

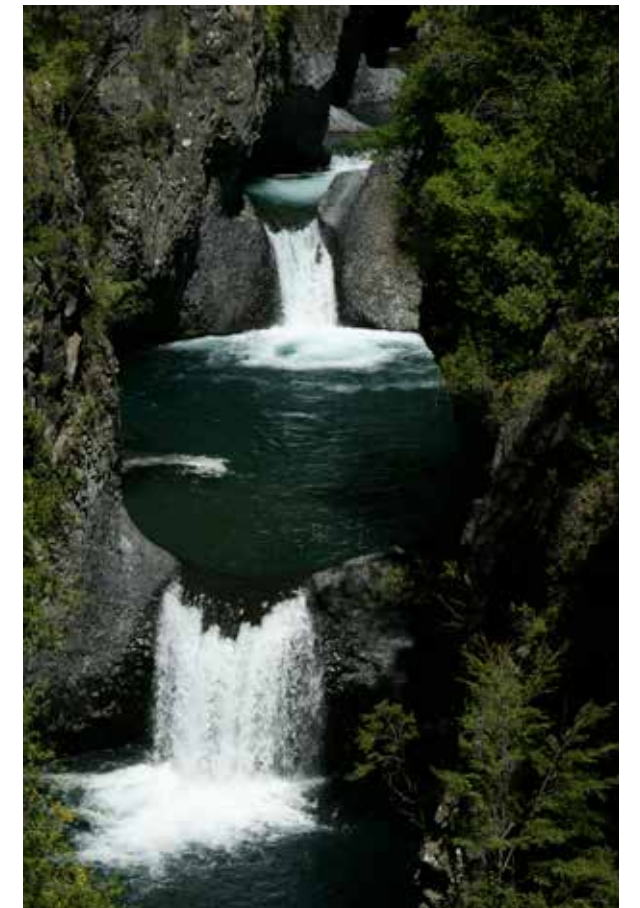
SOUTHERN COMFORT



Chloraea alpina



Cavilea glandulosa



Siete Tazas

Our studies of Mediterranean climate flora over the past ten years have revealed much about the exceptional wealth of plants to be found in these diverse areas. They may occupy only 2% of the world's land surface area, but they weigh in with 12% of its flora. One family of plants that really stands out and is utterly different in each Mediterranean climate region (Med, California, Chile, S & SW Australia and Western Cape of South Africa) is orchids. Each region has such different forms and Chile is no exception. Here they are typically robust, with large individual flowers. And these flowers only come in white, green or yellow, an indication of the limited pollinator availability on Chile. Indeed, Chile is about the most isolated of all Med climate regions.

In a normal year, I'd be heading to Chile about now to experience the orchid delights there, but this year I can only reminisce. Chilean orchids are most diverse in the southern Med region, from Santiago south. Starting at Siete Tazas, where pretty cascades tumble through hollows in basalt the southern beech forests conceal the remarkable all green *Chloraea bipinnula*, whose flowers are sexual mimics, attempting to lure wasps into pseudo-copulation - just look at those shiny blue eyes deep in the flowers. Another subtle beauty in



Chloraea bipinnula



Araucaria araucana at Nahuelbuta



Chloraea nubilabia

these woods is *Gavilea glandulifera*. *Gavilea* is the second main genus of orchids in Chile (*Chloraea* has by far the largest). Above the treeline at this season big clumps of golden *Chloraea alpina* can be found rubbing shoulders with calceolarias and Andean violets. They share this striking colour with the rich golden-orange of *Chloraea nudilabia*, an *Alstroemeria*-mimic. *C. nudilabia* offers no nectar reward, *Alstroemeria aurea* does, so the orchid tries to entice pollinators to their flowers. *C. nudilabia* also lacks a complex labellum with many osmophores (bumps) that is typical of most other Chilean orchids. At Nahuelbuta, they grow hidden in among the spidery whorls of *Araucaria araucana* and fiery bushes of *Embothrium coccineum* near spikes of *G. venosa* - a species that combines all the colours of Chilean orchids into one. The approach to Nahuelbuta is rich in other orchids, including the lovely *Chloraea longipetala*, near pastures with an abundance of *C. volkmanii* and a smattering of lemon-yellow *C. barbata*. The



Gavilea venosa



Gavilea odoratissima

Araucaria araucana below Volcan Lanin





Chloraea crispa



Chloraea longipetala



Chloraea barbata



Embothrium coccineum

latter seems happy to hybridise with various other *Chloraea*, especially near Antuco where they blend with *C. bidentata* and *C. stenantha* in a range of forms, or with *C. gaviu* and *C. chrysantha* near Angol. Perhaps the most statuesque species is white *C. crispa*, especially the populations that grow within the shade of the extensive *Pinus radiata* plantations. They not only survive here, but positively thrive.

Further south among more *Araucaria* below the imposing bulk of Volcan Lanin, one can find the handsome yellow spikes of *Gavilea odoratissima*. These grow alongside our favourite Chilean orchid, *Chloraea magellanica*. Also known as the porcelain orchid, it is a masterpiece of subtle greens, with an intricate lip of pronounced osmophores. The green-tipped sepals will emit pheromones to lure pollinators. However, to see them at their very best one has to venture south and nowhere is better than the magnificent Torres del Paine national park with its vast Patagonian landscapes studded with scarlet *Embothrium coccineum* bushes. Here we find fabulous clumps with a dozen or more spikes, growing near the gorgeous *Calceolaria uniflora*. The only downside are the frequent strong winds that make photography a challenge, involving lying down and piling up camera bags to block the air flow. But, time it right at everything looks like a calm spring day.

Of course, lie there too long and Andean Condors start to take a strong interest in you!



Chloraea magellanica