

Wawu Dimbi

The Great Barrier Reef Coastal Wetlands Protection Program Pilot Program was commissioned by the Australian Government to deliver on-ground actions for the sustainable management of 22 priority wetlands in the Great Barrier Reef catchment. The \$2 million program was delivered over two years by a consortium led by Conservation Volunteers Australia and involved partnerships between government, community and landowners to identify and protect these wetlands.

Project summary

This project highlights the value of partnerships between stakeholders to achieve significant rehabilitation action. Bamanga Bubu Ngadimunku and Douglas Shire Council worked closely together at Wawu Dimbi on:

- weed control
- revegetation
- fencing.

An 'Argo' all-terrain vehicle was used to spray hymenachne with herbicide, and success in controlling pond apple is a credit to the hard work and dedication of the staff involved. Douglas Shire Council was able to provide excellent support through funding received under the Australian Government's 'Defeating the Weed Menace' program, and has made Wawu Dimbi a priority site for ongoing control of pond apple. Bamanga Bubu Ngadimunku has developed a Natural Resource Management Plan for the entire property, which will underpin continued rehabilitation activities.

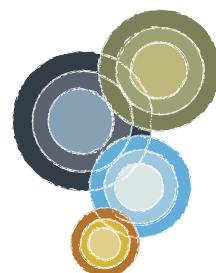
About the site

The Wawu Dimbi property is a 5-hectare series of perennial wetlands linked by ephemeral wetlands and creeks, with runoff from the adjoining property passing through it before entering the Daintree River. The site is between the Wet Tropics World Heritage Area (immediately to its north) and the Lower Daintree River Wetland site listed in the *Directory of important wetlands of Australia* (immediately downstream).

Ownership of the property is vested in the Indigenous Land Corporation. The property is managed by Bamanga Bubu Ngadimunku, and a lease is currently being negotiated between the Indigenous Land Corporation and Bamanga Bubu Ngadimunku with a view to the eventual handover of the property to the traditional owners.

Cultural heritage

The Wawu Dimbi property was purchased on behalf of the Daintree people after the Daintree Mission closed in the 1960s. The name Wawu Dimbi means 'spirit in the background', referring to the significant cultural site of Thorntons Peak, which is a major Kuku Yalanji story place. Traditionally the property formed part of a major walking track leading to the Kileys Creek Upper Daintree area (later used as a forestry track). The swamps and creeks on the property were used for the collection of various species, especially mud cod for bait.



Challenges

Hymenachne and pond apple, both categorised as '**weeds** of national significance', were seriously damaging the biological integrity and values of the Wawu Dimbi wetlands. These weeds displace and out-compete native species. A range of other weeds (e.g. snakeweed, giant sensitive plant) were also present. Additionally, loss and damage to **riparian vegetation** had occurred as a result of past clearing, competition and dominance by exotic grasses and unmanaged grazing.

Bamanga Bubu Ngadimunku relies on periodic **grazing** agistment as a source of income for managing the property. The wetlands are not fenced, so cattle have unrestricted access. This contributes to sediment and nutrient runoff from the property and affects water quality downstream.

Rehabilitation actions

Hymenachne and pond apple **weed control** at the site required a large initial effort, followed by an ongoing control program to mitigate future infestations. Hymenachne was sprayed from an 'Argo' all-terrain vehicle. The Argo is a specialised amphibious vehicle that travels on low-pressure tyres when on land (thus reducing environmental impact) and allows access to otherwise inaccessible areas. Follow-up spraying was carried out by Douglas Shire Council, and will continue.

Douglas Shire Council and Bamanga Bubu Ngadimunku staff used the 'cut stump' technique to treat pond apple in the late dry season. Trees are cut as close to ground as possible and the cut surface is immediately treated with glyphosate diluted 1:1 with water.

Infestations and treatment areas were mapped by Douglas Shire Council, and priority has been given to clearing pond apple at this site under the 3-year 'Defeating the Weed Menace' program. Ongoing maintenance programs are vital to the long-term control of pond apple and will be undertaken by Douglas Shire Council and Bamanga Bubu Ngadimunku into the future. The Douglas Shire Council Pest Management Officer provided training in pond apple control techniques to Bamanga Bubu Ngadimunku staff.

Revegetation is essential, to prevent the reintroduction of weeds and restore habitat connectivity. Under the direction of the Douglas Shire Council Revegetation Technical Officer, 3500 native seedlings were planted in the riparian areas of the wetlands. Follow-up maintenance was undertaken initially by Douglas Shire Council staff and subsequently by Bamanga Bubu Ngadimunku staff, who will plant an additional 2000 seedlings as weather permits.

Bamanga Bubu Ngadimunku is developing a natural resource management plan for the whole property, to support these rehabilitation actions and plan for future protection of the site.



Photo 1: Riparian area after revegetation (photo: Cairns Regional Council)

To ensure sustainable shared use of the wetlands, access to the wetlands by cattle must be properly managed. Funding was provided by the Terrain Natural Resource Management for the necessary **fencing** materials. Bamanga Bubu Ngadimunku provided a tractor, site manager and Community Development Employment Projects participants to erect the fencing, which will protect 20 hectares of wetland native vegetation.



Lessons learnt

Wetland rehabilitation is challenging in the very wet tropics. This project encountered a range of conditions from a very dry spring to a prolonged wet season, which created stop–start conditions. It is very important to take into consideration the climate and the characteristics of the individual wetland when planning rehabilitation.

Ongoing maintenance is important, and will not happen without local ‘ownership’ of the project and site. In this case there is a strong connection and commitment to the site by Bamanga Bubu Ngadimunku, supported by other groups such as the local council, and this is a positive for the future of the Wawu Dimbi wetlands.

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Photos courtesy of WetlandCare Australia



Australian Government

