

## Recruiting Research That Is Useful to Your MPA: Advice from Experts

For MPAs, scientific research on the effect of management policies is central to measuring overall success. Most managers, however, lack the funding to conduct such studies in-house. As a result, they must rely on external researchers — with their own interests and priorities — to conduct the work.

How can managers find scientists willing and able to do the necessary research? This month, MPA News interviews two practitioners — one from the Caribbean island of Saba, one from the US — about the challenges managers face in recruiting researchers, and how they can find the scientific help they need.

### Managers, not scientists, should set agenda

Tom van't Hof, an independent consultant based on Saba in the Netherlands Antilles, helped establish three MPAs in the archipelago and has advised on MPA projects around the world. Managers need to do a better job, he said, of setting the research agenda for their sites. "MPA managers should specify their research needs and subsequently get scientists to conduct that research," he said. "Currently, it is often the other way around, with scientists determining the research agenda."

The scientists are not to blame for this, said van't Hof. "Academic research has been around a lot longer than the MPAs with their practical information needs," he said. "Academic research has its own agendas, determined mostly by purely scientific questions, and it is supposed to be value-free." When MPAs began to appear, he said, they were viewed as good natural laboratories for basic science research. MPA managers, although often recruited from the community of marine biologists, were too busy managing, and could not afford time to develop research agendas. "The managers would welcome almost any research coming their way," he said.

Much of that research consisted of basic, rather than applied, science. In last month's MPA News (3:9), a former manager of the Bonaire Marine Park said that although some research conducted there during her nine-year tenure was invaluable to management, these studies comprised only a small part — 5% — of the total research performed. Van't Hof says this is beginning to change, due to financial considerations.

Funding for basic science is becoming more limited, he said, while support for applied, management-related research is growing — with government, private foundations, and NGOs contributing. As a result, scientists are increasingly pursuing applied research in MPAs, which may bode well for management.

Managers who lack a scientific background can find it difficult to develop an independent research agenda, said van't Hof. In such cases, managers often turn to scientists for help. But without limits set, the resulting research proposals can quickly grow beyond what a manager needs to know, he said. "That's all fine and useful if you have the means [to oversee and pay for it], but most managers don't," he said. "You need to be restrictive in your research and monitoring programs. Beware of the 'ideal and all-encompassing' monitoring program, because you won't be able to afford it."

Van't Hof said that because most MPAs limit or ban certain activities, the fundamental research and monitoring program for an MPA should address two main issues:

- a. Are the restrictions achieving the desired objectives?
- b. What is the impact of the permitted activities, and is that impact acceptable?

"These two research questions should be interesting enough in themselves to attract scientists," he said. Managers should not sit back and wait for researchers to come to them, though. "MPA managers should offer incentives to scientists who will conduct management-related research," he said. "Such incentives could include boat and land transportation, accommodation, lab or office space, air fills, etc."

### Steady stream of researchers

For nearly two decades, Terry Stevens has been recruiting researchers to study the MPA he oversees. As manager of the Padilla Bay National Estuarine Research Reserve in the state of Washington, USA, Stevens has worked with funders and local academic institutions to draw a steady stream of researchers. (The Padilla Bay site is one of 25 National Estuarine Research Reserves, or NERRs, across the US. The NERR program [<http://www.ocrm.nos.noaa.gov/nerr/>] emphasizes the use of these sites for research, education, and the raising of public awareness on estuaries.)

*continued on page 2*

### Line between monitoring and research

For the purposes of the adjoining article, MPA News has not drawn too fine a line between monitoring of MPAs (i.e., routine observations to track changes over time) and research (i.e., investigating why such changes or other phenomena occur, based on hypotheses). Although we acknowledge the difference, managers need each of them, and therefore must find funding for both.

### Table of Contents

Recruiting Research That Is Useful to Your MPA: Advice from Experts .....	1
What Scientists Want in an MPA Study Site .....	2
Finding International Funding for MPAs: Places to Search .....	3
MPA Perspective: Basis of MPA Success Lies in the Objectives .....	4
Conference Calendar .....	5
Notes and News .....	6

## For more information

**Tom van't Hof**, Marine & Coastal Resource Management Consulting, The Bottom, Saba, Netherlands Antilles. Tel: +599 416 3348; E-mail: [tomvanthof@hotmail.com](mailto:tomvanthof@hotmail.com).

**Terry Stevens**, Padilla Bay National Estuarine Research Reserve, Washington State Department of Ecology, 10441 Bayview-Edison Road, Mount Vernon, WA 98273, USA. Tel: +1 360 428 1558; E-mail: [tstevens@padillabay.gov](mailto:tstevens@padillabay.gov).

The 44-km<sup>2</sup> site consists largely of seagrass meadows. Upon designation of the MPA in 1980, management set a research agenda that focused on this key biological component. Namely, the agenda called for a mix of basic and applied research to examine the biology of the seagrass, its importance to the neighboring human community (e.g., as a nursery for salmon), and impacts on the seagrass from adjacent agricultural activities.

“Once the research agenda was set, the next thing we did was to establish a network of research partners at agencies and universities who shared the same basic and applied research goals,” said Stevens. Management formed a research advisory committee for the site in the 1980s, composed of a dozen people from various fields. Now, in addition to setting short-term research priorities, the committee helps steer the site’s long-term monitoring program, which relies on students, interns, and staff to perform environmental baseline studies.


In terms of attracting scientists to pursue the research agenda, said Stevens, “Money is the issue.” Graduate students — a major source of research labor — are generally cash-strapped, so anything an MPA can do to help lower students’ costs can make a difference. Management has built bunk rooms and shower facilities for students to use while conducting research. The cost to the MPA was US \$8,000, a relatively small price to ensure that students could afford to do research there.

Marketing plays a key role in the Padilla Bay research strategy. “Each year, we advertise our major research

topics to local graduate programs,” said Stevens. Topics range from short-term studies lasting several months to longer ones of up to three years’ duration. The MPA offers a competitive funding process whereby master’s degree students vie for grants of \$5,000 per year. Funding for the grants comes from private sponsors — including corporations, foundations, and individual donors — and federal sources.

Grant candidates meet with the research advisory committee. Once the process reaches this point, said Stevens, students tend to pursue their research whether or not they receive the funding. Padilla Bay has four master’s theses currently ongoing.

To further advertise his site’s science needs, Stevens announces the research agenda through newsletters, journals, conferences, and internet bulletin boards. Padilla Bay staffers have also visited with undergraduate students headed to graduate school, inviting them to contact the MPA if they are interested in pursuing research there in the near future. By planting the MPA in the minds of young researchers, said Stevens, “We’re sowing seeds in the academic community.”

The federal government, through the NERR program, also contributes research support to the site through two annual grants of \$18,000 each; the funds go to support two Ph.D.-level students. In addition, the program has developed a central database to store data collected from all 25 NERRs across the country. 

---

## What Scientists Want in an MPA Study Site: Interview with Callum Roberts

For a scientist’s view on what researchers look for when considering MPA study sites, MPA News interviewed Callum Roberts of the University of York (UK). Roberts has conducted fish censuses at several MPAs in the Caribbean, and is author of multiple papers and reports on the effect of marine reserves on fish populations (MPA News 3:6).

**MPA News:** What criteria do you consider when searching for a field site to study?


**Roberts:** The key factors for me are, firstly, the suitability of the site for answering some question(s) of importance to science and management. The “and” is critical here. I think there is a great degree of overlap between rigorous, question-driven science and the needs of managers. So I look for places where it is possible to combine these interests. In practice, this means my research generally takes place in areas where there is some management experiment taking place (e.g., some areas are marine reserves), and where there are people actively overseeing the implementation of these management actions.

Secondly, the managers must be interested in supporting scientific research, and have a willingness to use the findings to help guide their management actions. Finally, easy accessibility to field sites and good sea conditions are a big plus!

**MPA News:** What advice would you offer to managers on attracting scientists to conduct applied research at their MPAs?

**Roberts:** Places where there is real management going on — as opposed to just paper parks or places where there are wardens but regulations are not enforced —

will be highly attractive to scientists. If there is no management, there is no “experiment” for a scientist to study (although they could look at reasons for failure).

For effective managers, the main challenge is choosing among the many proposals they receive. For me, the following factors would be important in selecting whom to support: (1) the degree to which the proposal fits with management needs; (2) the acceptability of the research in relation to the goals of management; (3) the length of commitment of the researchers to the site (multiple visits are better than single visits — they give managers more leverage in getting reports out of scientists, for one thing); and (4) the track record of the scientists: Have they delivered reports promised in other places they have worked? Are they willing to become involved locally, giving presentations at meetings or advice to managers and decision makers? If they are students, are they working with a more senior scientist and will that scientist visit the site? 

**For more information:** Callum Roberts, Environment Department, Univ. of York, York, YO10 5DD, United Kingdom. Tel: +44 1904 434066; E-mail: [cr10@york.ac.uk](mailto:cr10@york.ac.uk).

# Finding International Funding for MPAs: Places to Search

For the MPA manager facing a future of tight government budgets and increasing program demands, the search for additional funding becomes an essential task. While there are various self-financing mechanisms from which to choose — e.g., user fees and income from associated commercial operations (MPA News 2:8) — there is another option available: soliciting donor organizations for funding.

MPA News has received requests from readers, particularly in developing nations, seeking advice on how to contact donor organizations working at the international level. Rather than continue to respond solely in a case-by-case manner, we put together the following brief guide on approaching donor institutions.

## Reports available on raising revenues

Lee Thomas, deputy chair of the World Commission on Protected Areas (WCPA) and convenor of its task force on financing of protected areas, told MPA News last year that before managers pursue any revenue-raising initiative, it is key that they first devise a plan. “The most common pitfalls for protected area managers in pursuing finance are the lack of a business plan and lack of a strategy for securing sustainable financial flows,” he said. (MPA News 2:8)

A report produced by Thomas’s task force, *Financing Protected Areas: Guidelines for Protected Area Managers*, provides a step-by-step process for creating business and financial plans, and guides readers through the range of funding sources and mechanisms available at various geographic scales. The report is available free-of-charge online in PDF format at [http://wcpa.iucn.org/pubs/pdfs/Financing\\_PAs.pdf](http://wcpa.iucn.org/pubs/pdfs/Financing_PAs.pdf).

Barry Spergel is director of the Center for Conservation Finance (<http://www.worldwildlife.org/conservationfinance>), operated by the World Wildlife Fund, an NGO. In 2001, he authored the report *Raising Revenues for Protected Areas: A Menu of Options*, available free-of-charge in PDF format on the Center’s website. Although the report primarily focuses on how to set up financing mechanisms, it provides some guidance on the advantages and disadvantages of soliciting international aid. Spergel is now completing a separate report on raising revenue for marine protected areas in particular.

## Donor institutions and websites

MPA practitioners seeking international aid have a choice of organizations to solicit. The following list provides a primer on some of the main types of funding sources, with websites for representatives of each type.

**Multilateral banks:** Funding is generally available only to governments or to government-approved, private-

sector projects (with some exceptions, as for small grants through the Inter-American Development Bank). A development bank grant or loan to establish or maintain protected areas would typically be part of the support given to implement a national conservation plan. **Advice:** Learn about the bank from its website, then contact your government’s liaison(s) to the bank and discuss partnering on a proposal. If you do not know your country’s liaison(s), contact the country office of the bank for this information.

**Global Environment Facility:** The GEF brings together more than 160 member governments, leading development institutions, the scientific community, NGOs, and the private sector to address biodiversity loss and other threats to the environment. Like the multilateral banks, GEF funding of projects requires approval and sponsorship by the host-country government. **Advice:** Learn about the GEF from its website; there, the web-based guide (<http://www.undp.org/gef/guide/main.htm>) is helpful. Then pitch your proposal to your country’s liaisons to the GEF. If you do not know these liaisons, contact the country office for the United Nations Development Programme (<http://www.undp.org>), a co-coordinator of the GEF, for this information.

**Bilateral donor agencies:** Bilateral agencies often have poverty alleviation objectives with biodiversity as a component. Assistance is normally focused on a target group of developing countries; like the multilateral banks, these bilateral agencies often require host-government approval of projects prior to providing financing. **Advice:** At right are some of the bilateral agencies most engaged with protected-area activities. Learn about the agency from its website, and determine whether it is active in your country. Then network with the appropriate national embassy and with your own government to discuss how your initiative could fit into the agency’s strategy for your nation. Also, don’t ignore the other embassies in your country: it may be worth checking with all of them to learn from their environmental officers about their areas of interest, aid-wise.

**International NGOs:** Several NGOs have significant funds and/or fundraising assistance to provide to conservation activities at the international level. These organizations usually have their own goals, activities, and partners with whom they collaborate. It is often possible, however, to work with these NGOs to develop programs that meet their needs as well as those of a protected area. **Advice:** Learn about the NGO and its priorities and programs from its website. Then contact the local, national, or regional office of the NGO to discuss and develop collaborative programs and proposals. 📧

## Multilateral banks / GEF

World Bank  
[www.worldbank.org](http://www.worldbank.org)

Asian Development Bank  
[www.adb.org](http://www.adb.org)

African Development Bank  
[www.afdb.org](http://www.afdb.org)

Inter-American Dev. Bank  
[www.iadb.org](http://www.iadb.org)

Global Env't. Facility (GEF)  
[www.undp.org/gef/](http://www.undp.org/gef/)

## Bilateral donor agencies

AusAID (Australia)  
[www.ausaid.gov.au](http://www.ausaid.gov.au)

CIDA (Canada)  
[www.acdi-cida.gc.ca](http://www.acdi-cida.gc.ca)

DANIDA (Denmark)  
[www.um.dk/danida](http://www.um.dk/danida)

DGIS (The Netherlands)  
[www.minbuza.nl/english](http://www.minbuza.nl/english)

JICA (Japan)  
[www.jica.go.jp/english/](http://www.jica.go.jp/english/)

NORAD (Norway)  
[www.norad.no](http://www.norad.no)

SIDA (Sweden)  
[www.sida.org](http://www.sida.org)

USAID (US)  
[www.usaid.gov](http://www.usaid.gov)

## International NGOs

Conservation International  
[www.conservation.org](http://www.conservation.org)

The Nature Conservancy  
[nature.org](http://nature.org)

Wildlife Conservation Society  
[www.wcs.org](http://www.wcs.org)

WWF  
[www.panda.org](http://www.panda.org)

### Some national agencies provide international aid, too

For an example of this, see p.6 for news on the US-operated Coral Reef Conservation Grant Program.

## Editor's note:

The author of the adjoining perspective piece, Nancy Dahl-Tacconi, is currently on leave from the Marine Group of Environment Australia. She is conducting research for her Ph.D. on incorporating participatory processes and scientific methods in the measurement of MPA management effectiveness. In this piece, she draws on her own observations and experience in the MPA field, both in Australia and Indonesia.

# MPA Perspective: Basis of MPA Success Lies in the Objectives

By Nancy Dahl-Tacconi

Popular themes in recent MPA literature have been the importance of stakeholder participation and transparent performance-assessment processes. To overcome obstacles toward these ends — such as the high cost of maintaining open communication with stakeholders; overuse of vague or misleading terminology; and gaps in understanding amongst stakeholders — it is necessary to clarify the issues under discussion.

To discuss issues and compare experiences meaningfully, we must examine the site-specific objectives for which each MPA is declared and managed. Objectives not only clarify the type, or IUCN category, of an MPA, but also provide bases for transparent management processes and assessment of management effectiveness.

Without quality objectives, an MPA's potential for success is blocked. The worst situation is for there to be no objectives at all: no guidance for decision-making processes, no grip for stakeholder participation and no foundation for assessment. Other troubles stem from objectives that are too vague, or too few and restrictive. Poor choice of language in wording objectives can also cause persistent obstacles, for management and assessment. All of these problems can be abated if objectives are designed with care.

Regardless of how a set of quality objectives is organized, it must exhibit the following characteristics.

## Appropriate

- An objective is appropriate if it is relevant to the area, to the overall management vision for that area, and to the stakeholders affected by that management.
- These objectives are catered to the size and shape of the MPA, type of conservation values, nature of threats to those values, amount of available information, and extent of resources available. This is where blanket views on no-take areas and standardized classes of objectives or indicators become especially problematic because they can distract a management agency from focusing on relevant circumstances.
- Few objectives are appropriate for all MPAs, regardless of their general popularity. For example, the objective *to provide a reference area for scientific monitoring of fishing impacts* may be an appropriate objective for a large, well-enforced MPA adjacent to a well-monitored fishery. It may not, however, be appropriate for a small community-based MPA with limited funds, located adjacent to a poorly managed fishery.

## Strategic

- An objective is strategic if its achievement considerably reduces the amount of work necessary to achieve other, future objectives.

- Strategic objectives distinguish a site that is designed to play a part in a larger society (i.e., its protection has long-term social benefits as well as natural benefits) from one that has limited potential (e.g., no educational value or no part in encouraging social development or partnerships).
- Some examples of strategic objectives are: *to improve community awareness of...*; *to establish partnerships for more integrated management*; and *to facilitate ecological research and innovative approaches to rapid-assessment techniques*.


## Timely

- Timely objectives account for and/or take advantage of current trends and situations. They are opportune in that they deal with contemporary environmental, social and economic tendencies.
- Avoiding bad timing is just as important as taking advantage of good timing. This requires that managers be in touch with current news and events related to activities in and around an MPA. The programs and promotions of NGOs, fisheries managers, schools, local festivals, and other management bodies are important things of which to be aware while designing objectives and implementing management decisions.

## Reasonable

- Reasonable objectives are achievable in the context of an MPA's specific management challenges. Achieving these objectives is likely because they have been designed with realistic limitations in mind. Such limitations may be the size or location of the MPA, legislation, political agendas, stakeholder conflicts, available technology, or financial resources.
- A solution to dealing with unreasonable objectives is to divide a large task into smaller, immediately achievable steps that can form a stairway of gradual change and success over time.

## Measurable

- Disputes about the impact and value of MPAs hinge on this criterion. If objectives are not measurable, it cannot be established that they are being achieved or that the MPA is justified.
- Measurability is also essential for incorporating scientific support into adaptive management. Objectives must be constructed to avoid problems regarding methodology, analysis and presentation. In many cases, this is a simple issue of wording. In other circumstances, there may be more fundamental problems. For example, the objective *to rehabilitate damaged habitats* is not measurable, and rewording will not solve the problem. Even if "rehabilitate" is defined, there may be too many technological and theoretical obstacles in collecting the data to demonstrate whether it has been achieved. These kinds of objectives need careful reconsideration with some scientific input. 

## For more information

Nancy Dahl-Tacconi,  
Center for International  
Forestry Research (CIFOR),  
PO Box 6596 JKPWB,  
Jakarta 10065, Indonesia.  
Tel: +62 251 355 552; E-  
mail: [ntacconi@indo.net.id](mailto:ntacconi@indo.net.id).

## Conference Calendar

June 10-14, 2002 — “American Society of Limnology and Oceanography 2002 Summer Meeting”. Victoria, British Columbia, Canada. Conference theme is “Inter-Disciplinary Linkages in Aquatic Sciences and Beyond”; conference will include special session on MPAs. Web: [aslo.org/victoria2002/](http://aslo.org/victoria2002/)

June 13-15, 2002 — “Info’Coast 2: 2<sup>nd</sup> European Symposium on Knowledge and Information for the Coastal Zone”. Noordwijkerhout, The Netherlands. Debating key issues and devising solutions for better information provision for the integrated management of coastal zones. Web: [www.infocoast.org/programs/noflash.html](http://www.infocoast.org/programs/noflash.html)

June 17-21, 2002 — “Ninth Biennial Conference of the International Association for the Study of Common Property (IASCP)”. Victoria Falls, Zimbabwe. Conference theme is “The Commons in an Age of Globalisation”; protected areas and trans-boundary natural resource management will be sub-themes. Web: [www.iascp.org/2002.html](http://www.iascp.org/2002.html)

June 23-26, 2002 — “2002 World Conference on Natural Resource Modeling”. Lesvos, Greece. Providing a forum for developments in modeling and analysis of natural resource systems, including aspects of fisheries, ecosystem conservation, and management of multiple-use resources. Web: [resourcemodeling.org/conferences/2002lesvos.htm](http://resourcemodeling.org/conferences/2002lesvos.htm)

June 24-26, 2002 — “Marine Fisheries, Ecosystems, and Societies in West Africa: Half a Century of Change”. Dakar, Senegal. Presenting new approaches to fisheries analysis in West Africa, and studying the impact of fishing on natural ecosystems and society. Web: [www.fisheries.ubc.ca/Projects/SAUP/Dakar/](http://www.fisheries.ubc.ca/Projects/SAUP/Dakar/)

June 24-28, 2002 — “Managing Shared Waters: Towards Sustainable Transboundary Coastal Ecosystems (Coastal Zone Canada 2002)”. Hamilton, Ontario, Canada. Examining real-life applications of transboundary coastal freshwater and ocean ecosystem management through a set of case studies. Web: [www.pollutionprobe.org/managing.shared.waters/index.htm](http://www.pollutionprobe.org/managing.shared.waters/index.htm)

June 28-30, 2002 — “Coastal Network/Coastal Zone Agenda 21 (CONet CZA21): Sustainable Coastal Zone Development in the Baltic Sea Region”. Roja, Latvia. Fostering sustainable coastal zone development in the Baltic Sea Region based on local and regional commitment and action. Web: [www.conet21.de/announcement.htm](http://www.conet21.de/announcement.htm)

July 7-12, 2002 — “28<sup>th</sup> International Conference on Coastal Engineering: Solving Coastal Conundrums”. Cardiff, Wales. Sponsored by the American Society of Civil Engineers. Web: [www.ICCE2002.com](http://www.ICCE2002.com)

July 8-12, 2002 — “International Symposium on Estuarine and Coastal Lagoon Fish and Fisheries”. Hull, UK. Organized under the auspices of the Fisheries Society of the British Isles and the Estuarine and Coastal Sciences Association. Web: [www.hull.ac.uk/iecs/](http://www.hull.ac.uk/iecs/)

July 8-12, 2002 — “7<sup>th</sup> Pacific Islands Conference on Nature Conservation and Protected Areas”. Rarotonga, Cook Islands. Reviewing progress in implementation of the Pacific Islands region’s Action Strategy for Nature Conservation, and defining priorities for the next four years. Web (in PDF format): [wcpa.iucn.org/wcpainfo/news/pacific\\_conf.pdf](http://wcpa.iucn.org/wcpainfo/news/pacific_conf.pdf)

July 21-26, 2002 — “10<sup>th</sup> Pacific Congress on Marine Science and Technology (PACON): The Ocean Century”. Chiba, Japan. Featuring several sessions on marine resource management. Web: [www.hawaii.edu/pacon/pacon2002.html](http://www.hawaii.edu/pacon/pacon2002.html)

August 14-17, 2002 — “World Congress on Aquatic Protected Areas 2002”. Cairns, Queensland, Australia. Bringing together scientists, government and non-government representatives, and user groups to examine the state of the art in designing and managing aquatic protected areas. Web: [www.ozaccom.com.au/apa2002/index.htm](http://www.ozaccom.com.au/apa2002/index.htm)

August 15-20, 2002 — “Ecological and Evolutionary Ethology of Fishes”. Québec City, Québec, Canada. Featuring presentations on larval behavior and settlement processes. Web: [www.bio.ulaval.ca/CIRSA/EEEEF2002/](http://www.bio.ulaval.ca/CIRSA/EEEEF2002/)

August 18-22, 2002 — “American Fisheries Society 2002 Annual Conference: Turning the Tide”. Baltimore, Maryland, USA. 132<sup>nd</sup> annual meeting of AFS will include symposia on the human dimensions of MPAs, ecosystem-based management, and coral reef management. Web: [www.fisheries.org/annual2002/](http://www.fisheries.org/annual2002/)

August 19-22, 2002 — “IIFET 2002: Fisheries in the Global Economy”. Wellington, New Zealand. Providing a forum to debate and assess the future management of fisheries; sponsored by the International Institute of Fisheries Economics & Trade. Web: [www.iifet2002.com](http://www.iifet2002.com)

For dozens of MPA-related conference listings through the rest of 2002 and beyond, go to the MPA News website:

[www.mpanews.org](http://www.mpanews.org)

## MPA News

### Editor-in-Chief

John B. Davis

### Editorial Board

#### Chair

David Fluharty, Ph.D.  
School of Marine Affairs  
Univ. of Washington

Patrick Christie, Ph.D.  
School of Marine Affairs  
Univ. of Washington

Michael Murray  
Channel Islands Nat'l  
Marine Sanctuary

Direct correspondence  
to: MPA News, School  
of Marine Affairs, Univ.  
of Washington, 3707  
Brooklyn Ave. NE,  
Seattle, WA 98105,  
USA. Tel: +1 206 685  
1582; Fax: +1 206 543  
1417; E-mail: [mpanews@u.washington.edu](mailto:mpanews@u.washington.edu).

.....

MPA News is published  
monthly by Marine Affairs  
Research and Education  
(MARE), a 501(c)(3) not-for-  
profit corporation, in associa-  
tion with the School of Marine  
Affairs, Univ. of Washington.  
The MPA News staff is solely  
responsible for content.

The MPA News project is  
funded in part by the David  
and Lucile Packard  
Foundation. The views  
expressed herein are those of  
the author(s) and do not  
necessarily reflect the views  
of the Packard Foundation.

For a free subscription, send  
an e-mail message to  
[mpanews@u.washington.edu](mailto:mpanews@u.washington.edu).  
Please type "subscribe" on  
the subject line, and include  
your name, mailing address,  
and daytime phone number in  
the text of the message.  
Also, please note whether  
you would like your subscrip-  
tion to be delivered elec-  
tronically or in paper format.

## Notes and News

**British Columbia publishes MPA inventory** The Canadian province of British Columbia has released an inventory of its provincial MPAs, offering a model that could be useful to practitioners pursuing their own MPA-inventory processes. The 560-page report *Provincial Marine Protected Areas in British Columbia* details a full range of values (environmental, cultural, recreational, and extractive) for each of the 104 MPAs it documents, and also provides these values for non-protected areas adjacent to each MPA. In addition, the report offers a GIS-based gap analysis of the provincial MPA system's representativity. The report is available online in PDF format at <http://srmwww.gov.bc.ca/dss/rpts/index.htm>. **For more information:** Mark Zacharias (project manager), Decision Support Services, Ministry of Sustainable Resource Management, 4th Floor, 810 Blanshard Street, Victoria, British Columbia V8W 3E1, Canada. Tel: +1 250 356 7721; E-mail: [Mark.Zacharias@gems6.gov.bc.ca](mailto:Mark.Zacharias@gems6.gov.bc.ca).

.....

**US releases assessment of MPA management needs** MPA managers in the US are challenged by unclear goals and terminology and a lack of integration among agencies, according to a federal assessment of US MPA practitioners. Based on interviews with practitioners and stakeholders, the assessment provides an extensive list of obstacles faced by managers, including needs for research, mapping, information sharing, and enforcement. The 91-page *Marine Protected Areas Needs Assessment Final Report* was prepared for use as a planning tool by the National MPA Center, a federal program to support the development of a coordinated, national MPA network. Ultimately, the Center aims to use the assessment to foster relationships with governmental and nongovernmental entities to address the needs. The report is available online on the website for the National MPA Center's Training and Technical Assistance Institute at [http://www.csc.noaa.gov/cms/cls/mpa\\_training.html](http://www.csc.noaa.gov/cms/cls/mpa_training.html).

.....

**Applications due for international coral grant program** Applications are due May 24, 2002, for the Coral Reef Conservation Grant Program, operated by the (US) National Oceanic and Atmospheric Administration. The program provides grants to international governmental and non-governmental entities working to protect coral reefs. For more information, go to <http://www.coral.noaa.gov/>.

.....

**Update** The e-mail address for Sibylle Riedmiller of Chumbe Island Coral Park Ltd., who was featured in April's MPA News ("Stretching Your MPA Budget: How to Do More With Less Funding") changed last month. Her new address is [sibylle@chumbeisland.com](mailto:sibylle@chumbeisland.com).

.....

**Northern Europe researchers to study wrecks where they lie** Archeologists in northern Europe are investigating environmental effects on the degradation of shipwrecks and developing ways to view, monitor, and preserve wrecks without bringing them to the surface. The EU-backed project will focus on four shipwrecks in northern Europe, representing a range of vessel types in various underwater environments. Technology will play a major role: each wreck will be filmed for scientific and general audiences, and researchers will explore various conservation methods, including the use of special tarpaulins to cover and protect the vessels. So far, none of the sites has an MPA associated with it, although such designations could be in store, according to project officials. **For more information:** Sallamaria Tikkanen, The Maritime Museum of Finland, Hylkysaari, 00570 Helsinki, Finland. Tel: +358 9 4050 9057; E-mail: [sallamaria.tikkanen@nba.fi](mailto:sallamaria.tikkanen@nba.fi).

.....

**Parks Canada releases inventory of marine invertebrates** A new report from Parks Canada – the Canadian national park agency – provides a baseline survey of marine invertebrates in the waters surrounding the Gwaii Haanas National Park Reserve/Haida Heritage Site, on the country's Pacific coast. Invertebrates represent roughly 90% of animal biodiversity in the waters of the Gwaii Haanas archipelago, and their harvest generates millions of dollars for the regional economy. In addition to providing an inventory of 2500 species, the report reviews local aboriginal knowledge of marine invertebrates and analyzes invertebrate issues relevant to future area management in the region. Marine ecologist Norman Sloan, a co-author, said he hopes the report will raise public awareness of invertebrates as the park agency and stakeholders discuss possible protections for the Gwaii Haanas waters. A limited number of free copies of the report *Living Marine Legacy to Gwaii Haanas II: Marine Invertebrate Baseline to 2000 and Invertebrate-Related Management Issues* are still available; to order, contact Norman Sloan, Gwaii Haanas National Park Reserve, P.O. Box 37, Queen Charlotte, BC V0T 1S0, Canada. Tel: +1 250 559 6342; E-mail: [norm\\_sloan@pch.gc.ca](mailto:norm_sloan@pch.gc.ca).

.....

**Correction** There were two editorial errors by MPA News in the "Letter to the Editor" that ran in the April 2002 issue. The word "problems" was mistakenly omitted from the final sentence of the second paragraph. The sentence – which addressed the challenge of controlling pollutant flow to marine areas – should have read, "We might have success on the land side, but the air and current sides are often international (as well as large-scale national) problems, and not easily mitigated." Also, the letter's author was Stephen C. Jameson, not Stephen S. Jameson. The editor-in-chief apologizes for any confusion caused by these errors.

.....