 ha
(11,880 ha including reef and water)
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 3
Human Impact 0
Conservation Importance 13

Baker

Area 1.24 sq. km Altitude 8 m
Island type: low coral island, very low rainfall
Natural threats: drought
Human impact: phosphate mined 1859-1878; settlement 1935-1942; military base in WWII with airstrip, birds nearly eradicated; uninhabited since.
Ecosystems: grasses and low scrub, 15 herbaceous species; fringing reef (CRD).
Special features: seabird rookery (15 species, with 6 breeding); green turtles reported; Acrocephalus aequinoctialis (Christmas Island Reed Warbler) formerly? present.
Protected area
Baker Island National Wildlife Refuge (IV) 124 ha
(11,583 ha including reef and water)
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1

Practicality of conservation action 3
Reliability of data 3
Human Impact 0
Conservation Importance 14

COOK ISLANDS (self-governing in free association with New Zealand)

Land area 241 km^2 Sea area 1,830,000 km^2
Population 17,400 (1981) Density 74 persons/km^2 Growth rate (est.) 1.1%/yr

The Cook Islands include both the Northern Cook Islands in Province XV at roughly the same latitude as the southern Line Islands, and the Lower Cook Islands with biogeographic ties closer to the Austral Islands in Province XVI.

Species of conservation interest
Plants
Insects
2 species of butterflies
Other invertebrates
13 endemic endodontids (land snails), only 2 found in 1965
2 partulids
Reptiles-amphibians
Birds
Ptilinopus rarotongensis (Rarotonga Fruit Dove) endemic to Atiu and Rarotonga.
Collocalia sawtelli (Cook Islands or Atiu Swiftlet) endemic to Cook Islands
Acrocephalus kerearako, southern Cook Islands
Mammals
Marine life
57 species of hard corals

Northern Cook Islands
Penrhyn (Tongareva)
Area 9.8 sq. km Altitude m
Island type: atoll, many islets
Natural threats: cyclones
Human impact: pop. 649 (1960s); coconut plantations; W.W.II airstrip; pearl fishing.
Ecosystems: coconuts, atoll scrub, atoll reefs, lagoon with pearl oysters
Special features: green and hawksbill turtle nesting area

Rakahanga
Area 4 sq. km Altitude m
Island type: atoll, 2 main islets to north and south, 7 smaller islets in between, lagoon has closed in last 25 years.
Natural threats: cyclones
Human impact: pop. 368 (1960s); coconut plantations
Ecosystems: remains of atoll forest, coconuts; atoll reefs; lagoon
Special features: lagoon going through ecological changes from open to closed type; green turtle nesting area.

Manihiki

Area 5.2 sq. km Altitude m
Island type: atoll, 2 large northern islets, many small islets to south, islets in lagoon.
Natural threats: cyclones
Human impact: pop. 1,089 (1960s); coconut plantations; potential for phosphate mining.
Ecosystems: coconuts, atoll scrub, atoll reefs, lagoon with pearl oysters
Special features: green and hawksbill turtle nesting area

Pukapuka

Area 5 sq. km Altitude m
Island type: atoll, triangular with three groups of islets at points, closed shallow lagoon 15 m deep.
Natural threats: cyclones
Human impact: pop. 800 (1960s); coconut plantations
Ecosystems: some Pisonia atoll forest, scrub, coconuts; atoll reef, lagoon
Special features: seabird rookeries on Motu Kotawa and Motu Ko; green and hawksbill turtle nesting area.
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 6
Conservation Importance 6

Nassau

Low coral island (1.2 sq. km) with a few sand dunes; coconuts, narrow reef flat and fringing reef.

Suwarrow (Suvarov)

Area 0.4 sq. km Altitude m
Island type: diamond-shaped atoll with more than 25 islets, deep lagoon (90 m) with good water exchange.
Natural threats: cyclones
Human impact: occasionally occupied, presently uninhabited; former pearl fishery.
Ecosystems: wet atoll forest, coconuts, atoll reef and lagoon (CRD)
Special features: seabird rookery, turtle nesting area
Protected area
Suwarrow National Park (IV) 40 ha
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 10

Province XVI
COOK - AUSTRAL ISLANDS

[COOK ISLANDS, continued]

Lower Cook Islands

Palmerston (Avarau)

Area 2.6 sq. km Altitude m
Island type: atoll, more than 8 islets around elongated lagoon
Natural threats: cyclones
Human impact: pop. 102 (1960s)
Ecosystems: atoll forest and scrub, coconuts, atoll reefs and lagoon
Special features: important Chelonia mydas turtle nesting area

Aitutaki

Area 18.1 sq. km Altitude 137 (119) m
Island type: volcanic island to one side of large lagoon which is silting up (mostly under 4.5 m, maximum 10.5 m deep), 13 low coral islets (2.2 sq. km) on triangular reef.
Natural threats: cyclones
Human impact: pop. 2,904 (1960s), much of land cleared for agriculture; airstrip.
Ecosystems: lowland rain forest, disturbed lowland vegetation; coconuts and scrub on coral islets; fringing reef, barrier reef 600-1000 m wide, lagoon with patch reefs (CRD).
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Vini peruviana (Tahiti Lorikeet) introduced in forest, Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 6
Conservation Importance 11

Manuae

Area 6 (22) sq. km Altitude m
Island type: atoll with 2 islets, closed lagoon filling with sediment
Natural threats: cyclones
Human impact: coconut plantations; little or no resident population
Ecosystems: coconuts; atoll reefs and lagoon
Special features: proposed as world marine park but ownership dispute prevented implementation; turtle nesting area.

Takutea

Low island (1.3 sq. km) subject to flooding by high seas; uninhabited, coconut plantations; seabird rookery; turtle nesting area.

Atiu

Area 27 (28.2) sq. km Altitude 91 m
Island type: central volcanic plateau surrounded by raised coral, low relief; ample water.
Natural threats: cyclones
Human impact: pop. 1,404 (1960s); agricultural development on volcanic plateau with soil erosion.
Ecosystems: freshwater marsh between volcanic plateau and limestone; fringing reef.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Ptilinopus rarotongensis ssp. (Rarotonga Fruit Dove) endemic subspecies.
Collocalia sawtelli (Cook Islands or Atiu Swiftlet) endemic to Cook Islands
Halcyon venerata ssp. (Kingfisher) endemic subspecies
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 11

Mitiaro

Area 22.3 sq. km Altitude m
Island type: low volcanic centre surrounded by raised coral; central lake
Natural threats: cyclones
Human impact: pop. 334 (1960s)
Ecosystems: limestone forest; freshwater marsh; fringing reef
Special features: lake in centre of island with endemic eel
Species of conservation interest
Plants
Santalum insulare var. mitiaro (Sandalwood) endemic variety, small population.
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Freshwater & marine life
Endemic eel in Lake Mitiaro

Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 1
Conservation Importance 12

Mauke

Area 18.4 sq. km Altitude 30 m
Island type: low volcanic centre surrounded by raised coral
Natural threats: cyclones
Human impact: pop. 866 (1960s); agricultural development
Ecosystems: lowland rain forest with Calophyllum and Thespesia; coconuts; freshwater swamp between volcanics and limestone; fringing reef.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Halcyon venerata ssp. (Kingfisher) endemic subspecies
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 3
Conservation Importance 11

Rarotonga

Area 64 (67) sq. km Altitude 652 (643) m
Island type: high volcanic with rugged eroded centre of peaks and ridges, and level lowland about 1 km wide with swampy inner area and some raised coral.
Natural threats: cyclones, fires
Human impact: inland centre largely undisturbed; high population in coastal lowland, with capital at Avarua, airport; agricultural and tourism development; soil erosion; reefs largely degraded.
Ecosystems: Homalium montane-slope forest, Fagraea-Fitchia ridge forest, Metrosideros cloud forest; Dicranopteria fernlands on degraded lower slopes; disturbed lowland vegetation; freshwater marshes and streams; tidal salt marsh; fringing reef 200 m wide on west and north, 400 m on south, 1000 m on east; some shallow lagoon.
Special features: Ngatangiia Harbour islands with reserve potential (CRD)

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	560	20	4%		
Insects					
Other invert.	13				
Rept-Amph.					
Birds		3		1	1
Mammals					
Marine life					

Species of conservation interest

Plants

560 vascular plant species, including 20 endemic species

Insects

Other invertebrates

13 endodontid land snails, of which 2 remained in 1965

Reptiles-amphibians

Birds

Ptilinopus rarotongensis ssp. (Rarotonga Fruit Dove) endemic subspecies, common

Pomarea dimidiata (Rarotonga Flycatcher, Kakerori) endemic to higer southern valleys, especially Totokoitu Valley, Vulnerable (RDB) or endangered, 20-30 (1985).

Aplonis cinerascens (Rarotonga Starling) endemic, apparently declining, 100 or more (1985).

Collocalia sawtelli (Cook Islands Swiftlet) endemic to Cook Islands

Acrocephalus kerearako, southern Cook Islands

Mammals

Marine life

Ratings

Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 1
Human threat 1
Natural vulnerability 2
Practicality of conservation action 2
Reliability of data 3
Human Impact 5
Conservation Importance 23

Mangaia

Area 51 (71) sq. km Altitude 169 m

Island type: low volcanic hills in centre surrounded by raised coral (30-90 m).

Natural threats: cyclones

Human impact: pop. 2,097 (1960s), settlement on limestone; volcanic area intensively cultivated; soil erosion.

Ecosystems: freshwater marsh between volcanic and limestone; fringing reef.

Special features: freshwater Lake Tiriara

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Halcyon [venerata] rufficollaris (Mangaia Kingfisher) endemic species or subspecies.
Acrocephalus vaughni ssp. (Pitcairn Reed Warbler) endemic subspecies
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 2
Conservation Importance 12

FRENCH POLYNESIA (self-governing overseas territory of France)

Land area 3,265 km^2 Sea area 5,030,000 km^2
Population 166,700 (1984) Density 51 persons/km^2 Growth rate (est.) 1.9%/yr

The islands of French Polynesia spread across five biogeographic provinces distinguished by island type and latitude as well as biological characteristics. The Austral Islands (except Rapa) have similarities with the southern Cook Islands (Province XVI); the Society Islands (XVII), Tuamotu Archipelago (XVIII) and Marquesas Islands (XIX) are each sufficiently distinct to warrant a province of their own; the Gambier Islands and Rapa are further south and are thus grouped with Pitcairn and Easter Island (Province XX).

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
18 endemic corals
52 cowries, 7 endemic

Austral Islands (Iles Australes, Tubuai)
Species of conservation interest
Plants
Insects
Other invertebrates
Endodontidae, 2 Partulidae
catastrophic snail extinctions
Reptiles-amphibians
Birds
Mammals
Marine life

Maria

Atoll with 4 islets (1.3 sq. km) on triangular reef around shallow lagoon, dense atoll forest, Pandanus and coconuts; former penal colony.

Rimatara

Area 18 sq. km Altitude 95 m
Island type: volcanic and raised coral
Natural threats: cyclones
Human impact: pop. 800 (1960s); agricultural development
Ecosystems: limestone forest; fringing reef
Special features: feral goats?

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants			<20%		
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
more than 20% endemism
Insects
Other invertebrates
Reptiles-amphibians
Birds
Vini kuhli (Kuhl's Lory, Lorikeet) endemic, status uncertain, successfully introduced to Teraina and Tabuaeran in the Line Islands
Acrocephalus vaughani rimatarae (warbler) endemic subspecies, common
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 2
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 14

Rurutu

Area 31 (29) sq. km Altitude 396 m
Island type: high volcanic with some raised coral
Natural threats: cyclones, fires
Human impact: pop. 1280 (1960s); airstrip; agricultural development; most endemic forest burnt.
Ecosystems: limestone forest; grassland and fernland on upper slopes, with forest remnants in ravines.
Special features: limestone forest of conservation interest; feral goats and cattle.
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 2
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 11

Moses Reef

Tupuai (Tubuai)

Area 49 (48) sq. km Altitude 399 (422) m
Island type: high volcanic island surrounded by barrier reef with 4 vegetated coral islets and 3 sandbanks.
Natural threats: cyclones
Human impact: pop. 980 (1960s); airport and hotels; agricultural development
Ecosystems: lowland rain forest; grasslands and fernlands on upper slopes; Casuarina and coconuts on reef islets; barrier reef and lagoon with rich coral fauna.
Special features: feral goats, pigs, cattle, horses, etc.
Species of conservation interest
Plants
150 species of flowering plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
77 species of corals including some not found elsewhere in Polynesia
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 9

Raivavae

Area 21 (16) sq. km Altitude 436 m
Island type: high volcanic island surrounded by barrier reef and reef islets
Natural threats: cyclones
Human impact: pop. 770 (1960s); some agricultural development
Ecosystems: lowland and montane rain forest; fringing reef, barrier reef and lagoon, outer reef fauna similar to Gambiers, lagoon fauna poorer.
Special features: important archaeological sites including temples and large statues; feral goats, pigs, cattle, horses, etc.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		?			
Insects					
Other invert.					
Rept-Amph.					
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
several important endemic plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 2
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 4
Conservation Importance 13

Neilson Reef

Province XVII
SOCIETY ISLANDS

[FRENCH POLYNESIA, continued]

Society Islands (Iles de la Société)
Species of conservation interest
Plants
ca. 700 vascular plant species
200 ferns, about 30% endemic
12 endemic genera
Insects
Phalanta marquesana (Nymphalinae; butterfly) endemic to Society and Marquesas Islands
Other invertebrates
65 species of Partulidae
many extinctions of ground-dwelling but not arboreal land snails
Reptiles-amphibians
Birds
22 resident land birds, 16 endemics, but 9 extinct, including 5 before 1900.
Ptilinopus purpuratus (Society Islands Fruit Dove) endemic
Ducula aurorae (Society Islands Pigeon) endemic to Tahiti and Makatea, Vulnerable (RDB).
Halcyon venerata (Society Islands Kingfisher)
Mammals
Marine life

Motu One (Bellingshausen)
Area 2.33 sq. km Altitude m
Island type: atoll with 4 islets on triangular reef, closed lagoon
Natural threats: cyclones
Human impact: coconut plantations
Ecosystems: atoll reefs and lagoon
Special features: seabird rookery; turtle nesting area.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Vini peruviana (Tahiti Lorikeet), Rare (RDB), possibly several hundred (1973)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 2
Conservation Importance 11

Manuae (Fenuaura, Scilly)

Area 3.5 sq. km Altitude m
Island type: atoll with nearly closed lagoon 50-70 m deep, heavy sedimentation.
Natural threats: cyclones
Human impact: few inhabitants; coconut plantations
Ecosystems: atoll reef, lagoon with patch reefs, abundant pearl oysters and Tridacna maxima (CRD).
Special features: seabird rookery; green turtle nesting area
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Vini peruviana (Tahiti lorikeet), Rare (RDB), over 600 (1973)
Mammals
Marine life
14 genera of hard corals
Pinctada margaritifera (Pearl Oyster) unexploited population (but under threat despite reserve status)
Protected area: the lagoon is a nature reserve
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 3
Conservation Importance 13

Maupihaa (Mopihaa, Mopelia)

Area 2.6 sq. km Altitude m
Island type: atoll with many islets
Natural threats: cyclones
Human impact: coconut plantations
Ecosystems: atoll scrub; coralline algal atoll reefs and lagoon
Special features: seabird rookery; turtle nesting area.
Species of conservation interest
Plants
3 ferns
36 native and 45 introduced angiosperm taxa
Insects
Other invertebrates
Reptiles-amphibians
Birds
Vini peruviana (Tahiti Lorikeet), Rare (RDB)
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 2

Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 3
Conservation Importance 11

Maupiti

Area 5 (13.5) sq. km Altitude 213 (380) m
Island type: high volcanic, barrier reef with reef islets
Natural threats: cyclones
Human impact: pop. 650 (1960s); airstrip; lagoon pollution from agricultural runoff.
Ecosystems: fringing reef, shallow partly reticulated lagoon and wide barrier reef.
Special features: 1 extinct bird Pomarea pomarea

Tupai

Area 21 sq. km Altitude m
Island type: atoll with 2 islets, narrow shallow closed lagoon with many patch reefs.
Natural threats: cyclones
Human impact: coconut plantations
Ecosystems: atoll scrub, 35 native fern species, 42 native and 53 introduced higher plants; atoll reefs and lagoon, patch reefs
Special features: seabird rookery

Bora Bora

Area 38 (30) sq. km Altitude 579 (727) m
Island type: high volcanic with barrier reef and reef islets
Natural threats: cyclones
Human impact: pop. 2000 (1960s); airstrip and hotels; intensive cultivation of lower slopes
Ecosystems: former lowland and montane forest; deep lagoon and wide barrier reef.
Special features: mangroves probably a recent introduction

Tahaa

Area 98 (88) sq. km Altitude 579 (590) m
Island type: high volcanic with barrier reef shared with Raiatea
Natural threats: cyclones
Human impact: pop. 3310 (1960s); some agricultural development
Ecosystems: lowland and montane rain forest types; lagoon and barrier reef.
Special features: some relatively undisturbed watersheds
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 4
Conservation Importance 14

Raiatea

Area 202 (194) sq. km Altitude 1,033 (1,017) m
Island type: high volcanic ridge with 8 peaks within barrier reef shared with Tahaa.
Natural threats: cyclones
Human impact: pop. 4818 (1960s); airstrip and hotels; coconut plantations in valleys and along coast.
Ecosystems: lowland and montane rain forest types, bamboo forest, cloud forest; lagoon and barrier reef.
Special features: Temehani Plateau with fragile and unique flora

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		2			
Insects					
Other invert.					
Rept-Amph.					
Birds				(2)	
Mammals					
Marine life					

Species of conservation interest
Plants
Apetahia raiateensis (Tiare apetahi) endemic to plateau
Kadua sp. endemic to plateau
Insects
Other invertebrates
Partula
Reptiles-amphibians
Birds
Acrocephalus caffer musae endemic subspecies, extinct
Aplonis mavornata endemic species, extinct
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 3
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 16

Huahine

Area 78 (73) sq. km Altitude 435 m and 456 (669) m
Island type: twin high volcanic islands, barrier reef raised at north forming cultivated terrace.
Natural threats: cyclones
Human impact: pop. 2500 (1960s); airstrip and hotels; coconut plantations and other agricultural development.
Ecosystems: forest; fringing reef largely dead, narrow barrier reef and lagoon.
Special features: two lakes with interesting faunas; archaeological sites; extinct bird subspecies Acrocephalus caffer ganetti; feral pigs.
Ratings
Natural conservation status 0
Ecosystem richness 1

Species richness 2
Economic pressure 3
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 5
Conservation Importance 15

Maiao (Tubuai-Manu)

Area 15 (9.5) sq. km Altitude 167 m
Island type: volcanic ridge with low coral margins, lagoon and barrier reef with 7 reef islets.
Natural threats: cyclones
Human impact: small population; coconut plantation; crab fishing
Ecosystems: fernland on upper slopes; freshwater marshes; barrier reef and lagoon
Special features:

Moorea

Area 132 (136) sq. km Altitude 1,121 (1,207) m
Island type: high volcanic, with steep upper slopes, shallow (3 m) lagoon and barrier reef; 4 low coral islets.
Natural threats: cyclones (1982-83)
Human impact: pop. 3,500 (1960s); tourism development; vegetation all disturbed; introduced mangroves; sand dredging in lagoon.
Ecosystems: forest with Inocarpus; lagoon and barrier reef with algal ridge (CRD).
Special features: saline lake; introduced Trochus niloticus exploited on reefs; important research site on Tiahura Reef (CRD).

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.		11		11	
Rept-Amph.					
Birds		2		1	1
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
11 endemic species of Moorean Viviparous Tree Snails (Partulidae), all Endangered (RDB) by introduced Euglandina rosea:
Partula aurantia, P. dendroica, P. exigua, P. mirabilis, P. mooreana, P. olympia, P. suturalis, P. taeniata, P. tohiveana.
Samoana diaphana, S. solitaria
Reptiles-amphibians
Birds
Acrocephalus caffer longirostris (Moorea Polynesian Warbler) endemic subspecies, montane forest 800-900 m, Endangered (RDB), close to extinction (1984).
Aerodramus leucophaeus (Swiftlet) small population
Halcyon venerata youngi (Kingfisher) endemic subspecies, rare (1972)
Mammals
Marine life
over 150 molluscs
280 species of fish

Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 2
Economic pressure 3
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 5
Conservation Importance 24

Tetiaroa

Area 6.4 (12.88) sq. km Altitude 3 m
Island type: atoll with 13 islets around lagoon
Natural threats: cyclones
Human impact: small population; coconut plantation
Ecosystems: atoll scrub, 4 native ferns, 47 native and 44 introduced higher plants; atoll reef and lagoon
Special features: seabird rookery (6 islets including Tahuna Iti)
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 3
Human threat 1
Natural vulnerability 1
Practicality of conservation action 2
Reliability of data 3
Human Impact 4
Conservation Importance 13

Tahiti

Area 1,042 sq. km Altitude 2,237 (2,241) m
Island type: high volcanic, twin cones deeply dissected, barrier reef; high rainfall.
Natural threats: cyclones (1982-83), fires
Human impact: more than half the population of French Polynesia (over 50,000); capital at Papeete with major urban development; military facilities, airport and port; major tourism development; lagoon pollution, reef degradation; development largely confined to coastal lowlands; frequent fires in fernlands and grasslands.
Ecosystems: lowland rain forest (largely disturbed), swamp forest, various types of montane rain forest, cloud forest; grassland and fernland on disturbed slopes; freshwater habitats including streams, river and lake; rocky shore; discontinuous fringing reef; some lagoon and barrier reef with coral cover to 80%.
Special features: Lake Vaihiria; archaeological sites; feral animals; introduced Trochus niloticus exploited on reefs; Papehoe Valley of interest for birds.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		1			
Insects		1			
Other invert.	80	79	99%		
Rept-Amph.					
Birds	12	1	8%	1	1
Mammals					
Marine life					

Species of conservation interest
Plants
Scleroteca jayorum endemic, Mt. Marau
Insects
Hypojamides catochloris (Lycaenidae; butterfly) endemic
Other invertebrates
80 species of land snails, 99% endemic
Reptiles-amphibians
Birds
12 species including:
Ducula aurorae (Society Islands Pigeon, Rupe) endemic to Tahiti and Makatea, Vulnerable (RDB), small local population (10-12 in 1975) in Papenoo Valley.
Pomarea nigra nigra (Tahiti Flycatcher) endemic, montane forest, Endangered (RDB), perhaps 100-500 (1984), other subspecies already extinct.
Butorides striatus patruelis (Heron) diminishing, less than 100 remaining (1984).
Aerodramus leucophaeus (Swiftlet) small population, 200-500 (1984)
Acrocephalus caffer caffer (Tahiti Polynesian Warbler) restricted
Hirundo tahitica, over 1,000 (1984)
extinct species include Tahiti Sandpiper
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 2
Economic pressure 3
Human threat 1
Natural vulnerability 2
Practicality of conservation action 0
Reliability of data 1
Human Impact 6
Conservation Importance 25

Mehetia (Meetia)

Area 2 sq. km Altitude 433 m
Island type: high volcanic cone, some raised coral
Natural threats: volcanic eruptions, cyclones
Human impact: not regularly inhabited
Ecosystems: coral communities on submarine slopes
Special features: active volcano; archaeological sites; feral goats and pigs

Province XVIII
TUAMOTU ARCHIPELAGO

[FRENCH POLYNESIA, continued]

Tuamotu Archipelago (Iles Tuamotu)
- Species of conservation interest
- Plants
  - 4 native ferns, 52 native angiosperms, 36% species endemism
- Insects
- Other invertebrates
- Reptiles-amphibians
- Birds
  - Gallicolumba erythroptera (Society Islands Ground Dove) extinct in Society Islands, group endemic, Indeterminate (RDB), on atolls without rats
  - Prosobonia [Aechmorhynchus] cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB), on a few small atolls without rats.
  - Acrocephalus caffer atyphus (Tuamotu Polynesian Warbler) group endemic subspecies, widespread in northwest Tuamotus.
  - Acrocephalus caffer ravus (Polynesian Warbler) group endemic subspecies, widespread in southern Tuamotus
  - Vini peruviana (Tahiti Lorikeet) Rare (RDB), on a few islands including Rangiroa
  - Pterodroma ultima, southeast Tuamotus, not threatened
- Mammals
- Marine life
  - 44 species of cowries

Mataiva (Matahiva)
- Elliptical atoll, visited occasionally

Tikehau
- Circular atoll, productive agriculture
- Species of conservation interest
- Plants
- Insects
- Other invertebrates
- Reptiles-amphibians
- Birds
  - Vini peruviana (Tahiti Lorikeet), Rare (RDB), 50 (1984)
  - Acrocephalus caffer atypha (Tuamotu Warbler) 100 (1984)
  - Ptilinopus coralensis (Fruit Dove) 50 (1984)
- Mammals
- Marine life
- Ratings
- Natural conservation status 1
- Ecosystem richness 0
- Species richness 1
- Economic pressure 1
- Human threat 1
- Natural vulnerability 1
- Practicality of conservation action 0
- Reliability of data 1
- Human Impact 2
- Conservation Importance 8

Rangiroa

Area 43 sq. km (1,640 sq. km including lagoon) Altitude m
Island type: atoll with 241 islets, narrow reef
Natural threats: cyclones
Human impact: pop. 700 (1985) in two villages; airport and hotels; coconut plantations; pearl fishery; aquaculture development.
Ecosystems: atoll forest with Guettarda, atoll scrub, atoll reefs and lagoon (20-35 m deep) with many passes, large areas of seagrasses, patch reefs (CRD).
Special features: second largest atoll in the world; seabird rookery at Motu Paio.
Species of conservation interest
Plants
41 native and 80 introduced vascular plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Vini peruviana (Tahiti Lorikeet) Rare (RDB) 100-200 individuals
Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB), sighted once (1973).
Mammals
Marine life
600 species of fish in lagoon
95 species of molluscs
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 3
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 4
Conservation Importance 10

Makatea

Area 28 sq. km Altitude 111 (113) m
Island type: raised coral platform with terraced cliffs and central depression, karstic surface.
Natural threats: cyclones
Human impact: pop. 30 (1985) greatly reduced from mining days; phosphate mined to exhaustion, 1917-1966, little or no lowland rain forest remaining.
Ecosystems: remnant Barringtonia asiatica forest, beach scrub; fringing reef 100 m wide with diverse corals only on outer slope.
Special features:
Species of conservation interest
Plants
over 200 taxa including introductions
Insects
Other invertebrates
Reptiles-amphibians

Birds
Ducula [pacifica] aurorae (Society Islands Pigeon) endemic to Tahiti and Makatea, Vulnerable (RDB), several hundred individuals (1974)
Ptilinopus chalchurus (Fruit Dove) common
Acrocephalus caffer eremus (Makatea Polynesian Warbler) endemic subspecies, common
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 2
Conservation Importance 11

Ahe

Atoll, 1 pass to lagoon, well wooded; inhabited at certain seasons; pearl fishing; Ptilinopus coralensis (Fruit Dove) present.

Manihi

Area sq. km Altitude m
Island type: atoll with shallow lagoon
Natural threats: cyclones
Human impact: airstrip and hotel; productive coconuts; pearl shell fishing and culture; some reef damage.
Ecosystems: atoll reefs and open lagoon with greatest coral diversity near pass.
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Ptilinopus coralensis (Fruit Dove)
Acrocephalus caffer atyphus (Tuamotu Warbler)
Mammals
Marine life

Takapoto

Area 23 sq. km (74 sq. km including lagoon) Altitude m
Island type: atoll with closed, slightly hypersaline (39.8 ppt) lagoon
Natural threats: cyclones (1982-83) with severe reef damage on east side
Human impact: pop. 400 (1985); airstrip; pearl culture
Ecosystems: atoll forest with Pisonia, atoll scrub; atoll reef and lagoon comparatively rich fauna, many patch reefs dominated by molluscs Tridacna maxima, Pinctada margaritifera, Arca ventricosa and Chama iostoma with high biomass (CRD).
Special features: important MAB research site, one of the best known atolls
Species of conservation interest
Plants
4 native ferns, 36 native angiosperms, 100 introduced
Insects

Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus caffer atyphus (Tuamotu Warbler) common (1984)
Ptilinopus coralensis (Fruit Dove)
Mammals
Marine life
24 genera of hard corals
300 species of fish
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 3
Human Impact 4
Conservation Importance 10

Takaroa

Atoll, 1 pass into lagoon; pearl fishing in lagoon; overfishing

Tikei

Low coral island (3 m), well wooded, fringing reef; seabird rookery

Arutua

Circular atoll, 1 pass into lagoon; wooded on north side; coconuts, pearl fishing

Apaataki

Atoll, lagoon with 3 passes; administrative centre, pearl fishing; seabird rookery; turtle nesting area

Kaukura

Atoll, lagoon with 2 narrow passes; badly damaged in 1903 cyclone; pearl fishing; seabird rookery

Niau

Area sq. km Altitude 5 m
Island type: eliptical atoll, completely enclosed lagoon; some phosphates present.
Natural threats: cyclones
Human impact: highly cultivated
Ecosystems: narrow swamp inside lagoon shore; fringing reef
Special features:

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants					
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
Halcyon gertrudae (Niau Kingfisher)* endemic, less than 100 (1972)
Acrocephalus caffer [atypha] niauensis (Tuamotu Warbler) endemic subspecies, common.
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 4
Conservation Importance 10

Toau

Atoll, occasionally inhabited; no ciguatera fish poisoning; potential reserve.

Aratika

Triangular atoll, lagoon with 2 passes; north side wooded; visited, pearl fishing.

Kauehi

Circular atoll; seabird rookery; turtle nesting area
Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 0
Human Impact 2
Conservation Importance 10

Taiaro

Area 20 sq. km (including lagoon?) Altitude 5 m
Island type: small circular atoll, single islet up to 700 m wide around lagoon, 12 km in circumference; closed lagoon slightly saltier than seawater, 25 m deep
Natural threats: cyclones
Human impact: coconut plantation
Ecosystems: atoll scrub/woodland of 23 species; lagoon with 23 molluscs, 1 echinoderm, 50 fish species, only one coral to depth of 1.5 m, atoll reefs with abundant corals, algal crest on windward reef (CRD).
Special features: seabird rookery
Protected area: whole atoll protected as
Réserve Intégrale W. A. Robinson (nature reserve) (IV, IX)
(Biosphere Reserve)
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1

Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 3
Human Impact 0
Conservation Importance 15

Raraka

Circular atoll

Fakarava

Rectangular atoll, islets only on east rim, 2 passes into lagoon; coconut plantations, former administrative centre, no pearl fishing.
Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Faaite

Atoll, lightly wooded

Anaa

Area sq. km Altitude m
Island type: atoll with 11 islets, closed lagoon
Natural threats: cyclones
Human impact: intensely cultivated; base for French nuclear testing programme.
Ecosystems: atoll reefs, lagoon dominated by Cardium fragum
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus caffer [atypha] palmarum (Tuamotu Warbler) endemic subspecies, frequent.
Mammals
Marine life
Ratings
Natural conservation status 1
Ecosystem richness 0
Species richness 1
Economic pressure 2
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 4
Conservation Importance 10

Tahanea

Atoll, lagoon with 3 passes, coconuts; visited occasionally

Motutunga

Low coral island; inhabited only part of year

Tepoto

Atoll, only small pass to lagoon; not regularly inhabited
Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Tuanake

Atoll, only small pass to lagoon; not regularly inhabited

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Hiti

Atoll, no entrance to lagoon; not regularly inhabited

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Katiu

Atoll, lagoon with 2 passes, low, vegetation covered; pearl fishing

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Makemo

Atoll, lagoon with 2 passes; well wooded to north; pearl fishing

Taenga

Atoll, well wooded to north, southern reef awash

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Raroia

Area 9 sq. km Altitude 2 m

Island type: oval atoll, many islets around lagoon; hot and dry

Natural threats: cyclones

Human impact: pop. 124 (1960s), coconut plantations (587 ha)

Ecosystems: dry atoll scrub (334 ha), 30 native plant species, 21 introduced; lagoon and atoll reefs.

Special features:

Takume

Atoll, lagoon with 2 passes; heavily wooded, coconuts; pearl fishery, overfishing.

Tepoto

Circular low coral island with central depression; coconuts; fringing reef

Napuka

Area sq. km Altitude m

Island type: irregular atoll with closed lagoon

Natural threats: cyclones

Human impact: coconut plantations; traditional fishing still practiced

Ecosystems: atoll forest and scrub; narrow reef, closed lagoon

Special features: seabird rookery; turtle nesting area.

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Acrocephalus caffer [atypha] flavidus (Tuamotu Warbler) endemic subspecies, extinct?, no information since 1920s.

Mammals

Marine life

Ratings

Natural conservation status 2

Ecosystem richness 0

Species richness 1

Economic pressure 0

Human threat 1

Natural vulnerability 1

Practicality of conservation action 0

Reliability of data 1
Human Impact 2
Conservation Importance 13

Fangatau
Atoll without pass into lagoon; coconut plantations with ferns and grasses; archaeological site.

Fakahina
Atoll; coconut plantations; archaeological sites

Pukapuka
Atoll without pass into shallow lagoon (less than 5 m deep), deep soil, wooded; visited occasionally; seabird rookery; turtle nesting area.

Nihiru
Circular atoll, closed lagoon, well wooded

Marutea (North)
Atoll, submerged barrier reef; no permanent inhabitants

Rekareka (Tehuata)
Atoll without pass into lagoon, no fresh water; not inhabited?

Tauere
Atoll; no permanent inhabitants

Tekokota
Atoll, closed lagoon; no permanent inhabitants; seabird rookery

Hikueru
Atoll, closed lagoon; some damage in 1903 cyclone; well wooded to north; coconuts; population about 1,000 (1960s); pearl shell fishing, overfishing.

Haraiki
Atoll, no permanent inhabitants

Reitoru
Atoll, closed lagoon; no permanent inhabitants

Marokau
Atoll, damaged in 1903 cyclone; pearl fishing

Ravahere
Atoll, closed lagoon, not regularly inhabited

Amanu
Atoll, well wooded

Hao
Atoll, lagoon with 1 pass; damaged in 1903 cyclone; coconut plantations; pearl fishing; airstrip for French nuclear test programme; research site.

Nengonengo
Nearly circular atoll; coconut plantations; pearl rich lagoon; not regularly inhabited.

Manuhangi
Atoll, closed lagoon; coconuts; no permanent inhabitants.

Paraoa
Atoll, closed lagoon; coconuts, pearl fishing, turtles; visited occasionally

Ahunui
Atoll, closed lagoon, coconuts; no permanent inhabitants

Akiaki
Low coral island, coconuts, fringing reef; visited occasionally

Vahitahi
Long atoll, closed lagoon; coconuts on west, east bare

Vairaatea
Atoll with 2 islets; coconuts and Pandanus; few inhabitants

Nukutavake

Area sq. km Altitude m
Island type: low coral island
Natural threats: cyclones
Human impact: coconuts
Ecosystems: fringing reef
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Prosobonia [Aechmorhynchus] cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB), present.
Mammals
Marine life
Ratings
Natural conservation status 2
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 0
Human Impact 1
Conservation Importance 8

Pinaki

Atoll with 3 islets to northwest; coconuts
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Prosobonia [Aechmorhynchus] cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB), present.
Mammals
Marine life

Takakoto

Low atoll, closed lagoon; coconuts to north

Pukarua

Atoll, closed lagoon; coconuts to northwest, southeast bare

Reao

Narrow atoll, closed lagoon with low coral diversity but high abundance of Porites mordax and Acropora formosa, high densities of Tridacna maxima; pop. 400 (1960s); former leprosarium

Hereheretue

Atoll without pass to lagoon: potential lagoon reserve

Anuanuraro

Atoll, closed lagoon; potential lagoon reserve

Anuanurunga

Atoll with 4 islets; coconuts; not permanently inhabited; potential lagoon reserve.

Nukutipipi

Atoll, closed lagoon; coconuts; not permanently inhabited; potential lagoon reserve.

Vanavana

Atoll with narrow strip of land enclosing lagoon; coconuts; visited occasionally.

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Tureia

Low atoll, closed lagoon; coconuts

Tematangi

Low atoll, closed lagoon; coconut plantation, pearl fishing; occasionally occupied.

Mururoa

Area sq. km Altitude 6.5 m

Island type: atoll with 300 islets, lagoon with 1 large pass and good circulation, up to 52 m deep.

Natural threats: cyclones (1904-06; 1980, 1981, 1983)

Human impact: French nuclear test site, 1966 to present, going underground in 1974; airport, major military installations, airport, extensive underground radioactive contamination, localized surface contamination (contained), drilling rigs in lagoon.

Ecosystems: coconuts; atoll reefs and lagoon, relatively rich lagoon coral fauna (CRD).

Special features: 80 species of corals in 26 genera; formerly 10 breeding species of birds.

Fangataufa

Oblong low coral island; French nuclear test site, airport, military installations.

Tenararo

Low atoll, closed lagoon; recent clearing for coconut replanting, damaged in 1983 cyclone; no permanent inhabitants

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Vahanga

Low atoll, closed lagoon; recent clearing for coconut replanting, damaged in 1983 cyclone; no permanent inhabitants

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Tenarunga

Low atoll, closed lagoon; recent clearing for coconut replanting, damaged in 1983 cyclone; no permanent inhabitants

Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Matureivavao

Area sq. km Altitude m

Island type: low atoll, closed lagoon

Natural threats: cyclones (1983)

Human impact: recent clearing for replanting of coconut plantations may have affected bird habitats; no permanent inhabitants

Ecosystems: atoll reefs and lagoon

Special features: no introduced rats; of interest for bird populations

Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians
Birds
Gallicolumba erythroptera (Society Islands Ground Dove) extinct in Society Islands, group endemic, Indeterminate (RDB), uncommon (1966).
Prosobonia [Aechmorhynchus] cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB), common (1969) probably breeding.
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 0
Conservation Importance 13

Marutea (South)
Area sq. km Altitude m
Island type: atoll 17 km long, 1 pass into lagoon
Natural threats: cyclones
Human impact: occasionally inhabited; coconuts; pearl fishing
Ecosystems: atoll scrub, atoll reefs and lagoon
Special features:
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians
Birds
Prosobonia [Aechmorhynchus] cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB), common (1969) probably breeding.
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 1
Conservation Importance 10

Maria
Atoll, closed lagoon, Pandanus and coconuts; visited occasionally
Prosobonia cancellata (Tuamotu Sandpiper) group endemic, Vulnerable (RDB) present 1920s, no recent information.

Morane
Atoll with 3 islets, closed lagoon; Pandanus and coconuts; no permanent inhabitants.

Province XIX
MARQUESAS ISLANDS

[FRENCH POLYNESIA, continued]

Marquesas Islands (Iles Marquises)

Species of conservation interest

Plants

76 pteridophytes and 171 native flowering plants, 103 endemics (Ex:1, E:17, V:13, R:7, I:21, K:40, nt:4)

20 endemic pteridopyhytes, all status insufficiently Known

Cheirodendron marquesense (Araliaceae) group endemic, Indeterminate

Reynoldsia marchionensis (Araliaceae) group endemic, Vulnerable

Cordia marchionica (Boraginaceae) endemic, Indeterminate

Heliotropium marchionicum (Boraginaceae) group endemic, K

Apetahia longistigmata (Campanulaceae) group endemic, Indeterminate

Celastrus crenatus (Celastraceae) group endemic

Bidens polycephala (Compositae) group endemic, Indeterminate

Weinmannia marquesana (Cunoniaceae) group endemic, K

Cyperus marquisensis (Cyperaceae) group endemic, K

Fimbristylis separanda (Cyperaceae) group endemic, K

Glochidion marchionicum (Euphorbiaceae) group endemic, K

Cyrtandra feaniana (Gesneriaceae) group endemic, Vulnerable

Cyrtandra ootensis (Gesneriaceae) group endemic, Endangered

Cyrtandroidea jonesii (Gesneriaceae) monospecific genus, group endemic, Endangered

Scaevola subcapitata (Goodeniaceae) group endemic, Endangered

Eragrostis marquisensis (Gramineae) group endemic, Rare

Eragrostis xerophila (Gramineae) group endemic, Vulnerable

Pennisetum simeonis (Gramineae) group endemic, K

Hernandia nukuhivensis (Hernandiaceae) group endemic, Endangered

Sesbania marchionica (Leguminosae) group endemic, Rare

Geniostoma hallei (Loganiaceae) group endemic, Indeterminate

Amylotheca mercieri (Loranthaceae) group endemic

Lebronnecia kokioides (Malvaceae) monospecific genus, group endemic, Rare, RDB

Ficus marquesensis (Moraceae) group endemic, K

Streblus sp. nov. (Moraceae) endemic, Endangered

Liparis clypeolum marquesensis (Orchidaceae) endemic subspecies, Endangered

Pritchardia pacifica marquisensis (Palmae) endemic subspecies, K

Freycinetia marquisensis (Pandanaceae) group endemic, Indeterminate

Freycinetia monticola (Pandanaceae) group endemic

Peperomia marchionensis (Piperaceae) group endemic, K

Alphitonia marquesensis (Rhamnaceae) group endemic, Indeterminate

Plectronia marquesensis (Rubiaceae) group endemic

Psychotria lebronnecii (Rubiaceae) group endemic, Vulnerable

Psychotria marchionica (Rubiaceae) endemic, Endangered

Santalum marchionense (Santalaceae) group endemic, Indeterminate

Allophylus marquesensis (Sapindaceae) group endemic, Vulnerable

Nicotiana fatuhivensis (Solanaceae) group endemic, Vulnerable

Trimenia marquesensis (Trimeniaceae) group endemic, Endangered

Pipturus henryanus (Urticaceae) group endemic, Endangered

Gahnia marquisensis (Cyperaceae) Rare

Coccothrinax argentata (Palmae) K

Insects

Other invertebrates
Endodontidae, 7 Partulidae
catastrophic land snail extinctions
Reptiles-amphibians
7 species of lizards
Birds
10 endangered species and 2 already extinct
Ptilinopus dupetithouarsii (White-capped Fruit Dove) group endemic
Ptilinopus mercierii (Red-moustached or Marquesas Fruit Dove, Kuku) group endemic; nominate race on Nuku Hiva may be extinct, only one subspecies surviving on Hiva Oa.
Gallicolumba rubescens (Marquesas Ground Dove) group endemic, Hatutaa and Fatu Huku, Indeterminate (RDB), probably vulnerable or endangered.
Vini ultramarina (Ultramarine Lory, Lorikeet) group endemic in montane forest, Nuku Hiva and Ua Pou, introduced to Ua Huka, Rare (RDB).
Halcyon godeffroyi (Marquesas Kingfisher)* group endemic, Hiva Oa and Tahuata
Pomarea iphis (Allied Flycatcher) group endemic
Mammals
Marine life
High level of species endemism
26 species of corals

Motu One (Ilot de Sable)
Area sq. km Altitude 3 m
Island type: low sandbank of volcanic material
Natural threats: drought, rare cyclones
Human impact: uninhabited
Ecosystems: low scrub and grass; fringing reef; Porolithon coralline algal bank to east.
Special features: seabird rookery; green turtle nesting area
Protected area: réserve intégrale
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 0
Human Impact 0
Conservation Importance 13

Hatutaa (Hatutu)
Area 18.1 sq. km Altitude 428 m
Island type: high volcanic; no surface water
Natural threats: drought, rare cyclones
Human impact: presently uninhabited, probably least altered of Marquesas Islands, no feral animals.
Ecosystems: grasslands and dwarf scrub heath of great botanical interest
Special features: seabird rookery

Species of conservation interest
Plants
Flora of 30 species with 6 endemic to Marquesas
Sesbania marchionica (Leguminosae) group endemic, Rare
Nicotiana fatuhivensis (Solanaceae) group endemic, Vulnerable
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus caffer [mendanae] postremus (Long-billed or Hatutaa Polynesian Warbler) endemic subspecies, Rare (RDB), 30-50 pairs (1975).
Gallicolumba rubescens (Marquesas Ground Dove) endemic to Hatutaa and Fatu Huku, Indeterminate (RDB), 200-250 (1975).
Mammals
Marine life
Protected area: réserve integrale 1,813 ha
Ratings
Natural conservation status 4
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 1
Practicality of conservation action 3
Reliability of data 2
Human Impact 0
Conservation Importance 19

Eiao

Area 51.8 sq. km Altitude 609 (577) m
Island type: high volcanic, porous rock with many caves
Natural threats: drought, rare cyclones
Human impact: presently uninhabited; vegetation devastated by feral pigs and sheep; extensive erosion; intense military activity in mid-1970s for studies of potential as a nuclear test site.
Ecosystems: formerly probably with dry forest; little remaining vegetation
Special features: seabird rookery; archaeological site; feral animals

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		5			5
Insects					
Other invert.					
Rept-Amph.					
Birds		2		1	1
Mammals					
Marine life					

Species of conservation interest
Plants
5 endemic species:
Achyranthes marchionica (Amaranthaceae) endemic, K
Heliotropium marchionicum (Boraginaceae) endemic, K
Bidens beckiana (Compositae) endemic, Indeterminate
Cyperus marquisensis (Cyperaceae) endemic, K
Ficus marquesensis (Moraceae) endemic, K
Insects
Other invertebrates
Reptiles-amphibians

Birds

Acrocephalus caffer [mendanae] aquilonis (Long-billed or Polynesian Reed Warbler) endemic subspecies, Endangered (RDB) or possibly extinct, small number in bush remnants of central plateau (early 1970s).

Pomarea iphis fluxa (Eiao or Allied Flycatcher) endemic subspecies, Indeterminate (RDB) or endangered.

Mammals

Marine life

Protected area: réserve intégrale 5,180 ha

Ratings

Natural conservation status 2
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 1
Human Impact 0
Conservation Importance 23

Motu Iti (Hatu Iti)

3 low barren dry islets, uninhabited

Nuku Hiva

Area 337 (120) sq. km Altitude 1,185 m

Island type: high volcanic; wet

Natural threats: rare cyclones

Human impact: main population and administrative centre, airport and hotels; most vegetation below 1000 m damaged or destroyed by domestic and feral animals.

Ecosystems: formerly lowland dry forest; intermediate rain forest in centre with Hibiscus, Piper and Cordyline; montane rain forest and cloud forest above 600 m with Metrosideros, Weinmannia and tree ferns; fringing reefs in some bays.

Special features: western valleys of Haatepuna, Hatihea and Taipi important for birds; feral animals.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		24		6	11
Insects					
Other invert.					
Rept-Amph.					
Birds		4		2(1)	1
Mammals					
Marine life					

Species of conservation interest

Plants

43 island or group endemic species, 24 island endemics, including:

Ilex marquesensis (Aquifoliaceae) endemic, Indeterminate
Bidens ahnnei (Compositae) endemic, Indeterminate
Bidens cordifolia (Compositae) endemic, Indeterminate
Bidens jardinii (Compositae) endemic, Endangered
Bidens serrulata (Compositae) endemic, Indeterminate
Cladium nukuhivense (Cyperaceae) endemic, K
Cyperus consocius (Cyperaceae) endemic, K
Fimbristylis marquesana (Cyperaceae) endemic, K
Fimbristylis nukahivensis (Cyperaceae) endemic, K

Cyrtandra nukuhivensis (Gesneriaceae) endemic, Endangered
Cyrtandra toviana (Gesneriaceae) endemic, Endangered
Pennisetum henryanum (Gramineae) endemic, K
Pennisetum marquisense (Gramineae) endemic, Rare
Astelia tovii (Liliaceae) endemic, Endangered
Pelagodoxa henryana (Palmae) endemic, Endangered (RDB), 30 individuals on one half hectare plot in Ta'ipiva'i Valley
Psychotria bowermanae (Rubiaceae) endemic, Vulnerable
Psychotria taupotinii (Rubiaceae) endemic, Endangered
Psychotria toviana (Rubiaceae) endemic, Endangered
Pelea nukuhivensis (Rutaceae) endemic, Indeterminate

Insects
Other invertebrates
Reptiles-amphibians
Birds

Ducula galeata (Marquesas Pigeon) endemic, western mountain ridges and valleys, Endangered (RDB), 45-105 (1970s).
Ptilinopus mercierii mercierii (Marquesas Fruit Dove) endemic subspecies, probably extinct.
Pomarea mendozae nukuhivae endemic subspecies, Endangered, probably extinct (RDB).
Vini ultramarina (Ultramarine Lorikeet) endemic to Nuku Hiva and Ua Pou, Rare (RDB), probably about 20 on northwest part of island.
Acrocephalus caffer percenis (Polynesian Warbler) endemic subspecies, common.

Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 2
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 2
Human Impact 4
Conservation Importance 26

Ua Huka

Area 78 sq. km Altitude 855 m
Island type: high volcanic
Natural threats: rare cyclones
Human impact: vegetation damaged by domestic and feral animals
Ecosystems: formerly lowland dry forest; montane rain forest and cloud forest above 600 m with Metrosideros, Weinmannia and tree ferns.
Special features: archaeological site; feral animals; seabird rookery on nearby islets of Motu Papa and Epiti.
Species of conservation interest
Plants
Insects
Other invertebrates
Reptiles-amphibians

Birds
Vini ultramarina (Ultramarine Lorikeet) introduced, Rare (RDB), ca. 450 (1975).
Acrocephalus caffer idae (Polynesian Warbler) endemic subspecies, abundant.
Pomarea iphis iphis endemic subspecies, common
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 1
Human threat 1
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 2
Human Impact 2
Conservation Importance 14

Ua Pou

Area 104 sq. km Altitude 1,231 (1,252) m
Island type: high volcanic cone
Natural threats: rare cyclones
Human impact: vegetation destroyed by domestic and feral animals, especially in northwest and up to 1000 m.
Ecosystems: formerly lowland dry forest and scrub; montane rain forest and cloud forest above 600 m with Metrosideros, Weinmannia and tree ferns; grasslands and fernlands.
Special features: Hohoi Valley important for birds; seabird rookery on nearby islets of Motu Mohoke and Motu Oa; feral donkeys.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		6			6
Insects					
Other invert.					
Rept-Amph.					
Birds		2			2
Mammals					
Marine life					

Species of conservation interest
Plants
6 endemic species
Bidens uapensis (Compositae) endemic, Indeterminate
Fimbristylis tertia (Cyperaceae) endemic, K
Rhynchospora marquisensis (Cyperaceae) endemic, K
Habenaria marquisensis (Orchidaceae) endemic, Vulnerable
Psychotria adamsonii (Rubiaceae) endemic, Vulnerable
Psychotria esulcata (Rubiaceae) endemic, Vulnerable
Insects
Other invertebrates
Reptiles-amphibians

Birds

Vini ultramarina (Ultramarine Lorikeet) endemic to Ua Pou and Nuku Hiva, Rare (RDB), population estimates: 200 (1972), over 500 (1985).

Pomarea mendozae mira (Flycatcher) endemic subspecies, Rare (RDB), 300-400 (1984).

Ptilinopus dupetithouarsii (White-capped Fruit Dove) group endemic, common (1985).

Aerodramus ocistus common (1985)

Acrocephalus caffer dido (Polynesian Warbler) endemic subspecies, common (1985).

Mammals

Marine life

Ratings

Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 17

Motuoa

Flat topped islet, grasses, seabird rookery; uninhabited

Fatu Huku

Area 1.3 sq. km Altitude 360 m
Island type: flat rocky islet, dry
Natural threats: drought, rare cyclones
Human impact: uninhabited
Ecosystems: Pisonia forest
Special features: seabird rookery
Species of conservation interest

Plants

Insects

Other invertebrates

Reptiles-amphibians

Birds

Gallicolumba rubescens (Marquesas Ground Dove) group endemic, Hatutaa and Fatu Huku, Indeterminate (RDB), local status unknown.

Mammals

Marine life

Ratings

Natural conservation status 3
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 1
Reliability of data 1
Human Impact 0
Conservation Importance 14

Hiva Oa

Area 241 (150; 320) sq. km Altitude 1,259 (1,190) m
Island type: high volcanic, rugged, wet
Natural threats: rare cyclones
Human impact: vegetation damaged by domestic and feral animals up to 1000 m.
Ecosystems: formerly lowland dry forest; intermediate rain forest on plateaux with Hibiscus, Piper and Cordyline; montane rain forest and cloud forest above 1000 m with Metrosideros, Weinmannia and tree ferns; grasslands and fernlands; fringing reef
Special features: undisturbed valleys around Puamau and Ootua important for birds.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		14		1	13
Insects					
Other invert.					
Rept-Amph.					
Birds		1		1	
Mammals					
Marine life					

Species of conservation interest
Plants
14 endemic taxa:
Bidens collina (Compositae) endemic, Indeterminate
Bidens henryi (Compositae) endemic, Indeterminate
Bidens hivoana (Compositae) endemic, Indeterminate
Oparanthus albus (Compositae) endemic, Vulnerable
Carex feanii (Cyperaceae) endemic, Endangered
Cyperus feanii (Cyperaceae) endemic, Rare
Scaevola marquesensis (Goodeniaceae) endemic, K
Korthalsella mumfordii (Loranthaceae) endemic, Rare
Pandanus mei (Pandanaceae) endemic, K
Ixora spathoidea (Rubiaceae) endemic, Indeterminate
Ixora sp. or subsp. nov. (Rubiaceae) endemic, Indeterminate
Psychotria hivaoana (Rubiaceae) endemic, Vulnerable
Psychotria mumfordiana (Rubiaceae) endemic, Vulnerable
Hydrocotyle feaniana (Umbelliferae) endemic, Indeterminate
Insects
Other invertebrates
Reptiles-amphibians
Birds
Ptilinopus mercierii tristrami (Red-moustached or Marquesas Fruit Dove) endemic subspecies, probably only surviving population of the species, status uncertain but reported present in 1980.
Pomarea mendozae mendozae endemic subspecies on Hiva Oa and formerly Tahuata, Endangered (RDB), few pairs surviving (1977).
Halcyon godeffroyi (Marquesas Kingfisher) endemic on Hiva Oa and Tahuata, uncommon in 1920's.
Acrocephalus caffer mendanae (Polynesian Warbler) endemic subspecies on Hiva Oa and Tahuata, common.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1

Economic pressure 2
Human threat 2
Natural vulnerability 0
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 18

Tahuata

Area 52 sq. km Altitude 999 (1,050) m
Island type: high volcanic, wet
Natural threats: rare cyclones
Human impact: pop. 500 (1960s); vegetation damaged by domestic and feral animals.
Ecosystems: formerly lowland dry forest; montane rain forest and cloud forest; grasslands and fernlands; fringing reefs in some bays.
Special features:
Species of conservation interest
Plants
Lebronnecia kokioides (Malvaceae) monospecific genus endemic to Tahuata (single tree) and Mohotani, Rare (RDB)
Insects
Other invertebrates
Reptiles-amphibians
Birds
Pomarea mendozae mendozae (Flycatcher) endemic subspecies on Tahuata and Hiva Oa, not seen since 1920's, probably extinct locally.
Halcyon godeffroyi (Marquesas Kingfisher) endemic to Tahuata and Hiva Oa, uncommon in 1920's.
Acrocephalus caffer mendanae (Polynesian Warbler) endemic subspecies on Hiva Oa and Tahuata, common.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 11

Mohotani (Motane)

Area 15.5 sq. km Altitude 518 m
Island type: volcanic, with coastal cliffs and gently sloping interior
Natural threats: drought, rare cyclones
Human impact: formerly inhabited, now visited occasionally
Ecosystems: scrub at lower elevations, grassland, woodland and high Pisonia forest in centre.
Special features: feral cats and sheep, undergrowth eaten out causing serious erosion all over island; seabird rookery (10 species breeding).

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		1		1	1
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest

Plants

1 endemic species:

Ixora marquesensis (Rubiaceae) endemic, Endangered

Lebronnecia kokioides (Malvaceae) endemic to Mohotani and Tahuata, only significant population, Rare (RDB)

Insects

Other invertebrates

Reptiles-amphibians

Birds

Pomarea mendozae motanensis (Flycatcher) endemic subspecies, 500-700 (1984).

Acrocephalus caffer consobrinus (Polynesian Warbler) endemic subspecies, uncommon.

Mammals

Marine life

Protected area: réserve intégrale 1,554 ha

Ratings

Natural conservation status 1
Ecosystem richness 1
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 2
Practicality of conservation action 3
Reliability of data 3
Human Impact 0
Conservation Importance 20

Thomasset Rock

Rocky islet, isolated.

Fatuhiva

Area 78 sq. km Altitude 1,118 (960) m

Island type: high volcanic eroded cone, wet on west side

Natural threats: rare cyclones

Human impact: pop. 300 (1960s); deforestation

Ecosystems: disturbed vegetation at lower elevations; montane rain forest and cloud forest above 600 m with Metrosideros, Weinmannia and tree ferns; very few corals.

Special features: feral goats have destroyed vegetation, also pigs, cats, cattle, horses.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		6		(1)	2
Insects					
Other invert.					
Rept-Amph.					
Birds		2			
Mammals					
Marine life					

Species of conservation interest
Plants
6 endemic species, including:
Cyperus moutona (Cyperaceae) endemic, K
Korthalsella feuana (Loranthaceae) endemic, K
Pelea fatuhivensis (Rutaceae) endemic, Extinct
Insects
Other invertebrates
Reptiles-amphibians
Birds
Pomarea whitneyi (Large Flycatcher) endemic, common
Acrocephalus caffer fatuhivae (Polynesian Warbler) endemic subspecies, common.
Mammals
Marine life
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 4
Conservation Importance 14

Province XX
PITCAIRN - GAMBIER ISLANDS - RAPA

[FRENCH POLYNESIA, continued]

Gambier Islands (Iles Gambier)

Mangareva

Area 13 sq. km Altitude 441 m
Island type: high volcanic
Natural threats: susceptible to fire
Human impact: pop. 700 (1960s); agricultural development; frequent burning on ridges; 98% of surface affected.
Ecosystems: forest remnant on southern cliff; Miscanthus reed grassland over most areas; relatively poor barrier reef; lagoon with rich coral fauna on pinnacles, many alcyonarians.
Special features: small flora

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		2		2	
Insects					
Other invert.	25	25		(25)	
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest

Plants

Achyranthes mangarevica (Amaranthaceae) endemic, Extinct or possibly Endangered (RDB)

Gouania mangarevica (Rhamnaceae) endemic, Extinct or possibly Endangered

Insects

Other invertebrates

4 genera and 25 species of endodontid land snails, only dead remains after catastrophic extinction found in remaining forest patch in 1934.

Reptiles-amphibians

Birds

Halcyon gambieri gambieri (Kingfisher) endemic subspecies, status uncertain.

Mammals

Marine life

246 species of fish

Ratings

Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 0
Reliability of data 1
Human Impact 6
Conservation Importance 16

Aukena

Area 1.3 sq. km Altitude 198 m
Island type: volcanic, rugged
Natural threats:
Human impact: coconut plantations, visited occasionally
Ecosystems:
Special features:

Akamaru

Area 1.8 sq. km Altitude 243 m
Island type: volcanic, rugged
Natural threats:
Human impact: pop. 2 (1960s), coconut plantations
Ecosystems:
Special features:

Manui

Volcanic, introduced rabbits; seabird rookery; visited for bird hunting.

Kamaka

Volcanic, not regularly inhabited

Makaroa

Volcanic, visited for cultivation and fishing

Tarauruoa

Volcanic; seabird rookery

Totegegie

Volcanic; seabird rookery

Motu Teiko

Volcanic; seabird rookery

Agakauitai

Volcanic (146 m), pop. 2 (1960s)

Taravai

Volcanic (5.7 sq. km; 243 m), pop. 12 (1960s) and decreasing.

Temoe (Timoe)

Atoll (1.8 m), lagoon enclosed by reef 90 m wide; atoll forest and scrub?, coconut plantations, visited occasionally.

Rapa

Area 22 (40, 54) sq. km Altitude 633 (650) m
Island type: high volcanic, temperate and moist, on gently sloping submarine platform.
Natural threats: vulnerable to fire
Human impact: some agricultural development; burning of vegetation; erosion from overgrazing.
Ecosystems: grasslands, cloud forest with tree ferns and epiphytes; rocky coast; marine algal cover up to 70%; coral communities.
Special features: estimated 5000 feral goats and 500 cattle (1982), but these may be excessive; seabird rookery on nearby islets.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	152	ca 100	66%		
Insects					
Other invert.	100	98	98%	(50)	
Rept-Amph.					
Birds		2			1
Mammals					
Marine life			10%		

Species of conservation interest
Plants
Many endemics (66% of 66(76) ferns and 86 angiosperms)
Sandalwood now extinct
Insects
Other invertebrates
5 genera and 100 species of land snails, 98% endemic
17 Endodontidae
1 Partulidae
half extinct by mid-1960s
Reptiles-amphibians
Birds
Ptilinopus huttoni (Rapa Island Fruit Dove, Koko) endemic, Rare (RDB), 200-300 in diminishing forest habitat (1975).
Fregetta grallaria titans endemic subspecies, breeds on islets near Rapa, possibly Marotiri
Puffinus assimilis myrtae breeds only on islets near Rapa, possibly Marotiri.
Mammals
Marine life
high algal cover, up to 70%
61 species of corals in 31 genera
250 species of molluscs with 10% endemics, many herbivores, 3 cowries
Ratings
Natural conservation status 0
Ecosystem richness 1
Species richness 1
Economic pressure 2
Human threat 2
Natural vulnerability 1
Practicality of conservation action 1
Reliability of data 1
Human Impact 5
Conservation Importance 24

Marotiri (Bass Islands)

9 volcanic rock pinnacles (26 ha; 105 m) without vegetation; seabird rookery.

PITCAIRN (dependent territory of the United Kingdom)

Land area 43.5 (36) km^2 Sea area 800,000 km^2
Population 44 (1983) Density 10 persons/km^2 (Pitcairn only)

Species of conservation interest
Plants
Euphorbia ramosissima (Euphorbiaceae) group endemic
Glochidion paniculata (Euphorbiaceae) group endemic
Canthium barbatum (Rubiaceae) group endemic
Insects
no butterflies recorded
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life

Pitcairn Islands
Pitcairn
Area 4.5 sq. km Altitude 304 m
Island type: high volcanic, good soil
Natural threats: volcanic eruptions
Human impact: settled 1790, evacuated temporarily in 1856; cultivation in centre and south; some reforestation.
Ecosystems: lowland and probably montane rain forest; scrub; grasslands; rocky coast.
Special features: feral goats, introduced plants such as Lantana

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants		2			
Insects					
Other invert.					
Rept-Amph.					
Birds		1			
Mammals					
Marine life					

Species of conservation interest
Plants
20 ferns, including 2 endemics
Insects
Other invertebrates
Reptiles-amphibians
Birds
Acrocephalus vaughani vaughani (Pitcairn Warbler) endemic subspecies, other subspecies on Henderson, Rimatara (Austral Islands) and Mangaia (Cook Islands).
2 remaining breeding seabirds
Mammals
Marine life

Oeno

Area 0.65 (0.8, 5) sq. km Altitude 4 m
Island type: atoll
Natural threats:
Human impact: largely undisturbed; some coconuts, visited occasionally
Ecosystems: atoll forest and scrub, atoll reefs
Special features: seabird rookery (12 breeding species)

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	17	2	12%		
Insects					
Other invert.					
Rept-Amph.					
Birds					
Mammals					
Marine life					

Species of conservation interest
Plants
2 ferns and 15 angiosperms, including 2 endemics
Bidens hendersonensis var. oenoensis endemic variety
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 12

Henderson

Area 32 (37) sq. km Altitude 33 (31) m
Island type: raised coral platform with slight depression in centre, 15 m undercut cliffs and karstic surface.
Natural threats:
Human impact: visited occasionally to cut wood for carving (Thespesia and Santalum), a few coconuts and citrus planted at landing place, otherwise undisturbed.
Ecosystems: dense limestone forest with Pandanus tectorus (5-10 m tall), high endemism, centre more sparsely vegetated; fringing reef 200 m wide to north and northwest (CRD).
Special features: seabird rookery (15 breeding species); green turtle nesting area.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	63	10	16%		2
Insects		11			
Other invert.	14	4	29%		
Rept-Amph.					
Birds	4	4	100%		
Mammals	1	0			
Marine life		3			

Species of conservation interest

Plants

9 ferns and 54 native higher plants, including 10 endemics:

Heliotropium anomalum var. candidum (Boraginaceae) endemic

Bidens hendersonensis var. hendersonensis and var. subspathulata (Compositae) endemic, Rare (RDB) primitive tree composite

Geniostoma hendersonense (Loganiaceae) endemic

Myrsine hosakae (Myrsinaceae) endemic

Pandanus sp. nov. (Pandanaceae) endemic

Peperomia hendersonensis (Piperaceae) endemic

Santalum hendersonense (Santalaceae) endemic

Nesoluma st.-johnianum (Sapotaceae) endemic

Celtis paniculata var. viridis (Ulmaceae) endemic

Insects

Devagama fasciata (Homoptera) endemic

Devagama insularis (Homoptera) endemic

Devagama maculatus (Homoptera) endemic

Atylana parmula thalna (Homoptera) endemic

Ugyops sp. (Homoptera) endemic

Catacanthus taiti (Hemiptera) endemic

Coleotichus sp. (Hemiptera) endemic

Lallemandrana insignis insignis (Hemiptera) endemic

Rhyncogonas hendersoni (Coleoptera) endemic

Microcryptorhynchus orientissimus (Coleoptera) endemic

Dacus setinervis (Diptera) endemic

Other invertebrates

14 land snails, including 3 endemic species and 1 subspecies:

Diastole glaucina (Helicarionidae) endemic

Tubuaia hendersoni (Achatinellidae) endemic

Tornatellides oblongus parvulus (Achatinellidae) endemic subspecies

Minidonta hendersoni (Endodontidae) endemic

4 other species may prove to be endemic

Reptiles-amphibians

Birds

4 land birds, all endemic:

Nesophylax ater (Henderson Rail, Chicken Bird) endemic, good population but vulnerable.

Ptilinopus insularis (Henderson Fruit Dove) endemic

Vini stepheni (Henderson Lorikeet) endemic

Acrocephalus vaughani taiti (Henderson Warbler) endemic subspecies

Mammals

Marine life

probable high level of endemism, only molluscs studied:

Engina fuscolineata endemic

Tritonidea difficilis endemic

Tritonidea rosacea endemic

Calliostoma roseopictum

Proposed protected area: to be nominated as World Heritage site

Ratings
Natural conservation status 4
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 22

Ducie

Area 0.7 sq. km Altitude 4 m
Island type: atoll, lagoon with poor water circulation
Natural threats:
Human impact: uninhabited, rarely visited
Ecosystems: atoll forest; atoll reefs and lagoon, reef corals mostly recently dead (1970), extensive algae and coralline algae (CRD).
Special features: seabird rookery (12 breeding species)
Species of conservation interest
Plants
3 plant species
Insects
Other invertebrates
Reptiles-amphibians
Birds
Mammals
Marine life
14 species of corals
50 species of molluscs
138 fish species (poor)
Ratings
Natural conservation status 3
Ecosystem richness 0
Species richness 0
Economic pressure 0
Human threat 0
Natural vulnerability 0
Practicality of conservation action 2
Reliability of data 2
Human Impact 0
Conservation Importance 11

TERRITORIES OF CHILE

Easter (Isla de Pascua, Rapa Nui)

Area 166 sq. km Altitude 600 m
Island type: high volcanic
Natural threats:
Human impact: pop. 1,200 (1960s); deforested through overpopulation in prehistoric times; grazing; many introduced species.
Ecosystems: grasslands with Stipa, Nasella, introduced Sporobolus indicus and Cynodon dactilon; bog in crater with outer swamp of Polygonium and Scirpus, Campylopus in centre.
Special features: 2 crater lakes including Rano Kao crater with bog; giant statues and archaeological sites.

Endemism:	Total sp.	No. endemic	% endemic	E	VRI
Plants	45	5	11%	(1)	
Insects					
Other invert.					
Rept-Amph.	2				
Birds	4				
Mammals					
Marine life			15%		

Species of conservation interest
Plants
150 species, 45 indigenous
Sophora toromiro only recorded tree, endemic, extinct in wild
Campylopus turficola (moss) endemic, in crater bog
3 endemic grasses
Insects
Other invertebrates
Reptiles-amphibians
2 species
Birds
4 terrestrial species and 3 seabirds
Mammals
Marine life
high level of species endemism
Gastropods 15%
Bivalves 2.7%
Protected area
Rapa-Nui National Park (II) 6,800 ha
Ratings
Natural conservation status 0
Ecosystem richness 0
Species richness 1
Economic pressure 0
Human threat 1
Natural vulnerability 0
Practicality of conservation action 3
Reliability of data 2
Human Impact 1
Conservation Importance 15

Sala y Gomez (Isla Sala y Gomez)

Volcanic, 2 hills of bare rock (29 m) joined by narrow isthmus

INDEX TO ISLANDS

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