## Marine Conservation

A newsletter about Marine Conservation in the Department of Conservation and Land Management

Issue 11 December 2003

#### **FOOD FOR THOUGHT**

#### Community involvement in marine planning

Public participation in planning and approvals processes relating to matters of community concern is now a well-established and accepted part of Government decision-making in Western democracies. This trend resulted from the reasonable desire of communities (including individuals, Indigenous people, community groups, non-government organisations and industry) to have a greater say over decisions that affect their lifestyles and/or livelihoods. It also implicitly acknowledges that strong local community support is essential for the ongoing success of 'public interest' programs. The 1997 changes to the marine reserve provisions of the Conservation and Land Management Act 1984 reflected this wider trend and significantly increased the role of the community in the planning of new marine conservation reserves in Western Australia.

A central issue facing managers of 'public interest' programs is how to ensure that community-based processes deliver 'credible' results. In contentious areas such as marine conservation reserve planning, this is not easy. Just defining 'credible' to the satisfaction of all groups is not a simple task. 'Credible' to some groups means the outcome must be scientifically 'perfect'; to others it means the outcome must completely satisfy the concerns of all groups. Often the answer lies somewhere in between.

The outcomes of current marine reserve planning processes in Western Australia indicate that, while most groups endorse community involvement in these processes, some are yet to fully reconcile the implicit primary assumption that underlies a community-based approach. That assumption is: building community involvement and ownership may well be more important, in the first instance, than attempting to develop a 'perfect'



The 'Capes' Advisory Committee and observers debating the merits of sanctuary zones along the west coast. Photo – CALM

result, particularly at the expense of local support. This assumption has several important provisos: the approach must deliver significant progress from a biodiversity conservation perspective, and must be able to deal with existing issues and have sufficient flexibility 'built-in' to readily accommodate future issues and concerns.

This is the approach the Department of Conservation and Land Management (CALM) is adopting in developing the statewide system of marine conservation reserves. Fortunately, the relatively undisturbed nature of much of Western Australia's marine environment also allows such an approach to be taken. Interestingly, Graeme Kelleher (former Chair of the Great Barrier Reef Marine Park Authority for almost 20 years) and Cheri Recchia, made exactly these points in a 1998 'lessons learned' editorial on marine protected areas in the journal PARKS (Vol 8, No 2, June 1998).

#### IMPORTANT NEWS IN THIS ISSUE

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This issue and past issues of Marine Conservation Matters can be viewed at www.calm.wa.gov.au/national\_parks/marine/index.html



#### MARINE RESERVE IMPLEMENTATION



Forested shorelines of the Walpole–Nornalup inlets create some of the most scenic estuarine locations in south Western Australia. Photo – CALM

#### Update on the proposed Walpole/Nornalup Inlets Marine Conservation Reserve

Planning has commenced for the proposed Walpole-Nornalup inlets marine conservation reserve. A Focus Group of local community, stakeholder and Government agency representatives has been formed to develop a management proposal which will then be made available to the broader community for comment.

Having a permanently open ocean entrance, the inlets are biologically diverse compared to many other south coast estuaries, while the forested shorelines of the inlets create arguably the most scenic estuarine location in southern Western Australia. The area is used extensively for recreational fishing and boating by local residents and is a major tourist attraction.

The inlets were initially included within the boundary of the Walpole-Nornalup National Park in 1972, until it was found that this could not be supported under the legislation of the time. In 1994, the Marine Parks and Reserves Selection Working Group recommended that the inlets be considered as a marine conservation reserve as a matter of high priority.

Providing information and obtaining the input and views of users and the community will be the major focus of this planning process in coming months.

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# Update on the proposed Dampier Archipelago/ Cape Preston Marine Conservation Reserves



Mangals are a key ecological value for conservation in the proposed Dampier Archipelago/Cape Preston marine conservation reserves. Photo – CALM

In August 2003, the Marine Parks and Reserves Authority (MPRA) provided advice to the Minister for the Environment on the proposal to create a marine park in the Dampier Archipelago and a marine management area in the Cape Preston area. A community-based advisory committee developed the proposal, outlined in a draft indicative management plan, with extensive input from the local community and key stakeholders over a three year period. Written submissions from stakeholder and community groups were sought on two occasions during the planning process to provide feedback to the advisory committee. The proposed zoning scheme has recently been sent to the various stakeholders, for a third time, to inform them of the committee's final outcomes and to provide them with an opportunity to raise any outstanding issues on the proposal.

The Government is considering the indicative management plan recommended by the MPRA, and it is intended that the plan will be released for the three month statutory public comment period in early 2004. Information about how, where and when to make a submission is available on CALM's NatureBase website (www.naturebase.net).

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The Indicative Management Plan for the proposed Montebello/Barrow Islands Marine Conservation Reserves recommends the creation of two marine parks and a marine management area. The aims are to facilitate multiple-use and to contribute to the conservation of species such as the green turtle. Photo – CALM

#### Update on the proposed Montebello/Barrow Islands Marine Conservation Reserves

The Marine Parks and Reserves Authority (MPRA) has provided advice to the Minister for the Environment on the Indicative Management Plan for the Proposed Montebello/Barrow Islands Marine Conservation Reserves. The plan recommends the creation of two marine parks and a marine management area.

The indicative management plan was developed by an advisory committee, with input from the community and

key stakeholders, over a three year period. The plan is currently being considered by Government before release for the three month public submission period, probably in early 2004. This will provide a further opportunity for stakeholders to have a say on how the proposed marine reserves will be managed. Information about how, where and when to make a submission is available on CALM's NatureBase website (www.naturebase.net).

Contact: Judy Davidson, Marine Conservation Officer, Marine Conservation Branch.
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A panoramic vista of turquoise waters and Favorite Island in Jurien Bay Mairine Park. Photo - CALM

#### Jurien Bay Marine Park launch

Premier Geoff Gallop officially declared Western Australia's newest marine park open on 31 August 2003. The ceremony was held on the foreshore at Dobbyn Park, Jurien Bay, and the turquoise waters and views of Favourite and Boullanger islands, so characteristic of the new park which covers the 100 kilometre section of the central west coast between Wedge Island and Green Head, provided a perfect backdrop to the event.

Environment Minister, Dr Judy Edwards, highlighted that the marine biodiversity of the park represented a biological transition zone, between the tropical north and temperate south.

More than 200 people attended the successful launch which was also addressed by Gary Snook, President of Dandaragan Shire Council, Dr Barry Wilson, Chair of the Marine Parks and Reserves Authority and Keiran McNamara, Executive Director of CALM.

The launch showcased a new brochure—Your guide to Jurien Bay Marine Park—which includes a map of the zoning and activities permitted in the marine park and a DVD—Discover Jurien Bay Marine Park—which shows aerial and underwater footage of the park.

More information about Jurien Bay Marine
Park is available on CALM's NatureBase website at
www.naturebase.net/national\_parks/marine/jurien/index.html.

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The community-based advisory committee for the proposed 'Capes' marine conservation reserve with CALM staff.

Photo — CALM

# Proposal launched for new marine conservation reserve in the 'Capes' area

On 1 August 2003, the Minister for the Environment announced the appointment of a community-based advisory committee for the proposed 'Capes' marine conservation reserve. The advisory committee has since met three times and has formulated a vision statement for the proposed reserve, identified the ecological and social values of the area, and developed management objectives. Additionally, the advisory committee has begun developing a zoning scheme to assist in the conservation of ecological values and sustainable management of human activities. The outputs from the advisory committee have been circulated to more than 30 sector reference groups representing community interests, a scientific reference group for ecological input, and 20 government agencies and peak bodies participating as observers.

CALM released 'Celebrating the waters of the Capes', a magazine that highlights the area's values, and describes the planning process and how the community can participate. CALM has also maintained information booths at the Busselton and Margaret River shows.

More information about the 'Capes' planning process is available on CALM's NatureBase website at www.naturebase.net/capes marine.html.

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Family stories relating to the ocean and its species highlight the cultural connection that the local Aboriginal community has with the marine environment.

# Indigenous values, uses and concerns of the marine and coastal environment in the "Capes" area

The Indigenous values and uses of the south west coastal and marine environment have been described in a recently completed honours project. The aim of this project was to develop an understanding of local Aboriginal values and uses in the 'Capes' area for use in the planning process for the proposed marine conservation reserve. Data were collected through a series of interviews with traditional families in the area.

Family stories relating to the ocean and its species highlighted the cultural connection that the local Aboriginal community has with the marine environment. The main uses in the area include resource use for food, recreation and employment. Concerns about the marine and coastal environments include the increase in coastal development, degradation of major fish breeding and nursery grounds, disturbance of Aboriginal cultural sites, decrease in fish stocks and the increasing human pressure on inshore intertidal reefs.

Comments relating to the proposed reserve focussed on ensuring the involvement of Aboriginal people throughout the entire planning process and in the future management of the area.

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#### Update on the review of the Ningaloo Marine Park Management Plan

The review of the Ningaloo Marine Park management plan and the proposed extensions to the reserve system are continuing.

The Coral Coast Parks Advisory Committee (CCPAC) was re-convened in June 2003, and has met three times since then. The CCPAC is a key mechanism to facilitate

community input into the planning and future management of conservation lands and waters of this region. In conjunction with the CCPAC, CALM is liaising with major stakeholders and the broader community.

A key issue in the planning process is the review of the existing zoning plan for the park, and consideration of proposed marine conservation reserves adjacent to the park. CALM will be seeking comments from key stakeholders and the general community on these proposals over the coming months, and will provide this input to the CCPAC for their consideration and advice. All feedback on the zoning scheme, draft management plan and draft indicative management plan for the proposed addition to the reserve system will be provided to the MPRA for their consideration and advice to Government.

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Extending the boundaries of the Rowley Shoals Marine Park will ensure outer-reef subtidal coral communities are represented in the Marine Park.

Photo – David Harasti

#### Update on the Rowley Shoals Marine Park Draft Management Plan

The Government is currently considering a draft management plan for the Rowley Shoals Marine Park, and a proposal to extend the boundaries of the marine park. The plan is due to be released in January 2004 for public comment for a period of three months, providing the community with the opportunity to comment on both the proposal to extend the boundaries of the existing marine park and on management of the Rowley Shoals Marine Park over the next 10 years.

Information about how, where and when to make a submission is available on CALM's NatureBase website (www.naturebase.net).

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#### MARINE RESERVE MANAGEMENT

EDUCATION

Find out more about marine conservation on line



This green turtle hatchling will guide you to the new 'Marine Conservation' portal on NatureBase. Photo — Josie Dean

A new and improved section about marine conservation is now available on CALM's NatureBase website (www.naturebase.net).

The section explains CALM's lead role in the establishment and management of a state-wide system of marine conservation reserves in Western Australia, with specific information on what marine conservation reserves are, where they are, how they are planned and managed, who's who, and how to get involved in helping to protect the marine environment.

The website also provides regular updates on the planning of new reserves such as the proposed reserve for the 'Capes' area (incorporating Geographe Bay-Leeuwin Naturaliste-Hardy Inlet). Information about the advisory committee members and sector reference groups along with minutes and outputs from each of the advisory committee meetings is available.

The marine conservation section is now more visible and easily accessible through the 'Marine Conservation' portal on the front page of CALM's NatureBase website at www.naturebase.net/national\_parks/marine/index.html.

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#### MONITORING

Marine Community Monitoring Manual— 2nd edition published



CALM's continuing efforts to encourage community participation in marine conservation in Western Australia includes an on-going commitment to the Marine Community Monitoring Program (MCMP). CALM has recently received an additional \$115,000 from the Natural Heritage Trust's (NHT 2) Coastcare program to continue the program to November 2004.

During 2002/2003 the second edition of the MCMP Manual was published. The manual is now available as a hard copy and has been distributed to a number of community groups around Western Australia. It is also available on CD-ROM. In addition, in early 2004 the MCMP homepage will be established, with an independent website linked to CALM's NatureBase website, allowing direct downloads of the manual from the web. The website will also contain an 'Access' database to manage registration and data entry forms and to generate results in the form of data tables and graphs.

The focus of the program in 2003/2004 is to promote the program around Western Australia. This will be achieved through a targeted education and awareness campaign highlighting CALM's existing marine monitoring initiatives, while encouraging the community to monitor aspects of their marine environment.

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#### RESEARCH

#### Premier's Major Research Facility Program: Western Australian Marine Science Institution application development

The Marine Conservation Branch has assisted in the preparation of the WA Marine Science Institution's bid to the State Government's Western Australian Major Research Facility Program, a new funding scheme for high impact scientific research, announced in June 2003 through the Office of Science and Innovation. The program will award its first \$20 million grant early in 2004. The bid's steering committee (with Drs Chris Simpson and Nick D'Adamo of the Marine Conservation Branch representing CALM) gained \$15,000 funding in September for development of a full bid, which was submitted to the Government in November. The bid focuses on harnessing the State's significant marine research capacity, residing in universities, CSIRO, AIMS, industry and Government agencies, through the leveraging of existing and new research capacity into areas relevant to the State's environmental, economic and social policies and programs. Many of the bid's research programs relate directly to the State's informational needs for marine biodiversity conservation. The program's funds will provide leverage of approximately \$80 million of additional marine research capacity through collaborative projects that will form the basis of its proposed research framework. CALM has committed significant resources to the institution and will play a central role in its governance and operational structure.

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## Marine priorities for natural resource management regional plans

Natural Heritage Trust 2 (NHT2), which commenced in mid-2002, delivers funds for projects in natural resource management via four main streams, including Coastcare. Regional natural resource management (NRM) groups act as the foci for setting priorities for NHT2 funding to Statebased projects. Priorities for marine and coastal funding will be specified in regional strategies: documents that are being written for the State's NHT2 regions (including South Coast, South West, Swan, Northern Agricultural and Rangelands). The Marine Conservation Branch, through Dr Nick D'Adamo, is assisting each of the groups to develop priorities relating to marine biodiversity conservation by working both directly with them and strategically through CALM's Natural Resource Management Branch, which is managed by Ken Wallace. CALM is playing an important role in providing NRM groups with specialist expertise and information on NRM management for biodiversity conservation, with emphasis on current statutory NRM frameworks specified through marine conservation reserve management plans. The prioritisation and future delivery of NHT2 funds for projects in Western Australia will be governed by priorities established in the regional plans, which are expected to be finalised during 2004.

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#### Central West Coast Marine Biodiversity and Conservation Program

The Marine Conservation Branch received \$345,000 in funding through the Northern Agricultural Region of the NHT2 earlier this year for the Central West Coast Marine Biodiversity and Conservation Program (CWCMBCP). Natural resource management (NRM) strategies will be implemented, focused on the Jurien Bay Marine Park, through four key work themes:

 A community education and interpretation program, including marine community monitoring.

 Installation of a computer-based Marine Information System (MIS), providing a facility to manage all types of NRM information.

- Development of a conceptual framework for human usage data collection and the establishment of a longterm human usage monitoring program that is needed to help determine the impacts of current and future human activities.
- Implementation of a water quality monitoring program to establish an understanding of background levels in key water quality parameters.

The CWCMBCP is being undertaken in conjunction with the CALM Moora District office at Jurien and will be a major step forward in conserving the marine ecological and social values of this unique marine region of the State.

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#### MARINE INFORMATION SYSTEMS Marine Information System for Shark Bay Marine Park

A Marine Information System (MIS) covering the marine area of CALM's Shark Bay District has been successfully delivered and installed at district headquarters in Denham. Following delivery of a similar system for the Ningaloo area to the Exmouth office last year, the system is the second in a program aiming to cover all existing marine reserves. The development of systems for Rowley Shoals, Jurien Bay, Marmion, Shoalwater Islands and Swan Estuary marine parks is currently in progress.

The Shark Bay MIS uses the ESRI Arcview Geographical Information System (GIS) software package, and incorporates a range of biological, physical and social information layers organised into logical groupings. Packaged with appropriate tools and procedures that provide decision support for day-to-day reserve management, it also facilitates the collection of information to verify progress towards auditable targets set out in management plans. A primary aim of this approach is to include the regional aggregation of information into corporate systems and provide feedback mechanisms to aid decision support at all levels.

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#### MPRA NEWS

#### Review of the Marine Parks and Reserves Authority is completed

The Minister for the Environment has completed a review of the three statutory authorities established under the Conservation and Land Management Act 1984 (CALM Act)—the Marine Parks and Reserves Authority (MPRA), Marine Parks and Reserves Scientific Advisory Committee (MPRSAC) and the Conservation Commission of Western Australia—as required by legislation and Government policy commitments including the Machinery of Government (MOG) review. Former Deputy State Ombudsman, Alex Errington, conducted the review and reported to the Minister in March 2003.

The review concluded that although the MPRSAC should be abolished as a statutory authority, there are "compelling reasons" that justified the retention of the Conservation Commission and the MPRA as separate bodies. A copy of the review is available on CALM's NatureBase website at http://www.calm.wa.gov.au/stat\_auth\_review.html.

As the term of appointment of all MPRA members expired on 29 August 2003 the Minister has called for expressions of interest for membership of the MPRA.

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#### MARINE AND COASTAL MANAGEMENT



'Yardi Yarra': the new vessel for Ningaloo Marine Park. Photo – CALM

#### NINGALOO MARINE PARK

#### 'New dugong in Coral Bay'

A significant move towards developing closer relationships with local Aboriginal communities in the Exmouth district was taken on Friday 19 September 2003 when Acting District Manager Arvid Hogstrom and Baiyungu Traditional Owner Gwen Peck jointly launched CALM's new vessel 'Yardi Yarra', which is the Baiyungu word for Dugong, in Coral Bay.

Members of the Coral Bay community, representatives from the local Baiyungu people, as well as staff from CALM, the Department of Fisheries and the Department for Planning and Infrastructure, attended the launch. In welcoming guests, Gwen explained the connection that her family and ancestors have to the area and how they utilise the local resources.

Arvid informed attendees that the 'Yardi Yarra' will be used for patrolling the Ningaloo Marine Park waters in line with the management plan, assisting with scientific research and responding to emergencies in the area, as well as undertaking maintenance of moorings and sanctuary zone markers, thus playing a large role in helping CALM conserve the Ningaloo Reef.

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#### SHARK BAY MARINE PARK

## 'Shark Bay Events' education program

'Shark Bay Events' is a program designed to promote the unique natural values of the Shark Bay World Heritage Area whilst educating visitors and local residents about their role in conserving them.

The October 2003 program activity, themed 'Ocean Life', was held in the school holiday period after funding was received from CoastWest through a joint application with the Shark Bay Tourism Association. The theme represented the lifestyle of the local community as well as the vast Shark Bay Marine Park, which includes the world's largest and most diverse seagrass meadows, the world's largest and most stable dugong population, significant breeding areas for loggerhead turtles, as well as a range of other unique values such as Shell Beach and the living marine stromatolites or "living fossils".

The events included a range of interpretive activities, guided walks, seminars, films, slide shows, interactive displays and entertainment in Denham and in the Monkey Mia Reserve. Community participation was an integral component of the program and the events were conducted by Birds Australia, Just Raptors Rehabilitation and Display Centre, international researchers and the Department of Fisheries. Facilities and support for the events were provided by Yadgalah Aboriginal Corporation and numerous local businesses. Students from Shark Bay Primary School produced displays and performed several plays and gave a number of PowerPoint presentations.

Local residents and tourists enjoyed the activities and claimed to have developed an understanding of the ecosystem and their role in protecting it.

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Local children building a sand castle on 'Ocean Life' day as part of the Shark Bay events education program. Photo — CALM

#### MARINE AND COASTAL MANAGEMENT

#### JURIEN BAY MARINE PARK

#### Marine biodiversity monitoring in Jurien Bay Marine Park

During October, marine ecologists from CALM's Marine Conservation Branch and the Tasmanian Aquaculture and Fisheries Institute (TAFI) of the University of Tasmania surveyed the reefs of the Jurien Bay Marine Park. This work was part of ongoing research and monitoring of ecological and social values of the State's newest marine park. The survey will provide baseline information about the biodiversity of marine habitats within the various management zones in the park, and over the longer term, will assist in the assessment of the effectiveness of the zoning scheme.

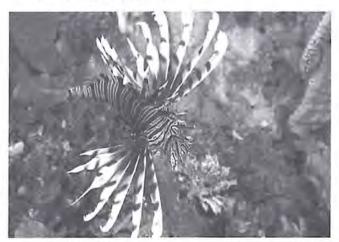
The park is host to both temperate and tropical species of macroalgae, fish, seagrass and invertebrates. There was a difference in the assemblages of macroalgae species between the northern part of the park and the southern part. There were new records for northern distributions of temperate species and southern distributions of tropical species.

The survey of the Fisherman Islands Sanctuary Zone confirmed earlier expectations on the influence of the Leeuwin Current on the northern part of the marine park, which results in a diversity of tropical macroalgae—at least 12 species of temperate and tropical corals, 10 species of tropical and temperate seagrass and numerous tropical fish species were identified.

The survey team comprised Drs Graham Edgar and Neville Barrett, both of TAFI and CALM's Kylie Ryan, Karen Wheeler, Andy Darbyshire and Kevin Bancroft. The survey was supported by TAFI, the Strategic Research Fund for the Marine Environment (SRFME, a CSIRO and State Government initiative for marine research in Western Australia), the Department of Environment and CALM.

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Jurien Bay Marine Park is host to both temperate and tropical species of macroalgae, seagrass, invertebrates and fish such as the lionfish. Photo – Ron Currie

#### SWAN ESTUARY MARINE PARK



The new signage for the bird walk trail along the foreshore of the Swan

Estuary Marine Park.

Photo – CALM

#### New signage for Swan Estuary Marine Park

The Swan Estuary Marine Park comprises three reserved areas: Alfred Cove, Pelican Point and Milyu. These areas encompass mudflats, seagrass beds and intertidal vegetation. The estuarine mudflats provide habitat for migratory waders, which move between the three areas according to the availability of feeding and roosting sites.

Recent developments include the installation of an informative bird walk trail featuring nine signs that provide information about local and migratory waders. These signs were designed and organised by Deanne Pember, formerly of the Swan Coastal District's Fremantle office, now in the Geraldton District.

Swan Coastal District Project Officer, John Snowden, is currently coordinating a weed removal program targeting the non-native Casuarina species (*Casuarina glauca and C. paupa*), introduced from the eastern states into the Alfred Cove Nature Reserve. These species reproduce by suckering and prevent all vegetation from growing underneath them. Without the eradication program, these weeds would eventually overrun the foreshore. The success of the program will be measured by the growth of the new native seedlings being planted. Stage one of the program has been completed with help from the work crew from CALM's Wanneroo Office.

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#### STAFF NEWS

#### Staff Departures

Dave Holley has left the Marine Conservation Branch to work as a Research Associate with the Steller sea lion program at the Alaska Sea Life Centre, Seward Alaska. Dave will be responsible for conducting and co-ordinating the biotelemetry programs throughout the distribution range of the species in Alaska. Dave had a diverse role with CALM as a Marine Zoologist and more recently as Marine Planning Officer for the proposed Walpole-Nornalup inlets marine conservation reserve. Good luck Dave!

**Deanne Pember** has left the Swan Coastal District (Marine) to work in the Geraldton District as an Operations Officer. She is responsible for the management of the District's nature reserves and conservation parks. Deanne's work with the Swan Coastal District included school and community education, provision of visitor facilities, and nature conservation management in Port Kennedy Scientific Park and the Swan Estuary Marine Park's adjoining nature reserves. We miss you De!

#### New Staff

Britt Anderson has joined the Swan Coastal District as a part-time Marine Park Ranger on a six-month contract. While completing her studies (Bachelor of Biological Science) in Victoria she worked as a Marine Education Officer for the Department of Sustainability and Environment. After finishing her degree Britt accepted a job as Education Officer/Ranger for the Rottnest Island Authority and won the Sir David Brand Youth Tourism award for her work on the Island. Last year, Britt had a short-term contract with the Marine Conservation Branch as a Marine Projects Officer and was responsible for the development and implementation of a signage program for Marmion Marine Park. Until recently, Britt has been working as a Marine Biologist within the central section of the Great Barrier Reef Marine Park.

Kate Fitzgerald joined us in February as a volunteer and in August was employed to assist with the Jurien Bay Marine Park launch. Her contract has recently been extended to work on the NHT2/CALM project: Central West Coast Marine Biodiversity and Conservation Program. Kate's duties will involve community education and interpretation, water quality monitoring and human usage data collection and processing. Kate completed Bachelor degrees in Science (Marine Biology) and Science (Environmental Science and Conservation Biology) at Murdoch University in 2001. Last year Kate undertook three months voluntary work in Cambodia where she handraised a baby sun bear and designed and implemented behavioural enrichment programs for the bears at Phnom Tamao Zoological Gardens and Wildlife Rescue Centre, in association with the Free The Bears Fund. Kate is also a Zoo Keeper at Perth Zoo and works in the exotic mammals section. Kate recently became a CALM Graduate Recruit.

**Dr Alan Kendrick** has moved from CALM's Bunbury office and joined the Marine Conservation Branch as a Marine Planning Officer for the proposed Walpole-Nornalup inlets marine conservation reserve. Alan recently completed his PhD on the spatial and trophic resource utilisation and reproductive biology of syngnathid fishes in temperate Western Australian seagrass habitats.

Phil Kindleysides joined the Marine Conservation Branch as a GIS Officer late last year and has recently had his contract extended for a further six months. Phil's GIS projects involved: Recherche Archipelago benthic habitat mapping, products for the Jurien Bay Marine Park launch, the management plan, maps and datasets for the review of Ningaloo Marine Park, maps for the Rowley Shoals Marine Park and a recreational values map for Geographe Bay. Phil has also worked on a product that graphically depicts the current status of Western Australian marine conservation reserves.

Kimberly Onton joined the Marine Conservation Branch as a volunteer in February. Kim recently completed her Bachelor of Science in Conservation Biology and Marine Science at Murdoch University with Honours at the University of Western Australia, investigating the breeding phenology of seabirds on Whitlock and Boullanger islands within the proposed Jurien Bay Marine Park. Now employed on a 3 month contract, Kim has been developing the Marine Conservation Branch research library as well as contributing to other research projects, including an overview of broadscale currents off Western Australia and the development of marine research plans for some of the State's marine conservation reserves. Kim recently became a CALM Graduate Recruit.

John Snowden is on a 12 month contract, taking over Deanne Pember's former role. His main projects include implementing management strategies for the Swan Estuary Marine Park—Alfred Cove, Pelican Point and Milyu and their adjoining nature reserves, as well as Port Kennedy Scientific Park. John's main tasks involve weed control, signage and access control. John is an Aboriginal Graduate Recruit.

Robyn Weir has returned to Fremantle as an Officer on an eight month secondment to the Marine Conservation Branch. Robyn will assist the branch in administrative and clerical matters. Robyn previously worked at Fremantle with the Swan Coastal District as an Administrative Assistant from September 2001 to July 2002 before moving to CALM's Finance Branch in Kensington.

Stephen Widjaja started in May 2003 at the Marine Conservation Branch as a volunteer in the Marine Information Section. He worked on Ningaloo Marine Park, Jurien Bay coastline habitat and recreational fishing in WA. Stephen recently received a six month contract. His main focus will be projects associated with the marine reserve implementation program. He completed a Bachelor of Science (Cartography) degree at Curtin University.

#### STAFF NEWS

### Marine Conservation Volunteers

Ben Deeley volunteered for the Marine Conservation Branch over six months during 2002/03. Ben completed a Bachelor of Science (Environmental Science) degree at Murdoch University in 2001. He recently progressed through CALM's Graduate Recruit Program and is currently working at CALM's Forest Management Branch in Bunbury on dieback interpretation and GIS projects.

Barbara Muhling volunteered for CALM between September and December 2002. She worked initially with the Swan Coastal District creating a database for scientific licenses, writing reports on beach wrack for public information, analysing visitor usage statistics for the Shoalwater Islands Marine Park, and designing a PowerPoint presentation for rangers to display at boat shows and public events. Barbara also worked with the Marine Conservation Branch primarily collating information for a new educational brochure for the proposed Geographe Bay/Leeuwin Naturalist/Hardy Inlet Marine Conservation Reserve, Barbara completed a marine science degree at Murdoch University in 2000, and an Honours project on coastal and dune rehabilitation in 2001. Earlier this year she started a PhD on fish larvae and oceanography under a grant through the Strategic Research Fund for the Marine Environment, with supervisors from Murdoch University and CSIRO, CALM wishes to thank Barbara for her excellent work and wishes her good luck with her research.

Claire Wright is a recent graduate from Murdoch University, where she majored in Marine Science and Biological Sciences. Claire joined the Marine Conservation Branch as a volunteer in February compiling an electronic reference database on Shark Bay and Marmion marine parks. Previous experience includes assisting in an Honours thesis on captive seal behaviour at the Aquarium of Western Australia, where she later continued with volunteer work.

Exmouth District has employed three new staff members this year and they are:

- Pam Parker: Nature Conservation Officer (Marine)
   —based at Coral Bay;
- · Shawn Thomas: Ranger—based at Coral Bay; and
- Ben Fitzpatrick: Nature Conservation Officer (Marine)
   —based at Exmouth.

#### Staff Achievements

**Dr Chris Simpson**, the Manager of CALM's Marine Conservation Branch, has been appointed as an Adjunct Professor in the Institute for Natural Resource Management at the University of Notre Dame, Australia. Congratulations Chris.

Kylie Ryan has commenced her Masters research on the assessment of the effectiveness of zoning in Marmion Marine Park. Kylie was a joint recipient of CALM's 2003 science-based Dr. George Malajczuk Post Graduate Scholarship for her Masters and will also receive supplementary funding and support from both the Marine Conservation Branch and Swan Coastal District. For more information please refer to the article in issue 10 of Marine Conservation Matters: 'Are the Sanctuary Zones in Marmion Marine Park Effective?'.



#### STAFF PROFILES

Sonya Stewart has been employed through CALM's National Indigenous Cadetship Program with the Marine Conservation Branch in Fremantle. CALM sponsored Sonya throughout the year to complete her Honours project and is also providing her with work placement opportunities. Sonya recently became a CALM Graduate Recruit.



Sonya was born in Denmark on the south coast but her origins lie with the Wardandi people around the south-west corner of WA from Busselton to Augusta. She grew up in Bunbury and spent most of her holidays either on her grandfather's farm in Pemberton or at her other grandfather's house in Denmark. Sonya completed a Land Management course at TAFE and was awarded with the Land Management Award. She then completed a Bachelor of Science in Environmental Science at Murdoch University in 2002. She worked for about four years on a casual basis at the Capel Wetlands Centre, which is a rehabilitated mine site in the south-west. This experience increased her interest in the ecology of aquatic environments.

Sonya recently completed her Honours project (in sustainable development) that focused on the Indigenous values and usage of the proposed marine conservation reserve in the 'Capes' region—her local area. Sonya hopes that her research will help inform planning of the proposed marine conservation reserve in relation to integrating the needs and views of the Indigenous communities in the proposed reserve's creation. This project will help to build a model for Indigenous consultation relating to marine conservation reserves.



Ben Tannock recently joined the Swan Coastal District's Marine Operations Unit, as a Marine Park Ranger. After starting with CALM as a Seasonal Ranger in 1994 in the South West Capes and South Coast, Ben moved to the Wildlife Protection Branch in Kensington in 1995 to be trained as a Wildlife Officer under CALM's



inaugural Graduate Recruit program. After two and a half years in Perth as a metropolitan based Wildlife Officer he was promoted to the portfolio of District Wildlife Officer in the East Kimberley, a posting which he recalls with great fondness. "It's a pretty special part of the world and to be able to work in such an awe inspiring environment was a great experience," he said.

In 2001 Ben undertook three months of volunteer work in an environmental survey in the Gobi Desert of Mongolia. Under the auspices of an international youth development charity, 'Raleigh International', he conducted large mammalian fauna population surveys to determine the effect and extent of domestic stock encroachment on traditional grazing areas. Surveys were also conducted on the numerous species of Raptors associated with this elevated region of the Gobi as well as the recording and banding of migratory birds. "It was a terrific experience to work along side Mongolians. Mongolia is a beautiful country, but one of incredible climatic extremes. I arrived there at the end of the 'Zud', the Mongolian winter, so the temperature was about –30°C. Coming off a Kimberley wet season it took just a little bit of getting used to!" he said.

Prior to joining the Swan Coastal District, Ben spent 18 months working in Victoria as a Waterways and Marine National Park Ranger.

In his new role with CALM as a Marine Park Ranger, Ben hopes to be able to make a successful contribution across all facets of marine reserve management. "I've been aware of the work conducted by the Marine Operations Unit of the Swan Coastal District for a number of years now and I'm extremely enthusiastic at the prospect of being a part of it," he said

#### MARINE CONSERVATION SEMINAR SERIES

The fortnightly Wednesday marine seminar series continues with presentations between 12 and 1 p.m. at the Marine Conservation Branch office, 47 Henry Street, Fremantle. For information on upcoming seminars go to www.calm.wa.gov.au/tourism/whats\_on/whats\_on.html or contact Melissa Mazzella at the Marine Conservation Branch on 9336 0124 or email melissam@calm.wa.gov.au.

The Marine Conservation Branch would like to thank the following presenters:

- Shirley Slack-Smith from the Western Australian Museum who presented 'The importance of soft bottom communities—The fauna of soft substrates' on 12 March.
- Patrick Baker from the Western Australian Maritime Museum who presented 'The marine environment of shipwrecks' on 26 March.
- Dr Tony Cunningham from the WWF who presented 'Abalone conservation and management: An international perspective' on 9 April.
- Andrew Kingham from Remote Research who presented 'Ningaloo Reef—a study of 'unmanaged' camping visitation 2001/2002' on 16 April.
- Dr Russ Babcock from CSIRO Marine Research who presented 'The New Zealand marine reserves experience —the science behind the politics' on 30 April.
- Dr Mervi Kangas from the Department of Fisheries who presented 'Implementing by-catch reduction devices in WA trawl fisheries' on 7 May.
- Fiona Valesini from Murdoch University who presented 'Classification of nearshore marine habitat types and relationships to fish fauna' on 21 May.
- Associate Professor John Penrose from the Coastal CRC and Curtin University (Centre for Marine Science and Technology) who presented 'CRC Coastal Zone Estuary & Waterway Management: Coastal waters habitat' on 4 June.
- John Savell from the Department of Housing and Works who presented 'West Coast Dive Park' on 18 June.

- Brooke Sargeant from Georgetown University who presented 'The Development of Foraging Strategies in Indian Ocean bottlenose dolphins' on 25 June.
- Dr Tony Koslow from CSIRO Marine Research who presented 'Plankton community structure and productivity regimes across the continental shelf and slope of southwestern Western Australia' on 30 July.
- Dr Gary Kendrick from UWA who presented 'Assessing habitats of the Recherche Archipelago', Andy Bickers who presented 'Mapping the Recherche',
- Dr Justin McDonald who presented 'Biodiversity sampling of the marine benthos', Nisse Goldberg who presented 'Diversity of benthic algae' and Katrina Baxter 'From data to map outputs' on 27 August.
- Dr Boyd Wykes from the Department of Defence who presented 'Defence maritime environmental management initiatives in WA' on 10 September.
- Simon Woodley from S & J Woodley Pty Ltd who presented 'Great Barrier Reef Marine Park: Finding the right balance' on 1 October.
- Professor Charitha Pattiaratchi from UWA—Centre for Water Research who presented 'Prediction of oceanographic processes off Western Australia' on 8 October.
- James Gilmour from UWA who presented 'Coral recruitment on the Ningaloo Reef' on 22 October.
- Loisette Marsh from the WA Museum who presented 'Zoogeography of Australian echinoderms' on 5 November.
- Dr Helen Astill from DAL Science & Engineering Pty Ltd who presented 'PLOOM: past, present and future' on the 3 December.



Marine Conservation Matters is produced by the Marine Conservation Branch of the Department of Conservation and Land Management, to broadcast up-to-date information about marine conservation activities in the Department. If you have any queries regarding our newsletter please contact Kate Fitzgerald at the Marine Conservation Branch, Ph. (08) 9336-0124, Fax: (08) 9430-5408 or email: katef@calm.wa.gov.au

