

Reducing the Environmental Impact of Fisheries

The problem

The OSPAR Quality Status Report from the year 2000 regarding fisheries reads like a never ending list of messages of amazement. The situation in the Baltic Sea, the agreement area of HELCOM, isn't better – fisheries are identified as one of the most serious threats today.

- In the North-East Atlantic, fisheries for 40 out of 60 commercially exploited fish species are overfished. In regions where typical commercial stocks decline, fishing pressure is often transferred to deep sea populations which are especially vulnerable to overfishing due to slow growth rates and low fecundity.
- In the Baltic, 70% of the commercially exploited fish stocks are overfished.
- Excessive fishing pressure also threatens some non-target species and the physical environment. This puts populations and habitats in danger, reduces biodiversity and affects the productivity of ecosystems.



Fig.1:
Harbour porpoise entangled and drowned in gill-net
Credit: © Danish Society for Nature Conservation (DNF)

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- By-catch of undersized or unwanted commercial species, mortality of non-target species including benthic animals and marine mammals such as porpoises and dolphins and high level discards are continuing problems (Fig.1).
- Disturbance of the seabed by fishing gear can change the species and size composition of the benthos especially where the disturbance is repeated. E.g. in the North Sea, there has been a shift in benthic diversity and composition from larger, more long-lived benthic

species to smaller, more opportunistic species. Investigations of the North-East Atlantic continental shelf have revealed the extensive damage caused to deep-water coral formations by trawling activities (Fig. 2 and Fig. 3).



Fig.2:
Intact cold water coral reef off the Norwegian coast.
Credit: © André Freiwald, ACES, University of Erlangen



Fig 3:
Cold water coral reef destroyed by bottom trawling.
Credit: © Institute of Marine Research, University of Bergen, Norway

What has been achieved?

To date measures taken by competent authorities have had only limited success in addressing poor fisheries management. Fishing effort remains in excess of the available resources and there is overcapacity throughout European fishing fleets. The EU fleet alone is estimated to be in the region of 40% over capacity. The urgent need for sustainable and responsible fishing is broadly agreed throughout the area. It is generally recognised that fisheries management needs to address the wider impacts that fisheries have on the marine environment and, in doing so, adopt an ecosystem-based approach. This will result in holistic, multi-annual, and strategic policies being implemented which will also be dynamic enough to respond to changes within the fishery.

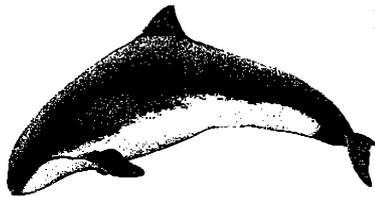
The reform of the EU's Common Fisheries Policy in 2002 was recognised as a major opportunity to integrate environmental protection requirements into principles, objectives and operational procedures of EU fisheries management. The final text agreed by Member States did not go as far as it could but made some headway in achieving environmental integration. WWF broadly welcomed the commitments made in the new regulation to the application of the precautionary approach to protect and conserve living aquatic resources, to minimise the impact of fishing activities on marine ecosystems, the progressive implementation of an ecosystem based approach to fisheries management and to bringing the European fleet into line with available resources. These targets provide an important way forward for the sustainable management of fisheries.

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There were, however, disappointments with the final outcomes, many of which WWF views as too little too late. Whether or not the objectives of sustainable management integrated in the new framework regulation will be met will come down to how Member States choose to interpret the regulations, how they implement them and importantly what enforcement measures are agreed. The new EU fisheries framework may be greener but if Member States are to be successful in achieving the critical balance of exploitation and existing resources they must address the size and nature of the fleet. The means by which they will achieve this remain unclear.

The added value of marine environment conventions



Although OSPAR and HELCOM have no authorisation to regulate fisheries in the North-East Atlantic or Baltic area both have a mandate to ensure sustainable use of natural

resources and the obligation to protect the full range of species, habitats and ecosystems of their Maritime Areas. This clearly gives these regional seas agreements and their members the authority to advise on urgent measures which may be necessary in relation to the environmental impacts of fisheries. Such mitigation measures are particularly important to safeguard species and habitats under threat and decline as listed by OSPAR. The steps to be taken should be developed co-operatively with the authorities competent for

fisheries management of the European Community, Norway and Iceland as well as the North-East Atlantic Fisheries Commission (NEAFC). The co-operation between HELCOM and the International Baltic Sea Fisheries Commission (IBSFC) is regarded to be a good start.

Text prepared by Heike Vesper and Helen McLachlan

Further reading

ASCOBANS (2002): Recovery Plan for Baltic Harbour Porpoises. Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas. Bonn.

EEA (2002): Indicator Fact Sheet, Fish stocks outside safe biological limits. European Environment Agency. Copenhagen. http://themes.eea.eu.int/Sectors_and_activities/fishery/indicators/stocks/stocks.pdf

EC (2001): Green Paper on the future of the Common Fisheries Policy. European Commission. Office for official publications of the European Communities. Luxembourg.

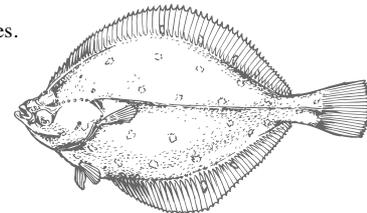
ICES (2002): Distribution of cold water corals in the North-East Atlantic in relation to fisheries. Section 3 of ACE Report. International Council for the Exploration of the Sea. Copenhagen.

OSPAR (2000): Quality Status Report 2000. OSPAR Commission. London.

WWF (2001): Put environment at the heart of European fisheries policy. WWF Manifesto for the review of the EU Common Fisheries Policy. WWF European Policy Office. Brussels.

WWF (2002): The Crisis in North Sea Fisheries. Briefing for the 5th NSC. WWF North-East Atlantic Programme. Bremen.

WWF (2002): Ecosystem-Based Management for Capture Fisheries. WWF International. Gland.



WWF hereby calls on Ministers to urge the relevant fisheries management authorities and international bodies to address the following issues as a matter of priority:

- the need to ensure that **capacity** and deployed **effort** of the fishing fleets in all regions is in line with available resources;
- the need for the swift agreement and implementation of strategic, comprehensive and well funded **recovery plans** for specific fish stocks that are immediately under threat and/or outside safe biological limits, the **rebuilding of fish stocks** generally and the establishment of **multi-annual management plans** based on a combination of management tools including the establishment of **year round no take zones (or regeneration areas)** which aim to meet recovery targets following scientific advice;
- the need to minimise the **by-catch of non-commercial species** and to avoid **damage to sensitive habitats**; to establish where data is available by-catch limits which should not be exceeded for non commercial species, by doing so contribute to the **protection of those species and habitats identified by OSPAR and HELCOM that are in need of protection**;
- the need to adopt and implement without delay a **recovery plan for harbour porpoises** in the Baltic Sea and to develop and implement one in the North Sea and the southern Channel, and in particular as a matter of urgency to take the appropriate measures to reduce the annual mortality of harbour porpoises in fisheries to below unsustainable levels;
- to progress research on **undisturbed areas** to establish on the basis of scientific advice by 2004, individually or in co-operation and on a pilot basis, undisturbed areas of significant size to assess the benefits for fisheries and the marine environment;
- the need for the improvement of the **management of deep-water fisheries** in line with scientific advice following the precautionary principle in order to protect deep water fish stocks and contribute to the **protection and conservation of vulnerable habitats** such as **deep-sea sponge aggregations, cold water coral (*Lophelia pertusa*) reefs, seamounts, and carbonate mounds**; to protect *Lophelia* reefs in particular, **spatial closures to towed gear** that potentially impact the bottom must be considered in line with ICES advice;
- to follow up the commitments made in the UN FAO Code of Conduct of responsible fisheries as well as through its international action plans on the management of fishing capacity, reducing incidental **by-catch of seabirds** in long-line fisheries, the **conservation and management of sharks** and preventing, deterring and **eliminating illegal, unreported and unregulated fishing**;
- the need to develop and implement methods for the **strategic environmental assessment of new fishing practices**, new fishing grounds and fishing on new species;
- the importance of the proper management of all forms of **aquaculture and mariculture** to prevent adverse effects on species and ecosystems and the development of principles and criteria for sustainable aqua- and mariculture.