

Redfish in Division 3M






Advice June 2013 for 2014 and 2015





Recommendation for 2014 and 2015

Because of weaker incoming recruitment and uncertainty regarding current levels of natural mortality, Scientific Council recommends not increasing the current TAC (6 500 t).

Management objectives

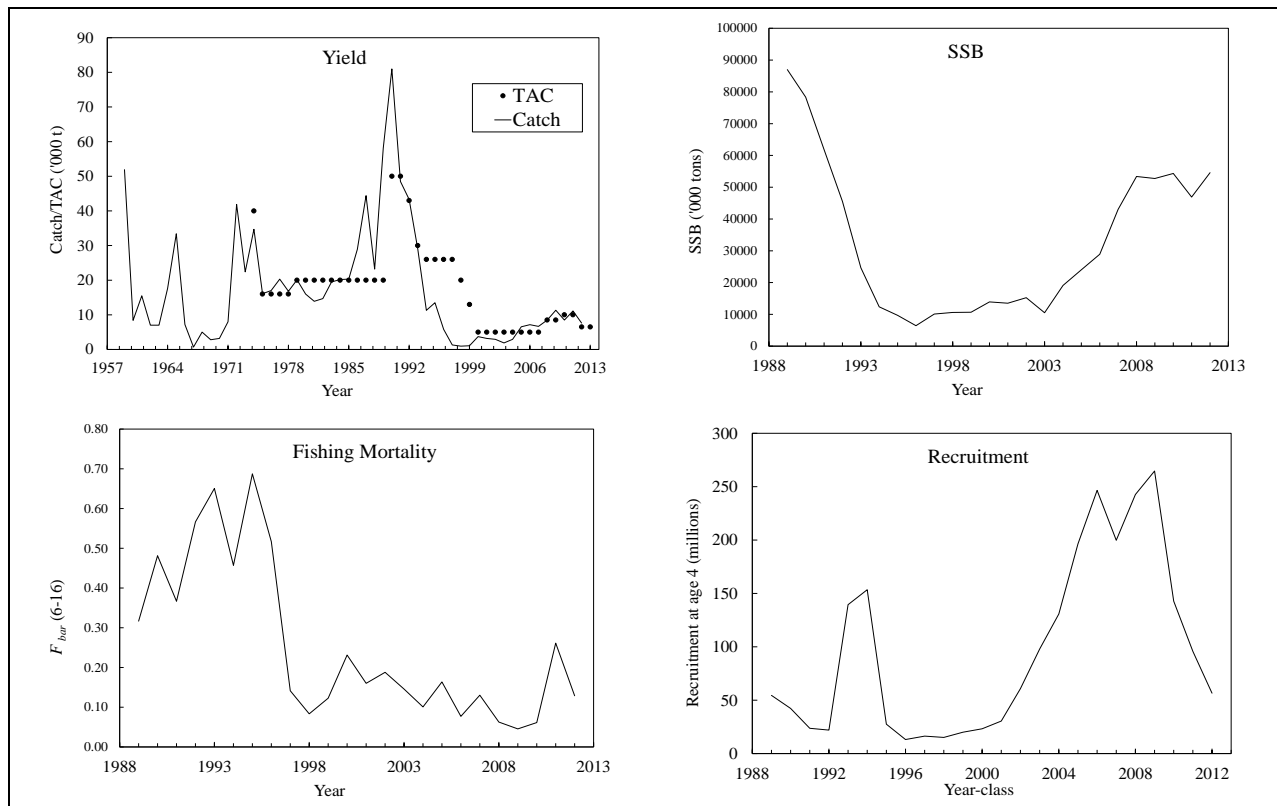
No explicit management plan or management objectives defined by Fisheries Commission. General Convention objectives (GC Doc. 08/3) are applied.

Convention objectives	Status	Comment/consideration
Restore to or maintain at B_{msy}		B_{msy} unknown, Stock stable at a high level
Eliminate overfishing		F_{msy} unknown, catch at low levels
Apply Precautionary Approach		Reference points not defined
Minimise harmful impacts on living marine resources and ecosystems		VME closures in effect, no specific measures, low bycatch reported
Preserve marine biodiversity		Cannot be evaluated

 OK
 Intermediate
 Not accomplished
 Unknown

Management unit

Catches of redfish in Div. 3M includes 3 species of the genus *Sebastes*; *S. mentella*, *S. marinus* and *S. fasciatus*. For management purposes they are considered as one stock (STACFIS 2013). Advice is based on data only for two species (*S. mentella* & *S. fasciatus*), labeled as Beaked redfish.



Stock status

The stock has increased since 2005 and has remained at a relatively high level in recent years. Fishing mortality has remained stable since the late 1990s. Recent recruitment is declining.

Reference points

No updated information on biological reference points was available.

Projections

Given the uncertainty about the actual level of current natural mortality (M) (see STACFISH 2013) and its impact on short term model projections, Scientific Council decided not to use model predictions as basis for the recommendation.

Assessment

The present assessment evaluates the status of the Div. 3M beaked redfish stock, composed of two very similar species (*S. mentella* and *S. fasciatus*). Input data comes from EU Flemish Cap bottom trawl survey and the fishery (STACFIS 2013). A quantitative model introduced in 2003 was used (STACFIS 2013). Model settings were in general kept unchanged and the results are consistent with the previous assessments. A sensitivity analysis pointed to changes in natural mortality in recent years which were included in the assessment. The next full assessment is planned for 2015.

Human impact

Mainly fishery related mortality. Other sources (e.g. pollution, shipping, oil-industry) are undocumented.

Biology and Environmental interactions

The three species of redfish found in Div. 3M are difficult to distinguish, and are landed as “redfish”. Redfish is an important component in the diet of cod, especially in those years when successful recruitment events were observed in redfish stocks. The perceived changes in natural mortality are consistent with the dynamics of the cod stock.

Fishery

Redfish is caught primarily in bottom trawl fisheries, but some landings are reported from fisheries with mid-water trawl. Cod is the main bycatch species in shallower waters, and Greenland halibut in deeper waters. In turn, redfish are also caught as bycatch in fisheries directed for cod and Greenland halibut. The fishery in NAFO Div. 3M is regulated by minimum mesh size and quota.

Until 2005 catches comprised of mainly *S. mentella*, while from 2005 onwards catches of *S. marinus* increased.

Recent catch estimates of all redfish and TACs are:

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
TAC	5	5	5	5	5	8.5	10.0	10.0	6.5	6.5
STATLANT 21	3.1	6.4	6.3	5.6	7.9	8.7	8.5	9.7	6.7	
STACFIS total catch	2.9	6.6	7.2	6.7	8.5	11.3	8.5	11.1	7.6	

Effects of the fishery on the ecosystem.

No specific information is available. General impacts of fishing gears on the ecosystem should be considered.

Special comments

None.

Sources of information

SCR Doc. 12/068, 13/013, 034; SCS Doc. 12/26, 13/05, 07/09; GC Doc 08/3.