Rebuilding Plan
Herring in the Celtic Sea and Division VIIj

December 2008

Proposal for Council Regulation for 2009 and subsequent years

By Celtic Sea Herring Management Advisory Committee

The Irish Celtic Sea Herring Management Advisory Committee has developed a rebuilding plan for this stock. This plan has been developed with the Irish Marine Institute. Irish Marine Institute simulations of the draft plan were presented to STECF, in November 2008. STECF concluded that these simulations showed that fishing at $F_{0.1}$ is sustainable, and that this plan, if fully implemented and enforced is likely to result in a rebuilding of this stock.

The Committee proposes that this plan be put forward for Council Regulation for 2009 and subsequent years. The plan incorporates scientific advice, EU policy statement on fishing opportunities for 2009, local stakeholder initiatives and Irish legislation.

ICES and STECF advice

ICES and STECF have advised that no target fishery should proceed unless accompanied by a rebuilding plan. The state of the stock is uncertain, but it is below $B_{pa.}$ In 2004 and 2005, the stock was below B_{lim}. There is evidence that the stock has increased in size since 2005, with at least one strong recruiting year class.

ICES management considerations

ICES considers that F has been high for many years, between 0.5 and 1.1. These rates of F are much higher than $F_{0.1}$ (=0.19). SSB has declined steadily since 1990 and the stock has become dominated by younger fish (2,3 and 4-winter ring). Simulations suggest that current F is too high to achieve recovery. However these simulations suggest that F0.1 has a high likelihood of recovery. Under most circumstances, ICES considers a catch of circa 5,000t to be appropriate to ensure that $F \sim F_{0.1}$.

Rebuilding plan

The plan is developed in response to the ICES and STECF advice, and to ensure exploitation that provides sustainable economic, environmental and social conditions. The overall objective is to substantially reduce F from the current high levels to a sustainable rate, $\mathbf{F_{0.1}}$ (=0.19). The plan also aims to rebuild the stock to a level that is at or above $\mathbf{B_{pa}}$ (44,000 t), and that has a low risk of being below $\mathbf{B_{lim}}$ (26,000 t).

The plan also incorporates an industry led initiative to protect recruits and allow first time spawners to spawn at least once. This will be achieved by closing an area of importance for recruits and first time spawners. This closed area is already established in Irish legislation. In order to monitor the stock in this area a small sentinel fishery will be permitted. The sentinel fishery will provide a means to measure strength of incoming year classes, by intensive

sampling of the catches. The plan is presented below, along with a schematic representation of how it will work (Figure 1).

Towards a long term plan

If, in the judgement of ICES and STECF, the rebuilding plan has been successful, it shall be superseded by a long-term management plan. This plan will aim to achieve harvesting at maximum sustainable yield. It will be developed in conjunction with stakeholders. Progress towards developing a long-term plan should start in 2009.

Rebuilding plan

1. For 2009, the TAC for 2009 shall be reduced by 25% relative to the current year (2008). This will lead to a TAC of 5,917 t and an Irish quota of 5,114 t.
2. In 2010 and subsequent years, the TAC shall be set equal to a fishing mortality of $F_{0.1}$,.
3. If ICES and STECF, advise on a lowest possible catch, the TAC for the following year shall be reduced by 25%.
4. In 2009, from 1st January until 31st March, no target fishing shall be permitted on this stock. Provision will be made for a scientific survey restricted to a quota of 220t.
5. Division VIIaS will be closed to herring fishing for 2009, 2010 and 2011.
6. A small-scale sentinel fishery will be permitted in the closed area, Division VIIaS. This fishery shall be confined to vessels, of no more than 50 feet length. A maximum catch limitation of 8% of the Irish quota shall be exclusively allocated to this sentinel fishery.
7. A small-scale observed sentinel fishery will be permitted during the closure as detailed in Point 4 above. It will take place over two weeks from 3th-10th and 11th -17th January 2008. This will be performed by a single pair team of trawlers, chosen by the CSHMAC, based on defined criteria. A maximum quota of 220t t shall be allocated to this fishery, and will be deducted from the Irish quota. The Marine Institute shall place observers on board the vessels.
8. The Commission shall ask ICES to evaluate this plan's consistency with the precautionary approach.
9. In 2010 and each subsequent year, the Commission shall request ICES to evaluate the effectiveness of this rebuilding plan. In the event that ICES advises that the stock has recovered, the rebuilding plan shall be superseded by a long term management plan.

Technical Background

The following information basis was used:

$F_{0.1}$	$F_{0.1}$, considered as a proxy for F_{MSY} has been calculated to be F = 0.19. This estimate of F0.1 has been shown to be quite robust over recent years (ICES, 2008).
B_{pa}	B_{loss} (ICES, 1998).
B_{lim}	Biomass at which there is low probability of low recruitment (ICES, 1998).
TAC in subsequent years	ICES has identified $F_{0.1}$ as having a high likelihood of leading to stock recovery.

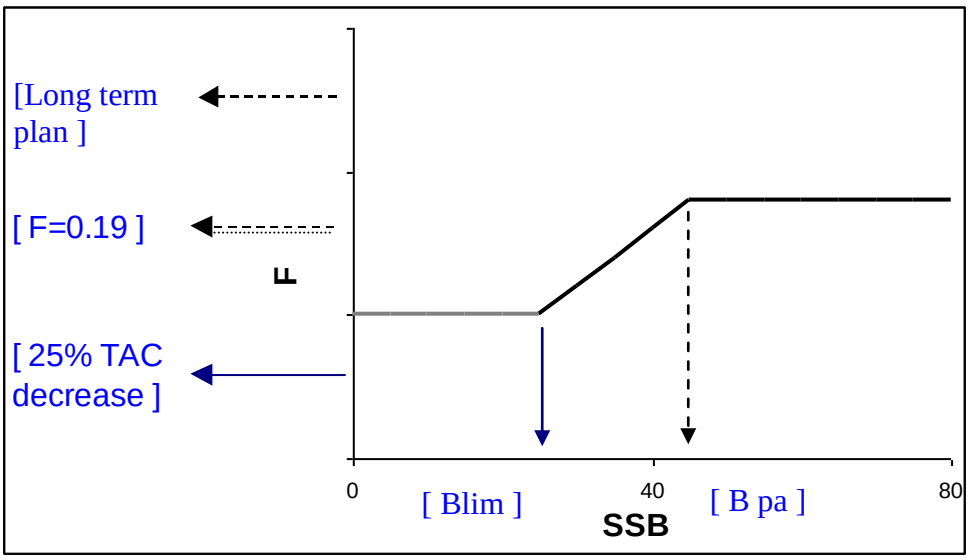

Figure 1. Schematic representation of the Rebuilding Plan for Celtic Sea herring.