Nature Glenelg Pty Ltd [ACN: 153 577 907]

as Trustee for



ABN: 23 917 949 584

Annual Report: 2017-18 Financial Year



Table of Contents

ORGANISATIONAL PURPOSE			
DIRECTORS REPORT			
1.	. Summary of the year's activities4		
	1.1	Project work overview	
	1.2	Grant funded project work4	
	1.3	Environmental consulting project work4	
2. Achievements: Case studies from across the NGT focal region			
	2.1	* The purchase and creation of NGT's Walker Swamp Restoration Reserve	
	2.2	Donation of Kurrawonga, Nelson, by the family of Bill and Kate Moore8	
	2.3	Mt Burr Swamp update11	
	2.4	Eaglehawk Waterhole Update14	
	2.5	* Establishment of the NGT Foundation17	
	2.6	Mulloway research update	
	2.7	The Great Goolwa Cockle challenge	
	2.8	Search for the Murray Crayfish in SA22	
	2.9	Fleurieu Swamps eco-hydrology update23	
	2.10	Preventing butterfly extinction through translocation26	
	2.11	Wetland Restoration Program on Private Land in Victoria and SA (2012-2017)29	
	2.12	Long Swamp restoration trial update	
	2.13	Southern Brown Bandicoot digging abundance report	
	2.14	Protecting wedge-tailed eagle nests in plantation forests	
	2.15	* Welcoming Ben Taylor, Greg Kerr and Jodie Honan to the team at NGT	
3.	Plans	s for the 2019-20 Financial Year41	
	3.1	Strive to be universally viewed as leaders in restoration ecology41	
	3.2	Continue a focus on high quality research and monitoring41	
	3.3	Build lasting partnerships within our focal region41	
	3.4	Establish additional restoration reserves in western Victoria and south-eastern SA41	
	3.5	Develop and implement restoration and/or management plans for NGT Reserves42	
	3.6	Grow the balance of the NGT Foundation42	
	3.7	Provide interesting practical opportunities for staff, ecology graduates and volunteers42	
	3.8	Explore new and innovative ways to add value to our operations42	
4.	Emp	oyee Statistics	
5.	5. Membership		
6.	FINANCIAL STATEMENT		

ORGANISATIONAL PURPOSE

Nature Glenelg Trust is a mission-driven, not-for-profit organisation that has been established to operate as:

- 1. a community environmental NGO;
- 2. a source of professional ecological knowledge available for delivering project work that improves environmental management outcomes; and,
- 3. a recipient of charitable donations for supporting habitat restoration and other environmental work consistent with the priorities set out in our Deed of Trust.

This operating model enables the organisation to (1) seek and deliver grants for community environmental benefit, but also (2) provide ecological consulting services under two registered trading names, Aquasave – NGT (for aquatic ecology) and NGT Consulting (for general ecology). In furthering our organisational purpose by working with clients on important conservation management projects, our consulting services also provide a financial contribution to support the costs of running our not-for-profit organisation.

Since Nature Glenelg Trust was admitted to the Register of Environmental Organisations in 2014, this model also seeks to diversify organisational funding streams and minimise the need to rely upon any precious future donated funds to support day-to-day operations and administration. In this way, we aim to give supporters the confidence that their donation to our Public Fund will achieve maximum impact in furthering the on-ground environmental objectives (such as wetland habitat restoration) of Nature Glenelg Trust.

All core activities of Nature Glenelg Trust (including our ecological consulting services) meet at least one of our organisational objectives from our Deed of Trust, namely:

- 1. To protect and enhance the natural environment, with a particular emphasis on wetland conservation and restoration activities in the Focal Region^{*1}, supported by the Habitat Restoration Fund.
- 2. To generate and provide high quality scientific information that enhances management of the natural environment.
- 3. To support and undertake key conservation ecology research predominantly within, but not limited to, the Focal Region.
- 4. To promote public awareness of nature through education, and involving the community in the activities of the Trust.

^{*1}: Our focal region includes the NRM/CMA regions situated between Melbourne (Victoria) and Adelaide (South Australia).

DIRECTORS REPORT

1. Summary of the year's activities

1.1 Project work overview

Nature Glenelg Trust delivered a total of 91 projects during the 2017-18 financial year, with 43 of these projects completed by the 30th June 2018.

Type of Project Work	Number of Projects Active during 2017-18 Financial Year
Native flora, vegetation management or ecological monitoring	19
Native fish	26
Other fauna	7
Community engagement	6
Multi-faceted projects (several types combined)	8
Wetlands	25
TOTAL	91

1.2 Grant funded project work

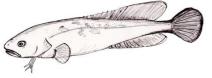
Nature Glenelg Trust was awarded grant funding to commence or continue the delivery of 27 grant funded projects in the 2017-18 financial year. Ten grant funded projects were acquitted during the financial year, with the other seventeen remaining active into the 2018-19 financial year.

1.3 Environmental consulting project work

Nature Glenelg Trust delivered 64 contracted environmental consulting projects for a range of clients in the 2017-18 financial year. Thirty-three (33) of these projects were completed and closed during the financial year, with the balance (31) remaining active into the 2018-19 financial year.

As previously explained, irrespective of whether they are grant funded or professional contracted fee-for-service or consulting projects (as delivered under our registered trading names: Aquasave NGT, or NGT Consulting – logos below), NGT only delivers projects that are consistent with our organisational objectives, making a positive contribution to regional environmental management. The breakdown of these projects by category is included in the overall summary table presented in section 1.1.

AQUASAVE - Nature Glenelg Trust



Ecology, Monitoring, Conservation



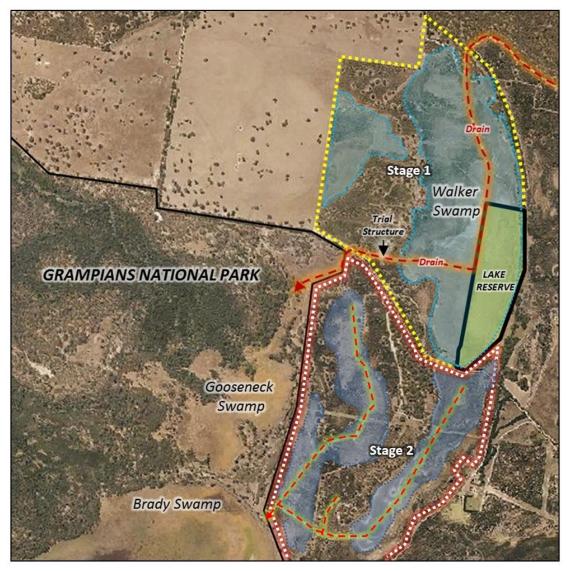
2. Achievements: Case studies from across the NGT focal region

Note: stories with an asterisk (*) directly address a priority action from the previous Annual Report.

NGT Reserves:

2.1 * The purchase and creation of NGT's Walker Swamp Restoration Reserve

In November 2017, Nature Glenelg Trust entered into contracts to secure our first wetland restoration reserve in Victoria, 1000 acres (or 400 hectares) in two stages at Walker Swamp adjacent to the Grampians National Park. In March 2018, Stage 1 of the project was secured with the financial support of the Glenelg Hopkins CMA and Hamilton Field Naturalists Club, formally kick-starting the project. Stage 2 remains under contract awaiting sub-division finalisation, but in the interim NGT has an agreement to take over day-to-day management of this portion of the site.



Stage 1 (northern - yellow outline) and Stage 2 (southern - white outline) of the new Walker Swamp Restoration Reserve. The minimum area of drained wetlands on the floodplain to be restored is shaded blue, and major artificial drains are marked red. The total project area, including the Lake Reserve, is approximately 440 hectares or 1100 acres.

Towards the end of the financial year, a public fundraiser was launched to bridge the shortfall on total land purchase costs incurred by NGT, and at the time of writing (November 2018), donations have raised \$100,000 of the \$150,000 target.

Beyond the minor shortfall on land purchase costs, the full project is now going ahead and is well placed to proceed with all the on-ground works required to establish Walker Swamp as a private nature reserve over the next few years. Our goal is simply to set this large area of floodplain wetlands on a lasting trajectory of long-term ecological recovery.

This process commenced in 2014, when NGT worked with the previous owner to initiate a restoration trial.



Impact of the trial restoration structure and early works in 2018 at Nature Glenelg Trust's new Walker Swamp Restoration Reserve – a small taste of things to come after the completion of major floodplain restoration works...

Dr Greg Kerr, Senior Ecologist with NGT (see 2.15), is based in Dunkeld and is overseeing the restoration project as our property and project manager. The tasks that are fully funded and have been completed (C), have started (S) or are planned and will soon be underway (P) include:

- Reserve establishment works (C), dealing with the legacy of the previous land use, including new fencing of unfenced sections, blue gum spraying and/or removal, initial mapping tasks and site planning. Funded in 2018 by a Victorian Government (DELWP) Biodiversity and On-ground Action (BOA) Grant.
- 2. On-ground restoration works, planning and community engagement (C, S and P), including blue-gum furrow removal in wetland beds, additional fencing repair, cultural engagement with traditional owners, community engagement via citizen science, and preparation of a draft management plan. Funded from 2018-2020 by the Glenelg

Hopkins CMA, (through CMA funding agreements with the Victorian Government (DELWP) Our Catchments Our Communities Program and AGL Energy).

- 3. Hydrological restoration assessment and planning, permits and approvals (S), which will enable the options for the reversal of artificial drainage to be assessed and designed, and permits obtained for the preferred option prior to major earthworks occurring in autumn 2019. Funded in 2018-2019 by the Glenelg Hopkins CMA, through the Victorian Government (DELWP) Our Catchments Our Communities Program.
- 4. Implementation of earthworks (P) to reverse artificial drainage on the property across 26 km of drains (right), restore natural floodplain processes and monitor eco-hydrological response to the works. Monitoring will commence in 2018 and continue throughout, while all major works will take place in autumn 2019. Funded in 2018-2020 by a Victorian Government (DELWP) Climate Change Innovation Grant.
- 5. Formal establishment of bird observation tower (S) to enable avian monitoring and community visitation to the site. Grant funding in 2018-19 provided by the Australian Government.

A major ongoing focus for us is meaningfully engaging the community in the project, turning the site into a local educational resource, a drawcard for visitors and researchers interested in floodplain restoration and sustainable catchment management, and creating a major, lasting ecological asset that is appreciated and becomes a source of local community pride.



The bird observation tower at Walker Swamp: soon to be relocated, with access formalised and turned into a focal point for bird monitoring and community visitation. Photograph Rod Bird.

2.2 Donation of Kurrawonga, Nelson, by the family of Bill and Kate Moore

In an incredibly generous gesture in memory of their late parents, Bill and Kate, in late 2017 the Moore family decided to donate 40 hectares (100 acres) of covenanted bushland – called Kurrawonga – to Nature Glenelg Trust. The property is situated at Nelson, on the southern edge of (and surrounded on three sides by) the Lower Glenelg National Park, in a beautiful area that provides valuable habitat for a wide range of threatened species.



Oblique image showing the location of Kurrawonga – at the doorstep of the Lower Glenelg National Park, on the edge of Nelson, Victoria.

Unlike NGT's other reserves (Eaglehawk Waterhole and Mt Burr Swamp), which we've established with an emphasis on habitat restoration, Kurrawonga is an area of intact remnant bushland in excellent condition. But like our other reserves, the property is also strategically located, situated adjacent to one of the region's largest National Parks.

NGT's Manager Mark Bachmann personally met Bill and Kate on a number of occasions, dating back to 1999 when he first met them at a Millicent Field Naturalists' Society meeting – by which time they had become respected elders within the group. Like many others of their era, they were extremely observant of nature and always interested to learn about their ever changing patch of bush.



Kate and Bill Moore at Kurrawonga. Photo courtesy of the Moore family.

The opportunity for NGT to now look after Kurrawonga, in a key part of the region where we are highly active (Long Swamp in Discovery Bay is only 10 minutes away), is an amazing privilege. We're now beginning to think about the best ways to involve NGT supporters in the property, and also consider the options for integrating it into our research and education programs. Needless to say, there are many great possibilities.

NGT would like to express our sincere gratitude to the Moore family for entrusting NGT as the new custodians of Kurrawonga – with an assurance that we'll do our very best to honour the legacy of Bill and Kate Moore.

Finally, to explain a little more about the history of Kurrawonga, let's hear directly from the Moore family:

"We've bought 100 acres of bushland near Nelson." These were the words of our father – a man not known for making announcements, especially with a hint of excitement! And so in 1967 Kurrawonga came into our lives – although the name itself actually came some years later.

Our parents, Kate and Bill Moore, loved Kurrawonga. On most weekends for almost 50 years they drove the 35km from Mt Gambier to their retreat in brown stringy-bark and manna gum forest. It was their shared joy – a delightful contrast to busy lives in town; our father a doctor and our mother, the primary child raiser and later, a counsellor with Lifeline.

What motivated Kate and Bill to buy the property? First and foremost they shared an interest

in nature. From the early 60s they had been active members of the South East Field Naturalists. Most holidays were spent camping and day trips were usually picnics in the bush. Kate's primary motivation was to have a small property that would meet the needs of the family – a chance to enjoy together their interest in the environment, as well as a place for their five children to have fun.

In the early days we camped; Kate and Bill in the caravan, us kids in tents. Before long we had a well set-up campsite – rainwater on tap, log seats around the campfire and a long-drop toilet and bush shower. One of the first things we'd do on arrival, would be to make 'cheese worms' for the blue wrens. Using an old fashioned cheese grinder, we'd wind the handle and let the pieces fall into a mesh cage built to allow wrens in while keeping the larger birds out.

Kate and Bill loved the bush. They would go for at least one walk every day, binoculars around their necks, eyes peeled for interesting plants, birds and other creatures to investigate and admire. As we walked it was common to hear words such as, "If we look under that yakka we should find some spider orchids." They got to know their patch in all its seasons, learning all the plants and compiling impressive lists of birds each visit. They became especially intimate with the resident red-necked wallaby family, watching generations come and go. First thing every morning Bill would feed the wallabies a handful of pellets, top up the bird bowl with seeds and check the water in the bird bath.

For us kids the Glenelg River, just 10 minutes' walk away, was a major drawcard. We spent endless hours there – fishing, swimming and messing around in our canoe.

A decade or so after buying Kurrawonga, Kate and Bill had the small house built with solar water heating and wind generated electricity. It provided basic comforts, which were really appreciated as they grew older. In particular they were better able to enjoy the cool wet winters with homely food and a book by the open fire.

After retiring, Kurrawonga was even more significant in their lives. They had more time and would usually visit every week for at least two nights. Kurrawonga was also a place they shared with friends and local conservation groups. In later years, it was always wonderful to visit Mt Gambier with our own children, spending time with Kate and Bill at Kurrawonga and being inspired by their appreciation of nature. They recount how Kate and Bill would say things like, "Now, let's see if there are koalas in this tree. We've seen them here several times before."

When the time came to consider the future of Kurrawonga without Kate and Bill, our unanimous view was to donate it to a conservation group. There is no doubt Kate and Bill would be delighted and grateful to Nature Glenelg Trust for assuming custodianship of Kurrawonga. From our perspective it is heartening to feel that Kurrawonga is in worthy hands and has a fresh future.

Dick, John, Andrew, Margie and David Moore, January 2018

2.3 Mt Burr Swamp update

In early 2018, the dry summer and autumn was contributing to the lowering of the water level at Mt Burr Swamp, but the aquatic life on the swamp was still thriving, with dragonflies and damselflies maintaining good numbers and diversity. A variety of waterfowl were also still hanging around especially as the mud flats were exposed and frogs are beginning to murmur.



Waterbirds on the drying wetland edge in autumn 2018

The property insect collection continues to grow, with Andy Lines visiting recently to survey and add to the collection.



Andy catching insects

Michelle Sargent who was working as an Intern with NGT (and recently commenced working for

Natural Resources South East as an Authorised Officer in Naracoorte) continues her Master's research on 'insects in recovering wetlands'. Mt Burr Swamp and the Marshes Native Forest Reserve are Michelle's study sites as she collects interesting data from across both properties.



Michelle sampling in compartment MA2

This Masters study is in conjunction with University of Adelaide and is set to continue throughout 2018.

Our trusty 'wild pine' volunteers have continued cutting down wildlings along the southern boundary including in The Marshes. Thanks to Fred, David and our other volunteers for heading out on numerous occasions to remove these trees from around our wetland edges and area of scrub.



Pine wildling control by volunteers

The Bank Australia (Impact Fund grant) revegetation area (on the southern boundary of Mt Burr Swamp which joins onto The Marshes NFR) managed to survive the below average summer rainfall. Despite some minor losses, overall we've had an encouraging result so far. Another 2000 plants went in before end of June 2018 to complete the project. This revegetation area aims to consolidate connectivity with The Marshes NFR, provide improved habitat conditions for Growling Grass-frogs, Southern Bandicoots and Red-tailed Brown Black Cockatoos and involve the community in planting.



Seed collecting and plant propagating for our 20 Million Trees project (at Mt Burr Swamp) has also been ramping up recently in preparation for the next couple of years of revegetation works.



Tarps full of drying seed pods to capture large quantities of seed

Weed spraying on site commenced in December 2017 for direct seeding and tubestock planting areas. A big thankyou to the volunteers that helped in the collecting and cleaning of the seed collected on the property or the adjacent Native Forest Reserves.

Finally, Mark also went for a quick look around the water's edge at night in the autumn to see what nocturnal wildlife was out and about.

As well as coming across a huge Growling Grass Frog, Mark also captured a glimpse of our first Rakali (i.e. Water Rat) at Mt Burr Swamp.



2.4 Eaglehawk Waterhole Update

An exciting component of our restoration efforts at Eaglehawk Waterhole is seeing things we haven't seen before, like wildflowers emerging on the wet flats, rare birds using burnt areas and new plant or animal species to the reserve. This update is highlighting changes in growth of vegetation, and health and safety on Eaglehawk Waterhole.

Greening Australia Victoria

Other organisations have also been contributing to revegetation at the reserve for their own project requirements, something which we are more than pleased to accommodate. Greening Australia Victoria has taken on the SW corner of the property with direct seeding and tubestock plantings in 2017. Andy Lines, our caretaker, has snapped a few photos to show how that is progressing. We thank Jess Gardner and the GA Vic team for contributing to our whole of property restoration, and hope this year's planting – of mostly stringybarks which will compliment previous efforts – establishes successfully.



Greening Australia direct seeding line germination (right)

Landscape Links

The Landscape Links project (coordinated by Cassie Hlava, Department of Environment and Water) has also been instrumental in transforming the front of the reserve. In the first year you couldn't miss the sea of tree guards. Well, you should see it now! A few more photos from Andy show off the success of this site below.



Landscape Links revegetation area showing tall plants amongst logs

As highlighted previously, piles of logs around the property have harboured rabbits and sometimes weeds. We have successfully re-purposed many of these logs, by scattering them throughout revegetation areas to create valuable woody debris habitat. Complementing this habitat creation has been the planting of a great diversity of species in their own little niches as required (damp areas or dry areas, etc). So we look forward to seeing what fauna these spots attract in the future. We are sorry to see the Landscape Links program come to an end, but hope a new version of the same type of project emerges in the future. From all of us at NGT, well done Cassie!

20 Million Trees

Our own efforts through a 20 Million Trees grant has also seen a large chunk of the reserve's vegetation improving in diversity and cover. Watering was the key in the first year to ensure a high survival rate and our watering system seemed to work well with a couple of 1000 L tanks dotted over the place where needed. Until recently, filling them has been problematic but late last year Andy and Sam, with help from Peter Haywood's engineering experience, installed a safer and more efficient system. The team welded up a new A-frame to hold a pipe which carries water from the large tank on site to a quick fill pipe which can then fill portable tanks.



Filling tanks to water plants

NGT was recently successful in obtaining another 20 Million Trees grant to continue our restoration effort at Eaglehawk, so preparation for more revegetation is rapidly moving along. Seed collecting is underway, with wattles collected back in Dec-Jan, and we're now set to collect Tea-tree along with a bunch of other species in readiness for a late autumn sowing by Eucaleuca Native Services (Ralph Scheel). Weed control has commenced during January with a large area of Skeleton Weed spraying undertaken by Bush Repair (thanks Ken).

Our new 'you-beaut' quick fill system has worked a treat for filling up the spray unit recently. Salvation Jane has also been on Andy's radar with many hours of volunteer work undertaken to reduce the cover of this plant throughout the reserve.

Quick fill pipe is now a safe method to fill tanks for spraying (right)



New butterfly species to the reserve

During the past six months, Andy has found several new butterflies in the reserve including Whitebanded grass-darts, Fringed and Blotched Blues. The larvae of Grass-darts feed on native and introduced grasses, while the caterpillars of the Fringed Blue feed on shrubby peas like *Daviesia*, *Pultenaea*, and *Bossiaea*. The Blotched Blue is a fan of *Cassytha* (Dodder-laurel) which is a native and parasitic plant. Interestingly, the larvae of both the Blues eat the flowers of their host plants, which is unusual for caterpillars.



Fringed Blue (Neolucia agricola)



White-banded Grass-dart (Taractrocera papyria)

Thank you to all local organisations, staff and volunteers that help us with our restoration program at Eaglehawk Waterhole. NGT would also like to thank the Australian Government and the National Landcare Program for their continued support for our conservation and restoration work.

2.5 * Establishment of the NGT Foundation



After six years of delivering results on the ground, NGT is demonstrating to our partners, supporters and the wider community that we're planning for the future. The NGT Foundation was inspired by a similar model successfully adopted by the Tasmanian Land Conservancy, who have generously shared their experiences with us. The newly established NGT Foundation is an endowment fund with a longterm goal of generating a reliable, stable source of income to fund effective management of the growing number of NGT Reserves:

- Eaglehawk Waterhole SA (2013)
- Mt Burr Swamp SA (2016)
- Kurrawonga Victoria (2018)
- Walker Swamp Victoria (2018)

Effective management isn't just about paying the rates, fixing fences, maintaining tracks and controlling pests or weeds – as important and real as these ongoing costs are. It is also about ecological activities like supporting research that informs our restoration work, undertaking surveys and monitoring, active recovery of threatened species, and helping to bring back the species we have lost. Our reserves are all strategically located and ideally placed to be at the fore-front of restoration science and practice in south-eastern Australia over the decades ahead.

How did it start?

The NGT Foundation was established in April 2018, thanks to the first of three initial \$20,000 annual contributions made by OneFortyOne Plantations, building on an existing, highly successful long-term relationship between our organisations.

How it works

The NGT Foundation is a capital fund established to provide a long-term income stream to sustainably fund the ongoing management costs of NGT's permanent reserves. To achieve this goal, all contributions into the NGT Foundation will be preserved (much like a superannuation account when it is in its growth phase) and invested ethically.

Then at the appropriate time in the future, when the preserved capital balance has grown to a sufficient level, the interest or investment earnings will be judiciously used by NGT to care for our network of reserves. Because the preserved capital amount is never drawn down, this has the capacity to deliver a sustainable income stream into the future – in doing so overcoming one of the

biggest challenges that we face in adequately caring for, and capitalising on the potential of, NGT's Reserves.

Based on long-term investment returns, we aim to ensure that every \$20 donated, will eventually result in a sustainable income of stream of \$1 per year, forever.

How to become involved

The NGT Foundation is made up of a number of Funds.

In addition to the OneFortyOne Fund established in April 2018, Nature Glenelg Trust has also established the NGT Reserves Fund, a generic Fund to enable small contributions to be made by individual donors. All donations over \$2 are fully tax-deductible.

Additionally, a named Fund can be established to recognise the role of any private individual or organisation to help to secure the long term future of Nature Glenelg Trust. (Note that a named Fund typically requires a minimum starting contribution of \$10,000.)

James Darling AM and Lesley Forwood care deeply about our region and have been tremendous supporters of NGT, in a variety of ways, ever since our journey began in January 2012. In 2018, James and Lesley decided to establish the first donor-established Named Fund in the NGT Foundation, as a way of demonstrating their renewed and now ongoing commitment.

James very kindly wrote a short contribution to explain why he and Lesley have taken the significant step of setting up a Named Fund in the NGT Foundation:

NGT is an extraordinarily successful organisation.

It has energy and integrity.

It has administrative credibility.

It has science at the base of its wetlands restoration and conservation projects.

It inspires community members to donate their time and their labour for shared objectives.

It acknowledges volunteers as integral to its many and growing environmental achievements.

The establishment of the NGT Foundation is a further step in the evolution of NGT, most obviously in response to the purchase of areas of high conservation value. These assets will require guaranteed funding in order to be maintained. The objectives of the NGT Foundation address this need.

The NGT Foundation gives community members another opportunity to be part of preserving significant and precious environmental assets in a manner in which they can be enjoyed in our lifetimes and benefit future generations.

Lesley Forwood and I consider it a privilege to play a part in that achievement.

James Darling AM.

Other NGT Projects:

2.6 Mulloway research update

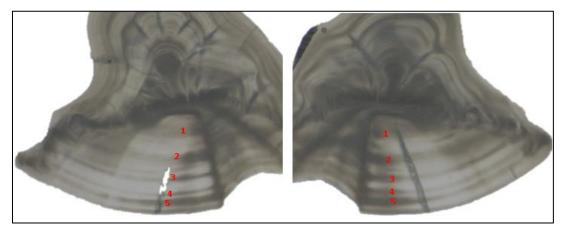
It's been a busy year for Mulloway anglers across the state, with many either tagging Mulloway or keeping frames for our research projects, both of which are funded by the Victorian Fisheries Authority through Recreational Fishing License Fees.



Mary Spencer donated the frame from her first ever Mulloway! The fish was caught from the Glenelg River, and was aged at 5.4 years.

The biology research relies on anglers donating their Mulloway frames and is now in its final year. So far, we've had over 150 anglers involved in the program, who have collectively donated just under 750 Mulloway frames. These contributions have allowed us to learn more about the age, growth and reproduction of the species without having to further exploit our Mulloway stocks.

You can read all about our latest research findings in the Research Angler Newsletter No. 4 <u>on the NGT Website</u>. One interesting finding to come out of our recent round of ageing, is that Mulloway from western Victorian estuaries appear to show slower annual growth in periods of low rainfall (and therefore flow). This is not uncommon and has been observed in other species such as Murray Cod and Golden Perch in the Murray River.



Otolith sections of Mulloway from the Glenelg River aged 5+ years, showing differences in seasonal growth, i.e. variable distances between bands 4 and 5.

NGT's second Mulloway project is investigating the movement patterns of Mulloway through the use of external tags. We currently have 58 anglers involved in the program, who have so far collectively tagged 133 Mulloway across the state. So far we have recorded nine recaptures, which have occurred throughout the Glenelg, Yarra and Hopkins rivers, as well as beaches off Port MacDonnell.

The most interesting recapture to date has been a 59 cm Mulloway tagged off Piccaninnie Ponds beach that was recaptured 42 days later in the Glenelg River near Donovan's Landing. The fish covered a distance of at least 15 km and showed no growth, presumably using energy for swimming rather than growing!



You can read all about the project in the <u>Tagging Newsletter No. 2</u>.

Luke Gercovich is one of the dedicated anglers involved in our tagging project. Luke recently tagged this 81 cm Mulloway from the Hopkins River.

2.7 The Great Goolwa Cockle challenge

Back in January, more than 450 people braved the hot and windy conditions to become citizen scientists during The Great Goolwa Cockle Challenge. The mission was to find as many of the 2500 uniquely tagged cockles that were released prior to the event.

In a great result, 160 were found during the event and more than 30 have been found since. This free community event was a fantastic success and it was great to see so many families out enjoying the beach and learning more about the species.

The major prize of four nights' accommodation (donated by Waves Edge, Goolwa) was won by youngster Jared Croger and family (pictured with Dad and The Great Goolwa Cockle Challenge organiser, NGT's Sylvia Zukowski).





Winner Jared Croger (with dad John) and organiser Sylvia Zukowski

The project is providing some interesting early results with two cockles recaptured 59 and 79 days after being released (with growth of 1mm per month) and one being detected 300m from the location where it was tagged.

The Great Goolwa Cockle Challenge was funded by a SA Recreational Fishing Grant and with support from the Alexandrina Council, Goolwa PiPiCo, Olaf Hansen, South Coast Marine, Fishing SA Magazine, Goolwa Surf Lifesaving Club, Bildlife Australia, Fishcare Volunteers SA, the South Australian Whale Centre and Waves Edge, Goolwa.

2.8 Search for the Murray Crayfish in SA

Over the past four years, NGT's Nick Whiterod has continued monitoring populations in the Murray River that had suffered significant (80% decline) population loss due to the 2010–11 extreme blackwater event. Over that time, we have only observed a gradual increase in the abundance of affected populations, and the species has not been detected at almost onethird of sites post-blackwater. So, recovery is going slow and this is not unexpected (our population modelling indicated it may take



decades for populations to increase to pre-disturbance levels). Clearly, sound management is needed as well as conservation actions that help to speed up the recovery of impacted areas.

Meanwhile, downstream in SA and after four years of searching, which included over 7700 net hours (number of nets per site times by the number of hours each net was set for – that's also 321 net days), at almost 30 sites, we have failed to detect a single Murray crayfish in the South Australian section of the Murray River (e.g. the Lower Murray) – we can't rule them being present somewhere but obviously, any remnant population will be small. That said, we sampled likely sites – those with reasonable flow (which is largely lacking in SA) – as well as several anecdotal records.

Whilst we haven't tracked down the last official record, we believe that it will be from the late 1980s, a likely absence of thirty years.

Why pursue recovery of Murray Crays in SA?

Firstly, the species historically occurred in the Lower Murray all the way downstream to at least Murray Bridge (there is even a record from the Lower Lakes!).

Secondly, despite the regulation of the Lower Murray by a series of weirs, which act to stabilise water level and reduce flow velocity (that is mixing of the water column), there are sections still that maintain suitable habitat, which could support the species. Additionally, other threats, such as pesticide run-off have been minimised.

Thirdly, they need a hand to get back into SA. As the nearest population is over 300 kilometres upstream, and they limited dispersal abilities, this means that it will take hundreds of years to recolonise. Additionally, having just completed translocations further upstream, NGT is in an ideal position to attempt something similar in South Australia.

Lastly, they are captivating species that could promote greater awareness of the river and can provide an indicator for the success of present and future river restoration in the Lower Murray. We don't think that they will ever be widespread again, but there is potential for locally abundant populations to persist. So, let's turn our attention to bringing the species back in SA!

2.9 Fleurieu Swamps eco-hydrology update

Back in autumn 2018, a small crew from NGT headed back to Glenshera Swamp to make some minor adjustments and repairs to the structures installed a year earlier, both inside and outside Stipiturus Conservation Park. This also gave us a chance to get a sense of how the site is responding, 12 months since restoration works began.

In some exciting news – despite the short period of time that has elapsed and the lack of recent rainfall – the results of the restoration works are really starting to show.

The most pronounced impacts are being observed in the portion of the swamp on private land next to the Park, where a network of drains across a significant area of peatland were back-filled. Here, the peat has now re-saturated, and the swamp vegetation is quickly bouncing back - helped along by the fact that a significant amount of remnant swamp vegetation was still hanging on at this site.



Wetland vegetation bouncing back next to the former 1.5 metre deep drain through the peat at Glenshera Swamp. Thousands of tea-tree seedlings and other wetland plants are emerging throughout the restored peatland.

Despite the tea-tree (*Leptospermum* sp.) shown above being drowned, as it was growing in the now back-filled drain, the importance of leaving these adult plants in place is clearly apparent. As the adult plants die, they release masses of seed from their fruit capsules. This process, which is the

same as occurs after a fire, is resulting in the emergence of thousands of seedlings that are happily growing at the right elevation (i.e. on the surface) of the now re-saturated peat – meaning the self-sustaining process of swamp recovery we were hoping to kick-start has now begun...

Elsewhere in this peatland, more dramatic signs of change are clearly visible – some of which even appear counter-intuitive at first glance, like the example below.



A stark image of formerly drained peatland in transition back to swamp.

In this image, the lowest elevation areas of the peatland next to the former (now back-filled) deep drain (right of image) through the peat bed are looking extremely brown / dead, despite the ground now being saturated or under water.

This is because with the drain in place, this area had previously transitioned over many years to a terrestrial vegetation community – in this case dominated by Bracken and Blackberry. With the drain no longer functional, this area of unsuitable vegetation (for a wetland) has rapidly died off and should now begin to revert to wetland vegetation. The area to the left of the image, despite being of higher elevation, actually maintained more remnant swamp vegetation as a result of bank seepage still managing to keep this area moist – hence with the drain no longer functioning, it has been ready to bounce back and more quickly take advantage of the new conditions. In this case, the long artificial drought is over!

The final snapshot below is of one of the most disturbed areas of the former swamp near Saffrons Rd, showing just what a difference 12 months can make when hydrology is restored.



March 2017 (above) and March 2018 (below) – before and after restoration works – Upstream of the Saffrons Rd Spillway.

When you consider that the 2017-18 summer was much drier than the equivalent period a year earlier, then the images really start to tell a story. Just look how green the 'after' image is – despite just being taken after such a dry spell!

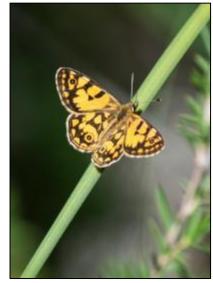
If you look closely, you'll also see how the area of *Phalaris* (an introduced pasture grass) is slowly but surely being out-competed by native rushes and sedges. These wetland plants are happily making the most of the extra moisture now being retained at the site.

Heading into the second year since restoration began, the future for Glenshera Swamp is looking bright!

Special thanks to the private land holders involved and Natural Resources AMLR for their ongoing support of this important restoration project.

2.10 Preventing butterfly extinction through translocation

The Silver Xenica (*Oreixenica lathoniella herceus*) is a small native butterfly, occurring in cool climate regions across South Eastern Australia and Tasmania. The species prefers open grassy woodland habitats and requires specific grass host plants during their larval stage. The Silver Xenica was only first recorded in South Australia (SA) in 1979 at Piccaninnie Ponds Conservation Park and was subsequently reported by Roger Grund and Lindsay Hunt in 1999. In March 2006, a new colony was detected in the Honan and Kangaroo Flat Native Forest Reserves (15 km NW of Mt Gambier), which represented the most western extent of the species known range in Australia. This colony was also observed flying the following year in 2007. Targeted surveys, between 2008 and 2015 have failed to detect the species and have raised concerns for their overall status in SA.



Current State and Commonwealth legislation does not list this butterfly as 'at risk' in any Act. However, based on available literature for the South East (SE) region of SA and local field data of no individuals since 2007, the Silver Xenica is considered 'critically endangered', and nearing extinction in SA. Nature Glenelg Trust are aiming to prevent this from occurring by increasing the population through translocation, a priority action from the Swamp Gum Woodland Regional Action Plan.



Female Silver Xenica laying eggs - how many eggs can you see?

NGT obtained the necessary permits to allow the shifting of butterflies and eggs from private and public land sites in western Victoria into public nature reserves in South Australia. Sites chosen in SA for translocation include Native Forest Reserves near Glencoe which contain suitable food plants in a moist grassy woodland setting with an overstorey of Swamp gums.



Translocation site in Swamp Gum grassy Woodland at Honan NFR

The propagation of food plants has occurred in the NGT nursery (see right) and plants were provided to Glenburnie Primary School to participate in aspects of the translocation where the students will gain first-hand experience in observing and recording information about insect life cycles.

In autumn 2018, 40 females and 20 males were carefully captured and transported from near Dartmoor (Vic) to Glencoe (SE SA) with help from NGT staff, volunteers and students from Glenburnie Primary School during this process.



A reconnaissance trip in late March confirmed that the butterfly was flying although very few females were observed. Males emerged first which is usual in the Nymphalidae with females often known to follow the males in subsequent days/weeks. We then waited a week or so for fine weather, then the crew set out to start the translocation process shortly after Easter.



Volunteers Lu-wei and Sheryl confirming the sex of the butterfly. Abdomen size was the key.

Numerous donated tins were converted into small holding cages to house the food plant and captured females. Andy and Sheryl were busy putting them together.



Cage making back at camp – Fort O'Hare, Dartmoor

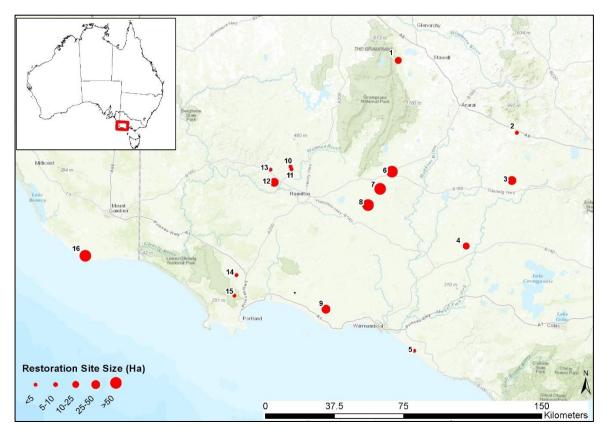
Laying of eggs onto the food plant was problematic and unexpectantly slow, so by the second day cages were transported to the release sites mid-afternoon and all butterflies released. Transects were walked to record numbers seen flying at and close to the release sites. Monitoring indicated that butterflies hung around (but in small numbers), so were difficult to find post-release.

The final step in the 2018 translocation was to capture late flying females (more inclined to lay) to gather more eggs which were then transported, placed out at the recipient sites and provided to Glenburnie PS for rearing.

This activity formed part of the Restoring Under-represented Ecological Communities project, which was supported by Natural Resources SE and the Australian Government.

2.11 Wetland Restoration Program on Private Land in Victoria and SA (2012-2017)

With funding through the Australian Government's Biodiversity Fund Round 1, Nature Glenelg Trust successfully delivered the Wetland Restoration on Private Land program. The aim of the project was to undertake hydrological restoration of wetlands on private property across western Victoria and South East South Australia. This five-year project concluded in August 2017 and had a total project budget of \$1.8 million. A total of 18 wetlands (across 16 properties and covering 807 hectares) were subject to restoration actions covering pest plant and animal control, restoration of hydrology and stock access restriction. An overview of site locations is provided below. Seventeen sites were committed to ten-year management agreements while an additional project (site 13) was undertaken in partnership with a local Landcare project.



Wetland restoration on private land project sites.

Winter-spring rainfall in 2016 resulted in surface water being restored to approximately 600 hectares of wetland area, achieving natural regeneration of wetland flora and elimination of terrestrial weeds, predominantly exotic grasses. Inundation events correlated with waterbird presence and recruitment, with confirmed observations of several species of conservation significance e.g. brolga, Latham's snipe and sharp-tailed sand pipers. In addition, the nationally threatened growling grass frog (*Litoria raniformis*) was detected at one site in high numbers. The western swamp crayfish (*Gramastacus insolitus*) was also detected at one site following re-inundation. Types of habitat restored included both shallow and deep freshwater marshes, plains grassy wetlands, plains saltmarsh and a coastal groundwater dependent ecosystem.

The project involved sixteen different properties and farming entities, involving 35 individuals.

Regular communication throughout the project resulted in the fostering of increased recognition of wetland values both on partnering landholder's properties and across the region in general. Additional investigations and restoration trials undertaken during this project were also undertaken.

The initial effectiveness of restoration works was demonstrated following winter-spring rainfall of 2016. This demonstrated that sites were subject to inundation durations which occurred longer than apparent from recent anecdotal observations and in many cases matched best available pre-drainage estimates. Vegetation monitoring has identified that desirable natural regeneration has occurred across all sites and that weed cover was lower following the inundation event. Through 2017, following a dry start to winter, the amount of rain required to achieve follow-up re-wetting after drying down was less than for the preceding year. Several sites also managed to retain areas of surface inundation through summer and autumn of 2017, meaning that at the start of the runoff season, they were at a state of inundation which was not observed until at least mid to late winter in their pre-restoration state. This translates to increased hydrological resilience but requires longer-term monitoring to validate the trend over time. The response of fauna was equally pleasing although not surprising given the intention of this project is to impart greater availability of shallow wetland habitat against a backdrop of continuing wetland loss across the region. The response observed across several sites in 2017 is that several will now act as critical refuge once other, less reliable systems dry down.

The Wetlands on Private Land project has had a big impact regarding approaches to wetland restoration and conservation. Hydrological restoration has been largely avoided in conservation programs due to notions of risk and expense. By demonstrating the approaches undertaken in this project, and now with the demonstrated results, there has been growing interest, and initiation of projects, in other regions. This project provided a timely demonstration that hydrological restoration is a feasible and achievable way of building ecological resilience back into the landscape, against a backdrop of otherwise continuing decline.



Wetland birds at one of the restored wetlands, Green Swamp, in April 2018, when other local wetlands were long dry.



Wetland Restoration Case Study: The restoration of Scale Swamp near Dunkeld

Scale Swamp provides a great demonstration of the benefits of restoring hydrology to drained wetlands. This 100 hectare swamp to the south of Dunkeld has a long-term history of drainage for grazing and low-intensity cropping. In 2013, under the Commonwealth Government funded "Wetland Restoration on Private Land" project, Nature Glenelg Trust and Dunkeld Pastoral Company worked together to decommission a drain and install fencing around the restored high water mark. We've been watching and enjoying the changes over the past five years and have been amazed at the response in vegetation and birdlife.

NGT's Lachlan Farrington headed into Scale Swamp between Christmas and New Year's Eve in 2017 to find there was still a significant amount of water. Unlike many of our other restoration sites, Scale Swamp is relatively shallow and more grassy than the deeper, freshwater marshes we have worked on. You can see a timeline of transition of the vegetation in the photo sequence over the page.

In large parts there has been an almost entire replacement of exotic pasture grasses with the native Australian sweet grass (*Glyceria australis*) and also increased coverage by native sedges (*Eleocharis acuta*) and other aquatic herbs (*Potamogeton, Myriophyllum* and *Ranunculus* species).

Despite previous research at the site (by Michelle Casanova) showing that a diminished native wetland plant seedbank persisted at the site, crucially the restored hydrological regime has given those wetland species that have held on, the vital competitive edge they had been waiting for.



Panoramas of Scale Swamp, showing a timeline of change since restoration.

The biggest surprise during Lachie's visit came while photographing the concentrations of water birds. He didn't see them with the naked eye but while reviewing a photo I'd just taken, I noticed some brolga in the background of a shot. Turns out there were three. Given the isolation of this site, the restored hydrological period and ideal vegetation assemblage, we're confident that Scale Swamp is now an ideal spot for brolga breeding.



A new record for brolga at Scale Swamp

Alongside the brolga were spoonbills of both species, a large number of black winged stilt, both species of herons, duck and teal, swans, whiskered tern, dotterels and a flock of sharp-tailed sandpipers darting across the swamp.



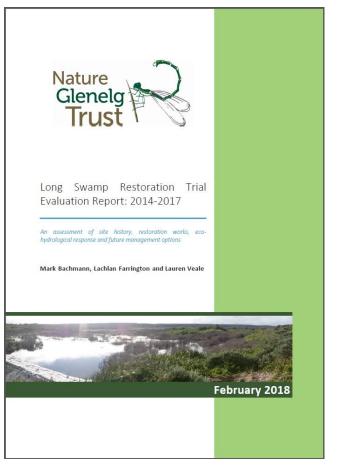
Based on water levels, we expected to still be seeing this sort of activity through until the end of summer. We have done some aquatic surveys over the past few years and can confirm that frog populations are also healthy but we are yet to hear growling grass frogs; however, based on the response so far, it is possibly only a matter of time. If we can manage another couple of good rainfall seasons in the years ahead, we're hoping to organise follow-up field days so more people can get to experience first-hand how quickly a degraded wetland can spring back to life, just by adding water.

2.12 Long Swamp restoration trial update

Thanks to the tremendous support of so many wonderful people and organisations with an interest in Long Swamp (Discovery Bay Coastal Park) over the past six years, NGT has now reached the stage where we can finally share everything we have learned about the site. Although some of this information has found its way into the blogs over that time, most hasn't – so this is your chance to read the full story, consolidated in one place, for the first time!

Reconstructing the early eco-hydrological history of the site (an essential part of the restoration story in this instance) provided a fantastic, complex case study in historical geography. As well as this in depth review of site history, the report covers all the relevant information about the restoration trial and summarises NGT's monitoring program to evaluate the trial's success.

To access the report, you can access it <u>from the</u> <u>NGT website here</u>.



As you'll see in the report, it was recommended that the trial structure be permanently consolidated (as part of a reformed sand dune) at some stage in the future, as a result of the range of positive biodiversity impacts associated with hydrological restoration. For just one example, in this case of vegetation response, see below.



The Nobles Rocks outflow gauge board – May 2015 (left) to October 2017 (right), with invading shrubs being displaced and the vegetation community showing a positive trajectory of change, in response to the restoration trial.

NGT's Tessa Roberts subsequently planned the next stages of the project, undertaking the consultation, detailed design work and planning work required to obtain the necessary permit approvals. This has ultimately led to NGT being awarded grant funding by the Victorian Government to complete the permanent restoration works in autumn 2019.



NGT's Mark Bachmann discusses the next stages of the Long Swamp Restoration Trial with staff from the GHCMA and DELWP.

Among the many people who have contributed to or supported this project over the past six years (too many to name here), NGT would like to make a special mention of the late Leila Huebner OAM of Nelson, who very sadly passed away in February 2018.

Leila first approached NGT in 2012 on behalf of the Nelson Coastcare Group (of which she was a founding member) asking for our assistance with answering local community questions about water management and the ecology of the site, eventually leading to the restoration trial which commenced in 2014. Despite her lengthy battle with poor health, Leila maintained an active interest in Long Swamp – even helping to review a final draft of the evaluation report a few weeks before her death.

For those of us that knew Leila and what she cared deeply about, it has been a sad time, as we have lost one of those rare, observant field naturalists who had an insatiable thirst for knowledge and then selflessly shared that experience for community and environmental benefit.

Vale Leila.

Nature Glenelg Trust gratefully acknowledges the Glenelg Hopkins CMA and the Victorian Government for their support of the project at Long Swamp.

2.13 Southern Brown Bandicoot digging abundance report

It's taken a little while to pull everything together, but the huge job of collecting digging abundance data in the field for the Southern Brown Bandicoot (completed by 2016 NGT graduate intern Andrea Fullagar) – has led to a major review of the species in the South East NRM region.

This project has helped contribute to the creation of a significant long-term biological data-set, by repeating a method first employed (as a rapid assessment technique for the

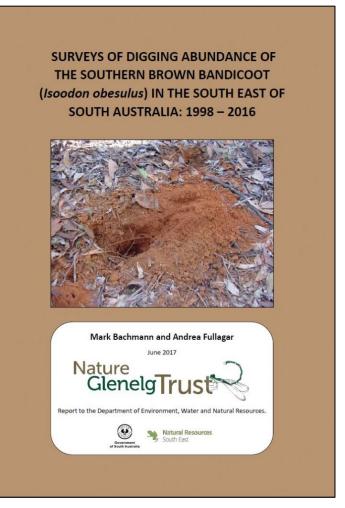


species) by Dr David Paull back in 1998. The survey was repeated by DEW (Dept.for Environment & Water, SA) and ForestrySA in 2007; meaning the 2016 NGT survey marks the third instalment in this long-term monitoring program. A huge thanks to David, DEW and ForestrySA for generously making the data from previous surveys available for analysis.

So, if you'd like to learn more about one of the few medium-sized ground-dwelling marsupials that has managed to persist in the region, then feel free to download and read a copy of the report <u>from the</u> <u>NGT website here</u>.

The report highlights that, despite the species still persisting in parts of the Lower South East, it remains under threat – particularly in smaller, outlying population areas. It also raises important questions in the discussion about fire management, survey techniques, fox control programs, population genetics and the potential for future translocations.

The information from this work contributed to a review of the Regional Action Plan for the Southern Brown Bandicoot, completed by NGT's Bryan Haywood. This project was supported by Nature Glenelg Trust and Natural Resources South East, through funding



from the Australian Government's National Landcare Programme.

2.14 Protecting wedge-tailed eagle nests in plantation forests

Ecologists at Nature Glenelg Trust have been monitoring known Wedge-tailed eagle nests within the pine forests of OneFortyOne Plantations. This is the second season of monitoring and we covered 12 known nests sites this year, which were checked three times over a period of 6 weeks from July to September 2017.

While OneFortyOne has committed to protect eagle nests within their plantations, the regular monitoring should eventually give us an insight into the birds behaviour when it comes to reusing old nests after pines around a nest tree have been harvested.

The surveys have provided us with some exciting news. Two of the 12 nests were being used. One by a breeding pair of Peregrine falcons. Peregrine falcons are listed as a rare species in South Australia and it is exciting to see them breed in the area. This nest is situated in a coupe which will be clear felled in a few years.

The other active nest was active in 2016 when the clearfall age plantation was still standing, and OneFortyOne delayed their harvest to minimise disturbance to the pair. The plantation was then clearfelled and the nest tree was left standing with a few protective pine trees around it to provide additional shade and shelter from the elements. We are pleased to report that, Wedge-tailed Eagles have been observed on or near the nest over the last few months and an adult is still sitting as shown. So we awaited like expecting parents to see a fluffy white chick over the coming weeks.



Photo taken from a safe distance, to not disturb the bird. Arrow showing head of adult amongst branches.

We were expecting chicks... and chicks we got!

The two of the 12 monitored nests that were active enabled us to welcome one wedge-tailed eagle chick and two young peregrine falcons to the South East.

During a visit we were lucky enough to observe one large eagle chick enjoying the warm sunshine from the edge of the nest.



A wedge-tailed eagle chick in one of the nests amongst the OneFortyOne plantations. Photo taken by C. Farrell

The peregrine chicks were a bit more advanced and were ready to fledge. While one of the two juveniles was exploring the immediate environment from the air, the other one was still a bit hesitant and was observing its surrounding from the safety of the nest.



A juvenile peregrine falcon (on the right) having a rest near the nest. Photo taken by C. Farrell

Well done to NGT's Nicole Mojonnier for her efforts in monitoring the nests this season, and for OneFortyOne's efforts to protect the nests of these iconic birds.

2.15 * Welcoming Ben Taylor, Greg Kerr and Jodie Honan to the team at NGT

Over the past 12 months, NGT was extremely lucky to recruit three highly respected ecologists, continuing to build NGT's reputation as a leader in restoration science in south-eastern Australia.

Ben Taylor

Ben's introduction to the wetlands of the South East of SA was as an undergraduate in 1991, when he spent 10 days surveying the vegetation of Bool Lagoon as part of a summer scholarship with Associate Professor George Ganf.

Following a decade of various endeavours and travels, Ben returned to wetland science and conservation projects in 2002. From 2004 to 2006 Ben worked on the Lower South East Wetland Inventory, surveying the



flora, water quality and condition of around 200 wetlands. The regional wetland mapping we use today was completed by Ben and others as part of that project. Ben worked on a range of wetland management and restoration projects including early works at Piccaninnie Ponds and Pick Swamp. He played a key role in the protection of Lake Hawdon South as a Conservation Park and has been monitoring the ecological response of that wetland to grazing cessation since 2008. From 2009 to 2017 Ben was based at DEW where he worked primarily as the Project Ecologist on the South East Flows Restoration Project, which is currently under construction in the Taratap and Tilley Swamp areas. He also spent a period out-posted to the Ngarrindjeri Regional Authority where he supported the Mannum Aboriginal Community Association with the development of a wetland restoration and management plan for the Sugar Shack wetlands, located on the River Murray floodplain near Swan Reach.

Since joining NGT in May 2017, Ben has been supporting our projects on the Fleurieu Peninsula at Hesperilla and Stipiturus Conservation Parks. He has also been working on the Restoration and Management Plan for the Mount Burr Swamp property, as well as other wetland projects across NGT's focal region between Adelaide and Melbourne.

Ben is based in Adelaide where he lives with his partner Natasha and kids Miles and Phoebe.

Greg Kerr

Greg joined NGT in March 2018 following five years working as a Landscape Ecologist with DEW, based on Eyre Peninsula, SA, but having grown up in the South West of Victoria, Greg has strong family connections in the local area.

Greg has a research background in Behavioural Ecology and Spatial Ecology, and has developed a broad ecological knowledge through wide ranging experience working as a consultant in a variety of terrestrial and wetland roles both across Australia and internationally. He is skilled in Natural Resource Management, raising environmental awareness, wetlands, development of citizen science programs, fauna monitoring and habitat requirements, and environmental policy. Greg is also an award winning secondary teacher who loves to involve and empower community members in

ecological monitoring and natural history.

Greg is based in Dunkeld and is managing NGT's major wetland restoration project at Walker Swamp, where he is pictured below.



Jodie Honan

Jodie Honan has lived on the south-west Victorian coast for over 40 years, and has worked across a range of professions including the arts, science, education and in her own eco-tourism venture. She has over 25 years of experience in conservation management and community engagement including as a Biodiversity Officer and Park Ranger and is also an accomplished author. During her professional employment, and through her association with local communities,



Jodie has developed a strong recognition for the importance of developing conversation and documenting stories which ultimately contribute to a sense of place and overall community resilience.

Her documentation of the stories of Yambuk Lake and the catchments of the Eumerella and Shaw rivers is great example of how a common story can be extracted from divided opinions.

In late 2017, Jodie joined NGT as a Project Manager for the Kang-o-meertek project, recognising her capacity to manage and focus on tasks objectively and systematically, but also with a recognition of the need to hear, consider and foster creative ideas as they emerge.

3. Plans for the 2019-20 Financial Year

3.1 Strive to be universally viewed as leaders in restoration ecology in south-eastern Australia

Nature Glenelg Trust has already had considerable success delivering a wide range of projects over the organisation's first five years. However, consistent with having an organisational emphasis on restoration and threatened species ecology, we continue to strive to be universally viewed by current and future project partners as leaders in these fields in south-eastern Australia.

Goal: Increase the geographic reach and effectiveness of NGT's restoration activities in southeastern Australia, based on the ecological expertise and commitment of our staff, volunteers and supporters.

3.2 Continue a focus on high quality research and monitoring to inform conservation management

An important element of our organisation's work has been an ability to initiate and participate in scientific research and monitoring that provides information to better conserve and manage aquatic species and ecosystems. Each year, a number of scientific publications have been produced and used to assist conservation and fisheries managers. We believe that greater opportunities exist in the future to robustly document the outcomes of restoration actions as well as continue to conduct research on key aquatic species.

Goal: Continue to produce scientific publications and foster new research collaborations

3.3 Build lasting partnerships within our focal region

Further to the previous goals, NGT will seek to build on our reputation and credibility in the sector to form longer term partnerships with any individuals or organisations who may want to support our work. This will enable NGT to continue to explore different pathways for achieving environmental results, including research partnerships and looking for opportunities to work across sectors (especially with those involved in the arts, education and social justice) to facilitate meeting the organisation's goals.

Goal: Forge new partnerships to achieve positive results on the ground

3.4 Establish additional restoration reserves in western Victoria and south-eastern SA

The successful purchase of Eaglehawk Waterhole (2013), Mt Burr Swamp (2016) and Walker Swamp (2018), and donation of Kurrawonga (2018), as *NGT Reserves* is a perfect illustration of NGT's mission to provide a small number of strategically located community demonstration sites situated across our focal region. If and when opportunities arise, NGT will attempt to secure additional sites where property-scale restoration activities for wider conservation benefit can be trialled and demonstrated.

Goal: To establish an additional Habitat Restoration Reserve in Victoria or SA in the next 2 years.

3.5 Develop and implement restoration and/or management plans for NGT Reserves

In order to trial and demonstrate property-scale restoration activities for wider conservation benefit on NGT's Reserves, each property requires a restoration and/or management plan to be in place or under development. This will provide a clear set of objectives to drive NGT's grant seeking, or other funding mechanisms pursued, to support active restoration, management and on-ground works.

Goal: To develop ecologically sound management plans for implementation on NGT Reserves

3.6 Grow the balance of the NGT Foundation

The NGT Foundation was launched in early 2018, meeting a goal from the previous NGT Annual Report. In order to successfully meet the long-term objectives of the Foundation, creating a recurrent funding stream to support the management of NGT Reserves, the balance of the Foundation requires significant growth.

Hence the priority now shifts to attracting additional support for the Foundation and attempting to lift its balance during these initial stages after its establishment. During this initial growth phase, all interest generated by the Foundation will be re-invested and no funds will be used for NGT operations.

Goal: To explore strategic opportunities to grow the balance of the NGT Foundation, broadening its funding base and over the next 12 months.

3.7 Provide interesting practical opportunities for our staff, ecology graduates and volunteers

Nature Glenelg Trust is proud to be creating regular opportunities for our staff, recent graduates (as interns) and volunteers to develop and build their ecological expertise through their work with NGT. With changes to the tertiary education sector and its teaching methods, providing opportunities to gain this hands-on ecological experience is a key service NGT can provide, while also adding significant value to our work. This will continue to be a focus for the next 12 months.

Goal: To continue to provide practical learning opportunities for ecology graduates and volunteers

3.8 Explore new and innovative ways to add value to our operations

NGT is a small and dynamic operation that is at the mercy of the range of economic forces that shape the environmental sector on a regular basis. Government funding sources, such as grants, are notoriously unpredictable and make longer term planning difficult. Hence NGT will continue to explore options for value adding to and diversifying our operations to improve our longer term financial security and viability.

Goal: To explore new and innovative ways to add value to our operations

4. Employee Statistics

Nature Glenelg Trust employed a total of fourteen full-time or part-time staff throughout the 2017-18 financial year, and a further eighteen staff on a casual basis. Our full-time or part-time staff are:

- 1. Mark Bachmann (Manager / Principal Ecologist)
- 2. Jessica Bourchier (Administration Support and Project Ecologist)
- 3. Lachlan Farrington (Senior Wetland and Landscape Ecologist)
- 4. Bryan Haywood (Senior Ecologist)
- 5. Greg Kerr (Senior Ecologist)
- 6. Ryan Little (Nursery Officer)
- 7. Lauren Kivisalu (Project Ecologist)
- 8. Nicole Mojonnier (Program Co-ordinator Education on NGT Reserves)
- 9. Tessa Roberts (Wetland Ecologist)
- 10. Ben Taylor (Senior Wetland Ecologist)
- 11. Rose Thompson (Project Ecologist)
- 12. Jonathan Tuck (Ecologist and Project Logistics)
- 13. Lauren Veale (Aquatic Ecologist)
- 14. Nicholas Whiterod (Senior Aquatic Ecologist)

5. Membership

As a duly constituted fixed trust, Nature Glenelg Trust does not have its own financial membership base. As a charitable environmental NGO committed to filling gaps, we are specifically interested in using our expertise to work with (not compete with) other membership-based community groups to increase their effectiveness, and ultimately help them to retain and attract members. We also hope to provide regular and meaningful volunteering opportunities for these groups' members (and the wider community) through participation in our projects. Nature Glenelg Trust is listed on the Register of Environmental Organisations, enabling the organisation to seek tax-deductible financial contributions to our Public Fund. Supporters of Nature Glenelg Trust are also encouraged to register their email address on our website (www.natureglenelg.org.au) to receive regular updates on our projects and organisational activities.

The Board of the Trustee for Nature Glenelg Trust, currently has six voting members:

- 1. Mark Bachmann
- 2. Catherine Dickson
- 3. Lachlan Farrington
- 4. Michael Hammer
- 5. Melissa Herpich
- 6. Nicholas Whiterod

At present, the members of the Trustee for Nature Glenelg Trust, also comprise the organisation's Committee of Management, which meets 3-4 times a year to oversee the strategic direction of the organisation, and are legally accountable for the administration of the Public Fund (the Habitat Restoration Fund).

6. FINANCIAL STATEMENT

NATURE GLENELG PTY LTD T/A NATURE GLENELG TRUST

STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 30th JUNE 2018

Revenue	Note	2018 \$	2017 \$
Sales Administration Fees Donations Direct Grants Other Income		1,312,830 276,084 2,749,647 417,860 63,817	1,981,118 101,769 117,201 663,140 62,649
Total Revenue		4,820,238	2,925,877
Less			
Expenses			
Cost of Goods Sold Employee benefits expense Other expenses		368,808 824,526 282,765	409,696 800,466 196,897
Total expenses		1,476,099	1,407,059
Net surplus for the Year		3,344,139	1,518,818
Other comprehensive income		-	-
Total comprehensive income		3,344,139	1,518,818

STATEMENT OF FINANCIAL POSITION AS AT 30th JUNE 2018

	Note	2018 \$	2017 \$
Current Assets Cash and Cash Equivalents Receivables Inventories	2. 3.	4,110,999 320,260 1,149,931	1,889,173 126,706 644,449
Total Current Assets		5,581,190	2,660,328
Non Current Assets Property Plant and Equipment	4.	3,098,389	2,412,185
Total Non Current Assets		3,098,389	2,412,185
Total Assets		8,679,579	5,072,513
Current Liabilities Trade Creditors and Other Payables Provisions	5. 7.	2,196,946 195,744	1,887,789 247,972
Total Current Liabilities		2,392,690	2,135,761
Non Current Liabilities Interest Bearing Liabilities Provisions	6. 7.	231,759 77,346	243,396 59,711
Total Non Current Liabilities		309,105	303,107
Total Liabilities		2,701,795	2,438,868
Net Assets		5,977,784	2,633,645
Equity Issued Shares & Settled Sum Retained Surplus		396 5,977,388	396 2,633,249
Total Equity		5,977,784	2,633,645

STATEMENT OF CHANGES IN EQUITY AS AT 30th JUNE 2018

	Retained Earnings	Issued Shares \$386 Settled Sum \$10	Total Equity
2017			
Balance as at 1 st July 2015	1,114,431	396	1,114,827
Total Comprehensive Income for the Period	1,518,818	-	1,518,818
Balance as at 30 th June 2017	2,633,249	396	2,633,645

	Retained Earnings	Issued Shares \$386 Settled Sum \$10	Total Equity
2018			
Balance as at 1 st July 2017	2,633,249	396	2,633,645
Total Comprehensive Income for the Period	3,344,139	-	3,344,138
Balance as at 30 th June 2018	5,977,388	396	5,977,784

STATEMENT OF CASH FLOWS AS AT 30th JUNE 2018

		2018 \$	2017 \$
Cash Flow from Operating Activities	Note		
Receipts from			
Donations and Gifts Government/Other Grants & Income		2,749,647	117,201
Interest		2,160,771 34,006	2,876,123 18,961
Payments to		51,000	10,701
Suppliers and Employees		(1,995,470)	(1,132,733)
Interest paid		(11,800)	(9,279)
Net cash flow from operating activities		2,937,151	1,870,273
Cash Flows from Investing Activities			
Purchase of Property Plant & Equipment		(703,687)	(1,708,177)
Net cash flow from investing activities		(703,687)	(1,708,177)
Cash Flow from Financing Activities			
Proceeds from interest bearing liabilities		-	246,000
Repayment of interest bearing liabilities Net cash flow from financing activities		(11,638) (11,638)	(2,604) 243,396
Net cash now from mancing activities		(11,058)	243,330
Net increase (decrease) in		2 221 826	405 402
cash and cash equivalents		2,221,826	405,492
Cash and Cash Equivalents at			
the beginning of the year		1,889,173	1,483,681
Cash and Cash Equivalents			
at the end of the year		4,110,999	1,889,173
Reconciliation of Net Surplus for the year to net Cash Flows from Operations			
Net Surplus for the year		3,344,139	1,518,818
Depreciation Expense		17,483	17,994
(Increase)/Decrease in Inventories		(505,482)	(61,204)
(Increase)/Decrease in Receivables		(193,554)	86,408
Increase/(Decrease) in Provisions Increase/(Decrease) in Trade Creditors		(34,592) 309,157	36,451 271,806
mercase (Decrease) in Trade Creations		507,157	271,000
Net Cash Flow from Operations		2,937,151	1,870,273

INDEPENDENT AUDITORS REPORT FOR THE YEAR ENDING 30TH JUNE 2018

Opinion

We have audited the accompanying financial report of Nature Glenelg Pty Ltd T/A Nature Glenelg Trust (the "entity"), which comprises the Statement of Financial Position as at 30th June 2018, Statement of Comprehensive Income, Statement of Changes in Equity and Statement of Cash Flows for the period then ended, Notes comprising a summary of significant accounting policies and other explanatory information and the Directors' Declaration of the entity. In our opinion, the financial report presents fairly the financial position of the Nature Glenelg Pty Ltd T/A Nature Glenelg Trust. as at 30th June 2018 and the results of its operations for the year then ended and complies with Australian Accounting Standards to the extent described in Note 1.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Report section of our report. We are independent of the entity in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the report in Australia, and we have fulfilled our other ethical responsibilities in accordance with that Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management for the Report

Management is responsible for preparation and fair presentation of the report in accordance with Australian Accounting Standards to the extent described in Note 1. This includes determining that the above basis is an acceptable basis for the preparation of the report in the circumstances, and for such internal control as management determines is necessary to enable the preparation of a report that is free from material misstatement, whether due to fraud or error.

In preparing the report, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Report

Our objectives are to obtain reasonable assurance about whether the report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this report. As part of an audit in accordance with Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit.

We identify and assess the risks of material misstatement of the report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

When applicable we obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

Where appropriate we conclude on the appropriateness of management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the report or, if such disclosures are inadequate, to modify our opinion.

Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, and related disclosures made by management. We also evaluate the overall presentation, structure and content of the report, including the disclosures, and whether the report represents the underlying transactions and events in a manner that achieves fair presentation.

We will, where appropriate, communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Christopher Clarke Partner Clarke & Brownrigg Chartered Accountants

Dated in Adelaide this 30th day of November 2018