



INCENTIVE PROJECT PROTECTING WOODLANDS AND WETLANDS ON PRIVATE PROPERTY

Ten years ago, during the Millennium drought, Melbourne-based Michael Cilia purchased a 100 acre property on the Goulburn River floodplain just south of Murchison to run stock and connect with nature. Three years later when good rain finally came Michael realised more than half the property comprised a large wetland.

Cut off from the river by the Cattanach and Stuart Murray irrigation canals, the wetland fills naturally when it rains as it is a low lying area fed by two creeks and the local surrounding area.

Michael marvels at the transformation on his property when it receives good rain. "It is unbelievable how the landscape changes," he says.

"Inundation of the area supports a high density of river red gums, including a large number of old trees with a largely weed free understorey characterized by a dense cover of wetland sedges including poong'ort (*Carex tereticaulis*) and common spike sedge.

"The whole area becomes completely submerged in water. The excess water slowly drains away into the Cattanach Canal leaving hundreds of ponds ranging from small pools to larger pools up to an acre in size.

"Within a few days of submergence, aquatic plants start to grow rapidly, transforming the area into a different world. Frogs appear from nowhere. Shield shrimp and other small crustaceans start hatching from the clay pans, and then the swamp yabbies emerge from their sleep."

Dr Susan Lawler, Head of La Trobe's Department of Environmental Management and Ecology, Albury-Wodonga campus, who has a special interest in the ecology of freshwater crayfish, visited Michael's property and describes it as a very special habitat wedged between farmland and the canal.

"Michael has the Common Yabby, the Murray Cray and the Swamp Yabby on his property. I was very pleased to see so many crustaceans in the one area.

▲ *Michael Cilia bought the Murchison property to run stock and connect with nature*

Goulburn Broken CMA's Woodlands and Wetlands incentive project achievements at a glance

- 20 landholders
- 26 sites
- 384 ha protected (including 196 ha of Seasonal Herbaceous Wetlands)
- 19,600 metres of new fencing
- 9 sites planted to re-establish understorey species
- 85 kilometres of direct seeding
- 1820 seedlings planted
- Extensive pest plant and animal control
- 1 Trust for Nature Conservation covenant



▲ *Michael Cilia's wetland during inundation*

"The Swamp Yabby spends the majority of its life two metres below the surface within its muddy burrow system. It is rarely seen as it is a species that avoids permanent water and only occasionally is captured by fishermen during flood events when their burrow systems are flooded over," says Dr Lawler.

On the outskirts of the wetland area Michael has observed Olive legless lizards, Goannas, an unidentified hopping marsupial, and a large population of Red bellied Black Snakes which he watched as they hunted in the wetland in search of prey. He also recently discovered a dead Feather-tailed Glider on the property.

"As the pools dry up and contract the animal life concentrates. I could cart away wheelbarrows full of tadpoles and frogs they are that thick," says Michael.

Michael has spent money fencing the wetland and keeping stock out of the area for the last seven years. He has also protected the creeklines with fencing 30 metres back from the creeks on either side. In addition Michael has put a Trust for Nature covenant over the wetland on the property title.

Michael recently purchased the property next door and is participating in the Goulburn Broken Catchment Management Authority's (CMA's) Nationally Significant Wetland and Woodland Ecosystem Conservation Project.

Goulburn Broken CMA Strategic Landscape Planner, Dr. Jenny Wilson, says, "The project makes financial incentives available for eligible landholders to protect and improve the quality of remnant Box-Gum Grassy Woodlands and Seasonal Herbaceous Wetlands, communities that are nationally listed as Threatened with extinction, on their properties.

"In Michael's case we will pay for internal fencing and solar pumps to pump water from the canal to stock troughs in order to protect the woodlands and wetlands on his properties."

Past and current land management practices had resulted in the loss of much of the native vegetation in the Goulburn and Broken catchments, particularly in the Agricultural Floodplains where up to 97% of native vegetation has been cleared for agriculture in some areas.

The native vegetation remaining on private land in the Agricultural Floodplains can be of poor quality with limited plant diversity, and a lack of native understorey and ground layer vegetation.

Many of the remnant vegetation communities and wetlands remaining in the Agricultural Floodplains and the Productive Plains areas of the catchment are nationally threatened.

The role of farmers in conserving these communities is acknowledged nationally, and their contribution needs to be recognised. Hence, the CMA has received funding from the Australian Government through the National Landcare Programme to assist landholders with financial incentives for the protection and management of these extremely important areas.

Priority is given to projects with the following types of vegetation on the property:

- Seasonal Herbaceous Wetlands: Typically fed by rainwater (not linked to rivers or streams) these wetlands look grassy when they are dry but as soon as they fill up with water, the water-dependent vegetation comes back to life.
- Box-gum grassy woodlands: Areas with widely spaced trees, dominated by White Box, Yellow Box, Buloke, Grey Box and/or Blakely's Red Gum and areas dominated by native grasses. Grassy woodlands typically exist on the most productive soils and have been cleared for agriculture, which, in combination with high levels of grazing, fertiliser application and cultivation, means Box Gum Grassy Woodlands are recognised as a Nationally Significant Ecosystem.
- Grey Box and Buloke Grassy Woodlands: Open woodlands usually found on clay-loam soils in areas that are seasonally inundated but rarely flooded for long periods.
- Derived grasslands: These grasslands would have originally had a cover of the dominant Box Gum Grassy Woodland tree species. In some cases most or all of the trees have been removed, but the intact grassy areas remain and are still valued as habitat.

"By providing incentives to landholders to fence off these areas, carry out enhancement plantings, and provide alternative watering points for stock, we will not only provide habitat for important local flora and fauna, we are helping build the catchment's resilience to the effects of grazing, cropping, rising water tables, increased nutrient levels, weed invasion and climate change that are very real threats to productivity," Dr. Wilson said.



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