Species Protection and the Inshore Fishing Sector



1 Introduction

While site protection measures may be the most well-known actions taken in support of species conservation with regards to the habitats Directive. an additional system is needed to protect species outside these areas. This is particularly important for species with a large natural range; species that migrate over long distances or rely on two or more distinct habitats during different stages of their life cycle.

The provisions for a strict system of protection thus complement the requirements for site designation under the habitats Directive (see Briefing 2). They are further underpinned by measures controlling the exploitation of species whose taking in the wild is permitted as long as it does not jeopardise their survival.

The habitats Directive consequently offers three different levels of species protection, as follows:

- site protection for species listed in Annex II;
- a strict system of protection for species listed in Annex IV; and
 - m a n a g e m e n t orientated protection for animal and plant species listed in Annex V, whose taking in the wild may be subject to management measures (eg quotas).

A majority of, but not all, animal species for which sites have to be designated (Annex II) are also subject to strict protection measures (Annex IV). Similarly, not all species subject to strict protection are covered by site protection measures.

2 The Legal Requirements – Species Protection

Site protection – Annex II species

Site protection in the marine environment has to be provided for a

number of species, including mammals, reptiles and fish. In the UK, sites have or may be considered for the grey seal, the common/harbour seal, the bottlenose dolphin and harbour porpoise, the otter and a number of fish species such as the sea lamprey, allis shad and twait shad. The loggerhead turtle, which is protected under Annex II of the habitats Directive and occurs in UK waters, is unlikely to require UK site protection.

Site protection requirements are outlined in detail in Briefing 2, on Natura 2000.

Strict species protection -Annex IV species

In providing strict protection for Annex IV species, Member States have to prohibit:

- all forms of deliberate capture or killing of members of the species in the wild;
- ii) deliberate disturbance of the species, particularly during periods of breeding, rearing, hibernation and migration;
- iii) deliberate destruction or taking of eggs from the wild; and
- iv) deterioration or destruction of breeding sites or resting places.

Similar provisions apply to plants, although the Directive in

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its current form does not include any marine plant species (Mediterranean Posidonia seagrass meadows are, however, protected as an Annex I priority habitat).

Member States are also obliged to establish a system to monitor the incidental capture and killing of all animals to which the strict protection provisions apply. If there is an indication of significant negative impact on the species concerned, further conservation measures have to be taken to prevent the incidental capture and killing.

At the time of entry into force of the 1992 habitats Directive, none of the marine species for which strict protection measures have to be taken were commercially exploited in the UK. Consequently, the implementation of the Directive has not required any significant changes as regards hunting at sea or fishing practices. One exception where some hunting did and, in exceptional cases, still does occur, albeit not for direct commercial reasons, is species such as cormorants seals, or which hunted are because they are seen to be competing with local fisheries

The incidental killing and capture of non-target species in fishing gear, however, is of concern. Bycatch may affect cetaceans and sea turtles, as well as protected non-target fish species, such as the sturgeon. There is also documented evidence of otter mortality in certain coastal fisheries.

The prevention of deterioration or destruction of breeding sites or resting places of listed species may also be a fisheries issue, particularly where demersal fishing gear has an impact on benthic habitats.

Taking in the wild - Annex V species

In addition to the above, the habitats Directive lists animal and plant species whose taking in the wild and exploitation may be subject to management measures, such as quotas. Member States have to ensure that their exploitation is compatible with the species being maintained at a favourable conservation status.

Annex V includes a number of marine species that occur in UK waters, including two seal species, Atlantic salmon (only when in freshwater), common whitefish, vendace, European river lamprey, allis shad and twaite shad, and two species of red algae.

3 Implications for the Protection of Key Groups of Marine Species Covered by the Directive

Cetaceans

The bycatch of cetaceans, particularly the harbour porpoise, is thought to have significant detrimental effects on populations. Some steps have been taken to monitor and avoid the loss of animals in fishing gear. In the UK, Defra (formerly MAFF) has funded monitoring of incidental capture of cetaceans since 1990. This has involved autopsies of stranded animals and the use of on-board observers, for example in the Celtic Sea gillnet fisheries and the sea bass fisheries. Recent trials of marine mammal exclusion devices in the Scottish sea bass fleet, fishing in the English Channel and Western Approaches, failed. The use of separator grids did not appear sufficient to reduce bycatch, with at least 169 dolphins caught despite the use of separator grids between November 2003 and April 2004. In contrast, positive results from pinger trials in Denmark in 2000 have led the Danish Government to make them mandatory in its North Sea wreck fisheries, between August and October.

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Addressing Cetacean Bycatch

At the EU level, three measures have been taken to prevent cetacean bycatch in EU fisheries. Firstly, the use of drift nets in certain fisheries, including for tuna, marlin, swordfish, cephalopods and some shark species, has been banned in the North-East Atlantic and Mediterranean since 2002 (Regulation 894/97, as amended by Regulation 1239/98). This has recently been extended to include the Baltic Sea (March 2004).

Secondly, EU vessels are not allowed to encircle schools or groups of marine mammals with purse seines in EU waters (Regulation 973/2001).

Thirdly, a new Regulation (812/2004), adopted in March 2004, also addresses the accidental capture of cetaceans in fishing gear more broadly. In addition to the extension of the drift-net ban to the Baltic, it includes two key measures:

- i) the mandatory use of acoustic deterrent devices ('pingers') in bottom-set gillnet, entangling net and other gillnet fisheries in the Baltic Sea, North Sea and south western approaches for vessels of 12 metres or more; and
- ii) the use of on-board observers in selected fisheries, for vessels of 15 metres or more with the exception of those using pingers. For vessels below 15 meters in length, Member States have to put alternative monitoring systems in place.

Observers would need to monitor fishing operations, incidental catches of cetaceans and the use of acoustic devices. The scheme would apply to 'high risk' fisheries in the North Sea, Baltic Sea, Mediterranean Sea, and in waters west of the British Isles, France and Spain, including inshore waters. These notably include high opening, and single and pair pelagic trawl fisheries, as well as gillnet and entangling net fisheries.

> The fact that observers would be required on the trawlers suggests that additional technical measures may be expected in this fishery,

should a high incidence of bycatch be confirmed.

In July 2004, the UK Government announced its intention to ask the European Commission to take emergency measures under the CFP to close the pelagic trawl fishery for sea bass in order to protect the common dolphin. This decision was taken after trials of cetacean exclusion devices failed to show an overall reduction in cetacean bycatch. The UK also seems determined to take unilateral action if no EU measures are taken.

Seals

Seals are also taken as bycatch, notably in static gear such as gill nets. The Mediterranean monk seal and Saimaa seal are currently the only seal species subject to strict protection under Annex IV of the habitats Directive. Nonetheless, some measures have been taken in the UK to assess and reduce incidental capture of other seal species. Under Annex II of the Directive, the grey and harbour seal are subject to site protection in the UK (see Briefing 2), and their taking in the wild is subject to management measures (Annex V).

Otters

Otters forage in the intertidal and shallow rocky areas of the coast, feeding on fish and crustaceans. They are vulnerable thus to entanglement in certain types of fishing gear, notably fyke nets, creels (for lobsters, crabs and prawns), fish farm nets and wade nets. They are subject to strict protection measures (Annex IV) and site protection (Annex II), although the latter are more likely to include freshwater habitats than marine environments

Various types of otter guards have been tested and some form of guard is now mandatory for eel fyke nets. In England and Wales, the use of eel fyke nets is also subject to a licence from the Environment Agency. Other fisheries, notably using crustacean traps, still lack equivalent rules on the use of otter guards.

Marine turtles

Five species of marine turtle have been recorded in UK waters: the leatherback turtle, the loggerhead turtle, the Kemp's ridley turtle, the green turtle and the hawksbill turtle. Most of these species are at the northeastern reach of their range in North-Western Europe, and only occasionally occur in UK waters. Of the five species mentioned above, the leatherback turtle is the most commonly occurring, and as a result it is more often taken as bycatch. Entanglement in rope is most common, particularly in pot fisheries targeting crustaceans and whelk. Most of the bycatch occurs between July and September, in waters north, west and south-west of the UK coast, and off the south and west coasts of Ireland. Driftnets, trawls, set gill nets, purse seines and long-line fisheries, have also been implicated.

The French pelagic tuna driftnet fleet, for instance, is reported to have caught 130 leatherbacks over a twoyear period (1992/93), a capture rate of one turtle per 10,000 tuna. In 1995, observers on UK tuna vessels reported a capture rate eight times that of the French fleet, clearly a substantial contribution to turtle mortality rates. This problem should have been rectified by the drift-net ban, however.

As in many other EU countries, the reporting of bycatch and turtle sightings in the UK has not been systematic and has relied upon reporting informal networks. Thus, the exact impact of capture rates favourable on the conservation status of the different species is not known. There are fears. however. that current

bycatch rates may be unsustainable, at least for leatherback turtles.

Fish

The habitats Directive lists just six fish species as in need of strict protection (Annex IV), only three of which spend time in the sea.

The *houting* (Coregonus oxyrinchus) is considered extinct in UK waters. The destruction of its riverine spawning grounds is thought to be the main for the reason houting's disappearance. It is rarely found in bycatch, and conservation measures are most likely to focus on its freshwater habitats. The species has a natural range throughout the North-Eastern Atlantic, including the countries along the coast of the Baltic Sea.

The *European sturgeon* is also considered very rare or extinct in most EU waters. As with the houting, the destruction of its freshwater habitats has contributed to its decline. High levels of exploitation have further decimated their numbers. drivina the European sturgeon to the brink of extinction. In recent years, there have been at least three cases of sturgeon bycatch, involving UK and German fishermen. Each case has

helped to highlight the plight of the species, while at the same time indicating the lack of awareness amongst the public and fishermen of its protection status.

The Adriatic sturgeon -

like its European counterpart, is vulnerable to habitat destruction, pollution and overfishing. It is, however, still more common than the European sturgeon.

Other fish species awarded strict protection under Annex IV of the Directive are the Valencia toothcarp, which is endemic to the Mediterranean, the Southern European *Anaecypris hispanica* and the Rhone streber.

In addition, a number of fish species require the designation of SACs, including the allis and twaite shad, lampern, sea lamprey and sturgeon (see Briefing 2).

Re-establishing the European Sturgeon

In Germany, steps have been taken to reintroduce the European sturgeon. In future, similar attempts may be made elsewhere, and could eventually lead to increasing numbers of animals in the sea. To be successful, reintroduction attempts have to go hand in hand with habitat restoration and species protection measures. These may include measures to reduce bycatch in fishing gear.

Derogations from the species protection provisions

In special circumstances, Member States can derogate from the species protection provisions. However, this must not undermine the conservation status of populations concerned. Derogations must be justified on the basis that they are made:

- in the interests of protecting wild plants and animals;
- to prevent serious damage to crops, fisheries, water, etc;
- in the interests of public health and safety, or for other overriding issues of public interest, including of a socio-economic and/or environmental nature; and/or
- for research and education purposes; or
- to restock or reintroduce species.

In practice, there is limited scope for UK derogations from the protection of marine species.

4 Implications for the Protection of Breeding or Resting Places under Annex IV

The obligation to prevent the deterioration and destruction of breeding sites or resting places of Annex IV species has only minor implications for the inshore fishing sector.

All of the listed fish species breed in riverine freshwater habitats, the restoration and protection of which is a priority. For seals and sea turtles, the protection of resting and breeding sites is primarily a matter of protecting beaches and other shores, and limiting disturbance close to the shoreline. Thus, the main consideration for the inshore fisheries sector is measures to protect the breeding and resting places of cetaceans.

SACs to protect breeding grounds of bottlenose dolphins

The Cardigan Bay European Marine Site (or SAC) is one of a few sites where bottlenose dolphins are known to breed. The local population is thought to consist of around 125 individuals, and in the summer months calves and juveniles are often observed together with adult individuals or groups. The Moray Firth European Marine Site in north-east Scotland also supports a resident population of approximately 130 bottlenose dolphins. The animals appear to favour particular areas within the site, which may allow for a spatially differentiated approach to the management of adverse pressures such as fishing activities.

If the Annexes of the habitats Directive are amended to include more marine interest features, provisions for the safeguarding of resting and breeding areas may become more important. In particular, the inclusion of other fish species, many of which are likely to breed in inshore waters, will probably require measures to protect benthic habitats not covered by the existing habitat type criteria (see Briefing 2).

5 Taking in the Wild of Fish and Other Species (Annex V)

For species listed in Annex V, Member States have to ensure that their exploitation is compatible with the species being maintained at а favourable conservation status. А number of marine species is listed, including two maerlforming species of red algae (Phymatolithon calcareum and Lithothamnion coralloides), all three seal species, the Atlantic (freshwater salmon habitats only), the common whitefish, the vendace, the European river lamprey, the allis shad and twaite shad, as well as all sturgeon species for which the system of strict protection under Annex IV does not apply (ie not the European and Adriatic sturgeon).

Monitoring schemes for the above fish species involving anglers and inshore fishermen may be, and in some instances have been put in place. These could potentially be accompanied by financial incentives for the recording and releasing of animals caught accidentally.

EU grants under the Financial Instrument for Fisheries Guidance (FIFG) have been used for similar schemes in the past, notably to notch and release lobsters in the UK and Ireland.

6 Future Developments

The Annexes under the habitats Directive have been identified as a particularly weak spot regarding its applicability in the marine environment. Marine animals, plants and habitats are poorly represented overall, and a revision to reflect marine conservation needs is becoming increasingly likely. This could result in the addition of other marine species, such as European eels and skates.

As regards compliance, there are various means to improve the use of more selective or sensitive fishing gear and methods, including grants under the FIFG programmes. Such aid may be used to compensate fishermen affected by changes in the law, as well as to encourage the voluntarily use of gear that goes beyond the legal minimum required. There may also be scope to fund management measures, such as monitoring and on-board observers. Getting fishermen and other stakeholders to successfully apply for grants, however, remains a challenge.

Summary of Briefing

- The protection of species is a central element of the habitats Directive. Three types of protection are offered: site protection through inclusion in the Natura 2000 network (Annex II), strict species protection (Annex IV) and managed exploitation (Annex V).
- For the inshore fishing sector in the UK, the incidental capture and killing of cetaceans, and to a lesser extent sea turtles, appears to be the most obvious species protection issue.
- Measures to mitigate bycatch of non-target species are likely to involve gear restrictions, as well as time and spatial closures. The use of acoustic deterrent devices, such as pingers, already is mandatory for certain fisheries.
- Monitoring schemes for non-target fish and other species are needed to increase knowledge and awareness.
- There are indications that the list of species protected by the habitats Directive could be extended. If so, more marine species could be added, for example the European eel.
- Incentives, including financial payments, could be used to encourage the take up of more selective gears, and potentially to fund reporting of incidental capture of protected species.



Information Sources:

James B. Reid, Peter G.H. Evans and Simon P. Northridge (ed) (2003) *Atlas of cetacean distribution in north-west European waters*. JNCC http://www.jncc.gov.uk/Publications/cetaceanatlas/#download

Pierpoint, C (2000) *Bycatch of marine turtles in UK and Irish waters*. JNCC Report 310 http://www.jncc.gov.uk/communications/pubcat/publications/JNCC_310/JNCC_310.pdf

European Register of Marine Species http://erms.biol.soton.ac.uk/

UK Species Action Plans http://www.ukbap.org.uk/species.aspx

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This is the third in a series of IEEP briefings,¹ examining key provisions of EU nature conservation policy set out in the habitats and birds Directives, and how these relate to the UK inshore fishing sector (ie within 12 nm). The aim of this briefing is to explain the provisions of Article 12 of the habitats Directive, outlining the **system of strict protection** for certain animal and plant species, and its application in the marine environment. Provisions for certain fish species, whose taking in the wild may be subject to management measures, are also outlined. *Additional measures under the EU birds Directive to establish a general system of protection of all European wild birds, their eggs and nests, including sea birds such as the guillemot, razorbill, puffin, gannet, shag and kittiwake, are NOT covered.*

The habitats and birds Directives have potentially far-reaching implications for various economic sectors, and the fisheries sector is no exception. The purpose of these briefings is to explore the possible consequences for the UK inshore fishing sector. In due course, the briefings will be followed by good practice examples from the UK and other European countries, demonstrating innovative ways of managing fisheries in support of EU nature conservation policy.

published so far are:

- 1. EU Nature Conservation and the UK Fishing Sector Overview of Issues
- 2. Natura 2000 in the marine environment
- 3. Species Protection and the Inshore Fishing Sector
- 4. Appropriate Assessment of Activities Affecting European Marine Sites
- 5. Managing European Marine Sites



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