

'Saving our fish' needs more than a ban on discarding

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Banning the practice of throwing unmarketable or over-quota fish back into the sea is just one of the measures needed to deliver sustainable fisheries according to new research from the University of East Anglia (UEA).

Research carried out by UEA with the Centre for Environment, Fisheries and Aquaculture Science (Cefas) and published today in the journal *Fisheries Research* reveals that a ban will only help future fish stocks if it is accompanied by other measures to reduce total fishing mortality.

Approximately half of the fish caught in marine fisheries are thrown back into the sea, but very few survive. The practice has bedevilled politicians, fisheries managers, scientists and fishermen for many years.

The move to ban discarding has gained widespread public support through the campaigning efforts of supermarkets, pressure groups, chefs including Hugh Fearnley-Whittingstall, and other celebrities such as the band Coldplay and the comedian Ricky Gervais. The new European Common Fisheries Policy (CFP) which is expected to enter into force in 2014 intends to ban the wasteful practice for all quota stocks by 2019.

The research team combined information on landings by English trawlers in the North Sea with data on discards collected by onboard observers. They then used this data to assess how a discard ban will impact the catches and profits of different segments of the fleet.

Key findings:

- A discard ban alone may not reduce unwanted catches.
- A ban in isolation does not create a strong incentive for selective fishing.
- Catch quotas (where all fish caught are counted against a limit) create strong incentives to avoid regulated species, but not other species.
- Profits of some parts of the fleet may be hit unless catch quotas are set differentially.
- Vessels catching the least fish may see the largest profit declines under catch quotas.

Lead researcher Harriet Condie, from UEA's school of Environmental Sciences, said: "We took into account data such as catch and discard figures from fishing trawlers, fish prices and landing costs, to calculate whether banning the practice of discarding will offer enough of an economic incentive to fish sustainably.

"The most important measure to safe-guard over-exploited fish stocks is to reduce the number of individuals being caught. But our research shows that a discard ban in isolation may not result in a dramatic reduction in unmarketable catches of all species.

"If all fish have to be landed, we will get better information on exactly how many fish of each species are being caught and the state of fish stocks. But the fact that fish can no longer be thrown back into the sea will not automatically make their exploitation any more sustainable because we show that there is no significant incentive to avoid catching them.

"We went on to investigate whether a discard ban in conjunction with different management scenarios would work – such as reducing fishing

effort and limiting the amount of fish that can be landed.

"We found that a ban combined with catch quotas has the greatest potential to incentivise more selective fishing, but only for regulated species such as cod, haddock and plaice.

"Experience from elsewhere in the world shows that discard bans are only effective if they are enforced by high levels of surveillance or there are economic benefits from landing fish that are currently discarded. But neither of these options is straightforward as policing fisheries is expensive and economic incentives can encourage increased catches of unwanted fish," she added.

Prof Alastair Grant, who supervised the work, said: "As welcome as the public's awareness about discarding may be, our research shows that a move towards the sustainable management of European fish stocks will require more than just a discard ban as the landing of all fish does not itself make exploitation more sustainable.

"A [fish](#) that is landed and turned into fishmeal makes as little contribution to future generations as one that is thrown back into the sea dead. The biggest challenge is to reduce fishing mortality, and national and international politics have always made that politically difficult to achieve."

Thomas Catchpole from Cefas said: "Choosing the right measures can be complicated and sufficient time is required to allow fishermen to adjust to a new management approach.

"The recently agreed reforms to the Common Fisheries Policy took years to secure but the policy now includes a phased introduction of a discard ban (completed by 2019) and legally binding commitments to set quotas at levels that achieve maximum sustainable yields of commercial

[fish stocks](#). In the interim governments have funded research to quantify and redress the impact of discarding. Catch-quota trials have been funded as have projects to design and use more selective fishing nets.

"A catch quota system provides the potential to remove many of the technical regulations currently in place, which will give fishermen increased flexibility in how they operate their businesses. This will be helped by decentralising the management of European fisheries and using a more regional approach, which was another agreed aspect of the reformed CFP."

More information: 'Does banning discards in an otter trawler fishery create incentives for more selective fishing?' by Harriet M, Condie, Alastair Grant, and Thomas L. Catchpole, is published in the journal *Fisheries Research* on November 11, 2013.

Provided by University of East Anglia

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