Mark Carwardine's
AT A GLANCE...

01 MARINE PROTECTED AREAS

WHAT IS A MARINE PROTECTED AREA (MPA)?

An MPA is any area of the sea where human activities are more strictly regulated than elsewhere. It is designed to protect marine habitats, wildlife and historical artefacts, while allowing varying degrees of sustainable use. Marine reserves, wildlife refuges and sanctuaries are all MPAs of one kind or another.

HOW MANY ARE THERE?

There are at least 5,000 MPAs worldwide. Most are in territorial waters, but some are in exclusive economic zones and international waters. They range in size from a 4,000m² MPA in Canada, to a new 830,000km² MPA around the Pitcairn Islands in the South Pacific. In the UK there are about 250 MPAs, with more being added this year.

IS ALL THE WILDLIFE IN AN MPA PROTECTED?

No. There is huge variation in the level of protection. At one extreme, no fishing, dredging, mining, shipping, tourism or pretty much anything else is allowed; at the other, an MPA is little more than a line on a map.

At the very least, MPAs should limit fishing practices, seasons and catch limits. About 17 per cent of UK waters are within MPAs, but there are only three tiny 'no-take' zones where both fishing and scallop-dredging are banned: Lundy in the Bristol Channel, Lamlash Bay off the Isle of Arran, and Flamborough Head in Yorkshire. Together the trio occupy just 7km², or 0.01 per cent of British territorial waters.

IS THAT ENOUGH?

Nowhere near. According to the UN, only 3.4 per cent of the world's oceans have any form of protection, and most MPAs are poorly managed. The Convention on Biological Diversity set a goal of putting 10 per cent of the world's marine areas under MPA designation by 2020 to form an ecologically coherent network; research suggests that, ultimately, we need two or three times that amount.

WHO MANAGES MPAs?

In the UK, MPAs within territorial waters (less than 12 nautical miles – 22.2km – from the coast) are the responsibility of the relevant devolved governments, who take advice from Natural England, Scottish Natural Heritage, Natural Resources Wales and the Northern Ireland Department of the Environment. In English inshore waters there are also 10 Inshore Fisheries and Conservation Authorities that manage fishing in MPAs out to six nautical miles.

WHAT KINDS OF MPA DO WE HAVE IN THE UK?

They fall into two categories. First, sites designated under EU legislation – these consist of Special Areas of Conservation (SACs), to protect habitats and species listed under the Habitats Directive, and Special Protection Areas (SPAs), to protect birds under the Birds Directive. Second, there are Marine Conservation Zones (MCZs, known as Nature Conservation Marine Protected Areas in Scotland), which give legal protection to habitats and species of national importance.

Plus, to add to the confusion, there are three statutory Marine Nature Reserves established under the Wildlife and Countryside Act 1981, various wetland sites established under the Ramsar Convention, some Sites of Special Scientific Interest (SSSIs) with marine or coastal components, and finally some voluntary MPAs.

CAN MPAs BENEFIT THE FISHING INDUSTRY?

Definitely. Despite complaints from the fishing industry – which is notorious for its mismanagement of fish stocks – MPAs can be effective tools for fish conservation by allowing populations to recover in the absence of human pressure. As fish numbers increase, they spill out into the surrounding seas, which increases catches for local fisheries.

These red and purple sea urchins are in the Channel Islands National Marine Sanctuary in California.

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MARK CARWARDINE is a frustrated and frank conservationist.

● Every month he demystifies some of the most important issues affecting the world's wildlife and assesses the organisations that protect it.

● You can find an interactive map of all of the Marine Protected Areas in the UK at **http://jncc.defra.gov.uk/page-5201**