

November 2015

A Study Tour to Chile and Argentina

Eamonn Wall, FICFor, November 2015

With the help of grant aid from Confor's Education Fund, Eamonn was a member of the study tour to Chile and Argentina organised by the Royal Botanic Garden Edinburgh. The aim of the tour was to visit a range of landscapes mostly containing native woodland habitats. Thirty people attended with two staff from the RBGE, Martin and Dr Sabina Gardner, both of whom led the tour and have been to Chile on many occasions. In fact Martin, in particular, is perhaps the world expert on Chilean flora. He also heads up ICONic, the conifer world conservation programme.

As well as the two RBGE members we also had different local guides joining us on the trip for three sections of Chile we visited. Most of the time was spent in Chile with a few days in Argentina, and ranged from sea level up and through the Andes.

We are all aware that Chile is a very long country with Peru along its narrow northern boundary (adjacent to the Atacama desert) and Argentina along its eastern boundary with the Pacific Ocean to the west. The eastern boundary is the Andes, including Aconcagua, the highest mountain in South America. In botanical terms Chile is almost an isolated island and contains a huge number of plants: in fact 46% are unique comprising 2266 plants. There are some 63 native trees (50 endemic to Chile) and many more woody shrubs. Chile has a human population of 18m of which 5m live in its capital, Santiago.

Our trip commenced in Santiago with a brief tour to see the range of street trees grown in the city. Despite having a large range of native trees to plant, most of the street trees were exotics including for example; London plane, copper plum, *Ginkgo biloba*, ash, *Magnolia grandiflora* and Persian violet. Our first guide quickly brought us up to speed on Chilean history and it was fascinating to learn that Chile became a Republic way back in 1818. Its last Governor under Spanish occupation was Ambrose O'Higgins an engineer from the west of Ireland who had joined the Spanish navy. His son Bernardo together with a San Martin, from Argentina, forced the Spanish out of these two countries and so Bernardo became the first leader of the new Republic. Interestingly the current President of Ireland is Michael D. Higgins. Every Chilean town and village now contains squares and roads named after their famous leaders. I felt at home already. Native Chileans are from the Mapuche tribe and are more common in the south.

We quickly departed the city heading north to visit the La Campana National Park. This park is mostly woodland and its mountain, La Campana, (the bell) was climbed by Darwin in 1830. The woodland was amazing containing the last main concentration of elephant palms (*Jubaea chilensis*) or Chilean Palm. The trunks look like large elephant legs. I was aware that Chile is a narrow country about 120 miles wide but there is also a coastal range of mountains reaching 1000 metres, so the central plain is in fact rather narrow.

Gunnera is perhaps one of the most common Chilean plants we see in the UK so it was very interesting to see it growing in its homeland. The Chilean firebush tree (*Embothrium coccineum*) with its lovely bright red flowers was a common sight throughout our trip. This grows well in the UK and the RBGE contains around 400 Chilean plants making it one of the largest collections in the world.

After a visit to Zapallar, on the Pacific coast, where we saw a huge range of colourful plants and interesting fauna (e.g. sea lions and pelicans) and walked through a native coastal broadleaved woodland where exotic trees are being removed, it was time to fly 700km south to Temuco. From here we headed east up into the Andes to stay two nights among the volcanos and amazing monkey puzzle (*Araucaria*) trees. As we drove up the mountains we could see forests in the distance and then suddenly the pine forest became a monkey puzzle forest. In some ways it looks like a Caledonian pine forest but of course it is growing on the sides of active volcanos, snow covered, and some of the trees are over a thousand years old. The undergrowth is often dense bamboo, which was not something I was expecting. Also growing in the mountains were four out of the eight southern beech trees (*Nothofagus spp*) native to Chile. Some are evergreen, some deciduous, some very large (eg; *dombeyi*) and some very small growing high up in the mountains (eg; *antarctica*).

We then visited a temperate rain forest where the variety of trees was wonderful and the sheer size of the southern beech trees amazing, much larger than our native trees in the UK. These were located on the side of a volcano that erupted only ten years ago, adding yet more interest. It was then time to head south again but this time by bus. We were heading for the Lake District and to the town of Puerto Varas located on a large lake with the famous Osorno volcano in the background. Along the way we saw many forest plantations containing mostly *Pinus radiata*, with some eucalyptus and a small number of Douglas fir.

Close to Puerto Varas we visited a reserve where the highlight was the Alerce tree, *Fitzroya cupressoides*, named after captain Fitzroy from Darwin's ship the Beagle. These are very old trees and one specimen is 3622 years old. This part of Chile was once covered by a huge forest of Alerce trees up to 50m tall but during the 18th and 19th centuries they were all felled for their valuable timber. The few remaining mature trees are protected in the reserve. We then visited an area settled by mainly German farmers back in the 1850s at the invitation of the Chilean Government.

It was now time to head for Argentina by boat to Bariloche, our final destination before flying home after two days in Buenos Aires. The journey actually comprised three separate boat trips and included a very unusual passport control and a bus up through beautiful broadleaved forest into Argentina. We then boarded a smaller boat along another lake followed by an hour's walk, finishing off with an amazing two-hour trip through the mountains to Bariloche.

I am very grateful to the Education Fund at Confor for helping support me on this great and highly informative study tour.

Eamonn Wall & Co.

www.eamonnwall.co.uk

