

Demersal redfish in Subarea 1

Advice June 2020 for 2021 - 2023

Recommendation for 2021 - 2023

Deep-sea redfish and Golden redfish: The Scientific Council advises that there should be no directed fishery. There will be no new assessment until monitoring shows that conditions have changed; until then, the advice given above will remain.

Management objectives

No explicit management plan or management objectives have been defined by the Government of Greenland.

Management unit

These two species are managed together as a single unit. Survey data reveal an almost continuous distribution of both species from East Greenland to West Greenland; both areas had geographically distinct fisheries historically. However, the degree of connectivity between the two areas is unknown.

Stock status

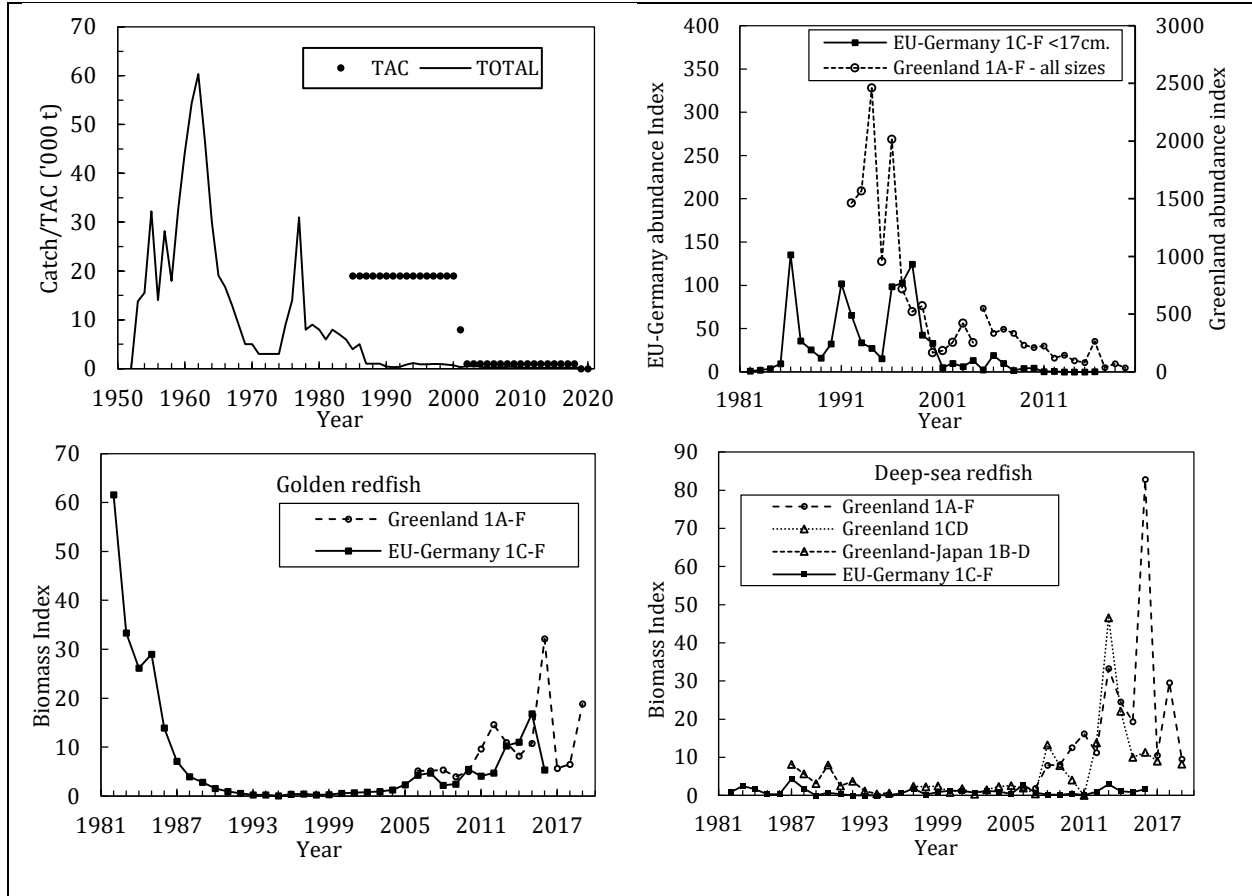
Catches of the stock have been very low since the 1990s.

Golden redfish

Survey indices indicate that the biomass remains far below historical levels. Recruitment has been poor for two decades and failing during the most recent decade. The overall stable biomass in recent years is the result of somatic growth or immigration balancing the limited fishery and natural mortality in the remaining stock.

Deep-sea redfish

Both the Greenland Shrimp and Fish survey (Div. 1A-F) and the Greenland deep-sea survey (Div. 1CD) indicate a decreasing biomass index of deep-sea redfish in the recent 4-7 years. Recruitment has been poor for two decades. No new incoming year classes have been identified during the trawl surveys in either East Greenland (EU-Germany survey), West Greenland offshore (EU-Germany survey and survey in Div. 1A-F), or inshore (Survey in Div. 1A-F) during the recent decade.



Reference points

Could not be established.

Assessment

No analytical assessment was performed. The assessment was based upon a qualitative evaluation of survey indices, length composition in surveys, and historical fishery. The assessment is considered data-limited and with relatively high uncertainty, as surveys do not fully cover the distribution of the stock

Human impact

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

Environmental impact

Unknown

Fishery

The proportions of golden and deep-sea redfish in the historical catches are unknown. The catches of redfish peaked in the 1960s at 60 000 tonnes, but gradually decreased during the 1970s and 1980s. A significant unreported bycatch of redfish was likely taken during the 1980s and 1990s in the fishery targeting shrimp. With the implementation of sorting grids in the shrimp fishery in 2002, catches and bycatch of redfish are considered to be very low.



Recent catch estimates ('000 tonnes) are as follows:

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TAC	1	1	1	1	1	1	1	1	1	0	0
STATLANT 21	0	0.2	0.12	0.16	0.25	0.19	0.16	0.23	0.19	0.095	
STACFIS	0.3	0.2	0.16	0.17	0.17	0.26	0.17	0.24	0.19	0.14	

Effects of the fishery on the ecosystem

There is currently no significant directed fishery in West Greenland. Recent landings of redfish are bycatches taken in other fisheries: mainly longline, gillnet or jigging in the inshore and coastal areas, and trawl in the offshore areas.

Basis for Advice

Survey indices were used to evaluate the stock.

Special comments

The higher biomasses of both redfish species observed in the surveys since around 2008 could be a consequence of either increased survival of redfish after the implementation of sorting grids in the shrimp fishery and/or migration of redfish from nearby areas. Current stock delineation may not be appropriate.

Although the Shrimp and Fish survey experienced vessel changes in 2018 and 2019, the indices are considered to be comparable with those from earlier years. The deep-sea survey in 1CD also experienced a vessel change in 2019, for which it has been shown that gear performance parameters remained constant with both vessels at depths < 700 m. Since both redfish are found mainly at depths < 600 m during this survey, results are also considered comparable.

This stock will be monitored by interim monitoring report until such time as monitoring suggests a major change.

Sources of Information

SCR Doc. 20/003, 006, 012, 016 and 045; SCS Doc. 20/12.