

## HFNC Working Bee Sandbagging at Bradys Swamp 18 March 2014

Rod Bird

This working bee was attended by Rod & Diane, John & Glenys, Ken & Janeen, Amanda, Roger and Peter. We assisted Nature Glenelg Trust staff (NGT) and local landholder Doug Craig to install a sandbag structure in the outlet drain at Bradys Swamp which lies on the SE corner of the Grampians NP.

Bradys Swamp was once a major site for large flocks of Brolga and nesting Magpie Geese and other waterbirds. Ibis were seen nesting in the Spike-rush in 2004, 2005 and 2007 when the drain was partly clogged with vegetation. The swamp has a shallow E-W drain across the centre, installed after 1948 since it does not show in the 1948 photo (see below) and, as a consequence of the drain, is usually dry by February. About 253 ha (southern part) is freehold and 200 ha (northern part) is a Wildlife Reserve that is contiguous with the Grampians/Gariwerd National Park. That part, and Gooseneck Swamp, was at one time freehold land. In 1986, that 232 ha area was purchased by the government. The privately owned parts were offered for sale to the government in about 1996 but not acted on.

The aerial photo shows the wetland system in 1948. The drain from Heifer Swamp to the east (near the lower right corner of the photo) to Bradys Swamp was dug in about 1900 and the 900 acre Heifer Swamp was then subdivided and sold by the Lands Department. The official Bunnugal Drainage Scheme was instituted in 1954. The photo shows that Lynchs Crossing Rd passes below Walkers Swamp and 1 km further west it turns north. Gooseneck Swamp is the dark area above the NE corner of Bradys Swamp.



Bradys Swamp takes fresh water from the outflow from the Grampians – the Wannon River delta in the park. That flow was reduced substantially when the Wannon Creeks at the headwaters were diverted north to the reservoir at Halls Gap. The flow from the drain from Heifer Swamp probably more than compensated for that loss, although the drain on Bradys rapidly removes that more saline water.

We saw that the 500-ha Bradys Swamp was now dry except for a shallow spread of water over about 5 ha near the western end of the swamp. That water may be glimpsed from North Boundary Rd but not from the Gooseneck Swamp area.

Initial work had been done with an excavator few days earlier to construct a trench across the channel, extending into the banks (the sandbag levee would extend into those areas), and a mound of clay had been built up a metre or so on the floor. Fabric had been placed over that and extended upstream and downstream over the sloping ends of the mound.

The sandbags that we volunteers filled with earth were later placed by NGT staff on the central level area of width about 12 m and length (along the channel) about 5 or 6 m. We had 9 members present working with Nature Glenelg Trust staff and others – well done to all! This was a significant effort by the club.

We filled 800 bags with earth and this went into the levee, building it up about 80 cm from the compacted earthen barrier that was constructed in the bottom of the drain – a total levee height of about 1.8 m, a little below the level of the ground surfaces beyond the drain and bank.

The idea is that when the swamp fills it will overflow along its adjacent historic, wider (and higher) route from the swamp into the Wannon River. Thus, the restoration works will be recreating the situation that applied before the deep outlet end of the drain was constructed in the late 1940s or early 1950s. The levee will enable water to be retained in the swamps for a longer period in summer-autumn. The same situation applies with the Gooseneck Swamp works made in August 2013.

Mark Bachmann (NGT) provided a photo of 20 helpers (except Mark and also Diane who had to leave a little earlier) on the finished sandbag levee. The second photo shows the levee from upstream side.



Monthly bird surveys are being conducted by HFNC at the swamp, beginning in September 2013.