HFNC Excursion to Long Swamp, Piccaninnie Ponds & Picks Swamp – 20 Feb. 2016

Rod Bird

Participants – Mark Bachmann (NGT), John & Glenys Cayley, Janeen Samuel & Ken Grimes, Rod Bird & Diane Luhrs, Hillary Turner, Jane Hayes, Peter Hocking, and Ivor & Ruth Graney from PFNC.

Some members left Hamilton at 8.30 am and all arrived at the junction of the Winnap Rd with the Portland-Nelson Rd at 9.45 am. We were surprised to note the number of road-kill animals (mostly Black Wallaby and Eastern Grey Kangaroo) on the road near Dartmoor and from Winnap south. One Koala was also seen wandering across the road.

Our guide for the day was Mark Bachmann from Nature Glenelg Trust (NGT) who has been the driver of all the recent wetland restoration projects in our region. Mark led us west to Quarry Rd and thence to the Nobles Rocks area. We took a fork off the track to Nobles Rocks parking area and stopped shortly after, to walk along the sandy management trail adjacent to Long Swamp.

We viewed the restored **Long Swamp** from a dune near the 4WD management trail and Mark explained some of the history of the swamp and dune vegetation. Early navigators described the dunes here as being bare and early settlers found them to be shifting. More recently most have become colonized by Marram Grass (introduced to stabilise the sand) and shrubs, now including Coastal Wattle.

Long Swamp, east of the levee, looking north (the new west flow outlet is on right hand edge).

Mark pointed out an area on the swamp where swans had pulled out a large area of water plants (mostly sedges), possibly to try and keep an open water. Water Ribbons (*Triglochin procerum*) is now a prominent component of the swamp vegetation. At this time the water in the swamp was about 30 cm deep and a good deal of the other vegetation, including Woolly Tea-tree (*Leptospermum lanigerum*) that was there has died, and shifted now to the new marginal grounds.

Originally, Long Swamp discharged fresh water west to the estuary of the Glenelg River. An artificial drain was cut through the dunes at Nobles Rocks sometime in the early 1900s and another opening was at Whytes Beach. That opening has closed naturally in recent decades, leaving Nobles Rocks as the major outlet. In the last few decades the pine plantations 1-2 km to the north (visible in the photo) have had an impact on the water flowing into the swamp. The only practical way now to restore the connection and flow of water to the estuary at Nelson is to reduce the outflow in the drains in the east.

Current monitoring involves surveys of vegetation, birds, invertebrates (incl. Damsel Flies, Butterflies), fish (Dwarf Galaxias were found) and frogs (using audio recorders) are being done.

At Long Swamp, the Phase 1 sand-bagging of the outlet in the dunes near Nobles Rocks was done in 2014. A Phase 2 levee was constructed further down the swamp in 2014 to check water levels and that maintained water at 34 cm in the deepest part of the swamp. A Phase 3 sand bag levee was begun in March 2015, about 40 m upstream from the first levee. A trench was dug by hand to establish a secure bedding, using Geofabric lining. Sandbags were filled near the Phase 1 site and wheeled by barrow to the Phase 2 site. To expedite matters a board race was laid down along the channel. In April, 58 mm of rain fell, causing the swamp to start filling, inundating the channel. Work was continued in the water by the NGT team and their many volunteers and after 7 or 8 days the sand bags rose above the water line! Some 6,600 bags were laid at first and then another 400 bags later, to bring the wall height about15 cm above the swamp level at which water would flow west towards Nelson. On 28 April 2014 the depth of water at the levee was 153 cm and that in the deepest part of the swamp was 45 cm.

Mark Bachmann on Phase 1 levee, Long Swamp).

Phase 3 levee, Long Swamp – HFNC group.

Long Swamp), from Phase 3 levee, looking NE.

Long Swamp, *Scaevola aemula* in flower.

We noted quite a few flowers along the trail, including the blue-flowered *Scaevola* and *Lobelia*.

Birds seen in the Long Swamp area:

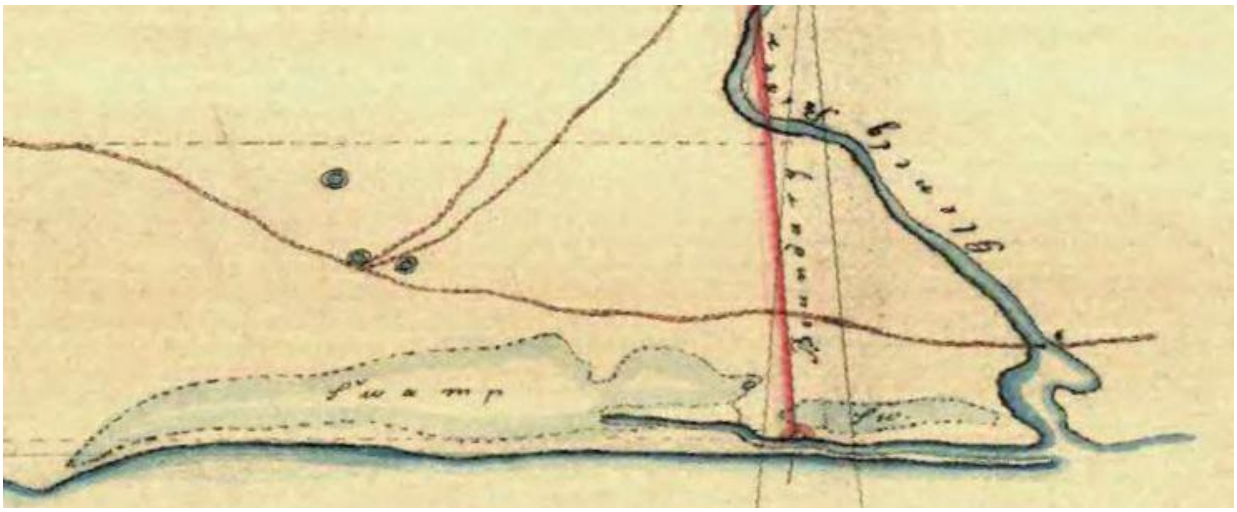
- Little Wattlebird
- Red Wattlebird
- Welcome Swallow
- Grey Shrike-thrush
- Silvereye
- Superb Fairy-wren
- Blue-winged Parrot
- Black Swan
- Australian magpie

The background and progress of the restoration of this and other swamps in SE of SA and SW Victoria is well documented in the NGT Blogs from 2013-2016. Detailed information and photographs can be found there for Long Swamp, Piccaninnie Ponds and Picks Swamp.

We drove west to Nelson and had lunch at the picnic area besides the Glenelg River. Birds seen on the Glenelg River at Nelson:

- Little Egret
- White-faced Heron
- Hoary-headed Grebe
- Chestnut Teals
- Silver Gull
- Musk Ducks (7)

Our next stop was at the outflow channel from **Piccaninnie Ponds** in South Australia. Prior to about 1920, or a little later, water flowed east behind the coastal dunes to the estuary at Nelson. In 1906 a landholder on the Victorian side of the border diverted the Freshwater Creek through the dunes to the sea. In 1915, fishermen mobilised government and community support to restore the origin function by sand bagging the exit channel. That was an enormous job, done largely by volunteers, and cost £1000 (equivalent to $96,000 today). The work did not last; the dune was breached in 1917, a little way upstream near the border. The breach may have been sabotage by a local landholder.



Early survey sketch of swamps west of Nelson and Glenelg River estuary

Some time before 1944 someone cut a channel from the Piccaninnie Ponds outlet through the dunes to the sea. One result was the silting up of the channel near the border. The SA Department of Environment installed a regulator on that channel in 2006, together with a fish ramp. The height was raised in 2013 to force water to flow east. The level can be lifted if access is gained in future years to privately owned swamp land between the border and Nelson. Once there is a natural ocean outlet at Nelson for fish and eel access it would be possible to block the artificial opening at Piccaninnie Ponds.

Piccaninnie Ponds artificial outlet to the sea.

We walked from the regulator weir along the board walk to the middle of the swamp, nearly opposite the inflow from Piccaninny Ponds. The recent increased level of the swamp in that area has killed a lot of shrubs but has allowed water to be maintained there through the summer.

Piccaninnie Ponds swamp regulator levee and fish ramp

Drain upstream from Piccaninnie Ponds regulator

Piccaninnie Ponds boardwalk into the swamp

Piccaninnie Ponds swamp viewed from boardwalk end

Our last stop for the afternoon was at **Picks Swamp**, now part of the Piccaninnie Ponds Conservation Reserve. Picks Swamp occupies 230 ha and was acquired in 2005, after several false starts. The main project to restore water began in 2007, after the lease for grazing cattle ended. Several drain blocks were installed to test the impacts and a weir was installed on the drain that conveys water through the dune to the sea, some 200 m distant.

Picks Swamp entrance.

Picks Swamp from SE end.

Unlike other wetlands in SW Vic and the lower SE of SA, the groundwater fed swamp had water and with a significant cover. There were many waterbirds present, including Pink-eared Duck, Chestnut Teal, Shelduck, Eastern Great Egret, Eurasian Coot and a few Brolga, Magpie Geese and Cape Barren Geese. Australasian Bittern, including Robbie who was tagged in a rice paddy in the Griffith area and made a bee line for Picks Swamp in one day, have been regularly sighted here and at Long Swamp. We saw a bittern at Piccaninnie Ponds on our last visit but not there or here this time.

Picks Swamp from the SW end, looking east

Picks Swamp from the N-S mound at west end

Picks Swamp west end– Coots, Swans and ducks

In 2009-10 a levee bank was built along the west boundary, to prevent water from flowing onto the grazing land there (part of the original swamp). The mound makes a good viewing stage. The mound was made from sand from the coastal dune and cost about $40,000 to build – a modest amount compared with a conventional engineering solution requiring hundreds of tonnes of clay to be carted in to form a bank. There is a slow leakage through and that is picked up by a drain along the west side and through to the sea. An ultimate objective would be to acquire the western property and fill in the drain.

Birds seen at Picks Swamp:

- Brolga (3)
- Magpie Goose (12)
- Cape Barren Goose (2)
- Black Swan
- Masked Lapwing (70)
- Little Black Cormorant(1)
- Australian White Ibis
- Straw-necked Ibis
- Brown Falcon
- Swamp Harrier
- White-faced Heron
- Australian Shelduck (100)
- Eurasian Coot (200)
- Purple Swamphen
- Musk Duck
- Chestnut Teal
- Grey Teal
- Pink-eared Duck
- Pacific Black Duck
- Silver Gull
- Eastern Great Egret (8)
- Black-winged Stilt
- Little Grassbird
- Blue-winged Parrot

Picks Swamp mound & drain on the west end.

Mark Bachmann noted in the NGT Blog of 24 Feb. 2016 that '*The HFNC* h*ave been a great partner and supporter of NGT's work in the South West, ever since our launch 4 years ago, so it was a real privilege to be able to spend the day with a great, down-to-earth bunch of people who share our passion for the natural environment*'.

PS. A week after our visit, 50 mm of rain lifted the Long Swamp water level by 6 cm.