

**Summer 2004
Volume 22
Part 4**

**Scientific
Officer's Report:**
OneSteel
Development

Field River Walk

**2004 Annual and
Financial Reports**

Southern Seas and
**Insights into the
Gulfs, Part II**

NCSSA major concerns include

- Native vegetation, threatened species and habitats
- Protecting all forms of life (biodiversity) on land and in the oceans
- Park dedication, management and legislation
- Education about biodiversity to all sections of the community
- Cooperation with other conservation groups

Inside this issue:

Scientific Officer's Report – OneSteel development	3
Get a Grip	4
Field River Walk	5
Annual Report	6
Audited Financial statements	10
Southern Seas and Insights into the Gulfs, Part 2	14

Around NCSSA

Some recent appointments have swelled the NCSSA workforce and contributed to a very busy, industrious atmosphere in our office. We now have seven staff working at our Wakefield Street premises, plus three officers working off-site.

Sue Graham commenced work in October as the new Biodiversity Extension Officer. Sue is coordinating 30 biodiversity workshops for the Murray Darling and the Northern & Yorke Agricultural District regions. Several workshops have already been run in Berri and Medindie, with great success. Check our website - www.ncssa.asn.au - for details of upcoming workshops in these regions.

Sonia Croft has been working for some time on our Bushland Condition Monitoring Manual project, and has recently joined our staff at Wakefield Street. This project is developing regional monitoring guides that use key environmental indicators of bushland health

to measure it's condition or degree of "ecological health". Sonia is assisting in developing descriptions of environmental indicators for different vegetation communities.

Caroline Wilson also started work with us in October. Caroline is coordinating this year's NCSSA biodiversity survey. It is being run over two weekends — 26th to 28th November and 3rd to 5th December, to look at Pink Gum woodland remnants in the Goolwa-Finnis-Wellington triangle.

The survey will assess the condition of remnants using indicators in the NCSSA Monitoring Manual and a timed active-area measure of bird diversity.

Jo Spencer's contract with us has been renewed following recent funding from the Murray Darling

Basin and Mount Lofty Ranges Natural Resource Management groups. Jo works three days a week promoting temperate grassy ecosystem conservation and management, and providing technical advice and support to local landholders and communities. Jo is currently based at the Mount Lofty Ranges Catchment Centre at Mount Barker.

We have a new(ish) Committee since the September AGM (see below). Jane Corin was elected as a general Committee member but subsequently resigned when she was elected President of the Conservation Council.



Sue, Tim, Caroline and Mark busy at work

NCSSA people

Management Committee

President Helen Vonow
Vice-President Fraser Vickery
Secretary Phil McNamara
Assistant Secretary Nicole Lewis
Treasurer Richard Winkler

General committee

Misch Benito, Sara Boulton, Allan McIlwee, Peter Tucker, Katie Rouse, David Moyle (co-opted)

Staff

Scientific Officer Matt Turner
Administrative Manager Elizabeth Lonie
Biodiversity Extension Manager Tim Milne
Temperate Woodland Campaigner Penny Paton
Stop Bushland Weeds Project Officer Meg Robertson
Eastern Flanks Grassy Ecosystems Officer Jo Spencer
Threatened Plant Action Group Coordinator Tim Jury
Biodiversity Extension Officer Sue Graham
2004 Survey Coordinator Caroline Wilson
Bushland Condition Monitoring Manual Project Officer Sonia Croft

Scientific Officer's Report:

OneSteel Development

OneSteel propose to extend their current operations in the Southern Middleback Ranges on northern Eyre Peninsula and mine magnetite ore. This will be sent to the Whyalla Steelworks via a slurry pipeline. It is a major project and the proponents claim that it will "preserve the economic viability of Whyalla."

However the project as it currently stands will result in the clearance of at least 473 hectares of native vegetation. It is understood that the vegetation is intact with few introduced weeds. Indeed, there are numerous threatened species in the project area, including:

Sandhill Dunnart	(<i>Sminthopsis psammophila</i>)
Malleefowl	(<i>Leipoa ocellata</i>)
Slender-billed Thornbill	(<i>Acanthiza iredalei</i>)
Thick-billed Grasswren	(<i>Amytornis textilis</i>)
Yellow Swainson-pea	(<i>Swainsona pyrophila</i>)
Greencomb Spider-orchid	(<i>Caladenia tensa</i>)
Whibleys Wattle	(<i>Acacia whibleyana</i>)
Bead Glasswort	(<i>Halosarcia flabelliformis</i>)

The NCSSA understands that in order to meet the most recent requirements of the SA Native Vegetation Act in respect to "significant environmental benefit" the proponent must off-set any vegetation clearance with action that will result in a net gain for biodiversity (e.g. heritage agreements, transfer of other biodiversity assets to the parks system, broadscale revegetation, or putting money into the Native Vegetation Fund). Until the recent changes in the Native Vegetation Regulations, clearance of native vegetation for mining purposes was generally considered exempt from the Act. The Regulations still list the exemption (regulation 5 (1) (zd)), but now specify the condition that off-sets will result in a significant environmental benefit.

Some might ask, "What could a mining company do to off-set the clearance of almost 500 hectares of native vegetation?" How much revegetation should be required for every hectare that is cleared?

One, ten or one hundred hectares? If the off-set is in the form of land donated to the parks system, should the equation be 1:1, 5:1 or 10:1? And what if the donated land has degraded vegetation on it? How does this affect the equation? These are all legitimate questions that should be able to be worked through with careful thought. How much is one hectare of native vegetation worth?

The NCSSA is pleased that the Native Vegetation Act and Regulations now call mining companies to account, just like anyone else that wants to clear native vegetation. Nevertheless, there are serious concerns about how "significant environmental benefit" is interpreted. The statutory body that oversees the Native Vegetation Act (The Native Vegetation Council) is currently negotiating with OneSteel for a suitable off-set for the clearance of 500 hectares.

Early indications regarding what this off-set might look like are worrying. The NCSSA expects that where native vegetation clearance is permitted the proponent will be obliged to make a genuine contribution towards off-setting the adverse biodiversity effects.

A long-standing NCSSA member recently died

Noel Lothian OBE, joined our Society in 1962 shortly after its foundation. After graduating in horticulture he worked at the Melbourne City Council gardens, in London at Kew, and the Munich Botanic Gardens, returning to Kew to complete his studies.

Noel became director at the Adelaide Botanic Gardens in 1948 and until his retirement in 1980, and among other achievements was responsible for the re-establishment of its Herbarium, Library and the international seed-exchange program, which had been allowed to run-down during the Depression and World War II.

He was also a long-standing member of the Field Naturalists Society and served terms as its President and Vice President, and for 22 years as the Editor of the South Australian Naturalist.

However, it was his membership of the (then) Flora and Fauna Advisory Committee and his keen interest in habitat retention and wildlife conservation that spurred him to join the NCSSA, and later in the 1960s he was also appointed as a member of the National Parks Commission, and then its Chairman, until the Commission was abolished when the Department of Environment and Heritage was established in 1972. This was a time of unprecedented additions to both the size and numbers of National and Conservation Parks.

Noel died on September 24, aged 87.

get a grip

HANDS ON ACTIVITIES FOR MEMBERS

The NCSSA Spring Survey

The Spring Survey is now well underway in the Pink Gum woodlands of the Fleurieu in the Goolwa-Finnis-Wellington triangle. Watch out for a report on the survey in a later edition.

Field River walk

The Marion Council took Society members on a walk through the land encompassing the Field River at Hallett Cove. The Council's Marion South Plan proposes that the land be publicly managed. See report on the following page of this issue of *Xanthopus*

Coming Up:

End of Year Celebration!



Our annual end of year celebration will be held at 5.30pm on Friday 10th December 2004 at the Botanic Park, opposite the Conservatory Gate. Please come along and meet fellow conservationists and celebrate another successful year. Light refreshments provided.

Sunday 20 February 2005, Beachcombing

Dr Bob Baldock from University of South Australia has agreed to lead us on another tour of a stretch of Adelaide's beaches. This time we're heading to Port Noarlunga to beachcomb. Meet at the jetty's base 12 noon, and bring old shoes for wading. Please contact the NCSSA on 8223 6301 to register interest.

Tammar Wallaby tracking

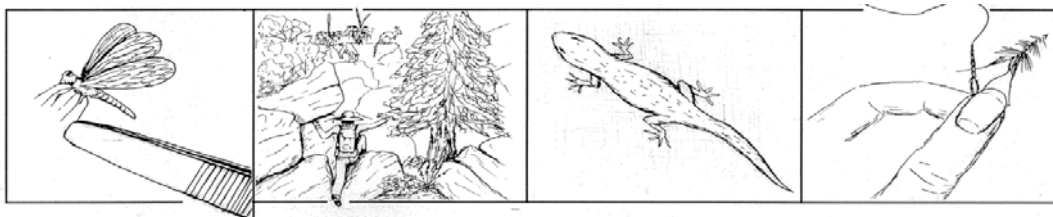
Leah Kemp from the University of Adelaide is looking for volunteers to help radiotrack recently-released Tammar wallabies in Innes National Park on lower Yorke Peninsula. Leah will track wallabies every night until December 22, and thereafter for 10 days in every month in 2005. Leah would be very grateful if some people could help out for a week or a couple of nights. This is a great opportunity to get involved with an important conservation project, while also getting experience in field work, seeing how the radio-tracking system works, and getting a feel for the movement patterns of Tammar wallabies during the course of the night. For further information contact Leah Kemp, PhD Student, School of Earth and Environmental Sciences, University of Adelaide, ph: 83038289.

Ecology of shearwaters

If you've ever wanted an opportunity to explore some of SA's offshore islands, this is it! Luke Einoder, University of Adelaide is on the lookout for volunteers to assist him with field work on the ecology, and particularly the diet, of shearwaters. Field trips range from one to two weeks in length and will involve a lot of night work (catching, banding, stomach flushing and microchipping the birds). Luke has a number of trips planned between now and April. If you're interested please contact him on email: lukeeinoder@hotmail.com.

River Murray Fish surveys

Want to learn more about River Murray fishes? Want an all expenses paid adventure on the River Murray? Well here's your chance! Scotte Wedderburn from the University of Adelaide is conducting field work on the River Murray over the entire summer and would greatly appreciate your help. Field trips range from 5-15 days and commence at the Lower Lakes in December and finish in Victoria in February. You can email Scotte directly at scotte.wedderburn@adelaide.edu.au or telephone 8303 6115.



Field River walk

Ten people attended the Field River Valley walk at Hallett Cove on Sunday 31st of October. Rowena McLean, Coordinator Sustainability, City of Marion, provided an overview of the 'Marion South Plan - Greenbelt proposal' before the walk. The Plan presents a concept of transferring the Field River Valley into public ownership as part of a comprehensive plan to establish a publicly accessible and revegetated Greenbelt surrounding the southern suburbs of the City of Marion, including Sheidow Park, Trott Park, Hallett Cove and Marino. Rowena provided NCSSA members with copies of the Marion South Plan as well as information on the area's cultural and natural heritage.



Rowena explains the significance of the Worthing Mine site

The Marion South Plan aims to transfer some 265 hectares from private to public ownership, including the Field River Valley, and land surrounding Marino Conservation Park and Linwood Quarry, and improve management for environmental and recreational benefits. Its intention is to protect stands of remnant native vegetation and revegetate degraded areas with indigenous plants, creating new habitats and improving riparian management. It is yet to be determined which agencies will be responsible for future management, and this is subject to further investigation.

The *Greenbelt* proposal requires both re-zoning land and amendments to the Marion Council's Development Plan. In July 2004, Council resolved to proceed with the *Marion South Greenbelt* 'Statement of Intent' (SOI), which has been referred to the Minister for Urban Development and Planning. If the Minister approves the SOI the Council can begin investigations as part of a Plan Amendment Report (PAR). Investigations would cover land zoning, options for management, management planning, and capital and recurrent funding. Public and agency consultation will be included as part of the PAR process.

With permission from the private landholder, Sheidows Beneficiaries, Rowena led the group into the Field River Valley from the top of Lonsdale Road. From this vantage point walkers got a view of the expanse of the Field River Valley looking upstream towards the Southern Expressway. The group took a closer look at the Worthing Mine site, where copper was discovered in 1847, it is believed. Construction of the engine house and chimney began in 1851. These buildings are thought to be the second oldest mine structures in Australia. The Worthing Mine has State Heritage listing, although the site has been vandalised over the years despite some effort to protect it.

Just south of the Worthing Mine, around the bend of the Field River, is another notable feature – Howchin's Anticline. This geological feature reveals a rare segment of the Precambrian Strata, which constitutes the basement of much of the Adelaide region. The site has been a subject of study over the years by many geology students, as have the geological features of international significance at Hallett Cove.

The Valley slopes would have been supported by two types of vegetation associations, including *Eucalyptus microcarpa* (Grey Box) and *Eucalyptus porosa* (Mallee Box) open woodlands. The Field River's riparian vegetation is dominated by *Eucalyptus camaldulensis* (River Redgum) over reeds, sedges and rushes, such as *Cyperus gymnocaulos* (Spiny Flat-sedge), *Typha domingensis* (Bulrush) and *Triglochin procerum* (Water Ribbon). However, this site is not without its weeds, with olives and young ash trees established in the

River. Council are currently seeking options for their removal. Despite the abundance of weeds, pockets of remnant vegetation are apparent in a different season and, over time, undoubtedly more remnants will be found.

Despite the obvious degradation to the area, sitting under a stand of River Red Gums alongside the Field River made it hard to believe that suburbia's edge was just over the top of the cliffs. This close proximity to an urban area made evident its potential value for conservation and community benefit.

If you would like further information about the Marion South Plan and the Greenbelt proposal, please contact Rowena McLean at the City of Marion on 8375 6712.

Rowena McLean and Scotte Wedderburn



Field River rock pool Photos: Scotte Wedderburn

NCSSA ANNUAL REPORT 2003-2004

The Nature Conservation Society of South Australia Inc. (NCSSA) is a not-for-profit voluntary conservation organisation that works for the retention and long-term protection and management of biodiversity, particularly in South Australia. The Society attempts to achieve its aims by fostering the retention of remnant and rare habitats, and the ecologically sustainable management of natural habitats.

Its work is based on scientific concepts, principles and research, and provides input into communication and education; cooperative biodiversity planning and management; the State's conservation reserve system; government policies, programs and legislation; and influencing political decisions.

General objectives

These are benchmarks against which existing and new initiatives are measured to maximise the effectiveness of our work for nature conservation.

- A. to undertake good scientific research and surveys that provides information for native biodiversity conservation*
- B. to advocate good conservation of ecosystems through management and legislation*
- C. to provide good quality ecological / habitat information to the public to foster a conservation ethic in the community*
- D. to have an active membership and volunteer involvement in NCSSA activities and objectives*
- E. to provide service to members through a sound administrative and financial base*
- F. to raise awareness of NCSSA objectives, publications, and activities*
- G. to cooperate with existing organisations with similar aims.*

Using these objectives as the headings a report on the current major activities of the Society is outlined below.

A. Scientific endeavours: scientific research and surveys

Projects, surveys and grants

The NCSSA undertakes surveys and other scientifically based projects funded by competitive application from a range of granting bodies. NCSSA Steering Committees manage the projects, evaluate the contractors work, assist with completion of survey reports and submit acquittals to the appropriate funding bodies. Projects, surveys, and grants managed during the past year are listed below.

Our Society gratefully acknowledges funding support from the following funding sources and grant programs for projects:

Animal and Plant Control Commission [APCC]
 Australian Government Envirofund [Env]
 Dept of Water, Land and Biodiversity Conservation South East [DWLBC]

Eastern Hills & Murray Plains Catchment Group/ Goolwa to Wellington Local Action Planning Group
 ForestrySA
 Mount Lofty Ranges Greater Adelaide INRM devolved NHT fund [MLRGA INRM]
 Murray Darling Basin INRM devolved NHT fund [MDB INRM]
 Native Vegetation Fund of the Native Vegetation Council [NVF]
 Nature Foundation SA [NFA]
 Northern and Yorke Agricultural Districts INRM devolved NHT fund [NYAD INRM]
 River Murray Catchment Water Management Board [RMCWMB]
 South East Natural Resource Consultative Committee [SENRCC]
 The Natural Heritage Trust [NHT]
 Threatened Species Network Community Grants [TSN]
 Trees For Life [TFL]

Projects completed during the 2003-2004 year

The NCSSA concluded a number of projects this year, with reports published or pending:

- Bushcare Support Program (consortium with Greening Australia) [NHT]
- Conservation of Grassy Ecosystems of Upper South East of SA – Year 3 [SENRCC]
- Mokota Conservation Park Vegetation Monitoring project - Year 3 [NVF]
- NCSSA Annual Survey 2002 – Biodiversity of grasslands of eastern flanks of Mount Lofty Ranges [Eastern Hills & Murray Plains Catchment Group; Goolwa to Wellington LAP]
- NCSSA Annual Survey 2003 – Biodiversity of Hopkins Creek [NVF]

Projects still under way at June 30

- Biodiversity Extension Program – Biodiversity workshops program [NYAD INRM]
- Biodiversity Extension Program - Monitoring Manual [NCSSA, DWLBC, TFL]
- Conservation of Temperate Woodlands [ForestrySA, Env]
- Conservation of Grassy Ecosystems of eastern flanks of Mount Lofty Ranges [RMCWMB]
- Invertebrate component of Biodiversity Survey of native grasslands at Mokota CP (Mt Cone) [NFA]
- New revised and enlarged edition of *Stop Bushland Weeds* [NHT, NCSSA, Env, APCC]
- Threatened species management on Kangaroo Island (with Threatened Plant Action Group) [TSN]
- Threatened Plant Action Group (TPAG) program coordinator [MLRGA INRM]

New grants as at June 30 but not under way by end of this financial year

- Biodiversity Extension Program – Biodiversity workshops program [NYAD INRM]
- Biodiversity Extension Program - Monitoring Manual [MDB INRM, NYAD INRM]

The Society also supported research activities by allocation of funds to continue the NCSSA Conservation Biology Grant, and has supported *Native Fish Aust. SA Inc* to undertake a fish survey of Kangaroo Island.

NCSSA ANNUAL REPORT 2003-2004 cont.

B. Advocacy for nature conservation issues

Scientific Officer and Committee initiatives

The work of the NCSSA Scientific Officer augments the work of our Committee in our community advocacy role. The Scientific Officer has the essential role of the longer-term follow-up advocacy, education, and input into submissions and legislative reviews based on the work of the specific grants and Committee expertise. This may involve personal involvement on his part through reports and submissions, or by briefing the Committee with action taken by one or more of its members. The position involves an important point of contact for the general public, community groups, NGOs and government officers. The role is also important for coordinating the numerous volunteers who contribute to the work of the Society. Matthew Turner continues in this position, in a part-time capacity.

Major initiatives for the Scientific Officer and the Committee have been in the areas of:

Threats to biodiversity
On Park biodiversity conservation
Integrated natural resource management
Community education

Threats to biodiversity

This year the NCSSA has undertaken:

- submissions to reviews: Native Vegetation Act: to PIRSA re continued releases of hatchery-raised exotic trout: Development Act Review: Kangaroo Island Development Plan Review: National Reserves System Directions Statement: Parklands Working Group Report: Senate Inquiry into Invasive species: Marion South Plan
- submissions and information provision on potential subdivision and development of land supporting significant native vegetation: (Aldinga Scrub CP ~ large development on the northern boundary: Sceale Bay ~ effects on Sea-eagles and Osprey: Hender Reserve near Stirling: Coffin Bay ~ proposed 10 ha subdivision of intact coastal vegetation: Carpenters Rocks ~ proposed subdivisions: Burnside Council (subdivision of the Simpson property): Di Simone property opposite Mark Oliphant CP: Cedar Avenue Reserve, Belair: American River proposed subdivision in Glossy Black Cockatoo habitat)
- Research into community concerns raised regarding alleged illegal vegetation clearances (at Cherryville: *via* horse access to Piggott Range Road Reserve, and in the lower south-east)
- Submissions on various government Policies and Programs: State Government Planting Indigenous Species Policy: regular liaison with the Pastoral Board: representation on the Yurrebilla Stakeholder Management Group, and on the DEH annual meetings with hunting organisations to discuss duck and quail open seasons.
- gathering information and submissions on biodiversity protection: Wind Farm proposals on lower Fleurieu Peninsula: diseases (Mundulla Yellows, *Phytophthora*, Stringybark dieback): proposals for harvesting beach-cast seagrass at Kingston: sale by nurseries of invasive plant species: inappropriate vineyard development: Upper SE drains through the West Avenue Range watercourse: Sir Richard Peninsula land use and management
- Information to media: community criticism of NPWSA fire management program: the impact of koalas on KI: of land division affecting biodiversity
- assisted with steering biodiversity projects: Birds for Biodiversity: Chilean Needle grass working group

On Park Biodiversity Conservation

In particular this year, the NCSSA has undertaken the following:

- submissions to both NPWS and Forestry SA Draft Management Plans: submissions on fire prevention statements for NPWS reserves
- input into CCSA National Parks policy
- input into EPBC referral submission on Aldinga Scrub CP
- input into National Parks Classification Review
- submissions and information provision on: Coongie Lakes: ponies from Coffin Bay National Park: personal watercraft in Coorong NP: Tammar Wallaby reintroduction to Innes CP on Yorke Peninsula

Integrated Natural Resource Management

- provided ongoing comments on NRM legislative framework as it relates to biodiversity conservation (NRM Discussion paper and Draft NRM Bill)
- provided comments on Rangelands regional INRM plan
- biodiversity advice to INRM groups: Northern and Yorke Agricultural Districts through Biodiversity implementation group sub-committee

Community education for nature conservation

The NCSSA has also:

- provided advice, assistance and educational information on biodiversity conservation issues to members, the general public, and to the media
- facilitated the involvement of individuals or groups in the planning and management of biodiversity
- provided representation at educational or promotional events
- held 10 monthly meetings with guest speakers on biodiversity topics
- conducted biodiversity knowledge and skills training workshops for members
- provided NCSSA volunteers and local community groups with the opportunity to participate in its biodiversity survey of Hopkins Creek in the Mid North of SA.
- maintained a web page providing information on conservation issues in South Australia and the NCSSA and its resources
- published five editions of the NCSSA newsletter *Xanthopus* (changed to a quarterly publication in 2004).
- conducted five free Walks with Nature in the Mount Lofty Ranges led by up to 35 volunteer naturalists
- provided a precis of environmental issues mentioned in Hansard.

The NCSSA acknowledges and appreciates the support of the South Australian Government through Service Agreement Grants for funding the Scientific Officer position.

C. Good quality nature conservation information to the public

Biodiversity Extension

2003-2004 has been a period of change for the Biodiversity Extension Program (formerly the Bushcare Support program). Until June 2003 the Society collaborated with *Trees for Life* and *Greening Australia (South Australia)* to deliver the Bushcare Support Program in South Australia on behalf of the Federal Government Natural Heritage Trust. In the past year, the NCSSA has continued key aspects of the program and sought funding through the new regional Integrated Natural Resource Management process.

NCSSA ANNUAL REPORT 2003-2004 cont.

The primary focus of the Extension Program has been the continued evolution of the *"Field Guide to Bushland Monitoring"* authored by Sonia Croft, Janet Pedler and Tim Milne. The *Guide* is designed to enable landholders and bush managers to monitor changes in the condition of their bushland. A version of the *Guide* for the Southern Mount Lofty Ranges has been developed and trialled in field situations in a co-operative project with *Trees For Life*. It has also been adopted by the Department for Water, Land and Biodiversity Conservation in the Upper South East of SA for use as an assessment tool to gauge the condition of remnant vegetation. Funding for 2004-05 (devolved NHT fund) has been secured through the regional NRM group in the Northern and Yorke Agricultural Districts (NYAD) natural resource management region to develop the specific materials to enable the *Guide* to be used in that area.

The NCSSA has also secured funding to run twenty regional biodiversity workshops during 2004-05 in two SA natural resource management regions – the NYAD and the Murray Darling Basin. These workshops aim to increase understanding and knowledge of regional biodiversity by landholders, and to provide an insight into simple bush management principles. In 2003-04, due to a lack of grant support, only five workshops were held – all in the NYAD region. More than 150 people attended these workshops. Two of these focussed on coastal habitats.

In the last year, the NCSSA Biodiversity Extension Program has had two staff – a part-time biodiversity extension officer (Tim Milne) and an administrative officer (Elizabeth Lonie). Additional work has been done by specialist consultants maintained on a NCSSA register.

Community education and biodiversity

The Society provides an important point of contact for the community and, following public requests, provides information on a broad range of topics.

Publications produced this year:

A Flora and Fauna Survey of Grassy Ecosystems in the Eastern Mount Lofty Ranges (2003) Randall Johnson, Nature Conservation Society of SA Inc.

The Biodiversity of Hopkins Creek, South Australia (2004) Katie J. Rouse, Nature Conservation Society of SA Inc.

An attractive information pamphlet *Native grassy habitats of the Mount Lofty Ranges* was produced by Jo Spencer, Grassy Ecosystems extension officer (MLR)

In addition to NCSSA reports, NCSSA retails three popular book titles, namely *Pre European Vegetation of Adelaide* : *Stop Bushland Weeds* : and *20 Walks with Nature in the Mt Lofty Ranges* Third and Updated Edition published this year. These contributed a gross turnover of about \$7,900 to the Society.

D. To have active membership involvement in NCSSA activities and objectives

Volunteers and committees

During the year, the Society had a strong volunteer base with about 7200 hours of volunteer time dedicated to conservation of

biodiversity in this State. Volunteer hours are equivalent to 3.7 FTE (about 50 - 60 individuals) and many volunteers do more than one task. New and longer-standing volunteers contributed a variety of specialised skills in the office. Particular mention to Tracey Tee (reception), Keith Lloyd (publications and library), Tung Lam (computer networking), Andrew Clark (database development) and Mark Barritt (archives and filing).

A special mention to all of those members and staff (and their families) who worked on the many aspects of the office renovation. This involved a significant rearrangement of space including removing walls, upgrading electrical wiring, replacing carpet and plastering and re-painting. A particular thanks to our previous General Manager Tanya Wittwer who organised the work, cracked the whip, and spent many hours of her own time on evenings and weekends ensuring that it was completed.

Memberships

NCSSA has a current membership of 340 members and welcomed 58 new members during the year. Thank you to Max Possingham and Sybille Haflinger for maintaining our database and distributing information to members.

General NCSSA committee

The NCSSA is one of few voluntary organizations in the state with strong biodiversity credentials and great depth in understanding conservation issues both scientifically and in appropriate on-ground actions. Most NCSSA committee members have at least one degree in the biological sciences and many have extensive field experience. Members of the 2003-2004 Committee have expertise in botany, ornithology, native mammals, vegetation management, plant taxonomy, rangelands, arid lands, remnant vegetation, grassy ecosystems, biodiversity principles, flora and fauna survey work, habitats and habitat management, threatening processes, rare and threatened species, education and communication and financial and project management.

Committee members were Helen Vonow - Acting President (Vice President), Phil McNamara - Secretary, Misch Benito - Treasurer, Annie Bond - Assistant Secretary, and committee members Luke Geelan, Nicole Lewis, Ann Prescott, Peter Tucker and Scotte Wedderburn. Luke resigned to take up a work position in the Riverland, Annie resigned to go travelling but then filled the Threatened Plant Action Group (TPAG) project coordinator position for three months, and David Moyle, Sara Boulton and Richard Winkler filled vacancies during the year.

Steering committees

Each funded project is managed by a Steering Committee, with a specific set of outcomes and budget. There was also coordination of other Activities by small committees and groups.

Increasing involvement in project work with community groups has continued to be an emphasis of the Society. The Hopkins Creek survey involved working in partnership with community groups (the South Australian Ornithological Association (Birds SA), the Field Naturalists Society of South Australia Mammal Club, and the South Australian Herpetology Group), local landholders, and approximately 30 volunteers.

NCSSA ANNUAL REPORT 2003-2004 cont.

E. Sound administrative and financial base for the Society

At the Conservation Centre, 120 Wakefield Street, Adelaide, the Society and the Conservation Council of SA jointly own the land and building in the proportion of 30:70. Building expenses such as Council rates and electricity are in proportion.

During the year extensive alterations, additions and upgrading of our office space has occurred to better accommodate staff and to allow for the move of Biodiversity Extension staff into the city office. This included improvements to the computer network and phone system to improve efficiency. Thanks to *Anglicare* who donated the phone system.

Our part-time General Manager Tanya Wittwer also undertook a major review and update of the administrative systems and the policies and procedures of the Society. During that time she also had considerable input into preparation of grant applications, project and human resource management. In June 2004 she resigned to move to Ceduna to join her husband.

Raelene Telfer retired from the position of Administrator after five years. We thank Raelene for her work for our Society. This position was subsequently reviewed and restructured to include some of the duties undertaken by the General Manager. The new Administrative Manager position was advertised and subsequently filled by Elizabeth Lonie.

The financial reporting was transferred to the 'MYOB accounting package'. Thanks to Raelene Telfer, Tanya Wittwer and in particular, Elizabeth Lonie for their work in upgrading the system.

During the year we came to an agreement with the Threatened Plant Action Group and Threatened Species Network (SA) to host the TPAG program coordinator position. This was temporarily managed by Annie Bond until the position was filled by Tim Jury.

The NCSSA has dedicated individuals who are prepared to put in many hours toward administrative tasks which make the Society work well, such as preparing budgets, grant writing, project management, staff management, policies and priorities.

Staff and project officers

NCSSA staff and project officers during the period included three part-time NCSSA core staff and nine part-time project officers, working on NCSSA projects paid from competitive grant monies

The Society wishes to express its gratitude to these staff and project officers for their continued excellent work and commitment to the NCSSA.

The NCSSA also acknowledges the support of the Federal Government Grants to Voluntary Environment and Heritage Organisations (GVEHO) in funding the administrative position.

F. To raise awareness of NCSSA objectives, publications, and activities

Our eye-catching display promoting the types of activities that underpin the NCSSA for use at events such as celebrations, shows, and field days helps to explain the strengths of the Society in quality active work in biodiversity and nature conservation.

Panels cover major habitats and the main activities of the Society in conserving, protecting, educating, influencing, participating and volunteering. Our Society was promoted when volunteers took the Society display boards to environmental events and field days.

Trevor Garnett maintained the NCSSA website www.ncssa.asn.au in which member's events and *Walks with Nature* were advertised to the wider public. Articles in *Ecovoice* magazines have promoted our Society and its activities.

G. To cooperate with existing organisations with similar aims

The Society is a member of the Conservation Council of SA, and through it, links with other organisations with similar aims. Our Society works on many projects in partnership with government departments and a variety of conservation organisations and tertiary institutions. The Society has a lot in common with many other environmentally focused organizations, and there are informal links with many of them at the committee and staff levels.

Highlights for the Year

- The NCSSA Conservation Biology Grant funded four student projects. This enabled additional field research by these students, and benefited the Society with four general meeting speakers and an article in *Xanthopus*.
- Launching the new-look office space at the May general meeting, along with the Hopkins Creek survey report and the announcement of the NCSSA Conservation Biology Grant recipients for 2004.
- A new quarterly format for *Xanthopus* with a striking new cover and updated layout.
- Continued success in achieving competitive grants for a wide range of NCSSA programs and projects.
- Increasing involvement in project work with community groups and in partnerships, and closer affiliations with the Threatened Plant Action Group, the Biology Society and Trees for Life.
- Continuing strong input into government policies, procedures and legislative changes, particularly the natural resource management proposals.
- Hard-working and loyal staff, volunteers, and committee members.

Summary

The aim of our Society continues to be working towards good biodiversity management and protection in South Australia. The program of major objectives informs our campaigns and projects.

In all our work the NCSSA has stuck to the principle that the key to the conservation of South Australia's biodiversity is good science and community education.

Helen Vonow
Acting President
Nature Conservation Society of SA
August 2004

AUDITED FINANCIAL STATEMENTS AS OF JUNE 2004

Nature Conservation Society of SA

120 Wakefield Street
ADELAIDE SA 5000

Balance Sheet

As of June 2004

2/9/2004
4:07:54 PM

Current Assets			
Operating Accounts and Cash			
NCSSA BankSA ...840	\$9,055		
Bio Ext BankSA...540	\$817		
Petty Cash Society	\$200		
Total Operating Accounts and Cash		\$10,072	
Investments			
Adelaide Bank T9	\$79,211		
Adelaide Bank T10	\$126,240		
BankSA Portfolio	\$40,263		
Commonwealth Cash Man Tr	\$32,514		
Commonwealth Comm Invest	\$109,980		
CommInvest Term Deposit 5071	\$30,000		
Total Investments		\$418,208	
Accounts Receivable		\$34,469	
Book stock on hand		\$23,814	
Total Current Assets		\$486,563	
Other Assets			
Grants in arrears		\$1,223	
Total Other Assets		\$1,223	
Fixed Assets			
Land (NCSSA 30% share)		\$82,500	
Building (NCSSA 30% share)		\$18,750	
Acc'd Dep'n - Building		(\$1,839)	
Furniture, Fittings & Equip		\$36,351	
Acc'd Dep'n - Furn & Equip		(\$31,178)	
Total			\$592,370
Liabilities			
Current Liabilities			
Credit Cards			
Visa	\$37		
Total Credit Cards		\$37	
Accounts Payable		\$2,756	
Payroll Liabilities			
Annual Leave Liability	\$6,842		
Long Service Leave Liability	\$9,276		
Workcover Liability	\$165		
OHS Liability	\$1		
Total Payroll Liabilities		\$16,284	
GST Liabilities			
GST collected from sales	\$3,267		
Less GST paid on purchases	\$95		
Total GST Liabilities		\$3,362	
Grants in advance		\$99,091	
Payments in arrears			
Total Current Liabilities		\$121,530	
Long-Term Liabilities			
Suspense Account			
Total Long-Term Liabilities		\$0	
Total Liabilities			\$121,530
Net Assets			\$470,840
Accmtd. funds-Rtnd earnings			
Acc Funds-Opening Bal		\$617,513	
Current Year Surplus/(Deficit)		(\$146,674)	
Total Accmtd. funds-Rtnd earnings			\$470,840

NOTES TO AND FORMING PART OF THE ACCOUNTS FOR THE YEAR ENDED 30TH JUNE 2004

Note 1 - Statement of Accounting Policies

(a) Financial Report

These financial statements form a report which has been prepared specifically for distribution to members in accordance with the Constitution of the Society, and the requirements of the Associations Incorporations Act 1985. The balance sheet has been prepared on an accruals basis, and disclosures therein are based on historic costs and do not take into account changing money values. The Committee of Management of the Society has determined that it is not a reporting entity and therefore that there is no requirement to apply Australian Accounting Standards or other mandatory professional reporting requirements in the preparation of the financial statements.

(b) Adjustments to Opening Balance figures of 1st July 2003

During the course of the year the Society finances were transferred from the previous Excel spreadsheet system to a professional accounting system, 'Mind Your Own Business' (MYOB).

This process involved the overhaul of the NCSSA financial system and revealed inaccuracies in figures that were reported at the AGM last year. Adjustments to the end of year figures from last year have been detailed in Note 7.

The Balance Sheet and Profit and Loss statements are reports generated from the MYOB system, and now more accurately reflect the financial position and performance of the Society.

(c) Pecuniary Interests

The NCSSA Committee is cognisant of the need to be transparent about all pecuniary interests of members of the committee and sub-committees.

There were no financial interactions between NCS committee members and the Society over the past financial year.

During the year no member was involved in discussions or voted where they had a real or potential pecuniary interest in the issue.

Note 2 - Stock

Represents valuation of Society publications. Current stock is, for recent publications, valued at the total of costs incurred in printing, or for older items where this information is not readily available, valued at 40% of the retail price of the publication.

Note 3 - Valuation of land and building

The Conservation Council of South Australia (CCSA) and the NCSSA own the land and buildings at 120 Wakefield Street, Adelaide in the ratio 70:30 (CCSA:NCSSA).

Land and building at committee valuation 100% (CCSA & NCSSA) \$337500

Land at committee valuation 30% NCSSA	\$82500
Building at committee valuation 30% NCSSA	<u>\$18750</u>
Land and building at committee valuation 30% NCSSA	\$101250
less Accumulated depreciation of building @ 2.5% per annum	\$1839
Thus final valuation of land and building asset as at 30 th June 2004	\$99411

Note 4 - Depreciation – furniture and fittings

The carrying amounts of furniture & fittings and the Society's portion of ownership of its office building are reviewed annually and depreciated to reflect the writing off of these assets over their estimated useful life.

Note 5 - Employee liabilities

This year the accounts have been updated to allow for annual leave and long service liabilities, in keeping with standard accounting practices which provide for an estimate of entitlements owing to

employees as at 30th June 2004.

Note 6 - Grants in Advance

As at 30th June the NCSSA is liable to fulfil projects listed below as follows;

Conservation Biology Grant (Society sponsored)	920
Native Fish Survey (Society sponsored)	1500
Mount Cone	1115
Grassy Ecosystems – Callington (Mount Lofty)	4763
Hopkins Creek Survey	547
Grassy Ecosystems – South East	3726
Stop Bushland Weeds	31450
Temperate Woodlands	6895
Threatened Plant Action Group Program Coordinator	9590
Biodiversity Extension Program	38585

Total project liabilities **99091**

Note 7 – Accumulated Funds

A closing balance of \$648880 was reported in respect of Accumulated Funds of the Society as at 30th June 2003. This figure has been reduced by a total of \$31367 to \$617513, as follows :

Account Opening 1/7/03	Closing Balance 30/6/03	Adjustment	New Balance
<i>Assets</i>			
Accounts receivable	53658	-1482	52176
Book stock on hand	19868	-6816	13052
Furniture & fittings value	3493	<u>-1654</u>	1839
		-9951	
<i>Liabilities</i>			
Survey/project liabilities*	37322	21487	58808
Accounts payable	5232	<u>-71</u>	5160
		21416	

* made up of Grants in Advance, plus Society Sponsorship, less Grants in Arrears

Note 8 – Deficit for year

The operating deficit of the Society for 2003/4 financial year (\$146674) consisted of two elements :

(a) In the last Annual Report, reference was made to a strategic planning meeting in January 2003 at which it was decided to assign funds to review the management and activities of the Society. As a result of this meeting, it was subsequently decided to allocate \$55000 from reserve funds towards management (funding of a manager) and office upgrade (renovations and new equipment). Of the allocated \$55000, a total of \$43546 was actually spent during 2003/4.

(b) The 2002/3 balance sheet report included separate reporting for balances in relation to the major Bushcare project. The final adjusted accumulated funds for this project (\$103127) have been expended on project related matters over the course of the 2003/4 year.

Nature Conservation Society of SA

120 Wakefield Street
ADELAIDE SA 5000

Profit & Loss Statement

1/7/2003 through 30/6/2004

2/9/2004
9:40:25 AM

Income		
Membership		\$8,594
Donations		\$2,508
Grants		
Environment Australia	\$14,364	
Environment Aust(GVEHO)	\$10,000	
DEH-Community Service Grant	\$20,000	
Projects	\$71,173	
Other grants	\$64,098	
Society sponsorship		\$7,677
Insurance Recovery		\$2,000
Non Cash Flow Income		
Profit & Loss on sale of asset	\$130	
Infrastructure income	\$18,958	
Project Recn Income	\$4,934	
Sales		
Book Sales	\$7,916	
Book sales postage	\$138	
Financial		
Interest cheque accounts	\$186	
Interest investment accounts	\$21,516	
Miscellaneous income		\$20
Total Income		<u>\$254,212</u>
Cost of Sales		
Freight		\$17
Cost of Sales Printing		\$3,167
Total Cost of Sales		<u>\$3,183</u>
Gross Profit		<u>\$251,028</u>
Expenses		
Employment Expenses		
Salaries and on-costs		
Staff Salary and Wages Expense	\$155,503	
Leave Provision Expense	\$16,118	
Superannuation Expense	\$13,995	
Workcover Society Expense	\$1,646	
Workcover Bushcare Expense	\$1,040	
OHS Society Exp	\$15	
OHS Bushcare Expense	\$8	
Workcover GST Society	\$10	
Employee expenses		
Travel nonpecuniary	\$10,800	
other Professional Development	\$140	
Cost of Consultant/Contractor		
Consultant Nonpecuniary	\$69,309	
Consultant Pecuniary interest	\$1,200	
consultant accom: pecuniary	\$115	
consultant accom: nonpecuniary	\$212	
Other HR and employee expenses		
Recruitment costs	\$2,768	
Other Employer Expenses	\$180	
Total Employment Expenses		<u>\$273,059</u>
Operating Expenses		
Office accom, fittings & maint		
Building & servicecontribution	\$6,000	
Rent	\$804	
Cleaning	\$240	
minor furniture & fittings	\$137	
minor office maintenance	\$326	
Major purchases (depreciable)		
major maintenance & renov	\$9,258	
General Office Expenses		

Nature Conservation Society of SA

Profit & Loss Statement

1/7/2003 through 30/6/2004

2/9/2004
9:40:25 AM

Stationery	\$1,063	
Telephone/fax	\$5,113	
Internet	\$1,748	
Computer consumables, repair	\$542	
Photocopying & Printing	\$4,658	
Postage and shipping (general)	\$984	
Other resources		
Subscriptions and library	\$1,278	
Project expenses		
Materials(Projects)	\$1,888	
Workshop Expenses	\$2,637	
Insurance		\$3,901
Xanthopus		
Xanthopus printing	\$2,129	
Xanthopus postage	\$799	
Sundries		\$1,319
Financial expenses		
Audit		\$1,800
Bank fees		\$770
Accounting fees		\$180
Depreciation		
Depreciation: Building	\$469	
Depreciation-Furn & Fittings	\$2,419	
Noncash expenses		
Infrastructure fee		\$16,868
Society Sponsorship		\$7,677
Project Recn Expense		\$47,998
Activity Expenses		
General meeting Expenses		\$644
Walks with Nature		\$64
Public Relations		\$600
Governance Expenses		
Committee Meeting Expenses		\$669
Legal expenses and fees		\$233
Total Governance Expenses		\$903
Total Expenses		<u>\$398,271</u>
Operating Profit		<u>(\$147,243)</u>
Other Income		
Grasses Identification		
Grasses ID income	\$2,393	
Grasses ID expenditure	(\$1,824)	
Total Other Income		<u>\$569</u>
Other Expenses		
Net Surplus / (Deficit)		<u>(\$146,674)</u>

Please note that the Annual Report and Financial Statements produced here are a précis of the complete documents tabled at the Annual General Meeting. Full copies are available from the NCSSA Office.

SOUTHERN SEAS and INSIGHTS INTO THE GULFS:

South Australia's natural marine heritage PART II

[Continued from Part I from the Spring 2004 edition of *Xanthopus* - p14 Vol 22(3)]

South Australia has two of Australia's largest gulfs and they have unique conditions and ecosystems.

The Gulfs are "back-to-front" or inverse estuaries – saltier at their heads.



Fig. 19. a normal estuary

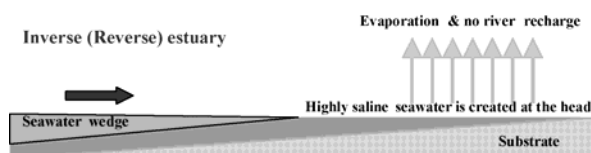


Fig. 20. an inverse estuary

The Gulfs sequester relict tropical species. There are 180 km² of Southern Grey Mangroves. Adjacent samphire



salinas provide food for migratory birds.

Fig 21. Succulent and salty — samphires at Pt Gawler.

Large areas of seagrasses are present.

Fig.21. 97,000 ha of *Posidonia* and *Amphibolis* beds existed in 1950.



Fig. 22. Leaves from deciduous seagrasses are washed into tall weed banks on our beaches.

Soft sediments form much of the Gulf coastline. Two types of systems exist on these soft sediments.

1. High wave energy coasts

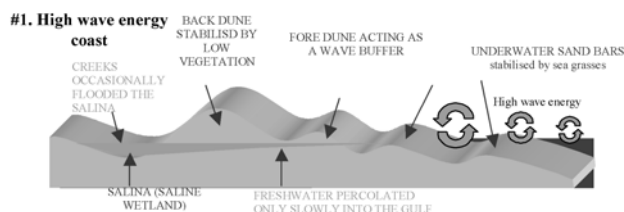


Fig. 22. high wave energy coast

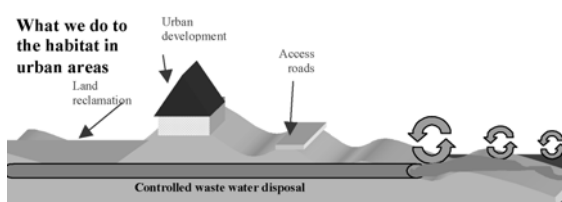


Fig. 23. "what we do to the habitat in urban areas"

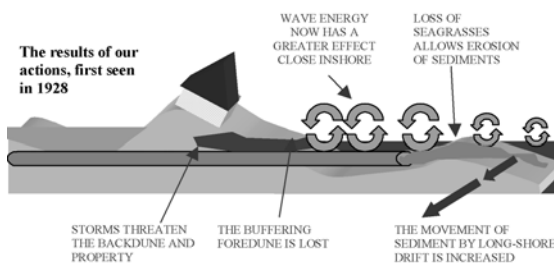


Fig. 24. "the result of our actions, first seen in 1928"

Coastal damage recurs despite engineering efforts

Implications for conservationists

Can we restore metropolitan coasts or merely protect them from further damage?

What do we do with waste water?

Can we afford coastal strip development?

2 Low wave energy coasts

Fig. 25. low wave energy coast

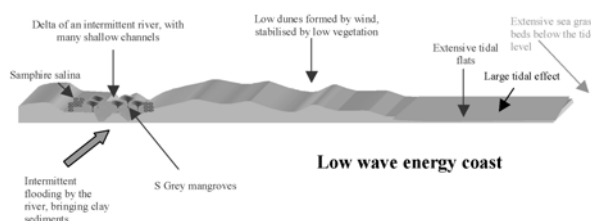


Fig. 26. "what we do to this type of habitat in urban areas"



Many fish species use these mangrove areas or shallow seagrass beds as nurseries, or for feeding

Edyvane in her booklet on mangroves ("Where forests meet the sea, SARDI) includes these commercially important species: King George Whiting, Yellow-fin Whiting, Garfish, Yellow-eye Mullet, Bream, Blue Swimmer Crab, Western King Prawn

Implications for conservationists

What are the long term effects of agricultural and industrial effluents on near-shore marine ecosystems?

Are our mangrove and samphire systems under threat?

Will the fishing industry be affected by damage to mangrove systems?

Our Gulfs are special

Our gulfs are inverse estuaries, with saline, shallow headwaters. Why don't they become saltier with time and end up as pickled, dead systems?

We know that Spencer Gulf purges itself of extreme salty water. In winter the salty headwaters become cold and very dense, slipping under the surface layers. A tongue of the saltiest Spencer gulf water slides down the edge of the continental shelf and flows out to the ocean until it finds an equally dense layer at 250m deep!

It's likely that a similar mechanism purges Gulf St Vincent of excess salt.

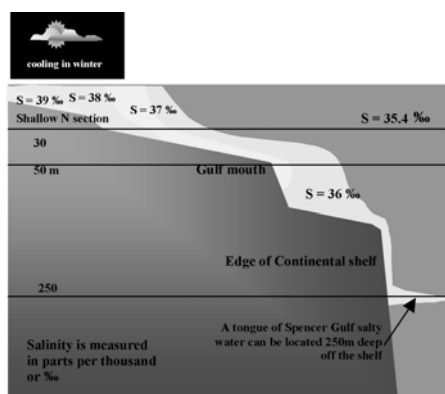


Fig. 27. a cross section of St Vincent Gulf

How we use and abuse the Gulfs

The way we use resources can be a measure of what we know about them, and how we think they function.

Here are some interesting comparisons extracted from "Protecting Gulf St Vincent: a statement on its health and future." DENR, 1997, now sadly out of print. You could complain that they are also dated, but one suspects that the amounts listed below have increased significantly rather than decreased since 1997.

Figures for loss of seagrass offshore from metropolitan beaches provided by the Coast Protection Board show a big plunge soon after the outfall at the Glenelg sewer was expanded and the Bolivar outfall was established.

How we use the Gulfs

For Gulf St Vincent alone:

Shipping: 794 vessels, 2.6M tonnes of export from Pt Adelaide in 1995-6

Recreational Boating: ~ 30,000 power boats in 1997

Recreational Fishing: 78 tonnes of Whiting caught = \$2M in 1997

Commercial Fishing: 147 tonnes of prawns caught = \$3M in 1997

Salt Production: 750K tonnes at Dry Creek, 200K tonnes at Price in 1997

How we abuse the Gulfs

For Gulf St Vincent alone, Adelaide metropolitan land users wasted in effluent water in 1997

Water: 180,000 mega litres (= \$144M)

Phosphorus: 250 tonnes (= \$64.5K)

Topsoil: 6,200 tonnes (= \$155K)

Implications for conservationists

Can we start treating estuaries and shallow embayments as whole functioning systems, not merely as conveniences?

Should we live within environmental constraints imposed by the environment, or engineer environments to suit us?

How can we protect the "out-of-sight" habitats (the submerged ones, sometimes romantically labelled as "inner space") and the less lovely ones such as coastal wetlands and salinas?

In conclusion

Can I repeat the sentiment expressed initially and hope I have given some insights into what it means?

"Most South Australians live literally and metaphorically at the edge of a gulf."



Fig. 28. Maslin cliffs and beach, Gulf St Vincent.

This is part of a transcription of a PowerPoint presentation made to a general meeting of the NCSSA in July 2004, and it shows!

Bob Baldock,
University of South Australia,
and volunteer researcher, algal
laboratory, State Herbarium of SA

GENERAL MEETINGS

are usually held on the first Thursday
of the month at the

Conservation Centre Meeting Rooms
120 Wakefield Street
Adelaide

7:00 pm (front door open at 6:45pm)

Upcoming meetings:

December Friday 10th 5.30 pm

End of Year gathering for members.
Botanic Park, opposite the Conservatory gate
[note change of date and location]

February 3rd 2005

The question of wind turbines by Terry Teoh

March 3rd 2005

The Glossy Black Cockatoo Recovery Program by
Trish Mooney