

Southern Chile

Volcanoes & Monkey Puzzles

A Greentours Tour Report

1st – 21st December 2018

Led by Chris Gardner & Oron Peri

Day 1 To Santiago

The unavoidable long flight....

Day 2 To Altos Vilches

There was a staggered arrival at Santiago, but we all convened and then set off south stopping for lunch after an hour in a service station. Essential picnic shopping was next and then we got to see some natural history with a mixed population of *Alstroemeria ligtu*, the colours ranging from pink to white. Alongside these were bushy plants of *Calceolaria thyrsoiflora* and overhead flew Turkey Vulture and Chimango Caracara. Moving on and we found a rich area with many lovely *Conanthera bifolia*, the flowers with elegantly reflexed tepals, mixed with a few deep blue *Pasithea caerulea*. Orchids were plentiful with a good number of greenish-cream *Chloraea lechleri*, what seemed to be the odd *Chloraea heteroglossa* with them, taller white and green *Chloraea galeata* and the final flowers of *Chloraea chrysantha*. Deep pink *Clarkia gayana* decorated the dried grasses with the orange stars of *Haplopappus macrocephalus*, round heads of *Quinchimalium chilense* and slender *Pteromonnina linearifolia*. We turned off onto an even smaller road and stopped after a while for a population of *Nierembergia repens* in a wet flush and then a bit further on for another rich area with spikes of golden *Chloraea lamellata*, clambering stems of cerise *Bomarea salsilla*, *Sophora macrocarpa* and the rusty-centred white flowers of *Salpiglossis sinuata* complete with roosting bees. The plan had been to head straight to the hotel and all was well until 500 metres from our destination when my tyre blew and we had to change it. On arrival, there were two handsome male Green-backed Firecrowns on the hummingbird feeders as Thorn-tailed Rayaditos rattled away in the background.

Some fine pisco sours completed our first day.

Day 3 Siete Tazas National Park

Southern House Wrens were singing away first thing in the morning. Back on the road we retraced yesterday's steps, stopping for some fine stands of orange *Alstroemeria ligtu* subsp. *simsii*. Then it was onto the first of the areas fine waterfalls with the long cascade of the bridal veil falls. A huge *Hydrangea serratifolia* was hanging from a tree ready to burst into flower and Austral Parakeets

flew over as White-crested Elaenias busied themselves in the bushes. Arriving at park HQ we went straight down to the river to try and find a very special plant. At first none then we saw a superb fresh spike of *Puya bertroniana*, the flowers a singular shade of turquoise-blue. It had a superb riverside setting and nearby was *Escallonia rubra* in flower. Once most of us had left, an Austral Blackbird (one of a number of bird species that pollinate this plant) arrived to take nectar. There were more of these glossy birds on a fence near where we had a quick lunch.

The afternoon was spent walking to another part of the river, but through the large tracts of *Nothofagus glaucus/dombeyi* forest seeing various pink and yellow oxalis, lovely deep magenta *Lathyrus magellanicus*, dangling red *Tropaeolum tricolor*, *Senna arnottiae*, rosettes of *Viola subandinus* and then some very old *Austrocedrus chilensis*. Rockier places had the dainty pink *Calceolaria cana* and barrels of the cactus *Eriosyce curvispina*, some with good flowers on. Moving through the woods a Magellanic Woodpecker was hacking away at something but remained hidden. Reaching the river, we continued along the path finding a decent *Chloraea chrysantha* and then several of the peculiar green *Chloraea apinnula*. A third orchid followed, *Chloraea viridiflora*, which was also all green. Our last area had an interesting combination of plants with rosettes of *Viola farkanensis*, lovely *Schizanthus hookeri*, deep pink *Oxalis squammata* as well as *Calceolaria meyeniana*, an *Adesmia* and a *Glandularia*, whilst *Azorella monteroi* grew on the rocks.

We more or less walked straight back to the vehicles had a quick drink and then drove back to the famed Siete Tazas, a series of small waterfalls that tumbled in succession from bowls in the basalt rocks. A few *Chloraea lechleri* were around and a solitary *Schizanthus alpestris* was found too. Then it was back to base stopping briefly to look at a tarantula along the road.

Day 4 To Antuco

Morning mists meant a cool start and it was to remain cloudy all day. We drove back down and on to Linares for essential provisions before we reached an area of pine plantation. Among it were many stunning pure white *Chloraea crispa* with some specimens nearly a metre tall. A couple of green-lined/suffused variants were mixed with them too and there was one pale yellow hybrid. Elsewhere, near the railway line we found a solitary *Chloraea gaudichaudii* and a population of pale pink *Alstroemeria angustifolia* with delicate red flecking on the dorsal tepals. Green caterpillars (*Automeris sp*) littered the ground in places, one of the few things able to feed on the pines.

The next stop was for the large Saltos de Laja waterfalls that crash down from a shelf of rock. Turning off the main road we headed east towards the Andes, though the continuing low cloud meant we couldn't see the impressive landscape. Another area of pine plantation was our final stop of the day and this one contained more and different orchids as well as several interesting hybrids. The large lemon-yellow flowers of *Chloraea barbata* grew not far from the more restrained green and more muted orange-yellow of *Chloraea bidentata*. And they produced some quite attractive intermediates. Alongside them was *Chloraea stenantha*, and this too seemed to be involved in some of the hybrids, adding dark green sepals to the mix. An adjacent area of open ground had more orchids, a couple of species of *Sisyrinchium* and few lovely lilac *Herbetia lahue*.

Day 5 Laguna de Laja National Park

The clouds of yesterday had parted and the mountains were revealed at dawn. We drove towards the national park stopping by a roadside area where seeps and waterfalls were tumbling down and supporting a diverse array of plants. Masses of *Mimulus luteus* was decorated with bright yellow trumpets and its diminutive cousin *Mimulus glabratus* was below. On the steep slopes were huge *Gunnera tinctoria*, clumps of *Cortaderia chilensis* and the odd *Buddleja globosa*. Driving higher to the dam the landscape opened up and there was a deep river valley below us. The towering 3788-metre cone of Volcan Antuco dominated everything and our next stop was in sight of this, beside a very productive flowery slope. However, the first thing we saw were three different birds feeding close to one another; White-browed Ground-tyrant, Rufous-banded Miner and Grey-hooded Sierra-Finch. At the base of the slope were billowing masses of *Lathyrus multiceps* and *Vicia nigricans*, then a big clump of *Calceolaria pennellii*. The upper slope was a wonderful mix of colours with domes of golden-orange *Senna arnottiana*, many *Calceolaria corymbosa* subsp. *floccosa* and more *Lathyrus multiceps* all laced together with abundant *Cerastium arvense*. Then moving to the top of the slope we found a few golden-yellow *Chloraea alpina* in flower. Plumbeous Sierra-finch was seen once we returned to level ground where *Nastanthus spathulatus* appeared like a squashed broccoli. Oron walked up to a big patch of *Mimulus cupreus*. On the way down, there was a delightful cluster of *Calceolaria pennellii* among the lava.

We skirted the lake and stopped below a slope with patches of vegetation on the black ash slope. Fine clumps of *Anemone multifida* sprouted from the seemingly inhospitable substrate and there was plenty more of the same as we slowly walked up. The greener patches had much *Berberis empetrifolia* and the ash areas various forms of *Euphorbia collina* and spreading, spiny mats of *Maihuea poepigii*. The first *Viola congesta* rosettes (with white flowers) were found and many more followed. And then a little higher were some stunning *Viola congesta*, with much showier flowers on the densely leafed columns. These ranged from white to purple and the flowers were sweetly-scented. Variable Hawk soared overhead at one point and then a Brown Hare was flushed and galloped across the slope. The hoped for *Rhodophiala araucana* failed to materialise despite lots of searching, though we did find leaves. A good clump of *Senecio bipontinii*, *Ephedra chilensis* and *Gaultheria pumila* were found on the way down.

Lunch among the rocks closer to the lake and where we could see two Andean Gulls flying along. On the rocks was a fine clump of *Calceolaria cavanallesi* in flowers. We tried to leave after lunch but didn't get more than fifty metres when a mat of *Happlopapus paucidentatus* was seen and many spikes of *Acaena pinnatifida* bursting from the sand. There was more, fine *Viola congesta* too. Then we took a more scenic tour around the lake to see the various landscapes, also stopping for some superb flower studded mats of *Maihuea poepigii*. It was time to return and we drove back past many bushes of white-flowered *Ochetophila trinervis* and then all the way back down to where an annoying fence had been built near some cliffs. We scaled the iron gate and made our way up the slope to the base of some basalt cliffs where below bushes of *Calceolaria cavanallesi* were pretty pink *Ourisia microphylla*. Black-chinned Siskins were feeding on the short grass as we walked down again.

Day 6 To Villarica

The morning saw us driving to Villarica stopping only for a clear view of Volcan Antuco. Lunch was in view of a second snow cone volcano, Volcan Villarica, beautifully framed with *Embothrium coccineum* and *Buddleja globosa*. A few *Gavilea araucana* were also found. Up at the ski centre we

took a walk across the ash slopes where there were many cushions of *Viola cotyledon* (with a few in flower), *Valeriana carnososa*, *Gaultheria pumila*, *Adesmia longipes*, nearly flowering *Nassuavia lagascae* and *Ovidia andina*. Two juvenile Yellow-bridled finches were seen before we left. Lower down and area of woodland had plenty of *Codonorchis lessonii* and yellow *Berberis montana*. Southern Caracara was seen well and then we found clumps of *Viola maculata* and more fine volcano views.

Day 7 Villarica National Park

It promised to be a warm day so we drove straight to the start of our walk. Here we saw out first stately and architectural *Araucaria araucana*. Beneath them were a few *Chloraea magellanica* and yellow *Gavilea odoratissima*. The walk passed through wonderful mixed forest. By a river was some superb intense red *Ourisia ruelloides* and along the tracksides were plentiful *Viola reichii* and *Vicia nigricans*. Various lizard species darted about and we saw both Patagonian Sierra-finch and Thorn-tailed Rayadito. The stands of monkey puzzles grew more impressive, heavily laden with Spanish moss lichen and further up we enjoyed magnificent views of Volcan Lanin framed with *Araucaria araucana*. The lovely deep pink *Rhodophiala andicola* grew in one area and *Quinchimalium chilense* was common throughout. *Berberis serratodentata* was found in flower and butterflies were plentiful with satyrids, blues and painted ladies on the wing. Walking back, we found more good clumps of *Ourisia ruelloides* by the river.

Lunch was under some *Araucaria* with lots of Austral Parakeets flying around and Einar found a nest hole with parent birds. Afterwards there were lots more *Chloraea magellanica* and *Olsynium junceum* ssp. *depauperatum*. A hill coloured red with *Embothrium coccineum* could be seen further way. Returning we stopped for the pretty little *Calceolaria tenella* and shell-like flowers of *Calceolaria valdiviensis*, Black-throated Ibises were seen well in a field and then our last stop was for a good colony of tall *Chloraea virescens*.

Day 8 Heurquehue National Park and to Puerto Varas

Cooler and cloudy this morning but this somehow fitted the lush environs of Heurquehue. This is very much the transition zone between the Lake District and the Valdivian rainforests of the south. In the car park was a wonderful clump of the big-pouched *Calceolaria crenulata* and more were in the forest. Many new forest plants were seen including the pretty white *Luzuriaga radicans* and pink *Campsidium valdivianum*. A Chucao Tapaculo came to see what we were doing but didn't stay long. However, as we exited the trail three Slender-billed Parakeets flew in to feed on young bamboo shoots just a few metres away. They seemed quite unconcerned about our presence and we had excellent close up views. *Weidermannia trichosperma* was seen with spikes of white flowers and then some immense *Nothofagus dombeyi* and the marbled trunks of *Saxagotaea conspicua*. Our final highlights were the bright red *Ourisia coccinea* and the pendant flowers of *Fuchsia magellanica* next to the river. We walked back past many *Libertia chilensis* and had lunch. There was time for a quick dip into the bookshop in Pucon and then we drove south seeing Black-faced Ibises feeding on the lawns of a service station we stopped in.

Day 9 Alerce Andino National Park

A totally different experience awaited us today. Driving a short way south we stopped by the coast where some fishermen were preparing and selling catch of heavily-toothed fish. A large number of Kelp Gulls had gathered and after a while the fishermen threw them the leftovers and an almighty squabble over the food began. At this point both Turkey and Black Vultures also joined the melee, the former bossing the situation. Along the more distant shoreline were both Brown-hooded Gulls and Elegant Terns, as well as two Black-necked Swans and a Whimbrel.

We moved on to a preserved tract of Valdivian rainforest where everything seemed lush, taller and more verdant than anywhere we had been. There were plants in common, but here they were scaled up in size. *Drimys winteri* became a towering tree and not a small shrub, the huge rough leaves of *Gunnera tinctoria* lined the roads and tracks with the huge fern fronds of *Lophosoria quadripinnata* and *Blechnum chilense*. We took a walk to Lago Sargazo, first passing the many interesting shrubs such as *Crinodendron hookerianum* laden with crimson-pink lanterns, bright orange *Mitraria coccinea*, the dangling ballerinas of *Fuchsia magellanica* and various *Gaultheria* and a few *Gavilea odoratissima*. A swampy area held the waxy trumpets of *Philesia magellanica* and on the ridge ahead, were some tall alerces, *Fitzroya cupressoides*, a tree which has been extensively felled for its durable timber. The trail led into the lush forest where trunks were swathed in moss, filmy fern and plenty of the dainty *Luzuriaga polyphylla*. Chucao Tapaculos called often as we went seeing *Codonorchis lessonii* among the emerald background. The lake was set among thickly forested hills with no sign of man. A Chucao Tapaculo came out to see what we were doing, before quickly darting away and a couple more *Philesia* flowers were found that were easier to get to than before. Then on the walk back Einar and I saw a pair of Black-throated Huet-huets (one feeding the other).

After lunch, we took another shorter walk into another fascinating (and quite different) section of forest. Here the ground was smothered in a peculiar 'rootless' tumbling moss and the trees seemed even more smothered in ferns and mosses. Stands of elegant bamboos filled the understorey and the climbing stems of various plants clung to the big trunks of *Eucryphia cordifolia* and other trees. One had some lovely red-pink *Asteranthera ovata* and here and there we found the fallen scarlet tubes of *Sarmienta scandens*. It was the overwhelming lushness that struck everyone. Hidden among this Chucao Tapaculos occasionally appeared and Einar photographed Ochre-bellied Tapaculo too. Driving out (after being encouraged to eat wild gunnera stems by a chatty local lady) we stopped for a superb spread of intact gunnera and ferns that rather summed up the incredible verdance we had just witnessed.

Day 10 Alerce Costero National Park

We made our way to the coastal ranges, navigating the awkward town of La Union and stopping eventually for a good colony of *Ourisia coccinea*. The shrub *Acrisione denticulata* grew nearby with pink *Campsidium valdivianum*. Reaching the park, we set off into the remarkable forest with dense stands of alerce *Fitzroya cupressoides* and *Saxagothaea conspicua*. The latter had superb marbled trunks plastered in beautiful lichens. Some descended all the way to the huge 3500-year old alerce, a tree with an immense twelve metre girth. Both Black-throated Huet-huet and Chucao Tapaculo were seen. There were fine bushes of *Latua pubiflora* festooned in purple bells near the entrance.

The rain arrived as it so often does here but as we drove down it eased and we able to stop for Crested Caracara and then some fine *Alstroemeria aurea* before driving on to Villarica for the night.

Day 11 Conguillio National Park

Unfortunately, the rain of yesterday rather persisted today, but there were enough breaks in the weather for us to enjoy the day. Our first stop was for a fine stand of golden *Alstroemeria aurea* and a Correndera Pipit was displaying flying nearby. At a long bridge crossing over a braided river there were Dark-bellied Cinclodes and Austral Negrito, but glancing upstream we saw a pair of beautiful Torrent Ducks. Moving on we stopped to look for Spectacled Tyrant, and found one perched on a bush, although the heat haze made scope views impossible. Chimango Caracaras and Black-throated Ibises posed well on roadside posts. Closer to the immense cone of Volcan Llaima there was an interested orchid population with both *Chloraea virescens* and many *Chloraea stenantha* together as well as all manner of hybrid intermediates. A solitary *Chloraea galeata* was also found.

Inside the national park many slender beige stems of *Arachnitis uniflora* stood up from the leaf litter, a most peculiar saprophytic plant. Then we entered an extraordinary world of lave flows and ash cliffs. The various flows were clear to see, sometimes the lava front reaching the road. Great plains of ash (much of it deposited in 2009) were beginning to be recolonised with *Rachometrium* moss and *Senecio chilensis*. Also visible were stands of trees that were spared the lava flows and survived intact, now emerald islands in a sea of rock. There was a beautiful blue lake and then fabulous stands of *Araucaria araucana*, often with *Embothrium coccineum* as an understorey. Fortunately, we had a sheltered place for lunch and the weather eased afterwards and long enough for us to enjoy a walk in a spectacular tract of forest with many impressive *Araucaria* and dense stands of *Nothofagus dombeyi*, all plastered in lichens. Great swathes of bamboo provided the ground cover alongside various coloured berries of *Gaultheria mucronata*.

Leaving the park, we stopped for a fine plant of *Berberis trigona* and then a final view of the big ash plains and lava flows with a lonesome young monkey puzzle growing optimistically among it.

Day 12 Nahuelbuta National Park

The beautiful environs of Chile's coastal range forests beckoned. We drove almost directly there stopping only for a population of an orange *Loasa* sp. and the peculiar brown bulb *Gilliesia montana*. Arriving at the park there was a tumbling plant of *Mutisia oligodon* and then just inside a vivid combination of intense scarlet *Rhodophiala chilensis* and *Calceolaria corymbosa*. Moving slowly through the lichen draped *Nothofagus obliqua* woodlands there was a very close Southern Crested Caracara and then we stopped for a pink *Oxalis arenaria* and also found a fine spike of *Gavilea venosa*. The landscape was quite surreal, enhanced further by the remarkable spidery profiles of *Araucaria araucana*. The parasitic shrub *Descumaria mutabilis* was suspended from some trees the flowers opening yellow and aging to red.

Our intended road had been closed part way so we took an early lunch beneath two venerable giant monkey puzzles where a Patagonian Sierra Finch came to see what was on offer. Then we walked through the lovely forests past open patches with plentiful *Calandrinia colchagensis*, *Tristagma* sp and the dainty *Polygala gnidioides*. The fiery scarlet of *Embothrium coccineum* was scattered

through the lichen-laced forest along with *berberis darwinii* and *Ovidia andina*. Then we found another fiery plant – *Chloraea nudilabia* – one of the most striking of all Chilean orchids. The last section of the path took us up to a superb viewpoint where a number of volcanoes could be seen as well as expansive views of the park with some wonderful architectural *Araucaria*, dense clumps of *Fascicularia bicolor* and more *Chloraea nudilabia* as stunning blue-and-green lizards sunbathed on the dark granite rocks.

Soon it was time to descend and on the way down we found plenty more for the cameras including diminutive *Pinguicula chilensis* and *Vicia nigricans*. Driving back out we stopped for a couple of feisty tarantulas that were crossing the road, their legs bristling with long ginger hairs. Stopping for a reshoot of the *Rhodophiala chilensis*, we were immediately alerted to the insistent calls of Black-throated Huet-huet and succeeded in finding two birds among the bamboo thickets. Along the roadside there were fine drifts of deep blue *Pasithea caerulea* to round off the day. Many orchids were passed lower down - something for tomorrow.

Day 13 To Vilches Alto

The morning was spent looking at the many orchids that can be found near Angol. First came the golden spikes of *Chloraea gavilu*, which grew with tidy bushes of *Ugni molinae* with its little white open bells. Next up was the lovely white *Chloraea longipetala*, these growing alongside *Chloraea barbata*, *Chloraea chrysantha* and some obvious hybrids. A fine spike of dark turquoise *Puya bertroniana* gave a break from the orchids. Then came *Chloraea volkmannii* growing with *Chloraea longipetala* as Thorn-tailed Rayadito and Austral Parakeets were seen in the surrounding trees. A final stop was in an area of meadows with lots more *Chloraea volkamannii* and a population of pale yellow *Chloraea barbata* with some hybrids. Long-tailed Meadowlark and Black-faced Ibis were seen too.

Now we had a long drive north to get to our next exciting places. In the later afternoon we arrived at the familiar and pleasant environs of Vilches.

Day 14 Laguna de Maule

The first of our duo of high Andean passes. However, we stopped well before we had started to gain any height for a few Burrowing Parrots perched in a tree beside the road. We had superb views of these surprisingly colourful birds. A Chilean Flicker was perched on a wooden post too. Continuing along we found the tall green orchid *Chloraea incisa* and then a bit further up bushes were draped in abundant *Mutisia oligodon* with large white to pink daisy flowers. Tucked among the scrub were quite a few pretty pale yellow *Rhodophiala andina*, a pink *Oxalis* and the peculiar upright stems of *Loasa filicifolia*. Flowers started to come thick and fast with superb stands of *Alstroemeria ligtu* ssp. *incarnata* next, followed by brick-red *Salpiglossis sinuata* and tumbling masses of *Tropaeolum tricolor*. Then as we drove higher the first Andean Condor was seen, and quite well. Five more appeared. And then we could see them circling a little further up so we drove quickly to a scenic viewpoint where we had unprecedented extended views of them lazily circling and gliding across the cliffs, sometimes coming past us very close and eyeing us carefully – looking for weakness perhaps? A stunning experience.

Reaching the lake there were hundreds of Silvery Grebes and White-winged Coots on the water. On a nearby slope were superb cushions of *Viola cotyledon* in a variety of colour forms from white to deep purple. Alongside these was a drift of *Oxalis adenophylla*, but frustratingly the cold wind meant these were closed. The Gardner greenhouse trick was applied and we left intending to return later. Despite the cool conditions the small native fritillary butterfly was on the wing! We continued around the scenic lake to a more sheltered slope with little wind. Here *Mimulus cupreus* grew by the roadside and the slopes had *Calceolaria pritchardii*, *Calceolaria corymbosa* ssp. *floccosa* and in wet flushes *Calceolaria filicaulis*. A pair of Grey-throated Seedsnipes was seen well near the road and there were also Greater Yellowfinches and both Rufous-banded and Common Miners. On the dry slopes were many more stunning cushions of *Viola cotyledon* and some decent specimens of its cousin *Viola glacialis*, a few *Oreopolus glacialis* and a good number of *Olsynium oscurum (frigidum)*. By a small stream we found a solitary pink *Ourisia breviflora* and the pale stars of *Caltha sagittata*.

Driving back there were more fine views and then a return to the *Oxalis adenophylla* produced two fine clumps in flower courtesy of their little greenhouses. Stands of *Schizanthus hookeri*, big mats of *Oreopolus glacialis* and the peculiar purple 'balls' of *Calceolaria arachnoideum* completed the day before we continued on to our comfortable hotel in Curico.

Day 15 Paso Vergara

Our final day in the field and another stunning high Andean valley. driving out from Curico we gained height slowly at first, seeing Burrowing Parrots and then stopping for some flowering *Puya coerulea* on some low cliffs. A big clump of *Cistanthe grandifolia* was next, in full bloom next to the river. Another small stream crossing that entered the river had superb clumps of *Mimulus naiandinus* and the rather lovely, pale yellow *Calceolaria paralia*, one the nicest species we had seen in this genus. The road followed close to the river in places and a female Torrent Duck was seen at one point. Going higher we found a couple of orange *Famatina cisandina*, Moustached Turca and then superb stands of *Alstroemeria ligtu* ssp. *incarnata*. The latter grew on a slope with plentiful bushes of *Calceolaria thrysifolia* and dainty *Clarkia tenella*, whilst birds included Long-tailed Meadowlark. Andean Foothill Whites and various satyrids were also evident on such a warm day. A male Torrent Duck was also seen. Reaching the customs post the police kindly allowed us to continue beyond the gate and drive into a superb alpine flower area. There was a lot to see up here and we began with a rocky slope draped in long stems of golden *Tropaeolum polyphyllum* growing with more *Alstroemeria* and a few *Schizanthus grahamii*. From here we drove directly along the scenic road to a plateau. The surrounding slopes were plastered in hundreds of perfect clumps of *Oxalis adenophylla* and wetter areas had abundant white *Calandrinia affinis*. Rockier places hid the pretty yellow *Oxalis erythrorhiza*, *Oreopolus glacialis*, pink *Olsynium philipii*, fine clumps of golden-yellow *Calceolaria corymbosa* ssp. *floccosa* and *Calceolaria volkmannii*. There was also lots of the peculiar brown-leaved *Barnoudia major*, though they had largely finished flowering.

After enjoying this wonderful area, we descended stopping for fine stands of *Schizanthus grahamii* and then amazing big cushions of *Azorella monantha* in full flower. Closer examination of this area also revealed the incredible rosettes of *Viola skottsbergiana*. Although the flowers of this species are small and white (at least in this location) the overlapping leaves and neat columns were a delight. Following the river back down the male Torrent Duck was relocated and seen well (and a female was seen lower down too). We only stopped to give the cars a bit of a clean and then we

had to make our way to Santiago airport for the night and farewells to Oron, Alan and Robert who were flying home tomorrow.

Day 16 To Torres del Paine NP

It was an early flight south for those carrying on south moving from the warm hills of Mediterranean Chile to the windswept Patagonian steppe. Arrival smooth enough and we were on our way seeing an Andean Condor early on and then Darwin's Rhea and a few Guanacos. A roadside bank had abundant *Olysnium biflora* and then we stopped beside a lake with a line of pink Chilean Flamingos – all with their heads in unfortunately (should have used the Gardner greenhouse trick! – Ed) – but there was also a stunning view of two close Coscoroba Swans with five cygnets. A little further up in the same lake were dozens of Silvery Grebes and on the opposite side a few White-eared Grebes. With a bit of persistence, we then found *Oxalis ennaephylla* growing in some shingly flats. Time was moving on so we covered the rest of the distance to Puerto Natales, crossing over the vast landscape of pastures, steppe and forest patches with the snowy mountains growing closer. Much of the forest was battered and succumbing to heavy loads of mistletoe.

Lunch was filling pizza and then shopping for supplies followed. Whilst we did that David and Einar spent time on the coast where Black-necked Swans, Imperial Shags and Chiloe Wigeon could be seen. Continuing north we branched off onto a smaller road and stopped at a viewpoint with *Embothrium coccineum* and the blue waters of the fjord beyond. In the heath were plenty of *Chloraea magellanica* and *Gavilea supralabellata*. A bit further along and *Gavilea araucana* was plentiful, growing near shrubby areas with *Fuchsia magellanica*, *Escallonia* and *Gaultheria*. Both *Gunnera tinctoria* and its diminutive cousin *Gunnera magellanica* grew together here. We entered an area of lakeland and stopped for various views before reaching the park. The Paine massif was beginning to clear as we entered the park, stopping for several Upland Geese, and then deciding to go to a blue lake viewpoint for some first photos of the iconic Cuernos del Paine.

Day 17 Western Torres del Paine

The ever-keen Einar set off to successfully find Magellanic Woodpecker before breakfast, seeing a pair feeding at length on a broken tree then as we prepared to leave there was a pair of Huemul, which were quite unconcerned by the many photographers gathering around them. Despite the gusty conditions we enjoyed a productive walk across an area of heathland with hundreds of pale yellow *Gavlea supralabellata* and many superb clumps of *Chloraea magellanica* – the Queen of Chilean orchids. However, even she was upstaged by the superb, medal-winning clump of *Calceolaria uniflora* we found nestled out of the wind. It had at least twenty flowers in excellent condition. After photographing this time was spent finding ever better clumps of *Chloraea magellanica*, some with up to eleven spikes. We went from the sublime to the ridiculous as our next stop was for the diminutive and in all honesty thoroughly uninspiring *Chloraea chica*, but I felt duty-bound to show all the orchids! There were increasingly better views of the impressive Cuernos del Paine across Lago Peho. The nearby campsite was very sheltered and a good place for birds with Rufous-tailed Plantcutter, close views of a family of Thorn-tailed Rayaditos and a very tame Southern Crested Caracara. Back to the orchids we looked at the rather odd, green *Chloraea leptopetala*, though the *Calceolaria biflora* were much showier. White-tufted Grebe was seen on a small pond. Following a look at the informative visitor centre we drove back to Lago Grey and spent

time in the tall forest there. Here there were *Gavilea lutea*, a good spike of *Gavilea littoralis* and *Codonorchis lessonii*. Out on the shingle flats were cushions of *Azorella monantha* and rings of *Gunnera magellanica* somehow gaining a foothold in the sand-blasted conditions. Arriving back at the rooms the male Huemul was right outside our windows and at one point even sparred with his reflection in the glass.

Day 18 Southern Torres del Paine

Elizabeth, Einar and I tried again for the Magellanic Woodpecker, but there was no sign this morning. There was a very tame Austral Parakeet feeding on the ground at the hotel instead. The virtual calm of this morning was a stark contrast to the last two days and it remained windless all day. There was a good sprinkling of *Calceolaria uniflora* as we walked to the waterfall between Lago Nordeskjold and Lago Pehoe. Three Spot-billed Ground-tyrants were watching from a rocky knoll as we arrived. *Lathyrus nervosus* grew amidst the many spiny domes of *Mulinium spinosum* and there was *Chloraea magellanica* in the heathy areas. Next, we stopped at a lake where male Great Grebes were fighting, chasing each other around the water. A family of Upland Geese and Yellow-billed Pintails were unimpressed. A few Guanacos followed and then fine views of the mountains and Lago Nordenskjold and a good clump of *Calceolaria polyrhiza*. Lunch was uncharacteristically hot and sunny.

Our afternoon walk took us past the pretty orange-yellow *Alstroemeria patagonica* and mats of *Nassauvia fuegiana*. Big pin drifts of *Samsola* filled damper areas with *Azorella trifurcata*. Other little gems included *Polygala*, pink forms of *Olsynium junceum* and pretty *Pratia longifolia* around a pool. Fritillaries were common throughout. There were also many *Calceolaria polyrhiza*, and areas with *Calceolaria uniflora* and *Calceolaria biflora* - the latter two occasionally hybridising. We reached a large rock with some modest Tehuelche Indian rock art. There were fine views and a Short-billed Miner was seen well. Returning we found three Scaly-throated Earthcreeper, Austral Canastero, and plenty of Long-tailed Meadowlark in a little gully. On our way out of the park there were two Magellanic Oystercatchers, more Guanacos and absolutely superb views of Darwin's Rhea with ten chicks that walked and fed right alongside the car for as long as we stayed to watch them.

Day 19 Laguna Azul and Lago Sarmiento

A glorious clear, sunny morning and fine, very calm weather was to accompany us all day. Driving out we passed at least one hundred Darwin's Rheas feeding in freshly cut fields. Then at a viewpoint for Lago Sarmiento we saw Fuegian Fox and Einar photographed Patagonian Mockingbird. There were calm waters at Laguna Amarga where we saw a few well-placed Chilean Flamingos and our first herd of Guanacos. The Rio Paine comes crashing through a series of cascades and we stopped to look at these, also finding some very photogenic *Chloraea magellanica* with the Torres del Paine in the background. Then the Guanacos continued with many animals close to the road. They were chasing, neck-wrestling and testicle-biting. Then we noticed a female Andean Condor perched on a nearby ridge. On up and we saw many Southern Crested Caracara and a dead Guanaco, but also no feeding Puma! The lakeside at Laguna Azul had two pairs of Red Shoveler, Magellanic Oystercatcher and Chiloe Wigeon. Lunch was in view of fast-clearing rock towers and under the gaze of very tame Crested Caracara. Striped Woodpecker was seen in the woods and by the time we had finished they were clearly visible. Taking a short walk past drifts of *Geum magellanicum* we reached a little beach

with great views of the massif. The cool waters were too much for a Norwegian to resist and Einar took a refreshing swim!

Back on the road we stopped for more Guanacos for those clichéd towers in the background shots. Re-entering the park, we looked at various ponds for ducks and stopped at viewpoints before heading out of the park to the far side of Lago Sarmiento. Here there was a fascinating assemblage of thrombolites, both past and present. The huge hulks of desiccated old thrombolites (from over a thousand years ago) could be seen on the beaches whilst still active algae-swathed mounds were clearly visible in the waters. Cinnamon-bellied Ground-tyrant showed well too. As we drove out a South American Snipe tried to walk across the road and I narrowly missed running it over. The bird flew into a ditch and we soon relocated it and then followed it at close distance as it fed, apparently unconcerned at our presence.

Returning to the hotel there were now over two hundred Darwin's Rheas in the fields!

Day 20 To Santiago

All good things come to an end. Our final day began with clear views of the Paine Massif. A Humboldt's Skunk was loitering around the rooms as I walked to breakfast. We took a short trip back towards the park seeing the usual gatherings of Guanacos hoping to find some good clumps of *Alstroemeria patagonica*, but alas no (it was probably too dry). A Dark-bellied Cinclodes landed nearby and began to sunbathe on a rocky slope. Crossing the vast steppe there were Darwin's Rheas and after a bit of shopping at Cerro Castillo we continued to a large pond. There were many Upland Geese, Great Grebes and Crested Ducks, but mainly all gathered towards the back. Reaching Puerto Natales there was a solitary Chilean Skua. The coast was much calmer than a few days ago and it was easier to enjoy the many Black-necked Swans, Chiloe Wigeon and Imperial Cormorants. Lunch was in the shelter of some trees where Thorn-tailed Rayaditos were feeding.

Next, we stopped for some fine clumps of *Oxalis ennaephylla*, which were growing with *Hypochaeris lanata* and *Senecio magellanicus*. The occasional Andean Condor was seen as we drove (we were so blasé about these now after the Laguna de Maule experience) and there were Chilean Flamingos on a large pond with Silvery and White-tufted Grebes. One sad incident involves the Lesser Grison I briefly saw as it dashed out from the verge and straight under my wheels!! Possible the first and last Lesser Grison I'll ever see. The search was still on for Flying Steamer Duck and we found a pair on the coast sitting quietly on the shore. Our last natural history moment was a heath covered headland with plenty of the pretty pale blue *Perezia recurvata* and a few final *Chloraea magellanica*. From the sweep of coast, we could look out onto the Straits of Magellan and bid farewell to the wide-open spaces of Patagonia.

Day 21 Flights

I had a hideously early flight, everyone else had a more leisurely morning and hopefully all travel arrangements went according to plan.

Systematic List No. 1 - Flora

Written by Oron Peri

ADIANTACEAE

Adiantum chilensis

similar to the common maidenhair before Vilches

Adiantum chilensis var hirsutum

like the above but more compact, erect, hairy form

ALSTROMERIACEAE

Alstroemeria aurea

common on road sides, large yellow flowers, occasionally orange forms as well

Alstroemeria angustifolia

at the edge of the pine forest, KM 446 from Vilches, slender species with pink flowers

Alstroemeria ligtu

common on road sides, much variation in color

Alstroemeria ligtu subsp simisii

a form with deep orange, elongated flowers Siete Tazas

Alstroemeria ligtu subsp. incranata

growing in large numbers with much variation in color, on the way to Laguna del Maule

Bomarea salsila

Pink, narrow bellshape flowering climber on trees and fences around Vilches

Luzuriaga polyphylla

prostrate or climbing, small leaves, many pendent flowers, orange fruits, Alerce Andino

Luzuriaga radicans

prostrate or climbing, white flowers, occasionally spotted red, usually in groups 3-4, red fruits. Huerquehue national park

AMARYLLIDACEAE

Famantia cisandina

Coral color, semi-pendulous flowers, Passo Vergara

Gilliesia montana

a particular bulbous plant with arching pedicels and brown flowers, Conguillio National park

Rhodophiala andicula

intense pink flowers with dark center Villarrica national park

Rhodophiala araucana

Leaves only, Laguna del Maule at higher elevations

Rhodophiala chilense

Intense orange-red flowers with bright yellow throat, way to Passo Vergara, at lower elevations

Rhodophiala Montana

Pale yellow trumpet like flowers, growing in sandy soil

Tristagma bivalve

small species with white starry flowers, Nahuelbut National park

AMPELOPSIACEAE

Cissus striata

climber, minute yellow-green flowers, reddish black fruits, on the way to Laguna del Laja

APIACEAE

Azorella Montana

beautiful, neat carpets, pale yellow flowers, Passo Vergara

Azorella monteroi

prostrate plant with glaucous serrated leaves, Siete Tazas

Azorella spinosa

prostrate plant with thorny, shiny green leaves, bright yellow flowers, Siete Tazas

Eryngium pandanifolium

Unusual species with glaucous leaves, dry habitats, road sides, widespread

Foeniculum vulgare

The common Mediterranean species, not native, widespread

Pozoa volcanica

Small flat growing species, round serrated leaves, round yellow flower heads, Laguna del Maule, Conguillío National Park

Sanicula graveolens

small flat plant, Celery like leaves bright yellow humbles, Laguna del Maule

ARALIACEAE

Pseudopanax valdiviensis

woody climber leaves divided into 4 sections, blackish berries, Villarrica National Park, Huerquehue National park

Pseudopanax laetivirens

Tall evergreen shrub leaves divided into 3-5 section, serrated Villarrica National Park, Huerquehue National park

ARUCARIACEAE

Araucaria araucana

Villarica national park, Volcan Lanin

ATHEROSPERMATACEAE

Laureliopsis philippiana

tree with serrated bay like leaves, small greeny/white flowers with pink blotch on the base of the petal, Siete Tazas, Huerquehue, Alerce Andino

AZOLACEAE

Azolla filiculoides

'floating fern' on the way to Laguna del Laja

BERBERIDACEAE

Berberis Montana

large shrub with relatively large flowers, outer petals yellow, inner petal orange, black berries, Villarrica, Huerquehue National Park

Berberis darwinii

dense, compact species, thorny leaves, orange color flowers with red pedicels, Laguna del Laja, Villarrica

Berberis empetrifolia

dense medium size shrub with Juniper like leaves, small flowers, Villarrica, Laguna del Laja

Berberis serratodentata

Large shrub, orange colored, round flowers, large thorny-serrated leaves Villarrica, Conguillio National Park

Berberis trigona

narrow, deep green, shiny, olive tree like leaves, red buds and pedicels, few pendulous black fruits, Villarrica

BIGNONIACEAE

Campsidium valdivianum

monophytic species, large woody climber with narrow bell-shaped, pink flowers

BLECHNACEAE

Blechnum microphyllum Growing in open areas, new leaves orange color, Laguna del Maule

BORGINACEAE

Cynoglossum creticum the common Mediterranean species, not native
Phacelia secunda typical borage species with mauve color flowers, Sette-Tazas, Laguna del Laja

Plagiobothrys myosotoides small species (Ancusa like) with flowers, Laguna del Laja

BROMELIACEAE

Fascicularia bicolor epiphytic species with red narrow centered leaves, blue flowers Alerce Andino

Puya bertroniana tall, showy flowering stems, turquoise flowers Siete Tazas, Passo Vergara

Puya coerulea smaller, clump forming species, flowering stems are slender, red in color, narrow deep-blue flowers

CACTACEAE

Echinopsis chilensis tall spiny cactus with large white flowers, dry hills, South of Santiago

Eriosyce curvispina round fat species, long curving spines, yellow flowers, Siete Tazas

CALCEOLARIACEAE

Calceolaria archniodea Silvery felted leaves with purple flowers Passo vergara
Calceolaria cana silvery- white rosettes, tall slender flowering stems with pink, marked purple flowers, Siete Tazas

Calceolaria cavanillesii large upright, serrated leaves, flowering stems 2-4 times the length of the leaves with many, small yellow flowers

Calceolaria corymbosa ssp flocosa

Calceolaria dentata

Calceolaria filicaulis

Calceolaria integrifolia

Calceolaria meyeniana

Calceolaria penellii

Calceolaria tenella

Calceolaria valdiviana

Calceolaria volkmnarii

CALICERACEAE

Nastanthus spathulatus flat growing, Broccoli like plant, Laguna del Laja, Laguna del Maule

CARYOPHYLLACEAE

Cerastium arvense
Arenaria serpens

Siete Tazas, Laguna del Laja
small carpet with many starry, white flowers, Laguna del Laja

CELASTRACEAE

Maytenus boaria* syn *M. chilensis
Maytenus disticha

pendulous tree, with elongated, serrated leaves, Villarrica
small shrub with minute flowers, 4 red petals contrasted by the yellow anthers, Villarrica

COMPOSITAE

Acrisione denticulate

large shrub leaves with silvery color beneath, large clusters of yellow flowers, Alerce Costero and Alerce Andino

Adenocaulon chilense

small plant with Primula like leaves and tall flowering stem, tiny creamy-white flowers

Baccharis neaei

medium size shrub, dense branches with creamy white flowers, Siete-Tazas and Alerce Andino

Haplopappus macrocephalus

low growing prostrate plant with Orange flowers

Haplopappus glutinosus

low growing, semi shrub with shiny leaves and yellow flowers, Laguna del Laja

Mutisia ilicifolia

small climber with pinkish-lilac flowers, Passo Vergara

Nassauvia lagascae

small, Coral looking plant with many tiny white flowers, Way to Volcan Villarica

Nassauvia revoluta

Like the above but larger in size with prominent bicolor style, Laguna del Laja, Laguna del Maule

Senecio bipontinii

Ice-plant like species with erect stems carrying typical yellow flowers, Under Volcan Antuco

Senecio chilensis

slender, narrow silvery leaves carrying orange-yellow color flowers, dry conditions, Congulio national park

Tragopogon pratensis

the common, yellow goat's beard, not native

CORCSIACEAE

Arachnitis uniflora

odd looking, leafless, orchid like species, Conquillio National Park

CUNONIACEAE

Weinmannia trichosperma

tree with fine, shiny leaves, bottle brushes of white flowers turning into red fruits

CUPRESSACEAE

Austrocedrus chilensis

Siete Tazas, Laguna del Laja

Fitzroya cupressoides

Alerce Costera & Alerce Andino

CYSTOPTERIDACEAE

Cystopteris fragile

Small fern, mostly in rocks, on way to Laguna del Laja

CYTHACEAE

Cyathea glauca

Tree fern, Laguna del Laja

DICKSONIACEAE

Lophosoria quadripinnata

Gigantic tree fern, Alerce Andino

DRYOPTERIDACEAE

Polystichum plicatum

Laguna del Maule, in rock crevices

ELEOCARPACEAE

Crinodendron hookerianum

small tree with coral color pendulous flowers, Villarrica

EMPETRACEAE

Empetrum rubrum

flat growing shrub, minute dense leaves, red berries, Villarrica

EPHEDERACEAE

Ephedera chilensis

shrub with relatively thick stems, yellow flowers, pale red fruits, Laguna del Laja

ERICACEAE

Gaultheria insana

Myrtus like leaves, flowers, white pendulous red berries, Alerce Costera

Gaultheria mucrunata

small shrub with minute leaves, white flowers. White to red Berries, Alerce Andino, Conquillio national Park

Gaultheria phyllireifolia

shrub with serrated narrow leaves with thorny tip, relatively large white flowers, particular discolored fruits, Alerce Andino, Alerce Costera

Gaultheria pumila

miniature shrub with white to deep red berries, Villarrica

ESCALLONIACEAE

Escallonia alpina

shrub with small serrated leaves, pinkish-red flowers, Laguna del Maule

Escallonia rubra

shrub with elongated leaves, clusters of red flowers

EUCRYPHIACEAE

Eucryphia cordifolia

tree with masses of Rose like flowers, white, four petals, Alerce Andino

EUPHORBIACEAE

Euphorbia collina

low growing species with reddish stems, high elevation Laguna del Laja

FAGACEAE

| | |
|-------------------------------------|---|
| <i>Nothofagus alpina</i> | large tree, trunk smooth, grey with pale markings, leaves deeply veined Villarrica |
| <i>Nothofagus antartica</i> | large tree, roundish-elongated leaves, slightly wavy, highly fragrant Villarrica, Conguillio national park |
| <i>Nothofagus betuloides</i> | large tree, small roundish, serrated leaves, Conguillio national park, Alerce Costera |
| <i>Nothofagus dombei</i> | Large tree, corky bark, very small leaves Siete Tazas, Laguna del Laja, Villarrica |
| <i>Nothofagus glauca</i> | this species has large leaves, surface is covered with glands, Siete Tazas, Alerce Andino, Conguillio National Park |
| <i>Nothofagus nitida</i> | large tree, smooth grey trunk with horizontal pale strips, small highly serrated leaves, Alerce Andino |
| <i>Nothofagus oblique</i> | this species has larger rounder leaves, slightly wavy, much serrated, Conguillio national park |
| <i>Nothofagus pumilo</i> | very small, dense leaves, slightly arching Villarrica, Laguna del Laja, Conguillio national park |

GERANIACEAE

Geranium berteroanum syn. ***G. submolle*** finely dissected leaves, pink flowers with white throat

GESNERIACEAE

| | |
|----------------------------------|--|
| <i>Asteranthere ovata</i> | neat climber, on tree trunks, relatively large red flowers, Alerce Andino |
| <i>Mitraria coccinea</i> | small, semi climber with orange/red pendulous flowers Alerce Andino |
| <i>Sarmienta scandens</i> | delicate climber, growing neatly on trunks, deep red, pendulous flowers, Alerce Andino |

GLEICHENIACEAE

Gleichenia quadripartite curious fern, new growth comes at the base of the branching leaflets, Alerce Andino

GUNNERACEAE

| | |
|-----------------------------------|---|
| <i>Gunnera magellanica</i> | surprisingly small species, growing in large patches in wet conditions, Passo Vergara |
| <i>Gunnera tinctoria</i> | A giant! Wet conditions, widespread |

HYDRANGEACEAE

Hydrangaea serratifolia a massive climber, large white inflorescences, Sette Tazas

HYPERICACEAE

Hypericum perforatum common on road sides etc., not native, Vilches, Sette Tazas

HYMENOPHYLLACEAE

Hymenophyllum cruentum

small cascading, lanceolate leaves, growing on trees.
Alerce Andino

Hymenophyllum pectenatum

small elegant fern, growing on trees. Alerce Andino

Hymenophyllum plicatum

small elegant fern, finely cut leaves, black stems Alerce Andino

IRIDACEAE

Conanthera bifolia

deep purple, nodding flowers, widespread in lower altitudes

Herbertia lahue

Iris like, small species, pale to deep Mauve – blue

Libertia chilensis* syn *L. formosa

tall, clump forming species with many flowering stems, bluish-green leaves, white flowers, damp conditions,

Heurquehue National Park, Alerce Andino

Libertia tricocca

smaller species, wider, deep green leaves only few flowering stems, Nahuelbuta area

Olsynium obscurum

small species to 15cm, pale yellow flowers, blue-green leaves, high elevations, Laguna del Maule

Olsynium junceum

variable species, white to deep purple, Laguna del Maule, Passo Vergara

Sisyrinchium arenarium

slender species, few flowers, yolk color with reddish markings

Sisyrinchium graminifolium

small species, relatively wide leaves, pale yellow, showy bracts

Sisyrinchium striatum

tall species carrying many flowering stems, yellow/white flowers

LAMIACEAE

Stachys grandiflora

pale pink flowers or white with darker markings on the lip, Vilches

Teucrium bicolor

semi shrub, pink/white flowers, Vilches, Siette Tazas

LEGUMINOSAE

Adesmia corymbosa

showy prostrate species, park national Conguillio

Adesmia longipes

small plant with feathery leaves, red stems, yellow flowers with reddish veins, Villarrica

Adesmia pumila

prostrate, small plant, Laguna del Laja

Astragalus pehuenches

slender species with puffed seed pods, Passo Vergara

Cytisus scoparius

large broom, yellow flowers, not native, mainly roadsides, Vilches, way to Laguna del Laja

Lathyrus chilensis

large deep pink flowers, wide, elongated leaves, Siete Tazas

Lathyrus magellanicus

bicolor flowers, relatively wide leaves, Siete Tazas, Conguillio National Park

Lathyrus multiceps

Large clumping species, bicolor ; bluish/white, high elevations, Laguna del Laja, Villarrica

Lathyrus subandinus

Lupinus microcarpus
Senna arnottiana

hairy leaves, pink/mauve flowers, Vilches, Siete Tazas
small shrub with relatively large, deep yolk color flowers,
Laguna del Laja

Sophora macrocarpa

woody shrub, large yellow flowers, hairy bluish leaves,
Vilches

Vicia nigricans

large clumping species, tall flowering stems, pink flowers,
Conguillio national park

LENTIBULARIACEAE

Pinguicula nahuelbutensis

small species with mauve flowers, short pedicel,
Nahuelbuta National Park

LILIACEAE

Nothoscordum gracile

Allium like, white segments with reddish, outer mid-vein,
Around Vilches

Paesithea coerulea

blue flowers, contrasted by the yellow anthers, often in
groups, Vilches, Siete Tazas

LINACEAE

Linum bienne

slender, pale blue flowers, widespread, not native

LOASACEAE

Loasa acanthifolia

deeply divided leaves, hanging orange flowers flower,
Heurquehue National Reserve

Loasa tricolor

Passo Vergara

LORANTHACEAE

Misodendron punctulatum

parasitic plant, round form made of many filiforme stems,
Villarrica

MYRTACEAE

Amomyrtus luma

large shrub/small tree Myrtus like leaves, masses of white
flowers with exerted anthers, Heurquehue National
Reserve,

Luma apiculata

Alerce Andino, Conguillio National Park

orange colored, smooth bark, white Myrtus type flowers,
Heurquehue National Reserve, Alerce Andino

Ugni molinae

Chilean Guava tree, pendent white flowers, pink stamens,
Angol area

ONGARACEAE

Clarkia tenella

slender species with purple/mauve cup shape flowers,
Vilches

Fuchsia magellanica

well known species from cultivation, widespread

| | |
|---|---|
| <i>Oenothera affinis</i> | tall species with yellow flowers, mainly on roadsides, very common and widespread |
| ORCHIDACEAE | |
| <i>Chloraea appinula</i> | small species, long, pointed, green netted petals, glandular, black lip, Siete Tazas |
| <i>Chloraea alpina</i> | small species of high elevations, deep orange color, deflexed petals, orange beard, Laguna del Laja |
| <i>Chloraea barbata</i> | bright yellow color flowers, green veined petals with olive-green tips, beard with green tips, Km 4460 |
| <i>Chloraea bidentata</i> | tall slender species, small yellow/green flowers with strongly deflexed lateral petals, Km 4460 |
| <i>Chloraea chrysantha</i> | tall species, deep orange/yellow flowers, narrow petals, green beard, Siete Tazas |
| <i>Chloraea crispa</i> | tall species, large, pure white flowers, km 4460 cultivated pine forests, road sides. |
| <i>Chloraea galeata</i> | tall slender species, small white, spotted green flowers with strongly deflexed lateral petals, Around Vilches |
| <i>Chloraea gavilu</i> | large orange/yellow flowers, flat, striped green beard, lateral petals with green tips |
| <i>Chloraea heteroglosa</i> | elegant species with creamy/white stained green, undulate petals, long green beard, Vilches |
| <i>Chloraea piquichen</i> syn <i>C. incisa</i>, <i>C. virescens</i> | tall elegant species with narrow, white petals, long green beard, orange/green stigma column. Way to Passo Vergara |
| <i>Chloraea lamellata</i> | dense inflorescence, bright yellow flowers, green beard and tips, Vilches |
| <i>Chloraea lechleri</i> | small species, white flowers with green veins and strongly marked green tips. Near Vilches, Siete Tazas |
| <i>Chloraea longipetala</i> | distinct species with pure white, non pointed petals, lip with yellow base, deep green, showy beard, Nahuelbuta National Park |
| <i>Chloraea magellanica</i> | distinct! Seems like made of plastic, highly netted green petals, lip with yellow margins, yellow stigma, Villarrica National Park |
| <i>Chloraea multiflora</i> syn, <i>C. stenantha</i>, <i>Chloraea nudilabia</i> | small species with many small white with deep green tips. distinct orange or yellow flowers with darker veins, with similarity to the Amaryllidacea members, Conguillio National Park |
| <i>Chloraea viridiflora</i> | another plastic looking species, green in all parts, petals netted deeper green, Siete Tazas |
| <i>Chloraea volkmannii</i> | this species has short very pointed lateral petals, slightly lemony color hint, deep green beard Nahuelbuta National Park |
| <i>Chloraea bidentata x barbata</i> | endless forms to this hybrid |
| <i>Codonorchis lessonii</i> | small orchid with three , pointed white petals, solitary flower on a stem, widespread under trees in partial shade, widespread |

Gavillea glandulifera

this species has long, pointed lateral petals, lip with yellow striped green wings, Villarrica

Gavillea odoratissima

tall species, many yellow flowers, pointed lateral petals, striped green, lip is orange, Villarica, Alerce Andino

OXALIDACEAE

Oxalis adenophylla

Species of high elevations, much variation in color Laguna del Maule, Passo Vergara

Oxalis erythrohiza

compact, high elevation, yellow flowering species, very curly leaves, rare, Laguna del Maule

Oxalis valdiviensis

Compact species, yolk color flowers with reddish veins, Vilches, Siete Tazas, Conguillio national park

Oxalis squamata

large clumps of pink/purple flowers, Siete tazas, Lguna del Laja, Passo Vergara, Laguna del Maule

PLANTAGINACEAE

Plantago lanceolata

widespread, damp conditions, not native

PLUMBAGINACEAE

Armeria maritime ssp andina

small clumping species, high elevation, Laguna del Maule

POACEAE

Chusquea coleou

Chilean bamboo, tall species, at high elevations as well

Chusquea quila

relatively smaller than the above, very dens growth, in the area of Vilches, Siete Tazas

PODOCARPACEAE

Podocarpus nubigena

Alerce Costera

Podocarpus salignus

Alerce Andino

Prumnopites andina

Alerce Costera

Saxe-gothaea conspicua

Alerce Costera

POLEMONIACEAE

Collomia biflora

narrow lanceolate leaves, coral color flowers with yellow throat, Laguna del Laja

Collomia cavanillesii

similar to the above, denser flower heads yellowy color, Siete Tazas

POLYGALACEAE

Pteromonnina pterocarpa

small semi shrub with particular flowers, looking almost like a legume, flowers bicolor; yellow and blue/mauve , Conguillio National Park

Polygala gnidioides

small species with pale blue flowers, Conguillio National Park

PORTULACACEAE

Calandrinia affinis

chasing snow melting, flat growing, large white or pinkish flowers, Laguna del Maule

Calandrinia colchaguensis

similar in appearance to the above, smaller, fewer flowers, mostly pale to deep pink with white and yellow center, Villarrica

Cistanthe grandifolia

glaucous, succulent like rosettes with tall flowering stems carrying large cup shapes, deep pink flowers, Passo Vergara

PROTACEAE

Embotrium coccineum

large shrub, covered with long tube like, deep coral/red flowers, widespread

Gevuina avellana

Chilean Hazel tree, bottle-brush creamy flowers, red fruits, Conguillio National Park

Lomatia ferruginea

tree with finely dissected, fern like leaves, clusters of orange/red flowers, Conguillio National Park

Orites myrtoidea

woody shrub, glossy leaves, large creamy/yellow clusters

RANUNCULACEAE

Anemonastrum autucense

White Anemone large bracts, endemic, Nahuelbuta National Park

Anemone decapetala

Small species, dissected bracts white flowers, Conguillio National Park

Anemone multifida

clumping, much dissected leaves, creamy/green flowers, high elevations, Laguna del Laja, Villarrica, Conguillio

Caltha sagitata

matt forming species, growing in damp conditions, sessile flowers, Laguna del Maule, Passo Vergara

Ranunculus peduncularis

small species, hairy leaves, whitish glands at the tip of each leaf section

ROSACEAE

Acaena magellanica

Potentilla like leaves, tall stems with round inflorescence Huerquehue

Acaena ovalifolia

Matt forming species with reddish flowering heads Huerquehue

Acaena macrocephala

finely divided leaves, compact growth, large flowering heads, Laguna del Laja

Acaena pinnatifida

finely divided leaves, tall elongated inflorescence, green flowers with prominent red anthers, Laguna del Laja

Fragaria chiloensis

wild strawberry, large white flowers, Villarrica

Geum magellanicum

tall species, orange flowers, Conguillio National Park

Rubus radicans

miniature species, prostrate, pink flowers, Alerce Andino

RUBIACEAE

Oreopolus glacialis

matt/cushion forming species covered with mustard-yellow color, Laguna del Maule, Passo vergara

SALICACEAE

Azara serrata

Tall shrub with serrated leaves and yellow petal less flowers Villarrica, Alerce Costera, Conguillio national park

SANTALACEAE

Quinchamalium chilense

low growing semi-shrub, Sedum like leaves, large, orange colored inflorescence

SAXIFRAGACEAE

Ribes magellanicum

large leaves, red flowers, Widespread

Ribes punctatum

leaves divided into three sections, greeny/yellow flowers, Vilches, Siete Tazas

SCROPHULARIACEAE

Buddleja globosa

large shrub with round, yolk color flowers, widespread showy species, deep orange color flowers, damp conditions, Laguna del Laja

Mimulus cupreus

Mimulus glabratus

small prostrate species, small yellow flowers, growing in damp conditions, Villarrica

Mimulus luteus

larger in all parts, yellow flowers, some have dark markings, vary in size, Villarrica

Mimulus naiandinus

large pale pink/yellow flowers, drier conditions, Passo Vergara

Ourisia alpina

high elevation species, Primula like, pink flowers, damp conditions, Laguna del Maule

Ourisia coccinea

Primula like, leaves arranged in a rosette, red pendent flowers, Heurquehue National Park, damp conditions

Ourisia microphylla

matt forming species, growing on wet walls, pink flowers, Laguna del Laja

Ourisia ruelloides

bright shining leaves, clumping, deep red flowers, streams, banks

Verbascum virgatum

widespread, tall yellow flowering stems, not native

Veronica anagallis-aquatica

the common European/Mediterranean species, near streams, not native, Laguna del Laja

SOLANACEAE

Cestrum parqui

large species with masses of pale yellow flowers, Vilches, Siete Tazas

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| <i>Fabiana imbricata</i> | distinct species with coral like stems, masses of tubic pale blue, mauve, white or whitish flowers, Siete Tazas, Laguna del Laja |
| <i>Latua pubiflora</i> | shrub with deep cerise, pendulous flowers Alerce Costera |
| <i>Nierembergia repans</i> | matt forming species with large up-facing white cups, Siete Tazas |
| <i>Salpiglosis sinuata</i> | amazing colored trumpets like flowers, well known from cultivation, Siete Tazas, Passo Vergara |
| <i>Scizanthus alpestris</i> | Slender species with soft pink/mauve petals with dark markings on white background in the upper petal |
| <i>Scizanthus grahamii</i> | stunning bicolor flowers, Passo Vergara, Siete Tazas |
| <i>Scizanthus hookeri</i> | this species has pink flowers with orange upper petal, Siete Tazas, Passo Vergara, |
| <i>Solanum crispum</i> | grayish/blue narrow leaves, clusters of pale purple flowers, Siete Tazas |
| <i>Solanum etuberosum</i> | potato like small shrub with deep purple flowers, Alerce Andino |
| <i>Solanum ligustrinum</i> | shiny, waxy green leaves, deep purple flowers clusters of purple pendulous flowers, Siete Tazas |
| THYMELEACEAE | |
| <i>Ovidia andina</i> | shrub with large waxy leaves, clusters of small white flowers, Villarrica |
| TROPAEOLACEAE | |
| <i>Tropaeolum polyphyllum</i> | semi climber, on rocks, many deep yellow flowers, Passo Vergara |
| <i>Tropaeolum tricolor</i> | well known Chilean climber, yellow, red purple flowers, Laguna del Maule, Siete Tazas |
| VALERIANACEAE | |
| <i>Valleriana fonkii</i> | small species, elongated, folded leaves flowering stems about 20cm with white flowers, Villarrica |
| VERBENACEAE | |
| <i>Diostea juncea</i> | broom like shrub with white, arching flowers, Siete Tazas |
| <i>Phyala x reptans</i> | matt forming species, small umbels of pinkish/yellow flowers, Villarrica |
| VIOLACEAE | |
| <i>Viola cotyledon</i> | cushiony species, high elevation species, different shades of white to purple flowers, Laguna del Laja , Laguna del Maule |
| <i>Viola frakasiana</i> | dull green color rosettes, dented margins, glands in between sections, white flowers, Siete Tazas |
| <i>Viola glacialis</i> | Pansy type, small deep purple flowers, narrow leaves, high elevations, Laguna del Maule |

Viola maculata

Pansy type, round serrated leaves, yellow flowers with brownish markings on central petal, Siete Tazas, Villarrica

Viola magellanica

similar to the above but with rounder petals, short blackish veins on central petal, Alerce Costera

Viola reichei

large round leaves, clumping, yellow flowers with brownish veins, Villarrica

Viola skottsbergiana

small rosettes, conical shape on older plants, white with purple, yellow stripes, Passo Vergara

Viola subandina

leaves only, small rosettes, dented margins, elongated leaves, Siete Tazas

WINTERACEAE

Drimys winteri

tree with large shiny leaves, clusters of white lowers, deflexed narrow petals, inflated green styles, Alerce Andino, Heurquehue national reserve