Do We Really Need 50 Ways to Say “Marine Protected Area”? Views on MPA Terminology, and Efforts to Categorize MPAs

The global assortment of terms and definitions for MPAs can be, in a word, confusing. A recent paper for the IUCN World Commission on Protected Areas compiled a list of more than 50 terms used for various marine and coastal protected areas — from marine reserve and marine sanctuary, to marine park, marine refuge, marine monument, habitat management area, habitat protection zone, protected seascape, sensitive sea area, strict nature reserve, coastal reserve, etc. (“IUCN Categories: Their Application in Marine Protected Areas”, p. 9, http://www.google.com/group/wcpamarine-summit/web)

So many terms are used to denote MPAs that it can be puzzling even to experienced practitioners, not least when a term is used to mean different things in different jurisdictions. The term sanctuary, for example, is used in the UK to refer to a no-take area, whereas national marine sanctuaries in the US are multiple-use MPAs. There is also the persistent misunderstanding among stakeholders that the term marine protected area automatically means a no-take area; in fact, the vast majority of MPAs worldwide allow some extractive activity. Effects of such confusion can be felt both at the international level (as during attempts to measure global ocean protection) and at the site level, with community members unclear on the level of protection at their local MPA.

When MPA News first reported on nomenclature in 1999, the array of terms was expanding rapidly (MPA News 1:4). It has continued to grow, with countries adding new MPA labels and definitions each year. Is it a problem that policy makers keep devising new words for marine protected area? What can be done to improve public understanding of existing MPA labels? This month, MPA News talks with managers about why there are so many terms, and how the global MPA field can start making sense of them all.

Diversity of terms not necessarily problematic

There are more than 4500 MPAs around the globe, with many more being developed or proposed. Jon Day, director of conservation for the Great Barrier Reef Marine Park Authority in Australia, notes that the goals and objectives for each site can vary enormously from place to place: each MPA is tailored to meet the specific circumstances of where and when it was established. Day says, “If a country chooses to use a name that is inconsistent with what other countries may consider more universally acceptable, that is its choice.”

He does not view that choice as necessarily being a problem. “The fundamental issue is not which name is more useful or legitimate than another,” says Day. “Rather, it is to ensure that effective marine conservation is occurring, recognizing that the drivers and expectations for marine conservation are very different worldwide.” In other words, he says, consistency in name between two sites is less important than the quality of conservation at each site.

Conservation quality, of course, is partly dependent on stakeholders’ understanding of regulations. If the official name of an MPA resonates with local stakeholders and helps convey the site’s goals, then it could reasonably be considered an adequate, useful name. If it does not, then it may be inadequate. Kathy Walls, director of the Wildlife Conservation Society’s South Pacific Program in Fiji, says concern over site names should be directed primarily at the local level: i.e., what a name means to local MPA stakeholders, not what it means in a broader (national or international) context.

“It is important that the communities within each jurisdiction understand what an MPA means to them,” says Walls. “This may require terminology that is specific to that jurisdiction, even though the term may not be recognized elsewhere.” In Fiji, for example, there are many tabu sites, recognized by Fijians as closed areas with a range of fisheries purposes: from traditional harvest areas to permanent or semi-permanent no-take zones. In this sense, suggests Walls, the dozens of terms now in use for MPAs — as well as future terms yet devised — may be appropriate as long as those terms hold meaning for their respective stakeholder communities.

Walls was formerly the senior technical support officer for marine protected areas with the New Zealand Department of Conservation, and participated in creation of New Zealand’s national MPA Policy and Implementation Plan, released in January 2006 (http://www.biodiversity.govt.nz/seas/biodiversity/protected/mpa_policy.html). That policy coined its own unique...
Categorizing MPAs

New Zealand still manages MPAs with a dozen different designation labels. But the MPA Policy applied order to this system by bringing each site under the umbrella term of “marine protected area”. While the sites retained their original names, the classification of each as a marine protected area under the policy helped draw links between them, illustrating their shared conservation goals.

That is the essence of categorization — what proponents would like to see done for the MPA field worldwide. In the global case, it would not be accomplished with a single catch-all term (marine protected area). Rather, it could be done with tiered categories that would quickly communicate the level of resource protection at each site. Each MPA would retain its original given name, but its category would express its conservation goals. Two sites with very different names but similar protection levels would have the same category — whether they were located in the same country or across the world from each other.

Such a system already exists: the IUCN Protected Area Management Category System. Unfortunately, as currently designed, it has not worked well for MPAs. Featuring six categories, the IUCN system ranges from what it terms Strict Nature Reserve (Category IA - “Managed mainly for science”) to Managed Resource Protected Area (Category VI - “Managed mainly for the sustainable use of natural ecosystems”). The system is described online at http://www.iucn.org/themes/wcpa/theme/categories/categories.htm. The concept is that governmental agencies around the world register their MPAs, including the relevant IUCN category, in a global database. Those assigned categories then ensure that comparisons between protected areas are valid, and also help to assess trends in global protection.

Problems with the system are best viewed through research by Louisa Wood at the University of British Columbia, Canada. Wood manages the MPA Global database (http://www.mpaglobal.org), which was developed from information in the World Database on Protected Areas operated by the UNEP World Conservation Monitoring Centre. Over the course of many years, agencies have entered protected area information into the latter database. In Wood’s analysis of the resulting figures, she has found little correlation between actual protection levels of MPAs and their IUCN categories. A substantial proportion of MPAs listed under each IUCN category, for example, have no strict protection — despite the fact that several of the categories require such protection.

Various factors may contribute to this. The official titles assigned by IUCN to the categories — such as “National Park” for Category II or “Natural Monument” for Category III — bear no clear relationship to their categories’ actual objectives, and are terms that can carry different statutory meanings in different countries. Some users scan these titles rather than the objectives, and mis-assign their MPAs as a result. In addition, the system does not allow for multiple categories for a single site, such as when an MPA has no-take zones within a larger multi-use framework. The Great Barrier Reef Marine Park is assigned to Category VI (“Managed mainly for the sustainable use of natural ecosystems”) despite its network of no-take zones totaling 115,000 km², or one-third of the entire MPA. Another problem, says Wood, is that in cases where three-quarters or more of a protected area consists of land, marine objectives are rarely considered when assigning the site’s category. All of these factors contribute to a substantial amount of uncertainty over the quality of the data, she says.

IUCN is in the process of reviewing and revising its category system, including at a summit meeting this month in Almería, Spain (http://www.iucn.org/themes/wcpa/theme/categories/summit/summit.html) that MPA News will recap in next month’s edition. IUCN’s goal is to finalize a set of revisions for the category system in 2008. As part of the process, an effort is underway to ensure greater recognition of specific challenges presented by the marine environment within the category system. A detailed consideration of the marine issues to be addressed is provided at http://groups.google.com/group/wcpamarine-summit/web.

“Rosetta Stone of MPA terminology”

In the US, the National Marine Protected Areas Center has developed its own MPA classification system, released in December 2006. Charlie Wahle, director of the Center’s Science Institute, says the system was created to provide a straightforward and objective way to describe MPAs in purely functional terms. “Think of it as the Rosetta Stone of MPA terminology, providing a
common language for place-based conservation in the ocean,” says Wahle. The US system (http://mpa.gov/pdf/helpful-resources/factsheets/final_class_system_1206.pdf) is based on five objective characteristics common to most MPAs:

- Conservation Focus — Whether the site’s purpose is natural heritage protection, cultural heritage protection, sustainable production, or a combination of these;
- Level of Protection — Whether the site is multiple-use (i.e., uniform uses across the site, zoned uses, or zoned uses with no-take zones) or more restrictive (i.e., no take, no access, or no impact);
- Permanence of Protection — Whether protection is permanent, conditional, or temporary;
- Constancy of Protection — Whether protection is year-round, seasonal, or rotational; and
- Ecological Scale of Protection — Whether protection is ecosystem-wide or focused on a particular resource (habitat/species/cultural resource).

Although the system combines features of several US and international MPA classification schemes, it adds a visual element. Simple cartoon icons express variables for the characteristics of “Conservation Focus” and “Level of Protection”, which the National MPA Center considers the two central organizing themes for the US national MPA system. The icon for an MPA with a focus on natural heritage, for example, features a scene with a seabird, fish, and seagrass. “The icons were designed to tell the main story of any MPA in an intuitive and consistent way,” says Wahle. The National MPA Center is now working to incorporate the icons into navigation products, posters, brochures, and other media.

Wahle believes the system, which can be applied to a single MPA site or to individual management zones within an MPA, represents an important step forward. “The problem is not that there are so many different MPAs, but that the current methods for management are not always effective in meeting policy objectives,” he says. “It is that the nation needs a tool to understand what they mean.”

Update on WCPA-Marine Summit: Guidebook Released on Establishing MPA Networks; Wet List and Action Plan to Come

A new guidebook summarizing key points in building MPA networks was released in April at the summit meeting of the marine program of the IUCN World Commission on Protected Areas (WCPA – Marine), a gathering that was previewed in the April 2007 MPA News. The 16-page guide Establishing Marine Protected Area Networks: Making It Happen offers a concise synopsis of factors necessary for effective network design, including ecological criteria, best practices for planning, and other considerations. It is intended to show briefly how to transform policy aspirations into practical action, and is not meant to be exhaustive. A full technical report to flesh out the summary report’s framework is expected to be released later in 2007. The summary report is available in PDF format at http://www.iucn.org/themes/wcpa/biome/marine/mpanetworks/nsmail.pdf.

The WCPA – Marine Summit also offered glimpses of tools that could prove useful to global MPA management in years to come:

- The first edition of a report on the global state of MPAs, dubbed The Wet List, is targeted for release by WCPA – Marine in 2008. The Wet List aims to provide annually updated information on MPAs by region, focusing attention on successes and challenges in marine area-based conservation.
- A WCPA – Marine Plan of Action will compile the summit’s discussions and background documents to form a comprehensive set of priorities and future directions for MPA management worldwide, including how WCPA – Marine may assist regional, national, and site-level practitioners. It is set for release in three languages in late 2007.

The Summit, held in Washington, DC (USA), involved 50 marine conservation experts drawn from government, intergovernmental organizations, NGOs, and academia around the world. Attendees produced a “Call for Action” document urging policy makers to accelerate the pace of marine protection to meet the goal of establishing national and high-seas MPA networks by 2012 — a target set at the World Summit on Sustainable Development in 2002 (MPA News 4:3). For more information on the WCPA – Marine Summit, including the Call for Action (in French and English), go to http://groups.google.com/group/wcpamarine-summit/web.
Agreement Places Strict Limits on Bottom Trawling in S. Pacific

In a move to protect deep-sea ecosystems, more than 20 nations have agreed to strict, voluntary limits on the practice of bottom trawling on the high seas of the South Pacific region. The agreement calls for closure of areas to bottom fishing where vulnerable ecosystems — including seamounts and cold-water corals — are known to exist or likely to occur. Because bottom-trawling activity in the region focuses on seamounts, the accord could effectively end this fishing practice in the South Pacific.

The agreement takes effect on 30 September 2007 and will apply to the signatory nations. Observers and vessel-monitoring systems will be used to track compliance, and vessels must stay at least five nautical miles from previously identified vulnerable areas or from areas where they encounter vulnerable ecosystems during fishing (such as by pulling up cold-water corals in their nets). The South Pacific region stretches from the Equator to Antarctica, and from Australia to South America.

The measures will remain in force until the formal establishment of a regional fisheries management organization (RFMO) for the South Pacific. Negotiations on establishing such an RFMO began last year in New Zealand, and are expected to continue for several years before conclusion. The bottom-trawl agreement emerged from a third round of negotiations, held in Chile 30 April – 4 May. Signatories to the bottom-trawling accord include Australia, Canada, Chile, China, Colombia, Cook Islands, Ecuador, the European Commission, Federated States of Micronesia, France, Japan, New Zealand, Niue, Palau, Papua New Guinea, Peru, Russia, South Korea, Ukraine, the United States, and Vanuatu.

Will “severely constrain” bottom trawling
New Zealand put forward the proposal that largely shaped the agreement, despite the fact its vessels account for 90% of bottom trawling in the region. The New Zealand delegation acknowledged the agreement will “severely constrain” its fishing industry. “Because of the cost implications of the necessary research and assessment and observer requirements, [the agreement] may have the effect of putting an end to bottom trawling,” said the delegation in a statement. Orange roughy is the main target fish on the South Pacific high seas, and its annual commercial value is estimated at roughly US $10 million.

Matthew Gianni, spokesperson for the Deep Sea Conservation Coalition (http://www.savethehighseas.org) says, “If the nation with the largest high-seas trawl fleet in the region can take this stance, there is no excuse for those with less at stake. By now going and putting into place effective regulations to implement this agreement, New Zealand can demonstrate real leadership in the protection of biodiversity on the high seas.”

The agreement is in line with a United Nations General Assembly resolution, passed in December 2006, that called for closure of areas of the high seas to bottom fishing where cold-water corals and other sensitive species are known or likely to occur. Text of that resolution (A/RES/61/105) is available at http://www.un.org/Depts/los/general_assembly/general_assembly_resolutions.htm.

The South Pacific agreement, covering nearly one-quarter of the world’s high seas, is the latest and largest in a series of regional initiatives limiting bottom trawling in waters beyond national jurisdiction. In 2006, major fishing companies announced a voluntary halt to trawling in 11 deep-sea areas of the Indian Ocean (“Four companies to halt high-seas fishing in southern Indian Ocean”, MPA News 8:1). In 2005, the main intergovernmental fishery management body for the Mediterranean Sea declared significant portions of its region to be permanently off-limits to bottom trawling (“Bottom Trawling Prohibited Below 1000 Meters in Mediterranean”, MPA News 6:9).

Notes & News

IMPAC1 proceedings released
Proceedings from the First International Marine Protected Areas Congress (IMPAC1), held October 2005 in Australia, are now available. Among the most comprehensive collections of MPA information ever compiled, the document totals 665 pages and includes abstracts from all IMPAC1 presentations, as well as full text of the meeting’s plenary addresses. The entire range of MPA issues is covered: planning, management, science, and more. The proceedings are downloadable in PDF format for free at http://www.impacongress.org/proceedings.htm.

The file, 19 MB in size, is searchable by author, keyword, theme, and other criteria. It also includes a list of delegates with e-mail contact information. More than 660 delegates from 78 nations attended IMPAC1. The Second International Marine Protected Area Congress (IMPAC2) is expected to be held in the US in 2009.
California designates MPA network for central coast

On 13 April, the US state of California formally designated 29 marine protected areas on its central coast, part of an initiative to create an MPA network along the state’s 1770-km coastline:

- The protected areas will cover a total of 204 square miles (528 km²), or roughly 18% of California’s central-region waters;
- The MPAs will have fishing restrictions ranging from partial limits to an outright ban. No-take regulations will pertain to 85 square miles (220 km²) — roughly 7.5% of state waters in the region.

The MPAs are expected to take effect in July 2007. California state waters extend three nautical miles from the shoreline.

The newly designated sites are the first product of California’s eight-year process so far to build a system of MPAs (“Update on implementation of California’s Marine Life Protection Act”, *MPA News* 8:8). Lessons learned from the process will be featured in the June 2007 edition of *MPA News*. The next phase of planning, focusing on California’s north central coast, began in February 2007. For more information on California’s Marine Life Protection Act initiative, go to http://www.dfg.ca.gov/mrd/mlpa/index.html.

Guidebook available on management of SCUBA diving in MPAs

MedPAN, the network of Mediterranean MPA managers, has released a guidebook on managing and monitoring SCUBA diving activity in MPAs. Produced by staff of the Natural Marine Reserve of Cerbère-Banyuls in France, the 62-page guide offers basic advice on setting up a dive-management program, studying environmental impacts of dive activity, raising public awareness, and establishing infrastructure (including mooring buoys and artificial reefs). It also lists Mediterranean MPAs with aspects of dive management programs in place, such as those with impact studies underway or with “good practice” codes established. The guidebook is available in French and English at http://www.medpan.org/?arbo=telecharger.

Report: Reef restoration for coral reef managers

A new report offers guidance for managers on the restoration of degraded coral reefs, drawing lessons from successes and failures in active restoration projects worldwide. Reef restoration includes indirect measures to remove obstacles to natural recovery (such as reducing human impacts on an affected site), as well as direct interventions like the transplantation of corals. The report offers the caveat that although restoration can enhance conservation efforts, it is “a poor second” to the preservation of original habitats. In other words, improved management of reef areas remains critically important.


European scientists invited to sign consensus statement on marine reserves

Biologist Callum Roberts at York University (UK) is inviting European scientists to sign a consensus statement to affirm the need for no-take marine reserves and express concern for what the statement terms a “lack of progress in implementing marine reserve networks in European waters.” The statement is timed to inform discussions in preparation for the 9th Conference of the Parties to the Convention on Biological Diversity (to be held in Germany in 2008) and ongoing negotiations for a new European Union law for the protection of Europe’s seas. Roberts intends to release the statement on 8 June 2007, World Oceans Day.

The idea for the consensus statement stems from a similar initiative signed by marine scientists from around the world in 2001 (*MPA News* 2:8). The European statement is available online at http://www.york.ac.uk/depts/eeem/gsp/mem/marine_reserves_consensus.pdf.

Grants available for historical marine ecology research

Marine Conservation Biology Institute, a US-based NGO, is offering grants in support of research on past ecosystem conditions — i.e., historical baselines — for the purpose of conserving and restoring marine biodiversity. The grant program is particularly interested in studies that describe systems prior to large-scale human impacts and industrialization. Grants can range up to a maximum of US $10,000. Preference will be given to graduate students, post-graduate researchers, and early career scientists. The deadline for submissions is 1 June 2007. For more information, visit http://www.mcbi.org.
Letter to the Editor

Mobile MPAs good for more than just highly migratory species

Dear MPA News:
The article on “mobile MPAs” in your March edition (MPA News 8:8) addresses a timely and important topic. Although this concept of no-take reserves with flexible boundaries is discussed in the context of protecting highly migratory species on the open ocean, the tool could be applied to other species and ecosystem types as well. The essence of ecosystem-based management is that the ocean is a dynamic system. As evidence of this dynamism:

- Spawning grounds, nursery grounds, and larval transport pathways are often not fixed in space;
- Overlap between predator and prey populations is constantly fluctuating; and
- Climate change may alter fish distributions in both nearshore and offshore areas.

Designing tools able to address these types of dynamic relationships is essential, and mobile MPAs provide a promising example. Highlighting their potential application to a number of ecosystem types and developing practical ways for implementation are of key importance.

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MPA Tip: Questions for thinking about the business of protected areas

“MPA Tip” is a recurring feature in MPA News that presents advice on planning and management gathered from various publications on protected areas. The purpose is two-fold: to provide useful guidance to practitioners, and to serve as a reminder of valuable literature from past years.


There is no simple step-by-step guide to developing a financial sustainability plan. The following list of key questions should help to start the process:

- What are the current sources of funding? Can these be relied on indefinitely? What can be done to increase, extend, or strengthen each one of them?
- Who are the protected area’s constituents? Sightseers? Hikers? Campers? Boaters? Fishermen? Tourism service operators (shops, hotels, restaurants, guides) in the area? What do they currently contribute to the costs of managing the area? Could they do more?
- What services are currently provided, such as parking, trails, and campsites? Picnic areas? Boat launching, anchorage, or mooring? Do the users pay for these services? Are the fees what they should be? Would the users pay more?
- What new services might be provided? What is the likelihood of their profitability?
- What organizations are interested in the conservation of this area? Can the manager form a partnership with them to launch and share the costs of a fundraising campaign? Can the manager get campaign services pro bono from local companies (radio/TV, advertising agency, celebrity appearances, site/food/music for a special event, etc.)?
- What donors, on a global or regional scale, have supported activities similar to what is included in the conservation plan here? Have they been made aware of the area and plans, to sound out their interest?
- Has the government considered special taxes or levies? What are the pros and cons of such programs in the area/country? Can a case be made for establishing such a program, and can the necessary coalition be built to support it? Are there one or two key leaders who might be instrumental in establishing a “conservation sales tax” or some other type of surcharge or levy? Who could enlist them in the campaign?