PMRS

PACIFIC ISLANDS MARINE RESOURCES INFORMATION SYSTEM

PIMRIS is a joint project of the South Pacific Applied Geoscience Commission(SOPAC), the Forum Fisheries Agency(FFA), South Pacific Commission(SPC) and The University of the South Pacific(USP) funded by Canadian International Development Agency. The SPC component is funded by the Government of France, South Pacific Regional Environment Programme(SPREP) is also another cooperating institution.

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(Views expressed in the articles are not necessarily those of the institutions cooperating in the PIMRIS Network)

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FROM THE PIMRIS DESK.....

The year 2003 witnessed the first time scheduling of the PIMRIS Steering Committee Meeting using the Satellite communication facility at the USP. Prof. Rajesh Chandra, Acting Vice Chancellor (AVC), gave his official opening address in which he highlighted various aspects of PIMRIS. He appreciated the use of USPNet for this meeting. More on the meeting can be read in this issue.

Fiji Government officials have revealed that the country's tourism development is causing serious environmental degradation, in particular, coral reefs, which are suffering irreversible damage. The full article can be found inside.

A Global Initiative for the conservation and sustainable use of coral reefs is being produced by Ocean Futures Society. A press release from the Society is provided in this Newsletter.

The PIMRIS Coordinator leaves PIMRIS in January 2004 after serving PIMRIS for thirteen years and the University for fifteen and half years.

This issue of the Newsletter also provides some recent information releases and announcements:

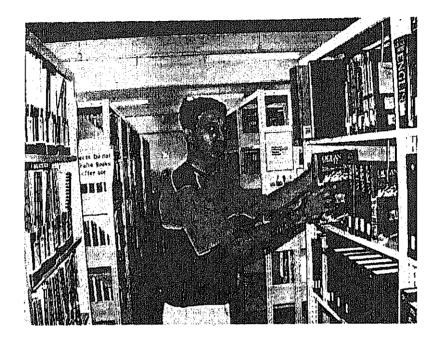
> Happy Festive Season & The New Year. Ganeshan Rao PIMRIS Coordinator

REQUEST

This is a request to you to deposit copies of any of your publications (published or unpublished - reports, research papers, technical papers, etc.) with PIMRIS. The annual reports are especially important. The items will be added to the Pacific Collection of USP Library.

PIMRIS has been continuously soliciting for documents (published or unpublished) on Marine Resources (living as well as non-living), specific to the Pacific Island countries. This is essential in order to create a centralised location in the Region where most of the marine related documents could be found.

PIMRIS COORDINATION UNIT



Adrian Singh, worked at PIMRIS Library during December 2003/January 2004 on a special library shelf reading project and other activities.



Gwen Mar, Graduate Trainee at USP Library, was attached to PIMRIS for 3 weeks in December 2003. She worked on a special cataloguing project and other activities.

PIMRIS STEERING COMMITTEE MEETING

This meeting was held during 11-12 November at USP. This was the first time the meeting held using USPNet Satellite communication so the participants could attend via USP centres in their countries. The Actng VC Chandra officially opened it. Representative from FFA, SPC, SPREP, USP, Pacific Is Ocean Forum, FAO/SAPA, and six country fisheries departments attended. A complete set of discussion papers and minutes are available at the Librarian's office for reference.

Prof. Rajesh Chandra, Acting Vice Chancellor (AVC), gave his official opening address in which he highlighted various aspects of PIMRIS. He appreciated the use of USPNet for this meeting. The use of Information Communication Technology in the region has expanded recently. Having this PIMRIS meeting for the first time through the USPNet allows participants to be part of the meeting without incurring financial cost and also saving time.

He explained that PIMRIS is a cooperative information network of five regional organizations based at the Marine Studies Facility supported jointly by the University Library and Marine Studies Programme. The initial funding to establish PIMRIS components came from Canada while that of SPC came from the Government of France and the AVC thanked the funding agencies

The meeting arrived at various recommendations and resolutions to be the implemented for the betterment of PIMRIS over the next two years. These covered areas such as: means of providing help to fisheries departments of Pacific island countries; Catalogue records from regional partners can be converted into the current central WINISIS System; Ad-hoc database working group; in information dissemination despite various resource constraints; library use policy; strengthening information networking etc.

CONCERNS ON OVER SURVEY OF PACIFIC OCEAN

There is a major concern that a large amount of data on many years of survey on the Pacific Ocean is either lost or difficult to identify.

The director of the South Pacific Applied Geoscience Commission (SOPAC), Alfred Simpson, advised scientists working in the Pacific that a large number of past research initiatives have not been followed up. He said that the Pacific Ocean is one of the world's most surveyed areas in the world today. He said research had been carried out over the course of the last two decades with very little follow done on the part of scientists'.

Mr Simpson suggested at the 32nd Annual SOPAC Session in Niue that Pacific Island countries must be encouraged to work with the SOPAC secretariat toward addressing the issue of data rescue and improved co-ordination of future marine scientific research activities through maintaining robust national and regional databases.

Mr Simpson told delegates there would be "a normal state of a system" in respective Pacific Island countries on what they can do in their parts of the Pacific Ocean but requested that they consider requesting SOPAC to carry out the important tasks as it had the technical expertise and know-how.

Data collecting on the Pacific Ocean has been on everything from marine mining, habitat mapping, scientific research, seabed survey, ridges, ocean currents, fish stocks, sand mining, war wrecks, environmental degradation, etc.

SOPAC has said it hopes to work with its Council of Regional Organisations (CROP) colleagues to collect as much data as possible on research done in the Pacific Islands, whether it is out at sea or on Land.

Excerpts from Source: PACNEWS 3: Fri 03 Oct 2003

FIJI TOURISM DESTROYING REEFS

Senior Fiji Government officials have revealed that the country's tourism development is causing serious environmental degradation, in particular, coral reefs, which are suffering irreversible damage.

Minister for Tourism, Pita Nacuva, told a Stakeholders Consultation workshop in Nadi last Tuesday that a Strategic Environment Assessment (SEA) of Fiji's Tourism Development Plan 1997 - 2005 has found that the vulnerability of an island country such as Fiji to environmental and cultural erosion meant, "small impacts can result in serious damage".

The SEA was conducted this year through an agreement between Fiji's Ministry of Tourism and World Wide Fund (WWF) and is funded by the Asian Development Bank to understand the likely environmental and social impact of the Tourism Development Plan by comparing the current environmental, social and economic baseline and likely trends under the Tourism Development Plan.

According to a WWF press statement, an SEA recommendation included the implementation and enforcement of the Fiji Government's Sustainable Development Bill as well as the establishment of an Environmental Fund, to be derived from visitor user fees and the establishment of effective tourism planning at tikina (district) and provincial level and only permit tourism developments approved through the process.

Excerpts from Source: PACNEWS 1: Tues 09 Sept 2003

THE CNIDARIA HOME PAGE

http://www.ucihs.uci.edu/biochem/steele/default.html

The Cnidaria Home Page is maintained by Rob Steele at the University of California -- Irvine "for the use and benefit of the worldwide community of researchers studying all aspects of cnidarian biology." The Cnidaria Home Page serves as a centralized Web portal for all things cnidarian, including cnidarian genomics, research history, lab protocols, related newsgroups and newsletters, and much more. Also, the General Information section contains downloadable review articles on cnidarians from _Canadian Journal of Zoology.

Source: From the The NSDL Scout Report for the Life Sciences -- October 17, 2003

THE IODE GROUP OF EXPERTS ON MARINE INFORMATION MANAGEMENT

This Group is a team of knowledgeable marine science information management professionals selected carefully to outline, review and list priorities of tasks for implementation under IODE activities and work/address on the specific marine science information issues arising from time to time during intersessional period under its terms of reference. GEMIM was established by IODE-XI (New York, 9-18 January 1984) through Recommendation IODE-XI.4 (IODE's role in marine information management)

Terms of Reference

- (a) advise the Working Committee on IODE on the policy, development and further implementation of an effective international system for scientific and technical inormation about marine environment by keeping user requirements under continuing review and ensuring that these requirements can be met adequately;
- (b) Identify the policy, technical and financial problems involved in the development and implementation of marine information systems, and make recommendations concerning their solution;
- (c) Develop programmes to improve the capability of Member States, particularly developing countries, to benefit from and participate in marine information systems and keep Member States informed on how they might best have access to such systems through the application of information technology;
- (d) Report to the Working Committee on IODE on matters with special reference to ASFIS and MEDI pertaining to United Nations and specialized agencies information systems and services related to the marine area;
- (e) Represent IOC on inter-agency panels on marine information and related systems such as those required by ASFIS and MEDI.

Membership

- Dr. Murari P Tapaswi (India), <u>murari@csnio.ren.nic.in</u> (Chair, elected at GEMIM-VI), Librarian, National Institute of Oceanography, India.
- Pauline Simpson (UK) <u>ps@soc.soton.ac.uk</u>, Head of Information Services University of Southampton Waterfront Campus, United Kingdom
- Suzie Davies (Australia) <u>suzie@gbrmpa.gov.au</u>, Librarian Great Barrier Reef Marine Park Authority, AUSTRALIA
- Sofia Goulala (Greece) <u>sqoulala@ncmr.gr</u>, Head of Library, Documentation and Information Center, Greece.
- Janice Beattie (United States) <u>jbeattie@nodc.noaa.gov</u>, Director NOAA Central & Regional Libraries, MD, USA
- Marc Goovaerts (Belgium) <u>marc.goovaerts@luc.ac.be</u>
 University Library LUC, BELGIUM.



IOC's IODE

The IOC's International Oceanographic Data and Information Exchange (IODE) was established in 1961 to enhance marine research, exploitation and development by facilitating the exchange of oceanographic data and information between participating Member States and by meeting the needs of users for data and information products. The IODE system forms a worldwide service oriented network DNAs (Designated National Agencies), NODCs consisting of Oceanographic Data Centres), RNODCs (Responsible National Oceanographic Data Centres) and WDCs (World Data Centres - Oceanography). During the past 40 years, IOC Member States have established over 60 oceanographic data centres in as many countries. This network has been able to collect, control the quality of, and archive millions of ocean observations, and makes these available to Member States.

The main objectives of the IODE Programme are (i) to facilitate and promote the exchange of oceanographic data and information; (ii) to develop standards, formats and methods for the global exchange of oceanographic data and information; (iii) to assist Member States to acquire the necessary capacity to manage oceanographic data and information and become partners in the IODE network.

The IODE network has been able to collect, control the quality of, and archive millions of ocean observations, and makes these available to Member States. Whereas in the past IODE data centers focused mainly on physical oceanography data, the IODE Programme now gives attention to all ocean related data including physical oceanography, chemical, biological, etc. IODE now closely collaborates with, and services the needs of the other IOC and related programmes such as Ocean Sciences, GOOS and the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM). Another major and long-term commitment of the IODE Programme is the long-term accessibility and archival of oceanographic data, meta-data and information to safeguard present and future holdings against loss or degradation.

In today's information-rich environment, the IODE Programme, due to IOC's role as UN focal point for Ocean matters, will also increasingly play an active role in guiding users to information through the development and maintenance of specialized Portals and clearing-house mechanisms, and this in close collaboration with UN and other agencies.

Contact & excerpts from Source at: http://www.iode.org



seemingroved data and information for management, research and education

www.reefbase.org

www. worldfishcenter.org

Introduction

ReefBase is a global information system on coral reefs and was developed by the WorldFish Center and the International Coral Reef Action Network (ICRAN). This online database provides quality information on the location, status, threats and management of coral reefs in nearly 100 coral reef countries and territories. ReefBase serves as the central database for the Global Coral Reef Monitoring Network (GCRMN) and ICRAN, and continues to provide valuable information services to managers, policy-makers, researchers, conservationists. educators and students around the world.

The first online version of ReefBase was launched on April 19th 2002 (http://www.reefbase.org). During its first year, the ReefBase website received more than 200 000 visits by over 60 000 individuals from 136 countries. During that time, more than 60 000 publications were downloaded from the ReefBase website.

A major new version of ReefBase's online information system was launched in August 2003 (Figure 1). It was designed to provide better access to more information. In this article, we highlight some of the improved contents, layout and functionality that will strengthen ReefBase as a key source of quality information for coral reef professionals.

New Website

The ReefBase website has been redesigned to create a more attractive and user-friendly interface. A new navigation menu makes it easier to locate relevant information. It is also possible to retrieve data and information not only at the country level, but also for larger regions (e.g., information can be queried for Fiji, as well as for Melanesia, or the entire Pacific).

Coral Bleaching Data

During the past year, ReefBase, in collaboration with NOAA, has developed an extensive collection of information on recent as well as historical coral bleaching events, based on literature and communication with experts. This global phenomenon of coral bleaching has affected coral reefs around the world, and continues to be of concern for both researchers and managers. This dataset is combined in ReefBase's Geographic Information System (GIS) with monthly updated maps of ocean temperatures around the world, and thus provides an early warning system for this important phenomenon.

Download Datasets

Much of the ReefBase data can now be downloaded from the website in various formats. A prominent feature is the availability of GIS-datasets for nearly 100 countries and territories that have coral reefs. Such datasets are 'complete packages' which include coastlines, coral reefs, mangroves, MPAs, reef monitoring

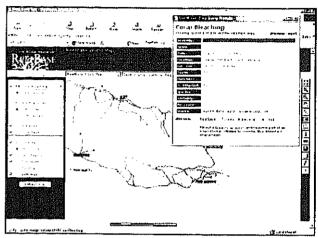


Fig. 1. ReefBase's online GIS provides a powerful tool to view and query coral reef data via interactive maps. Many of the GIS datasets are also available for downloading from the new ReefBase website (http://www.reefbase.org).

activities, observations on coral bleaching, and other reef related information. These datasets are available free of charge, and can be used in combination with one's own data for research, education and management purposes.

Reef Mapping Tools

ReefBase has developed a state-of-the-art interactive mapping system (GIS), allowing users to draw maps of coral reef areas using their Web browsers. Coral reef related datasets can be switched on and off, queried, and full-color maps can be saved for use in publications or presentations.

This updated version of our mapping system includes numerous new maps and datasets, particularly from remote sensing sources.

What's Next?

ReefBase is preparing thematic CD-ROMs on coral reef issues (i.e., Coral Bleaching, Reef Monitoring). In addition, we plan to expand our database contents considerably throughout 2003 and 2004. We are currently preparing for active collaboration and data-sharing with monitoring programs around the world. We envision to generate the key statistics and data summaries for coral reef status reports at the national, regional and global scales. By doing so, we strive to improve management of coral reefs, and ultimately benefit poor people in developing countries who depend on these resources for food, income and livelihoods.

For further information:

ReefBase Project WorldFish Center PO Box 500 GPO 10670 Penang, Malaysia reefbase@cgiar.org





FishBase - The world's premier Information System and Global Public Good on Fishes

www.fishbase.org

www.worldfishcenter.org

FishBase is the world's premier information system on the world's fishes, with detailed information on almost all of the known world fish species (28,000 species representing 96% of known species). This includes species biology, life history, ecology, diseases, diet, taxonomy, larvae, aquaculture, ecosystems, species introductions, images, identification keys, world records and museum information. It is the largest site on the internet for fish occurrence information with over 1.5 million fish records, representing over 250 years of fish collections worldwide.

Information for All

FishBase is widely used, with up to 8 million web-site hits per month in 2003 and over I million users visiting the web site in 2002. Information is available in 234 languages, including national scripts as Chinese, Thai, Arabic, Hindi, Russian, Greek and in multi-media (CD-ROM, DVD, and on the Internet). Over 100



reports are quickly and easily available to users with essential information for biodiversity conservation, fisheries management, and increased fish production by species, country or topic. FishBase also provides powerful but user-friendly analytical and graphical tools to assess the state of fisheries and provide policy guidance, especially in data-poor situations. It offers a number of networking mechanisms and opportunities to connect scientists, managers, students and the general public worldwide, through a "Fish Forum", "Guest Book" and E-Mail.



FishBase website statistics for 2002

- > 1.1 million unique users from 187 countries
- > 2 million User Sessions,
- 21.9 million web site hits
- 940 linked web sites

A State of the Art System

FishBase uses state of the art computer programming techniques and information technology. On the desktop and on the internet, web-based dynamic links to other internet sources of information package and generate data and information in thematic, ecosystem and country formats. By integrating a number of databases and working with leading scientific institutions, FishBase provides users all over the world with immediate and powerful access to the world's best available public information on fishes and country-related information.

Networking globally with **FishBase**

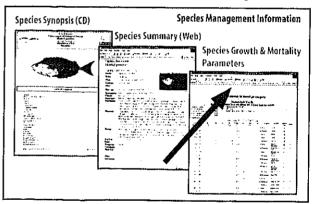
- **Encoding & Remote** Data Entry
- Internet Multi-Access
- Experts Listing
- Fish Forum Exchange
- GuestBook Exchange
- FishBase Team global Exchange

What FishBase Users Say

FishBase has received many positive endorsements from users internationally. Typical comments include the following: The Natural History Museum, London, UK "Authoritative, useful and well designed." (Douglas G.D. Russell); Marine Biological Research Institute, India "very gooooood site.We can find out any of the species available around the World" (Dr. S.G. Belsare); INDP - Cape Verde "FishBase is a very useful tool for fisheries research. I've been using this electronic encyclopedia since 1998, also to teach about biological characteristics of marine resources in my country." (Anibal Delgado Medina); CAB International, UK "Probably the finest taxonomic database I've used on the internet. Very useful for indexing and checking species names/taxonomies in our bibliographic database. A must." (Tony Pittaway); Kasetsart University, Thailand "Thank you for your great information....." (Panuwat Poungsuwan)

The History of FishBase

Since 1988 FishBase was conceived and developed at the WorldFish Center and the Center has developed and significantly invested in FishBase in cooperation with the Food and Agriculture Organization of the United Nations (FAO) and over 900 collaborators (organizations and individuals), with support from the European Commission and other donors. Institutionally, a FishBase Consortium has been created of WorldFish Center; FAO; Institut fur Meereskunde, Kiel (IFM-K), Germany; University of British Columbia (UBC), Canada; Muséum National d'Histoire Naturelle (MNHN), France; Musée Royale de l'Afrique Centrale (MRAC), Belgium; and the Swedish National Museum (NRM), FishBase is now internationally recognized as a Global Public Good associated with the Center, with the development of such information products formally recognized in the WorldFish Center Strategic Plan (2000-2020) as pivotal for aquatic conservation and management.



Over 100 customized reports (species, family, topic, country, biodiversity, ecosystem) available at one "click"

For further information:

FishBase Project

WorldFish Center - Philippine Office MCPO Box 2631

0718 Makati City, Philippines

fishbase@cglar.org http://www.fishbase.org



JEAN-MICHEL COUSTEAU'S OCEAN FUTURES SOCIETY AND DISNEY/PIXAR TEAM UP TO PROTECT REEFS

SANTA BARBARA, CA.: The blockbuster animated film, *Finding Nemo*, has given millions of people a personal connection to coral reefs that fosters hope for a new generation to become better stewards for our ocean environment, according to Jean-Michel Cousteau.

"We applaud Disney/Pixar for popularizing coral reefs, because Nemo's home and neighbors are in desperate need of help," he said. "Reefs around the world are suffering from human impact, and the more people, especially young people, who know it sooner can take action to turn things around."

Jean-Michel Cousteau's Ocean Futures Society has partnered with Disney/Pixar in creating a coral reef web adventure for children of all ages. These resources add depth and understanding to the *Finding Nemo* storyline. Beginning with Mr. Ray's Classroom on the Disney website (http://disney.go.com/disneypictures/findingnemo/index2.html) and connecting with Jean-Michel Cousteau's Cities Under the Sea – Coral Reefs (http://www.oceanfutures.org/Nemo/index.html), computer adventurers can stay dry and safe while they explore the wonders of coral reefs. They can explore the beauty and diversity of life on the reef, discover how key species keep communities functioning smoothly, and learn how reefs use energy efficiently, recycle wastes and even provide public health for residents.

By going to Jean-Michel Cousteau's Ocean Futures Society's general website, <u>www.oceanfutures.org</u>, interested viewers can become aware of many topics on ocean life and preservation. Membership in Ocean Futures Society is free to all via the website.

"Our teams have created a superb learning adventure to help us all understand the value of reefs and the importance of managing them wisely" Cousteau said. "These treasures of our water planet are fragile and vulnerable... they need our help, now!"

Cousteau is encouraged that *Finding Nemo* conveys a message about pollution, fisheries and the capture of wild fish for the aquarium trade. He is concerned, though, that some people are flushing fish down the drain to liberate them and that the film has created a fad of purchasing clownfish.

"Just as we can purchase dolphin safe tuna, it is now becoming possible to get reef safe marine life for aquaria," Cousteau explained. "The Marine Aquarium Council (www.aquariumcouncil.org.) is now establishing standards and certification for marine life that has been harvested sustainably or have optimally been raised in fish farms. I urge everyone to learn more and help save our reefs."

Ocean Futures Society is presently producing a unique coral reef education program for schools and communities in the Pacific region. It's well known that coral reefs world wide are in crisis; and that, for lack of funding, many schools don't include coral reef education in their curricula. Sustainable Reefs includes resources for teachers and community spokespersons: the new 30 minute video. Sustainable Reefs: A Gift for the Future, a cartoon book, teacher's guides and other resources in a boxed set. Materials will be translated into local languages and provided to schools, free of charge, in 2004.

The mission of Jean-Michel Cousteau's Ocean Futures Society is to explore the global ocean, inspiring and educating people throughout the world to act responsibly for its protection, documenting the critical connection between humanity and nature, and celebrating the ocean's vital importance to the survival of all life on our planet. Ocean Futures Society is based in Santa Barbara, Ca., USA with offices in Paris and Washington, D.C.

UN URGES BALANCE BETWEEN ECONOMY AND CONSERVATION IN TROPICAL FISH TRADE

UN NEWS UPDATE

With over 20 million tropical fish being harvested each year in a trade worth up to \$330 million to supply the booming aquarium market in Europe and the United States, the United Nations environmental agency today called for a proper balance between preserving valuable ecosystems and helping local people battle poverty.

"Collecting tropical fish brings pleasure to millions. It also fuels an important, and mostly legitimate, industry," the Executive Director of the UN Environment Programme (UNEP), Klaus Toepfer, said in launching "From ocean to aquarium: The global trade in marine ornaments," the most comprehensive global survey ever undertaken on the issue.

"The global trade in marine species on the one hand poses a significant risk to valuable ecosystems like coral reefs, but on the other has great potential as a source of desperately needed income for local fishing communities," he added.

"As a result it represents another important weapon in the war against poverty and in helping to meet not only the United Nations Millennium Development Goals but also the World Summit on Sustainable Development's Plan of Implementation," he said, referring to the goals set by the Millennium Summit of 2000 to halve many of the world's ills, including poverty, by 2015.

The annual harvest of over 20 million includes 1,471 species ranging from the sapphire devil to the copperhead butterflyfish. A further nine to 10 million animals, including molluscs, shrimps and anemones and involving some 500 species, are also being traded to supply tanks in homes, public aquaria and dentists' surgeries.

Moreover, up to 12 million stony corals are being harvested, transported and sold annually, according to the report, released by UNEP's World Conservation Monitoring Centre (UNEP-WCMC), which puts the value of aquarium creatures in trade at between \$200 million to \$330 million annually.

Southeast Asia is shown to be the main source of the trade, but species are increasingly being taken from several island nations in the Indian and Pacific Oceans. Most of the demand comes from the United States, Europe and to a lesser extent Japan.

Excerpts from UN News Update. For more updates and press releases Contact; /www.unep.org/Documents.Multilingual

DIGITAL LIBRARY FOR EARTH SCIENCES EDUCATION (DLESE)

DLESE strives to classify & organize materials for a variety of educational age groups. This is a distributed geo-library & they allow input to the system. The new DLESE educational resources have been cataloged as containing content on the topic area of:

- * Agricultural Sciences
- * Biology
- * Ecology
- * Forestry
- * physical oceanography
- * chemical oceanography and/or
- * biological oceanography

The Community Review System gathers web-based feedback on resources from educators who have used a resource to teach with, and from learners who have used a resource to learn with. The CRS provides feedback to resource creators to help them improve their resources, and posts aggregated, anonymous information from the reviews to help users decide whether, and how, to use the resource.

Source & Contact: www.crs.dlese.org

PACIFIC ISLAND LEADERS DISCUSS REEF- MANAGEMENT PRACTICES

The fight for marine preserves - parts of the reef where no fish can be caught has been a long, hard one in the Pacific Islands. In some places, like Guam, it took the better part of two decades just to convince the community, and then lawmakers, to set aside some chunks of reef to try and replenish the dwindling fish populations around the island.

Today, three leaders from three different Pacific Islands taiked to dozens of federal agents attending the Coral Reef Task Force meeting about their islands' traditional reef-management practices, from which the task force can learn to better protect US reefs.

High-talking Chief Apelu Aitaoto from American Samoa will tell the task force about his culture's traditional land-use practices.

Buck Cruz, former mayor of Merizo, Guam and another of today's speakers, said that similar ownership and sense of responsibility for the reef in his village has lead to protection of the reefs.

Palauan congressman and world-renowned environmentalist Noah Idechong of Palau will discuss his island nation's success at marrying traditional management practices with a modern political system to create one of the most sustained reef ecosystems in the world.

Excerpts from Source: PACNEWS Third Edition 06 October, 2003

OCEANPORTAL

http://www.oceanportal.org/

Ocean Portal is a high-level directory of Ocean Data and Information related web sites. Its objective is to help scientists and other ocean experts in locating such data & information. You can submit a new URL, modify an existing link or report a broken link. When submitting a new link, select the Category that best describes your site. New catagory names can also be suggested.

We welcome suggestions for additions, improvements, or corrections to the OceanPortal. The IOC/IODE Marine Data Training Team is grateful to the many (sometimes anonymous) compilers of ocean lists, whose work we have surveyed in the creation of this Portal. In the case of general 'marine science' lists, we have tried to add structure to the many useful links you have identified; in the case of specialized lists, we hope that the larger view provided here is appreciated, albeit with somewhat different categories. You will see that we have also included links to well-maintained lists and other Portals, and invite you to include our site in your next update.

PUBLICATION

World Atlas of Seagrasses. Edited by Edmund P. Green. Due September 2003. ISBN:0-520-24047-2. 320 pp., 64 color maps, 128 color photographs, 416 line drawings. Hardcover. \$60.00

The World Atlas of Seagrasses is the first authoritative and comprehensive global synthesis of the distribution and status of this critical marine habitat--which, along with mangroves and coral reefs, has been singled out for particular attention by the United Nations Convention on Biodiversity. Illustrated throughout with color maps, photographs, tables, and more, and written by a large team of international collaborators, this unique volume covers seagrass ecology, scientific studies to date, current status, changing distributions, threatened areas, and conservation and management efforts for twenty-four regions of the world.

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