



 **Endangered Seas  
Campaign**

**Marine Reserves:**

**Protecting  
the future  
of our  
oceans**

Marine Reserves:

# Protecting the future of our oceans

The use of marine reserves is not new. For centuries communities have restricted access to marine areas –

through tradition or law – to protect their resources and livelihoods. With more and more pressure on the world's dwindling fisheries

and vulnerable ocean habitat, there is an urgent need to create additional marine protected areas to conserve fish and other marine life for future generations.



future



Today less than half of one percent of the seas lie within marine protected areas, and most of these are under-resourced and poorly managed, offering little in the way of real protection. It is estimated that up to 80% of the world's marine protected areas are protected in name only and are not actively managed at all.

Marine protected areas come in many different forms. Fully protected marine reserves – or areas closed to fishing and other harmful uses – are powerful management tools providing a range of benefits for fisheries, conservation and local economies. Faced with the consistent failure of other management approaches, scientists, governments, conservationists – and fishers – are increasingly calling to protect the future of our oceans in this way.

**Fully protected marine reserves are powerful management tools.**



WWF Canon/Rick Weyerhaeuser



**...areas closed to fishing within a marine protected area are small yet still provide vital ecological and economic benefits.**

From the deep-water coral reefs of Norway to the species-rich waters of Australia, WWF is working around the world to promote marine protected areas. WWF's Endangered Seas Campaign is specifically focusing on some of the most biologically diverse regions, promoting new marine reserves, ensuring that existing reserves are managed effectively and securing a future for coastal communities.

Within a comprehensive management plan, marine protected areas provide coastal communities with a valuable conservation tool, allowing fish the chance to breed and grow. In many cases, the areas closed to fishing within a marine protected area are small yet still provide vital ecological and economic benefits.

### **What solutions do marine reserves offer?**

Marine reserves that are closed to fishing and other harmful activities provide a range of benefits to coastal communities, the public and fishers by enhancing fisheries, safeguarding marine habitat and increasing economic opportunities.

#### ***Fisheries benefit through –***

- Enhanced production of offspring within reserves to restock nearby fishing grounds.
- Spillover from within the reserve of adult and juvenile fish, which may then be caught in the fishery.
- Protection of dwindling stocks of species particularly vulnerable to fishing effort.

*The health of the oceans benefits from –*

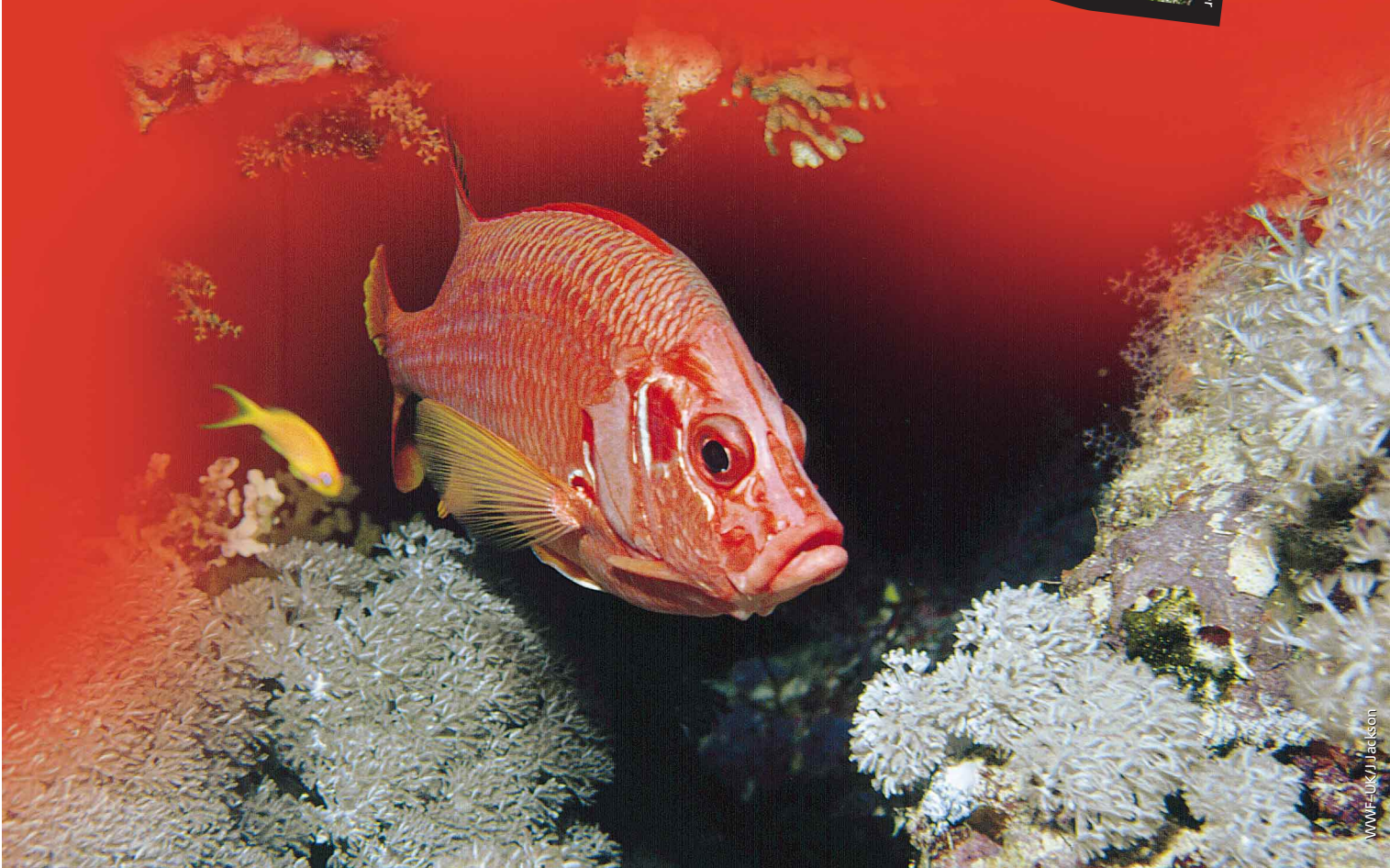
- The prevention of habitat damage and the promotion of habitat recovery within reserves that are no longer subjected to the impacts of destructive fishing gear.
- More 'natural' marine ecosystems containing top predators and fish that have been allowed to grow to their adult size.
- Maintenance of biodiversity in areas that are not threatened by fishing.

*Local economies benefit from –*

- Alternative sources of income from activities, such as guiding visitors and recreational fishers, or taking visitors scuba diving.
- An insurance policy for local fisheries. If other management measures fail, at least some populations are protected in reserves.
- Frequently increased catches outside of reserves due to the enhanced spawning and spillover.



WWF-Canon/Meg Gawler





## The challenge ahead

Many marine protected areas around the world are failing due to a lack of commitment from local communities. Like a broken record, the same lesson is proven time and time again in establishing these reserves – without local commitment there is no real protection, and without true involvement there is no commitment.

That's why WWF is working hard in places like Belize, the Philippines and the Florida Keys to build relationships of trust with local fishers, divers and tour operators. Sometimes it takes years for local people to believe that they can benefit from reserves. But these investments are repaid by the commitment shown by these communities, which today act as responsible stewards of the oceans.



WWF-Canon/Alain Compost

Ensuring critical areas are formally protected is challenging. But the real work is managing marine reserves on day to day basis. Enforcing regulations can be expensive and sometimes dangerous work.

Experienced managers recognize that resources are more effectively spent on education and outreach efforts. In many cases, such as in Tubbataha Reef in the Philippines or in Dry Tortugas in the Florida Keys, fishers who once protested against the

establishment of protected areas today help secure their future by reporting offenders to authorities.

With local, on-the-ground support, marine reserves flourish, providing substantial benefits both for fishers and the fish. It is essential that these benefits are documented and communicated to the local stakeholders and the public, and in turn that they are recognized for their contribution to the future of our oceans.



### Priority areas where WWF is taking action

WWF's Endangered Seas Campaign is involved in marine protected area projects in some of the world's most biologically rich and threatened regions. Together with local WWF staff, other non-governmental organizations, governments and local communities, the Endangered Seas Campaign is working to secure practical steps towards the establishment of effective protection for these areas.

*Florida Keys National Marine Sanctuary, USA* – WWF provided technical input to help develop the proposed Tortugas Ecological Reserve (an area closed to all fishing) and continues to promote its establishment. With the help of Motorola Corporation, communications equipment to help manage the reserve has been provided to sanctuary staff.





*Tubbataha Reef National Marine Park, The Philippines* – WWF has purchased new enforcement vessels to patrol this spectacular World Heritage Site. Teams are working with local communities to investigate the use of community-scale reserves to help sustain local fisheries.

*Banc d'Arguin National Park, Mauritania* – Home to the Imraguen people, Africa's largest marine park has been subject to increasing threats from overfishing of mullet and sharks, driven by demand from overseas markets. WWF is working to secure improved legislation and enforcement on the ground, and funds both staff and equipment to manage park resources.

*Mediterranean Sea* – The fisheries of the Mediterranean have been consistently overfished, and are likely to benefit tremendously from the application of no-fishing-zones. The Endangered Seas Campaign is funding an analysis with experts in the Mediterranean to establish priorities for protection in this highly threatened but unique marine ecoregion.



***The Mesoamerican Reef, Belize*** – Second in size only to Australia's Great Barrier Reef, the barrier reef of Belize is home to some of the last-remaining spawning aggregation sites for reef fish in the Caribbean. Working with local community organizations, WWF is helping stakeholders develop proposals that will regulate the impacts of foreign fishing vessels and excessive tourism, which are a growing threat to this delicate but spectacular reef system.

***The Galapagos, Ecuador*** – Growing demand for sea-cucumber and shark fin in Asian markets has threatened the viability of one of the most famous and distinct marine ecosystems on earth. New legislation and the foresight of some local stakeholders may make the next decade the turning point in securing a sustainable future for the Galapagos. WWF has helped provide technical assistance to design a system of no-fishing areas around the Galapagos Islands and lobbied to secure new legislation to protect the islands' unique marine species and habitats.



***New legislation and the foresight of some local stakeholders may make the next decade the turning point in securing a sustainable future for the Galapagos.***





# Everyone

## Everyone benefits

**...the restrictions are minimized,  
and the benefits maximized, when  
everyone gets involved.**

Establishing effective marine protected areas and no-fishing-zones is no easy task. Closing selected areas to fishing and other human activities impacts may influence livelihoods, traditions and recreational opportunities. But the restrictions are minimized, and the benefits maximized, when everybody affected gets involved in the process. Sound science, the experience of fishing communities around the world and common sense all suggest that protecting areas of ocean habitat from exploitation will increase their productivity, and perhaps more importantly, ensure that future generations have the opportunity to visit and benefit from healthy marine ecosystems.

*Everyone has a stake in marine reserves:*

- *Commercial fishers* ensure that the reserve's boundaries respect their knowledge about which fishing grounds to keep open and which nurseries and spawning grounds to enclose. In the years following closure, they can expect increased catches and healthier fish populations outside of the reserves.
- *Recreational fishers* make sure that valuable species are protected from exploitation and trophy fish given a chance to grow undisturbed.
- *Divers and tour operators* recognize that enjoyment of the marine realm is wholly dependent on the health of marine systems. Working with other stakeholders, like commercial fishers, to develop marine protected areas helps reduce conflict between such groups.

**WWF believes that there is an urgent need to create more marine reserves to conserve fish and other marine life for future generations.**





## Endangered Seas Campaign

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In order to ensure that our children inherit a living planet, where the oceans continue to teem with life and sustain human communities, WWF's Endangered Seas Campaign is working with fishers and local communities, businesses and retailers, as well as governments and environmental organizations to:

- Safeguard fisheries and marine biological diversity by establishing marine protected areas.
- Reduce wasteful government subsidies that contribute to overfishing.
- Create market incentives for sustainable fishing through the Marine Stewardship Council's certification initiative.