

Article 1: The North Sea is Emptying

Depending on whom you ask, the North Sea is in trouble. Environmental groups, from Greenpeace to the International Council for the Exploration of the Sea, are warning that fish stocks in the region are in danger of becoming dangerously depleted. Scientists in Europe and Canada warn that if the current level of fishing prevails, seafood will be completely extinct by 2050. Yet Scottish fishermen maintain that fish stocks are rebounding to healthy levels, thanks to quotas imposed by the EU in 2003. All this is due to be revisited in December, when the Council of Ministers will meet to formally review the Common Fisheries Policy (CFP) they implemented in 2002, a policy which environmentalists and fishermen alike say has failed.

So what is the issue? In 2002, fisheries ministers met to find a better way to manage fisheries and the availability of fish populations across the EU. Alarmed by reports that fish stocks were disappearing at a disquieting rate, fisheries ministers panicked to think the sustainability of the fishing industry was in danger. In a radical departure from previous EU policies, ministers significantly cut the amount of days fishermen could spend at sea from 30 to 15 per month, and severely limited the amount of certain species of fish which could be caught in a given year. They also insisted that fishing fleets in all member states be slashed significantly, and arranged to financially reimburse fishermen whose boats were decommissioned.

The most lasting change brought on by this CFP was in the landmark shift in perspective, from focusing only short-term gains to working for a more long-term management of the fishing industry. Prior to 2002, the industry - and any international agreements monitoring it - operated under the "tragedy of the commons" approach, in which fishermen grabbed all they could without worrying about the ecological damage they were causing. "The thinking was, if we didn't grab as much fish as we could, somebody else would," said Mike Park, a retired skipper who scoured the North Sea for fish for thirty years.

But five years after imposing severe quotas and cracking down on illegal landings of seafood, fish stocks throughout the North Sea are still in danger of extinction. ICES issues dire warnings each year to the EU, and maintains that "target fisheries should not be permitted, and by-catch in the mixed fisheries should be reduced to the lowest level. TACs [Total Allowable Catches] should be set at zero for the year 2008."

Last month, the House of Lords declared the CFP a failure in its own five-year review. "We conclude that on most indicators, the Common Fisheries Policy has failed: overcapacity in the fishing fleets of the Member States, poor compliance, uneven enforcement, and a stiflingly prescriptive legislative process all persist, while fish stocks remain depleted," the report begins.

John Buchan, a trawler skipper from Peterhead, Scotland, agrees. "There's not a single Scottish fisherman who doesn't want out of the CFP," he said.

Not everyone is convinced that the CFP has been a complete failure. Ann Bell, the Executive Chairman of the North Sea Regional Advisory Council, which monitors fish stocks and makes recommendations to the European Commission, believes that policy has had limited success. "Things are improving, but they could improve faster," she said, referring to the recovery of cod and herring stocks. "The CFP isn't working, so they'll have to change a part of it." She credits the CFP for bringing together groups that never before interacted without great antagonism - such as government

ministers and fishermen's lobby groups. Under the regime, she says, now they at least have the ability to negotiate.

Elliott Morley MP, who as Fisheries Minister played a key role in the 2002 negotiations, says it is unfair to blame the CFP for not protecting fish stocks from the threat of extinction. "It's certainly not been a huge success," he said. "But the fault is really a political failure – ministers ignore the science, and give into the pressure from their own industries. The problem with the CFP was that it was not science-dominated, it was politically dominated."

What went wrong

"There's a great deal of non-compliance [within the CFP]," says Park. "But when those within the system don't comply, who's to blame? We can't lay all the blame on the CFP," he said. Fishermen have always broken the law in order to land as many fish as possible, and it was unlikely they were going to change their behaviour overnight, he continued. So, new restrictions on the types of fishing gear allowed – such as regulations on net sizes in catching cod, herring, and prawns – were simply not heeded by fishermen. "It's progressively been getting better," said Morley. "Before, it was just out of control."

The problem also lies in the uneven enforcement of the 2003 regulations across the EU. While the United Kingdom has decreased its fishing fleets by **21.1%**, other fishing nations – most notably Spain, France, and Italy – have resisted similar measures, and have thus far dodged any serious penalties from the EU.

Scottish fishermen, who themselves took a significant hit in a series of decommissioning schemes in 2001 and 2003, which decimated their fleet by 60%, maintain that they have been unfairly targeted by the EU. "We would like to see the rest of Europe cut their fleet as much as we have," said Buchan.

Simply reducing the number of fishing boats to decrease fishing "effort" – how much fishing is undertaken in a given year – has not been sufficient in slashing the numbers of fish that are landed per year, due to "technological creep" on fishing boats. Sonar like Simrad's SH80 model is a high-resolution, high-frequency tool used by many skippers on the North Sea to pinpoint mackerel and other pelagic species at any location, and its dual beam system transmits images of fish schools from above and front. Because of these innovations, there has not been the significant drop-off in the amount of fish landings, which worry environmentalists and fisheries management specialists as they calculate future stocks. Morley is dismayed by the levels of technological advancements that render the quotas useless. "It's like there's an arms race in the fishing industry – new technologies, new methods, new targeting techniques. All of this increases catching capacity."

Faulty science?

The biggest debate, however, lies in the science on which the 2003 CFP is based. Scientific assessments of the amount of fish present in European waters form the basis for the Total Allowable Catch (TAC), which limit the amount of fish fishermen are allowed to catch each year. But questions remain about how scientists gather this data and its overall accuracy.

"The TAC is determined by scientific advice plus political wheeling and dealing," said Roger May, a fisheries officer with the Scottish Fisheries Protection Agency. "What scientists tend to do is

count the shoals [group of fish that remains together] to determine their stock assessments. What they don't take into account is just how many shoals are present throughout the North Sea.”

Mike Park had a similar critique of how fish assessments are made. “What you have are scientists going to the same spot every year, and counting the fish there. What they don't take into consideration is that fish change their migration patterns,” and this results in inaccurate data. “There's more fish than we've seen out there in fifteen years, but the TACs don't reflect that.”

Morley vehemently disagrees. “This idea that the science is bad is a myth that's perpetuated by the fishing industry,” he said. “When you have a look at the work ICES has done over the years, you see they have a very good idea of stock levels. It's never going to be 100%, but the science is actually pretty reasonable.”

John Osmond, who runs the fish processing plant of Jedfish in Aberdeen Harbour, is pessimistic about the levels of fish stocks in the North Sea. Dressed in the signature white coat and yellow boots of fish processors, he laments the near-complete eradication of small fish processing companies, and their relegation to a far corner of the Aberdeen quays. “There's no more fish,” he says. “Everything we get now comes in from Iceland and the Faroes.” Moira Moore, a Quality Advisor at the Peterhead Market, agrees. “You used to see boxes of fish stacked nearly to the ceiling” every morning at the market, she said. Now, there were only a handful of species which were stacked by two or three rows.

What needs to be changed?

Elliott Morley believes the biggest change to the CFP is how it measures fishing capacity, and find a way to curtail that indefinitely. “We've tried to cut capacity by reducing the fleet and by reducing days-at-sea,” he said. “But total landings have not decreased at all.” He acknowledged that putting restrictions on fishing technology may hamstring the development of the fishing trade, but believes that it may be necessary to save the stocks.

Another possible way to reform the fisheries may be in redrafting how quotas are managed. Currently, EU stocks are under a shared quota system, in which each member state which borders the North Sea is guaranteed a percentage of the catch. However, there are no individual allotments for fishermen, and so the yearly catch frequently outstrips the allotted quotas. Several NGOs have called for an Individual Transferable Quota (ITQ) approach, based on the models of Iceland and New Zealand. Environmentalists say that because the ITQ system gives fishermen ownership of their stocks, the ITQ method leads to less waste, and encourages them to fish responsibly with a minimum of bycatch, or excess fish taken aboard.

The major problem with implementing this method, said Dr. John Pinnegar, is that the North Sea fishery is shared between eight countries, whereas Iceland and New Zealand have sole control over their waters. Dividing up ownership of fish would be a costly and politicized process which would result in more non-compliance and bad feelings between the member states, he said.

Is overfishing the only reason why fish have disappeared?

Perhaps predictably, Scottish skippers and representatives of the fishing industry insist that overfishing is not the only, or even main, culprit in the decimation of stocks in the North Sea. They

claim that the dual forces of continuing climate change and introduction of deep-sea oil drilling have caused stock levels to decline to their current abysmal levels.

It is true that there has been significant climate change within the North Sea area. Temperatures have increased by nearly 1 degree Celsius in the last ten years alone, while the migratory patterns of mackerel and herring have shifted noticeably. Where it was once possible to catch mackerel in local inlets throughout northeast Scotland, it is now necessary to go at least 100 miles from shore to catch them.

Cod has been the most vulnerable to temperature variations, according to the Grant Bartlett, fisheries expert at the World Wildlife Fund. Phytoplankton – the microscopic plants that float en masse – is the main nourishment for cod - but the amount of phytoplankton has decreased alarmingly due to increasing ocean temperatures. It is this phenomenon, argue fishermen, that has caused the severe drops in the amount of cod, not irresponsible fishing.

Oil drilling, which has overtaken fishing as the primary economic activity in this part of the North Sea, also causes a concern for fishermen and ecologists. “We’ve always suspected that sonic blasting for oil pipelines is dangerous to the stocks. Our understanding is that there is a downside to the seismic shift – it kills herring in its spawning stage, we think,” said retired skipper Park.

Even considering these factors, there is consensus among fisheries scientists, environmental organisations and government that overfishing is by far the single most potent factor in the rapid depletion of available fish stocks in the North Sea. Currently, the EU estimates that 80% of fish in the European zone are overfished, and have fallen beneath a scientifically acceptable level for fishing. No one now can deny that the Common Fisheries Policy in serious need of revision, but exactly what its new form will look like, and how effectively it will operate, is anyone’s guess.

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