Redfish in Divisions 3LN Advice June 2026 for 2027-2028

Recommendation for 2027 and 2028

Given that Division 3LN redfish is assessed using an index-based assessment, Scientific Council is unable to provide projections for the range of Fs required in the NAFO Advice table. Divs. 3LN redfish is estimated to be above the biomass series average and there is a 19% risk of being below B_{lim}, therefore the stock is not in the Critical Zone of the NAFO Precautionary Approach Framework. Relative fishing mortality is low and remains well below the time series high seen in the early 1990's.

Given that catches over the most recent five years have allowed the stock to increase (in terms of the point estimate), Scientific Council advises a catch consistent with these levels (4 804 t to 12 131 t, averaging 8 705 t).

Management objectives

No explicit management plan or management objectives have been defined by the Commission. Convention general principles are applied.

Convention Principle	Status	Comment
Restore to or maintain at B_{msy}		$B \geq B_{lim}$, $B_{trigger}$ undefined
Eliminate Overfishing (Stock)		F_{lim} undefined, F is considered to be low
Eliminate Overfishing (Ecosystem)		Total EPU catches < 2TCI
Apply Precautionary Approach		B_{lim} defined, other B and F reference points undefined
Minimize harmful impacts on living marine resources and ecosystems		Directed fishery, VME closures in effect, Effectiveness of bycatch regulations uncertain
Preserve marine biodiversity		Cannot be evaluated

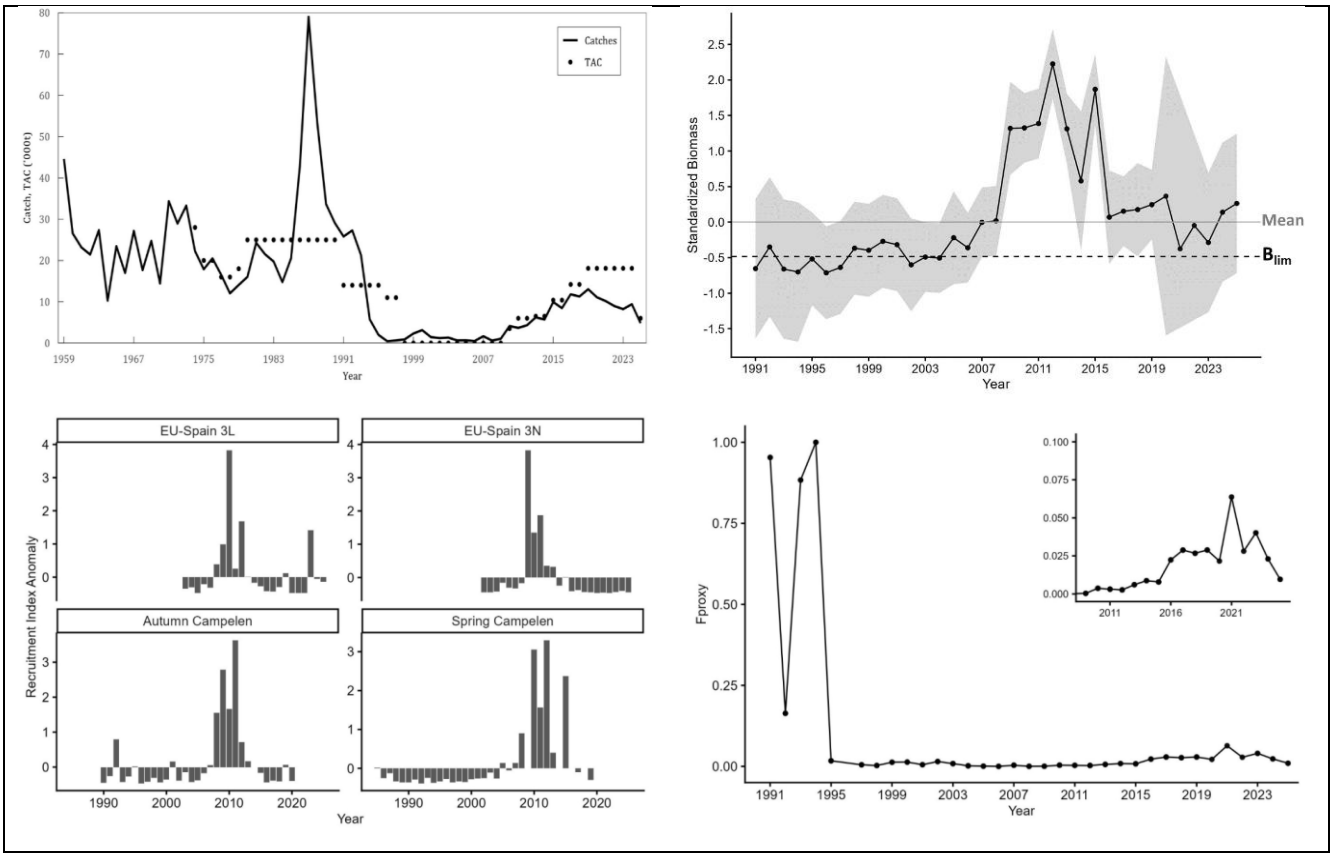
OK
Intermediate
Not accomplished
Unknown

Management unit

The management unit is defined as NAFO Divisions 3LN. This stock includes two species of redfish in Divisions 3L and 3N, the deep-sea redfish (*Sebastes mentella*) and the Acadian redfish (*Sebastes fasciatus*) that have been commercially fished and reported collectively as redfish in fishery statistics.

Stock status

The stock has increased since 2023. There is a 19% risk of the stock being below B_{lim} in 2025. Recruitment (abundance 15-20 cm) has been below the long-term average since the mid-2010s in all surveys, with the exception of the 2023 EU-Spain survey in 3L. Relative fishing mortality has been decreasing in recent years, remaining well below the time series high seen in the early 1990's.



Reference points

A biomass limit reference point (B_{lim}) is based on the combined mean standardized survey biomass of 3N EU-Spain, Canadian autumn Campelen and spring Campelen surveys for the period 1991-2005. This period was chosen as it represented a time when stock biomass recovered from a prolonged period at a low level.

Assessment

No analytical assessment was performed.

This assessment is based on a combined 3L and 3N EU-Spain, Canadian autumn Campelen and spring Campelen survey mean standardized index.

The next assessment is scheduled for 2028.

Human impacts

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

Biology and environmental interactions

There are three species of the genus Sebastes with distribution overlapping in several areas of Northwest Atlantic, the deep sea redfish (*Sebastes mentella*), Acadian redfish (*Sebastes fasciatus*) and golden redfish (*Sebastes norvegicus*).

Redfish diet in the Grand Bank (3LNO) EPU typically includes large zooplankton species (e.g. amphipods, euphausiids), small forage fishes (e.g. sandlance and capelin), and shrimp.

The Grand Bank (3LNO) Ecosystem Production Unit (EPU) continues to experience low productivity conditions, with EPU biomass below pre-collapse levels (pre-1990s). Rebuilding has been observed since the 1990s, but

declines across multiple trophic levels and stocks occurred in the mid 2010s. Positive signals have been observed since these declines, with EPU biomass near the post-collapse highs of the early-mid 2010s.

Ecosystem sustainability of catches

The impact of bottom fishing activities on VMEs in the NRA was last assessed in 2021. The risk of Significant Adverse Impacts (SAIs) on sponge and large gorgonian VMEs was assessed to be low, while this risk for sea pen VMEs has been assessed as intermediate. The risks of SAIs on small gorgonian, black coral, bryozoan and sea squirt VMEs were assessed as high. Some areas in the Grand Bank (3LNO) EPU have been closed to bottom fishing to protect sponge and coral species.

3LN redfish is included in the piscivores guild of the Grand Bank (3LNO) Ecosystem Production Unit (EPU). Other NAFO managed stocks in this guild within the EPU include 3O redfish, 3NO cod, 3NOPs white hake and 2+3KLMNOPs Greenland halibut. The Catch/TCI for 2025 was below the 2TCI ecosystem reference point (3LNO Piscivore $Catch_{2025}$/TCI=1.43).

Fishery

Between 1959 and 1960, reported catches dropped from 44 600 to 26 600 t, fluctuating over the next 25 years (1960-1985) around an average level of 21 000 t. Catches increased to a 79 000 t high in 1987 and declined steadily to a 450 t minimum in 1996. A moratorium on directed fishing for this stock was implemented in 1998. Catches remained at relatively low levels (450-3 000 t) until 2009. From 2011 onwards–catches steadily increased to 13 050 t in 2019, the highest level recorded since 1993. Since then, catches have been decreasing and have remained below the TAC. In 2025, total catch was estimated to be 4 804 t.

Recent catch estimates and TACs ('000 t) are:

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
TAC	14.2	14.2	18.1	18.1	18.1	18.1	18.1	18.1	6.0	6.0
Catches[1]	11.8	11.3	13.1	11.1	10.2	9.0	8.2	9.4	4.8	

[1]CESAG estimates

Special comments

Redfish are known to have variable and episodic recruitment, with potentially large periods of time between recruitment pulses and poorly understood relationships between stock size and recruitment. Impacts of delineations of stock boundaries and synchronicity between adjacent stocks are unknown.

Work is ongoing to develop an MSE for this stock.

Sources of information

SCR Doc. 26/01, 02, 26; SCS Doc. 26/06, 07, 10