

Orange roughy (*Hoplostethus atlanticus*) in subareas 1–10, 12 and 14 (the Northeast Atlantic and adjacent waters)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, there should be zero catch in each of the years 2025–2028.

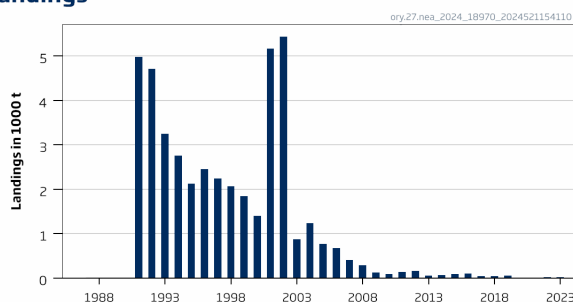
ICES Non-fisheries conservation considerations

ICES has not identified any conservation aspects other than those related to the commercial fisheries.

Stock development over time

ICES cannot assess the stock and exploitation status relative to MSY and precautionary approach (PA) reference points because there is no assessment model for this stock.

Landings



Landings by area since 2010

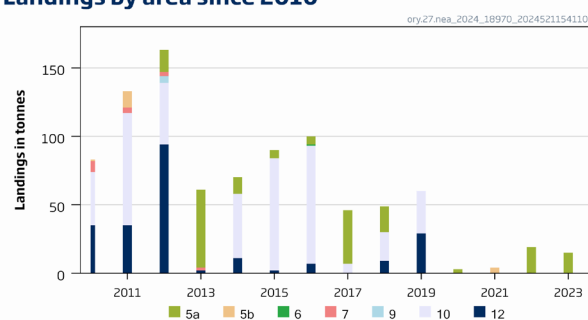


Figure 1 Left: Orange roughy in the Northeast Atlantic. ICES estimates of international landings (in thousand tonnes). Right: ICES estimates of international landings over the last 15 years, by area (in thousand tonnes).

Catch scenarios

The ICES framework for Category 6 stocks was applied (ICES, 2012). For this stock, current catches are very low and currently limited to bycatch in Division 5.a. For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented where there is no ancillary information clearly indicating that the current level of exploitation is appropriate for the stock.

Table 1 Orange roughy in the Northeast Atlantic. For stocks in ICES categories 3–6, one catch option is provided. Catch in tonnes.

| | | |
|---|-------------|---------|
| Advised catches for 2021–2024, issued in 2020 | | 0 |
| Discard rate | | Unknown |
| Precautionary buffer | Not applied | - |
| Catch advice* | | 0 |

* Equal to advised catches for 2021–2024.

Basis of the advice

Table 2 Orange roughy in the Northeast Atlantic. The basis of the advice.

| | |
|-----------------|--|
| Advice basis | Precautionary approach |
| Management plan | ICES is not aware of any agreed precautionary management plan for orange roughy in this area |

Quality of the assessment

There is no information available to conduct an assessment.

Catch figures have been revised according to official catch statistics, working group estimates, and expert judgement on corrections of these data.

Issues relevant for the advice

Orange roughy is a very long-lived species (> 100 years) with low productivity that can support only very low levels of fishing pressure. This species is strongly associated with seamounts, and there is a high risk of local depletion. Since the early 1990s, orange roughy fisheries in subareas 6 and 7 have shown a severe decline, suggesting a sequential depletion; but it is currently unknown whether aggregations remain in these subareas. There is insufficient information to evaluate the status of the stock in other areas.

Current monitoring programmes are insufficient to monitor the recovery of the stock. To evaluate the impact of any directed fishery on orange roughy populations, data would be required at the spatial resolution of single seamounts.

In subareas 6 and 7, this species is classified as Category 2 in the NEAFC categorization of deep-sea species/stocks, which implies that NEAFC requires measures stipulating that directed fisheries are not authorized and that bycatches should be minimized (NEAFC, 2016).

In Subarea 10, this species is classified as Category 1 in the NEAFC categorization of deep-sea species/stocks, which implies that NEAFC requires stock-specific management measures because the entire or a significant proportion of the catch is taken in the NEAFC regulatory areas (RAs) (NEAFC, 2016).

Catches in the NEAFC RAs have very low since 2020. Recent reported catches have come from exclusive economic zone (EEZ) waters.

Reference points

No reference points have been established. However, an analysis in other regions indicated that potential sustainable F reference points for orange roughy would be very low and similar to natural mortality (Branch, 2001).

Basis of the assessment

Table 3 Orange roughy in the Northeast Atlantic. The basis of the assessment.

| | |
|--------------------------|--|
| ICES stock data category | 6 (ICES, 2023) |
| Assessment type | No assessment (ICES, 2024) |
| Input data | Landings data |
| Discards and bycatch | Negligible |
| Indicators | None |
| Other information | Historical commercial CPUE and survey data |
| Working group | Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP) |

History of the advice, catch, and management

Table 4 Orange roughy in the Northeast Atlantic. History of ICES advice, the agreed TAC, and ICES landings. Weights are in tonnes.

| Year | ICES advice | Catch corresponding to advice | EU TAC subareas 1–5, 8–12, and 14* | EU TAC Subarea 6** | EU TAC Subarea 7** | Total EU TAC subareas 1–12 and 14 | ICES landings |
|------|--|-------------------------------|------------------------------------|--------------------|--------------------|-----------------------------------|---------------|
| 2003 | Exploitation strictly limited and populations closely monitored. No direct fishery in Subarea VI | - | - | 88 | 1349 | 1437 | 873 |
| 2004 | Biennial | - | - | 88 | 1349 | 1437 | 1239 |
| 2005 | No fishery unless accompanied by programmes to collect data | 0 | 102 | 88 | 1148 | 1338 | 768 |
| 2006 | Biennial | 0 | 102 | 88 | 1148 | 1338 | 671 |
| 2007 | No direct fishery, bycatch in mixed fishery as low as possible | 0 | 44 | 51 | 193 | 288 | 411 |
| 2008 | Biennial | 0 | 30 | 34 | 130 | 194 | 288 |
| 2009 | No direct fishery, bycatch in mixed fishery as low as possible | 0 | 15 | 17 | 65 | 97 | 130 |
| 2010 | Biennial | 0 | 0 | 0 | 0 | 0 | 88 |
| 2011 | No directed fisheries and measures to minimize bycatch | 0 | 0 | 0 | 0 | 0 | 133 |
| 2012 | No new advice, same as 2011 | 0 | 0 | 0 | 0 | 0 | 163 |
| 2013 | No directed fisheries and measures to minimize bycatch | 0 | 0 | 0 | 0 | 0 | 61 |
| 2014 | No new advice, same as 2013 | 0 | 0 | 0 | 0 | 0 | 70 |
| 2015 | No directed fisheries and measures to minimize bycatch | 0 | 0 | 0 | 0 | 0 | 90 |
| 2016 | No new advice, same as 2015 | 0 | 0 | 0 | 0 | 0 | 99 |
| 2017 | Precautionary approach (same value as advised catches for 2016) | 0 | 0 | 0 | 0 | 0 | 46 |
| 2018 | Precautionary approach (same value as advised catches for 2016) | 0 | 0 | 0 | 0 | 0 | 48 |
| 2019 | Precautionary approach (same value as advised catches for 2016) | 0 | 0 | 0 | 0 | 0 | 60 |
| 2020 | Precautionary approach (same value as advised catches for 2016) | 0 | 0 | 0 | 0 | 0 | 3 |
| 2021 | Precautionary approach | 0 | 0 | 0 | 0 | 0 | 4 |
| 2022 | Precautionary approach (same value as advised catches for 2021) | 0 | 0 | 0 | 0 | 0 | 19 |
| 2023 | Precautionary approach (same value as advised catches for 2021) | 0 | 0 | 0 | 0 | 0 | 15 |
| 2024 | Precautionary approach (same value as advised catches for 2021) | 0 | 0 | 0 | 0 | 0 | |
| 2025 | Precautionary approach | 0 | | | | | |
| 2026 | Precautionary approach (same value as advised catches for 2025) | 0 | | | | | |

| Year | ICES advice | Catch corresponding to advice | EU TAC subareas 1–5, 8–12, and 14* | EU TAC Subarea 6** | EU TAC Subarea 7** | Total EU TAC subareas 1–12 and 14 | ICES landings |
|------|---|-------------------------------|------------------------------------|--------------------|--------------------|-----------------------------------|---------------|
| 2027 | Precautionary approach (same value as advised catches for 2025) | 0 | | | | | |
| 2028 | Precautionary approach (same value as advised catches for 2025) | 0 | | | | | |

* Annual total catches of any contracting party not to exceed 150 tonnes in the NEAFC regulatory areas (RAs), excluding subareas 5–7.

** No directed fishery in the NEAFC RAs of subareas 5–7.

History of the catch and landings

Table 5 Orange roughy in the Northeast Atlantic. Catch distribution by fleet in 2023 as estimated by ICES.

| Total catch | Landings | Discards |
|-------------|------------------------------|----------|
| 15 t | 100% trawl fisheries 15 t | 0 t |

Table 6 Orange roughy in the Northeast Atlantic. History of official landings (in tonnes) presented by each country participating in the fishery.

| Year | Faeroe Isl. | France | Germany | Iceland | Ireland | New Zealand | Portugal | Russia | Spain | UK – EW N.Irl. | UK - Scot | Total |
|------|-------------|--------|---------|---------|---------|-------------|----------|--------|-------|----------------|-----------|-------|
| 1987 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1988 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1989 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1990 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 1991 | 0 | 4 918 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 983 |
| 1992 | 0 | 4 050 | 0 | 382 | 0 | 0 | 274 | 0 | 0 | 0 | 0 | 4 706 |
| 1993 | 60 | 2 153 | 0 | 717 | 0 | 1 | 317 | 0 | 0 | 0 | 0 | 3 248 |
| 1994 | 259 | 1 932 | 0 | 158 | 0 | 0 | 405 | 0 | 0 | 0 | 0 | 2 754 |
| 1995 | 732 | 998 | 0 | 64 | 0 | 0 | 331 | 0 | 0 | 0 | 2 | 2 127 |
| 1996 | 950 | 1 067 | 0 | 43 | 0 | 0 | 366 | 0 | 22 | 0 | 0 | 2 448 |
| 1997 | 854 | 1 012 | 0 | 79 | 0 | 0 | 267 | 0 | 26 | 0 | 0 | 2 238 |
| 1998 | 747 | 1 110 | 0 | 28 | 0 | 0 | 160 | 0 | 26 | 0 | 0 | 2 071 |
| 1999 | 349 | 1 332 | 0 | 0 | 0 | 0 | 117 | 0 | 38 | 0 | 12 | 1 848 |
| 2000 | 155 | 1 048 | 0 | 0 | 0 | 0 | 157 | 14 | 20 | 2 | 0 | 1 396 |
| 2001 | 430 | 1 322 | 0 | 0 | 2 759 | 450 | 161 | 0 | 15 | 1 | 34 | 5 172 |
| 2002 | 36 | 499 | 0 | 10 | 4 647 | 0 | 122 | 0 | 55 | 14 | 55 | 5 438 |
| 2003 | 2 | 548 | 0 | 0 | 311 | 0 | 0 | 0 | 12 | 0 | 0 | 873 |
| 2004 | 466 | 511 | 4 | 28 | 209 | 0 | 0 | 0 | 21 | 0 | 0 | 1 239 |
| 2005 | 291 | 284 | 0 | 8 | 96 | 0 | 0 | 0 | 11 | 0 | 78 | 768 |
| 2006 | 89 | 539 | 0 | 2 | 39 | 0 | 0 | 0 | 2 | 0 | 0 | 671 |
| 2007 | 20 | 190 | 1 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 411 |
| 2008 | 108 | 179 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 288 |
| 2009 | 61 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 |
| 2010 | 74 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 |
| 2011 | 129 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 133 |
| 2012 | 139 | 3 | 0 | 16 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 163 |
| 2013 | 2 | 2 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 2014 | 58 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 |

| Year | Faeroe Isl. | France | Germany | Iceland | Ireland | New Zealand | Portugal | Russia | Spain | UK – EW N.Irl. | UK - Scot | Total |
|------|-------------|--------|---------|---------|---------|-------------|----------|--------|-------|----------------|-----------|-------|
| 2015 | 84 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |
| 2016 | 93 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 99 |
| 2017 | 7 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 2018 | 29 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 2019 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| 2020 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 2021 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2022 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 2023 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |

Table 7 Orange roughy in the Northeast Atlantic. History of official landings (in tonnes) presented by ICES area.

| Year | 2 | 4 | 5a | 5b | 6 | 7 | 8 | 9 | 10 | 12 | 14 | Total |
|------|----|----|-----|-----|-------|-------|----|---|-----|-----|----|-------|
| 1987 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1988 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1989 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1990 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| 1991 | 0 | 10 | 65 | 0 | 3 502 | 1 406 | 0 | 0 | 0 | 0 | 0 | 4 983 |
| 1992 | 0 | 32 | 382 | 3 | 1 296 | 2 683 | 31 | 0 | 274 | 5 | 0 | 4 706 |
| 1993 | 0 | 1 | 717 | 37 | 428 | 1 664 | 58 | 0 | 318 | 25 | 0 | 3 248 |
| 1994 | 0 | 2 | 158 | 170 | 178 | 1 719 | 29 | 0 | 405 | 93 | 0 | 2 754 |
| 1995 | 0 | 8 | 64 | 419 | 75 | 867 | 7 | 0 | 331 | 356 | 0 | 2 127 |
| 1996 | 0 | 0 | 40 | 79 | 120 | 890 | 44 | 0 | 836 | 439 | 0 | 2 448 |
| 1997 | 14 | 0 | 79 | 3 | 144 | 890 | 27 | 0 | 273 | 808 | 0 | 2 238 |
| 1998 | 0 | 4 | 28 | 2 | 117 | 987 | 5 | 0 | 337 | 591 | 0 | 2 071 |
| 1999 | 0 | 1 | 0 | 4 | 190 | 1 189 | 0 | 0 | 117 | 347 | 0 | 1 848 |
| 2000 | 0 | 0 | 0 | 1 | 270 | 727 | 40 | 0 | 160 | 198 | 0 | 1 396 |
| 2001 | 0 | 0 | 0 | 5 | 284 | 3 803 | 23 | 0 | 695 | 362 | 0 | 5 172 |
| 2002 | 0 | 0 | 10 | 1 | 331 | 4 914 | 22 | 0 | 152 | 8 | 0 | 5 438 |
| 2003 | 0 | 0 | 0 | 6 | 81 | 543 | 31 | 0 | 0 | 201 | 11 | 873 |
| 2004 | 0 | 0 | 28 | 7 | 56 | 465 | 42 | 0 | 339 | 298 | 4 | 1 239 |
| 2005 | 0 | 0 | 8 | 16 | 92 | 265 | 31 | 0 | 131 | 225 | 0 | 768 |
| 2006 | 0 | 0 | 2 | 0 | 32 | 491 | 43 | 0 | 8 | 95 | 0 | 671 |
| 2007 | 0 | 14 | 0 | 2 | 12 | 361 | 1 | 0 | 0 | 20 | 1 | 411 |
| 2008 | 0 | 7 | 0 | 1 | 12 | 158 | 2 | 0 | 37 | 71 | 0 | 288 |
| 2009 | 0 | 0 | 0 | 2 | 10 | 36 | 22 | 0 | 26 | 34 | 0 | 130 |
| 2010 | 0 | 0 | 0 | 1 | 0 | 8 | 4 | 0 | 39 | 35 | 1 | 88 |
| 2011 | 0 | 0 | 0 | 12 | 0 | 4 | 0 | 0 | 82 | 35 | 0 | 133 |
| 2012 | 0 | 0 | 16 | 0 | 0 | 3 | 0 | 5 | 45 | 94 | 0 | 163 |
| 2013 | 0 | 0 | 57 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 61 |
| 2014 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 47 | 11 | 0 | 70 |
| 2015 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 82 | 2 | 0 | 90 |
| 2016 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 0 | 86 | 7 | 0 | 99 |
| 2017 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 46 |
| 2018 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 21 | 9 | 0 | 48 |
| 2019 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 29 | 0 | 60 |
| 2020 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 2021 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |

| Year | 2 | 4 | 5a | 5b | 6 | 7 | 8 | 9 | 10 | 12 | 14 | Total |
|------|---|---|----|----|---|---|---|---|----|----|----|-------|
| 2022 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 2023 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |

Table 8 Orange roughy in the Northeast Atlantic. Landings inside and outside the NEAFC regulatory areas (RAs) as estimated by ICES. Landings are in tonnes.

| Year | Inside the NEAFC RAs (tonnes) | Outside the NEAFC RAs (tonnes) | Total landings (tonnes) | Percentage inside the NEAFC RAs (%) |
|------|-------------------------------|--------------------------------|-------------------------|-------------------------------------|
| 2014 | 58 | 12 | 70 | 83 |
| 2015 | 84 | 6 | 90 | 93 |
| 2016 | 93 | 6 | 99 | 93 |
| 2017 | 7 | 39 | 46 | 15 |
| 2018 | 29 | 19 | 48 | 61 |
| 2019 | 60 | 0 | 60 | 100 |
| 2020 | 0 | 3 | 3 | 0 |
| 2021 | 4 | 0 | 4 | 100 |
| 2022 | 0 | 19 | 19 | 0 |
| 2023 | 0 | 15 | 15 | 0 |

Summary of the assessment

There is no assessment for orange roughy in this area.

Sources and references

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[Download the stock assessment data and figures](#)

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