

European eel (*Anguilla anguilla*) throughout its natural range

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, there should be zero catches in all habitats in 2025. This applies to both recreational and commercial catches and includes catches of glass eels for restocking and aquaculture.

Non-fisheries conservation considerations

Based on ecosystem-based management, ICES considers that:

- all non-fisheries related anthropogenic mortalities should be reduced to zero.
- the quantity and quality of eel habitats should be restored; this includes restoring connectivity and the physical, chemical, and biological properties of the habitats.

Stock development over time

The status of European eel remains critical. Indices of both glass and yellow eel recruitment strongly declined from 1980 to 2011. Index values correspond to the recruitment as a percentage of the 1960–1979 geometric mean. Glass eel recruitment in the “North Sea” index area was 1.1% in 2024 (provisional) and 0.5% in 2023 (updated). In the “Elsewhere Europe” index series, recruitment was 7.2% in 2024 (provisional) and 7.4% in 2023 (updated). The yellow eel recruitment index for 2023 was 11.4% (updated) of the 1960–1979 geometric mean. Time-series from 1980 to 2024 show that eel recruitment remains at a very low level.

ICES cannot assess the exploitation status relative to maximum sustainable yield (MSY) or precautionary approach (PA) reference points because the reference points are undefined. The 1960–1979 geometric mean recruitment is considered a likely limit reference point (R_{lim}). Given that the current recruitment estimate has been below R_{lim} for many years, it is assumed that current biomass is below a potential B_{lim} . Therefore, while stock-size reference points are also undefined, it is considered that the stock size is well below potential biological limit reference points.

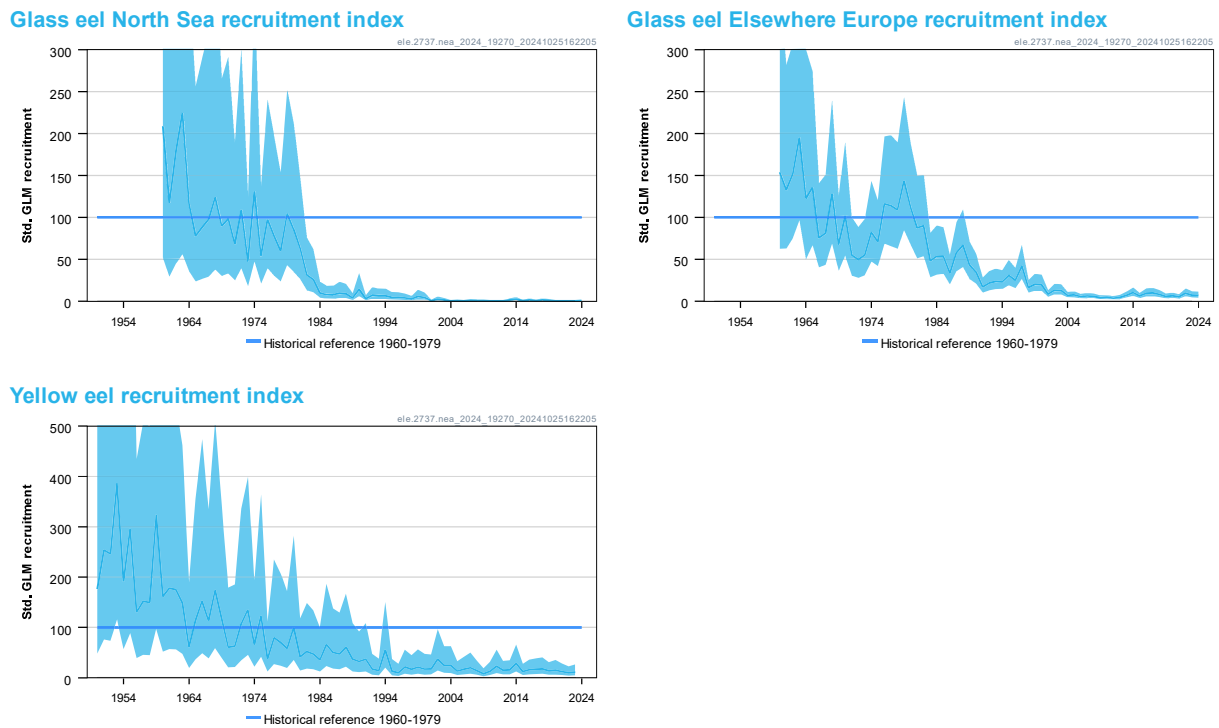


Figure 1 European eel. Indices; geometric mean of estimated glass eel recruitment for the continental “North Sea” (top-left panel) and “Elsewhere Europe” (top-right panel) series. A statistical model was fitted to 60 time-series comprising either pure glass eel or a mixture of glass and yellow eels (35 “North Sea” and 25 “Elsewhere Europe”). The results were scaled in percentage to the 1960–1979 geometric mean. The “North Sea” series are from Norway, Sweden, Germany, Denmark, the Netherlands, UK, and Belgium; the “Elsewhere” series are from UK, Ireland, France, Spain, Portugal, and Italy. In the Baltic area, recruitment occurs at the yellow eel stage only, and series are thus not included in the glass eel recruitment index. Bottom panel: estimated yellow eel recruitment trends for Europe. A statistical model was fitted to 21 yellow eel time-series and scaled in percentage to the 1960–1979 geometric mean. The series are from Denmark, Germany, Ireland, Sweden, France, and UK. The horizontal blue line on each panel represents the likely R_{lim} (calculated from the 1960–1979 geometric mean). Ribbons show 95% prediction interval of the generalized linear model (GLM; $1.96 \times$ standard error).

Conservation status ‡

Non-fisheries related anthropogenic mortalities are not reliably quantified (ICES, 2022a), and no reference points are defined.

European eel has been listed as Critically Endangered on the International Union for the Conservation of Nature (IUCN) Red List since 2008 (Pike *et al.*, 2020.; IUCN, 2022). It was listed in Appendix II of the Convention on International Trade in Endangered Species (CITES) in 2007 that came into force in 2009 (CITES, 2007, 2022), and Appendix II of the Conservation of Migratory Species of Wild Animals (CMS) in 2014 (CMS, 2018).

European eel was added to the OSPAR List of Threatened and/or Declining Species and Habitats in 2008. The status of European eel is still very poor in all OSPAR regions (OSPAR, 2022).

European eel was assessed as Critically Endangered by HELCOM in the Baltic Region in 2013 (HELCOM, 2013).

‡ This is for information purposes, and ICES does not formally endorse the methods used by third parties to create lists.

Catch scenarios

In the absence of an analytical assessment and accurate catch information, ICES is not in a position to provide catch scenarios.

Basis of the advice

Table 1a The basis of the advice for **fishing opportunities**

Advice basis	Precautionary approach
Management plan	<p>A management framework for eel within the EU was established in 2007 by Council Regulation (EC) No. 1100/2007 (EU Council, 2007) with the objective of achieving at least 40% of pristine silver eel escapement biomass. The General Fisheries Commission for the Mediterranean (GFCM) adopted Recommendation GFCM/42/2018/1 (GFCM, 2018), establishing management measures for European eel (<i>Anguilla anguilla</i>) in the Mediterranean Sea, which was amended most recently in GFCM/46/2023/16 (GFCM, 2023).</p> <p>These management plans have not been evaluated by ICES for their conformity with the precautionary approach and, for this reason, have not been used as the basis for the advice.</p> <p>Eel fisheries in EU waters are further regulated in Council Regulation (EU) 2024/257 and Council Regulation (EU) 2024/259, fixing 'Fishing Opportunities' (EU Council, 2024a, 2024b), Regulation (EU) 2023/2124 on "certain provisions for fishing" (EU, 2023) and in Commission Implementing Decision [EU] No 2018/1986 "Specific Control and Inspection Programme" (EC, 2018; amended by Commission Implementing Decision [EU] 2020/1320 [EC, 2020] and Commission Implementing Decision [EU] 2023/2376 [EC, 2023a]).</p>

Table 1b The basis of the advice for **conservation aspects**

Advice basis	Ecosystem-based management (EBM) considerations
Existing conservation measures	<p>Although the Convention on International Trade in Endangered Species (CITES) is legally binding, it requires specific domestic legislation and measures to allow implementation. For example, European eel (<i>Anguilla anguilla</i>) has been listed in the EU implementation of CITES rules (Annex B to Council Regulation [EC] No 338/97; EU Council, 1996) since 2009. In 2010, the EU considered that a Non-Detriment Finding could not be developed because of the status of the species, and export and import outside of Member States have not been permitted since that date.</p> <p>A Single Species Action Plan, the mechanism through which coordinated actions are delivered in the Conservation of Migratory Species of Wild Animals (CMS) for European eel, is presently in draft format.</p> <p>In 2014, the OSPAR Convention issued a recommendation to strengthen the protection of European eel at all life stages (OSPAR, 2014).</p> <p>HELCOM’s Baltic Sea Action Plan (BSAP) contains several targets for European eel (HELCOM, 2021).</p> <p>National conservation measures are contained in the report of the Workshop for the Technical evaluation of EU Member States’ Progress Reports for submission in 2021 [WKEMP3]), Eel Management Plan progress reports submitted in 2024 and to be evaluated by ICES in 2024/2025, and the country reports of the Joint ICES/European Inland Fisheries and Aquaculture Advisory Commission (EIFAAC)/General Fisheries Commission for the Mediterranean (GFCM) Working Group on Eels (WGEEL; ICES, 2022a, 2024a).</p> <p>Other international legislations/communications relevant to eel conservation:</p> <ul style="list-style-type: none"> • Directive 2000/60/EC, known as the Water Framework Directive (WFD; EU, 2000) • Directive 2008/56/EC, known as the Marine Strategy Framework Directive (MSFD; EU, 2008). • Council Directive 92/43/EEC, known as the Habitats Directive (EU, 1992) • The Ramsar Convention on Wetlands (UN, 1976), which aims to stem the loss of and progressive encroachment on wetlands, an important European eel habitat. • EU Nature Restoration Law: Regulation (EU) 2024/1991 (EU, 2024) • EU Marine Action Plan (EC, 2023b)

Quality of the assessment

The assessment is based on two glass eel recruitment indices and a yellow eel recruitment index, each comprising multiple time-series. The indices are fitted based on data from fisheries and scientific surveys, forming the longest and most reliable time-series that constitute an index of abundance.

The addition of new data points to all three recruitment indices naturally causes changes in GLM predictions of past years. Mohn’s Rho is calculated to evaluate the consistency of the assessment in retrospect (Figure 2). Mohn’s Rho is 0.04 for the “Elsewhere Europe” index, 0.2 for the “North Sea” index, and 0.23 for the “Yellow eel” index. While exceeding 0.2, which is generally considered as a threshold of concern (ICES, 2023), the number of series used in the eel indices may vary between assessment years, e.g. because of the inclusion of new series or replacement of existing series with other monitoring activities in the same area. This may cause additional variation of Mohn’s Rho compared to a situation where variation is caused only by the addition of new data points in recent years.

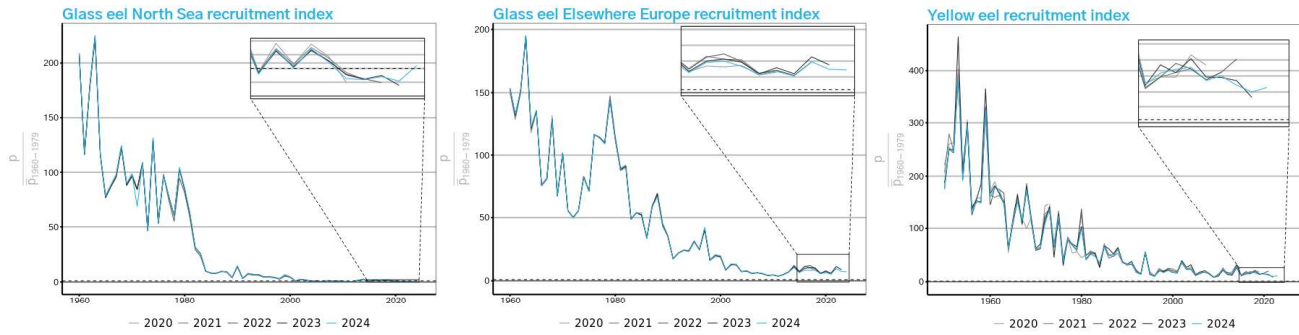


Figure 2 European eel. Retrospective comparison of generalized linear model (GLM) recruitment trends for “North Sea” (Mohn’s $\rho = 0.2$), “Elsewhere Europe” (Mohn’s $\rho = 0.04$), and “Yellow eel” (Mohn’s $\rho = 0.23$) recruitment. The GLM predictions of past years change with the addition of new data points for the most recent year and/or the addition/removal of data series. Years indicated in the legend (2020–2024) show GLM predictions based on the data available in the given year for glass eel (“North Sea” and “Elsewhere Europe”) and yellow eel indices, respectively.

In the absence of precise quantitative information on the spatial distribution of recruitment, the model does not weight time-series. As a consequence, a time-series collected in a zone with low recruitment has the same weight as one collected in a zone of higher recruitment. Moreover, in the absence of weighting, regions with numerous time-series have a greater weight than data-limited regions in the resulting recruitment index.

Total landings and effort data are incomplete (ICES, 2024a). In addition, a great heterogeneity is present among the time-series of landings owing to inconsistencies in reporting by, and between, countries. Changes in eel management practices have also affected commercial and non-commercial/recreational fisheries and the reporting of these fisheries.

Data deficiencies in reports on recreational fisheries are described by ICES (2016a). Although this has improved, landings in recreational fisheries remain largely unquantified (ICES, 2024a). Estimates from countries, where available, show that landings of yellow and silver eels from recreational fisheries can be of the same order of magnitude as those of commercial fisheries.

The annual eel data call, issued for the first time in 2017, has substantially improved the coverage and completeness of the data being reported to ICES. National estimates of biomass indicators, mortality rates, and associated data are requested once every third year, in line with reporting on Eel Management Plan (EMP) implementation progress to the European Commission. The most recent call was issued in 2024 (ICES, 2024b). Data on eel, fisheries, and other anthropogenic impacts across the whole stock, however, remain incomplete because there is no single international legislative requirement to collect and provide data that cover the entire stock area.

Issues relevant for the advice

On fishing opportunities

Total reported commercial landings of yellow and silver eel have remained above 2 000 tonnes per year over the last decade, with several countries reporting annual landings of over 100 tonnes. Commercial glass eel total landings remained above 40 tonnes for the past decade, with an average of 57.4 tonnes. Both are in contradiction with the current advice.

Restocking

ICES notes that the restocking of eels (the practice of moving eels from one waterbody to another) is intended as a *conservation measure* in EU Council Regulation (EC) No. 1100/2007 (EU Council, 2007) and is implemented in many eel management plans. Restocking is reliant on a glass eel catch, which is in contradiction with the current advice.

The net benefit of restocking to the reproductive potential of the eel stock is unknown. It requires information on e.g. the carrying capacity of glass eel source estuaries, reliable mortality estimates at each step of the restocking process, and the spawning potential of stocked vs. non-stocked eels. While a local increase in eel production may be apparent (ICES, 2016b), an assessment of net benefit to the spawning stock was unquantifiable. When constrained by the above-mentioned uncertainties and potential harmful effects, while following the precautionary approach, no catch for restocking should be allowed.

Assisted migration

ICES acknowledges that catches for the purpose of subsequent release to improve survival may be part of temporary conservation measures. For example, where dams exist and prevent downstream migration of silver eel or upstream migration of recruiting glass or yellow eels, transfer across barriers within the same waterbody could be considered if it is likely that the associated mortality is less than that in the absence of such measures. Upstream assisted migration should only be applied if the future escapement of silver eels is ensured. In such conditions, the current advice does not apply to these catches.

Aquaculture

Since cultured eels are always wild caught and either permanently removed from the stock (for consumption) or used for restocking (and hence not for conservation purposes following the definition above), no catch for aquaculture purposes should be allowed.

On conservation aspects

Other anthropogenic impacts

Non-fisheries anthropogenic impacts are substantial (ICES, 2019, 2020, 2021a, 2022b) and can be grouped into the following: (a) hydropower, pumping stations, and other water intakes; (b) habitat loss or degradation; (c) pollution, diseases, and parasites; and (d) other management actions that may affect levels of predation (e.g. conservation of predators vs. control of predators). These impacts vary over a range of temporal and spatial scales.

Global climate change, in particular changes in temperature, have and will continue to both directly and indirectly affect both marine and freshwater habitats, requiring similar considerations given the likelihood of dual impacts on migratory fish such as European eel. However, those effects from climate change are not well understood.

The implementation of environmental legislation (e.g. the EU Water Framework [WFD] and the Marine Strategy Framework directives [MSFD]) aims to improve the continental environment in marine, transitional, and freshwaters and could have a positive effect on the reproductive potential of silver eel.

At present, ICES is not able to quantify the level and the relative impact of non-fisheries anthropogenic factors on the reproductive capacity of the stock. However, given the state of the stock, all other anthropogenic impacts (e.g. those caused by hydropower, pumping stations, and pollution) that decrease production and escapement of silver eels should be zero.

Other aspects

Illegal, unreported, and unregulated (IUU) fishing is known to occur, and customs seizures indicate that the illegal export of eel could be substantial. Some countries have reported the level of misreporting and illegal fisheries (i.e. the seizure of illegal nets as well as the illegal trade of eels from countries both inside and outside the EU) to ICES, EIFAAC, or GFCM. However, there are insufficient data available to quantify their effect on the total stock size or status with any level of certainty.

Reference points

No biomass or fishing mortality reference points are formally defined for this stock. For the time being, the 1960–1979 recruitment is considered a potential limit reference point (R_{lim} ; ICES, 2021b)

Basis of the assessment

Table 2 European eel. Basis of the assessment.

ICES stock data category	3 (ICES, 2023)
Assessment type	Trend analysis, generalized linear model (GLM) of glass and yellow eel recruitment indices
Input data	Glass eel and yellow eel recruitment indices (informed by 60 glass eel and 21 yellow eel time-series)
Discards and bycatch	Not included
Indicators	None
Other information	None
Working group	Joint ICES/EIFAAC*/GFCM** Working Group on Eels (WGEEL)

* European Inland Fisheries and Aquaculture Advisory Commission

** General Fisheries Commission for the Mediterranean

History of the advice, catch, and management

Table 3 European eel. History of ICES advice.

Year	ICES advice	Predicted catch corresponding to the advice	TAC*	ICES catch**
1999	Recovery plan	-	-	-
2000	No fishery and a recovery plan	0	-	-
2001	A recovery plan should be implemented for the eel stock, and fishing mortality should be reduced to the lowest possible level until such a plan is agreed upon and implemented	-	-	-
2002	Exploitation should be reduced to the lowest possible level until a recovery plan is agreed upon and implemented	-	-	-
2003	All anthropogenic mortality as close to zero as possible until a recovery plan is agreed upon and implemented	-	-	-
2004	-	-	-	-
2005	-	-	-	-
2006	All anthropogenic mortality as close to zero as possible until a recovery plan is agreed upon and implemented	-	-	-
2007	All exploitation and other anthropogenic impacts should be reduced to a level as close to zero as possible, and a recovery plan for the whole stock should be implemented urgently	-	-	-
2008	All exploitation and other anthropogenic impacts should be reduced to as low as possible until there are clear signs of recovery	-	-	-
2009	All exploitation and other anthropogenic impacts should be reduced to as close to zero as possible	-	-	-
2010	All anthropogenic impacts should be reduced to as close to zero as possible until stock recovery is achieved	-	-	-
2011	All anthropogenic mortality as close to zero as possible until there is clear evidence that the stock is increasing	-	-	-
2012	All anthropogenic mortality as close to zero as possible until there is clear evidence that both recruitment and the adult stock are increasing	-	-	-
2013	All anthropogenic mortality as close to zero as possible until there is clear evidence that both recruitment and the adult stock are increasing	-	-	-
2014	All anthropogenic mortality as close to zero as possible until there is clear evidence of sustained increase in both recruitment and the adult stock	-	-	-
2015	All anthropogenic mortality as close to zero as possible	-	-	-
2016	All anthropogenic mortality as close to zero as possible	-	-	-
2017	All anthropogenic impacts as close to zero as possible	-	-	-
2018	All anthropogenic impacts as close to zero as possible	-	-	-
2019	All anthropogenic impacts as close to zero as possible	-	-	-

Year	ICES advice	Predicted catch corresponding to the advice	TAC*	ICES catch**
2020	All anthropogenic impacts as close to zero as possible	-		
2021	All anthropogenic impacts as close to zero as possible			
2022	Precautionary approach	0		
2023	Precautionary approach	0		
2024	Precautionary approach	0		
2025				

* There has never been a TAC (total allowable catch) for this stock.

** ICES landings estimate for the entire stock are not complete for the entire range of European eel.

History of catch and landings

Landings data are not complete for the entire natural range of European eel.

Table 4 European eel. Commercial landings (tonnes) of glass eels (1945–2024), as reported to ICES by EU Member States (France [FR], Spain [ES], Portugal [PT], and Italy [IT]) and United Kingdom (GB). Empty cell = no data, data not collected, or data not pertinent.

Year	GB	FR	ES	PT	IT	Total
1945			119.2			119.2
1946			71.9			71.9
1947			100.1			100.1
1948			110.6			110.6
1949			9.3			9.3
1950			3.8			3.8
1951			2.1			2.1
1953			2.5			2.5
1954			5.9			5.9
1955			0.9			0.9
1956			0.9			0.9
1957			2.8			2.8
1958			0.4			0.4
1959			6.6			6.6
1960			9.5			9.5
1961			16.7			16.7
1962			11.1			11.1
1963			8			8
1964			11			11
1965			4			4
1966			6			6
1967			5			5
1968			4			4
1969			4			4
1970			5			5
1971			1			1
1972	16.7		1			17.7
1973	28.2		1			29.2
1974	57.5		2	1.6		61.1
1975	10.5		2.6	5.6		18.7
1976	13.1		11.6	12.5		37.2
1977	38.6		17.5	22.6		78.7
1978	61.2	1393	21.6	7.3		1483.1
1979	67	1850	17.3	8.8		1943.1
1980	40.1	1491	15.4	10.1		1556.6
1981	36.9	890	13	18		957.9
1982	48	866	19.3	22.2		955.5
1983	16.9	791	10.3	6.7		824.9

Year	GB	FR	ES	PT	IT	Total
1984	25	528	16.4	16.1		585.5
1985	20	444	18.3	14.8		497.1
1986	19	423	6.4	7		455.4
1987	21.3	461	9.4	9.5		501.2
1988	21.4	504	9.9	2.6		537.9
1989	20.6	410	9.9	2.8		443.3
1990	20.9	325	5.3	4.5		355.7
1991	1.1	179	6.8	2.8		189.7
1992	5	183	3.7	4.5		196.2
1993	5.7	329	5.2	3.6		343.5
1994	9.5	329	2.4	2.9		343.8
1995	11.9	413	4.9	5.3		435.1
1996	18.8	262	14.5	8.7		304
1997	8.7	287	12	4.4		312.1
1998	11.2	195	14.1	4.5		224.8
1999		242	13.9	3.6		259.5
2000		206	11	3		220
2001	0.8	101	12	1.1		114.9
2002	0.5	202	8.6	0.8		211.9
2003	1.7	151	10	1.4		164.1
2004	1	89	5.1	0.8		95.9
2005	1.7	89	6.4	1.2		98.3
2006	1.3	67	4.1	2.7		75.1
2007	2.1	77	5.2	0.9		85.2
2008	0.8	79	5.1	0.8		85.7
2009	0.3		3.7	1.4		5.4
2010	1.3	41	6.5	2.4		51.2
2011	2.3	31.3	5.2	1.1		39.9
2012	2.8	34.3	5.3	0.8		43.2
2013	5.9	33.6	7.2	1.1		47.8
2014	12	35.3	11.3	1.2	0.4	60.2
2015	2.8	36.1	8.8	1.3	0.2	49.2
2016	4	46.4	6.6	0.4	0.1	57.5
2017	3.3	43.2	11.1	2.2	0.1	59.9
2018	4.2	53.4	4.5	1	0.2	63.3
2019	6.6	50	4.3	0.6	0.2	61.7
2020	3.4	48.7	6.3	0.9		59.3
2021	0.1	46.6	4.5	1.2		52.4
2022	1.1	53.9	4.7	0.9		60.6
2023	0.9	49	3.6	0.5		54
2024*	1.4	50.9	3.3	0.5		56.1

* Preliminary data

Table 5a European eel. Official commercial landings (tonnes) of yellow and silver eel (1908–2023) in Albania (AL), Belgium (BE), Germany (DE), Denmark (DK), Algeria (DZ), Estonia (EE), Spain (ES), Finland (FI), France (FR), United Kingdom (GB) and Greece (GR). Empty cell = no data, data not collected, or data not pertinent.

Year	AL	BE	DE	DK	DZ	EE	ES	FI	FR	GB	GR
1908											
1909											
1910											
1911											
1912											
1913											
1914											
1915											
1916											
1917											

Year	AL	BE	DE	DK	DZ	EE	ES	FI	FR	GB	GR
1918											
1919											
1920				3413							
1921				3443							
1922				3760							
1923				3396							
1924				4130							
1925				4880							
1926				4726							
1927				4648							
1928				4117							
1929				4375							
1930				4773							
1931				4195							
1932				5088							
1933				5014							
1934				5171							
1935				4316							
1936				4332							
1937				4329							
1938				3849							
1939				4662							
1940				3709							
1941				3717							
1942				3140							
1943				3917							
1944				4245							
1945				4169							
1946				4269							
1947				4784							
1948				4386							
1949				4492							
1950				4500							
1951				4400			90				
1952				3900			102.2				
1953				4300			80.2				
1954				3800			97.7				
1955				4800			102.9				
1956				3700			106.1				
1957				3600			80				
1958				3300			115				
1959				4000			100				
1960				4937			98			771.7	
1961				4110			153.8			768.4	
1962				4122			114.9			696.1	
1963				4166			136.9			787.8	
1964				3505		3	91.5			548.9	
1965				3402		0.3	130.4			783.8	
1966				3901		1.9	191.5			881	14.9
1967				3679		2.7	163.8			568.7	19
1968				4476		2.9	175.6			585.6	4.9
1969				3878		49	136.4			605.6	2.9
1970				3558		61.5	119.4			752.1	0
1971				3378		59.5	107.4			842.2	0
1972				3429		73.4	119.4			632.6	4.3
1973				3656		69	100.2			723.2	15.5
1974				2977		51.1	93.4			765	129.8

Year	AL	BE	DE	DK	DZ	EE	ES	FI	FR	GB	GR
1975				3485		82.1	78			762.2	133.8
1976				3054		71.6	82.7			621.7	158.7
1977				2502		65.8	79.9			690.5	89.2
1978				2492		63.2	67			823.6	225.3
1979				1904		28.5	96.8			1045	185.5
1980				2288		25.7	89.8			912.2	226.9
1981				2227		21.9	97.7			907.1	250.6
1982				2541		13.9	19.9			942.5	255.2
1983				2119		28.8	18.4			866.4	200.8
1984				1871		72.2	11			973.4	285.4
1985			1096.7	1630		75.1	16.5			750	189.6
1986			1118.7	1672		61.1	13.4		1944	650.8	151.6
1987			1031	1279		66.7	21.2		2062	684.1	266.3
1988			1018	1878		109.7	13.9		2265	933.6	268.1
1989			963.6	1696		54.8	5.3		1746	874.7	155.6
1990			829.7	1675		61.3	8.7		1778	783.9	194.2
1991			724.7	1465		52.4	49.8		1645	736.9	209.4
1992			761.7	1451		39.4	54.3		1321	715.4	184.8
1993			790.1	1080		59.2	66.5		1280	670.7	181.9
1994			833.1	1200		46.9	50.7		1280	777.8	200.5
1995			777.9	892		45.4	69.4		1280	899.6	201.4
1996			603	751.5		55.1	61.7		1280	805.2	151.3
1997			616.2	797		59.1	61.5		1223	730.7	136.5
1998			566.9	597		44.2	43.6		1150	693.4	87.6
1999			645.1	717	20.4	64.8	48.3		1005	667.8	80.7
2000		2.9	591.2	628	17.2	67	55.3		1008.8	587.2	88.1
2001		2.9	569	707	44.5	67	130.2		1024.1	582.7	93.4
2002		2.9	543.9	614	25.4	49.9	105.6		30.4	551.1	136.3
2003		2.9	497.9	648	25.2	48.6	95.6		21.4	552.3	76.5
2004		2.9	475.3	546	29	39.2	85.3		12.5	471.7	58.1
2005		2.9	454.8	534	7.6	30.7	88		7.8	477.2	116.1
2006			472.2	596	2.7	33.4	115.6		15	383.5	77.1
2007			423.6	537	14.6	31.1	82.1		26.1	450.4	89.7
2008			352.8	466	13.9	30.6	65.6	1	31.4	400.6	71.1
2009			311.6	467	14.2	22.1	89.2	1.8	42	462.4	78.5
2010			318.5	422	3.4	18.9	76.1	2.3	20.2	461.1	58.6
2011			287	370		16.2	61.6	1.5	368	455.9	83.2
2012			246.9	317	0.4	17.7	85.4	1.5	472.6	415.1	55.2
2013	47		265.9	356	3	17.4	86.7	1.3	504.1	426.5	38
2014	43		231.1	346	6	16.7	91.6	1	434.4	392.8	58.3
2015	50		213.7	282	3	14.2	63.7	0.6	356.9	341	60.2
2016	41		208.8	265	2	15.2	83	1.3	442.6	347.2	60.9
2017	47	0	244.3	257.3	10.6	15.7	76.7	1.1	434.1	321.8	48.3
2018	60		228.6	181.8	33	18.3	64.1	1.1	617.4	366.9	42.8
2019	70		209.7	183.3	25.2	21.7	57.6	0.4	309.6	295.6	20.4
2020	40		228.9	182.2	18	38.8	81.7	0.4	347.4	182.2	27.9
2021	22		223.4	233.7	4.7	47.9	69.6	0.4	309.4	244	19.2
2022	17		207.8	163.1	7.6	52.4	66.1	2.3	376.2	166.7	17.5
2023	20			125.2	3.4	59.5	69.5		308.4	104.7	19.4

Table 5b European eel. Official commercial landings (tonnes) of yellow and silver eel (1951–2023) in Croatia (HR), Ireland (IE), Italy (IT), Lithuania (LT), Latvia (LV), Libya (LY), Morocco (MA), Netherlands (NL), Norway (NO), Poland (PL) and Portugal (PT). Empty cell = no data, data not collected, or data not pertinent. No data is available before 1951 for any of the countries, except Norway.

Year	HR	IE	IT	LT	LV	LY	MA	NL*	NO	PL	PT
1908									268.1		
1909									326.6		
1910									303.1		
1911									383.8		
1912									187.3		
1913									212.7		
1914									282		
1915									143		
1916									117		
1917									44		
1918									35		
1919									64		
1920									80		
1921									79		
1922									94		
1923									140		
1924									290		
1925									325		
1926									341		
1927									354		
1928									325		
1929									425		
1930									450		
1931									329		
1932									518		
1933									694		
1934									674		
1935									564		
1936									631		
1937									603		
1938									526		
1939									434		
1940									143		
1941									174		
1942									131		
1943									136		
1944									150		
1945								2668	102		
1946								3492	167		
1947				8	10			4502	268		
1948				14	10			4799	293		
1949				21	50			3873	214		
1950				29	10			4152	282		
1951				32	10			3661	312		
1952				39	10			3978	178		
1953				80	20			3157	371		
1954				147	20			2085	327	609	
1955				163	40			1651	451	732	
1956				131	20			1817	293	656	
1957				168	20			2509	430	616	
1958				149	20			2674	437	635	
1959				155	24			3413	409	566	
1960				165	37			2999	430	733	

Year	HR	IE	IT	LT	LV	LY	MA	NL*	NO	PL	PT
1961				139	43			2452	449	640	
1962				155	41			1443	356	663	
1963				260	56			1618	503	762	
1964				225	37			2068	440	884	
1965				125	35			2268	523	682	
1966				238	33			2339	510	804	
1967				153	39			2524	491	906	
1968				165	28			2209	569	943	
1969			2469	134	36			2389	522	935	
1970		200	2300	118	29			1111	422	847	
1971		200	2113	124	29			853	415	722	
1972		200	1997	126	25			857	422	696	
1973		91	588	120	27			823	409	644.7	
1974		67	2122	86	20			840	368	691.1	
1975		79	2886	114	19			1000	407	809.7	
1976		150	2596	88	24			1172	386	760.5	
1977		108	2390	68	16			783	352	867.8	
1978		76	2172	70	18			719	347	910.4	
1979		110	2354	57	21			530	374	978.9	
1980		75	2198	45	9			664	387	1214	
1981		94	2270	27	10			722	369	943.5	
1982		144	2025	28	12			842	385	911.3	
1983		117	2013	23	9			937	324	868	
1984		88	2050	27	12			691	310	819.4	
1985		87	2135	29	18			679	352	1022.5	
1986		87	2134	32	19			721	272	920.7	
1987		230	2265	20	25			538	282	886.6	
1988		215	2027	23	15			425	513	943.3	
1989		400	1243	21	13			526	313	812.8	13.5
1990		256	1088	19	13			472	336	768.1	13
1991		245	1097	16	14			573	323	669.7	23.5
1992		234	1084	12	17			548	372	638.2	29.7
1993		260	782	10	19			293	340	568	33.9
1994		300	771	12	19			330	472	635.1	26.6
1995			1047	9.4	38			354	454	641.9	23.7
1996			953	8.6	24			300	353	629	25.6
1997			727	10.7	25			285	467	526	24.7
1998			666	17.1	30			323	331	544.4	23.3
1999		250	634	17.9	26			357	447	599.1	23.1
2000		250	588	22	13.7			370.1	281	443.6	21.8
2001		98	520	23	17.4			439.5	304	434.5	15
2002		123	415	25.6	9.6			370.2	311	372.9	26.9
2003		111	446	23.5	10.3			309.8	240	365.5	10.6
2004		136	379	32	11.3			310.2	237	337.2	8.8
2005		101	75	44.6	10.3			255.2	249	219.9	7
2006		133	56	31.6	7.9			240.3	293	184.4	10.1
2007		114	277	29.8	9.6			197	194	180.7	10.5
2008		108.3	56	27	12.9			147.6	211	159.7	7
2009		0	289.9	17.2	4.9			108	69	160.6	8.2
2010		0	225.1	37.6	8.9			445	32	173.2	11
2011		0	149.7	22.6	6			370.6	0	118.8	5.9
2012		0	142.4	15.8	6.3			351.7	0	119.3	3.8
2013		0	129.8	28.4	4.7		23	318.9	0	137.4	2.7
2014	0.5	0	144.4	15.4	4.4		23	320.3	0	116.8	3.3
2015	0.1	0	129.2	11.8	5.2		4	293	0	102.4	2.9
2016	0.6	0	166.9	28.4	4.2		7	312.5	3	138.4	2.4
2017	0.6	0	165	24.3	8.6		2	421.3	10.9	172.6	1.5

Year	HR	IE	IT	LT	LV	LY	MA	NL*	NO	PL	PT
2018	0.6	0	121.9	20.3	5.8		2	476.9	3.4	146.5	3.6
2019	0.4	0	126.6	4.6	6.1	1.3		484	4	167.5	1.9
2020	0.4	0	95.7	6.8	6.7	1.9		475.5	4	103.6	3.2
2021	0.4	0	82.9	9.9	6.4	0.2		523.7	5	126.6	2.4
2022	0.5	0	112.5	11.6	6.1	2.1		538.1	4	115.3	1.7
2023	0.5	0	85.8	6.3	5	0.9		456.3	5	192.8	2.8

* Landings from the Netherlands are incomplete before 2010.

Table 5c European eel. Official commercial landings (tonnes) of yellow and silver eel (1908–2023) in Sweden (SE), Slovenia (SL), Tunisia (TN) and Türkiye (TR). Empty cell = no data, data not collected, or data not pertinent. The total column is the yearly sum for all countries included in tables 5a, 5b, and 5c and not just the countries listed in this particular table.

Year	SE	SL	TN	TR	Total
1908					268.1
1909					326.6
1910					303.1
1911					383.8
1912					187.3
1913					212.7
1914	1460.6				1742.6
1915	996.9				1139.9
1916	1078.2				1195.2
1917	1283.6				1327.6
1918	884.4				919.4
1919	1145.4				1209.4
1920	969.6				4462.6
1921	1072.4				4594.4
1922	925.9				4779.9
1923	947.7				4483.7
1924	1201.1				5621.1
1925	1714.2				6919.2
1926	1707.3				6774.3
1927	2011.5				7013.5
1928	1040.1				5482.1
1929	1393.7				6193.7
1930	1528.8				6751.8
1931	1531.4				6055.4
1932	1723.7				7329.7
1933	1546.2				7254.2
1934	1844.9				7689.9
1935	1950.9				6830.9
1936	1654.5				6617.5
1937	1725.1				6657.1
1938	1870.5				6245.5
1939	1774.4				6870.4
1940	1625.7				5477.7
1941	1629				5520
1942	1131.6				4402.6
1943	1546				5599
1944	2001.6				6396.6
1945	1673.4				8612.4
1946	1516.6				9444.6
1947	1914.4				11486.4
1948	1866.5				11368.5
1949	1902				10552
1950	2192				11165
1951	1933				10438

Year	SE	SL	TN	TR	Total
1952	1600				9807.2
1953	2381				10389.2
1954	2113				9198.7
1955	2656				10595.9
1956	1537				8260.1
1957	2228				9651
1958	1757				9087
1959	2797				11464
1960	1648				11818.7
1961	2079				10834.2
1962	1911				9502
1963	2107				10396.7
1964	2304				10106.4
1965	1823				9772.5
1966	1975				10889.3
1967	1623				10169.2
1968	1817				10976
1969	1690			342	13188.9
1970	1209			441	11168
1971	1391			460	10694.1
1972	1204			220	10005.7
1973	1212			315	8793.6
1974	1034			588	9832.4
1975	1391			448	11694.8
1976	935			499	10599.2
1977	989			282	9283.2
1978	1076			283	9342.5
1979	954			396	9034.7
1980	1112			224	9470.6
1981	887			374	9200.8
1982	1161	0.8		424	9705.6
1983	1212	0.7		588	9325.1
1984	963	1.2		616	8790.6
1985	1029	2.5		583	9694.9
1986	841.1	2.7		517	11158.1
1987	718.1	1.6		543	10919.6
1988	965.5	1.5		756	12370.6
1989	928.4	1.3		472	10240
1990	941.6	1.9		230	9469.4
1991	1084.4	1.4		262	9192.2
1992	1181.8	0.1		245	8889.4
1993	1145.9	0.1		261	7841.3
1994	1297.7	0.7		329	8582.1
1995	971.4	0		390	8095.1
1996	1053.3	0		342	7396.3
1997	1073.4	0		400	7162.8
1998	649.3	0		300	6066.8
1999	701.6			200	6504.8
2000	532	0	109.9	176	5853.8
2001	643.2	0	144.1	122	5981.5
2002	666.7	0	204.4	147	4731.8
2003	628.6		171.7	158	4443.4
2004	613.6		132.5	165	4082.6
2005	714.2	0	197	176	3768.3
2006	771.2	0	266.3	162	3851.3
2007	761.9	0	296.5	179	3904.6
2008	727	0	316.7	171	3377.2

Year	SE	SL	TN	TR	Total
2009	519	0	122.2	158	2945.8
2010	525.3	0	92.6	182	3113.8
2011	457	0	79.6	28.3	2881.9
2012	336.5	0	55	38	2680.6
2013	356.5	0	149.6	48.2	2945.1
2014	302	0	83.6	56	2690.6
2015	228.7	0	81.4	71	2315
2016	261.8	0	250.4	75	2717.6
2017	227.7		153	81	2725.4
2018	231.6		166.3	111	2903.9
2019	156.1		107	330	2583
2020	185.5		129.9	232.8	2393.5
2021	166.8		105.3	267.3	2471.2
2022	117.1		105	275.8	2366.5
2023	174.8		105	281.9	2027.2

Table 6 European eel. Recreational landings (tonnes) of glass eels (1978–2023) in countries where fisheries exist, i.e. France (FR) and Spain (ES). Empty cell = no data, data not collected, or data not pertinent.

Year	FR	ES	Total
1978	647		647
1979	697		697
1980	1303		1303
1981	904		904
1982	219		219
1983	161		161
1984	156		156
1985	71		71
1986	87		87
1987	172		172
1988	40		40
1989	110		110
1990	54		54
1991	87		87
1992	77		77
1993	130		130
1994	74		74
1995	113		113
1996	25		25
1997	39		39
1998	6		6
1999	6		6
2000	2		2
2001	1		1
2002	37		37
2004		0.9	0.9
2005	0	1.2	1.2
2006	1	1.7	2.7
2007	0	1.3	1.3
2008	0	1.6	1.6
2009	0	0.4	0.4
2010	0	0.8	0.8
2011	0	0.4	0.4
2012	0	1.1	1.1
2013	0	1.6	1.6
2014	0	2.4	2.4
2015	0	2.3	2.3
2016	0	1.7	1.7

Year	FR	ES	Total
2017	0	1.5	1.5
2018	0	1.7	1.7
2019	0	0.9	0.9
2020	0	0.7	0.7
2022		0.7	0.7
2023*		1.3	1.3

* Preliminary data

Table 7a European eel. Recreational landings (tonnes) of yellow and silver eel (1980–2024) in Sweden (SE), Finland (FI), Estonia (EE), Latvia (LV), Lithuania (LT), Poland (PL), Czechia (CZ), Germany (DE), Denmark (DK), Netherlands (NL) and Belgium (BE). Countries omitted in tables 7a and 7b include those where recreational landings are prohibited and those that have not reported.

Year	SE	FI	EE	LV	LT	PL	CZ	DE	DK	NL	BE
1980											
1981											
1982											
1983											
1984											
1985								581.6			
1986								562.8			
1987								546.3			
1988								558.5			
1989								542.5			
1990								501.3			
1991								498.1			
1992								488.5			
1993								485.6			
1994	1273.3							492.9			
1995								452.2			
1996								416.3			
1997								423.7			
1998								430.5			
1999	1218							424.8			
2000				1.7				428.9			33.6
2001				1.2				425.9			33.6
2002				1.1				417.3			33.6
2003				0.4				427.9			33.6
2004	594			0.7				413.9			33.6
2005			1.7	2.6				398.1			33.6
2006	259.9		1	0.3				399.1			33.6
2007			1	0.3				375.4			33.6
2008		17	1.1	0.2				326.4			33.6
2009			1.4	0.7				309.8	108		33.6
2010		10	1.1	0.3				276.7	125.5	95	30
2011			1	0.4				272	79.5		30
2012		5	0.6	0.4	1.4	32.4	17.1	262.3	52.3	77	30
2013			0.6	0.7	3	26.7	15.4	265.4	50.3		30
2014		20	0.5	0.5	1.8	29.5	18.8	270.3	57	46	30
2015			0.7	0.5	5	26.5	12.4	270.5	118.3		29.5
2016		8	0.6	0.2	1.6	34.2	12.4	273.9	164.3	29	29.5
2017			0.6	0.5	3	39.7	17.3	275.5	117.1		29.5
2018		2	0.6	0.2	0.6	45.3	11.5	271.1		13	29.7
2019			0.6	0.3	6	42.1	12.3	276	110		29.7
2020		2	1.1	0.5	1.2	49.8		285.5	98.9	18	29.7
2021			0.5	0.3	6.8	65.4		272.9	79		29.6
2022		5	0.4	0.2		25.9		274.7	160	10	29.5
2023				0.1	2.5	33.7					29.5

Year	SE	FI	EE	LV	LT	PL	CZ	DE	DK	NL	BE
2024*									4.1		

* Preliminary data

Table 7b European eel. Recreational landings (tonnes) of yellow and silver eel (1980–2024) in Ireland (IE), France (FR), Spain (ES), Italy (IT), Slovenia (SL), Croatia (HR), Türkiye (TR), Libya (LY) and Algeria (DZ). Countries omitted in tables 7a and 7b include those where recreational landings are prohibited and those that have not reported. Empty cell = no data, data not collected, or data not pertinent.

Year	IE	FR	ES	IT	SL	HR	TR	LY	DZ	Total
1980					0					0
1981					0					0
1982					0					0
1983					0					0
1984					0					0
1985					0					581.6
1986					0.1					562.9
1987					0.1					546.4
1988					0.1					558.6
1989					0.1					542.6
1990					0.1					501.4
1991					0.1					498.2
1992					0.1					488.6
1993					0.1					485.7
1994					0					1766.2
1995					0					452.2
1996					0.1					416.4
1997					0.2					423.9
1998					0.1					430.6
1999					0					1642.8
2000		20.9			0					485.1
2001		19.9			0					480.6
2002		19			0					471
2003		14.7			0					476.6
2004		16.8			0					1059
2005		12.9			0					448.9
2006		683.9			0					1377.8
2007		14.6			0					424.9
2008		14.9			0					393.2
2009		7.1			0					460.6
2010		4.9		149.5	0					693
2011		3.2		60.6	0					446.7
2012		4.6		73.6	0					556.7
2013		4.7	1	69.7	0					467.5
2014		4.3	1	69.8	0					549.5
2015		3.5	1	60.2	0	10.1				538.2
2016		3.1	0.8	56.8	0	8.9				623.3
2017		2.9	0.1	41.3		7.6				535.1
2018		3.6	0.9	42.3		6.8				427.6
2019		2.3	2.2	33.7		5.7		0.1		521
2020		2		24.5		5	87.2	0.1		605.5
2021		3.3		12.6		1.9	41.7	0		514
2022	0	1.7		17.1		1.3	24.2	0.2	0.9	551.1
2023	0	3.5		0.8			8.1	0.1	6	84.3
2024*	0									4.1

* Preliminary data

Summary of the assessment

Table 8 European eel. Recruitment indices: geometric means (“Value”) of estimated (GLM) recruitment for glass eels, with 95% prediction intervals (“Lower” and “Upper”) in the continental “North Sea” and “Elsewhere Europe”, and recruitment of yellow eels in Europe. The glass eel GLM (predicting recruitment as a function of area, year, and site) was fitted to 60 time-series, comprising either pure glass eels or a mixture of glass eels and yellow eels and scaled to the 1960–1979 geometric mean so that values correspond to the recruitment as a percentage of the 1960–1979 geometric mean. The yellow eel GLM (predicting recruitment as a function of year and site) was fitted to 21 yellow eel time-series and scaled to the 1960–1979 geometric mean so that values correspond to the recruitment as a percentage of the 1960–1979 geometric mean. These indices are updated on an annual basis and, as they are presented in relative terms, may change the historical values.

Year	North Sea index (%)			Elsewhere Europe index (%)			Yellow eel Europe index (%)		
	Lower	Value	Upper	Lower	Value	Upper	Lower	Value	Upper
1950							47.8	175.9	646.9
1951							76.1	254.0	847.2
1952							73.7	246.0	820.7
1953							115.9	386.6	1290.0
1954							57.3	191.1	637.6
1955							88.9	296.7	989.8
1956							39.0	130.2	434.4
1957							45.6	152.1	507.4
1958							44.8	149.7	499.2
1959							97.0	323.6	1079.0
1960	52.4	208.8	831.4	62.5	153.7	377.4	51.8	161.3	502.3
1961	29.4	117.3	466.9	62.6	132.8	281.7	57.1	178.0	554.1
1962	44.9	179.1	713.0	74.9	151.8	307.2	56.2	175.1	545.0
1963	56.3	224.4	893.3	96.4	195.2	395.1	47.6	148.3	461.7
1964	35.4	116.7	383.8	49.8	122.5	300.9	19.5	60.8	189.4
1965	23.6	77.8	256.1	66.9	135.6	274.5	36.7	114.3	355.8
1966	26.8	88.2	290.3	40.6	75.7	141.0	48.8	152.2	473.9
1967	29.6	97.5	320.9	43.4	81.0	150.8	38.3	113.3	334.7
1968	37.8	124.3	409.0	68.9	128.4	239.1	59.0	174.4	515.2
1969	30.3	89.8	265.7	36.2	67.4	125.6	39.4	116.6	344.3
1970	33.2	98.4	291.1	54.5	101.6	189.2	20.5	60.5	178.9
1971	24.7	68.3	189.0	30.4	55.2	100.4	21.2	62.7	185.3
1972	39.4	109.0	301.4	28.0	49.9	88.7	34.6	107.9	335.8
1973	17.8	46.9	123.6	31.0	55.1	98.0	45.7	135.1	398.9
1974	47.4	131.3	363.1	47.2	82.3	143.7	22.2	65.6	193.9
1975	21.1	53.8	136.8	41.9	70.9	120.1	41.7	123.2	364.0
1976	39.5	97.5	240.5	68.6	116.2	196.6	12.7	37.7	111.6
1977	30.5	77.7	197.5	65.6	114.0	198.0	26.9	79.5	235.0
1978	23.7	60.2	153.1	62.7	108.9	189.1	23.7	70.1	207.2
1979	43.4	104.5	251.8	84.8	143.7	243.2	19.7	58.2	172.0
1980	34.7	85.6	211.5	67.0	112.1	187.5	35.1	99.5	282.2
1981	26.4	62.4	147.5	51.1	87.5	149.7	14.7	41.7	118.3
1982	13.1	31.5	76.0	53.9	90.1	150.4	18.4	52.3	148.4
1983	10.7	25.8	62.2	28.6	48.4	81.7	16.6	47.2	133.8
1984	4.2	9.9	23.4	31.7	53.6	90.6	12.4	35.2	99.9
1985	3.3	7.8	18.6	32.8	53.8	88.0	23.3	65.9	186.8
1986	3.3	7.8	18.5	20.2	33.4	55.3	18.3	50.3	138.0
1987	4.0	9.6	23.3	35.7	58.0	94.1	17.2	47.3	129.6
1988	3.8	8.9	20.8	40.8	66.8	109.5	22.2	61.0	167.2
1989	1.7	4.1	9.6	26.4	43.2	70.9	12.4	36.8	108.8
1990	6.0	14.2	33.5	21.2	34.7	56.9	11.4	32.4	91.8
1991	1.3	3.1	7.4	10.4	17.2	28.4	12.4	36.8	108.6
1992	3.1	7.3	16.9	13.1	21.8	36.0	6.3	17.4	47.7
1993	2.8	6.5	15.0	14.5	23.8	39.0	5.1	13.9	38.2
1994	2.8	6.6	15.4	14.5	23.2	37.0	20.0	54.9	150.4
1995	1.9	4.6	10.6	19.1	30.7	49.4	4.6	13.2	37.4

Year	North Sea index (%)			Elsewhere Europe index (%)			Yellow eel Europe index (%)		
	Lower	Value	Upper	Lower	Value	Upper	Lower	Value	Upper
1996	2.0	4.7	10.9	15.6	24.9	39.8	3.6	10.0	27.5
1997	1.7	4.0	9.4	26.6	42.2	67.0	8.2	21.3	55.6
1998	1.2	2.8	6.6	10.2	16.2	25.8	6.3	16.8	44.9
1999	2.4	5.8	13.7	12.7	20.4	32.8	7.9	21.1	56.2
2000	1.9	4.4	10.3	12.4	19.9	31.8	6.3	17.3	47.4
2001	0.3	0.9	2.1	5.4	8.5	13.4	6.5	17.4	46.4
2002	1.0	2.4	5.8	8.3	13.2	21.0	14.2	36.9	96.1
2003	0.7	1.7	4.0	8.2	12.8	20.2	9.6	24.6	62.8
2004	0.2	0.6	1.4	4.5	7.1	11.2	9.6	24.5	62.6
2005	0.3	0.9	2.1	4.8	7.6	12.0	5.4	13.3	32.9
2006	0.2	0.4	1.0	3.5	5.6	8.7	6.9	17.0	42.0
2007	0.5	1.1	2.6	4.0	6.4	10.0	7.9	19.8	49.7
2008	0.5	1.0	2.3	3.7	5.8	9.2	5.8	14.0	33.8
2009	0.3	0.7	1.6	2.5	4.2	7.0	3.2	7.8	18.9
2010	0.3	0.6	1.5	2.8	4.6	7.4	5.3	12.8	31.3
2011	0.2	0.4	1.0	2.3	3.7	6.0	9.4	22.9	55.8
2012	0.2	0.5	1.0	2.9	4.7	7.7	6.5	14.8	33.6
2013	0.7	1.6	3.5	4.5	7.1	11.4	6.8	15.5	34.9
2014	1.1	2.4	5.2	6.5	10.3	16.4	12.2	28.3	65.6
2015	0.3	0.7	1.6	4.0	6.3	10.0	5.5	12.3	27.4
2016	0.7	1.6	3.6	5.9	9.5	15.3	7.0	15.9	36.0
2017	0.4	1.0	2.1	6.2	9.9	15.9	7.5	17.0	38.6
2018	0.8	1.7	3.6	5.1	8.3	13.3	7.7	17.7	40.4
2019	0.5	1.2	2.6	3.7	5.8	9.2	5.9	13.6	31.0
2020	0.2	0.6	1.3	4.2	6.7	10.5	6.3	15.0	35.5
2021	0.2	0.5	1.2	3.3	5.3	8.4	5.2	12.1	28.1
2022	0.3	0.6	1.4	6.1	9.7	15.4	4.3	9.9	22.7
2023	0.2	0.5	1.1	4.6	7.4	11.7	4.9	11.4	26.2
2024*	0.6	1.1	1.7	4.4	7.2	11.4			

*Preliminary data

Sources and references

Convention on the Conservation of Migratory Species of Wild Animals (CMS). 2018. Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals. https://www.cms.int/sites/default/files/basic_page_documents/appendices_cop13_e_0.pdf.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). 2007. Fourteenth meeting of the Conference of the Parties, The Hague, the Netherlands, 3–15 June. CoP14 Com. I Rep. 10 (Rev. 1).

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). 2022. <https://cites.org/eng/app/appendices.php>.

EC. 2018. Commission Implementing Decision (EU) 2018/1986 of 13 December 2018 establishing specific control and inspection programmes for certain fisheries and repealing Implementing Decisions 2012/807/EU, 2013/328/EU, 2013/305/EU and 2014/156/EU. http://data.europa.eu/eli/dec_impl/2018/1986/2020-09-26.

EC. 2020. Commission Implementing Decision (EU) 2020/1320 of 22 September 2020 amending Implementing Decision (EU) 2018/1986 establishing specific control and inspection programmes for certain fisheries. https://eur-lex.europa.eu/eli/dec_impl/2020/1320/oj/eng.

EC. 2023a. Commission Implementing Decision (EU) 2023/2376 of 22 September 2023 amending Implementing Decision (EU) 2018/1986 establishing specific control and inspection programmes for certain fisheries. https://eur-lex.europa.eu/eli/dec_impl/2023/2376/oj/eng.

EC. 2023b. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS EU Action Plan: Protecting and restoring

marine ecosystems for sustainable and resilient fisheries, COM/2023/102 final <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0102>.

EU Council. 1996. Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein. <https://eur-lex.europa.eu/eli/reg/1997/338/oj>.

EU Council. 2007. Council Regulation (EC) No. 1100/2007 of 18 September 2007 establishing measures for the recovery of the stock of European eel. Official Journal of the European Union, L 248: 17–23. <http://data.europa.eu/eli/reg/2007/1100/oj>.

EU Council. 2024a. Council Regulation (EU) 2024/257 of 10 January 2024 fixing for 2024, 2025 and 2026 the fishing opportunities for certain fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters, and amending Regulation (EU) 2023/194 <https://eur-lex.europa.eu/eli/reg/2024/257/oj>.

EU Council. 2024b. Council Regulation (EU) 2024/259 of 10 January 2024 fixing for 2024 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Mediterranean and Black Seas.

EU. 1992. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. European Communities, L 206: 7–50. <http://data.europa.eu/eli/dir/1992/43/oj>.

EU. 2000. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Official Journal of the European Communities, L327: 1–73. <http://data.europa.eu/eli/dir/2000/60/oj>.

EU. 2008. Directive 2008. Directive 2008/56/EC of the European Parliament and of the Council of June 17 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive). Official Journal of the European Communities, L164: 19–40. <http://data.europa.eu/eli/dir/2008/56/oj>.

EU. 2023. Regulation (EU) 2023/2124 of the European Parliament and of the Council of 4 October 2023 on certain provisions for fishing in the General Fisheries Commission for the Mediterranean (GFCM) Agreement area (recast). <https://eur-lex.europa.eu/eli/reg/2023/2124>.

EU. 2024. EU Nature Restoration Law: Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1991&qid=1722240349976>.

General Fisheries Commission for the Mediterranean (GFCM). 2018. Recommendation GFCM/42/2018/1 on a multiannual management plan for European eel in the Mediterranean Sea. Issued by the General Fisheries Commission for the Mediterranean. Available at <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC201605/>

General Fisheries Commission for the Mediterranean (GFCM). 2023. Recommendation GFCM/46/2023/16 on a long-term management plan for European eel in the Mediterranean Sea, repealing Recommendations GFCM/45/2022/1 and GFCM/42/2018/1 <https://www.fao.org/gfcm/decisions/es/>

HELCOM. 2021. HELCOM Baltic Sea Action Plan. Adopted on 15 November 2007, Krakow, Poland. Updated 2021.

HELCOM. 2013. HELCOM Red List of Fish and Lamprey Species 2013. Species Information Sheet for *Anguilla Anguilla*. <https://helcom.fi/wp-content/uploads/2019/08/HELCOM-Red-List-Anguilla-anguilla.pdf>.

ICES. 2016a. Report of the Working Group on Eels (WGEEL), 15–22 September 2016, Cordoba, Spain. ICES CM 2016/ACOM:19. 107 pp. <https://doi.org/10.17895/ices.pub.5626>.

ICES. 2016b. Report of the Workshop on Eel Stocking (WKSTOCKEEL), 20–24 June 2016, Toomebridge, Northern Ireland, UK. ICES CM 2016/SSGEPD:21. 75 pp. <https://doi.org/10.17895/ices.pub.8436>.

ICES. 2019. Joint EIFAAC/ICES/GFCM Working Group on Eels (WGEEL). ICES Scientific Reports, 1:50. 177 pp. <http://doi.org/10.17895/ices.pub.5545>

ICES. 2020. Joint EIFAAC/ICES/GFCM Working Group on Eels (WGEEL). ICES Scientific Reports, 2:85. 223 pp. <http://doi.org/10.17895/ices.pub.5982>

ICES. 2021a. Joint EIFAAC/ICES/GFCM Working Group on Eels (WGEEL). Draft report. ICES Scientific Reports, 3:85. 205 pp. <https://doi.org/10.17895/ices.pub.8143> Publication of the full report is expected at the end of November 2021.

- ICES. 2021b. Workshop on the future of eel advice (WKFEA). ICES Scientific Reports, 3:13. 67 pp. <https://doi.org/10.17895/ices.pub.5988>
- ICES. 2022a. Workshop for the Technical evaluation of EU Member States' Progress Reports for submission in 2021 (WKEMP3). ICES Scientific Reports. 4:41. 177 pp. <http://doi.org/10.17895/ices.pub.19768585>
- ICES. 2022b. Joint EIFAAC/ICES/GFCM Working Group on Eels (WGEEL). ICES Scientific Reports. 4:62. <http://doi.org/10.17895/ices.pub.20418840>
- ICES. 2023. ICES Guidelines for Benchmarks. Version 1. ICES Guidelines and Policies - Advice Technical Guidelines. 26 pp. <https://doi.org/10.17895/ices.pub.22316743>
- ICES. 2024a. Workshop for the Reconstruction of Eel Landings Statistics (WKLANDEEL). ICES Scientific Reports. 6:58. 114 pp. <https://doi.org/10.17895/ices.pub.26038612>
- ICES. 2024b. The Fifth Workshop on Designing an Eel Data Call (WKEELDATA5). ICES Scientific Reports. 6:68. 13 pp. <https://doi.org/10.17895/ices.pub.26311120>
- ICES. 2024c. Joint EIFAAC/ICES/GFCM Working Group on Eels (WGEEL). ICES Scientific Reports 6:90. 146 pp. <https://doi.org/10.17895/ices.pub.27233457>.
- IUCN. 2022. The IUCN Red List of Threatened Species. Version 2022-1. <https://www.iucnredlist.org> accessed on 06.10.2022.
- OSPAR. 2014. OSPAR Recommendation 2014/15 on furthering the protection and conservation of the European eel (*Anguilla anguilla*) in Regions I, II, III and IV of the OSPAR maritime area, 14/21/1, Annex 20.
- OSPAR. 2022. Sheet reference: BDC2022/European eel. <https://oap.ospar.org/en/ospar-assessments/committee-assessments/biodiversity-committee/status-assesments/european-eel/>
- Pike, C., Crook, V., and Gollock, M. 2020. *Anguilla anguilla*. The IUCN Red List of Threatened Species 2020: e.T60344A152845178. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T60344A152845178.en>. Accessed on 18 October 2023.
- United Nations (UN). 1976. Treaties and international agreements of field and recorded with Secretariat of the United Nations. Volume 996. No. 14583: Convention on wetlands of international importance especially as waterfowl habitat. Concluded at Ramsar, Iran, on 2 February 1971.

Recommended citation: ICES. 2024. European eel (*Anguilla anguilla*) throughout its natural range. In Report of the ICES Advisory Committee, 2024. ICES Advice 2024 , ele.2737.nea, <https://doi.org/10.17895/ices.advice.27100516>