

# ICE BREAKER

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## EDITORIAL

While governments and businesses are undergoing changes in personnel and policy regarding Antarctic matters, it is satisfying to know that the Australian Antarctic Division's administration of Madrid Protocol recommendations for environmental protection in Antarctica, continues to act as a steady 'anchor' for all decisions made.

The recently released Tasmanian Government's 'Antarctic, Sub-Antarctic and Southern Ocean Policy Framework' reflects the aims and achievements of the Office of Antarctic Affairs in conjunction with the Tasmanian Polar Network, which in turn are both guided and inspired by the AAD's policies. The Collex-Onyx/Vivendi Environnement story in this issue is an example of these successful interlinks.

However, the extensive lobbying and consultation with the previous Federal Government's Environment Minister Robert Hill, to maintain the focus on Tasmania as the logical departure point for the Australia-Antarctica air link, needs to be restarted with the new Environment Minister David Kemp. While this briefing may delay the announcement of the successful air link operator between Australia and Antarctica, it is hoped that the new Minister will be prepared to accept Hobart as the preferred departure point.

It is disappointing that the inaugural Minister for Antarctic Affairs in Tasmania, Peter Hodgman, was unsuccessful in his bid for a Federal seat in the recent election, as he would have been a strong advocate of the use of Hobart for any Australian-based Antarctic activities. ICE BREAKER wishes him every success in his new occupation.

*Anthea Wallhead*

Cover Photo: Members of Hobart's Antarctic community celebrating the launch of the State Government's Antarctic Policy on board *Aurora Australis*. (OAA)



## FROM THE PREMIER'S DESK

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With the festive season fast approaching, it is an opportune time to reflect on the progress of the State's Antarctic effort over the last 12 months. It has certainly been a year marked by significant achievements on a number of major issues.

Firstly, in September I was pleased to launch the Tasmanian Government's comprehensive policy on the Antarctic, the Sub-Antarctic and the Southern Ocean. Being able to launch such an important document on the *Aurora Australis* with over 100 representatives of the State's Antarctic community further highlighted for me the vital role Antarctica plays in our State.

As a result of one of the recommendations contained in the policy, the Government has increased resources to our Office of Antarctic Affairs with the appointment of an Executive Officer. This appointment will be critical in assisting the office to implement the policy promptly.

The Government has also made funding available to Tasmanian Shipping Supplies, under the logistics and provisioning elements of the Antarctic policy document, to conduct further investigations into the use of ozone technology in multi-product containers destined for Antarctic bases.

Also commenced during 2001 was the initial development of an Antarctic Marketing and Promotion Plan by the Antarctic Tourism Group (ATG). The group is chaired by the Office of Antarctic Affairs. The Marketing Plan, when it is completed, will provide clear directions as well as implementation strategies to promote and to raise the level of awareness about the importance of Antarctica to both Tasmanians and visitors to our island.

During this year I also had the opportunity to open or address a number of Antarctic conferences hosted in our State, including the Twentieth Anniversary Conference of the Commission for the Conservation of Antarctic Marine Living Resources. Having the opportunity to address such a wide range of scientists and Antarctic specialists reinforces my strong belief in the appropriateness of my Government's policies in relation to science, technology, innovation, and the Antarctic. These policies build on and strengthen the uniqueness and the quality of Tasmanian expertise in a global context.

Finally, I, like many other Tasmanians with an interest in Antarctica, am awaiting the announcement by the Australian Antarctic Division of the successful tenderer for the provision of the Australia – Antarctic Air Link. As I have said on many occasions, I firmly believe that our State is the only logical point of departure for such a service. Whenever the announcement on the successful bidder is made, it is incumbent on all of us to continue the efforts of the Office of Antarctic Affairs and the Tasmanian Polar Network, and work in a constructive and unified manner to maximise the opportunities presented to our State.

This year has been a year of much progress in Antarctic matters. We have achieved a great deal. It is important that we build on these advances in the coming year and continue to promote the State's Antarctic capabilities at every opportunity.

I wish you and your families a safe and peaceful Christmas and I hope that the New Year will be a successful one, whatever your Antarctic endeavours may be.

Jim Bacon MHA  
*Premier*  
*Minister for State Development*

## A MESSAGE FOR ICE BREAKER READERS

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It is with pleasure that I write these few words in my new role as Shadow Minister for Antarctic Affairs.

I begin by expressing my genuine interest in the Antarctic region. As a former school teacher, Antarctica was an area of the curriculum that I particularly enjoyed studying with my students.

Readers can be assured that I will continue to support the very good work which is being done in developing sound Antarctic policy. It is good to see a productive bi-partisan approach being taken to progress the interests of Antarctic Affairs.

I appreciate that Peter Hodgman had an active interest in this portfolio and I look forward, as his replacement, to the opportunities ahead.

**Martin McManus MHA**  
Shadow Minister for Antarctic Affairs

## A MESSAGE FROM THE FORMER SHADOW MINISTER

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Life after politics creates new opportunities, which I hope will allow a continuing role in Antarctic Affairs for me.

As a previous Minister and self confessed Antarctic addict, I have built up over the years International, National and Tasmanian contacts, which I believe as a consultant I can put to good use. So if you would like to discuss this further, please give me a call on 0417 516 307.

I am very pleased to pass the Shadow Antarctic portfolio onto Mr Martin McManus MHA, who I am sure will address the needs of the Antarctic and I hope will continue the bi-partisan relationship.

A Merry Christmas and all the best for the New Year.

**Peter Hodgman**  
Inaugural Minister for Antarctic Affairs  
Initiator of the Tasmanian Polar Network



## TPN CHAIRMAN'S MESSAGE

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We are now approaching summer as evidenced by the return of Antarctic shipping to the port of Hobart as the Australian Antarctic Division and others commence their field activities again. I understand another busy shipping season lies ahead which is a good omen, particularly for our members involved in provedoring and ship support.

The last Quarter has seen the Annual CCAMLR meetings and attendant opportunities to provide hosting and welcoming to international Antarctic related visitors to Hobart. Again the Governor, Sir Guy Green, opened the doors of Government House and provided a memorable evening of music with the Tasmanian Symphony Orchestra for our visitors. I have no doubt that these types of events for such influential people are building a solid international reputation for our State as a welcoming and friendly gateway to Antarctica. It is now up to those of us with international Antarctic-related commercial opportunities to provide service delivery up to and beyond the expectations of both our international customers and our compatriot Tasmanians. It is from this base of promise and delivery that Tasmania will earn the reputation of the preferred gateway to Antarctica.

I am pleased to report progress in the last quarter with two specific initiatives which arose from the Governor's Forums and which have found their way into both the Tasmanian Government's Antarctic Policy and the Tasmanian Polar Network's action plan for the current financial year.

Firstly, the TPN has provided an Industry Briefing to the Solid Waste Management Association regarding the current status of the proposed Antarctic Waste Cleanup project with AAD. The objective is to alert this industry sector within Tasmania to the challenges and opportunities which are current and encourage them to address them within their corporate capabilities. It is significant that one of their Members, Collex, also a TPN Member, has recently announced a major initiative in the donation to AAD of specially designed containers to transport Antarctic waste back to Hobart.

Secondly, the TPN has initiated discussions with both the Education Department and the University of Tasmania with respect to the provision of Antarctic studies in both High Schools and Colleges and at the undergraduate level. These studies would open into and feed the existing postgraduate opportunities at IASOS and the Antarctic CRC. As identified at the Governor's Forums, these opportunities will also encourage local, interstate and overseas students to both study in Tasmania and seek Antarctic and Southern Ocean related career opportunities here. The opportunity to offer secondary studies in a virtual environment is also being discussed, as this medium will entice students to relocate to Tasmania. Our initial approaches have been well received at both the Secondary and Tertiary levels and I am optimistic that we will be able to generate sufficient interest and enthusiasm in the right places to make this happen. It is important that we recognise the nexus between this 'Studies' agenda and Antarctic related career and work opportunities which will flow from Tasmania becoming more internationally active in Antarctic goods and service supply.

I believe these initiatives are progressing well in a coordinated manner which is reflective of implementation of the 'Grand Plan' which has grown from the Governor's Forums into the State Government's Antarctic and Southern Ocean Policy. It is a testimonial to all that we have been able to move to an implementation phase in such a short timeframe. The main thing is that we all 'keep going' and believe in our capacity to deliver our plans for the mutual benefit of our State and citizens.

It remains for me to extend the Seasons Greetings to all TPN Members and readers of this Article. I wish you all a Merry Christmas and a successful New Year.

Bill Lawson.  
Chairperson, Tasmanian Polar Network.



# OFFICE OF ANTARCTIC AFFAIRS

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## Antarctic Marketing Strategy

Work continues to progress on the development of the Antarctic Marketing and Promotion Strategy. A draft of Stage 1 of the Plan has been circulated to members of the Antarctic Tourism Group for comment. It is hoped to have the Plan completed by the end of this year.

## Antarctic and Southern Ocean Policy Document

The Premier launched this policy before an audience of over 100 of Tasmania's Antarctic community, on board the *Aurora Australis* in September. Copies of the document have been circulated widely and it appears in electronic form on: [www.oaa.tas.gov.au](http://www.oaa.tas.gov.au) Hard copies are also available from the office. OAA is currently prioritising and working on implementation of the recommendations of the policy.

## Proposed Antarctic Airlink

The Selection Panel for the appointment of the successful tenderer will soon have completed its initial deliberations and in due course will be forwarding a recommendation to the Director of the Australian Antarctic Division.

## Mid Winter Events

The Southern Tasmanian Regional Tourism Task Force has appointed a consultant to investigate the events and festivals for Southern Tasmania, particularly in what is termed the "shoulder" and "off" tourist season. Initial presentations to the consultant by OAA have been very positive. The consultant also met with the Mid Winter Events Group, whose members again reinforced the positiveness and potential of this event. Final report from the consultant is due to be presented to the Task Force in mid to late December.

## Antarctic Shipping Group

Initial meetings of the ASG have been very positive and have focussed on several systemic issues, including fuel, quarantine, shipping scheduling and tourism opportunities.

## Tasmanian Polar Network

In an effort to better serve members and to increase the knowledge and awareness by OAA of individual members' activities, the team from the office is arranging visits to all members. To-date OAA met with 17 organisations and has been very impressed with the diversity, innovation and complexities of TPN businesses.

## Antarctic Cruising

Following on from a recommendation from the ATG, OAA has provided comprehensive tourist packs to all Antarctic tourists departing Hobart this year, with a view to extending their stay in our city. This has only been achieved through the significant cooperation of the cruise operators Quark Expeditions, Heritage Expeditions and Ocean Frontiers.

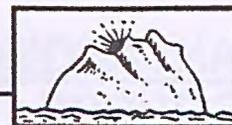
## Staffing Issues

Mr Ben Galbraith from the Australian Antarctic Division has been appointed to the new position of Executive Officer within OAA. Ben has a wide range of Antarctic and management skills that will be an asset to this office.

**Bill Bleathman**

**Director, Office of Antarctic Affairs**

# POLAR NEWS



## OZONE HOLE STILL LARGE

This year's ozone hole over Antarctica is similar in size to last year's and covers nearly 30 million square kilometres. Up to 90% of ozone has been destroyed in layers 15-20 km above Antarctic research stations. Ozone-breaking reactions occur each year in early spring but the ozone hole breaks up once the upper atmosphere warms up during summer.

According to other recent UK research, parts of Antarctica are warming faster than other areas, causing some penguin colonies to move their home bases. Global warming, changing ocean currents and warmer air have all been identified as possible causes, which have also led to the loss of 7 ice shelves during the past 50 years.

In addition, global climate and sea-level changes have been linked to cyclical variations of the Earth's orbit. NZ scientists have recently proven these 'wobbles' cause rapid changes to the structure of the East Antarctic ice sheet, confirming a 20-year-old theory.

## ICY KNOWLEDGE

Now available to school students is the "ICE BOX", a travelling library of Antarctic information including maps, posters, CD-ROMs, videos, audio tapes and books. Donated by Australian and international organizations, the contents also include classroom activities and course guides.

Blackmans Bay Primary School was the first to utilize the Box, and information received by the students from Pengo, their stuffed penguin now on its second journey to Antarctica, was added to the Box. Pengo sends daily e-mails about Antarctic activities when spending a day with each scientist on board AURORA AUSTRALIS on its voyage to Antarctica.

Other students, from the University of Tasmania, voyaged south in November to work on a project studying the thickness of sea ice, but were required to take their exams on board ship! Bronwyn Kimber, studying for her Bachelor of Geology, and Angus Monro, a Bachelor of Science student, both took their third year exams supervised by Dr James Reid, who faxed their papers back to the examiners at the University.

## POLAR BUSINESS CHANGES

- Sir Hubert Wilkins Pty Ltd has moved to Taree from Warriewood, NSW and their new mailing address is PO Box 4011, Taree Delivery Centre, NSW, 2430. The new delivery address is 30 Hargreaves Drive, Kolodong Industrial Estate, Taree, NSW, 2430. Phone: (02) 6551 2233. Fax: (02) 6551 0475.

- The *Spirit of Sydney*, previously owned by Don and Margie McIntyre, has been sold to Roger Wallis, who runs adventure sailing trips to Antarctica, around Cape Horn and in South American waters. The skipper of the ship intends to sail in the Sydney-Hobart yacht race before sailing to Commonwealth Bay in Antarctica early next January. For further details, contact Gerald Fitzgerald on mobile 0428 749 166.

- Malcolm Wallhead and Associates' web site with photos of Igloo Satellite Cabins has changed to [www.icewall.alltasmanian.com](http://www.icewall.alltasmanian.com)

- A proposal to disband the Antarctic Society of Australia Inc. was put forward at the Society's Annual General Meeting in September with the current President, Stephen Martin resigning from his position and his role as Editor of the Society's Newsletter.

- The new Manager of Antarctic Adventure in Hobart is Rod Cameron-Tucker, formerly of the University of Tasmania and a TPN Committee member.

- Ministry changes since the recent Federal Election include David Kemp replacing Robert Hill as Minister for the Environment, and the new Shadow Minister is Kelvin Thompson.

## CASEY'S POWER OFF

An electrical fault cut power supplies at Casey Station in Antarctica on November 12 this year. Although damage to buildings and equipment was sustained because fire extinguishers were automatically activated, power was restored quickly after the power surge and emergency communication links with the Antarctic Division in Tasmania were used to report the incident. Normal power supplies were expected to be in operation as soon as tests were carried out to establish the cause.

# ANTARCTIC TREATY ENVIRONMENT MANAGEMENT COURSE

A short course on Antarctic environment management will be held at the Institute of Antarctic and Southern Ocean Studies and the Antarctic Cooperative Research Centre at the University of Tasmania, Hobart Australia, between 1-12 July 2002. The short course is designed to give an introduction to environmental management within the Antarctic Treaty System with detailed analysis of the requirements established by Annexes I to V of the Protocol. The program also discusses emergent issues likely to impact on environmental management into the future.

The principal focus of the short course is on key areas of environmental management under the Protocol on Environment Protection to the Antarctic Treaty (Madrid Protocol). The program builds on a highly successful short course on Antarctic Environmental Management run by the Institute of Antarctic and Southern Ocean Studies at the University of Tasmania in 1993, and focuses on issues and topics relevant to all Antarctic Treaty parties in fulfilling their obligations under the Protocol.

The course involves interactive seminars and practical exercises, including a short project exercise designed to develop and extend participants skills in environmental management. These sessions are to be presented by specialists in each of the topic areas. The short course is designed for people whose work (or interests) addresses issues and aspects of Antarctic environmental management. It will be of interest to government officials, the private sector, academics, and non-government organisations.

For further details, see enclosed brochure or contact:

Dr Marcus Haward 6226 2333

Dr Julia Jabour-Green 6226 2978

## TASMANIAN WEBSITES WITH ANTARCTIC AND SOUTHERN OCEAN NEWS

<a href="http://www.antarctican.com">www.antarctican.com</a>	News items weekly
<a href="http://www.tpn.aq">www.tpn.aq</a>	Media releases
<a href="http://www.aad.gov.au/going_south">www.aad.gov.au/going_south</a>	Shipping and Air schedules
<a href="http://www.aad.gov.au/goingsouth/tourism/News">www.aad.gov.au/goingsouth/tourism/News</a>	Antarctic Non-government Activity News, twice monthly
<a href="http://www.antrc.utas.edu.au">www.antrc.utas.edu.au</a>	Occasional newsletter
<a href="http://www.marine.csiro.au">www.marine.csiro.au</a>	Media releases
<a href="http://www.isofish.org.au">www.isofish.org.au</a>	Media releases
<a href="http://www.oceans.gov.au">www.oceans.gov.au</a>	Media releases, Sea Bites Newsletter
<a href="http://www.ccamlr.org">www.ccamlr.org</a>	Annual reports of members' activities
<a href="http://www.comnap.aq">www.comnap.aq</a>	Meetings dates

## A NEW TPN MEMBER, MAKING IT ALL TOO EASY...

**TWEEZY** is a recent member of the Tasmanian Polar Network. A Tasmanian-based Internet, multimedia and software development business, Tweezy was formed in 1999 by Tony Phelps and Phil Wood. Phil will be known to many TPN members, with over ten years experience with the Australian Antarctic Division, Phil had responsibility for media liaison, promotional program management, and coordination of the Division's Internet presence.

Recently Phil had a hand in organising the Midwinter Solstice celebrations in June of this year. This year's "mini-festival" we all hope will have a long-term future as a major event in Tasmania. Phil looks forward, through the TPN and through the work of the consortium of service providers he is associated with, to have an ongoing role in the future plans, for what could become an exciting annual event that celebrates Tasmania's important role in Antarctic affairs — nationally and internationally.

Phil and Tony have in excess of 25 years' experience in software and database design, network administration, computer training, system trouble-shooting, web site design and development, marketing, promotion, public affairs management and media liaison.

Tweezy's principal focus is:

- database and software systems and;
- web site design, multimedia presentations, video and print production

*Tony* specialises in database design and development. Tony has considerable experience in database design and implementation, and has developed a variety of database solutions, for a diverse range of clients. Database projects completed include a Bushland Reserves Management system for the Hobart City Council; real-time data logging and a management software application for trout and salmon farms, and a commercial, small business financial management application — to mention a few.

Tony, as an application developer with the Australian Taxation Office, has developed several large and complex applications, some of which are now being used nationwide by more than 5000 Taxation Office staff.

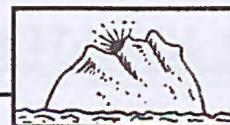
*Phil* specialises in website development, graphic design, promotions and marketing, and, working within a specialised consortia of service providers, providing clients with a diverse range of multimedia products, including animation, 3D graphics, digital video productions and organisational Intranet systems.

In private practice Phil has been working closely with a very diverse range of clients in developing web sites, marketing and promotional strategies, print design and related work. Current clients include Antarctic Adventure, the Tasmanian Salmonid Growers Association, the Australian Bed and Breakfast Association, the Huon Trail Tourism Association and numerous small businesses — particularly in the tourism industry.

Tweezy is set to expand its business presence over coming months and will be looking to move into new office accommodation in December 2001. Locating into offices with the Sundial I.T. Centre in Brown's Road Kingston, will allow both businesses to offer clients a "one-stop-shop" for all IT needs — from hardware, network systems, web hosting, hardware upgrades and repairs, and importantly from Tweezy's perspective, a diverse range of content — from database applications through to innovative web based technologies.

Tweezy is keen to utilise its Tasmanian/Antarctic experience to assist Polar Network members, and Antarctic programs generally, in delivering a range of computer based solutions — from dedicated software applications through to static and dynamically driven Internet and Intranet systems, CD interactives and related technologies.

Phil and Tony would welcome any enquiries from TPN members and subscribers to Icebreaker.



## ANTARCTIC SHIP SITES

Concerns about the lack of information available on the position of expedition and tourist ships in Antarctic waters has led to the development of a Ship Position Reporting System (SPRS). After consultation with ships' officers, Antarctic programmes and maritime safety organizations, SPRS was established by COMNAP so that accurate positions of every ship could be determined, particularly in the event of an emergency due to hazardous weather conditions.

Further details are at [www.comnap.aq](http://www.comnap.aq) by clicking on SPRS.

## MAWSON'S HUT PRESERVATION

Recently presented to Federal Environment Minister Robert Hill was heritage consultants Godden Mackay Logan's report stating that the plan to repatriate Mawson's Hut to Australia is impractical and that the hut should be preserved in situ at Commonwealth Bay.

The report recommended that accumulated ice and snow within the building should be removed provided the basic structure is not weakened and that limited, supervised access should be permitted for tourists.

Moving the hut would contravene the Antarctic Treaty and the site should be nominated as a protected area under the Treaty, in order to preserve its historical significance.

## SOUTHERN OCEAN RACERS

The 8 contestants in this year's Volvo Ocean Race will be crossing the Indian Ocean from November 11 to December 4 to arrive in Sydney, NSW in time to compete in the Sydney to Hobart yacht race starting on December 26, 2001. Leg 3 of this round-the-world yacht race is Sydney via Hobart to Auckland, New Zealand, then Leg 4 will take the yachts around Cape Horn to Rio de Janeiro.

Each Volvo Ocean 60 is equipped with ocean research instruments, including a Thermistor chain embedded in the rudder. The chain collects data for the Thermistor unit about ocean temperatures and ocean currents. Optical radiometers, one on the aerial stub mast on the stern and 2 below the radome on the main mast, measure ocean colours which indicate biological activity in the ocean. The

Ocean-i sensor installed collects and processes data from all these units and sends it to the yacht's communication system. This transmits the data to the race office via the satellite dish positioned in the bow and a NASA satellite.

All ocean data collected will be available at [www.VolvoOceanAdventure.org](http://www.VolvoOceanAdventure.org)

## IN THE PUBLIC EYE

- Robin Burns, author of 'Just Tell Them Survived', discussed her Antarctic based book at the Afterword Café in Hobart in September 2001.

- Honda TRXs, the four-wheel All Terrain Vehicles used at Australian Antarctic bases, were featured the Spring edition of 'Tasmanian Farmer'.

- Moonraker Australia Pty. Ltd. (in October) and Taylor Bros. (in November) both featured in Brand Tasmania's Newsletters.

- Bed linen and towels featuring penguins, polar bears and other polar photographic images by Italian firm Bassetti are on sale at Harvey Norman and Harris Scarfe stores in Hobart.

- Hobart Ports Corporation organised an Open Day on November 19 as part of Tasmania's Centenary of Federation celebrations. Displays by the Australian Antarctic division, customs, Quarantine Inspection and the fishing industry were also included.

- The Australian Plant Society's wildflower exhibition this year was entitled *Spirit of Gondwana* and showcased native plants such as lichens and ferns which originated on the giant supercontinent.

- Aurora australis lights have been visible in Tasmanian skies several times this year, and an 11-year solar cycle reaches its peak in the coming months.

## COMMUNICATION LOSS

Contact was temporarily lost with an expedition yacht bound for Wellington, NZ in November this year. The *Arctos* left Hobart for NZ as part of its round-the-world voyage though the Southern Ocean, but did not notify its position as scheduled because of electrical problems. Ships were alerted between Tasmania and NZ, but contact with expedition co-ordinator Don McIntyre was re-established with an improvised power system for the satellite telephone.

# OPEN TO ALL, WEATHER OR NOT!

Despite choppy waves, strong winds and torrential rain, nearly 2000 people visited the Marine Discovery Centre at Woodbridge on October 7, 2001. The Centre was filled from early morning to late afternoon on Open Day, with young families, older people, fishermen keen to show off their knowledge of marine life to the inexperienced, and maritime police who braved the conditions to bring three of their vessels down from Hobart to add to the attractions.

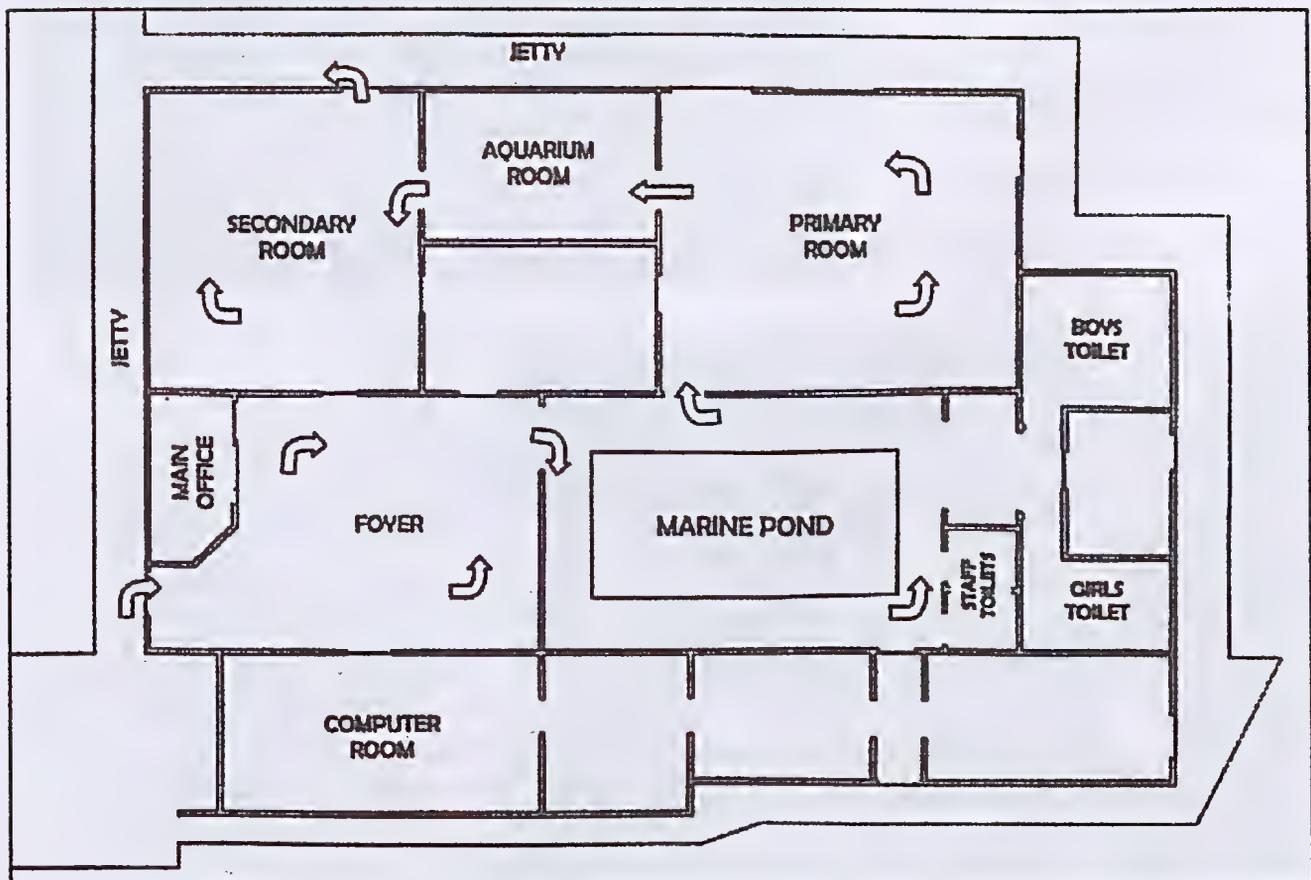
The weather conditions did not stop the MDC's PENGHANA continuing short trips out into the D'Entrecasteaux Channel, and visitors who arrived from Hobart on the CARTELA were also offered a lunchtime cruise in the Channel.

Assistance to visitors was offered by MDC staff and over 40 volunteers, who included ex-staff, local people, work experience students, university scientists and students, and scientists from CSIRO and TAFE College.

In the foyer of the Centre, visitors were able to see displays on boating Safety, Aquaculture, Introduced Species, Marine Debris and Threatened Species. The Marine Pond held examples of larger fish species found in the Channel, and Touch Tanks in other rooms were available for children to have hands-on experience with live sea animals. In another section, Aquaria were filled with a wide variety of small fish, abalone, seaweeds and sponges, while the Secondary room displayed equipment and references for experiments and data collection necessary for marine environment studies.

The Marine Discovery Centre's Open Day this year was held in conjunction with the local school's Fair, other Woodbridge community activities, a Rotorlift Police helicopter rescue display, and an ABC outside radio broadcast.

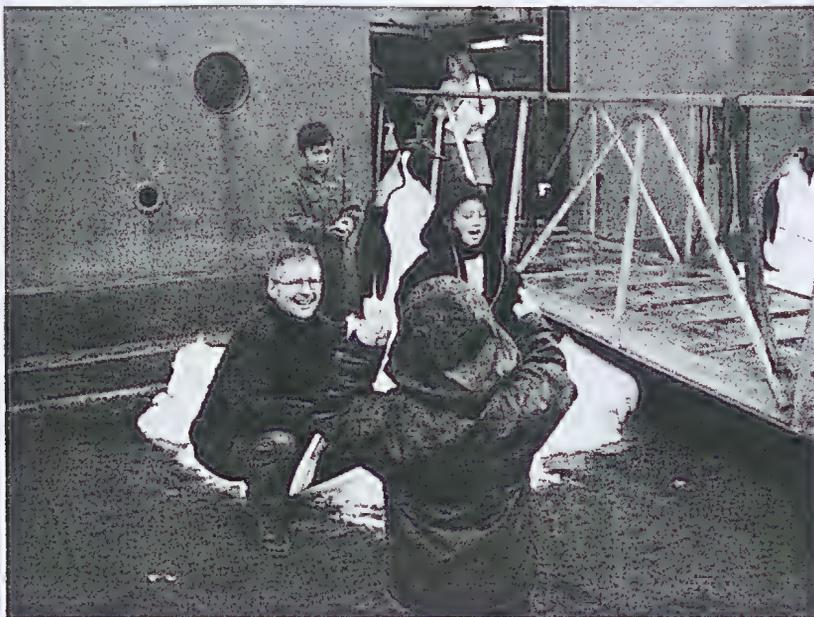
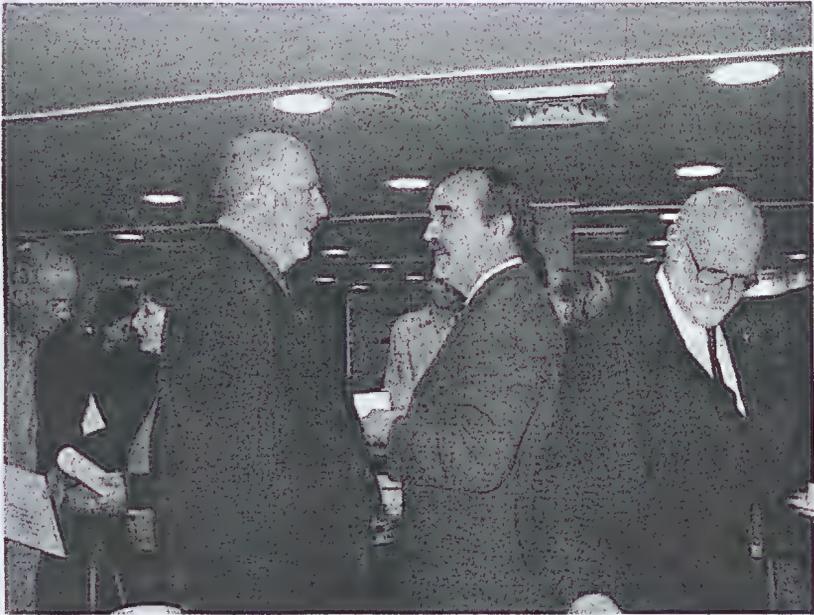
## THE MARINE DISCOVERY CENTRE, WOODBRIDGE, TASMANIA.





One of the displays at the Marine Discovery Centre.  
Photo: MDC

TPN Chairman, Bill Lawson (left), Premier Jim Bacon (centre) and others at the launch of the Tas. Government's Antarctic Policy aboard *Aurora Australis*.  
Photo: OAA



TPN member, Lorne Kriwoken and children on the wharf near *Aurora Australis* with snow and penguins provided for the Antarctic Policy Launch Celebrations.  
Photo: OAA

# AUSTRALIA'S OCEANS POLICY IN ACTION

Alongside Australia's rights to its exclusive economic zone comes the responsibility to protect the sea's resources and to develop these sustainably using the best scientific information available.

The National Oceans Office was created to put into place the vision of Australia's Oceans Policy – a whole-of-government initiative to manage the many uses and resources of our oceans in a way that best meet all of our needs and aspirations.

The Office's first major undertaking is a regional marine plan for the South-east Marine Region – more than 2 million square kilometres of ocean off eastern South Australia, Tasmania, Victoria and southern New South Wales, and including areas of Macquarie Island.

Over the past year, the Oceans Office has been conducting an in-depth investigation of the South-east Marine Region, to create a knowledge foundation for its regional marine plan. Following a detailed scoping exercise, a series of Assessments are now nearing completion. These will help to create a foundation for what we know about the Region: its biological and physical characteristics; its many resources and how we use and manage them; the disturbances we create in the oceans, and the social and cultural relationships we have with the sea.

The Assessments cover six key themes, designed to improve our understanding of the economic, environmental, social and cultural values of the Region:

- Biological and Physical Characteristics – identifying the key ecological characteristics in the Region, their linkages and interactions
- Uses within the South-east Marine Region – improving our knowledge of the nature and dimension of human uses and their relationship with each other and the Region's resources
- Impacts on the Natural System – providing an objective analysis of impacts that can affect the biological diversity and habitats in the Region
- Community and Cultural Values – ensuring the community wishes and aspirations are incorporated in the planning process
- Indigenous Use and Values – gaining an understanding of and support for Indigenous interests in the Region
- Management and Institutional Arrangements – analysing existing legislative and institutional frameworks.

The aim is to create a shared understanding and appreciation of the unique characteristics of the Region, and how we manage our activities to sustain a healthy ecosystem. From here, we can move forward to define options for managing the many uses we make of the oceans and the many pressures this involves.

Oceans Office Director Veronica Sakell says that for the planning process to be effective, the needs and aspirations of all groups with an interest need to be taken into account.

“We have asked people about community, business and cultural ambitions so that we can define the things that we all agree are important” she explains.

“Moving forward with regional marine planning also means that we need to address many complex issues, particularly our limited knowledge of ocean processes and ecosystems.”

“Our Biological and Physical Assessment team has been looking at the key ecological characteristics, and the linkages and interactions between and across all ecological levels that are critical to ocean health.”

Continued next page >

**“The outcome of their work will be an accessible account of our current understanding of the structure and function of ecosystems in the Region,” she says.**

The Assessment has been looking at ecosystem structure – dividing the Region into sub-units, each with a finer geographical and ecological scale than the three current Large Marine Domains that have been defined for the Region: South-eastern, Sub-Antarctic and Macquarie.

This process will give us a deeper understanding of structure of the Region. The information products that map these bioregions will create a framework for management options that reflect physical and ecological characteristics, rather than jurisdictional ones. As well, ecosystem function has been analysed to determine the links between processes, species and habitats.

As part of the scientific basis for the regional marine plan, the Oceans Office commissioned a major collaborative scientific survey in 2000 between CSIRO and the Australian Geological Survey Organisation (AGSO), to help provide baseline data and prove scientific methods for the sorts of deep ocean studies needed as a basis for a new approach to oceans planning and management in southern Australian waters.

CSIRO marine scientists provided new insight into the deep ocean world with a comprehensive survey of the seafloor at greater depths than ever before. At the same time, they benchmarked sophisticated new equipment including echo-sounders and deep ocean video cameras.

**CSIRO marine ecologist and co-research cruise leader, Dr Alan Butler, says that the voyage has given scientists a vital opportunity to evaluate and refine advanced underwater survey techniques.**

**“In the marine world, our knowledge is strongest at or near the 57,000 kilometre long coastline. Nearer the continental shelf, and in the much deeper basins, technology, time and resources have been the impediment to building a profile of Australia’s marine back yard – the physical conditions as well as life in the deep. At ocean depths below 1,500 metres – which is more than 70 per cent of the entire Australian marine jurisdiction – very little is known.”**

**“There are considerable difficulties and limitations for scientists researching in these deep ocean environments,” he explained, “but from this cruise alone, the way we can increase our knowledge of ocean conditions and marine life has jumped substantially.”**

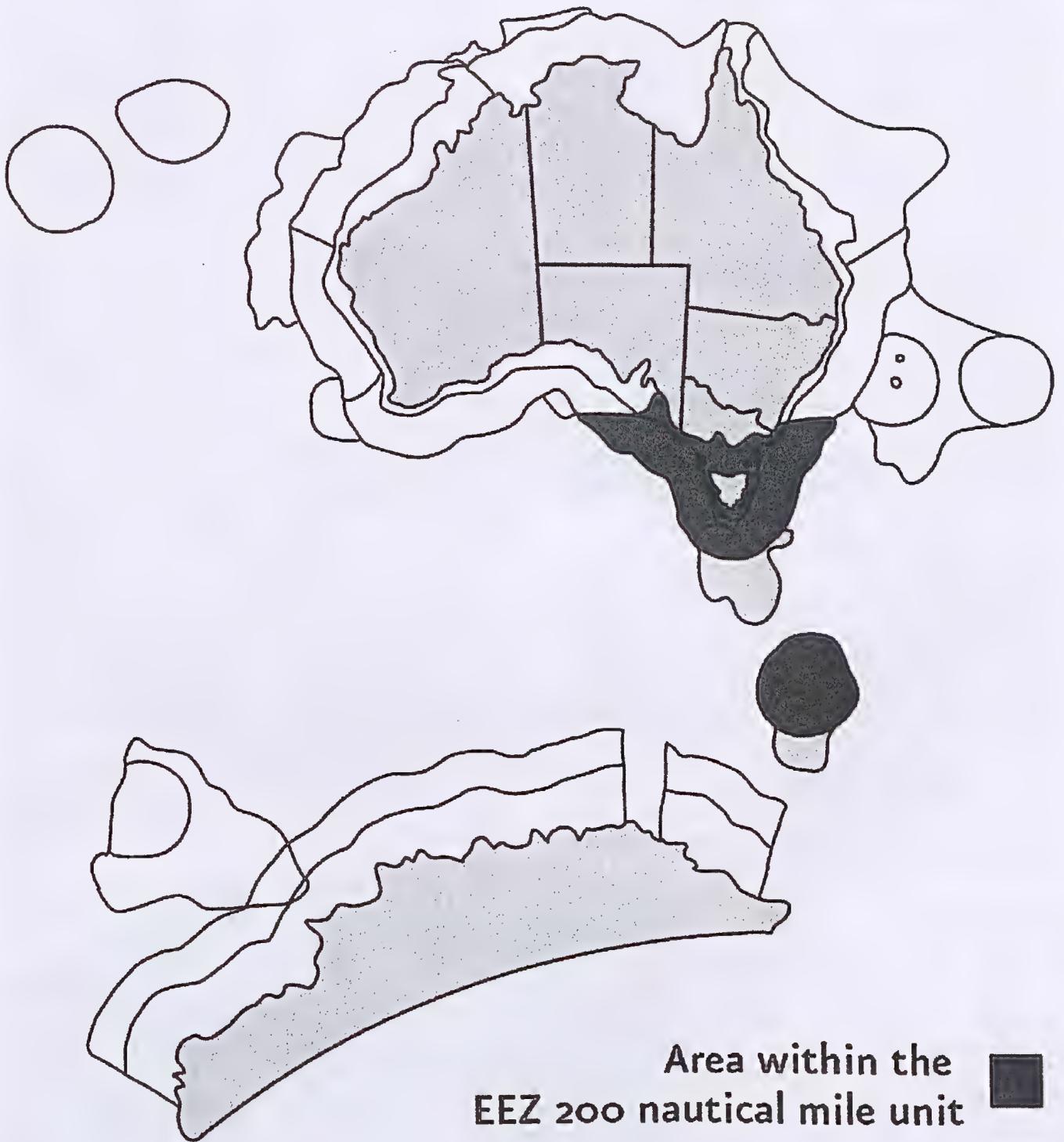
**“Voyages like these are demonstrating clearly that such expeditions are helping scientists increase their knowledge of the deep oceans.”**

To widen avenues for comment, documents will be available, and other avenues for participating include getting involved in regional meetings and forums, participating in briefings and reviews, responding to discussion papers and fact sheets and subscribing to our mailing list and email bulletin. To register your interest or for more information about the National Oceans Office and its programs, see the National Oceans Office web site at [www.oceans.gov.au](http://www.oceans.gov.au) or talk to our staff on Tel (03) 6221 5000.

This article kindly supplied to ICE BREAKER by:

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# SOUTH-EAST MARINE REGION



Area within the EEZ 200 nautical mile unit

Area of claimable extended continental shelf



## NEW MARINE SCIENCE STUDIES

An education package specifically focussed on Tasmania's marine environment will be available in schools next year. The package was funded by the National Heritage Trust Fisheries Action Program and prepared by the Department of Primary Industries, Water and Environment, Tasmanian Educational Leaders Institute and the Marine Discovery Centre at Woodbridge. Contributions were also made by the CSIRO, Marine and Safety Tasmania and Tasmanian teachers.

Co-ordinator of the Marine Links unit is Jennifer Pratt, who discovered that most marine educational resources were based on warm, tropical waters which had little relevance to those around Tasmania. In contrast, Marine Links concentrates on local marine resources and how to sustain them.

## COOL CHOCOLATE

Christie's Polar Sale in London in September included a 100-year-old bar of chocolate removed from Captain Scott's ship *Discovery* after its return from Antarctic exploration in 1904. The chocolate, which still showed the Cadbury trademark, was sold for \$A1,500 to an unnamed buyer.

Other polar memorabilia sold at the same auction were a photo of Shackleton's *Endurance* (\$45,000) and the diary of Alexander Macklin, assistant surgeon on the *Endurance* (\$315,000).

## NASA'S GAIN

Dr Des Lugg, head of polar medicine at the Australian Antarctic Division for the past 33 years, resigned in June 2001 to take up a position in USA. He will be visiting professor at the University of Texas' medical branch in Galveston, as well as chief of medicine in extreme environments at NASA's headquarters in Washington DC, and at the Johnson Space Center in Houston.

Over the past 39 years, Dr Lugg has been a frequent Antarctic expeditioner and his extensive research into the effects on humans of isolation in an extreme environment will be of great benefit to his new research for astronauts. ICE BREAKER wishes Dr Lugg every success in his new job.

## POLAR FIRE

Research at Britain's Rothera Station on the Antarctic Peninsula suffered a major setback in September this year when the Bonner biological research laboratory caught fire. All staff were evacuated but attempts to quell the fire were unsuccessful, with firefighters hampered by darkness, snowdrifts and 75 knot wind gusts.

The laboratory was built in 1997 and contained a seawater aquarium, SCUBA diving facility, controlled environment chambers and facilities for microbiological and molecular research. Up to 20% of the whole research program was based at the laboratory, and only a small percentage of the work will be able to be carried out at other stations.

## PROJECT FUNDING

- This year, further funds from the Federal Government's National Heritage Trust have been provided for activities on Macquarie Island, including the control of ship's rats in localized areas, rabbit control and monitoring king penguin numbers.

- A member of Tasmania's Sustainable Tourism Co-operative Research Centre, Dr Lorne Kriwoken, has received a grant to assist with his research on sustainable Antarctic tourism.

- The Australian Research Council (ARC) has provided research grants to the University of Tasmania's Institute of Antarctic and Southern Ocean Studies.

- ARC has also awarded a five-year grant to paleontologists Tom and Pat Rich to research polar dinosaurs which existed in Australia about 100 million years ago.

## ANTARCTIC VIEWINGS

As part of the Mitchell Library's celebrations for its centenary in 2010, collections of Antarctic material will be featured in 2002. A series of Antarctic films, including those from Ponting's, Hurley's and Byrd's expeditions will be screened, followed by other documentaries made over the past 100 years. A major exhibition will also be held later in the year, with historical memorabilia from early expeditions to Antarctica. For further information contact the organizer, Stephen Martin on (02) 9273 1766 or (02) 9981 5809.

# POLAR WASTE AWAY

Once again, Australia is setting an example among the 42 Antarctic Treaty nations concerning environmental issues. The Australian Antarctic Division (AAD) and Collex-Onyx/Vivendi Environnement now have a collaborative arrangement regarding waste management in Antarctica. In response to the AAD's strategy for returning nearly 40 years of accumulated waste in Antarctica, a French company, Vivendi Environnement, is donating services and products to help AAD fast-track this program. Direct funding has been provided for 240 purpose-built waste containers which AAD will use to return waste to Australia. The first batch of these has already been built by Doric Engineering, a Tasmanian firm based in Quoiba. Half the order of steel containers, each able to hold 10 tonnes of solid waste, will be shipped to Antarctica on the *Aurora Australis* on December 17, 2001.

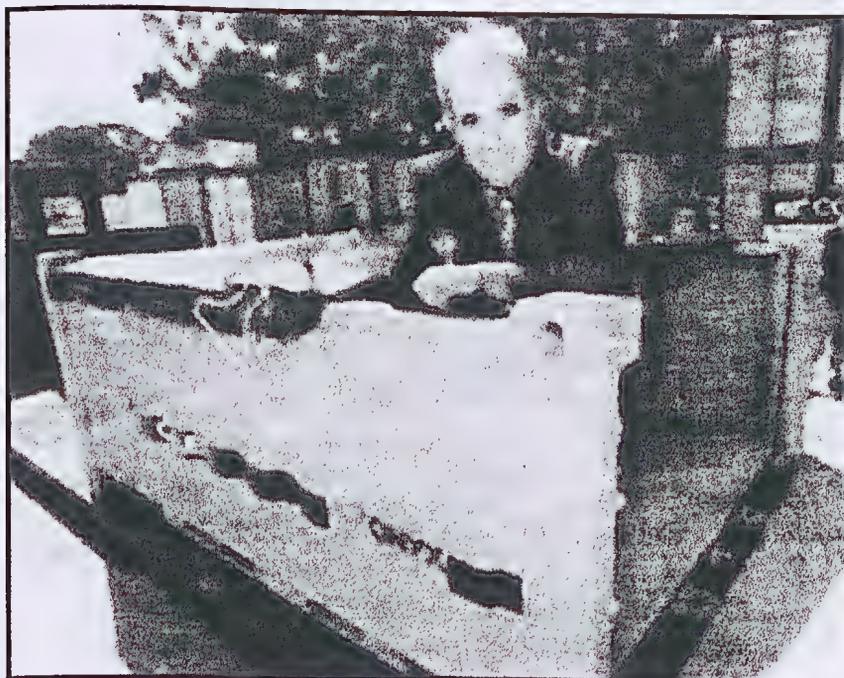
The first area to be thoroughly cleared and restored to its original condition will be the Thala Valley near Casey Station, where there is an estimated 3000 tonnes of waste to be removed for treatment in Australia. Over the next 10 years, the containers will be made available to other Treaty nations, so that all Antarctic waste is returned to the country of origin.

As the Chairman of the Vivendi Environnement Management Board, Henri Proglio says, "The agreement with the Australian Antarctic Division and our company is a true reflection of our commitment towards sustainable development. Our mission is not only to use our expertise in waste management, but also in water preservation, energy efficiency, and transport optimization to protect the Earth's resources and its natural heritage for future generations.

As one of the few remaining virgin areas of the planet, Antarctica will be a symbol of this mission.

This venture will continue to reinforce the long-term commitment of France and Australia to its preservation and protection. We would like this agreement to serve as a showcase and for it to lead to stronger involvement by all parties who are concerned with the future of our planet."

Vivendi Environnement has research laboratories in France which spend millions of dollars annually in solid and liquid waste processes. As a result of this new agreement, Collex-Onyx will extend opportunities to AAD scientists and engineers to participate in technology transfer programs which will assist in providing the funds, the services and expertise to allow Australia and other Antarctic Treaty nations to achieve their environmental goals.



Manager of Doric Engineering,  
Jimmy Trambas, with one of the  
new Antarctic waste containers.

# POLAR NEWS



## THE BLUE PLANET

An eight-part series on the natural history of the oceans has been screening on ABCTV recently. Co-produced by the BBC and Discovery Channel, the series has included both Arctic and Antarctic sea life as well the rare Tasmanian handfish.

## MORE POLAR EDUCATION

Students in Canada and USA now have the opportunity to visit both the Arctic and Antarctic regions, thanks to Canadian Geoff Green, founder Students on Ice. To join a group studying in a polar environment, applicants are required to write essays explaining why they want to join the expedition, as well as raise \$US 5,600. Successful applicants then board an icebreaker chartered for the polar study cruise. Lectures in oceanography, history, geology and marine biology are given by experienced scientists and expeditioners, and students also carry out experiments on ocean currents, salinity and ocean depth. Inflatable boats take students to shore to study plant and marine life each day, and discussions on topics such as global climate change are given in the evenings. For further information: [www.studentsonice.com](http://www.studentsonice.com)

## NEW OCEAN MONITORS

Over the next five years, a team of international scientists plan to launch 3000, 1.5 m-long floats which will drift with ocean currents 2 kms underwater. Once deployed from ships or aircraft, the floats will surface every 10 days and report data via satellite to Argo, a group of scientists researching climate change.

The information will be used to create ocean weather maps detailing currents as well as temperature and salinity patterns. Argo is a component of a larger international ocean weather project called Global Ocean Data Assimilation Experiment.

## WEBSITE UPDATE

Check out the upgraded website for Antarctic Adventure, at [www.antarctic.com.au](http://www.antarctic.com.au) - produced by Tweezy.

## TPN COMMITTEE FOR 2001-2002

At the Annual General Meeting of the Tasmanian Polar Network (TPN), held on 7 October, 2001, the following Executive Committee was elected:

Chairman	<b>Bill Lawson</b> (Sinclair Knight Merz)
Senior Deputy Chairman	<b>Antoine Guichard</b> (Latitude Technologies)
Deputy Chairman	<b>Wayne Tucker</b> (Hobart Int. Airport)
Secretary	<b>Bill Bleathman</b> (Office of Ant. Affairs)
Treasurer	<b>Hugh Hutchinson</b> (Bureau of Meteorology)
Committee Members	<b>Rod Cameron-Tucker</b> (Antarctic Adventure) <b>Geraldine Edwards</b> (Moonraker Australia) <b>Richard Burgess</b> (P&O Polar)

## POACHER FINED

The Captain of the Togo-registered *South Tomi*, caught illegally fishing for Patagonian Toothfish in the Southern Ocean, has been ordered to pay \$A136,000 for poaching. Cleared by the court for failing to comply with a fisheries officer's order to sail back to Fremantle WA after being apprehended near Heard Island, the Captain pleaded guilty to 2 charges of fishing illegally in Australian waters and was fined the highest amount to date.

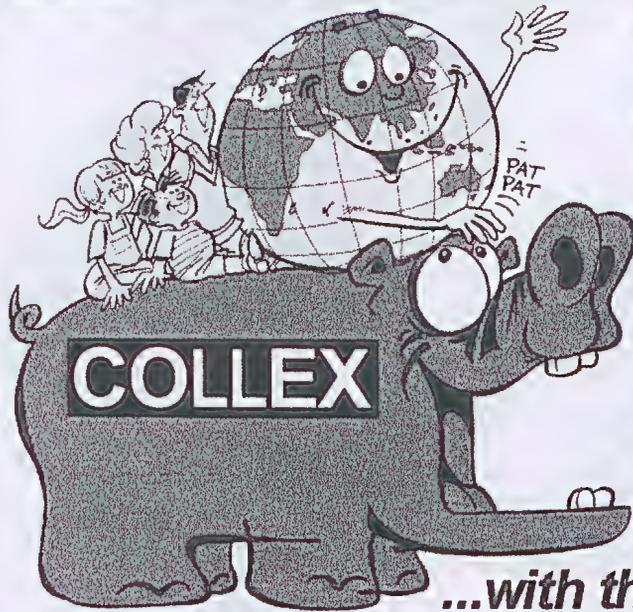
The catch of 117 tonnes of Toothfish was sold by authorities for \$1.4 million.

## ALL TASMANIAN CD-ROM

Not since 1930 has a comprehensive encyclopedia of Tasmania been produced, and 'Tasmania The Island - Fact File', on CD-ROM, is now available. Produced by Hobart researcher and writer Ann Greenwood, the CD-ROM contains 1800 entries and about 300 images.

A useful reference for potential visitors to Tasmania, copies are available for \$39.95 from the Visitor Information Centre, the Tasmania Shop and Global Online Marketing at [www.ontas.com.au/fact-file](http://www.ontas.com.au/fact-file)

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# POLAR PUBLICATIONS



## BOOKS

**‘Antarctica: The Complete Story’** by David McGonigal and Lynn Woodworth. Published by Five Mile Press. Price: \$99.95.

This 608 page book is divided into 6 parts covering the geology, geography, life, tourism and exploration of Antarctica. The CD-ROM included features 80 website links as well as an Antarctic wildlife and weather sounds. (N.B. No mention is made of the Tasmanian Polar Network.)

**‘The voyage of the Narwhal’** by Andrea Barrett. Published by W.W.Norton & Company. Price: Unknown.

This novel is based on explorers and their ship stuck in Arctic sea ice and the interpersonal relationships between the crew when confined in extreme conditions.

**‘In Shackleton’s Wake’**. Published by Sheridan House. Price: \$US25.

First published in German, this English version details the ‘Shackleton 2000’ expedition re-enactment.

## BOOK REVIEW

**‘Endurance’** by Alfred Lansing. Published by Phoenix Press. Price: \$35.00.

‘Endurance’ is a fitting title to a story of survival in extreme and constantly changing conditions in Antarctic waters. Frank Hurley’s photographs capture the atmosphere with stark clarity and Lansing’s text, based on Shackleton’s expeditioners’ diaries and personal accounts of events of 1914-16, clearly reflects the daily struggle to survive.

The book, divided into 6 parts, begins by covering the early preparations for Shackleton’s Imperial Trans-Antarctic Expedition and then recounts the different stages of the journey made by the men when their ship becomes stuck fast in ice off the Antarctic coast – firstly the sinking of the ship *Endurance* and the 28 men with their equipment drifting northward on ice floes. Then came the voyage, by 3 small boats in appalling wind and sea conditions, to Elephant Island, where 22 of the men were left. Only Shackleton and a small crew attempted to seek help by rowing to South Georgia Island, where they had to cross the island’s rugged interior to reach Stromness Whaling Station. After 3 failed attempts to reach the men on Elephant Island, the Chilean ship *Yelcho* successfully rescued all the expeditioners on August 30, 1916. Lansing has effectively captured the tension created by the difficult conditions and clearly portrays the expeditioners’ characters and methods of survival.

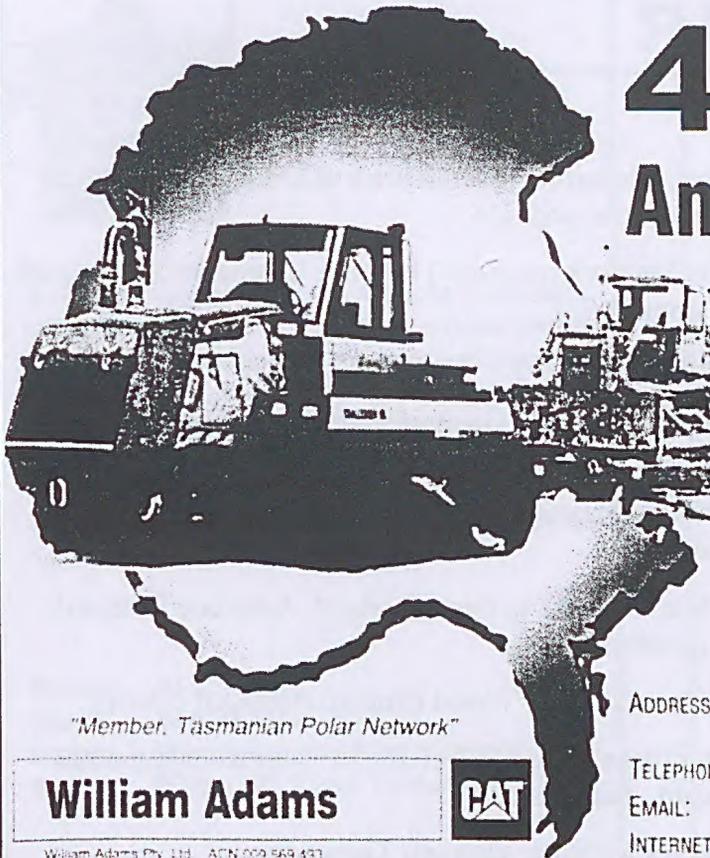
(Both ‘Just Tell Them I Survived!’ reviewed in Issue 16 and ‘Endurance’ kindly supplied to ICE BREAKER by Allen and Unwin .)

## MAGAZINES

**Australian Antarctic Magazine – Spring 2001** edited by Elizabeth Haywood. Published by the Australian Antarctic Division.

Maintains the high standard set in the first edition and contains a wide range of articles on scientific research projects carried out by the AAD.

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# POLAR CALENDAR



- |       |           |      |   |
|-------|-----------|------|---|
| 10    | December  | 2001 | 90 <sup>th</sup> Anniversary of departure from Hobart of Douglas Mawson's Australasian Antarctic expedition.  |
| 14    | December  | 2001 | Tasmanian Polar Network meeting. 11.00 am. Tasmania Technopark <b>Glenorchy, Tasmania.</b>  |
| 29    | December  | 2001 | International Biodiversity Day.   |
| 4-11  | January   | 2002 | High Plateau Marathon, South Geographic Pole, Antarctica. Contact: <a href="mailto:general@adventure-network.com">general@adventure-network.com</a>     |
| 13-15 | February  | 2002 | Bi-annual Australian Organic Geochemistry Conference. CSIRO. <b>Hobart, Tasmania.</b>   |
| 2     | March     | 2002 | Fifth Antarctic Marathon. King George Island, Antarctic Peninsula. Contact: <a href="mailto:marathon@shore.net">marathon@shore.net</a>                  |
| 18-23 | March     | 2002 | Joint Scientific Committee on World Climate Research meeting.   |
| 14-18 | April     | 2002 | Contaminants in Frozen Ground Conference. Australian Antarctic Division. <b>Kingston, Tasmania.</b>   |
| ?     | May       | 2002 | Biospheres Reserves Meeting. <b>Hobart, Tasmania.</b>   |
| 1-12  | July      | 2002 | Antarctic Environmental Management Course. <b>Hobart, Tasmania.</b> Contact: <a href="mailto:Carolyn.Napier@utas.edu.au">Carolyn.Napier@utas.edu.au</a> |
| 15-26 | July      | 2002 | XXVII SCAR and XIV COMNAP meetings. Shanghai, China<br>Contact: <a href="mailto:jsayers@comnap.aq">jsayers@comnap.aq</a>                                |
| 3-14  | September | 2002 | XXV Antarctic Treaty Consultative Meeting. Warsaw, Poland.  |



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&



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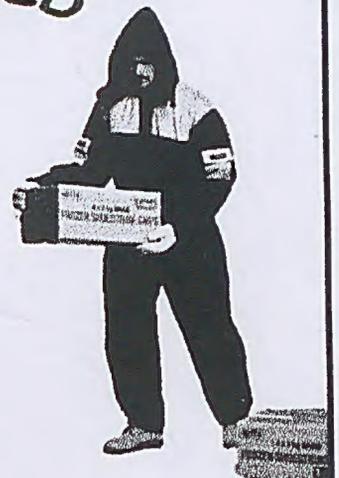
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## ANTARCTIC AND SOUTHERN OCEAN SHIPPING CALENDAR

4	December	2001	POLAR BIRD V4	Departs Sansom Island.
4	December	2001	SIR HUBERT WILKINS	Departs Hobart for C'wealth Bay.
4-6	December	2001	L'ASTROLABE	Arrives, departs Hobart for Antarctica.
9-13	December	2001	POLAR BIRD V4	Mawson Base.
13	December	2001	GEO ARCTIC	Arrives Hobart.
14-16	December	2001	AURORA AUSTRALIS V3	Arrives Hobart from Marine Science.
14-16	December	2001	ITALICA	Arrives, departs Hobart.
16	December	2001	SIR HUBERT WILKINS	Departs Hobart for C'wealth Bay.
14-16	December	2001	AURORA AUSTRALIS V3-V5	Arrives, departs Hobart.
19-20	December	2001	KAP. KHLEBNIKOV V4.2	Arrives, departs Hobart.
20	December	2001	GEO ARCTIC	Arrives Hobart from research.
26-30	December	2001	L'ASTROLABE	Arrives, departs Hobart for Antarctica.
25-31	December	2001	AURORA AUSTRALIS V5	Casey Base.
27-30	December	2001	POLAR BIRD V4	Arrives, departs Hobart.
9-11	January	2002	AURORA AUSTRALIS V5-V7	Arrives, departs Hobart.
10	January	2002	SIR HUBERT WILKINS	Departs Hobart for Macquarie Island.
11-14	January	2002	POLAR BIRD V6	Davis Base
18-23	January	2002	POLAR BIRD V6	Mawson Base.
20	January	2002	SIR HUBERT WILKINS	Departs Hobart for Macquarie Island
22	January	2002-	AURORA AUSTRALIS V7	Marine Science.
5	February	2002		
24-27	January	2002	L'ASTROLABE	Arrives, departs Hobart for Antarctica.
5	February	2002	POLAR BIRD V6	Arrives Hobart.
6-8	February	2002	AURORA AUSTRALIS V7	Davis Base.
11-12	February	2002	AURORA AUSTRALIS V7	Mawson Base.
12-14	February	2002	KAPITAN KHLEBNIKOV	Arrives, departs Hobart.
15-18	February	2002	L'ASTROLABE	Arrives, departs Hobart.
23-25	February	2002	AURORA AUSTRALIS V7-V8	Arrives, departs Hobart.
24	February	2002	SIR HUBERT WILKINS	Arrives Hobart.
28	February	2002-	AURORA AUSTRALIS V8	Macquarie Island.
6	March	2002		
9	March	2002	AURORA AUSTRALIS V8	Arrives Hobart.
12	March	2002	L'ASTROLABE	Arrives Hobart.

For up-to-date shipping information, check the Hobart Ports Corporation website and the Australian Antarctic Division's website:

[www.hpc.com.au/expected](http://www.hpc.com.au/expected)  
[www.aad.gov.au/goingsouth](http://www.aad.gov.au/goingsouth)