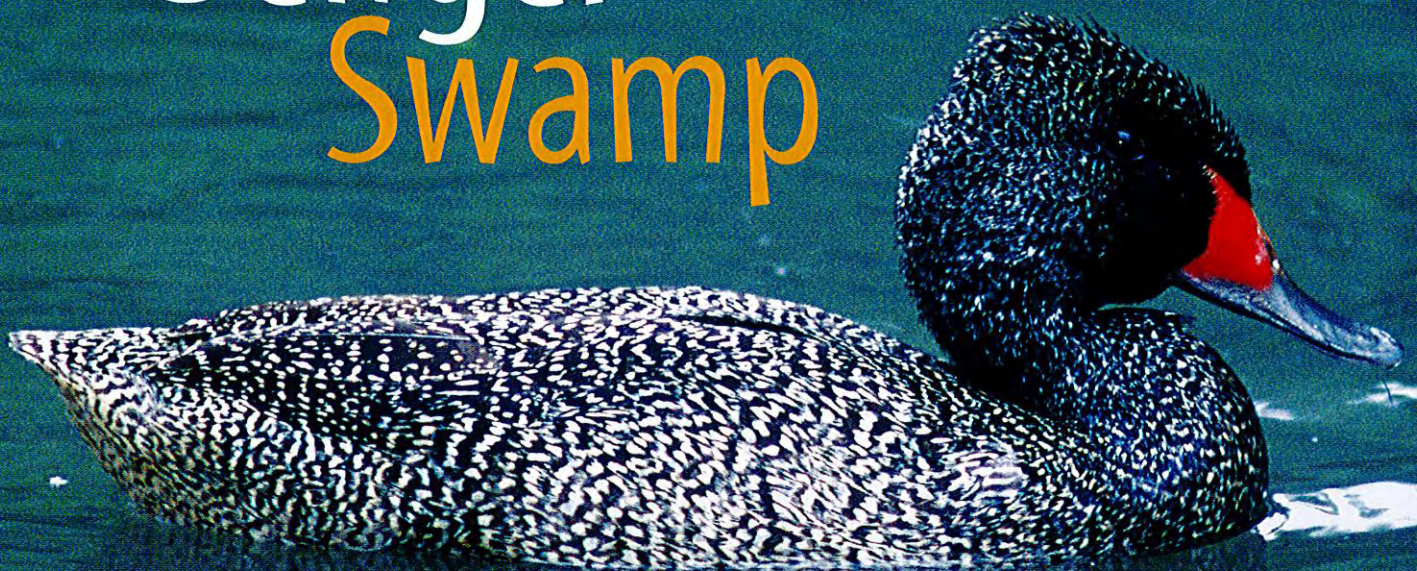


Benger Swamp



Late in 2009 the whole of Benger Swamp, near Harvey in Western Australia's south-west, was reserved for conservation, finalising a process which started more than 35 years ago.

by Alex Errington and Joanna Moore

Benger Swamp Nature Reserve, about 155 kilometres south of Perth on the Swan Coastal Plain, has been the subject of one of the State Government's longest running conservation acquisition projects. The Department of Environment and Conservation (DEC) recently completed the consolidation of this important site for conservation, protecting important waterbird habitat.

Benger Swamp once covered an area of about 1,000 hectares, but during the past 100 or so years the swamp has been reduced to almost half this size, primarily through draining. The reserve is surrounded by farmland, most of which has been cleared, and a history of farming has significantly impacted on the swamp.

The swamp was originally known to European settlers as the Flats of Mornington, with the name Benger being derived from the local Aboriginal name for the area—Bengerup meaning 'place of water' and Beenja meaning 'big water'.

Potatoes, pasture and waterbirds

Benger Swamp and the land around it was granted to a settler in 1830 and



changed hands several times during the early years of European settlement. Agriculture began in the 1890s, with mostly potato crops grown as well as pasture crops such as clover, and peas and beans. Fertilisers and insecticides, such as DDT, were used. Levee banks and drains were constructed as part of the farming process.

In the late 1960s, the then Department of Fisheries and Fauna, one of DEC's predecessor departments, recognised the value of the area for conservation. In 1974, the department raised the issue of conserving the area in the context of protecting the rare freckled duck (*Stictonetta naevosa*). Considerable data had been collected by Honorary Game Warden Reg Taylor about the significance of the area for waterbirds generally. Concerned individuals and organisations also

encouraged the establishment of a nature reserve to protect the swamp.

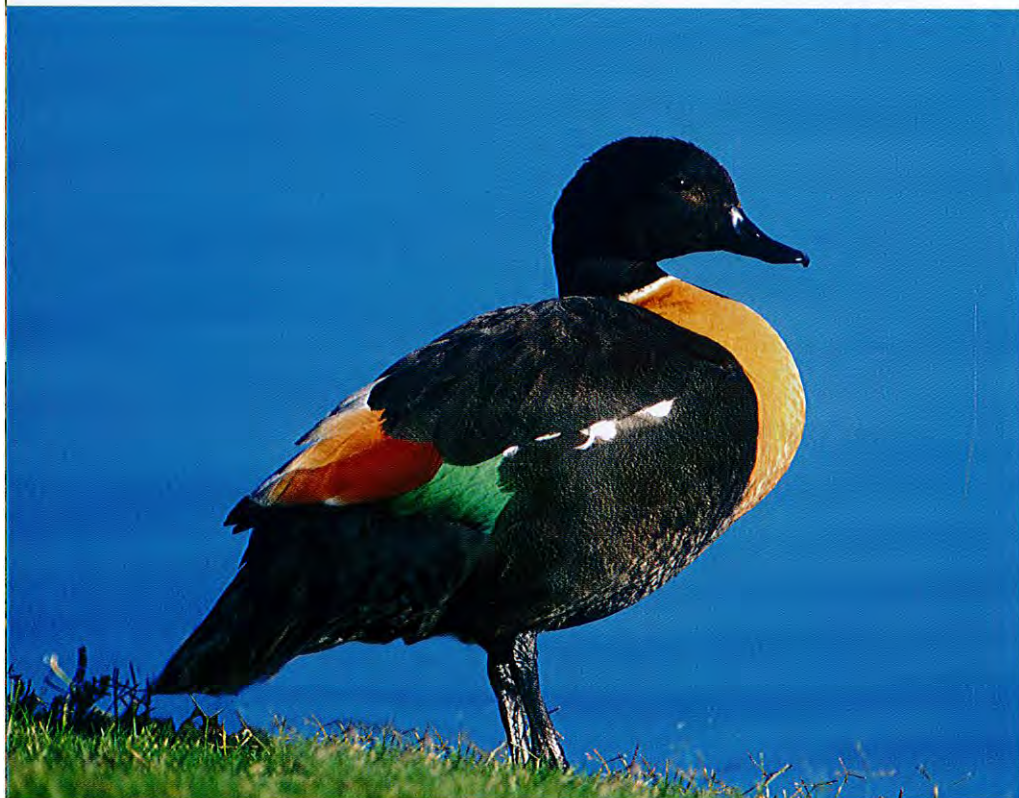
However, the swamp was privately owned freehold land and was still being used to grow potatoes and other seasonal vegetable crops, despite the fact that crop yields were dropping. Increased salinity, a direct result of irrigation, was identified as a probable cause of this.

Protection puzzle

The swamp had also been the subject of two major subdivisions—in 1914 and again in 1929. The area was like a jigsaw puzzle, made up of dozens of separate small blocks of land. Before 1974, the reserve was divided into some 160 separate lots.

The first parcel of land was acquired for conservation in mid-1973—56 hectares of wetland. Another parcel of 80 hectares was purchased in the same year. This started a process lasting 35 years, in which successive conservation agencies purchased further holdings as they became available. The land was purchased in small sections, gradually making the vision to consolidate the swamp into one reserve more and more achievable.

In 1987, the then Department of Conservation and Land Management produced a management plan for the reserve. At this stage, the swamp was 19 per cent nature reserve, 70 per cent land already purchased by the Government for addition to the nature reserve and 11 per cent privately owned. The management plan included two key strategies: that the department continued its attempts to purchase the 29 blocks still remaining in private ownership; and that all purchased blocks be added to the reserve. The



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Main Benger Swamp Nature Reserve has been considered important for conservation of the rare freckled duck (*Stictonetta naevosa*) since the 1970s. *Photo - Dave Watts/Lochman*

Transparencies

Inset Black swans with cygnets.

Left Australian shelduck. *Photos - Jiri Lochman*



goal was for the reserve to eventually encompass all of the swamp plus a small area of adjacent land, totalling 582 hectares.

In February 2006, DEC acquired the last two lots inside the swamp. It then started the necessary action to have the redundant road reserve system inside the swamp cancelled, and to rationalise the western boundary with a neighbour who had portions of his property jutting into the swamp.

In September 2009, the last purchases, the former road reserves and the strips of the neighbour's property were included into the reserve. Benger Swamp is now a consolidated 577-hectare nature reserve for waterbirds, some 35 years after the process began.

Conservation values

Benger Swamp is an important conservation reserve for several reasons. It is a seasonal wetland for a wide range of bird species including Australasian grebe, white-faced heron, sacred ibis, black swan, Pacific black duck, grey

teal, Australasian shoveler, hardhead, black-winged stilt, marsh harrier, purple swamphen, spotless crane and little grassbird.

Diving ducks such as blue-billed ducks and musk ducks feed on the animal and plant life at the bottom of the swamp. In late October and November, waterbird numbers triple as water levels fall. Flocks of little pied cormorants, white-faced herons, great egrets, Australian shelducks, Australian pelicans, wood sandpipers and Eurasian coots can be seen. During the drying out months of December and January numbers of yellow-billed spoonbill, pink-eared duck, rufous night heron, Pacific heron, little black cormorant, hoary-headed grebe, banded stilt, greenshank and sharp-tailed sandpiper increase.

Recognition of the importance of Benger Swamp as a significant area for the conservation of the freckled duck has continued. The species is ranked as rare, or otherwise in need of special protection under the *Wildlife Conservation Act 1950*.

Above Signs remain from the redundant road reserve system inside the swamp, which has now been cancelled with the consolidation of the nature reserve.

Photo - Christine Fleay/DEC

Above left Wetland rehabilitation site.

Below Moon rise over Benger Swamp.

Photos - Sallyanne Cousans

In recent years, field surveys have confirmed the persistence of Australasian bitterns within the swamp. Though recorded in 1987, this species has undergone significant declines across most of its range both locally and nationwide with the total WA population estimated to be between 38 and 154 individuals. As a consequence, the species may soon be listed as a Schedule 1 species in WA and nominated as endangered under the *Environment Protection and Biodiversity Conservation Act 1999*. Benger Swamp Nature Reserve is the last remaining wetland on the Swan Coastal Plain where this species can reliably be found.



Alex Errington is a Department of Environment and Conservation (DEC) Land Tenure Project Officer and has been involved in the purchase and consolidation of Benger Swamp Nature Reserve for 27 years. He can be contacted on (08) 9219 8775 or by email (alex.errington@dec.wa.gov.au).

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