2009-10 ANNUAL REPORT

NATURE CONSERVATION SOCIETY OF SOUTH AUSTRALIA



Musk Lorikeets (Glossopsitta concinna) Photo by Tina Gillespie

Achievements this year:

- Our advocacy for protection of our state's precious habitats and biodiversity, with a focus over the past year on our state's "protected" areas
- With the support of our volunteers we have surveyed important remnant vegetation on the Adelaide Plains and provided information to assist in advocating for its protection
- The successful negotiation by the Threatened Plant Action Group with landholders to protect critical habitat for threatened plant species including Spyridium coactilifolium and Acacia rhetinocarpa
- Our collaboration in significant biodiversity monitoring projects, including monitoring Mount Lofty Ranges woodland birds with the University of Queensland, and Bushland condition Monitoring with multiple NRM Boards
- Our continued support of conservation based research through our Conservation Biology Grant, this year funding work on native bee conservation and buffel grass invasion
- Topical and interesting public meetings with presentations on vital conservation issues such as the Crisis of SA's freshwater fish and Mount Lofty Ranges woodland birds in decline



Helen Vonow President Page 2 ANNUAL REPORT 2009-10

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.



Leafy Greenhood (*Pterostylis cucullata*).
Photo by Tim Jury

The NCSSA has a history of almost 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

2009-2010 MANAGEMENT COMMITTEE, STAFF & VOLUNTEERS

Management Committee

President Helen Vonow
Vice-President Katie Fels
Secretary Susan Graham
Assistant Secretary Caroline Taylor
Treasurer Richard Winkler

General committee

Ben Taylor Nicole Lewis Nerissa Haby Robert Lawrence Susan Gehrig Hugh Kneebone (co-opted)

Staff

Conservation Ecologists Anthelia Bond, Georgina Mollison and Tim Milne

Administrative Manager Elizabeth Lonie

Project Manager Tim Milne

Threatened Plant Action Group Program Coordinator Tim Jury

Temperate Woodlands Campaigner Penny Paton

Eastern Flanks Grassy Ecosystems Officer Bill New

Mt Lofty Ranges Woodland Bird Survey Coordinator Tina Gillespie

Mokota Conservation Park Vegetation Survey Meg Robertson

South East Cemeteries Project Officer Kerry Gilkes

Database & Website Officer Lesley Parton

Bushland Condition Monitoring Evaluation Officer Peter Mahoney

Volunteers

Regular: Max Possingham (database), Keith Lloyd (general), Christina Roberton (general), Sara Boulton (activities), Rachel Gein (general) and many others who generously contributed their time throughout the year to various NCSSA conservation projects and activities

2009 - 2010 FUNDING

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

Funding bodies for the 2009-2010 financial year included;

Adelaide & Mount Lofty Ranges Natural Resource Management Group, Australian Government Grants to Voluntary Environment and Heritage Organisations (GVEHO) Program, Department of Education and Children's Services, Department of Environment and Natural Resources, Eyre Peninsula Natural Resource Management Group, Murray Darling Basin Natural Resource Management Group, Native Vegetation Council Department of Environment and Natural Resources, Northern & Yorke Agricultural Districts Natural Resource Management Group, SA Water

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Our part-time Conservation Ecologist position (the new title given to the Scientific Officer) augments the work of the NCSSA committee in our biodiversity advocacy role.

Tim Milne and Annie Bond continued in the role to January 2010, when Georgina Mollison returned from parental leave. Georgina and Annie now share the position.

Key areas of input include nature conservation and biodiversity protection, public land and sustainable natural resource management and natural heritage conservation.

In the last year we have:

- Continued to argue for improvements to the Department of Environment and Natural Resources' (DENR) visitor and recreation planning processes. We have been calling for:
 - * Early, representative stakeholder involvement as part of accountable, transparent, and inclusive consultation processes.
 - * A process to negotiate agreed 'first principles' that will underpin the planning for recreation in protected areas.
 - * A landscape scale approach to planning that provides for the proper consideration of conservation objectives.
 - * Decision-making informed by the results of an agreed environmental risk assessment process.
 - * Scientifically sound monitoring and evaluation to support adaptive management and inform future planning.
- Made a submission to a Local Government Association inquiry into the management of trees on public land, and provided advice to the Native Vegetation Council about their draft framework for native vegetation clearance for road safety.

- Provided comment on the terms of reference for strategic assessment (under the EPBC Act) of DENR's fire management policies and procedures. We have also provided feedback on DENR fire management plans such as the Draft Fire Management Plan for Reserves of the Onkaparinga Valley.
- Provided advice to DENR
 r e g a r d i n g t h e
 determination of the 2010
 Duck and Quail hunting
 season. We advised that a
 conservative approach
 should be adopted, due to
 the long period of dry
 conditions that preceded
 this season, and the
 uncertainty about recovery
 timeframes.



Arkaroola Wilderness Sanctuary Photo by Georgina Mollison

- · Provided information and advice to the Native Vegetation Council (NVC) seeking to protect biodiversity from impacts of recent changes to the Regulations under the Native Vegetation Act. We are asking for measures to ensure the minimum impact on biodiversity from native vegetation clearance for fuel reduction: that communications are revised to present a balanced and factual representation of the relative risks from native vegetation; and that the NVC monitor and report on the impact of the regulation changes
- Argued for comprehensive protection for Arkaroola's biodiversity and landscape, by commenting on Seeking A Balance: Conservation and Resource Use in the Northern Flinders Ranges.

- Continued to support local native flora experts and concerned residents to highlight the significance of remnant vegetation in Victoria Park.
- Advocated for protecting the few remaining remnants of coastal vegetation in the Adelaide region from damaging development. We were particularly concerned by planned developments on the more significant remnants of sand dune systems, both at the Minda Incorporated site and on Torrens Island.
- Prepared a report on the management and status of South Australia's public protected areas. We presented this report to a symposium in Canberra titled "National Parks, can they take the heat?" which was convened by the National Parks Association of the ACT and attended by a diverse audience.

RESEARCHING

MOUNT LOFTY RANGES WOODLAND BIRDS SURVEY

The Mount Lofty Ranges Woodland Bird Monitoring Program is a long-term project initiated by Professor Hugh Possingham, University of Queensland in 1999. It aims to assess the evidence for declines in woodland birds through repeated surveys of sites throughout the Mount Lofty Ranges.

Survey data is gathered annually from September to December, dependent upon funding. Each site is independently surveyed 3 times per year using the Bird Atlas' 2ha/20min methodology. During the spring and summer of 2009, 163 sites were surveyed.

The NCSSA manages and coordinates the survey as well as securing funding for the project.

A paper by Judit Szabo et al, University of Queensland, using the data to describe changes in abundance of species, has just been accepted for publication in the refereed journal *Emu*.

DEH/DENR have provided funding to support the development of a précis document which summarises this program, the results obtained to date, and prospects for the future.

The Microsoft Access database used to collate all of the bird records has also been updated to allow for simple transfer of data from this project to the state system Biological Databases of SA, to ensure records are broadly accessible.

Ongoing funding for this project has been provided by the Adelaide and Mount Lofty Ranges Natural Resources Management Board.

A special thanks to all the surveyors who have helped gather data for the project this year, to Brian Knill for his assistance in maintaining and updating the database, and to Tina Gillespie for survey coordination.



Eastern Spinebill Photo by Brian Furby

MURRAY DARLING BASIN WATERHOLES

We were contracted by the SA Murray Darling Basin NRM Board to collect baseline biological data at eight permanent water sites on the eastern flanks of the northern Mount Lofty Ranges, as there is only patchy information regarding the state and function of these waterways. This included the Burra, Baldina, Brady and Newikie Creeks.

A combined total of 374 indigenous plant species and 158 introduced plant species were found on the survey, including 106 species, or 28%, of some conservation significance. In terms of indigenous fauna, there were five

species of mammals, two species of frogs, eighty-five bird species (including three of conservation significance) and forty species of macroinvertebrates recorded. The data indicated that these permanent waterholes do provide significant refuge value for water dependent species.

This survey has been written up as a formal survey report, and is available from the NCSSA offices. Its reference is "Moise, D. and Milne, T. (eds) (2010). A Biological Survey of Permanent Water Sites within the South Australian Murray Darling Basin Rangelands. Nature Conservation Society of South Australia, Adelaide."

CONSERVATION BIOLOGY GRANT

Each year we offer honours and post-graduate students the opportunity to apply for grant funding of up to \$1000 to support their research into aspects of conservation biology.

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:

Scott Groom, Flinders University of South Australia "South Australia "South Australian native bee conservation in the face of combined habitat fragmentation and climate change"

Victoria Marshall, *University of Adelaide* "Mapping/ modelling the distribution of invasive weed, Buffel grass (*Cenchrus ciliaris*)"

BUSHLAND CONDITION MONITORING

The Bushland Condition Monitoring project provides training and resources to allow community and professionals to score and monitor the condition of native vegetation. Field observations are made on ten condition indicators that are scored regularly. These indicators are measurable and dynamic attributes of bushland. They demonstrate how the bushland is changing, the magnitude of changes, and whether the condition or health of the bushland is improving, deteriorating or remaining stable. The resultant suite of observations is then compared to a set of Vegetation Communityspecific Condition Benchmarks developed for each region by NCSSA.

We have provided training workshops to 28 people across the state, including on the Eyre Peninsula, in the Mount Lofty Ranges and in the Murray Darling Basin.

These workshops not only introduce people to the monitoring method, but have also been demonstrated through evaluation to significantly build attendee's understanding of the



Galahs (Cacatua roseicapilla) Photo by Dragos Moise

function of their local ecosystems.

The Society also completed a presentation on native vegetation condition indicators at a Federal Government workshop that was reporting on Caring for our Country outcomes.

We are working collaboratively with projects across a number of regions, including in the Mount Lofty Ranges, Murray Darling Basin, Eyre Peninsula, and Northern and Yorke. Since last year 289 additional sites have been established

across the state using this methodology. We have compiled data and prepared summary reports, including an ongoing protocol for monitoring for the Northern and Yorke Natural Resource Management Board, and SA Murray Darling Basin NRM Board.

Support for this project has been provided by the Adelaide and Mount Lofty Ranges NRM Board, the Northern & Yorke NRM Board, the Eyre Peninsula NRM Board, and the SA Murray Darling Basin NRM Board.

WILDEYRE



Pygmy Possum (Cercartetus concinnus)

Photo by Peter Bird

In the last year, NCSSA has continued as a partner in the WildEyre project.

WildEyre aims to protect the complex and unique habitat areas of western Eyre Peninsula through collaborative landscape scale conservation planning and action.

Collaborators in the WildEyre project include Greening Australia, The Wilderness Society, Department of Environment and Natural Resources, Eyre Peninsula Natural Resources Management Board and the NCSSA.

We are extremely pleased with the outcomes this project is providing, with over four hundred thousand dollars for on-ground works in the region being sourced in the last two years.

THREATENED PLANT ACTION GROUP (TPAG)

During 2009-10 TPAG continued with threatened flora recovery and stewardship work throughout South Australia's fragmented agricultural regions for around 60 threatened plant species and six threatened ecological communities.



Behr's cowslip orchid (*Diuris* behrii) Photo by Tim Jury

Over 2500 hours of onground work by more than 50 volunteers contributed to recovering species populations and improving the condition of critical habitat at around 50 sites.

Implemented recovery actions included: Abatement of serious weed threats; pest control; fencing to protect habitat; plant population monitoring; flora surveys; revegetation; stakeholder liaison; and public education.

Effective working partnerships with landholders, environment agencies and other community groups continue to develop. One grant was obtained and two others assisted to implement onground work. Working bees

and field days continue to be productive with some excellent results gained from actions undertaken to regenerate and restore threatened flora. TPAG continue to make a real and tangible contribution toward improving the *in-situ* conservation prospects for South Australia's threatened flora.

Thanks to our partners and supporters including NCSSA, Regional NRM Boards & DENR, Adelaide Botanic Gardens, Friends of Parks, SA Water, Forestry SA, District Councils, Australian Plant Society, and numerous private landholders.

Once again, our thanks goes to Tim Jury for his great work as Program Coordinator.

REEVES PLAINS BIOLOGICAL SURVEY

The 2009 NCSSA Volunteer survey was of the remnant flora of eight remnant vegetation sites within the area known as Reeves Plains, north of Gawler in the Adelaide Mount Lofty Ranges (AMLR) region. The work was undertaken to address knowledge gaps in baseline data on vegetation that is at risk from sand mining.

Fourteen keen volunteers assisted to gather data across two days in September 2009.

A total of 155 species were found in the vegetation survey quadrats in the eight sites. Of these, 104 were native and 51 were introduced. Of the native species, one was Vulnerable at state level and 34 were rated as significant at regional level, made up of one Endangered, six Vulnerable, 16 Rare and 11 Uncommon species.

Whilst there were a relatively large proportion of weeds at most sites, the survey revealed a significant diversity of native species still exist in the Reeves Plains area. Many species of conservation significance were also noted.

Given the close proximity of this area to the highly denuded Adelaide metropolitan area, and the fact that only 3% of native vegetation remains in the Mallala region, these remnants should be prioritised for protection.

This survey was done in conjunction with the Gawler Environment and Heritage Association Inc.



Reeves Plains survey site

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PUBLIC INFORMATION MEETINGS

Our general meetings are held bi-monthly and are open to NCSSA members and the general public.

The meetings usually involve an update of current issues that we are working on, and any general business of the organisation, followed by a talk from a guest speaker invited to discuss an environmental topic of current interest.

Over the past year we have run several of our meetings in partnership with the *Biology Society of South Australia*. These meetings have been well-attended and interesting and much thanks goes to Joel and Laura from BSSA and Sara Boulton and our Activities sub-committee for their efforts in organising these meetings.

Talk topics over the 2009-2010 year were:

- Crisis of South Australia's freshwater fishes, by Dr Michael Hammer, Native Fish SA.
- A decade of satellite tracking seals and seabirds in SA, by Dr Bradley Page, SARDI.
- Are river red gums being pushed to the edge?
 by Dr Anne Jensen, Environmental Consultant, Wetlands and Natural Resource Management.

- The Million Trees program

 A glance at this program and its impact on the urban landscape, by Chris Gibson, Million Trees Progam, Urban Biodiversity Unit, Department of Environment and Natural Resources.
- Conservation on South Australia's offshore islands by Jason Van Weenen, Regional Ecologist, Department of Environment and Natural Resources.
- Are Mount Lofty Ranges woodland birds declining?: a snapshot of 10 years of monitoring data, by Tina Gillespie, Mount Lofty Ranges Woodland Bird Project Officer.

- Pollination biology and ecology of saltmarsh communities in S.A. (with a focus on the impacts of introduced plants, Limonium spp.), by Melissa Schlein, PhD candidate, Flinders University.
- Rabbits on the rebound: dire consequences for biodiversity, by Dr Ron Sinclair, Senior Research Officer NRM Biosecurity Unit, Department of Environment and Natural Resources.

We would like to express our appreciation to all those who spoke at the above meetings.



River Red Gums in trouble. Photo by Anne Jensen

NCSSA PRESENTATIONS

Through its projects, staff and volunteers, we continue to educate the community about the significance of biodiversity.

In the past year, presentations have been given to a broad spectrum of people on a wide variety of topics, including:

- to the Local Government Association on the impacts of climate change on biodiversity
- two presentations on the plight of Mount Lofty Ranges woodland birds, and the NCSSA's ongoing monitoring program
- a series of presentations to over 200 primary school students at the Appila Springs field day on the importance of habitat and biodiversity
- two presentations to field naturalist groups on the reptiles of the Mount Lofty Ranges region

- a talk on South Australia's biodiversity to Mercure Grosvenor staff
- written articles and presentations on South Australia's threatened plants

EDUCATING

