

Redfish in Division 30

Advice June 2016 for 2017-2019

Recommendation for 2017- 2019

There is insufficient information on which to base predictions of annual yield potential for this resource. Stock dynamics and recruitment patterns are also poorly understood. Catches have averaged about 13 000 t since the 1960s and over the long term, catches at this level appear to have been sustainable. Scientific Council is unable to advise on an appropriate TAC for 2017, 2018 and 2019

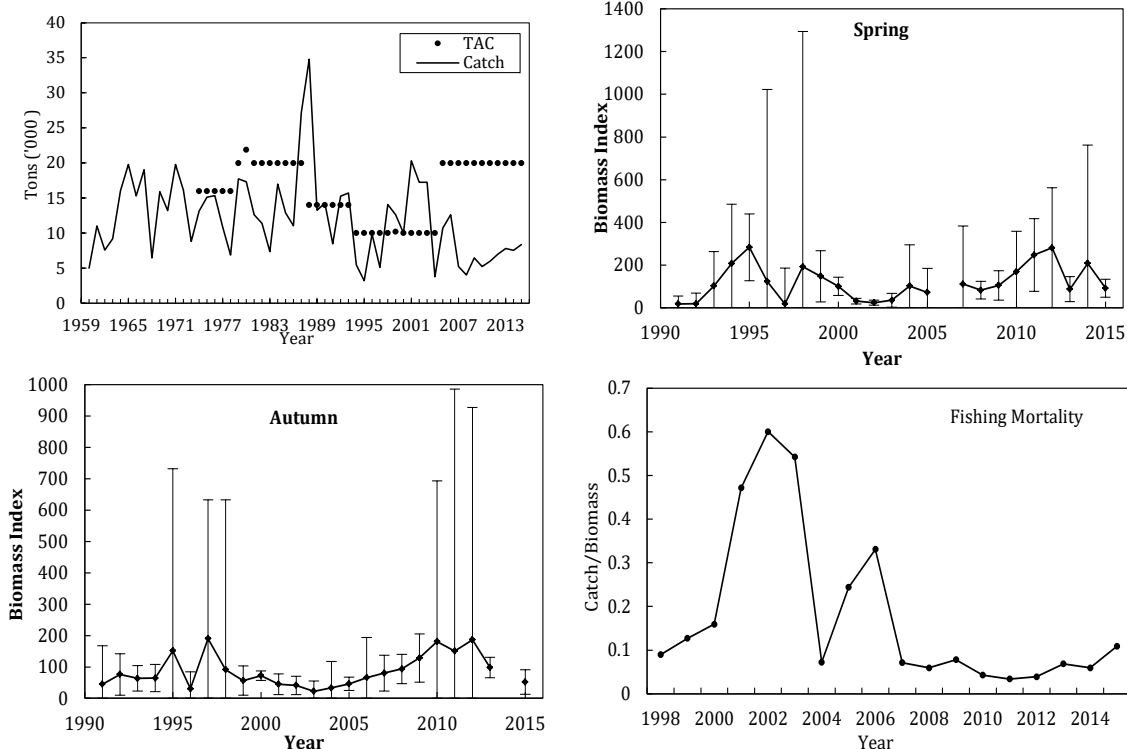
Management objectives

No explicit management plan or management objectives defined by Fisheries Commission. General convention objectives (GC Doc. 08/3) are applied. Advice is based on survey indices and catch trends. (the observation of a period of stable catches since the 1960s)

Convention objectives	Status	Comment/consideration	
Restore to or maintain at B_{msy}	○	B_{msy} unknown, stock decreasing	● OK
Eliminate overfishing	●	Fishing mortality low	● Intermediate
Apply Precautionary Approach	○	Reference points not defined	● Not accomplished
Minimise harmful impacts on living marine resources and ecosystems	●	VME closures in effect, low bycatch reported	○ Unknown
Preserve marine biodiversity	○	Cannot be evaluated	

Management unit

The management unit is confined to NAFO Div. 30.

**Stock status**

The stock appears to have decreased from near time series highs in 2012. Current fishing mortality appears low and recent recruitment appears to be low.

Reference points

Not defined.

Projections

Quantitative assessment of risk at various catch options is not available for this stock at this time.

Assessment

Based upon a qualitative evaluation of trends in stock biomass, fishing mortality proxy and recruitment. The assessment is considered data limited and as such associated with a relatively high uncertainty. Input data are research survey indices and fishery data (STACFIS 2016).

The next full assessment of this stock will be in 2019.

Human impact

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

Biological and environmental interactions

Redfish are slow growing and bear live young. Recently, genetic analyses linked strong year-classes of juvenile *S. fasciatus* sampled from the Gulf of St. Lawrence with adults collected in NAFO Divs. 3LNO and southern 3Ps. Local plus distant dispersal of young fish makes the influences of physical and environmental processes on stock dynamics difficult to interpret. There are observations of juvenile redfish associated with seapens in this region.

Fishery

Redfish is caught primarily in bottom trawl fisheries, but some landings are reported from mid-water trawl fisheries. In directed redfish fisheries, Atlantic cod, American plaice, witch flounder and other species are landed as bycatch. In turn, redfish are also caught as bycatch in fisheries directing for other species. The fishery in NAFO Division 30 is regulated by quota and within Canadian waters, also by minimal fish size.

Recent catch estimates and TACs are:

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TAC	20	20	20	20	20	20	20	20	20	20
STATLANT 21	7.5	5.1	6.3	6.5	6.0	7.0	7.8	7.5	7.9	
STACFIS	5.2	4.0	6.4	5.2	6.0	7.0	7.8	7.5	8.4	

Effects of the fishery on the ecosystem

No specific information is available. General impacts of fishing gears on the ecosystem should be considered. A large area of Div. 30 has been closed to protect corals.

Special comments

Length frequencies suggest that the 30 redfish fishery takes predominantly immature fish.

Sources of information

SCR Doc. 16/11, SCS Doc. 16/05, 08, 09, 10.