

International news and analysis on marine protected areas

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- **Solving the Mystery of MPA Performance: Linking Governance to Ecological Outcomes.** With Helen Fox of RARE and David Gill of the National Socio-Environmental Synthesis Center (co-hosted with the NOAA National Marine Protected Areas Center) [www.openchannels.org/node/10548](http://www.openchannels.org/node/10548)

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- **Webinar: Mapping Ocean Wealth.** With Rob Brumbaugh of The Nature Conservancy September 23 at 5 pm UTC / 1 pm EDT / 10 am PDT
- **Webinar: Inspire Ocean and Climate Literacy and Conservation through MPAs.** With Claire Fackler of NOAA (co-hosted with the NOAA National Marine Protected Areas Center) October 8 at 5 pm UTC / 1 pm EDT / 10 am PDT

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## Assessing the state of the art in MPA management training programs

In 1999, Graeme Kelleher, former chairman of the Great Barrier Reef Marine Park Authority, wrote in his classic publication *Guidelines for Marine Protected Areas*:

"The management of MPAs is becoming as sophisticated as that of many commercial organizations, requiring not only technical skills but also a high level of managerial and communication ability. Traditional training for protected area staff has tended to focus on specialist areas, such as marine zoology, but this is no longer adequate: today's MPAs need staff from a wide range of backgrounds with many different skills."  
(<http://bit.ly/MPAGuidelines>)

His words, true then, are even truer now. MPA management has never been more complex. Continual advances both in our scientific understanding of MPAs and in the technologies available (and often

required) to manage sites just add to the formidable managerial and communication demands of the job.

Few people enter MPA management with all the skills and knowledge needed to be effective. According to experts who spoke with MPA News for this issue, the field remains primarily populated by scientists. Therefore training in a broader set of disciplines is necessary.

In this issue and the next, MPA News talks with MPA management trainers about what represents the state of the art in such training programs. Below, we focus on two global programs: the Coral Reef Management for Sustainable Development program and the International MPA Management Capacity Building Program. (In our next issue, we'll examine a regional program in the Caribbean and a certification program for MPA professionals in the Western Indian Ocean.)

continued on next page



## Case 1. A new training program to create leaders in coral reef management

The first Coral Reef Management for Sustainable Development program was held this past June in Queensland, Australia. Designed and implemented by Reef Ecologic — a social enterprise established by former Great Barrier Reef Marine Park Authority (GBRMPA) directors Paul Marshall and Adam Smith — the program drew 12 marine park managers from the Caribbean, Western Pacific, and Indian Ocean regions. The trainees learned the latest in coral reef research and management. The three-week course was funded by Australia's Department of Foreign Affairs and Trade; participation was free of charge for trainees.

A central theme of the program was leadership. All trainees were selected by regional organizations as current or emerging leaders, and were trained in contemporary environmental leadership. Trainees met with nearly 50 experts from GBRMPA, other government agencies, academia, NGOs, and industry over the program's span. Participants received certificates for completing the course, which included development of a follow-up project plan for each trainee.

**MPA News: Paul and Adam, your training program covers all the different aspects of effective MPA management, including human resource management, ecology, negotiation, finance, project management, communication, risk, and strategic planning, among others. But it particularly highlights leadership as a core skill. How do you teach leadership?**

**Paul Marshall:** We do it by combining leadership theory and experiential learning in our course. Participants learn about leadership principles, leadership styles, and techniques for being effective as a leader. These are then put into practice through practical exercises and activities, such as teamwork challenges, personal reflection, scenario exercises, and presentations. We have also used the program as a chance for participants to evolve as leaders in the course of the training by involving them in the planning, management, and reporting of the course activities on a day-to-day basis.

In addition, we believe strongly in the power of networks and mentoring relationships. So we bring retired senior managers into the course to spend time with the participants, to be part of the leadership-training activities, and to give the participants a chance to form mentoring relationships with these experienced leaders.

**Adam Smith:** A passionate leader cares about the people on his or her team (as well as stakeholders, the environment, and doing the best possible job). This means understanding staff members' individual and collective values, interests, and goals. In my view, it is preferable to have a strategic-thinker personality as a

leader, complemented by steady, conscientious people. Undertaking personality-profile exercises (such as Myers-Briggs and other tests) within MPA teams can help people have greater understanding of themselves and their peers. We conduct various exercises as part of the program.

**You've also conducted management trainings within single agencies, involving senior and junior staff at the same time. What do those trainings look like?**

**Marshall:** An important capacity-building area relates to vertically shared knowledge and awareness within organizations. We have been structuring some of our training so that the first day is a broad overview and update on key management issues or topics — such as climate change or MPA planning, for example — delivered to a combination of senior managers and technical staff. That first day is pitched as a knowledge update or master class, making it enticing and accessible to senior staff. By combining senior and junior staff in lectures and discussion sessions, they interact in frank and productive ways that can be very helpful to future relations and organizational coherence. Subsequent days (without the senior managers, who usually have other demands that prevent them from attending longer training) then focus on technical learning, but usually with the confidence that their senior managers will have the context or willingness to engage in new ideas and initiatives that come from the training.

**In what ways do you see MPA management training evolving over time?**

**Smith:** A combination of training is essential. There needs to be more MPA training in university subjects (sciences and management); in-house training within agencies (including mentoring and coaching); secondments (visits to other MPAs); probably some degree of online instruction; and certification at the end to demonstrate the trainee has grasped the material. Many professions such as engineers or physicians have mandatory professional development and certification, which may be appropriate for MPA management as well. I suggest at least three to five training days a year for all MPA managers, with varying levels of training for executives, site managers, new staff, and so forth.

**Marshall:** The rapidly expanding range of skills and knowledge areas required for effective MPA management requires a more sophisticated and strategic approach to training. Leadership skills (including management, negotiation, and communication) are required at all levels, as even junior officers can have important leadership responsibilities with community groups or in their interactions with the public. The

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

A video on the training program is at <http://bit.ly/reefleaders>

The next courses in Australia for the Coral Reef Management for Sustainable Development program are a 5-day class for global MPA leaders (6-10 June 2016) and a 12-day class for senior MPA leaders (6-18 June 2016). Reef Ecologic can also scope and deliver courses in-country for groups of 10 or more MPA leaders.

range of disciplines and technical areas involved in management inevitably requires and justifies specialization, especially for those in technical roles. As Adam said, capacity building at these levels will increasingly need to be delivered in a modular fashion,

with online and in-person training content tailored to suit different technical areas (compliance, monitoring and assessment, planning and permissions, and so forth).

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## Case 2. The largest and longest-running MPA management training program

For the past 11 years, the US Office of National Marine Sanctuaries has operated a program that now, at any given time, is actively training MPA managers in six regions of the globe. The International MPA Management Capacity Building Program is the largest and longest-running effort of its kind. Over its existence, thousands of individuals from more than 30 countries have gone through its trainings, workshops, and other associated capacity-building activities.

The program is designed to partner with networks of MPAs. Sometimes this represents a cluster of countries (e.g., Coral Triangle, Eastern Tropical Pacific Seascape, or MedPAN South [the non-EU countries of the Mediterranean]). In other cases, the program works with an MPA network in a single country, or a region within a country (e.g., Sea of Cortez in Mexico). The program makes an initial commitment of three years to each partner network, which is usually extended. Over that time period, the program works with a focused group of practitioners from the MPA network. In most cases a large percentage of trainees remain with the program and participate in a succession of capacity-development activities over the entire three-year period. It is a long-term, in-depth process.

Anne Walton heads the program.

**MPA News: Anne, you've described your program as a peer-to-peer interactive learning experience with partner networks. How do you start each partnership?**

**Anne Walton:** From the beginning of a new project, our job is to facilitate the identification of priority resource management issues and associated capacity development needs and activities for a given network of MPAs. Because we make a major commitment upfront to conducting a thorough needs assessment (with the assistance of in-country planning teams) and designing the first three years of the program, we integrate measures of success into the design of each regional program.

Having said that, there are certain foundational pieces of our program that we think are important to any success we might hope for. These include our mentor program; strong partnerships with the NGO community working in-country; and focusing on capacity development from both the bottom-up (community-based MPAs) and the top-down (national, provincial, district level government).

**You've been doing these trainings for 11 years now. How have they changed over time?**

**Walton:** There have been new and emerging issues and management approaches that, when appropriate, we have incorporated into our program. Maybe seven or eight years ago, climate change adaptation was an emerging resource management issue, for example. More recently, in the last six or seven years, with increased awareness of the phenomenal number of new human use activities occurring in the coastal and marine environment, we have been supporting marine spatial planning trainings, workshops, and pilot projects in multiple regions. There are also many new tools, handbooks, and guidebooks that we have partnered on developing and incorporated into our program, such as Conservation International's Capacity Assessment and Development Planning Guide Series and WWF's Stakeholder Engagement Guide.

I would add, however, that some of the challenges that we identified from the inception of this program still remain. The biggest one is how to move individuals from trainings to successful implementation in the field. We have developed implementation agreements, demonstration projects, incentive programs, and small grants programs, and incorporated them into the design of individual programs. There is no formula, just experimentation from one geography

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**MPA Management Capacity Building Program:** <http://sanctuaries.noaa.gov/international/welcome.html>

### Past coverage of MPA management training and capacity-building

"Perspective: Developing Capacity-Building Programs to Meet the Needs of Regional MPAs", by Anne Walton. MPA News 8:9 (April 2007)

"Problem Is Shortage of Capacity, Not Revenue Sources: Proposing a New Approach to Financing Protected Areas". MPA News 5:5 (November 2003)

"Capacity-Building in MPAs: Practitioners Face Challenges, View Opportunities" MPA News 1:6 (March 2000)

We have also featured training programs that focus on MPA enforcement specifically:

"Building Credible, Effective MPA Enforcement in the Caribbean: An Interview with Jayson Horadam". MPA News 15:3 (November-December 2013)

"Developing an International Center for Compliance Management in MPAs" (in the article "Advances in MPA Enforcement and Compliance") MPA News 14:5 (March-April 2013)

For these and all other issues of MPA News, go to [www.mpanews.org/issues.html](http://www.mpanews.org/issues.html)

to the next. And sometimes it requires an external examination to understand the obstacles.


Another ongoing issue has been institutionalization of capacity building. It has never been our intention to stay within a region indefinitely: we build an exit strategy into each of our programs. So the question has been how to leave the capacity development opportunities behind, within the framework of a national government, research, or educational institution. Since day one we have worked on institutionalization approaches by building mentor programs, working on sustainable finance mechanisms, building the political will, educating governments, and helping to structure capacity building within local, national or regional institutions. We have had some success in this area, mostly with the support of the NGO community.

#### **Where do you see MPA management training headed in the future?**

**Walton:** As much as we have resisted virtual [online] learning, we are realizing that there is a place for it in our program. This doesn't mean that we are going to use technology as a replacement for hands-on learning; rather, we'll use it as a way to keep the momentum going in regard to sharing the learning amongst MPAs. In some ways, technology allows lessons from the classroom to be shared with peers in the field in a timely manner. It also allows for easier continua-

tion of mentoring support as trainees implement what they've learned. So we are starting to incorporate technology as we design each program.

The second area we are now focusing on is problem solving. Much of what an MPA manager's job requires is based on learning how to solve problems. So rather than focusing on particular management models for addressing impacts from climate, fisheries, or tourism development, we focus more now on understanding how to solve such problems in an analytical, sound way.

The third area is learning forums designed specifically to develop the next generation of marine conservation leaders. Our program identifies outstanding individuals with promise of leadership, and those with a strong and committed desire to move into an MPA leadership role. Becoming a leader emerges from building their skills in leading and co-leading teams, facilitating stakeholder and community engagement, collaborating with a broad range of partners, navigating and negotiating conflict, engaging in professional mentorship and peer support, and committing to lifelong individual leadership development. We will be piloting our first 12-day learning forum soon with 19 young professionals in the Mediterranean region through a partnership with WWF, SeaMED, and the Training Network for Monitoring Mediterranean Marine Protected Areas (MMMPA) program. 

**To comment on this article:**  
<http://openchannels.org/node/11009>

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## Notes & News

### **Bahamas designates 15 MPAs, expands 3 more**

In August 2015, The Bahamas announced designation of 15 new MPAs and 3 expansions of existing MPAs. The designations and expansions cover a total marine area of 45000 km<sup>2</sup>, and allow the nation to exceed its commitment of 10% MPA coverage by 2020 under the UN Convention on Biological Diversity.

The new sites do not have management plans yet; public consultations to develop such plans are forthcoming. Bahamian Environment Minister Kenred Dorsett said some sites may be multiple-use while others may be no-take zones. He also said the nation will continue working to meet its additional commitments under the Caribbean Challenge Initiative, which calls for 20% MPA coverage of marine and nearshore waters, also by 2020.

The Bahamas passed legislation last year to establish the Bahamas Protected Area Fund, a national conservation trust fund devoted to protected area management.

Minister Dorsett's 31 August 2015 announcement of the designations is at <http://issuu.com/ministryofehbahamas/docs/mpastmt>

### **Crowdsourcing the online surveillance of Cocos Island MPA**

The 2000-km<sup>2</sup> Cocos Island National Park — a no-take zone and World Heritage site off the Pacific coast of Costa Rica — has partnered with DigitalGlobe and Turtle Island Restoration Network to create one of the first crowdsourced digital patrols of an MPA. The public can visit DigitalGlobe's online Tomnod platform (<http://blog.tomnod.com/protecting-cocos-island>) and search satellite images of the MPA, looking for boats and ships and marking them on a map, which authorities can then use as evidence to prosecute violators.

In the two days following the project's launch in mid-August 2015, 5700 people from 115 countries searched the Cocos Island maps on the lookout for vessels. Cocos Island suffers from illegal fishing, including the taking of endangered shark species. For more information: <https://seaturtles.org/newssection/crowdsourcing-illegal-fishing-vessels>

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# Perspective Can local management of fisheries through periodic closures help to kick-start marine conservation efforts?

By Steve Rocliffe and Alasdair Harris

For many years, the Vezo – traditional fishers in southwest Madagascar – saw marine conservation as a threat, a way of preventing them from accessing their fishing grounds. This is perhaps unsurprising in these semi-nomadic communities, where seafood is the sole source of protein in 99% of meals and income is much less than US \$2 per day. The prospect of waiting years for the uncertain benefit of fish spillover from a protected area represented too high a risk – and too severe an economic sacrifice – to be a workable solution.

A decade ago, we (Blue Ventures) set about trying to overcome this issue, working with these communities to understand their concerns and develop a low-risk approach to marine protection that would return meaningful economic benefits in timeframes that worked for them. And to help achieve this, we turned to an unlikely eight-legged ally.

Octopus is one of the region's most important stocks, fished by women and men alike, and sold to lucrative export markets. Seafood companies regularly transport catches from some of the Indian Ocean's most remote villages all the way to restaurants and supermarket shelves in southern Europe.

We started small, supporting just one village to close a small part of its octopus fishing area for a few months, to see whether this might boost catches. When the closed site was reopened to fishing, the community saw a dramatic increase in both octopus landings and fisher incomes.

In Madagascar, this approach has since gone viral, inspiring a grassroots revolution in fisheries management that has seen more than 250 closures to date, and other countries of the western Indian Ocean following suit. New research into the effectiveness of the closures has shown that they can improve catches and boost income. The study, an analysis of eight years of data from more than 30 sites, found that octopus landings increased by more than 700% in the month following the lifting of a closure, boosting the catch per fisher per day by almost 90% over the same period. On average, communities discovered that 1 dollar's worth of octopus left in the ocean had grown to \$1.81 by the end of a closure (<http://discover.blueventures.org/marine-management-pays>).

However, whilst three quarters of the closures produced positive net earnings for villagers, poaching prevented some from working entirely, and eroded earnings in others. Overall success was likely

underpinned by factors not present in all traditional fisheries, including provisions within Madagascar's legal code to allow local marine management, as well as backing from seafood exporters, who supported the closures (a considerable interruption to revenues, followed by a sudden surge in production) and facilitated access to export markets. The exponential growth rates of the targeted species *Octopus cyanea* are also key to the model's success, being so rapid that stocks can respond favorably to protection periods of just two months. And of course, improved fisher catches and incomes are of little interest to biodiversity conservationists if the overall sustainability of the fishery remains essentially unchanged.

## Inspiring other marine management efforts

But this is where things get interesting, since bioeconomic analyses of landings data only tell part of the story. It's not so much the success of the closures that's particularly noteworthy, but the ambitious marine management initiatives that this success appears to have inspired. From mud crabs in mangrove forests to lobsters on rocky reefs, this approach has since been adopted by other traditional and artisanal fisheries in different habitats and regions across the country, from the exposed Indian Ocean coast to the sheltered lagoons and estuaries of the Mozambique Channel.

The efficacy of this model applied to other stocks and ecosystems remains to be tested, and our limited monitoring and evaluation capacity cannot keep pace with the ongoing expansion of local management efforts. But encouragingly, this process is evolving iteratively and organically through local-level dialogue, exchange, and experimentation, with communities acting and adapting based on the results and responses that they themselves experience in fisheries landings.

Across the country, fishing communities have grouped together to establish more than 60 Locally Managed Marine Areas (LMMAs) that ban destructive fishing practices, many of them incorporating community-enforced marine reserves permanently off-limits to fishing, measures rejected as inconceivable and unworkable just a few years previously. And all of these LMMAs are led by community members, a testament to the tremendous growth in local leadership in marine conservation being seen as a result of these early experiences in fisheries management.

MIHARI, Madagascar's growing LMMA network, now covers over 11% of the island's seabed, and is championed at the highest levels of government. In November 2014, exactly a decade after the pilot closure, the President of Madagascar committed to

## Editor's note:

Alasdair Harris is the executive director of Blue Ventures, a science-led social enterprise that works with coastal communities to rebuild tropical fisheries ([www.blueventures.org](http://www.blueventures.org)). Steve Rocliffe is Blue Ventures' outreach manager.

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tripling the country's marine protected area coverage, with a special emphasis on community-centered approaches. This is perhaps the boldest single conservation commitment made by any government at the recent World Parks Congress.

These experiences add to a growing body of evidence from elsewhere in the Indo-Pacific that community experiences of effective periodic fishery closures are not only instrumental in boosting catches, but can also facilitate engagement in broader marine conservation and management efforts.

### Building support for no-take areas

We don't yet have all the evidence, but from our discussions with local leaders, it appears that community support for these broader efforts is not based on commercial interest, as is largely the case with the temporary closures. Rather, by enabling local leadership to arise, increasing knowledge of human impacts on reefs and enhancing trust, social capital, and inter-village communication, the activities associated with periodic closure management may simply build better conditions for cooperation, lowering the metaphorical activation energy for broader conservation and

management, just as a catalyst would in a chemical reaction.

Many of the 1.3 billion people who live around our tropical coasts depend on fisheries and aquaculture for their livelihoods and on seafood as a primary source of protein. With over-exploitation and global environmental change posing ever-increasing threats to our oceans, sustainable management is crucial to protecting both the biodiversity of the marine environment and the food security of hundreds of millions of people. Madagascar's periodic octopus closures and the community-managed marine protected areas that followed them are not a panacea for this pernicious combination of ills. But 10 years of learning and development led by some of the world's poorest tropical coastal communities suggests they are a step towards a more hopeful future for these 'not so' small-scale fisheries. 

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## New California law strengthens MPA enforcement by giving field officers discretion to cite lesser offense

In the US state of California, where designation of a state-wide system of MPAs was completed in 2012, a new state law promoting enforcement of the state's 100+ MPAs has given field officers an additional tool against poachers.

Prior to the new law, any MPA poaching violation was to be cited as a misdemeanor, which under California law is subject to a trial by jury and punishable by up to six months in jail and a maximum \$1000 fine. Although a misdemeanor charge is appropriate for significant violations and repeat offenders, officers often let off small-time violators — say, a weekend angler who had unknowingly ventured into a closed area — with just a warning instead, no penalty. Additionally, district attorneys' offices (who are responsible for prosecuting all variety of crimes in society, including violent crimes) sometimes would not prioritize fish- and wildlife-related misdemeanors brought before them, due in part to being overburdened already with other cases. This combination of factors ultimately led to under-enforcement of California MPA regulations.

In June 2015, the California state legislature addressed this by passing a law to close the loophole. The new law gives officers in the field the discretion to cite a

lower-level offense — an infraction — depending on the circumstances of each case. Infractions, which carry a fine from \$100 to \$1000, can be processed by a local traffic court (as they are roughly equivalent to a road traffic violation), rather than requiring the involvement of a district attorney and a trial by jury. The aim of this new law is to penalize MPA violators who might previously have been issued only a warning, while also avoiding the further clogging of the court system.

"The new law helps ensure that all poachers will face real consequences, including through the enforcement of minor violations," says Zachary Plopper, coastal and marine director of conservation group WILD Coast, which supported passage of the law. "The result will be better protected MPAs and increased efficiency for busy courts and prosecutors throughout California."

The discretion does not apply to repeat offenders, commercial fishermen, or licensed party boat operators, who will still be charged with misdemeanors for violating MPA regulations and fully prosecuted.

The law takes effect 1 January 2016. Text of the law is at <http://bit.ly/CaliforniaMPAlaw> 

# Perspective Success in the smallest marine reserve of Taiwan: A triumph anchored by effective enforcement, stakeholder support, and replenishment

By Ming-Shiou Jeng, Colin KC Wen, Jeng-Ping Chen

No-take marine reserves are increasingly designated in tropical coral reefs with the goals of maintaining biodiversity and subsidizing fisheries. However, due to lack of enforcement and replenishment, many cases of reserves — including most of Taiwan's — have exhibited little difference in diversity or abundance inside their boundaries compared to outside. These reserves have become “paper parks” where illegal fishing continues. Failed marine reserves lead to disappointment in local communities and discourage the advocacy and designation of more reserves in future.

However, Taiwan's smallest marine reserve (just 0.5 hectares) — called Houbihu and located in Kenting National Park, south Taiwan — is emerging as a success story, albeit an unusual one. The success of this reserve stems from strong enforcement by the national park police starting in 2005. Shortly after enforcement began, the increasing abundance and diversity of coral reef fishes gave rise to a local dive tourism industry and garnered the support of local guides. Nonetheless, in the first five years, little to no recovery of large predatory fish populations was observed in the reserve.

This changed in 2010. During that year's typhoon

season, a large number of native groupers (Epinephelidae) were accidentally released from destroyed marine farms. A small number of groupers recolonized around Houbihu reserve where these groupers had previously been overfished. This reserve became the only diving spot in Taiwan with regular sightings of large predatory fishes.

With effective enforcement, local stakeholder support, and this accidental but fortuitous replenishment of fish, the Houbihu marine reserve stands today as the smallest but most successful marine reserve in Taiwan — as measured both by fish biomass and tourism. The success of this reserve evokes an old Chinese saying — right time, right place, and right person — where multiple factors have converged to form the keys to success. We urge governments and stakeholders to recognize that marine reserves, even small ones, can deliver real benefits with their support and the right circumstances.

**Acknowledgements:** We appreciate the enforcement efforts pioneered by Captain Siao Tsai-Chuan and research funding from Kenting National Park.

**To comment on this article:**

<http://openchannels.org/node/11012>

## Editor's note:

The authors of this piece have conducted fisheries research on Houbihu marine reserve, described below. Ming-Shiou Jeng is a research fellow at Biodiversity Research Center, Academia Sinica in Taiwan. Colin Wen is a faculty member in the Department of Life Science, Tunghai University, in Taiwan. Jeng-Ping Chen is a biologist at the Taiwan Ocean Research Institute.

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## New book analyzes two sides of the marine reserve debate: 'nature protectionists' vs. 'social conservationists'

A new book on the science and advocacy of MPAs examines the rise of no-take marine reserves as a popular tool on the marine conservation agenda over the past 20 years, and how that political ascent occurred, including through papers in scientific journals. The book, *The Controversy over Marine Protected Areas: Science Meets Policy*, analyzes what it describes as the two sides of marine reserve politics: “nature protectionists” (NPs), who argue for an extensive network of no-take areas, and “social conservationists” (SCs), who argue for conventional fisheries management complemented by certain spatial restrictions to protect spawning areas of target fish or biodiversity.

The book suggests that the NP side wields significant political power, with influential scientific papers and the backing of large advocacy organizations. We asked lead author Alex Caveen of Seafish ([www.seafish.org](http://www.seafish.org)), an administrative body that supports the UK seafood industry, about this. (The book is based on Caveen's work as a doctoral student at Newcastle University [UK] — he received his Ph.D. in 2013.)

• **MPA News:** Alex, your book suggests the NP side is fairly powerful politically. Yet less than 2% of the global ocean is in no-take marine reserves. In light of that, how powerful can the NP side really be?

• **Alex Caveen:** It's an important question. Certainly you would expect that if the NP had actual power it would be reflected in more of the global ocean being designated as marine reserves (MRs). Arguably, you could say SCs still hold the upper hand in the debate as policy-makers will typically prioritize social needs (e.g., employment) over protection of the environment.

One of the arguments we were trying to make in the book was highlighting the transfixion of the scientific community on marine reserves, and the ethics of scientists becoming drawn into advocacy. The NPs seem to have misleadingly represented MRs as panaceas, often framing the debate between NPs and SCs as one that can be resolved empirically, and viewing politics rather disparagingly. However, politics funda-

## For more information:

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Alex Caveen's co-authors on the book were Nick Polunin, Tim Gray, and Selina Marguerite Stead, all of Newcastle University in the UK.

The eBook version of *The Controversy over Marine Protected Areas* is available for £34.99 (US \$54) at [www.springer.com/gb/book/9783319109565](http://www.springer.com/gb/book/9783319109565)

mentally means compromise in achieving one's goals. There has to be understanding on both NP and SC sides to accommodate each other's viewpoints, as well as thinking how best these could be reconciled through different types of spatial management, which could range from marine reserves to multiple-use MPAs.

No doubt some NPs view percentage targets of ocean to be fully protected necessary to create political momentum for their objectives. Debate however becomes confusing when NPs start suggesting that such targets have a scientific underpinning. Taking this latter stance ignores recent evidence that human activities in the seas tend to be much more clustered, with significant amounts of sea actually not being used. Here is the dilemma facing the NP community: do you establish an MR in an area of sea that is actually not used, or do you establish an MR in an area that is used and thereby cause displacement of the human activ-

ity onto a site that was previously unused? Of course the answer to this depends on 1) your objective for protection, and 2) the availability of local information to ensure a high likelihood of meeting your objective. As we suggest in the book, lack of clear planning objectives and the availability of robust local information often compromise this analytical approach to site designation.

Dogmatic adherence to percentage targets can also be counter-productive because they incentivize meaningless decisions to meet targets, often leading to expedient decision-making rather than encouraging meaningful dialogue over the impacts of different types of human pressure on marine ecosystems, and how these risks can essentially be better managed. Window-dressing MRs/MPAs as panaceas also detracts from more fundamental problems in fisheries management such as lack of enforcement and IUU fishing. 

#### To comment on this article:

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## Notes & News

### Large no-take marine reserve envisioned for Easter Island

A 13 September article in *The Guardian* describes support from leaders of the Rapa Nui people of Easter Island (Chile) for the potential designation of a large no-take marine reserve in most of the island's waters. The proposal, also supported by The Pew Charitable Trusts and the Bertarelli Foundation, would allow local indigenous islanders to fish within 50 nm from shore and in a corridor toward the neighboring Sala Gómez islands to the east, but would otherwise ban all fishing (by locals and non-locals alike) out to the 200-nm limit of the island's EEZ. The purpose of the no-take area would be to protect the island's waters from illegal fishing by international vessels, which is believed to be substantial. The article speculates that

the Chilean Government may announce a notice of intent to designate the marine reserve in October 2015 at the Our Ocean 2015 conference, to be held in Valparaiso. The article is at <http://bit.ly/GuardianEasterIsland>

#### To comment on any Notes & News items:

<http://openchannels.org/node/11014>

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### Report on financing needs and gaps for Mediterranean MPAs

A new report provides the first assessment of financing needs and gaps for effective MPA management across 17 Mediterranean nations. Produced by MedPAN, WWF Mediterranean, and the Regional Activity Centre for Specially Protected Areas (RAC/SPA), the report also assesses the financial resources needed to achieve the Aichi target of protecting 10% of the Mediterranean's marine area by 2020. The 114-page report "Sustainable Financing of Marine Protected Areas in the Mediterranean: A Financial Analysis" is at <http://bit.ly/MedMPAfinancing>

### From the MPA News vault: Features and news items from yesteryear

**Five years ago:** July-August 2010 (MPA News 12:1)

- Gulf of Mexico Oil Spill: The Experiences of MPA Managers So Far, and What Lessons Can Be Learned
- How Close Is the MPA Field to Meeting Its Global Targets?

**Ten years ago:** August 2005 (MPA News 7:2)

- "Sister MPAs": Building International Relationships Between Sites to Share Lessons
- MPA Spotlight: Tanzanian MPA Teams Up with Mobile Phone Company to Improve Communications

**Fifteen years ago:** August 2000 (MPA News 2:2)

- The "New" Economics of Marine Reserves: What MPA Practitioners Need to Know
- Courses Provide Training for Managers in Caribbean, Western Indian Ocean

For these and all other issues of MPA News, go to [www.mpanews.org/issues.html](http://www.mpanews.org/issues.html)

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### UNEP releases WDPA user manual

The UNEP World Commission on Protected Areas has released a user manual for the World Database on Protected Areas (WDPA). The manual describes the history of the WDPA's data; how the data are collected, managed, and distributed; and how they should be interpreted and used. The manual is available at [www.unep-wcmc.org/resources-and-data/world-database-on-protected-areas-user-manual-10](http://www.unep-wcmc.org/resources-and-data/world-database-on-protected-areas-user-manual-10)