

# **“Eggs in one basket?”**

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**For the  
Sea fishery Advisory Group  
Irish Seal sanctuary**

This paper was prompted by the recent communication from the NWWRAC regarding the 2008 F.A.O. “Report on the State of World Fisheries and Agriculture” This included the recommendation that current management plans should be expanded to include strategies for coping with climate change. It states that climate change is affecting...marine and freshwater food webs with unpredictable consequences for fish production. Urgent efforts are needed to help fishery dependent communities to strengthen their resilience to climate change.

We take this as a clear warning that fishery managers must be ready for climate change. Increasing water temperatures is simply one of the effects of climate change. Many authors have pointed out that this will not favour fish like Cod, which prefer colder waters, Although they favour warmer shallow waters for spawning. In the Irish Sea, we have a position now where *Nephrops* are the dominant target species.

In 1955 Cod fetched almost twice the price per tonne as *Nephrops*. However after 1970 *Nephrops* achieved more than twice the first sale price of Cod. Throughout this period, *Nephrops* landings increased from 209 tonnes in 1955 to almost 4000 tonnes in 2000.

Cod landings declined from 6500 in 1980, to 2875 tonnes in 2000. Trawling for *Nephrops* had the effect of reducing the Cod biomass, finfish populations declined and the profitable invertebrates on which they fed underwent a population explosion. Due in part to the reduced numbers of predators.

A study on the Clyde fishery reported similar findings. In previous years the Clyde hosted Scottish and European sea angling Championships because of the fantastic Cod fishing. However in one recent competition not one fish was landed. Recreational Sea Angling has been estimated to be worth £150million to the Scottish economy, so the socio-economic benefits of a healthy mixed species fishery are obvious.

Commercial Fishermen interviewed “stated that declines in the size and abundance of fish occurred as trawling increased.” I have been told by retired fishermen myself that the... “The Irish Sea was finished the day they let the twin-riggers (large trawlers pulling two nets) in.”. The Clyde environment is now less biologically complex and with much lower abundance of species and is therefore less resilient to environmental fluctuations”

What we now have in the Irish Sea is a fishery almost, if not totally dependent on one species. The implications of this dependence could be disastrous, given the uncertainties associated with climate change. No fisherman should require further evidence to strive for a mixed species fishery, We have witnessed that trawling by its very nature is non-selective and catches and kills large numbers of juvenile fish. Besides the commercial species, Skate, Angle Shark and Spurdog were once widespread in the Irish Sea. These species are now endangered in the Eastern Atlantic. The Clyde study concluded that in the Clyde fishery many species are at an all time low... the only way these declines can be halted is if fisheries are reduced and restricted to certain areas.

In its latest review of the Cod stock in the Irish Sea, published by the Marine Institute. Irish Sea Cod sampled by the Marine institute in 2006 had a maximum age of six years and 90% had not reached their fourth year. It is generally accepted that Cod do not spawn until they are at least four years old. It concludes that the stock has collapsed and a further decline is in prospect. It recommends that only fisheries, which can prove a zero by-catch of Cod, should be permitted within the area occupied by the stock is justified and long overdue. As proven in many other fisheries early, decisive action saves a lot of agonising later, and can restore a stock to sustainable levels. Having a range of target species is important for the future of the commercial fisheries, particularly in light of the warnings from the F.A.O.

An interesting point here is that the official landings reached T.A.C. only once between 1987 and 2006, although widespread misreporting is believed to have taken place. Fishermen's representatives crying for more quota when the landings have not reached T.A.C. means that the problem is not with quota but with allocation of quota. This year in Ireland many Commercial fishermen were angered when Fisheries Minister Tony Kileen allocated 90% of Irelands 33% increase in Mackerel quota to 23 refrigerated Sea Water (RSW) boats who mostly operate out of one port. This port in Co. Donegal has a number of fishmeal processing plants and has powerful political friends. Is this fresh Mackerel destined for meal to feed Salmon farms, pigs and Chickens? So you see the problem is complicated by the fact that the fishermen themselves are not in agreement other than that they all want to catch more fish.

We have called for all non-selective fishing methods to be excluded from nursery and spawning areas of the Irish Sea. This would result in reduced by-catch and reduced subsequent discarding of juvenile fish and increased recruitment to spawning stock. In reality this means waters shallower than one hundred feet

(30m.). However selective and sustainable methods, such as potting and Recreational Sea Angling could still fish these waters with little impact on finfish stocks, but certain proven selective methods such as potting for *Nephrops*, cannot operate where trawlers operate. While many commercial operators will state that they do not fish shallow water, there is ample evidence that they often do, moving inshore as darkness falls and the *Nephrops* emerge from their burrows. Two trawlers from Killybegs stranded while netting in Donegal bay in the autumn of 2008.

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