

Marine Health Check Update 2009

Securing the health of our marine life under the forthcoming Marine and Coastal Access Act

The UK has a remarkable 20,000km of coastline, and our waters are home to an astonishingly diverse range of marine wildlife. But many are in severe decline and urgently need protection.



Short-snouted seahorse.

After 10 years of calling for new legislation, we are delighted that the Marine and Coastal Access Bill will soon become law. Equivalent legislation is expected to be passed in Scotland in spring 2010. Although we've been campaigning to strengthen some elements of the bill, we think the Marine and Coastal Access Act (thereafter referred to as Marine Act) will be a significant improvement on the current provisions. It's imperative that the new legislation, including any secondary legislation and associated policy guidance, provides improvements in the marine environment that we all depend on. It's also vital that complementary legislation is urgently brought forward in Northern Ireland.

In 2000 we commissioned a Marine Health Check report. The 2005 report, and 2009 update, highlight the need for comprehensive legislation. They provide an evolving overview of the status of flagship habitats and species in the seas around the UK. The 2009 Marine Health Check Update report provides a snapshot of six of the marine features covered in the 2005 report. The findings reveal mixed fortunes, but show that human activities continue to threaten many of our marine biodiversity resources.

The UK Marine Act: can we turn the tide for wildlife?

In the last five years, several tools have been developed that could provide a real opportunity to secure the health of our marine life. They include a scientifically robust and ecologically coherent and representative network of Marine Protected Areas combined with effectively designed and executed marine spatial plans developed as part of an ecosystem-based approach to management.

The Marine Act will contain a provision to set up a series of Marine Conservation Zones (MCZs) to protect marine biodiversity. It will allow for an integrated marine spatial planning (MSP) process. It will also set up a single agency – the Marine Management Organisation (MMO) that will oversee planning in the marine environment.

Marine protected areas

The new legislation and associated policy documents should result in the designation of a UK-wide ecologically coherent network of protected areas including MCZs. These need to be robust enough to conserve nature and provide opportunities for species and habitats to recover. Identification of MCZs must be based solely on sound science and include a range of management options from multi-use areas, where non-damaging activities can continue, to zones that are strictly protected from all activities. It's important to engage marine users in the designation process and in establishing and implementing management plans. It's also important Government provide clear guidance on objectives, outputs and roles so that stakeholders can engage and their expectations can be managed.

Marine Spatial Planning

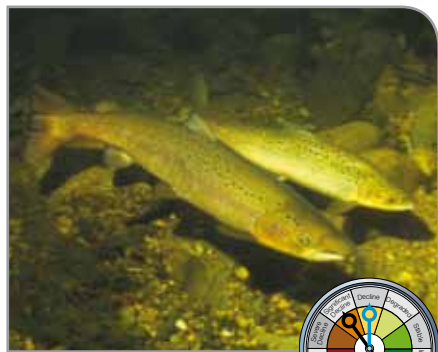
The Marine Act will create a marine spatial planning system that will clarify objectives and guide future priorities. The planning system will outline goals and objectives both for conservation and for different sectoral users of marine areas. It will identify the issues, collect relevant information and evaluate how well plans allow for the efficient, sustainable use and protection of marine resources.

Our Marine Health Check Update is a timely reminder of how vital it is that we effectively implement the Marine Act to protect our seas.

A summary of the key threats to the six flagship species and habitats follows:

Flagship species and habitats

Atlantic salmon (*Salmo salar*)

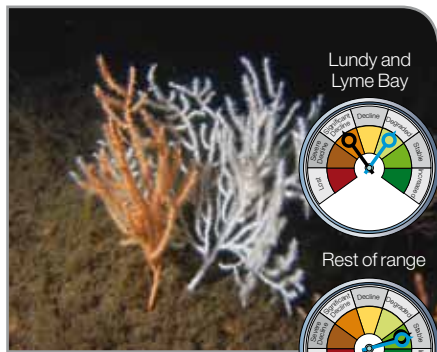


2005: Significant decline
2009: Continuing decline

The Atlantic salmon is found throughout Britain and Ireland. It spends most of its adult life at sea, but lives in fresh water during its reproductive and nursery phases. Salmon stocks have continued to decline over the past 30 years despite targeted management measures and some improvements in water quality. North Atlantic catches plummeted 80% between 1970 and 2000. As well as a decline in abundance, the condition of salmon is currently a cause for concern.

The new Marine Act could be used to increase the level of protection for salmon in estuaries, not only through the designation of MCZs, but also through integration with current piecemeal coastal and estuary measures through spacial plans. Integration is necessary to manage the cumulative pressures on migrating salmon.

Pink sea fan (*Eunicella verrucosa*)



2005: Significant decline (Lundy and Lyme Bay), stable in rest of it's range
2009: Degraded, no evidence of recovery (Lundy and Lyme Bay), stable in rest of its range

The pink sea fan is one of the most exotic of our seabed species. It thrives only in south-west Britain where, at a few locations, it can occur in 'forests'.

Although pink sea fans are no longer in overall decline, populations are classified as degraded as a result of past and continuing damaging activities, such as dredging for scallops. They have not shown signs of recovery from damage.

As well as being a nationally important species, pink sea fans are often found with a variety of other sensitive species, such as sponges. The Marine Act provides an opportunity to increase the level of protection given to these long-lived, fragile species via MCZs. This is vital to ensure recovery and guard against the possibility of further damage.

Seagrass beds (*Zostera spp.*)



2005: Severe decline
2009: Degraded

Seagrass beds are rich habitats for marine life and important sources of food for wading birds. They're also a spawning and nursery habitat for many types of fish. In the 1930s, seagrass beds were affected by a wasting disease and there are still no signs of recovery. Beds are also being damaged by activities such as anchoring and by trawling for cuttlefish, which can cause physical impacts and lead to fragmentation of the habitat. Seagrass beds are important for species such as seahorses. A breeding population of seahorses has been recorded at Studland Bay, Dorset.

Designation of MCZs, provided by the Marine Act, should be used to increase protection of this important habitat to allow recovery. The Act could also give stronger powers and explicit duties to manage inshore fisheries in England in ways that will boost conservation. This should lead to greater protection for marine habitats, including seagrass beds, and their inhabitants.

Harbour porpoise (*Phocoena phocoena*)



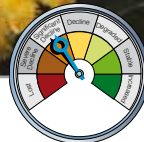
2005: Decline
2009: Stable in wide-ranging populations but declining in some local areas e.g. Moray Firth

The harbour porpoise is the smallest of the cetaceans found around the UK. It is also the most heavily-protected species, being listed in 23 directives, statutes and conventions. Despite this, populations continue to be threatened by human activities and incidental capture or 'bycatch'. Bycatch continues to be the most significant threat to this species (and may have contributed to its continued decline) in specific areas such as the Moray Firth in Scotland.

In 2008, OSPAR listed the harbour porpoise as under threat/in decline in the Greater North Sea and the Celtic Sea.

The Marine Act presents the opportunity, via a strategic marine planning system, to manage areas important to the harbour porpoise. Particularly those regions that are adjacent to areas used by people. The legislation must address the number of activities which impact directly on the harbour porpoise. The Marine Act also offers the potential to designate MCZs that could have a number of levels of protection, and which could vary seasonally to account for how porpoises use certain areas in different ways at various times of the year.

Deep-water coral reefs (*Lophelia pertusa*)



2005: Significant decline
2009: Significant decline

Deep-water coral reefs occur worldwide, generally at depths in excess of 200m, beyond the reaches of surface light. The reef structure provides shelter for a wide range of species such as fish and crabs and creates a habitat for non-mobile species such as sponges and barnacles. For many years, deep-water trawlers have been fishing long-lived and slow growing fish from the area of these reefs, often destroying the reefs in the process. Deep-sea fishing is now widespread and it is likely that currently unknown reefs are sustaining damage before they have been discovered.

Climate change is increasing the acidity of the oceans and this is likely to be a significant threat to deep-water corals.

Surveys continue to provide more information, which points to the location of sites that need to be protected from fishing. The designation of an ecologically-coherent network of marine protected areas through the Marine Act and EU legislation could help to build marine ecosystems' resilience to climate change and protect cold water corals from destructive fishing practices.

Horse mussel (*Modiolus modiolus*)



2005: Significant decline
2009: Stable but no sign of recovery in damaged areas, such as Strangford Lough

Horse mussel beds act as living reefs and provide a habitat and refuge for many species.

Without human interference, horse mussel beds are extremely long-lasting, stable structures. However, due to their poor rate of growth, beds are very slow to recover from any damage. In fact it's possible that beds may never recover from severe damage, particularly that caused by trawling – for example, trawlers target queen scallops, which are often associated with horse mussel beds.

The designation of MCZs through the Marine Act will provide an opportunity to adapt the level of protection to restrict damaging activities, and ensure that key examples of this habitat are no longer damaged, and aid recovery.

Further protected sites covering the full geographical range of this species will be required if, as predicted, its natural range alters due to increased sea temperatures as a result of climate change.

Conclusion



Farmed Atlantic salmon held in a Scottish loch.

© Sue Scott

The 2009 update of the Marine Health Check shows that, Atlantic salmon and deep-water corals continue to decline, despite some conservation and management measures. The pink sea fan, harbour porpoise, seagrass and horse mussel reefs have not declined further since 2005 but continue to be threatened, degraded and damaged by specific activities in particular areas. Decline in status or degradation in the quality of marine life is generally something that can be checked and reversed. In our experience, political will and stakeholder engagement are key to such success. Successful and timely implementation of the Marine Act, including marine spatial planning and the development of an ecologically-coherent network of MPAs, is therefore a requirement of both government and stakeholders.

WWF is calling for the following to be implemented via the Marine Act and its supporting guidance and policy documents:

- MCZs must be identified using sound scientific criteria alone. The socio-economic consequences should only be taken into account where two or more areas being considered for designation are equally desirable, and choosing between them will not compromise an ecologically-coherent network of sites.
 - MCZs should have different levels of protection to address the variation in threats to and conservation needs of species and habitats. Highly protected MCZs are needed for especially vulnerable, sensitive or threatened species and habitats.
- Sea fishing must be compliant with the requirements of the MCZs because it can be one of the most common causes of harm to marine biodiversity.
 - Conservation objectives for MCZs need to be explicit, and the species and/or habitats protected clearly stated, as ambiguity can lead to ineffective protection and failure to meet objectives. Robust management plans provide a key mechanism to achieve this and should be produced for all MCZs
 - Management of marine protected areas and implementation of marine spatial planning must be flexible and adaptable in order to be effective against the impacts of climate change.
 - The Marine Management Organisation (MMO) and equivalent devolved bodies must have a proactive role in delivering marine nature conservation and sustainable development.
 - The MMO and equivalent devolved bodies must deliver a consistent and coordinated approach across borders and the boundaries between land and sea. Marine plans should be based on ecosystems, not administrative boundaries, and should be produced for all UK seas.
 - Inshore fisheries management in England and Wales should be sustainable and reduce bycatch.

The full report, *The Marine Health Check Update 2009*, prepared by the Marine Life Information Network (MarLIN) at the Marine Biological Association of the UK, will be published in autumn 2009.



The mission of WWF is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- reducing pollution and wasteful consumption

www.wwf.org.uk/marineact

for a living planet

WWF-UK

Panda House, Weyside Park
Godalming, Surrey GU7 1XR

t: +44 (0)1483 426444

f: +44 (0)1483 426409