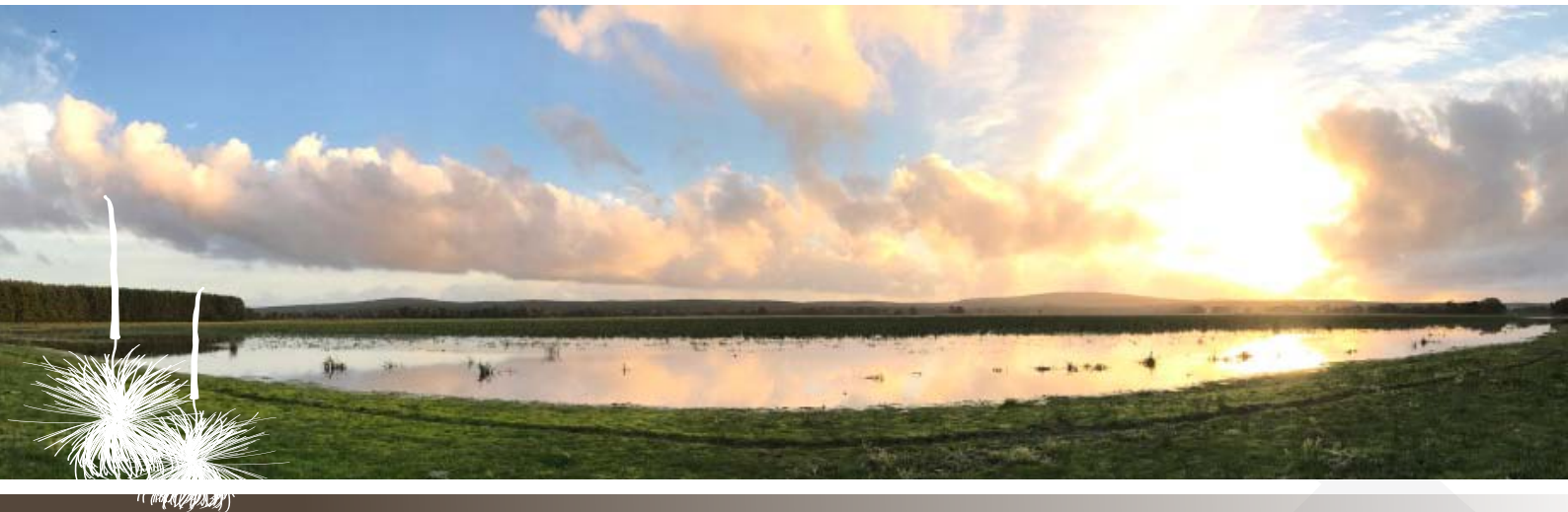


2016 – 17



NATURE CONSERVATION SOCIETY OF SOUTH AUSTRALIA

ANNUAL REPORT

HIGHLIGHTS THIS YEAR:

- Increased our support of early career environmental researchers by doubling the grant amount for the 2017 *Conservation Biology Grant*
- Undertook a feasibility study for the reintroduction of the yellowish-sedge skipper to the northern Adelaide Plains
- Donated \$16,500 from the Madeleine Boyce Bequest to complete the purchase of Mount Burr Swamp by the Nature Glenelg Trust
- Donated a further \$2,000 to support the continuation of the Policy Officer position at the *National Parks Australia Council*
- Increased our reach and engagement via social media
- Guided a series of highly popular nocturnal walks for the 2017 SA History Festival
- Ran our *Walks with Nature* programs at the Belair National Park 125th Anniversary celebration
- Completed an internal review of our advocacy position, which resulted in the recent recruitment of our new Nature Advocate.

ABOUT THE NATURE CONSERVATION SOCIETY OF SOUTH AUSTRALIA

The Nature Conservation Society of South Australia is a not-for profit voluntary conservation organisation working to promote and protect South Australia's wildlife and natural habitats.

The NCSSA has a history of over 50 years as a leader in advocacy for the environment and is a respected source of scientific information and informed comment on the biodiversity of South Australia.

One of the primary objectives of the NCSSA is to "foster the conservation of the State's wildlife and natural habitats", and the Society has taken action on many varied environmental issues since its formation in 1962.

- Our activities include:
- promoting, protecting and managing native habitats
- researching and protecting threatened species and their habitats
- advancing the protection, management and strategic expansion of the state's reserve system, and
- educating the community and all tiers of government about environmental matters



NCSSA PEOPLE

MANAGEMENT COMMITTEE

President: Michael Stead

Vice-President: Rick Davies

Secretary: Robert Lawrence

Assistant Secretary: vacant

Treasurer: Anna-Lucia Draper

General Committee: Lindell Andrews, Janine Guy, Kelly Henderson, Erinne Stirling, Helen Vonow

STAFF

Administrative Manager: Amanda Stewart

Conservation Programs Manager: Jeff Foulkes

Conservation Ecologist: Nicki de Preu

Nature Advocate: Julia Peacock

Threatened Plant Action Group Program Coordinator: Tim Jury

Bushland Condition Monitoring Project Officer: Peter Mahoney

Woodland Bird Survey Coordinator: Erin Sautter / Ali Ben Kahn

Database & Website Project Officer: Lesley Parton

Other project staff and consultants: Robert Bates, Ali Ben Kahn, Brian Blaylock, Gabrielle Bond, Tom Bradley, Chris Butcher, Jane Cooper, Sonia Croft, Tim Croft, Debra Hopton, Gavin Kluske, Ben McCallum, Penny Paton, Alex Stolarski and Sarah Telfer.

REGULAR VOLUNTEERS

Keith Lloyd (General office support/library); Brian Knill (MLR Woodland Birds database);

the MLR Woodland Bird surveyors: Rodney Attwood, Ali Ben Kahn, Stuart Collard, Sonia Croft, Peter Day, Jody Gates, Thomas Hunt, Chris James, Penny Paton, David Paton, James Plummer, Beatrice Rogers and Rebecca Zanker;

and many others who generously contributed their time throughout the year to various conservation projects and activities

FUNDING 2016-17

NCSSA activities are funded by membership subscriptions, donations, bequests, book sales, investment interest, government grants and external funding agencies that fund many of our conservation projects.

Funding bodies for the 2016-17 financial year included:

The City of Onkaparinga; Department of Environment, Water and Natural Resources (including the Native Vegetation Council; NRM Regions of: Adelaide & Mount Lofty Ranges, Eyre Peninsula, Northern & Yorke, SA Murray Darling Basin); SA Water.

Views across **Mt Burr Swamp** in the lower South-east of South Australia. It was purchased by the Nature Glenelg Trust in 2016 with the aim of achieving sustainable water management, threatened species recovery and large-scale native revegetation.

On front cover: the swamp, August 2017 Photo: L. Andrews

Facing page: The black swans *Cygnus atratus* just commenced their nesting season on the swamp. They harvest the water ribbons in a circular pattern and use it to build a nesting platform. The surrounding clear water allows easy detection of approaching predators. Photo: M. Stead

On back cover: Water ribbons *Triglochin procerum* are the dominant aquatic vegetation within the main swamp. Photo: M Stead

PRESIDENT'S REPORT

This past year has been another productive one for the Society.

We are very proud to have contributed to a number of very worthwhile conservation initiatives throughout the course of this year, including the protection of Mt. Burr Swamp for future generations, the doubling of grant funding to support student-led ecological research, and financial support for the continuation of the Policy Officer position at the *National Parks Australia Council*.

In addition, we have seen successful completion of the current *WildEyre* project and a feasibility study into the reintroduction of yellowish sedge skipper butterflies on to the northern Adelaide Plains. More information about these projects is included within.

We also shouldn't understate the importance of our long-term conservation initiatives: the *Bushland Condition Monitoring Method* and *Mount Lofty Ranges Woodland Bird Project*. The value of these projects grows with each year that passes.

Naturally, our desire to educate and engage people with nature conservation remains as strong as ever. This year's oversubscribed nocturnal walks program was a refreshing means by which to do just that, in addition to our long-standing *Walks with Nature* program.

This year's financial performance, although a sizeable loss, was slightly better than forecast after the Committee's decisions to donate money were taken into account. Conditions remain difficult, but the Committee is upbeat about future revenue and is always exploring new avenues.

This year a slight internal reallocation of staff also provided a timely opportunity to redesign and rebadge our *Conservation Ecologist* advocacy position. Recruitment for this new *Nature Advocate* position was completed recently. Much thought has gone, and will continue to go, into ensuring our proud history of nature advocacy continues.

Lastly I would like to thank the staff, volunteers and Management Committee for their efforts over the past year. It has been a privilege to work with you.

Love, protect and respect,
Michael Stead
President



Mt. Friday, Hiltaba Station, Gawler Ranges. Photo: M Stead

NCSSA Conservation Biology Grant

Annually since 2003 we have offered honours and post-graduate students the opportunity to apply for grant funding to support their research into aspects of conservation biology.

We decided earlier this year to double the maximum grant amount per successful applicant to \$2,000.

Funds are available for research which is aimed at:

- improving understanding of the conservation status of species or ecological communities
- providing recommendations for improvement of some aspect of biodiversity conservation
- understanding the ecology of species or communities
- understanding threats to biodiversity and management of those threats.

This year we funded the following research projects:

Julian de Silva (PhD, The University of Adelaide), \$1,980 for research on *Gorse-mediated changes in soil during biological invasion*.

Ellen Freeman (Honours, The University of Adelaide), \$2,000 for research into *the Diet of Wild Deer in South Australia*.

Tahlia Perry (PhD, The University of Adelaide), \$1,750 for research on *Developing molecular indicators for the health and reproduction of our iconic Australian echidnas*.



ADVOCACY

As South Australia's primary nature conservation advocacy organisation, we have an active interest in the protection and conservation of South Australia's precious natural resources with a key focus on nationally and state listed threatened plants, animals and ecological communities, management of protected areas and remnant native vegetation. Advocacy for a wide range of nature conservation issues continued to be a key part of the Society's work over the past 12 months. In the last year we have made the following important contributions:

Wildlife and Natural Habitats

- Ongoing involvement in the *Nature of SA* working group and workshops to progress the development of a nature conservation strategy for South Australia after the *No Species Loss Strategy 2009-2017*.
- Provided ongoing input to the review of the Native Vegetation Regulations under the *Native Vegetation Act 1991*.
- Provided information to Natural Resources Eyre Peninsula for development of a *Roadside Native Vegetation Management Plan* that they are doing in conjunction with the Eyre Peninsula Local Government Association and local Eyre Peninsula Councils.
- Continued to represent the Conservation Council SA on the Adelaide Mount Lofty and Flinders, Mid North and Yorke regional Bushfire Management Committees.
- Ongoing input to *Bushfire Management Area Planning* (BMAP) throughout the state through our feedback on draft plans for the Kangaroo Island, Flinders Mid North & Yorke, Fleurieu, Murray Mallee and Upper Eyre Peninsula Bushfire Management Areas.
- Continued involvement in the *Ecological and Technical Reference Group* that provides technical and scientific advice on environmental matters to the State Bushfire Coordination Committee as part of the BMAP process.
- Provided nominated representatives and conservation expertise to the Department of Environment & Natural Resources (DEWNR) Reference Groups for Kangaroo Management and Duck and Quail Hunting.
- Provided nominated representatives and conservation expertise to the DEWNR "Taskforce Protecting Shorebirds" for the Adelaide International Bird Sanctuary.

Regular meetings were held with Minister Hunter over the past 12 months to discuss priority conservation issues for SA and brief the Minister on our program activities. Some of the issues discussed included the management of total grazing pressure in the Adelaide Mount Lofty Ranges, management of feral goats in the South Australian Arid Lands NRM Region and monitoring programs in National Parks and reserves.

Protected Area Management

The management of protected areas to ensure their natural values are maintained continues to be an important priority for NCSSA. We provided comments to DEWNR on draft Management Plans for the following reserves:

- Witjira National Park – a large reserve in the far north of the state that contains the National Heritage Listed Dalhousie Mound Springs and many plants and animals of conservation significance.
- Ngaut Ngaut Conservation Park – a small reserve on the River Murray that contains important Aboriginal cultural sites and habitat for the Regent Parrot, Carpet Python and Southern Bell Frog.
- Initial consultation on the management plan for the Adelaide International Bird Sanctuary.
- Innamincka Regional Reserve- in the far north of the state that contains a large portion of the Cooper Creek and its associated system of lakes and wetlands that are of international importance for their conservation values.
- Tallaringa Conservation Park - a large reserve in the north west of the state that provides important links with other protected areas across the Great Victoria Desert.

We met with DEWNR staff to discuss the development of a quantitative

Orange bell creeper *Marianthus bignoniaceus*
Photo: M. Stead

Community Events & Engagement

We seek opportunities to become involved in public events and so engage with our membership and the broader South Australian community.

Public Meetings, held with the *Biology Society of South Australia* were:

Remko Leijds, SA Museum 'The biodiversity of Australian native bees, attracting bees to your garden and the conservation of the green carpenter bee on Kangaroo Island.'

The 2016 Conservation Biology Grant Recipient's presentations:

Ben Parslow 'Systematics and host associations of the Australian Gasteruption'

Marlee Crawford 'Combining genetics and bioclimatic modelling to inform management of sandalwood'

James Trezise 'Seed bank development in rehabilitating and re-vegetation: potential recovery from fire'

Hannah Bannister 'The survival and ecology of juvenile brushtail possums in a reintroduced population'

Reece Pedler 'Long distance flights and high risk breeding on remote desert salt lakes: using satellite telemetry, remote sensing and light aircraft to uncover the secrets of Banded Stilts'

In May, for the *SA History Festival*, we once again ran two nocturnal walks: 'Natural History of the Adelaide Parklands after Dark'. These were very popular and booked out well in advance, so much that we offered an addition walk. Participants saw brush- and ring-tailed possums, and flying foxes were constantly overhead.

A new experience for many!

ADVOCACY cont.

monitoring program to assess the status of park health including natural assets and threats to their future viability.

We had ongoing input to the *National Parks Australia Council* that aims to bring together organisations like NCSSA in other states and territories, to provide coordinated advocacy at the national level and highlight the importance of protected areas for biodiversity conservation.

Sustainable Natural Resource Management

The Society had ongoing input to the sustainable management of the State's precious natural resources through a variety of forums including:

- Ongoing involvement with the Wild Eyre program, Southern Yorke Peninsula and Mid North Agricultural Districts Community Action Planning groups that aim to provide a collaborative, landscape-scale planning approach to conservation of soil, water and biodiversity assets in these areas.
- Engaged in the five-yearly review of the *State NRM Plan 2012-2017: 'Our Place Our Future'*.
- Provided feedback on the 2017-2027 Regional Natural Resource Management (NRM) Plans for the Eyre Peninsula, Kangaroo Island and South Australian Arid Lands.
- Ongoing involvement in the development of the *South Australian Murray Darling Basin Regional Action Plan* that identifies NRM priorities and actions across 11 subregions within the region.
- Met with DEWNR staff to discuss the *NRM Report Card* system that they are developing to assess the condition of natural resource assets across the State.
- We had ongoing involvement in the Natural Resources Management - Non-Government Organisation (NRM-NGO) Alliance that involves a formal agreement and commitment to work collaboratively between eleven environmental NGO's and the NRM Boards in South Australia.

Legislative Reform

- Provided feedback on Technical Papers developed by the Australian Panel of Experts on Environmental Law that outline a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come.
- Engaged in the *Leading Practice Mining Acts Review* that proposes to update these laws to provide for more modern and efficient practices for exploration and mining activities in South Australia.
- Responded to the Australian Government's draft discussion paper that considers potential reforms to the Deductible Gift Recipient tax arrangements and advocacy work by environmental groups.
- Provided feedback to Greens Senator Mark Parnell on the report produced by the Environment, Resources and Development Committee inquiry into South Australia's regulatory and policy framework and whether it appropriately supports ecological processes and biodiversity values, and abates species extinction.

Biosecurity

The threat posed by introduced pest plants, animals and diseases to biodiversity has long been an issue of concern to NCSSA. Over the past 12 months we have contributed to a number of initiatives that aim to address environmental biosecurity risks including:

- Participated in a *Review of the National Environmental Biosecurity Response Agreement* and endorsed the submission by the Invasive Species Council.
- Provided feedback on the Discussion Paper and draft report for the *Review of the Inter-Governmental Agreement on Biosecurity* to which South Australia is a signatory.
- Commented on draft *Australian Pest Animal Strategy 2017 to 2027*.
- Provided comment on draft *Australian Weeds Strategy 2017 to 2027*.

Nicki de Preu

Protected Areas - influencing management of over 3 million hectares of South Australia's reserve system

Sustainable NRM - input to Bushfire Management Area Plans for 5 of 9 Regions across the State

Advocacy - continued to advocate for the protection of threatened and regionally rare species and ecological communities through our involvement in a range of workshops, working groups and submissions over the past 12 months.



Alligator Gorge, 2015. Photo: N de Preu



Striated Thornbill Photo: J. Groves

Mount Lofty Ranges Woodland Bird Monitoring Program

Monitoring last year at our 166 long-established sites (each visited three times / season) was initially delayed due to rain and wind, and then by frequent fire bans. This led to a longer than usual season and very worn out surveyors by the end of it all!

Since then we have been collating the data for inclusion into the DEWNR Biological Database of South Australia and reviewing our Program structure and priorities.

Monitoring data collected over the past 16 years is currently being re-analysed by the Adelaide University to determine any changes in trends of species over time. The results will be presented in an updated Program pamphlet due for release in Summer 2017.

Community / government commitment for the Program remains high, with the AMLR NRM Board funding the program for the forthcoming season. In consultation with the Program steering committee, we will continue to work closely with the Board, DEWNR, other partner bodies and research institutions to further investigate trends in species and bird community composition.

We are also planning on resampling a number of BCM sites at bird survey sites to assess what changes in habitat variables may be influencing bird decline.

Preparations for the upcoming survey season are underway and surveys will recommence from September 2017. Co-ordinator Ali Ben Kahn is assisted by Chris Butcher in the day-to-day program administration, data entry and management.

We would like to take this opportunity to thank Erin Sautter for her contribution as Co-ordinator for the last four years.

PROJECTS

There has been a lot happening this past year with our Conservation Programs Manager Jeff Foulkes working on developing new projects and renewing/renegotiating the contracts for a number of projects.

We are currently working on 12 separate projects across three Natural Resource Management regions in the state. Here is a summary of what has been happening is some of our project work:

Bushland Condition Monitoring (BCM)

The Bushland Condition Monitoring (BCM) project provides training, manuals, and a database to allow community and professionals to score and monitor the health of the native vegetation of South Australia.

Field observations are made on a range of condition indicators that are scored regularly. These indicators are measurable and dynamic attributes of bushland health, biodiversity and habitat value. They demonstrate current condition and the magnitude of and direction of changes.

During the year we have been busy with BCM survey and reporting work primarily in Northern and Yorke and the Adelaide Mount Lofty Ranges NRM regions with over 100 new sites or re-visits being undertaken.

This comprises sites linked to management as part of specific NRM projects, capture of older un-entered data and baseline sites in under-sampled vegetation communities. It includes:

- AMLR Samphire Coast Icon Project,
- AMLR Samphire Coast (Light River Delta Boxthorn Removal)
- AMLR Lower Light/Hamley Bridge
- N&Y Northern Rivers/Crystal Brook Creek environmental flows
- N&Y BCM general revisits

In addition to the BCM sites for the AMLR Samphire Coast (in conjunction with BirdLife Australia), we were contracted to undertake photopoint reassessment of a series of 32 sites along the coast. The photopoints visited in 2016, were revisited in 2017 ~ this was to record the progress and outcomes of various management activities such as weed control, tubestock planting and the closure of tracks to vehicular traffic. A report was prepared for the AMLR NRM Board and, generally speaking, most sites showed improvement as a result of the works undertaken as part of the Samphire Coast Icon Project.

Only one full BCM training course was undertaken during the year with participants coming from Friends of parks groups. We undertook a refresher course with EP NRM staff prior to the resampling of WildEyre BCM sites.

NCSSA staff have been working closely with DEWNR staff (Science, Monitoring and Knowledge) on developing a new MOU and improving both the functionality and stability of SABAT (now officially called the BCM Database).

Threatened Plant Action Group (TPAG)

TPAG continued to make a tangible contribution towards improving the in-situ conservation prospects for some of South Australia's most threatened flora through on-ground work, and contributions to threatened species information and policies.

TPAG working bees and field days produced good results from the actions implemented to regenerate and restore threatened flora. Implemented recovery actions included abatement of weed competition; fencing to protect habitat; revegetation; plant population monitoring; flora surveys; stakeholder liaison; and public education. We continue to develop effective working partnerships with landholders, environment agencies and other community groups

Our thanks go to Tim Jury for his work as coordinator and the admirable efforts of all the volunteers willing to get their hands dirty to help nature.

PROJECTS cont.

WildEyre

NCSSA is one of five partner organisations in a landscape-scale conservation project in central northwest Eyre Peninsula. The partnership was formed in 2007, based on a shared ecological vision for the landscape. Members of the partnership include a range of individuals and local, regional and national environmental groups who are working together to restore, conserve and monitor the unique and diverse ecosystems of the region.

Unfortunately, funding for the project ceased this year and we produced final reports on three components of the project. These were:

WildEyre Bird Monitoring

Conducting bird surveys in Spring 2016 across the region at 70 sites established in Spring 2012 across four priority vegetation communities Red Gum Woodland, Native Pine/Mallee Box Woodland, Sheoak Grassy Woodlands and Coastal Dunes and Cliffs.

The surveys were affected by severe weather events last September which strongly influenced the results of the monitoring with fewer species recorded and fewer observations made.

WildEyre Bushland Condition Monitoring

The BCM method assesses a number of key attributes of vegetation condition, including tree health which will be useful for monitoring the health of these systems in the long term.

BCM site assessments were first done in 2012, and Peter Mahoney coordinated resampling of these sites in Spring 2016.

Data from both years have been entered into the BCM Database and used as the basis of the report.

Red Gum Exclosure Monitoring

We undertook initial monitoring of herbivore exclosures in Red Gum Communities in the WildEyre Study area in Spring 2015. The exclosures were established at that time to examine the impacts of all herbivores on regeneration and recruitment of vegetation. It will take many years of repeated monitoring to determine the responses of native vegetation (and weeds) to different types of grazing pressures. However, the resampling in Spring 2016 revealed that exclusion of kangaroos, in particular, resulted in a noticeable increase in vegetation cover.

The WildEyre Working Group has worked together with the community to produce a 'Conservation Action Plan' and revised the investment prospectus which is designed to guide conservation activities in the region. Although funding has ceased, the working group are continuing to meet to look for opportunities to gain further funding to realize some of the long term objectives of WildEyre.



Yellowish Sedge-skipper *Gahnia sedgeland* habitat on southern Yorke Peninsula. Photo: C. Butcher



Alex Stolarski counting Yellowish Sedge-skipper shelters on *Gahnia* within quadrats, with Erin Sautter recording data. Photo: C. Butcher

Yellowish Sedge-Skipper

The Yellowish Sedge-skipper (YSS) Butterfly Reintroduction Feasibility Project was an assessment of several factors that will facilitate the return of this native species to its former range on the northern Adelaide coastal plain.

It aimed to determine if it was feasible to translocate a suitable phenotype/genotype of the YSS from healthy Yorke Peninsula populations to restored habitats in the northern Adelaide coastal plains ~ where it is now regionally extinct and extensive habitat restoration work has been undertaken.

Chris Butcher assessed the literature to determine current knowledge and best practices for butterfly conservation/reintroduction. Field work included liaising with land managers, surveying YSS populations on southern Yorke Peninsula and recording detailed descriptions of their habitats. This knowledge was then cross referenced against the potential YSS habitats containing Thatching Grass tussocks on the northern Adelaide coastal plains, which have also been surveyed.

The report concluded that populations of YSS on southern Yorke Peninsula are most likely to be a suitable phenotype/genotype ~ further research (e.g. DNA analysis) can confirm this. We were unable to provide an accurate quantitative assessment of the full extent of YSS populations due the lack of resources to survey the vastness of the YSS habitats in the region. However, the survey was able to conclude that there were many (some large) healthy YSS populations on southern Yorke Peninsula, and that they are large enough to support collection for a translocation.

Similarly, site assessments determined that, with right preparation, there are at least four potential YSS habitats that could receive a founding population of YSS within 6-12 months of funding being provided. Three more sites have potential as habitats given more time and/or more intensive management.



2016-17

ANNUAL REPORT

**THE NATURE CONSERVATION
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