

Stock assessment of hake (*Merluccius* merluccius) in GSA07 — Gulf of Lions

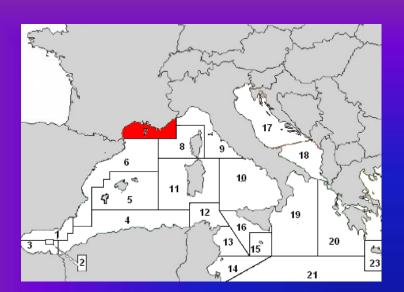
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SECRETARÍA DE ESTADO DE INVESTIGACIÓN, DESARROLLO E INNOVACIÓN INSTITUTO ESPAÑOL DE OCEANOGRAFÍA

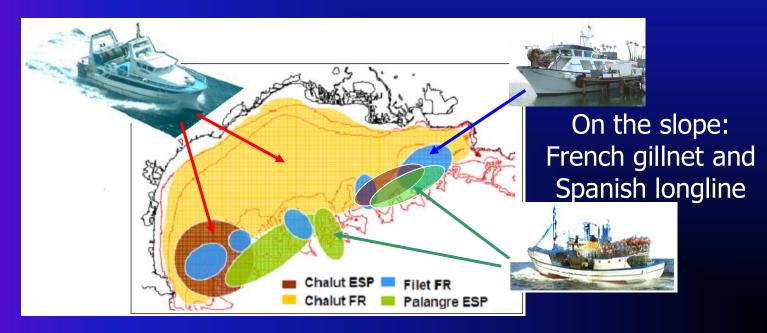


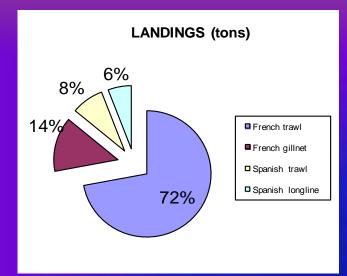


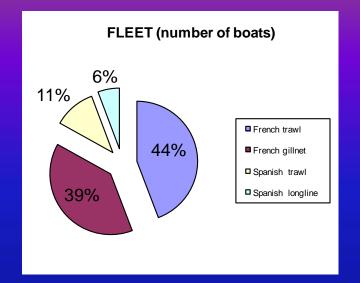
Shared stock:

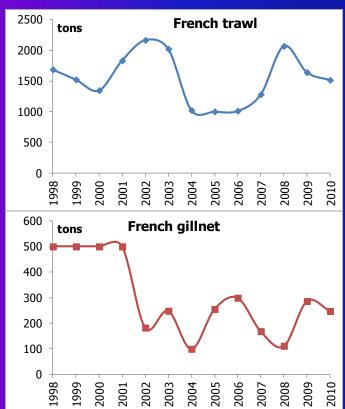
- 2 countries:
 - > France
 - > Spain
- 4 gears:
 - > French trawl
 - > Spanish trawl
 - > French gillnet
 - > Spanish longline

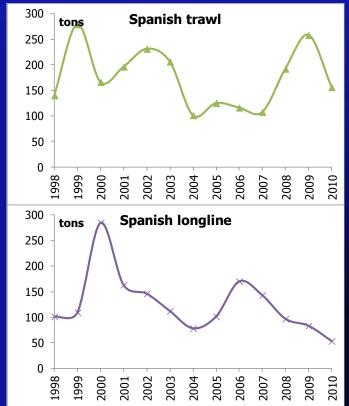
On the shelf: French and Spanish trawl





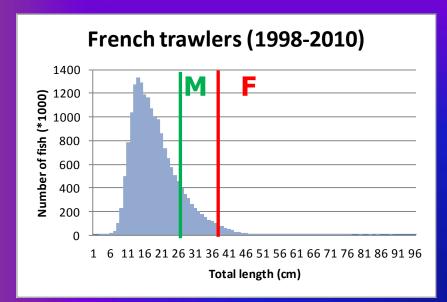


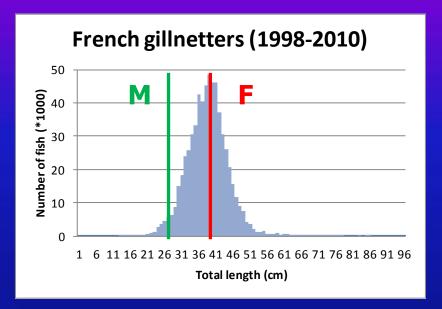




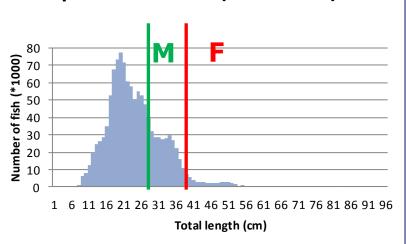
Since frequency of hake catches

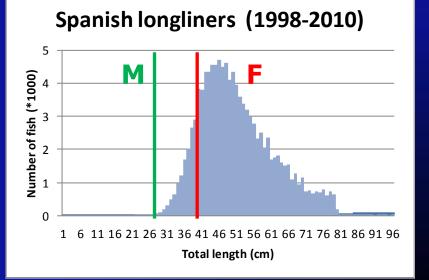
Maturity: males 28 cm, females 40 cm

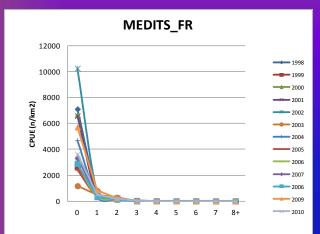




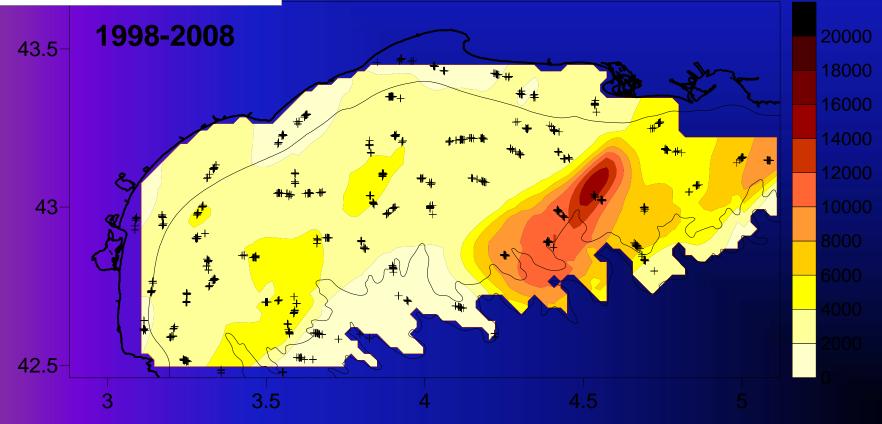




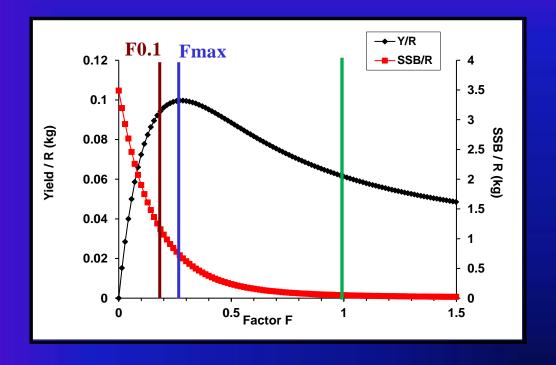




n/km² Age 0 (recruitment)







The stock is in overfishing status and low abundance. It is characterized by **growth overexploitation** with periodical higher recruitment (1998, 2002, 2008) with ensure the sustainability of the stock at a low level of abundance

Management advice and recommendations

To reduce growth overfishing:

- -Improve the fishing pattern of the trawl to increase the minimum length of catches equally to the minimum legal landing size
- Close nursery areas, at least temporaly
- Reduce trawling effort, by reducing time at sea, number of fishing boats, engine power, Bollar pull and/or trawl size

To avoid recruitment overfishing:

- -To reduce longline effort and gillnets in order to increase (or at least maintain the spawning stock biomass)
- Establish temporal closures for longline and gillnet during the period of maximum spawning (end autumn-beginning winter)

Freezing the effort in the Fishery Restricted Area