

Community partnerships for wetland conservation and restoration.

Incredible community support secures Mt Burr Swamp for restoration

Mark Bachmann, Nature Glenelg Trust

Every once in a while, an opportunity to investigate a site with standout wetland restoration potential comes along. This was the case way back in February 2012, only a few weeks after Nature Glenelg Trust began, when we were alerted to a drained wetland called Mt Burr Swamp, situated only half an hour from Mt Gambier in the lower south east of South Australia.

The concept immediately looked like a great idea. After all, the property was located next door to one of the region's premier wetland reserves, The Marshes (a nationally recognised wetland complex), and would enable the overall conservation area to be expanded by 50 per cent.

The property contains dozens of drained wetlands with excellent restoration potential. The largest wetland, Mt Burr Swamp, is a large, former deep freshwater marsh that forms something of a natural centrepiece for the site. Plus, fortunately for us, and unlike a lot of the South East where water resources are under pressure, water security in this area has not been compromised—meaning that the ingredients for a successful restoration project were in place.



The restoration of Mt Burr Swamp—September 2016 (Lachlan Farrington)

There was just one problem. Because the property has been developed as a farm, a significant amount of funding would be required to get the purchase off the ground.

And so began a long and arduous four year journey, working behind the scenes in an attempt to find partners interested in helping us make this vision a reality.

Fast forward to today and what seemed unlikely, if not impossible, has actually eventuated, with Nature Glenelg Trust settling the purchase of the 300 hectare Mt Burr Swamp property on the 30th of September 2016.

We did so by successfully establishing a unique blend of partnerships with government (the South Australian Native Vegetation Council), private business (OneFortyOne Plantations) and the wider community (individuals, groups and businesses who donated to our fundraising appeal) to reach this significant milestone.

The purchase was celebrated with an art exhibition and on-site open day in early October, while the ecological restoration of Mt Burr Swamp is also already underway. A trial structure installed in August to lift water levels has resulted in the immediate reinstatement of over 50 hectares of wetland habitat, which early surveys have now confirmed already support recovering populations of two nationally threatened aquatic species—the growling grass frog and little galaxias. More significant species are expected to return to the site over the years ahead.

While the full restoration of the property is a long term work in progress, thanks to fantastic broad-based community support, this project is clearly off to a flying start.

Nature Glenelg Trust will keep you up to date on the progress of its wetland restoration projects through the NGT website: natureglenelg.org.au and future editions of *Wetlands Australia* magazine.



*The restoration trial structure at Mt Burr Swamp—
from August to September 2016 (Mark Bachmann)*

Look how far we have come—celebrating Panboola's 20th birthday!

Michelle Richmond, Project Coordinator, Pambula Wetlands and Heritage Project

In 2017 Panboola will celebrate 20 years of existence! On the Pambula River floodplain on the Far South Coast of NSW, Panboola is a wonderful example of the power of committed individuals coming together to protect and restore a significant environmental and community asset.

Panboola is a diverse estuarine and freshwater wetland comprising billabongs, saline areas, a tidal channel, tidal mudflats, mangroves and saltmarsh. Remnant stands of forest red gums also exist along with vast areas of past grazing land undergoing revegetation. The area is bordered by Ben Boyd National Park, NSW State significant wetlands (SEPP 14), the Pambula River, the Princes Highway and the southern fringe of Pambula village.

The area is being rehabilitated as a wetland for the purpose of nature conservation, protection and restoration of habitat for birds and other indigenous flora and fauna and for community education and passive enjoyment. The story of Panboola began in 1997 when a block of land on the floodplain was put on the market. A local conservationist purchased the land to protect this six hectare area from development. It is

now known as the Waterbird Sanctuary. This land has since become the subject of a Voluntary Conservation Agreement and has been formally gifted to the community.

At around this time the nearby Pambula Racecourse was decommissioned and this Crown land is now managed as part of Panboola along with additional lands that have been purchased and donated. Today the site spans 82 hectares.

Over the years, tens of thousands of grasses, shrubs and trees have been planted on this formerly cleared farmland, numerous formal biodiversity surveys have been conducted and community events are held regularly. Walking and cycling tracks extend across the area. Panboola is almost entirely managed by volunteers with over 2,500 hours given annually toward maintenance and development.



Panboola is teeming with birds (Michelle Richmond)

Panboola has:

- four Endangered Ecological Communities,
- five species of bat listed as protected or threatened,
- five species of flora noted as being regionally uncommon,
- over 160 different bird species, including 14 species listed as threatened on schedules of NSW and Commonwealth legislation,
- over 50,000 visitors each year.

The initial vision for Panboola to be a beautiful refuge for waterbirds and all other native animals as well as a place where the local community and other humans can be inspired, educated and rested, has certainly been achieved.

For further information, contact
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or visit www.panboola.com



Salt marsh and pond now cover the old Pambula Racecourse (Robyn Kesby)



The waterbird sanctuary today (Michelle Richmond)

Habitat restoration in Dee Why Lagoon Wildlife Refuge

Jillian Macintyre, Northern Beaches Council

The Dee Why Lagoon Habitat Restoration project involves many stakeholders in a whole-of-lagoon system approach. It is focusing on removing and reducing environmental impacts, restoring ecosystems and engaging the community to encourage community ownership.

Dee Why Lagoon Wildlife Refuge (DWLWR) provides important habitat to a range of animals. The lagoon has a maximum surface area of 30 hectares and is located within a 571 hectare catchment. It supports three Sydney Basin endangered ecological communities (EECs)—Sydney coastal estuary swamp forest complex, Sydney freshwater wetlands and coastal saltmarsh, listed under the *Threatened Species Conservation Act 1995* (NSW).

Land uses in the catchment have a significant impact on the health of the lagoon. The DWLWR catchment is regarded as extensively developed with 75.5 per cent classified as urban, 13.5 per cent light industrial and 11 per cent native vegetation and open space.

Threats to the lagoon system and biodiversity values in the reserve include an increase in invasive plants and animals, domestic pets, rubbish and stormwater impacts. These threats reduce ecosystem service capacity and resilience while increasing vulnerability to climate change.

The habitat restoration project recognises that wetland habitat in the lagoon is likely to be affected by climate change in the foreseeable future. Threats to DWLWR may increase over time and place further stress upon local habitat and exacerbate the risk of local plant and animal extinctions. The project has assisted in building habitat resilience in the face of a differing climatic regime.



Dee Why Lagoon Salt Marsh (Northern Beaches Council)

Northern Beaches Council has restored natural areas impacted by invasive plants and animals. The focus has been on the removal of weeds, restoration of EECs and vertebrate pest animal control. Fauna surveys have also been established with the aim of identifying the presence/absence of critical species including the threatened eastern pygmy possum.

Bush regeneration works to date have seen high priority weed species removed from over 10 hectares. This has resulted in natural regeneration beginning to recover, providing critical habitat for native animals.

A native seed bank has been created with over 3000 tube stock established by Council's Community Nursery volunteers. The Friends of Dee Why Lagoon bushcare group continue to remove weeds, restore ecosystems and promote DWLWR.

Community awareness-raising events such as planting days, a fauna fair and bird survey workshop have increased the local community's understanding and appreciation of DWLWR. A newly established volunteer bird survey group is assisting in local bird surveys, including the annual swift parrot and regent honeyeater surveys.

DWLWR provides a valuable ecological function for various mammals, birds and aquatic species. Continued monitoring will be essential in determining the success of restoration efforts and enabling alternative solutions to be found to support critical ecosystem services into the future.

For further information, contact
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Aerial view of Dee Why Lagoon Wildlife Refuge (Northern Beaches Council)

NGOs combine forces to support wetland resilience

Conservation Volunteers Australia

Two Australian non-government organisations with a mission to conserve nature and connect with people have joined forces to expand their wetland programs. WetlandCare Australia merged with Conservation Volunteers in July 2015. Our two organisations are now fully integrated, combining our expertise and resources and expanding our reach to 35 offices in Australia and New Zealand. Our goal is to increase ecosystem resilience through the protection, maintenance and restoration of the environment by engaging volunteers in practical conservation projects.

We have launched two conservation programs with a focus on wetland conservation: *One Reef*, and *Wetlands Catchments Coasts*. Both programs integrate a range of activities including site assessments and restoration planning, volunteer engagement, training, citizen science and on-ground work.

One Reef harnesses the strength of partners, communities and volunteers to repair priority wetlands and catchments of the Great Barrier Reef. One Reef is all about mobilising the community to make a practical

and tangible on-ground difference. The program addresses the fact that declining marine water quality, influenced by land-based run-off, is one of the most significant threats to the long-term health and resilience of the Reef. The Great Barrier Reef receives run-off from 35 river basins which drain 424,000 square kilometres of coastal Queensland. River discharges are the single biggest source of nutrients to the inshore areas of the Great Barrier Reef World Heritage Area.



Merv Pyott, Senior Project officer for the Delivering Biodiversity Dividends to the Barratta Creek Catchment project at Horseshoe Lagoon in the Barratta Creek Catchment (Conservation Volunteers Australia)

One of the first initiatives under the One Reef program is a partnership between Conservation Volunteers Australia, Greening Australia and Birdlife Australia to restore 200 hectares of riparian habitat and coastal wetlands. The project aims to protect the reef from water pollution and sediment.

The *Wetlands Catchments Coasts* program aims to conserve healthy and resilient wetlands, catchments and coasts for nature and people. *Revive Our Wetlands* is a key initiative of the program. *Revive Our Wetlands* recognises that wetland losses are estimated at 50 per cent in Australia. Projects are being undertaken to protect and restore wetlands for nature conservation, water security, climate change resilience and wellbeing. Maintaining habitat values at shorebird flyway sites is also a focus.

A partnership between Conservation Volunteers and Belmont Wetlands State Park Trust is a good example of a *Revive Our Wetlands* project funded by the NSW Environmental Trust. Conservation Volunteers is working with community Trustees, educating park neighbours to appreciate and protect wetland values and get involved through volunteering.

The *One Reef* and *Wetlands Catchments Coasts* programs provide frameworks to inspire and empower communities to make a positive contribution to conservation, through practical nature based experiences and skill development.

For more information, visit www.conservationvolunteers.com.au or contact Ian Walker, Director, Conservation Volunteers, T: 1800 032 501, E: iwalker@conservationvolunteers.com.au.

NGO Networks for wetland conservation

Conservation Volunteers Australia

The World Wetland Network (WWN) is a global network of over 2000 non-government organisations (NGOs) initiated at the Ramsar Conference of the Parties (COP) in South Korea, 2008. It arose from the need for NGOs to arrive at Ramsar meetings well prepared, and participate effectively. The network also supports members in their broader wetland conservation activities, making a positive contribution to delivery of the Ramsar Convention.

Australian Louise Duff was recently appointed Chair of the World Wetland Network. Louise is the Program Manager – Wetlands Catchments Coasts with Conservation Volunteers, and administers the Australian Wetland Network. She has been the Oceania representative to WWN for five years, working with the WWN management committee consisting of eight regional representatives from Europe, Asia, Africa, America and the Neo-tropics. Ms Duff attended Ramsar COP 11 in Romania and COP 12 in Uruguay, working with WWN to give smaller NGOs a voice in the proceedings.

In the lead-up to Ramsar COP 12, WWN conducted a survey of its members and the broader wetland conservation community. The survey overwhelmingly showed that NGOs are committed to Ramsar and want to do more. The creation and continued existence of WWN is testament to this. According to Ms. Duff, *“WWN and the broader NGO community understand that human and financial resources for wetland conservation are scarce and that collaboration between the government, non-government and business sectors is critical to wetland conservation.”*

Developing a greater understanding of the role, the commitment and the potential of wetland NGOs is an important first step, said Ms. Duff.

Conservation Volunteers (CVA) endorsed Ms Duff to take up the chair, noting the close alignment between WWN's commitment to support community-based wetland conservation with CVA's partnership approach and practical achievements engaging up to 7000 volunteers a year in nature conservation. CVA's new Wetlands Catchments Coasts program managed by Ms Duff aims to conserve healthy and resilient wetlands, catchments and coasts for nature and people.



World wetland Network Chair, Louise Duff (Conservation Volunteers Australia)

With the recent merger between WetlandCare Australia and Conservation Volunteers, CVA became host for the Secretariat of the Australian Wetland Network (AWN), also administered by Ms. Duff. AWN was formed in 1994 to facilitate input by Australian Non-Government Organisations (NGOs) to the Ramsar Conference of Parties held in Brisbane in 1996. Since then its members have supported an ongoing role in wetland conservation, strategic planning, national reporting and policy. It is informally affiliated with the World Wetland Network.

AWN has 39 member organisations representing all states and is guided by a Reference Group with six members. It is supported by the NSW Government with funding through its Environmental Trust. New members for both the network itself and the Reference Group are welcome.

For more information, visit www.worldwetnet.org, www.wetlandcare.com.au, or contact:

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Local government facilitating cross-agency collaboration to achieve positive outcomes for Tasmania's largest wetland

Glamorgan Spring Bay Council

On the east coast of Tasmania, Glamorgan Spring Bay Council is playing a key role in facilitating the collaborations and partnerships critical to achieving positive outcomes for Moulting Lagoon Ramsar wetland. Moulting Lagoon at the northern end of Great Oyster Bay on Tasmania's east coast is the largest and most significant wetland area in Tasmania. This wetland of international significance supports an array of rare, vulnerable and endangered species of plants and animals. Many businesses and land holders depend upon the health of this wetland to sustain their livelihood.

For many years Glamorgan Spring Bay Council and the Glamorgan Spring Bay Natural Resource Management Committee (a Special Committee of the Glamorgan Spring Bay Council) have been working with stakeholders including public and private land managers to raise awareness of this unique wetland. Two Weeds of National Significance, gorse and African boxthorn pose a threat to Moulting Lagoon. Council has been working in partnership with the Tasmanian Parks & Wildlife Service and private land managers to source funding to undertake weed control works around the perimeter of the wetland to aid in regeneration of native vegetation. Thirteen threatened plant species are found around the Lagoon.

Moulting Lagoon is home to about 80 per cent of Tasmania's black swans. The Lagoon was named after the piles of swan feathers that can be seen along the shoreline when the swans undergo their annual moult. At different times of the year the Lagoon is also home to many other birds such as ducks, herons and egrets, plovers, grebes, cormorants, oystercatchers, gulls and terns, waders and birds of prey.

In partnership with the Parks & Wildlife Service, Glamorgan Spring Bay Council will continue to seek funding to build on and maintain weed control works undertaken in the past and to engage the local community via awareness raising activities such as World Wetlands Day celebrations.



Moulting Lagoon, Tasmania's largest and most significant wetland area, is home to 80% of the State's black swans (Eric Woehler, Birdlife Tasmania)

The success to date of the weed control works and awareness raising would not be possible without the support of the Parks & Wildlife Service, Crown Land Services, the Department of Primary Industries, Parks, Water and Environment, the Australian Government, Wildcare, Friends of Freycinet, BirdLife Tasmania, NRM South, Landcare Tasmania, the Tasmanian Land Conservancy, private land managers and the local community.

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System repair: Key partnerships help repair wetlands and bring back fish

NQ Dry Tropics

Coordinated local action is helping to restore the ecosystem function of the shallow coastal freshwater wetlands that flow into the Ramsar-listed wetlands at Bowling Green Bay National Park, and into the Great Barrier Reef lagoon.

Under the Australian Government-funded System Repair project, NQ Dry Tropics has brought together Burdekin Shire Council (BSC), Lower Burdekin Water (LBW), Burdekin Fish Restocking Association (BFRA) and local landowners to remove weeds, construct fishways, and revegetate wetland riparian areas.

NQ Dry Tropics Senior Project Officer Scott Fry said many fish species migrate between fresh, estuarine and saltwater environments:

“Fishing is one of the Burdekin region’s most popular recreational activities, but healthy fish stocks need healthy wetlands. Nearly 70 per cent of Queensland’s fish species rely on freshwater wetlands to complete their lifecycles. They need clean, oxygenated water, and connectivity between inland waterways and the sea.

“Species such as Barramundi need to move between freshwater and estuarine areas to spawn. Without continuous passage linking fresh and saltwater, they can’t successfully breed, which impacts stocks,” he explained.

Human development has altered the natural landscape of the region, undermining the connectivity of its wetlands and waterways. Obstructions include dams, weirs, roads and railway crossings, irrigation water control gates and weed chokes.

Lack of connectivity affects species’ populations, health and distribution, and helps pests such as tilapia flourish. Waterbirds also suffer from decreased habitat and less fish to eat. Many years of riparian tree clearing has also been bad news for fish. Tree roots provide valuable habitat, and trees provide shade—reducing water temperature, helping to keep water oxygenated and preventing fish kills.



Fishway (NQ Dry Tropics)

Scott says: *“We work with BSC on a major weed removal programme, which we fund jointly, with help from local landowners. “We are co-investing with LBW to better control how irrigation water is delivered, to improve efficiency and minimise losses. We are also working closely with them to construct fishways in their current and future infrastructure. The BFRA monitors and replenishes fish stocks, and helps revegetate riparian areas.”*

Recent results following a major tree planting at Sheepstation Creek in Brandon indicate the project is benefiting fish stocks. Electro-fishing surveys indicate increased fish diversity, with 15 species found, compared with only three species 10 years ago. Alan Griggs of the BFRA says: *“Massive amounts of small fish have come back to the habitat. Everyone involved with the project is ecstatic – nobody can believe the results.”*

For more information, contact
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Hunters—Australia's most surprising conservationists

David McNabb, Field and Game Australia

Field & Game Australia has a long history with wetland conservation, forming in 1958 in response to news that due to habitat loss, the pacific black duck could be extinct in 10 years. The private/public partnership created in response, joined conservationist-hunters and government through a game licensing system to fund the acquisition of threatened wetlands.

Nearly 50 years later, state game reserves created under the licensing systems in Victoria and South Australia together provide around 100,000 hectares of critical breeding sanctuary for waterbirds. These include 200 wetlands (75,000 hectares) in Victoria and 10 wetlands (25,000 hectares) in South Australia. The game reserves provide an offset for habitat lost by drainage for agricultural and other purposes and also facilitate legal hunting during the prescribed season, a purpose often overlooked.

FGA has responded to some of the environmental challenges caused by widespread landscape modification, seeking commitment to improving wetland habitat for waterbirds and a greater focus on monitoring and gathering accurate data for long-term decisions. To support these aspirations, FGA established the WET Trust (Wetlands Environmental Taskforce) in 2002 and is proud of this achievement. The WET Trust funds research and wetland acquisition, protection and restoration.

Some highlights of FGAs wetlands protection work are highlighted below.

The Heart Morass restoration project, near Sale in Victoria, has transformed depleted, saline grazing land to a thriving wetland with healthy biodiversity and improved water quality. Importantly, it demonstrates a new model of private partnerships to acquire and rehabilitate wetlands, underpinned by dedicated, local volunteers, providing students with opportunities linking wetland ecology and art.

Our volunteers are motivated by the value they place in the continuation of their hunting culture and traditions and the ability to utilise these project wetlands for research, education, or other recreation. This provides the funding necessary for wetland restoration and management.



Top: Johnson Swamp State Game Reserve (Field and Game Australia)

Bottom: Heart Morass restoration project (Field and Game Australia)

The Connewarre Wetlands Centre near Geelong in Victoria, is another exciting project. The project includes a building designed for community and educational use, a feature wetland, and access to the adjoining Lake Connewarre Complex of State Game Reserves—part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.

Metropolitan Field & Game celebrate the worlds wetlands each year, linking people from all walks of life through their nest box program. Supported by Latrobe University Lifeskills Program, Parks Victoria and the City of Whittlesea, this program highlights the value of volunteer effort for protection of precious remnant wetlands.

These successful projects demonstrate the value of private conservation models with pools of volunteer resources delivering great conservation outcomes. The challenge is greater than ever with our increasingly urbanised society, largely removed from the practical realities of habitat and wildlife management.

FGA is a hunter organisation but we are heavily invested in conservation—always have been! We want science and public policy that supports better habitat for wildlife and for us—the people in the equation, to utilise.

For further information, contact David McNabb at david.mcnabb@fga.net.au



Top: Johnson Swamp State Game Reserve (Field and Game Australia)

Bottom: Heart-Morass restoration project (Field and Game Australia)