

Inspirational wetland restoration on private land

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The Department of Environment, Water, and Natural Resources South Australia (DEWNR) has been working with private property owners to achieve an exciting large scale restoration project in the south east of South Australia. Steve and Kaleen Harris, graziers, from Iluka Estate, near Beachport have recently placed 130 hectares of their property underwater in a conservation measure to restore the landscape to that of pre-drainage and clearance.

Originally part of a vast near-coastal wetland system that spanned over 100 square kilometres, the Iluka tract of wetland abuts the Crown land wetland of Mullins Swamp effectively creating a 375 hectare, 5 kilometre long wetland.

Recent on-ground works designed to hold water for longer periods on Iluka have included reinstating a 500 metre levee/causeway, a spillway, fish passageway and fencing. The engineering has enabled the surface water to remain within the required area to a depth of up to 60 centimetres. On a brief survey over 50 indigenous flora species have been identified

including tall saw sedge (*Gahnia clarkei*), river buttercup (*Ranunculus inundatus*) and bottlebrush tea-tree (*Melaleuca squarrosa*), which are all rare, state listed species. Fauna records so far are equally impressive and include the EPBC listed southern bell frog (*Litoria raniformis*), dwarf galaxias (*Galaxiella pusilla*) and the Australian mudfish (*Neochanna cleaveri*), which was recently thought to be extinct in SA. So far five species of fish, seven species of frogs, and over 20 species of water fowl have been recorded. Transects and quadrats have been set up and surveys undertaken to better understand the vegetative changes that will occur over the next few years.



Top: 2 kilometres of open water (Steve Clarke)

Bottom: Tea tree and sedge (Steve Clarke)



Top: Steve Harris inspecting a spillway and fish passageway (Steve Clarke)

Bottom: Survey at Illuka (Steve Clarke)

The Harris', though very excited about the possibility of restoring a wetland to such extent, debated for some time about placing such a large part of their property under conservation. Eventually, after much deliberation, they settled on the option of grazing parts of the wetland that totally dried over summer, alleviating some of their concerns. Selectively grazing was the ideal method to manage the introduced pasture grasses therefore reducing fire fuel loads and allowing an economic return at the same time. Grazing management would be undertaken using hot wire ribbon (a type of electric fence) and exclude stock from high conservation areas and revegetation sites.

DEWNR works with many private landowners to conserve their wetlands but only rarely do landowners return such large areas to wetland. All landholders that conserve must be highly commended for their contribution to the natural environment.

Restoration work at Illuka Wetland has been funded by the South Australian and Australian Governments. Contact Wetland Conservation Ecologist Steve Clarke for more information (steve.clarke@sa.gov.au)