

Stock Annex for Cod in VIb Rockall Plateau

Stock specific documentation of standard assessment procedures used by ICES.

Stock	cod-rock
Working Group	WGCSE
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Revised by	WGCSE / Steven Holmes

A. General

A.1. Stock definition

Cod at the Rockall plateau.

A.2. Fishery

No targeted fishery. Cod in Division VIb are taken in other trawl fisheries targeting haddock or anglerfish.

A.3. Ecosystem aspects

In recent years there has been a rise in seawater temperature on the Rockall Bank combined with a significant reduction of *Calanus finmarchicus* which is a significant food item for larval and juvenile cod.

In order to protect cold-water corals, four areas (northwest Rockall, Logachev Mounds, west Rockall Mounds, and Empress of British Banks) have been closed since 2007.

B. Data

B.1. Commercial catch

Official landings. No discards information. There are doubts on the accuracy of the reported landings as these are reported by vessels operating in both Divisions VIa and VIb.

B.2. Biological

None.

B.3. Surveys

None.

B.4. Commercial cpue

Irish otter trawl fleet (lpue).

Scottish otter trawl fleet (lpue).

B.5. Other relevant data

None.

C. Assessment: data and method

Model used: **None**.

Software used:

Model Options chosen:

Input data types and characteristics:

TYPE	NAME	YEAR RANGE	AGE RANGE	VARIABLE FROM YEAR TO YEAR YES/No
Caton	Catch in tonnes	na	na	na
Canum	Catch at age in numbers	na	na	na
Weca	Weight-at-age in the commercial catch	na	na	na
West	Weight-at-age of the spawning stock at spawning time.	na	na	na
Mprop	Proportion of natural mortality before spawning	na	na	na
Fprop	Proportion of fishing mortality before spawning	na	na	na
Matprop	Proportion mature at age	na	na	na
Natmor	Natural mortality	na	na	na

Tuning data:

TYPE	NAME	YEAR RANGE	AGE RANGE
Tuning fleet 1	na	na	na
Tuning fleet 2	na	na	na
Tuning fleet 3	na	na	na

D. Short-term projection

Model used: **None**.

Software used:

Initial stock size:

Maturity:

F and M before spawning:

Weight-at-age in the stock:

Weight-at-age in the catch:

Exploitation pattern:

Intermediate year assumptions:

Stock–recruitment model used:

Procedures used for splitting projected catches:

E. Medium-term projections

Model used: **None.**

Software used:

Initial stock size:

Natural mortality:

Maturity:

F and M before spawning:

Weight-at-age in the stock:

Weight-at-age in the catch:

Exploitation pattern:

Intermediate year assumptions:

Stock–recruitment model used:

Uncertainty models used:

- 1) Initial stock size:
- 2) Natural mortality:
- 3) Maturity:
- 4) F and M before spawning:
- 5) Weight-at-age in the stock:
- 6) Weight-at-age in the catch:
- 7) Exploitation pattern:
- 8) Intermediate year assumptions:
- 9) Stock–recruitment model used:

F. Long-term projections

Model used: **None.**

Software used:

Maturity:

F and M before spawning:

Weight-at-age in the stock:

Weight-at-age in the catch:

Exploitation pattern:

Procedures used for splitting projected catches:

G. Biological reference points

No reference points are defined for this stock.

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	TYPE	VALUE	TECHNICAL BASIS
MSY	MSY $B_{trigger}$	xxx t	Explain
Approach	F_{MSY}	Xxx	Explain
	B_{lim}	xxx t	Explain
Precautionary	B_{pa}	xxx t	Explain
Approach	F_{lim}	Xxx	Explain
	F_{pa}	Xxx	Explain

H. Other issues

H.1. Historical overview of previous assessment methods

NA.

I. References

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