

Around NCSSA

The Nature Conservation Society of South Australia is a voluntary organisation. It has members drawn from all parts of the State and all walks of life. One of the primary objectives of the NCSSA is to "foster the conservation of the State's wildlife and natural habitats".

Its activities include: protecting and managing habitats, particularly native vegetation, researching threatened species and habitats, working to ensure adequate park dedication, management and legislation, educating the community and all tiers of government, and cooperating with other conservation groups and land managers.

The Society has taken action on many varied environmental issues since its formation in 1962.

Surveys to support new reserve dedications

A major objective of the NCSSA has been to ensure that South Australia has a comprehensive and representative reserve system. This is a vital part of the system needed to ensure that the State's native plants and animals are conserved in their natural environment.

The Society has sought the addition of new reserves and opposed the withdrawal of existing reserves when necessary. It has been Society policy to put its case objectively, based on the facts available. Since 1966, in most years, there has been a major biological survey carried out by members and other volunteers to support the case for dedication of a new reserve in a particular area or to promote conservation in an area by a range of landholders.

Promoting conservation more widely

The Society has played a strong role in the formation and development of environmental legislation such as the original Native Vegetation Management Act in 1985 and the Native Vegetation Act 1991. It is now obvious that conservation reserves alone will not ensure the survival of all of the State's plants and animals, and that as much native habitat as remains is needed to conserve the biological diversity of South Australia. The Society has played a major role in the promotion of biodiversity conservation on a range of land tenures including Heritage Agreements and in integrating biodiversity objectives into the whole range of land management decisions.

Research about environmental issues

The Society conducts scientific research related to environmental protection and management. Studies done by, or on behalf of the Society, are published as reports and made available to the public through sale and distribution to libraries and government institutions. Grant funding supports this work, awarded on scientific merit from a number of grant sources.

Education and skill development about ecological matters

The Society is also active in public education through activities such as an extension program of biodiversity understanding and management workshops for rural landholders, biological skill and knowledge development for members, informative general meetings open to the public, and through its newsletter Xanthopus.

Getting involved with NCSSA activities

An elected Committee handles the Society's affairs. However it is not necessary to be a Committee member to play an active role in pursuing particular issues or topics of research on behalf of the Society. There are many opportunities to volunteer, such as assist on a survey, help manage a project, lead a members activity, or to promote the organisations activities.

The Society has its offices at **260 Franklin Street, Adelaide, 5000**. The NCSSA is financed by subscriptions, sales of its publications, private donations, and State and Federal Government grants. Much of the work is voluntary, while a few part time staff ably support this volunteer work. Donations are always welcome and fully tax deductible

For more information please contact the office on **(08) 7127 4630**, or by **email: ncssa@ncssa.asn.au**.

NCSSA people

Management Committee

President: vacant - still looking
 Vice-President: Helen Vonow
 Secretary: Robert Lawrence
 Assistant Secretary: Katie Fels
 Treasurer: Richard Winkler (co-opted)

General Committee

Andrew Allanson, Ali Ben Kahn, Valerie Lawley, Tim Milne, Michael Stead, Andrew Crompton (co-opted)

Staff

Conservation Ecologists: Anthelia Bond and Georgina Mollison
 Administrative Manager: Amanda Stewart
 Project Manager: Peter Mahoney (acting)
 Threatened Plant Action Group Programme Coordinator: Tim Jury
 Woodland Bird Survey Coordinator: Tina Gillespie
 Database & Website Project Officer: Lesley Parton
 Bushland Condition Monitoring Project Officer: Peter Mahoney
 Other project staff: Andrea Brown, Abigail Goodman, Kellie MacKenzie, Ben McCallum, Bill New, Simon Parker, Meg Robertson

Regular volunteers

Keith Lloyd: General office support and library
 Max Possingham: Woodlands Birds database
 Christina Robertson: General support
 Rachel Gein: General support

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Dicyemid parasite diversity in SA cephalopod

Around NCSSA

Annual General Meeting

At our recent Annual General Meeting we had a fascinating presentation by Marg Sprigg about Arkaroola, and its history ~ both geological and more recent. Our thanks to Marg, who had driven down to speak to us.

Thanks to out-going Committee members: Blair Grace, Sue Graham, Nerissa Haby, Caroline Taylor and Jason Tyndall. Caroline, Sue and Nerissa had each contributed to the Committee for a number of years, in a variety of roles.

Welcome to the incoming Committee members, including some changes and returns.

Helen Vonow continues as Vice President; Robert Lawrence is now Secretary; Katie Fels has taken on the Assistant Secretary role; Richard Winkler has been co-opted to continue as Treasurer until we can fill the role; Michael Stead and Andrew Crompton are continuing, with Andrew Allanson, Ali Ben Kahn, Valerie Lawley and Tim Milne as the new General Committee members.

The Annual Report is published in this edition of Xanthopus, and Financial reports are available to members by contacting the office (08) 7127 4630 or email ncssa@ncssa.asn.au

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50th Anniversary for NCSSA

The NCSSA is turning 50 in June 2012 !!!

We need your help. The NCSSA Committee would like to compile a history of our organisation, from the grass roots beginnings and early days of advocacy, up to the wonderful and still relevant organisation that it has grown into today.

We would like to collect oral, visual or written histories from the membership covering the last 50 years. We are after anecdotal tales, achievements, struggles and triumphs had by the NCSSA in continuing to provide an unbiased view for conservation in SA.

There is much ground to cover, and we may need to call on you to share your NCSSA knowledge and experience. We ask you to cast your mind back and think about what you might be able to contribute to this collective history.

Further details in the forthcoming edition.



Behr's cowslip-orchid *Diuris behrii* Photo: Tim Jury

TPAG Working Bees Diary Dates for the rest of 2011

Millbrook Reservoir Every Thursday

Come help with the management and restoration of Grassy Red gum - Blue gum woodlands that are habitat for threatened plant species, including: White spider orchid (*Caladenia rigida*); Clover glycine (*Glycine latrobeana*); Behr's cowslip orchid (*Diuris behrii*) and Pale flax-lily (*Dianella longifolia* var. *grandis*).

Tarlee/Spalding/Gulnare Friday November 11th

Help recover threatened temperate grasslands and the nationally endangered Spalding Blown-grass (*Lachnagrostis limitanea*) at sites north of Adelaide. Activities include weeding, slashing, planting and site management.

Everyone Welcome

Please contact Tim Jury prior to working bees, as dates and times are subject to change due to weather and other factors.
 08 7127 4166 or tpag@ncssa.asn.au

Conservation Ecologist Report

National Parks Australia Council

On a windy weekend in October, Valerie Lawley and Annie Bond travelled to Melbourne to attend the National Parks Australia Council conference and Annual General Meeting. The event was excellent, with much interesting discussion, great guest speakers, a field trip to see endangered grassland in Melbourne's west, outstanding hosts (Victorian National Parks Association) and inspiring participants.

Discussions and presentations covered fundraising and marketing, recent policy directions for private protected areas and improving protection and conservation outcomes for national parks.

We look forward to working with our colleagues interstate on some of these issues and using the information shared during the conference to inform and enhance our work.

Importation of the Silver Fox into Australia

The Society has provided comment to the Federal Wildlife Trade Section on an application to import the Silver Fox *Vulpes vulpes* into Australia to be kept as a domesticated pet.

We, along with a range of other environmental organisations around Australia condemned the application due to the high risk of the domesticated animals escaping and breeding with feral populations of Red Foxes. This is highly likely to occur as the Silver Fox and the Red Fox are in fact the same species, *Vulpes vulpes*, and therefore could successfully breed to dramatically increase the feral population. Considering the huge sums of money that are being spent Australia wide to control the ecological impacts of Foxes this application seems nothing less than madness.

EPBC Environmental Offsets Policy

In response to the recent independent review of the Environment Protection and Biodiversity Conservation Act the Federal Government introduced a suite of consultation drafts as part of the reform package. The Society has provided comment on these drafts with particular attention being paid to the *Biodiversity Policy* and the *Environmental Offsets Policy*.

While both of these are extremely relevant to the Society, the Offsets Policy in particular provoked some vigorous discussion amongst the NCSSA Committee and staff, due to our ongoing interest in improving the framework for Significant Environmental Benefits (SEB) in South Australia.

We believe that it is essential that the Federal Government set an example of best practice and scientific rigour with the Offsets Policy. There is no doubt that State Government's will look towards the Policy for guidance in the development and reform of its own legislation. The Society urged the Federal Government to be vigilant in ensuring that the Policy takes a cautious and environmentally sympathetic approach with regard to calculating offsets and policy development so the environment and biodiversity do not lose out in the long term.

More information about the reforms to the Act can be found on the EPBC website at www.environment.gov.au/epbc/ and the submission is available for viewing on the NCSSA website.

Submissions

NCSSA made a submission to DENR regarding the scope of the proposed review of the *No Species Loss* strategy. We commented on the achievements of the strategy and what we would like to see in the review.

We recently provided advice to DENR regarding the development of their policy for management of over-abundant and impact-causing wildlife. We support the overarching directions of the policy and provided advice relating to potential areas where it could be strengthened. We intend to provide a written submission on this policy by the 25th of November and invite you to contact us if you would like to discuss this issue and contribute to our submission.

Annie Bond and Georgina Mollison
Conservation Ecologists
Phone (08) 71 27 4630







NCSSA Projects:

Northern and Yorke Resource Condition Pilot Study

In most NRM Biodiversity Plans in Australia you will find regional NRM goals defined in terms of Management Action Targets (MATs) for which 'an improvement in vegetation condition' is identified as a principal measure of success.

Since the mid-2000s, NCSSA's Bushland Condition Monitoring Method (BCM) has become the most commonly used method in SA for measuring bushland condition. As such, it is increasingly being adopted as the standard in NRM reporting on vegetation and habitat condition. It can be used this way because it is based on a benchmarking system which estimates the condition of a patch of bushland relative to the potential best-case scenario for the vegetation type. These benchmarks have been devised from extensive research and field ground-truthing by highly experienced and skilled ecologists, authors Tim Milne, Sonia Croft and Janet Pedler.

Based on the standard 30m x 30m quadrat biological survey methods widely in use throughout Australia's temperate ecosystems, it calculates a range of indicators which are then adjusted to a scale between 0-100, corresponding to conditions from 'very poor' to 'excellent'. This scaling is different for each vegetation type.

The beauty of BCM is that it can be used in two complementary ways to measure progress towards NRM biodiversity targets. The first is by way of the so-called "BACI" (Before-After-Control-Impact) design. Using this method, someone wanting to measure the effectiveness of say, fencing their bushland to keep out sheep, would establish two BCM sites prior to putting their fence up; one inside the fenced area, and one in a similar piece of bush outside. After the fence is up and the sheep have been excluded for a sufficient time, the 2 exact sites can be assessed again. The difference in condition between the 2 sites between the two times indicate the success or not of the fencing action. The more times you replicate this situation, the surer you can be that the effects are due to fencing and not some other seasonal factor.

The second complementary approach is by devising a systematic grid of permanent sites for ongoing monitoring across a region, by selecting a number of sites at random from within the known range of each main vegetation type of interest. If the selection is random, then the results can be truly said to represent the average picture of vegetation across the region, not just in sites that are under active management. In current monitoring parlance this is referred to as "Resource Condition Monitoring".

In 2009-10 NCSSA undertook a pilot study with the Northern and Yorke NRM Board to develop a standardised methodology for Resource Condition Monitoring in their region. The study area was centred on Jamestown in the Mid North of SA and covered the area of eight 1:50,000 map sheets from Port Pirie in the south-west to Peterborough in the north-east (Figure 1).

6 vegetation benchmark types were chosen for the study with 10 random sites from each. The final number of sites in each type is shown in the Table 1 below.

Code	Benchmark Vegetation Community - Northern Agricultural Region	Number of Sites
NA 1	Open Forests & Woodlands with a dense shrub understorey	2
NA 2	Open Forests & Woodlands with a mid-dense shrub & grassy understorey	11
NA 3.1	Woodlands with an open grassy understorey	11
NA 3.2	Grasslands	10
NA 4	Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey	15
NA 5	Mallee & Woodlands with open Chenopod and sclerophyll shrub understorey	8
	Total	57

Table 1 NCSSA BCM Benchmarked Vegetation Communities and the number of sites surveyed in each type.



Figure 2 The most north-western site in the study area. Photo Wes Crisp



Figure 1 BCM sites in the Resource Condition Monitoring Study

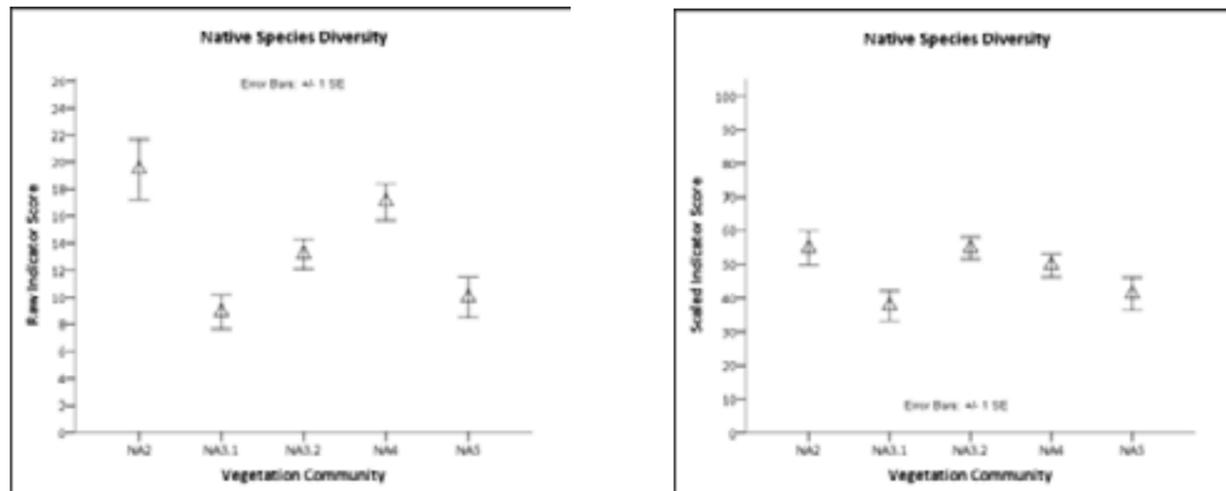
Each indicator was assessed at each site and the score calculated between 0-100, relative to the benchmark values. The scaled scores correspond to a range of condition classes from very poor (0-20) to excellent (80-100).

Condition	Scaled Score
excellent	80-100%
good	60-80%
moderate	40-60%
poor	20-40%
very poor	0-20%

The data was then tested for differences between vegetation types using Analysis of Variance (ANOVA).

Northern and Yorke Resource Condition Pilot Study cont.

An example of the results is given below. It shows the mean raw and scaled scores for Native Species Diversity (Indicator 1). The mean number of native species per site ranged between 8 and 20, but when these numbers were scaled relative to the best case scenario for a highly intact site of the same vegetation type, the averages are all in the 'moderate' range. The only significant difference in average condition is between NA2 (Open Forests & Woodlands with a mid-dense shrub & grassy understorey) and NA5 (Mallee & Woodlands with open Chenopod and sclerophyll shrub understorey).



Using the code described above a general picture can be seen in the following matrix, showing the average condition for each indicator in each of the vegetation types (Table 2).

In five years' time, when the sites are revisited, the maintenance, improvement or decline in average condition across the subregion will be indicated by changes in the colour of cells, either better or worse.

With NCSSA's development of benchmark standards for condition of major vegetation types in each region of the state, for the first time SA NRM Boards now have a means to report against their targets in terms of improvement or maintenance of vegetation condition.

Firstly, using the BACI approach, land managers can reasonably extrapolate from demonstrated changes in condition at monitored sites, to the full extent of their investment in the region. And secondly, using the Resource Condition Monitoring approach, land managers can demonstrate that average condition is being maintained or improved across the full extent of remnant vegetation, and not only those receiving direct NRM investment.

This demonstrates the versatility of Bushland Condition Monitoring as a method which can be used at many scales, from the individual and non-professional interested in the values of their individual remnant bushland patch, up to the level of professional NRM reporting against State and Commonwealth conservation milestones.

BCM training is open to anyone, and are run at a range of locations throughout the State. If you are interested in attending one of our 2-day workshops please contact NCSSA - ncssa@ncssa.asn.au

INDICATOR	Core Attributes				Threats			Tree Health			Habitat Features			
	Plant Species Diversity	Structural Diversity A: Ground Cover	Structural Diversity B: Plant Forms	Recruitment	Weed Abund. and Threat	Grazing Pressure	Feral Animals	Primary Canopy Health	Lerp	Mistletoe	Tree Habitat	Hollow Trees	Fallen Logs & Trees	
NA2	Forests-woodlands mid-dense shrub & grassy u/s	Moderate	Good	Moderate	Poor	Poor	Very Poor	Moderate	Poor	Excellent	Excellent	Moderate	Poor	Excellent
NA3.1	Grassy Woodlands	Poor	Good	Poor	Very Poor	Moderate	Good	Moderate	Moderate	Excellent	Excellent	Good	Good	Excellent
NA3.2	Grasslands	Moderate	Moderate	Moderate	Very Poor	Moderate	Moderate	Good						
NA4	Woodlands - mallee shrub &/or spiroflex - sedge u/s	Moderate	Good	Moderate	Poor	Very Poor	Very Poor	Poor	Poor	Excellent	Excellent	Moderate	Moderate	Excellent
NA5	Woodlands - mallee chenopod and sclerophyll shrubs u/s	Moderate	Good	Moderate	Poor	Very Poor	Poor	Poor	Poor	Excellent	Excellent	Good	Excellent	Excellent

Table 2 Matrix of mean condition scores by vegetation type

XANTHOPUS

The views presented in this newsletter are not necessarily those of the NCSSA

Copy deadline for the SUMMER edition is 25th November 2011.
Contributions in a variety of formats will be considered, but electronic submissions are preferred.

Editor for this issue: Helen Vonow.