Deep-water fish stocks ICES advice 2008

Tom Blasdale ICES WGDEEP



International Council for the Exploration of the Sea Conseil International pour l'Exploration de la Mer

AND AND AND A

Roundnose grenadier

Four management units considered.

- •Division (IIIa)
- •Subareas VI, VII, and Divisions Vb, XIIb
- •Mid-Atlantic ridge (Xb, XIIc, Va1, XIIa1, XIVb1)
- •All other areas. (I, II, IV, Va2 VIII, IX XIVa XIVb2)





Total landings of roundnose grenadier by area (WG estimates). Top: absolute landings (tonnes). Bottom: relative proportion by area.



Roundnose grenadier Vb, VI, VII, XII



Estimates of stock biomass from the separable VPAs for methods 1 et 2 and different ranges of ages. Terminal F is set to 0.15 and S to 0.6.

Roundnose grenadier Vb, VI, VII, XII



Total international landings of roundnose grenadier in Vb, VI, VII, and XIb (data for 2007 are incomplete). Directed Ipue of the French reference fleet in reference area. trips where roundnose grenadier comprise >10% of total landings

ICES advice 2008 – roundnose grenadier

- Due to its low productivity, roundnose grenadier can only sustain low rates of exploitation. Cpue in the areas has been at a reduced level.
- ICES recommends that catches should be constrained to 6000 t (50% of the level before the expansion of the fishery, 1990–1996).
- The fishery should not be allowed to expand unless it can be shown that it is sustainable.
- Current EC TAC Vb, VI & VII = 4600t
- Current EC TAC VIII, IX, X, XII XIV = 6114t



Orange roughy



····



ICES estimates of international catch of orange roughy.



Cpue from French trawlers in Subarea VIa for 400–600 kW power vessels (open triangles) and for 1400–1600 kW vessels (solid squares).

Cpue from French trawlers in Subarea VII. Cpue series for 400–600 kW power vessels (open triangles) and for 1400– 1600 kW vessels (solid squares).

ICES advice 2008 – orange roughy

- Due to its very low productivity, orange roughy can only sustain very low rates of exploitation.
- Currently, it is not possible to manage a sustainable fishery for this species.
- ICES recommends no directed fisheries for this species.
- By-catches in mixed fisheries should be as low as possible.



Red (blackspot) seabream (Pagellus bogaraveo)

Considered as three different management units:

- Areas VI, VII, and VIII;
- Area IX; and
- Area X (Azores region).



Tusk

Based on new genetic information analyzed in 2007, ICES presents advice for the following stock units of tusk:

- Subareas I and II
- Division Va and Subarea XIV
- the Mid Atlantic Ridge (Division XII excluding XIIb, see Roundnose Grenadier)
- Subarea VIb (Rockall)
- Other areas (IIIa, IV, Vb, VIa, VII, VIII, IX, and XIIb). This latter grouping is a combination of isolated fishing grounds and these areas are grouped due to their mutual lack of data.



Tusk, total landings by Subareas or Division

Tusk in Subareas I and II (Arctic)



Norwegian tusk landings 1896–2007 in all areas.

Norwegian cpue (kg/1000 hooks) of tusk based on skippers' logbooks (pre-1994) and official logbooks (post-2000).

Tusk in Subareas I and II (Arctic)

- Tusk has been exploited in Subareas I and II for centuries, but landings increased from the 1950s onwards (Figure 9.4.12.2). The state of the stock is unknown. Cpue has in recent years been well below historical levels.
- ICES reiterates the advice to constrain catches to 5000 t and to collect information that can be used to evaluate a long-term sustainable level of exploitation.

Tusk in Division Va and Subarea XIV



Tusk in Divisions Va, XIVa, and XIVb. Total landings. 2007 is a preliminary value.

Indices from Icelandic groundfish survey in March 1985–2008. a) fish smaller than 40 cm, b) fish 40 cm and larger.

Tusk in Division Va and Subarea XIV

- The state of the stock is unknown.
- Recruitment has increased from a low level in 1995. There are indications that fishing mortality may have declined in recent years
- Surveys indicate that the overall biomass is increasing but consists mostly of small individuals.
- ICES reiterates the earlier advice to constrain catches to 5000 t (average 2001–2004) to allow the juveniles to recruit to the adult stock. ICES also recommends to collect information that can be used to evaluate a longterm sustainable level of exploitation.

Tusk on the Mid-Atlantic Ridge

- Fisheries in this area take very small catches of tusk. There is no information on the state of the stock.
- Fisheries on tusk should be accompanied by programmes to collect data on both target and bycatch fish.
- Fisheries should not be allowed to expand unless there is information that can be used to evaluate a long-term sustainable level of exploitation.

Tusk in Division VIb (Rockall)



Tusk landings in VIb.



Norwegian cpue (kg/1000 hooks) based on skippers' logbooks (pre-1994) and official logbooks (post-2000).

Tusk in Division VIb (Rockall)

- cpue in Rockall does not indicate any clear trends.
- Therefore, recent levels of catches do not appear to have had a negative impact.
- ICES recommends that catches should be constrained to 530 t (average 2003–2007) and to collect information that can be used to evaluate a long-term sustainable level of exploitation.

Tusk in Divisions Illa, IV, Vb, Vla, VII, VIII, IX, and XIIb (other areas)





Figure 9.4.12.5.2 Estimates of cpue (kg/1000 hooks) of tusk based on skippers' logbooks (pre-2000, blue dots) and official logbooks (post-2000, red squares). Note gap in the time-series between 1993 and 2000, and the differences in cpue scale between areas.

Tusk in Divisions Illa, IV, Vb, Vla, VII, VIII, IX, and XIIb (other areas)

- Cpue indicators for Divisions IVa, VIa, and Vb suggest that tusk abundance has been at a reduced level but may be increasing.
- Because of these uncertainties, ICES recommends to constrain catches to 5000 t and to collect information that can be used to evaluate a long-term sustainable level of exploitation.

Greater forkbeard



Greater forkbeard. International landings by ICES Subarea

Greater forkbeard

- The only new information available for these species is landings information and it is not sufficient to change the advice from 2006.
- The advice for 2009 and 2010 is therefore the same as the advice given in 2006:
- "Fisheries on greater forkbeard should be accompanied by programmes to collect data. The fishery should not be allowed to expand unless it can be shown that it is sustainable."

Red seabream

ICES has established three different management units for this species:

- Areas VI, VII, and VIII;
- Area IX; and
- Area X (Azores region).



Red seabream (*Pagellus bogaraveo*). Long-term trends in landings in the North Atlantic.

Red seabream: subareas VI, VII and VIII



Red seabream in VI, VII, and VIII appears to be severely depleted based on historical catches.

Red Seabream subarea IX



Red seabream fishery of the Strait of Gibraltar (ICES Subarea IX):



SSB estimates from traditional VPA (separable analysis with reference age:4, S=0.4, F=0.3, default weighting values and considering, or not, age 10 as a plus group).

Red seabream subarea IX

- Red seabream in Subarea IX is depleted and there is no evidence of a significant recovery as a result of the local recovery plan in Spanish waters of the Strait of Gibraltar.
- ICES recommends that catches should be constrained to recent average catches (2003– 2007) of 500 t and to collect information that can be used to evaluate a long-term sustainable level of exploitation.

Red sea bream: subarea X



Red seabream (*Pagellus bogaraveo*) historical landings from the Azores (ICES Area Xa2) Annual standardized cpue in number per thousand hooks and 95% confidence intervals for the Azores bottom longline

Red seabream subarea X

- The status in Subarea X is uncertain but there are signs of increases in indices of abundance from surveys.
- The cpue in the fishery is stable.
- It is possible that sequential depletion of local populations may occur and this may contribute to the stability of the commercial cpue series.
- ICES recommends that catches should be constrained to recent average catches (2003– 2007) of 1050 t and to collect information that can be used to evaluate a long-term sustainable level of exploitation.