Report on a day of observations and collections of flora and fauna

on Ile Brion, 13 Aug. 2009





Paul M. Catling Brenda J. Kostiuk Lucie d'Amours Alain Richard

Limeston Scurvy Grass Cochlearia tridactylites (left) and habitat on sea cliffs (above) Photos by P.M. Catling near Cap du Monolithe, 13 Aug. 2009

Published privately in Ottawa and circulated in February 2010

© P.M. Catling 2010

Report on a day of observations and collections of flora and fauna on Île Brion, 13 Aug. 2009

Paul M. Catling¹, Brenda J. Kostiuk¹, Lucie d'Amours², Alain Richard³

²397 ch. Dune du Sud, Havre-aux-Maisons, Quebec G4T 5G3 e-mail : <u>luciedamours@ilesdelamadeleine.ca</u>

³C.P. 8017, Cap-aux-Meules, Québec, G4T 1R3 e-mail: <u>alainrichard@yahoo.com</u>

CONTENTS

Introduction	1
Vascular Flora	12 13
Fauna	
General Observations	
Acknowledgements	
References	13

Introduction

As part of an ongoing study of the flora and fauna of North Atlantic coastal islands, a collecting trip was undertaken to gather information on the flora of Île Brion, which is located at approximately 47.7958 N, -61.4666 W, and is part of Îles-de-la-Madeleine. This report lists all vascular plants seen/collected on the island as part of a project to develop a complete list. A few observations of insects and vertebrates are also included.

A research collecting permit for plants for la réserve écologique de l' Île Brion was provided by Ministère du Développement durable, de l'Environnement et des Parcs.

Route of the survey

Some of the previous work on Brion has concentrated on more accessible dune and wetland habitat and forest east of the lighthouse. The observations and collections reported here are of importance in representing well the open meadow and heathland parts of the island. The route is shown on Figure 1.

¹Agriculture and Agri-Food Canada, Environmental Health, Biodiversity, Wm. Saunders Bldg., Central Experimental Farm, Ottawa, Ontario, CANADA K1A 0C6 e-mail: catlingp@agr.gc.ca

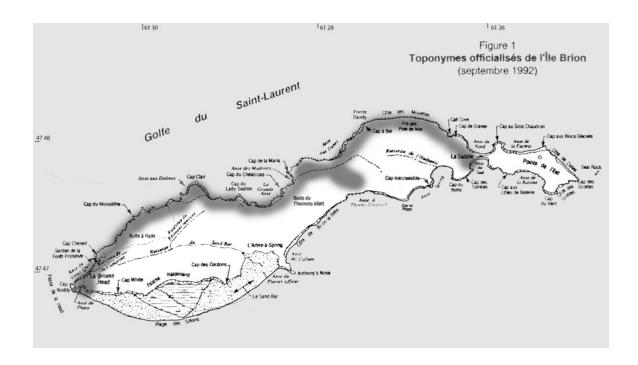


Figure 1. Route (shaded) of the 13 Aug. 2009 survey of Brion.

Notable Observations

Based on the flora of islands in the region and on habitat variation on Brion, we suspect that there may be 200-250 species on the island of which 10-15% would be introduced. This list thus documents approx. half of the island vascular flora with voucher specimens.

It is difficult to know with certainty whether any of the species observed or collected are new to Brion or to the Îles-de-la-Madeleine because the information on the flora and fauna of this region is dispersed throughout an extensive literature and in collections (mostly MT and QFA) and personal notes. A compilation of records is underway. However, it appears that the brief 2009 survey may have resulted in 10-20 additions to the plants of Brion. Some may also be new to the archipelago including *Dryopteris expansa*, *Agrostis canina*, and *Rosa nitida*. *Cochlearia tridactylites* was a notable collection. This rare plant was found previously on Brion but was not reported. It, or a related species is also known from other islands in the main chain.

In addition to the potential new records, it was observed that Brion has many of the distinctive floristic elements of the northeastern maritime region. These species include: Abies balsamea var. phanerolepis, Agrostis canina, Cochlearia tridactylites, Dryopteris campyloptera, D. expansa, Juniperus communis var. megistocarpa and Ligusticum scoticum ssp. scoticum.

Among the unusual plant forms observed were *Vaccimium vitis-idaea* and *Vaccinium macrocarpon* with white berries. Also notable was the relatively large size of some herbaceous plants in the woodland near the lighthouse including ferns, *Prenanthes trifoliata*, *Solidago macrophylla* and especially plants of *Oclemena acuminate*, some of which had the broad, acute leaves of var. *magdalenense*.

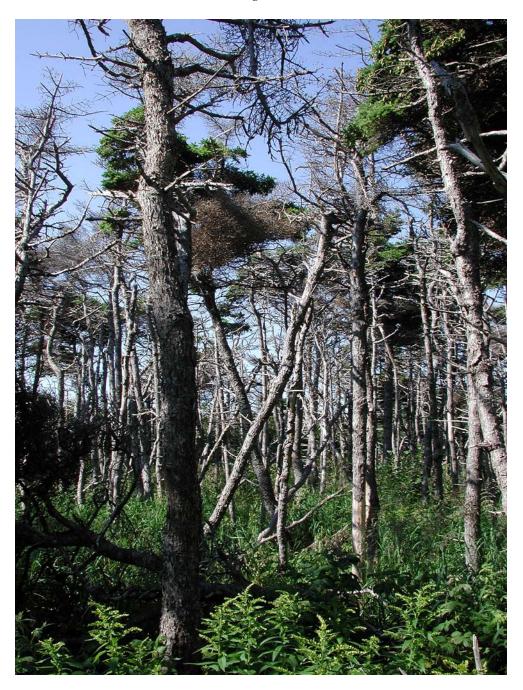


Figure 2. Largely dead coniferous forest was the most widespread plant community on the island. Photo taken near Cotes des Mouettes by P.M. Catling, 13 Aug. 2009.

Conifers on much of the island had been killed (Figure 2, see also photos at the end by Lucie d'Amours) by a phenomenon that has not been investigated yet. The White Spruces seem to be most affected. This apparently began a few years ago. We strongly recommend a specific evaluation by specialists in this field and local biologists have already shown some interest. The distinctive thick Spruce-Fir woodlands on Brion may have been the best preserved examples in the Magdalen chain, but with the death or decline of 80% of the trees in some areas, shade-adapted woodland vegetation has been replaced by *Solidago rugosa*, *Calamagrostis canadensis*, *Rubus* sp. and other species.

VASCULAR FLORA

A total of 100 species of vascular plants were recorded of which collections were made for 89 and 11 are based on sight records. Species recorded but not collected (sight records) included *Abies balsamea* (L.) P. Mill., *Chamerion angustifolium* (L.) Holub. ssp. angustifolium, Cirsium arvense (L.) Scop., Cirsium vulgare (Savi) Ten., Cornus sericea L. ssp. sericea, Heracleum maximum Bartr., Hylotelephium telephium (L.) H. Ohba ssp. telephium, Iris versicolor L., Juncus effusus L. var. effuses, Juniperus communis L. var. megistocarpa, Picea glauca (Moench) Voss, Spartina pectinata Bosc ex Link, Trientalis borealis Raf. ssp. borealis. All 99 are listed in Table 1.

Table 1. Annotated List of Plants collected (89 taxa in DAO) and observed without a collection (11 taxa) on Île Brion, 13 Aug. 2009. The sequence of family names (in small capitals) is that used in standard older manuals such as Fernald (1950). Species marked with an asterisk (*) are introduced but well established and those introductions preceded by a cross (+) are persisting but not spreading. Family name is followed by scientific Latin name, English common name, specimen citation (with location, habitat and latitude and longitude in decimal degrees) or note on sight record with "NC" (=not collected) and 2009 collection number(s) for the Îles-de-la-Madeleine survey. The collectors in all cases are *Paul M. Catling, Brenda J. Kostiuk, Lucie D'Amours, and Alain Richard*

EOUISETACEAE

Equisetum arvense L.,

Field Horsetail,

the old Dingwell Farm site, 47.79737, 61.45639, 82a.

LYCOPODIACEAE

Diphasiastrum digitatum (Dillenius ex A. Braun) Holub. (*L. digitatum, L. fabelliforme*), Fan Ground-Pine,

the old Dingwell Farm site, 47.79737, 61.45639, 86.

OSMUNDACEAE

Osmunda cinnamomea L. var. cinnamomea,

Cinnamon Fern,

the old Dingwell Farm site, 47.79737, 61.45639, 96.

DENNSTAEDTIACEAE

Pteridium aquilinum (L.) Kuhn var. latiusculum (Desvaux) L. Underwood ex. A. Heller,

Northern Bracken Fern,

the old Dingwell Farm site, 47.79737, 61.45639, 95.

DRYOPTERIDACEAE

Athyrium felix-femina (L.) Mertens var. angustum (Willd.) G. Lawson,

Subarctic Lady Fern,

the old Dingwell Farm site, 47.79737, 61.45639, 85.

Dryopteris campyloptera (Kunze) Clarkson,

Mountain Wood Fern,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 108.

Dryopteris carthusiana (Villars) H.P. Fuchs,

Spinulose Wood Fern,

the old Dingwell Farm site, 47.79737, 61.45639, 97.

Dryopteris expansa (C. Presl) Fraser-Jenkins and Jermy,

Spreading Wood Fern,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 116.

Dryopteris intermedia (Muhlenberg ex Willd.) A.Gray,

Evergreen Wood Fern,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 116a.



Figure 3. Creeping Juniper (*Juniperus horizontalis*) and Black Crowberry (*Empetrum nigrum*). Photo taken near Cotes des Mouettes by P.M. Catling, 13 Aug. 2009.

CUPRESSACEAE

Juniperus communis L. var. megistocarpa Fern. & St. John

Common Juniper

Occasional on heathlands. The var. *megistocarpa* is mainly coastal. NC.

Juniperus horizontalis Moench,

Creeping Juniper, (Figure 3)

open meadows at the east point saddle, 47.79794, -61.4358, 56. Figure 3.

Figure 4. Balsam Fir (*Abies balsamea* var. *phanerolepis*). The bracts are protruding from the cones as is characteristic of this coastal variety. Photo near La Grande Anse by P.M. Catling, 13 Aug. 2009.

PINACEAE

Abies balsamea (L.) P. Mill.

Balsam Fir (Figure 4)

This is abundant in the wooded areas of the island. Many, if not all plants might be referred to var. *phanerolepis* Fern., a northern and coastal taxon with awns of the mature bracts exserted and spreading instead of shorter than the scales. NC but see Figure 4.

Picea glauca (Moench) Voss White Spruce (Figure 5) Common in wooded areas. NC. Figure 5.

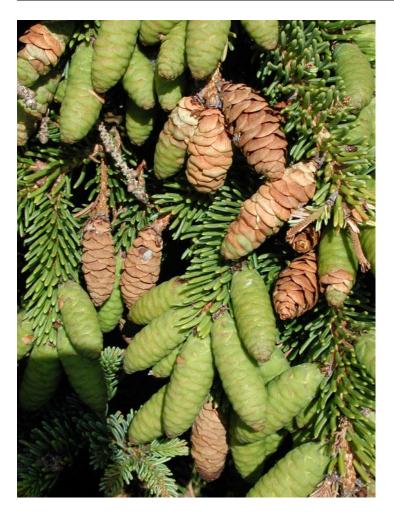


Figure 5. White Spruce (*Picea glauca*) with drooping cones. Photo taken near La Grande Anse by P.M. Catling, 13 Aug. 2009.

POACEAE

*Anthoxanthum odoratum L.,

`Large Sweet Vernal Grass,

the old Dingwell Farm site, 47.79737, 61.45639, 91, 94.

*Elytrigia repens (L.) Nevski,

Creeping Wild Rye,

open meadow on top of hill on N side overlooking the house, Cotes des Mouettes, 47.80247, -61.4468, 79.

*Phleum pratense L.,

Common Timothy,

open meadows at the east point saddle, 47.79794, -61.4358, 53.

Agrostis canina L.,

Velvet Bent,

open meadows at the east point saddle, 47.79794, -61.4358, 50a.

Agrostis scabra Willd.,

Rough Bent,

open meadows at the east point saddle, 47.79794, -61.4358, 50.

Agrostis stolonifera L.,

Spreading Bent,

open meadows at the east point saddle, 47.79794, -61.4358, 50c.

Ammophila breviligulata L.,

American Beach Grass,

rare and scattered on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe, 47.78776, -61.5032, 103.

Bromus ciliatus L. var. ciliatus

Fringed Brome,

the old Dingwell Farm site , 47.79737, 61.45639, 87; on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe , 47.78776, -61.5032, 105.

Calamagrostis canadensis (Michx.) P. Beauv. var. langsdorfii (Link) Inman,

Bluejoint,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 67.

Cinna latifolia (Trev. ex Goepp.) Griseb.,

Slender Wood-Reed,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 119.

Danthonia spicata (L.) Beauv.ex Roemer and J.A. Schultes,

Poverty Wild Oat Grass,

open meadows at the east point saddle, 47.79794, -61.4358, 50e.

Deschampsia flexuosa (L.) Trin. var. flexuosa

Wavy Hair Grass,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 107.

Festuca rubra L. ssp. rubra,

Red Fescue,

open meadows at the east point saddle, 47.79794, -61.4358, 50.

Poa pratensis L. ssp. pratensis,

Kentucky Blue Grass,

open meadows at the east point saddle, 47.79794, -61.4358, 50b.

Spartina pectinata Bosc ex Link

Freshwater Cord Grass

Seal Cove. NC

CYPERACEAE

Carex arctata Boott ex Hook.,

Drooping Woodland Sedge,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 118.

JUNCACEAE

Juncus effusus L. var. effusus

Lamp Rush

in a small pond at the northeast end, approx. 47.80009, -61.4407 NC.

Luzula multiflora (Ehrhart) Lejeune subsp. multiflora,

Common Wood-Rish,

the old Dingwell Farm site, 47.79737, 61.45639, 92.

LILIACEAE,

Clintonia borealis (Ait.) Raf.,

Yellow Bluebead-Lily,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 64.

Maianthemum stellatum (L.) Link,

Starry False Soloman's-Seal,

open meadows at the east point saddle, 47.79794, -61.4358, 43.

Streptopus amplexifolius (L.) DC. var. amplexifolius,

Clasping Twistedstalk,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 66.

IRIDACEAE

Iris versicolor L.

Harlequin Blue Flag

In wet meadows at east end. NC.

Sisyrinchium montanum Greene var. montanum,

Strict Blue-Eyed-Grass,

pen meadows at the east point saddle, 47.79794, -61.4358, 48.



Figure 6. Hooded Ladies'-Tresses (*Spiranthes romanzoffiana*). Photo taken near Calf Cove by P.M. Catling, 13 Aug. 2009.

ORCHIDACEAE

Platanthera aquilonis Sheviak (*P. hyperborea* of earlier American authors),

Northern Green Orchid,

open meadows at the east point saddle, 47.79794, -61.4358, 44.

Spiranthes romanzoffiana Cham.,

Hooded Ladies'-Tresses, (Figure 6.)

open meadows at the east point saddle, 47.79794, -61.4358, 33.

BETULACEAE

Alnus viridis (Vill.) Lam. & DC. ssp. crispa (Ait.) Turrill,

Sitka Alder,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 63.

POLYGONACEAE

*Rumex acetosella L.,

Common Sheep Sorrel,

the old Dingwell Farm site, 47.79737, 61.45639, 88.

*Rumex patentia L.,

Patience Dock,

open meadows at the east point saddle, 47.79794, -61.4358, 38.

Polygonum aviculare L. var. buxiforme (Small) Costea and Tardiff,

Yard Knotweed,

steep, open slope on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe, 47.78776, -61.5032, 99, 99a.

CHENOPODIACEAE

*Chenopodium album L. var. album,

Lamb's-Quarters,

steep, open slope on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe, 47.78776, -61.5032, 100.

CARYOPHYLLACEAE

*Cerastium fontanum Baumg. ssp. vulgare Greuter and Burdet (C. vulgatum),

Common Mouse-Ear Chickweeed,

open meadows at the east point saddle, 47.79794, -61.4358, 37.

*Stellaria graminea L.,

Grass-leaf Starwort,

open meadows at the east point saddle, 47.79794, -61.4358, 41.

RANUNCULACEAE

*Ranunculus acris L.,

Tall Buttercup,

open meadows at the east point saddle, 47.79794, -61.4358, 59.

Crassulaceae

+Hylotelephium telephium (L.) H. Ohba ssp. telephium (Sedum purpureum)

Witch's-Moneybags, Autumn Joy (Figure 7)

Planted and persisting but not spreading around Dingwell homestead and in the graveyard to the northwest. NC.

BRASSICACEAE

Cochlearia tridactylites Banks ex DC.,

Limestone Scurvy-Grass,

This is primarily a coastal species that is often associated with seabird colonies ranging from Labrador south to Nova Scotia (Benjamin and Newell 1985). We follow Fernald (1950) in maintaining it as distinct from *C. officinalis*. steep, open slope on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe , 47.78776, -61.5032, 98.

GROSSULARIACEAE

*Ribes uva-crispa L. var. sativum DC.,

European Gooseberry,

open meadows at the east point saddle, 47.79794, -61.4358, 32.

ROSACEAE

Comarum palustre L. (Potentilla palustris),

Purple Marshlocks,

in and around small pond, 47.80009, -61.4407, 73.

Photinia floribunda (Lindl.) Robertson & Phipps (Pyrus floribunda),

Purple Chokeberry,

the old Dingwell Farm site, 47.79737, 61.45639, 93; on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe, 47.78776, -61.5032, 106a.

Prunus virginiana L. var. virginiana,

Choke Cherry,

open meadow on top of hill on N side overlooking the house, Cotes des Mouettes, 47.80247, -61.4468, 78.

Rosa nitida Willd.,

Shining Rose,

open meadows at the east point saddle, 47.79794, -61.4358, 40.

Rubus pubescens Raf.,

Dwarf Red Raspberry,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 111.

Sanguisorba canadensis L.,

Canadian Burnet,

in and around small pond, 47.80009, -61.4407, 72.

Sibbaldiopsis tridentata (Ait.) Rydb. (Potentilla tridentata),

Shrubby-Fivefingers,

on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe , 47.78776, -61.5032, 101.

FABACEAE

*Trifolium hybridum L.,

Alsike Clover,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 62.

*Trifolium pratense L.,

Red Clover,

open meadows at the east point saddle, 47.79794, -61.4358, 60.

*Vicia cracca L. ssp. cracca,

Purple-White Tufted Vetch,

open meadows at the east point saddle, 47.79794, -61.4358, 49.

Lathyrus japonicus L. var. japonicus (L. japonicus var. aleuticus),

Sea Vetchling,

open meadows at the east point saddle, 47.79794, -61.4358, 52.

Lathyrus palustris L. var. pilosus (Cham.) Ledeb.,

Marsh Vetchling,

open meadow on top of hill on N side overlooking the house, Cotes des Mouettes, 47.80247, -61.4468, 77, 77a.

OXALIDACEAE

Oxalis montana Raf. (O. acetsella),

Sleeping-Beauty,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 114.

EMPETRACEAE

Empetrum nigrum L. ssp. hermaphroditum (Lange ex Hagerup) Böcher,

Black Crowberry,

open meadows at the east point saddle, 47.79794, -61.4358, 55.

ONAGRACEAE

Chamerion angustifolium (L.) Holub. ssp. *angustifolium* (*Epilobium angustifolium* incl. var. *intermedium*)

Narrow-Leaf Fireweed (Figure 7)

Occassional at east and west end. NC.

Oenothera parviflora L.,

Northern Evening-Primrose,

on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe , 47.78776, -61.5032, 106.

HALORAGIDACEAE

Hippuris vulgaris L.,

Common Mare's-Tail,

in and around small pond, 47.80009, -61.4407, 74.

ARALIACEAE

Aralia nudicaulis L.,

Wild Sarsaparilla.

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 110.



Figure 7. The cemetery above the old Dingwell homestead. Many plants can be identified in this photo, but of particular interest is Witch's Moneybags, perhaps better called Autumn Joy (*Hylotelephium telephium* ssp. *telephium*), an introduced persisting species, and growing with it the native Narrow-Leaf Fireweed (*Chamerion angustifolium* ssp. *angustifolium*). Both of these species with attractive pink blossoms are in front of the grave of Jane McCallum. Neither was collected, this photo by Alain Richard being important proof of their presence on the island.



Figure 8. Northern Evening Primrose (*Oenothera parviflora*). Photo taken near Cap de Maria by P.M. Catling, 13 Aug. 2009.

APIACEAE

*Carum carvi L.,

Caraway,

rare and scattered on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe, 47.78776, -61.5032, 104.

Heracleum maximum Bartr.

American Cow-Parsnip (Figure 9)

E of Cap Clair, P.M. Catling et al., NC.

Ligusticum scoticum L. ssp. scoticum,

Scot's Lovage, (Figure 10)

open meadows at the east point saddle, 47.79794, -61.4358, 42.

Sanicula marilandica L.,

Maryland Black Snakeroot,

open meadow on top of hill on N side overlooking the house, Cotes des Mouettes, 47.80247, -61.4468, 75.

CORNACEAE

Cornus canadensis L.,

Canadian Bunchberry,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 68.

Cornus sericea L. ssp. sericea

Redosier

Occasional on edges of wwods. NC.

Figure 9. Looking NW toward Cap Clair. American Cow-Parsnip (*Heracleum maximum*) in right foreground. Photo taken by P.M. Catling, 13 Aug. 2009.

ERICACEAE

Gaultheria hispidula (L.) Muhl.,

Creeping Snowberry,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 70a.

Vaccinium angustifolium Ait.,

Late Lowbush Blueberry,

the old Dingwell Farm site, 47.79737, 61.45639, 83.



Figure 10. Scot's Lovage (*Ligusticum scoticum* ssp. *scoticum*), Photo taken near Cap de Maria by P.M. Catling, 13 Aug. 2009.

Vaccinium macrocarpon Ait.,

Large Cranberry,

open meadows at the east point saddle, 47.79794, -61.4358, 57;

the old Dingwell Farm site, 47.79737, 61.45639, 81.

Vaccinium vitis-idaea L.,

Northern Mountain-Cranberry, the old Dingwell Farm site, 47.79737, 61.45639, 90, 90a.

PRIMULACEAE

Trientalis borealis Raf. ssp. borealis

Maystar

In woodlands at east and west end. NC.

LAMIACEAE

Clinopodium vulgare L. (Satureja vulgaris),

Wild Basil,

open meadow on top of hill on N side overlooking the house, Cotes des Mouettes, 47.80247, -61.4468, 76.

Prunella vulgaris L. var. lanceolata (Barton) Fernald,

Common Self-Heal,

the old Dingwell Farm site, 47.79737, 61.45639, 89.

SCROPHULARIACEAE

*Euphrasia nemorosa (Pers.) Wallr. (or E. officinalis L. sensu lato),

Common Eyebright,

on top of sea cliffs E of Cap Clair in the vicinity of Cap du Monolithe, 47.78776, -61.5032, 102; open meadows at the east point saddle, 47.79794, -61.4358, 46.

Rhinanthus minor L. ssp. minor (R. crista-galli),

Little Yellow-Rattle,

open meadows at the east point saddle, 47.79794, -61.4358, 54.

PLANTAGINACEAE

Plantago maritima L. var. juncoides (Lam.) Gray,

Seaside Plantain.

open meadows at the east point saddle, 47.79794, -61.4358, 47.

CAPRIFOLIACEAE

Linnaea borealis L.,

American Twinflower,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 115.

Lonicera villosa (Michx.) J.A. Schultes var. solonis (Eat.) Fern.,

Swamp Fly-Honesuckle,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 71.

Sambucus racemosa L. var. racemosa,

Red Elder.

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 65.



Figure 11. Bent spruce on top of sea cliff showing effect of wind in maintaining open cliff top meadows. by P.M. Catling, 13 Aug. 2009.

ASTERACEAE

Achillea millefolium L. ssp. lanulosa (Nutt.) Piper,

Common Yarrow,

open meadows at the east point saddle, 47.79794, -61.4358, 45.

*Achillea millefolium L. ssp. millefolium,

Common Yarrow,

open meadows at the east point saddle, 47.79794, -61.4358, 45a.

Anaphalis margaritacea (L.) Benth.,

Pearly-Everlasting,

the old Dingwell Farm site, 47.79737, 61.45639, 82.

*Artemesia stelleriana Bess.,

Oldwoman,

open meadows at the east point saddle, 47.79794, -61.4358, 36, 36a.

Aster novi-belgii L. var. novi-belgii,

New Belgium American-Aster,

in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 70.

Cirsium arvense (L.) Scop.

Canadian Thistle

Open meadows near Dingwell homestead. NC.

Cirsium vulgare (Savi) Ten.

Bull Thistle

Open meadows near Dingwell homestead. NC.

*Leontodon autumnalis L. ssp pratensis (Link) Arcang.,

August-Flower,

open meadows at the east point saddle, 47.79794, -61.4358, 61.

*Leucanthemum vulgare Lam.,

Ox-Eye Daisy,

open meadows at the east point saddle, 47.79794, -61.4358, 39.

Oclemena acuminata (Michx.) Greene (Aster acuminatus),

Whorled Nodding-Aster, (Figure 13)

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 109.

Prenanthes trifoliata (Cassini) Fernald,

Gall-of-The-Earth, (Figure 12)

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 113, 115, 117; in and around recently killed spruce-fir forest at cliff top, 47.79947, -61.4374, 71a.



12. Gall-of-The-Earth (*Prenanthes trifoliata*). Photo taken near Cap de Maria by P.M. Catling, 13 Aug. 2009.

Solidago macrophylla Pursh,

Large-Leaf Goldenrod,

in semi-open spuce-fir woods, near lighthouse, 47.78286, -61.5051, 112.

Solidago rugosa P. Mill. ssp. rugosa var. villosa (Pursh) Fernald,

Wrinkle-Leaf Goldenrod,

open meadows at the east point saddle, 47.79794, -61.4358, 34.

*Sonchus arvensis L. ssp. uliginosus (Bieb.) Nyman (S. u;liginosus),

Field Sow-Thistle,

open meadows at the east point saddle, 47.79794, -61.4358, 58.



Figure 13. Whorled Nodding-Aster (*Oclemena acuminata* = *Aster acuminatus*). Photo taken in semi-open spuce-fir woods, near lighthouse by P.M. Catling, 13 Aug. 2009

FAUNA

Dragonflies

Four species of dragonflies and damselflies (Odonata), all believed to be resident, were observed (Table 1) and some collected are in the Canadian National Collection in Ottawa (CNC).

Table 2. Odonata collected on Île Brion (specimens in CNC) on 13 Aug. 2009, mostly near to 47.795597N, -61.467836 W.

Libellula quadrimaculata,, coll. 1 CNC, saw 7 Aeshna interrupta lineata, coll. 2 CNC, saw 50 Sympetrum internum, coll. 2 CNC, saw 400 Lestes disjunctus, coll. 3 CNC, saw 10

Butterflies

Butterflies collected (CNC) and observed are listed in Table 3. The five species observed were all believed to be resident.

Table 3. Butterflies collected (CNC) and observed on Brion on 13 Aug. 2009, mostly near to 47.7958 N, -61.4666 W in open meadows and heathland above sea cliffs on the middle north shore.

Thymelicus lineola, European Skipper, 3 were seen. This introduced species is not shown for Île Brion or Îles-de-la-Madeleine by Layberry et al. (1998) but reached Newfoundland some time ago and was not unexpected.

Lycaena epixanthe, Bog Copper, 10 seen in low areas with abundant *Vaccinium macrocarpon*. (Figure 14)

?Lycaeides idas ssp. scudderi, Northern Blue, 10 seen in heathlands. The individuals also resembled the Western Cranberry Blue and other subspecies of idas and the identification is tentative. Specimens are available at CNC and will be identified.

Cercyonis pegala, Common Wood Nymph, - 20 seen in the central meadows. *Papilio brevicauda*, Short-tailed Swallowtail, - two half grown larvae (Figure 15) were found on *Ligusticum scoticum* in a mixed patch of *Ligusticum* and *Heracleum*. Two adults collected appeared unusually large.

Figure 14. Bog Copper (*Lycaena epixanthe*). Photo taken near La Grande Anse by P.M. Catling, 13 Aug. 2009.





Figure 15. Short-tailed Swallowtail (*Papilio brevicauda*). Middle instar larvae on *Ligusticum scoticum* Photo taken E of Cap Clair by P.M. Catling, 13 Aug. 2009.

WEATHER AND ACCESS TO THE ISLAND

On August 13, 2009, the weather was sunny and warm (around 20°C). The wind was from the southwest at 10 km/h in the morning, and 30 in the afternoon. We accessed the island from the east end, on the east side of what was called "La Saddle". This low land that connected the east and west portions of Brion place has disappeared now and the eastern part has been separated from the western part for 2 or 3 years. We walked a distance of around 7 km in through meadows and heathlands and did a brief survey in the forest between the lighthouse and the old fishermans house on the off-reserve part of the west coast. All traces from a wharf has now desapeared. There is a temporary floating wharf that was installed by "Excursion en mer" permitting access.

ACKNOWLEDGEMENTS

A research collecting permit for plants for la réserve écologique de l'Île Brion was provided by Ministère du Développement durable, de l'Environnement et des Parcs through the kind assistance of Andrée Giroux, Gildo Lavoie, Réal Cartentier and Patrick Beauchesne. Daniel Banville, Jacques Labrecque and Line Couillard were helpful in locating information sources. Jean Gagnon and Jacques Cayouette provided extensive background information on the flora of Îles-de-la-Madeleine. Catherine Denault, Directrice, Attention Fragîles, provided background information and contacts, and also made the fascilities of Attention Fragîles available.

REFERENCES

Benjamin, L.J. and R.E Newell. 1985. Scurvygrass, *Cochlearia tridactylites*, a new plant record for Nova Scotia. Canadian Field-Naturalist 99(3): 373-375.

Fernald, M.L. 1950. Gray's Manual of Botany, 8th ed. American Book Company, New York. 1632 pp.

- Kartesz, J. T. and C. A. Meacham. 1999. Synthesis of the North American Flora, Version 1.0 North Carolina Botanical Garden, Chapel Hill, NC.
- Layberry, R.A., P.W. Hall and J.D. Lafontaine.1998. The butterflies of Canada. University of Toronto Press. 280 pp.
- Figure 2. Largely dead coniferous forest was the most widespread plant community on the island. Photo taken near Cotes des Mouettes by P.M. Catling, 13 Aug. 2009.
- Figure 3. Creeping Juniper (*Juniperus horizontalis*) and Black Crowberry (*Empetrum nigrum*). Photo taken near Cotes des Mouettes by P.M. Catling, 13 Aug. 2009.
- Figure 4. Balsam Fir (*Abies balsamea* var. *phanerolepis*). The bracts are protruding from the cones as is characteristic of this coastal variety. Photo near La Grande Anse by P.M. Catling, 13 Aug. 2009.
- Figure 5. White Spruce (*Picea glauca*) with drooping cones. Photo taken near La Grande Anse by P.M. Catling, 13 Aug. 2009.
- Figure 6. Hooded Ladies'-Tresses (*Spiranthes romanzoffiana*). Photo taken near Calf Cove by P.M. Catling, 13 Aug. 2009.
- Figure 7. The cemetery above the old Dingwell homestead. Many plants can be identified in this photo, but of particular interest is Witch's Moneybags, perhaps better called Autumn Joy (*Hylotelephium telephium* ssp. *telephium*), an introduced persisting species and growing with it the native Narrow-Leaf Fireweed (*Chamerion angustifolium* ssp. *angustifolium*). Both of these species with attractive pink blossoms are in front of the grave of Jane McCallum. Neither was collected, this photo by Alain Richard being important proof of their presence on the island.
- Figure 8. Northern Evening Primrose (*Oenothera parviflora*). Photo taken near Cap de Maria by P.M. Catling, 13 Aug. 2009.
- Figure 9. Looking NW toward Cap Clair. American Cow-Parsnip (*Heracleum maximum*) in right foreground. Photo taken by P.M. Catling, 13 Aug. 2009.
- Figure 10. Scot's Lovage (*Ligusticum scoticum* ssp. *scoticum*), Photo taken near Cap de Maria by P.M. Catling, 13 Aug. 2009.
- Figure 11. Bent spruce on top of sea cliff showing effect of wind in maintaining open cliff top meadows. by P.M. Catling, 13 Aug. 2009.
- Figure 12. Gall-of-The-Earth (*Prenanthes trifoliata*). Photo taken near Cap de Maria by P.M. Catling, 13 Aug. 2009.
- Figure 13. Whorled Nodding-Aster (*Oclemena acuminata* = *Aster acuminatus*). Photo taken in semi-open spuce-fir woods, near lighthouse by P.M. Catling, 13 Aug. 2009
- Figure 14. Bog Copper (*Lycaena epixanthe*). Photo taken near La Grande Anse by P.M. Catling, 13 Aug. 2009.
- Figure 15. Short-tailed Swallowtail (*Papilio brevicauda*). Middle instar larvae on *Ligusticum scoticum* Photo taken E of Cap Clair by P.M. Catling, 13 Aug. 2009.

Photos by Lucie d'Amours



Dead trees on Butte de l'homme mort



Dead Forest around Calf Cove



Dead forest, north side of the island



Dead trees, between north and south side with Dingwell house Dead forest south side of Dingwell house and Anthony's Nose on the background





Accessing point on the east at "La saddle" with view on east island



East Island, now separated from main Brion



Dead forest and east island on the background



Floating wharf and boat on the west coast