

# Environmental water benefits wetlands and threatened species

# Finding a new wetland home for a threatened fish in the Murray-Darling Basin

The Murray-Darling Freshwater Research Centre

Research, land and water management agencies and state government department's work together to provide a new wetland home for the threatened Murray hardyhead (*Craterocephalus fluviatilis*).

The Murray hardyhead is a small fish native to the wetlands of the lower Murray River system, which for the last few decades has faced a very real threat of extinction. As few as nine remnant populations survive in Victoria and South Australia, all of which required a helping hand to avoid extinction during the recent millennium drought.

A revised draft Recovery Plan for the species identified two key recovery objectives for the species:

1. Protect, maintain and monitor known populations, and
2. Increase the area of occupancy of the species. One method to achieve this is to translocate fish from existing populations to carefully selected and prepared floodplain wetlands, from which natural dispersal will be possible in future flood events.

Monitoring by the South Australian Department of Environment, Water and Natural Resources (DEWNR) of Riverland populations of Murray hardyhead in February 2015 identified high abundances in two wetland systems: Dishers Creek and Berri disposal basin. These high abundances were likely a reflection of recent conservation efforts by DEWNR, involving carefully timed delivery of environmental water supplied by the Commonwealth Environmental Water Office (CEWO). This presented an ideal opportunity to progress Objective 2 of the Recovery Plan by translocating a sub-population of Murray hardyhead from the Riverland sites to another suitably prepared wetland.

Fortunately, a long collaboration between the Murray-Darling Freshwater Research Centre (MDFRC), the Mallee Catchment Management Authority (MCMA) and Victorian Department of Environment, Land,



*Murray hardyhead (Craterocephalus fluviatilis) is a small native fish found in the lower Murray River system*

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*Lara Suitor (SA DEWNR) and Iain Ellis (MDFRC) netting Murray hardyhead (Craterocephalus fluviatilis) in a Riverland wetland* (© Copyright, Scott Huntley)

Water and Planning (DELWP), has developed translocation sites including Brickworks Billabong in Victoria, a wetland just a few hundred kilometres from the Riverland. Water from the Commonwealth and Victorian Environmental Water holders has been delivered to Brickworks Billabong since 2013 specifically to establish suitable habitat for Murray hardyhead.

Both Victorian and South Australian state departments were able to fast track approval for the translocation of Murray hardyhead. Meanwhile, the MCMA and CEWO concurrently delivered environmental water to Brickworks Billabong in order to increase available habitat, and prompt a production boom in the wetland, enhancing food supply in readiness for the addition of Murray hardyhead.

The MDFRC and DEWNR then captured and translocated a sub-population of Murray hardyhead (approximately 2500) from the Riverland to Brickworks Billabong in a transport trailer generously supplied by the Victorian DELWP. Future monitoring

of Brickworks Billabong will evaluate the success of survival and recruitment following the translocation, with all parties keen to see a thriving new population in the Mallee.

We believe this is the first coordinated interstate translocation of threatened fish between South Australia and Victoria. This recovery action was only possible due to large-scale cooperation and collaboration involving research, land and water management agencies and state government departments. Cooperation is paving a path for the streamlining of threatened freshwater fish recovery processes.

For more information, please visit:  
<http://www.mdfrc.org.au/projects/featured/MHHtranslocation.asp>, or read the 2014 review of the status of Murray hardyhead:  
<http://www.mdfrc.org.au/projects/featured/Mhhworkshop.asp>



*Some of the Riverland catch of Murray hardyhead (Craterocephalus fluviatilis) in March 2015 (© Copyright, Scott Huntley)*