



PRESS RELEASE

International Council for the
Exploration of the Sea

17 October 2005

OVERHAUL DEEP-SEA FISHERIES, SHARKS IN TROUBLE, GOOD AND BAD NEWS FOR OTHER FISH STOCKS.

This Friday, scientists from ICES will release a report calling for a complete overhaul of deep-sea fisheries. Scientists will recommend that all existing deep-sea fisheries should be cutback to low levels until they can demonstrate that they are sustainable. They will advise zero catch of depleted deep-sea sharks, and they will recommend that no new fisheries for deep-sea fish should be allowed until it can be demonstrated that they are capable of being sustainable.

David Griffith, General Secretary of ICES said today:

“Deep-sea fish such as the orange roughy or the roundnose grenadier are long-lived, slow-reproducing fish that can withstand only low levels of fishing pressure. All our evidence indicates that the current fishing pressure on these stocks is much too high. We are particularly concerned about deep-sea sharks such as the Portuguese dogfish and leafscale gulper shark which are now heavily depleted.”

For all existing deep-sea fisheries, ICES will advise that fishing pressure should be reduced considerably to low levels, and should only be allowed to expand again very slowly until reliable assessments indicate that increased harvests are sustainable. New fisheries on deep-sea fish should be permitted only when they are accompanied by programmes to collect data and should expand very slowly until it can be demonstrated that they, too, can be sustainable.

In the case of deepwater sharks, the **Portuguese dogfish** and **leafscale gulper shark** stocks are already so depleted that the advice is now for zero catch. Because deepwater sharks are caught in mixed fisheries for other deep-sea species, ICES will advise that methods will need to be developed to avoid catching deepwater sharks in these fisheries, or if this is not possible then effort in the mixed fisheries will have to be reduced to the lowest possible level.

Sharks, skates and rays in trouble

The report will also advise that it is not just deepwater sharks that are depleted; other shark species such as **spurdog**, **porbeagle** and **basking sharks** are also in poor condition. In the case of spurdog, the stock is thought to be depleted to a record low and may be in danger of collapse.

Spurdogs are a long-lived, slow-growing member of the shark family, and are considered to form one stock ranging from the Barents Sea down to the Bay of Biscay. They are mainly caught as a by-catch although there have been directed fisheries targeting large females. ICES will recommend zero catch of spurdog across the whole of their range, and will state that an overall reduction in demersal fishing effort would help to reduce by-catches of this species.

ICES will also recommend zero catch of porbeagle and basking shark. There are no longer any directed fisheries for basking shark in the ICES area but they are sometimes caught as a by-catch. The directed porbeagle fishery finished in the 1970s when it became unprofitable, but since then there have been sporadic targeted fisheries for them and they are also caught as a by-catch.

In the North Sea, ICES will also advise zero catch of **common skate** and **thornback ray** which are both depleted. The advice will be that targeted fisheries should not be permitted and by-catch in mixed fisheries should be reduced to the lowest possible level.

While some skate and ray stocks are in poor condition in the North Sea, some shark species such as the **lesser spotted dogfish** and **smooth hound** sharks are actually on the increase.

Other stocks: good and bad news

The news for other fish stocks is the usual mixed bag of good and bad news: on the positive side, ICES will advise that **haddock** in the North Sea are still plentiful (estimate 266,000 tons in 2005) as a result of the large 1999 year class (the number of fish spawned in a particular year). Scientists, however, warn that since the 1999 year class, subsequent year classes have been below average so unless there is another big year class it is likely that catch levels will decline in future.

The **blue whiting** stock - a member of the cod family - is also plentiful at the moment, because of some successful year classes. The stock reached a record high of over 5 million tons in 2003, but has since declined slightly. However, ICES will advise that current fishing pressure is too high and needs to be reduced in line with the long-term management plan agreed for this stock by the EU, Faroe Islands, Iceland and Norway in 2002. ICES will also advise that measures set out in the management plan to protect juveniles should be implemented, that the stock should be monitored more closely and that there should be an immediate reduction of fishing if the number of young fish joining the stock drops in the coming years.

Another stock that is doing well is the **Norwegian spring spawning herring** which continues to thrive (the stock is now over 6 million tons) although fishing pressure has been creeping up in the last few years and needs to be reduced in line with the agreed long-term management plan.

Meanwhile **cod** stocks in the North Sea, Irish Sea and west of Scotland remain well below minimum recommended levels and the advice for these stocks, and Iberian Peninsula **hake**, which is also still in poor condition, is zero catch. **Whiting** in the Irish Sea are also thought to be in poor condition so the advice is for the lowest possible catch until the stock has had a chance to recover. ICES will also advise that North Sea **plaice** and **sole** need further reductions in catch, or effort, to let the plaice spawning stock increase and to prevent the sole spawning stock from declining in the near future.

Anglerfish/monkfish - time for a change of management?

Fisheries for anglerfish are increasingly profitable across the ICES area but scientists have such poor data about the number of fish that are caught that it is impossible to produce accurate advice on the status of the stock.

Poul Degnbol, Chair of the ICES Advisory Committee on Fishery Management said today:

"We, and by this I mean managers, fishers and scientists, are all stuck in a vicious circle of bad data resulting in inaccurate advice and then poor management. To try and change this we are recommending that the management of fisheries for anglerfish changes from being based on total allowable catches to being based on effort restrictions - limiting the amount of time that fishers have to catch anglerfish. Although effort controls won't solve all the problems they should help to reduce the incentive for misreporting and discarding, which hopefully will mean we have better data on which to base our advice. We are also calling for much more stringent monitoring so that we can get a better idea of what is going on in these fisheries."

Industrial fisheries: sandeel and Norway pout

Sandeel and Norway pout stocks are both below minimum levels in the North Sea. The minimum recommended level for sandeel is 600,000 tons while the stock is estimated to be 446,000 tons in early 2006. The Norway pout stock is estimated to currently be around 58,500 tons while the minimum recommended level is 150,000 tons. Fisheries for both stocks closed in 2005 and ICES will advise that they should remain closed until signs of a recovery. Industrial fisheries are fisheries that catch fish for reduction to fishmeal or fish oil and not human consumption.

What does it mean when a fish stock is below the minimum recommended levels?

When a stock is below the minimum recommended levels it is being fished too hard, the fish are not being given enough chance to reproduce and the stock may not be as productive in the ecosystem as it should be. This does not necessarily mean that the stock will become extinct but it does mean that the current fishery needs to be reduced to more sustainable levels.

ENDS

For more information on how scientists assess fish stocks please see:

<http://www.ices.dk/marineworld/fishbrochureSCREEN.pdf>

For further information please contact:

Neil Fletcher
Communication Officer.
International Council for the Exploration of the Sea.
Palægade 2-4, DK-1261, Copenhagen K, Denmark.
Tel (0045) 3315 4225
Direct (0045) 33386713
Mobile (0045) 40847938
Fax (0045) 3392 4215
E-mail neilf@ices.dk
<http://www.ices.dk/aboutus/pressroom.asp>

The full report on fish stocks in the northeast Atlantic will be available on the ICES website as a series of pdf files on 21 October 2005:

<http://www.ices.dk/advice/icesadvice.asp>

NOTES FOR EDITORS

More information on deep-sea fisheries

Since the 1980s, dwindling resources on the continental shelves of the North Atlantic have encouraged the development of fisheries in deeper waters - greater than about 400 m. There has been a tendency for fisheries for species such as anglerfish and Greenland halibut to extend into deeper waters, and new fisheries have developed to target the "new" deepwater species that have been found there. Deepwater species such as the argentine or greater silver smelt (*Argentina silus*) and roundnose grenadier (*Coryphaenoides rupestris*), which were previously bycatch species have been targeted within the ICES area for the last two decades. Orange roughy (*Hoplostethus atlanticus*) has been a target species since the early 1990s. Deepwater sharks such as the leafscale gulper shark and Portuguese dogfish have been targeted since the 1980s.



Picture: Two leafscale gulper sharks in the foreground and a Portuguese dogfish in the background. Leafscale gulper sharks grow to a maximum size of 1.6m and Portuguese dogfish grow to a maximum size of 1.2m. High resolution version of this photo available from ICES neilf@ices.dk.

The life history of deepwater creatures is very diverse, but many species of fish targeted by fisheries, and their communities, are particularly vulnerable to disturbance because they grow slowly, mature late in life, and form aggregations easily accessible to fisheries. Recovery rates are much slower than in shallower waters. Examples of vulnerable species include the long-lived fish species orange roughy and grenadiers, but also animals such as cold-water corals that live on the seabed at these great depths and form important habitats for many fishes.

As ICES has stated many times before, scientific knowledge about crucial features (including migration, growth, feeding, and fecundity) of most deep-sea species still lags considerably behind knowledge of commercially exploited shelf-based species. Such information is required to expand our understanding of the population dynamics of deep-sea fishes, which in turn is needed to underpin stock assessments.

However, experience shows that some deep-sea species with long life-spans, high age at maturity, and slow growth (e.g. orange roughy, blue ling) can be depleted very quickly and that recovery will be slow. Regeneration and growth are so slow that abundance does not increase in the depleted populations in the short or medium term. Other species with higher productivity have also been severely impacted by fisheries, but show greater resilience and potential for recovery in the medium term.

For more information about the decline in deep-sea sharks please see ICES Newsletter P10 <http://www.ices.dk/products/newsletters/lces42.pdf>

Advisory Committee on Fishery Management (ACFM)

The Advisory Committee on Fishery Management (ACFM) provides scientific information and advice on living resources and their harvesting. In formulating its advice on the management of ca. 135 stocks of fish and shellfish, ACFM uses information prepared by numerous ICES stock assessment Working Groups. ACFM consists of one scientist from each of the 19 ICES member

countries along with chairs of relevant ICES science committees and observers from the European Commission, Faroe Islands/Greenland and the Northwest Atlantic Fisheries Organisation (NAFO).

ACFM meets twice a year (summer and late autumn) to prepare its advice, which is published annually in the ICES Cooperative Research Report series. The advice is also available in pdf format on the ICES Website at www.ices.dk

International Council for the Exploration of the Sea

ICES is the organisation that coordinates and promotes marine research in the North Atlantic. This includes adjacent seas such as the Baltic Sea and North Sea. ICES acts as a meeting point for a community of more than 1600 marine scientists from 19 countries around the North Atlantic.

Scientists working through ICES gather information about the marine ecosystem. As well as filling gaps in existing knowledge, this information is also developed into unbiased, non-political advice. The advice is then used by the 19 member countries, which fund and support ICES, to help them manage the North Atlantic Ocean and adjacent seas. The annual budget is 25 million dkk/3.3 million euro.

ICES plans and coordinates marine research through a system of committees, more than 100 working groups, symposia, and an Annual Science Conference. Most meetings take place either at the ICES Headquarters in Copenhagen, Denmark, or in the member countries.

ICES has been based in Copenhagen, Denmark, since 1902. Today, we have a Secretariat of 38 staff who provide scientific, administrative and secretarial support to the ICES Community of over 1600 marine scientists. <http://www.ices.dk>