Waikato Botanical Society Te Maika Peninsula Visit January 2018
By Thomas Emmitt

Nearly ten years after the Waikato Botanical Society last visited Te Maika peninsula an adventurous group of Waikato 'botsoccers' set out again to survey the peninsula on Auckland Anniversary weekend. Te Maika is a long, narrow strip of coastal cliff and dune land that stretches out to form the southern side of the entrance to Kawhia Harbour. The peninsula has a long history of human occupation and almost all of the original vegetation has been cleared at some point in its history. Despite this the peninsula is slowly being reclaimed by regenerating coastal forest.

Setting out on the ferry on Friday night from Kawhia enabled two and a half days of botanizing. After a short ferry ride, we were greeted on the beach by Phillip and Vivienne who were our hosts for the weekend. A short walk up to our accommodation and a couple of quad bike trips to get our gear up from the beach and we were ready to find our beds for the night.

The peninsula is now under the ownership of the maori king and is managed by the Te Maika trust.

The plan for this visit was to survey the small areas of wetland nearby our accommodation, then get out and around some of the coastal cliffs and dunes. Totara Point was also up for a visit seeing as it was administered by the same trust and was a short trip across the mudflats at low tide.

During the last visit threatened plants such as *Cyclosaurus interruptus* had been found and there were also records for *Ranunculus macropus* and *Centipida minima* subsp. *minima* in and around the main wetland.

In the morning we explored the wetlands on the inland side (See Figure 1) of the peninsula then in the afternoon we decided to seek some shade and botanise the coastal forest. Of interest for the morning was relocating the threatened fern *Cyclosaurus interruptus*. There is no fencing on the peninsula wetlands allowing horses to roam in and out around the edge of the wetlands creating pathways through the tall raupo. One positive impact from the horses is that grazing along the edges also maintains a herbfield/grass land along the wetland margins. These herbfield/grasslands were dominated mostly by *Ludwigia palustre* and *Paspalum distichium* but were also interspersed with natives such as *Myriophyllum propinquum* and *Ranunculus amphitrichus*. The best discovery amongst the sea of *Ludwigia* and *Paspalum* was made by our threatened and interesting species locator Lynne Griffiths who found some beautiful patches of *Glossostigma elatinoides* in full flower (See Figure 2), which is not threatened but great to see surviving amongst the exotics.

The main wetland areas are dominated by raupo, and swamp millet (*Isachne globosa*), with emergent grey willow (Salix cinerea).

After morning tea (after having not made it very far) we carried on around the main wetland and decided to wade inland to see what was growing around the patches of Grey willow which at a distance were first thought to be patches of manuka. Not far in and we stumbled across the *Cyclosaurus interruptus* which was abundant amongst the raupo. Also growing in the same area, we found *Thelyptris confluans* which had eluded the previous botanical foray 10 years earlier. The *Thelypteris* was also abundant amongst the safety of the tall raupo.

The Grey willow was not very widespread amongst the wetland vegetation making control feasible at this stage, many smaller willow seedlings were found around the wetland indicating the population is growing and if left too long will dominate the wetland.

Further round we located an area dominated by swamp millet and interspersed with *Sparghanium subglobossum* which is a regionally rare species. This area of more open vegetation had many small willow seedlings coming up.

Earlier in the morning it had been noticed that a significant portion of the wetland had browned off which we were informed was created by an influx of saltwater during the latest storm. We later found out that it was in this area that the *Ranunculus macropus* had been located. This also explained the existence of Spartina, which thankfully we could not relocate. John Dodson even went for a swim to relocate the Spartina. During the 1980's a drain had been put directly through the middle of the wetland and opened up to the harbor causing periodic incursions from the sea.

We continued to search the wetland for the *R. macropus* but could only locate what we determined as large leaved *Ranunculus amphitrichus* in flower.

As we wandered around several weedy species were noted growing in the paddocks possibly having escaped from the local gardens. *Carex longbrachtiata*, pinapple plant (*Euchomis comosa*) and elephants ear (*Alocasia brisbanensis*) were all growing in small and distinct patches.
Overall the wetland was in good condition and was largely dominated by native species in the middle. The outer edge was influenced by grazing from the horses who have been slowly tracking further in and opening up the interior to weed invasion. Fencing off the wetlands or getting rid of the goats and horses in the future will help to keep these wetlands intact. The grey willow also needs immediate control as they will quickly take over and modify the habitat rendering it unsuitable for the threatened ferns inhabiting the wetland. The other major threat to the wetland is the drain that allows salt water to invade the systems causing large areas of dieback and also threatens the survival of the threatened species.

After lunch we headed around the coast for the afternoon towards a gully at the narrowest point on the peninsula then up through the forest back to the open grassland. On the way around the coast it was great to see remnant puriri (*Vitex lucens*) and kowhai (*Sophora microphylla*) poking their tops through the regenerating kanuka. There were the remains of many baches along the coast. One had a large *Eleagnus x reflexa* hedge that was going rampant and starting to creep its way into the bush. Of note was a large ngaio (*Myoporum laetum*) which is very uncommon along this stretch of the west coast.

Once under the canopy it was very noticeable that the understory and ground cover tiers were missing, symptoms of the large numbers of goats that roam the coast along with the impact from deer, pigs and horses. Many of the forest species were present in the forest but were mostly epiphytic. A concentrated effort on goat control would help to ensure the forest is regenerating underneath. Once we had made it to the ridge we headed down the gully on the other side which led us down to the seaward side of the peninsula. Part way down the gully opened and flattened off creating wetland areas dominated by swamp millet and *Scheonoplectus tabernaemontani.* These wetlands had no weed species in them which was great to see.

On day two we headed out to the coast on the seaward side for an explore of the cliffs and dunes then in the afternoon headed over to Totara Point. Although the coastal cliffs had been highly modified by goats they were still botanically interesting with large specimens of *Coprosma repens* (although heavily browsed), *Triglochin striata*, rengarenga (*Arthropodium cirratum*), Lilaeopsis novae-zelandiae and flowering specimens of *Selliera radicans*. The rengarenga and *Coprosma repens* were heavily browsed, at one point they had ripped out the rengarenga tubers from the ground leaving them strewn along the base of the cliffs. Both of these species as well as the rest of the ecosystem would benefit greatly from the removal of goats.

The dunes were a highlight for the day as they were relatively free of marram grass and had large swards of *Spinifex sericeus, Ficinia nodosa* and *Carex pumilo*. (See Figure 3) There were some weeds present, namely pampas, gorse and marram which if controlled now would be easy and would help retain the natural character of the coast. Also noted was the lack of rabbits in an area that normally holds large numbers. This was later explained as not being normal and up until a couple of years ago there were rabbits all over the peninsula but suddenly died off.

Notably missing from the coast was the sign of any pohutukawa, young or old. The pre-human vegetation maps of this area show the peninsula as being covered in a pohutukawa dominated forest.

In the afternoon while it was low tide a group of us headed over to totara point which was the site of an old pa site once inhabited by Te Rauparaha. As soon as we crossed over we were welcomed by a large fruiting ngaio and unfortunately a large patch of African clubmoss (*Selaginella kraussiana*) growing around an old campsite. We wandered around the coast and up onto the pa site which had superb views of the harbour. No totara were found on totara point, only a lone rimu (*Dacrydium cuppresinum*) towards the point. As we made our way around the southern side the vegetation made a dramatic change from regenerating kanuka forest to a broadleaf dominated forest, which we think is most likely some of the original forest (See Figure 4). The forest remnant was dominated by mangaeo (*Litsea calcaris*), kowhai (*Sophora microphylla*), Olearia albida and karaka (*Corynocarpus laevigatus*). The only wharangi (*Melicope ternata*) for the trip was also seen in this remnant patch of forest.

On the last morning we set out to explore some of the closer coastal area from the wharf to the harbour entrance where there was some coastal forest still hanging on in the steeper areas. Close to the wharf we unfortunately found some young cotoneaster plants that were spreading from one of the local batches. Also noted were some pohutukawa that had been planted. As we headed around toward the harbour entrance a few strategic forays into the coastal scrub yielded some more rengarenga (See Figure 5) hanging on out of the reach of goats and a very nice patch of *Peperomia urvilleana*. Unfortunately, we also found our second weedy Carex for the trip; *Carex divulsa*. A patch of Macrocarpa trees were also noted that would be good to remove before they become too large and spread further over the cliffs.

Figure 1 – View of main wetland complex

Figure 2 – Glossostigma elatinoides

Figure 3 – View of the dune system

Figure 4 – Remnant vegetation on Totara point

Figure 5 – Rengarenga hanging out of reach of goats