



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Mullus barbatus</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Red mullet, Striped mullet.
	French	Rouget de vase, Rouget barbet, Rouget-barbet de vase.
	German	Rote Meerbarbe, Rotbarbe, Meerbarbe.
	Spanish&Catalan	Moll de fang, Salmonete de fango.
	Italian	Triglia di fango, Barbon, Barbone, Cape tonne, Capirozzuli, Caputedda, Cavasol, Gestenedde, Minl e sbrigl, Rosciolo, Rusciolo, Rusciolotti, Sparacalaci, Treggh, Tregghia caputedda, Tregghia de fanghe, Tregghie, Tregghia de funnu, Tregghia saponara, Trejazzula, Trigghiola, Triglia, Triglia arrubia, Triglia de fangu, Triglia di murghio, Triglia di rena, Trija.
	Other	https://www.fishbase.se/ComNames/CommonNamesList.php?ID=790&GenusName=Mullus&SpeciesName=barbatus+barbatus&StockCode=806
Classification	Actinopterygii > Perciformes > Mullidae	



*Image from Fishbase

Biology	Geographical distribution	Eastern Atlantic, <i>M. barbatus</i> from the British Isles (occasionally Scandinavia) to Dakar, Senegal. It is reported from the Canary Islands, Azores and Madeira as well as the Mediterranean and Black seas.
	Habitat & Ecology	<i>Mullus barbatus</i> has a clear preference for muddy bottoms, which is especially marked in young individuals. More abundant in waters between 51 and 200 metres on muddy bottoms, and between 51 and 100 metres on rough bottoms.
	Short description/Behaviour	Body moderately compressed. A pair of stout barbels under chin, their length smaller than that of pectoral fins. Small villiform teeth in lower jaw, upper jaw toothless with teeth also present on roof of mouth. Colour rosy, no markings on fins. The chemoreceptor system is well developed, a morphological feature which offers benefits to a species which inhabits waters with a reduced visual field.
	Size/Weight	It can reach a maximum size of 33.2 cm (SL), but is more commonly seen from 10 to 22 cm (SL). Maximum published weight is 680 g.
	Age	
	Reproduction	All year classes and nursery and spawning areas are well distributed along the narrow Mediterranean shelves. The spawning season is in spring and in summer. This species reaches sexual maturity at 1 year old.
	Diet	Small benthic crustaceans, worms and mollusks.
Natural predators		

Use	Interest to fisheries	<i>Mullus barbatus</i> is a commercially important target species.
	Fishing method	Trawling, but also by trammel nets, hook-and-line, and traps and spears. In the Mediterranean, this highly-desirable species is the main target of many demersal fisheries and is considered heavily fished.
	Fishing area (according to FAO)	37
	Subareas	GSA 10, 17, 18, 19, 22
	Stock assessment/institution responsible	STEF
	Type of assessment	No information.
Special remarks	<i>Mullus barbatus</i> has been utilized in a number of studies to evaluate the biological effects of chemical pollutants in marine organisms in the Mediterranean, and was chosen as a pilot species for the MED POL II Pilot Program. Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 27, 34 and Asia inland waters. Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies).	

Conservation	IUCN Status	Least concern globally.
	Stock evaluation date by IUCN	14-Jul-14
	Population trend	Unknown.
	Main threats	<i>Mullus barbatus</i> is heavily exploited in the Mediterranean and northeast Atlantic, as well as off the coast of West Africa. All evaluated stocks of <i>M. barbatus</i> in the Mediterranean are considered overfished, and some are showing signs of growth overfishing and very low biomass. Prudence in the management of <i>M. barbatus</i> is recommended. Protection of spawning and nursery areas seems to be crucial for the conservation of <i>M. barbatus</i> . Coastal demersal resources are very sought after in all four of the northern CECAF zone countries (Mauritania, Morocco, Senegal and the Gambia). There is evidence of endocrine disruption in <i>M. barbatus</i> during its reproductive season in highly-polluted cities in the northwestern Mediterranean. Due to high concentrations of mercury found in this species, consumption of large quantities of <i>M. barbatus</i> in parts of its range has been cited as a public health concern.
	Conservation concerns	Separate catch statistics are not reported for <i>M. barbatus</i> .
Conservation actions	<i>Mullus barbatus</i> is a relatively well-researched and managed species in the Mediterranean. Stock assessments are performed regularly by sub-region in the Mediterranean basin, however management units are not currently based on knowledge of population structure. Species-specific catch statistics are not collected for this species in the CECAF region/northwestern Africa. It is found in marine protected areas throughout its range. <i>Mullus barbatus</i> responded positively to a 14-year trawl-ban in the gulf of Castellmare (northwestern Sicily, central Mediterranean). Spawning-stock biomass and recruit numbers increased significantly, and females at depths >50 metres during the post-ban period were much larger than those collected before the ban.	

IUCN	https://www.iucnredlist.org/species/198673/42691799
Fishbase	https://www.fishbase.in/summary/Mullus-barbatus+barbatus.html
FAO	http://www.fao.org/fishery/species/3208/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Molva dypterygia</i> (Pennant, 1784)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Blue ling, Ling.
	French	Lingue Bleue, Lingue Bâtarde, Lingue Espagnole.
	German	Blauleng.
	Spanish&Catalan	Arbitán, Escolá, Maruca Azul.
	Italian	Sogliola limanda, Molva azzurra, Molva occhiona.
	Other	http://www.fishbase.us/ComNames/CommonNamesList.php?ID=1383&GenusName=Molva&SpeciesName=dypterygia&StockCode=1402
Classification	Actinopterygii > Gadiformes > Lotidae	



*Image from Fishbase

Biology	Geographical distribution	North Atlantic Ocean. <i>Molva dypterygia</i> is found in the northeastern Atlantic Ocean from the southwest Barents Sea north to Spitsbergen, southeast Greenland, the south coast of Iceland, around the British Isles and Ireland. It is also present in the northwest Atlantic around Newfoundland.
	Habitat & Ecology	From 150 to 1,000 m depth, however it is concentrated at depths of 350 to 500 metres on muddy bottoms.
	Short description/Behaviour	Lower jaw longer than upper jaw, barbel shorter than eye diameter. Back gray-brown, grading to white ventrally. Posterior portions of vertical fins dark with pale margins.
	Size/Weight	Maximum size in the Mediterranean Sea is less than 130 cm (TL), and males are smaller than females, reaching a maximum of 115 cm (TL). Maximum published weight is 30 kg.
	Age	Longevity of males is at least 17 years, and longevity of females is at least 20 years.
	Reproduction	Reproduction occurs from February to March between 500 and 600 m. This species forms spawning aggregations, which make it particularly vulnerable to exploitation. There is variability in the reported age of first maturity. Males can reach sexual maturity at nine years and 75 cm, while females can reach maturity at 11 years and 88 cm.
	Diet	Crustaceans and fish (flatfishes, gobies, rocklings).
	Natural predators	
Use	Interest to fisheries	The Blue Ling is a commercial species.
	Fishing method	Bottom trawls and longlines, especially in the Northeastern Atlantic.
	Fishing area (according to FAO)	27
	Subareas	Vb-VI-VII
	Stock assessment/institution responsible	2018/CIEM
	Type of assessment	Quantitative (modèle...)
	Special remarks	Although there is insufficient scientific information to establish stock boundaries, isolation of several fishing grounds is considered the basis of the following management units: Subdivisions Va and XIV (Iceland and Reykjanes ridge); Subdivisions Vb, VI, VII (Faroes Rockall and Celtic shelf); Subdivisions I, II, IIIa, IVa, VIII, IX, XII - a combination of isolated fishing grounds which have been grouped due to a lack of data. Each country has to verify the local status of this stock, as it might be different from the one described above. This species is also native from FAO zones 21, 34 and 37. Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies).
Conservation	IUCN Status	Vulnerable in Europe.
	Stock evaluation date by IUCN	11-Oct-13
	Population trend	Unknown.
	Main threats	This species has clearly been historically overexploited in Norway and other portions of its range, and catches have become very low. There are no reliable biomass or abundance trends for the stocks in 1) Iceland and East Greenland or 2) Norway. This species is fished throughout its depth range. In the Northeast Atlantic, in Subdivisions Va and XIV (Iceland and Reykjanes ridge) this species is primarily taken as bycatch in fisheries for cod, haddock and saithe. It forms spawning aggregations, and as a result is susceptible to sequential depletion. Fisheries on deep-water species, including Blue Ling, which are intrinsically vulnerable to exploitation, have developed rapidly and many have been depleted before appropriate management measures were designed/implemented. Additionally, landing statistics that are available may not reflect the scale of recent fishing activity, particularly in waters outside national exclusive economic zones.
	Conservation concerns	
	Conservation actions	This species is known to form spawning aggregations, some sites of which are protected. ICES has recommended that if new spawning grounds are discovered, that an immediate closure and area protections be set in place. This species was listed as Endangered under Criterion A1 on the Norwegian Red List.

IUCN	https://www.iucnredlist.org/species/198591/45131980
Fishbase	https://www.fishbase.in/summary/Molva-dypterygia.html
FAO	http://www.fao.org/fishery/species/2221/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Homarus gammarus</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	European lobster, Common lobster, Lobster.
	French	Homard européen, Homard.
	German	No information.
	Spanish&Catalan	Abricanto, Bogavante, Homar, Llangant, Lubricante.
	Italian	Aragosta, Astice, Elefante di mare, Lupicante, Lupo di mare.
	Other	https://www.sealifebase.ca/comnames/CommonNamesList.php?ID=26022&GenusName=Homarus&SpeciesName=gammarus&StockCode=200
Classification	Malacostraca > Decapoda > Nephropidae	



*Image from Sealifebase

Biology	Geographical distribution	Across the eastern Atlantic Ocean. It can be found from the Lofoten Islands in Norway, to the southeast of Sweden and Denmark, though cannot be found in the Baltic Sea. Its range then extends along coastal mainland Europe, including the United Kingdom and Ireland, south to the coast of Morocco. It can also be found along the coastline of the Mediterranean and the western Black Sea, though is not found in such great abundance.
	Habitat & Ecology	Continental shelf to depths of 150 m, though is more commonly found at depths above 50 m. It is typically found on rocky substrates, but may also burrow into cohesive mud or form depressions in sand. This species uses rocky reefs for shelter, especially during moulting. Nocturnal and territorial living in holes or crevices.
	Short description/Behaviour	
	Size/Weight	Common total length range 23 to 50 cm (TL), maximum length is 65 cm. Maximum published weight is 6 kg.
	Age	
	Reproduction	Females with eggs are usually found throughout the year. Coupling occurs a few days after the female molts. Spawning usually occurs during the summer months and eggs are carried for 9-12 months. The European Lobster will not typically mature before 5-8 years, although like many other lobster species, this is largely dependent on water temperature.
	Diet	Nocturnal species which feeds on malacostracan crustaceans, gastropod molluscs, and polychaete annelids; but diet known to include carrion, echinoderms, lamellibranchs and plant matter.
	Natural predators	
Use	Interest to fisheries	This species is commercially harvested throughout much of its range as a food source for humans.
	Fishing method	Mostly taken with lobster pots, although it occasionally turns up in trammel nets and dredges. Bait (usually pieces of octopus or cuttle fish) tied to lines can tempt them out of their burrows, after which they are caught by hand or with nets. In some areas captured specimens are kept alive in enclosures.
	Fishing area (according to FAO)	27
	Subareas	VIIe-VIIa
	Stock assessment/institution responsible	2018/Ifrremer
	Type of assessment	Qualitative (modèle)
	Special remarks	Experiments in aquaculture of the species are underway in France and Spain. Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 34 and 37. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation appllies).
Conservation	IUCN Status	Least concern globally.
	Stock evaluation date by IUCN	05-Oct-09
	Population trend	Stable.
	Main threats	The greatest threat is the commercial scale exploitation of this species as a human food source. This species is harvested throughout its range, but the main fisheries occur around the United Kingdom, Ireland, France and the Channel Islands. This species was once taken in greater quantities in both Norway and Turkey, but significant declines in population size in the 1960s and 1970s have reduced the annual catch to a fraction of what it was formerly. However, since the 1980s global landings of this species have been steadily increasing.
	Conservation actions	A number of countries have imposed national minimum legal size limits, closed fishing seasons, and have prohibited the collecting of berried females. In an effort to protect lobster spawning potential in some areas, berried females caught may be V-notched on the tail before being returned to the sea. Under local by-laws or voluntary bans, such lobsters may not be landed until the V-notch has grown out. As of January 2002 an EU wide minimum legal size of 87 mm (CL) was imposed. This species occurs in a number of marine protected areas.

Site IUCN	https://www.iucnredlist.org/species/169955/69905303
Site Sealifebase	https://www.sealifebase.ca/summary/Homarus-gammarus.html
Site FAO	http://www.fao.org/fishery/species/2648/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Merluccius merluccius</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	European hake, Cornish salmon, Herring hake, Hake.
	French	Merlu européen, Abadioa, Ânon, Bardot, Brochet de mer, Canapé, Colin, Colinet, Hoglet, Merlan, Merlu, Merlu blanc, Merlu commun, Merluche, Merluchon, Nasello.
	German	Europäischer Seehecht, Hechtdorsch, Seehecht.
	Spanish&Catalan	Lluç, Alambolo, Carioca, Cria, Ilus, Iluz, Lejatxa, Merluza, Merluza europea, Pescada, Pescadilla, Pijota, Pijotilla, Pijoton, Pitillo.
	Italian	Merluzzo, Asinel, Lovo, Luzzu, Marluzzu, Mazzoni, Mbarluzzu, Merlan, Merluzziello, Mirruzzo, Nasello, Nuzz, Nuzze, Organelo, Pesce lupo, Pesce prete.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=30&GenusName=Merluccius&SpeciesName=merluccius&StockCode=40
Classification	Actinopterygii > Gadiformes > Merlucciidae > Merlucciinae	



*Image from Fishbase

Biology	Geographical distribution	East Atlantic from Norway and Iceland, south to Mauritania, including the Mediterranean Sea. The distributional limit of this species in the Baltic Sea is the Kattegat.
	Habitat & Ecology	Usually between 70 and 370 m depth. In the Mediterranean Sea, it has been found from 30 to 1,000 m. In the Ligurian Sea the species was caught starting from 18 m depth.
	Short description/Behaviour	Inside of mouth and branchial cavity are black. During their juvenile phase, these fish demonstrate vertical migration, preferring the muddy bottoms during the day and feeding at shallower depths at night. Adults also leave the bottom at night but do not migrate nearly as close to the surface as juveniles.
	Size/Weight	Maximum length recorded is 140 cm (TL) for males and 100 cm (TL) for females. Common length is 45 cm (TL). Maximum published weight is 15 kg. In the Mediterranean, the maximum recorded size is 91 cm (TL).
	Age	Maximum reported age is 20 years.
	Reproduction	Currents determine the major nursery grounds of <i>M. merluccius</i> by producing meso-scale eddies which retain larvae and favor the feeding behavior of recruits. Spawning generally occurs between April and December, with a peak between February and March. Depending on the direction of the sea current, the larva are either deposited in the nursery areas of the Bay of Biscay or swept further out to sea. Age of first maturity is reached during the seventh year for most females (57 cm) and during the fifth year for males (40 cm), for the Atlantic population. In the Mediterranean, the length at maturity for females ranges from 26.5 cm to 42.5 cm (TL) and for males ranges from 21.0 cm to 29.5 cm (TL).
	Diet	Adults feed mainly on fish (small hakes, anchovies, pilchard, herrings, cod fishes, sardines and gadoid species) and squids. The young feed on crustaceans (especially euphausiids and amphipods).
	Natural predators	
Use	Interest to fisheries	The European hake is the most important demersal species in western European continental shelf fisheries.
	Fishing method	Trawls, fixed nets and seines. Bottom longline and set-net fisheries are targeting adults of this species in some areas.
	Fishing area (according to FAO)	27
	Subareas	IIIa-IV-VI-VII-VIIIabd
	Stock assessment/institution responsible	2018/CIEM
	Type of assessment	Quantitative (modèle...)
	Special remarks	This species is separated in two distinct subspecies: <i>Merluccius merluccius smiridus</i> (Rafinesque, 1810) for the Mediterranean population and <i>M. merluccius merluccius</i> (Linnaeus, 1758) for the Atlantic population. Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 34 and 37. Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies). There are two stocks for this species, the northern and the southern.
Conservation	IUCN Status	Least concern in Europe.
	Stock evaluation date by IUCN	16-Oct-13
	Population trend	Unknown.
	Main threats	There is evidence to support that this species is over-exploited and that over-fishing is a major threat to the populations. Uncertainty still remains concerning both the population structure and the state of the stocks. According to the annual harvesting of this species, the species may seem to be relatively abundant. However, signs of overfishing could be dramatically reducing its numbers. High dispersive capabilities of a marine organism do not necessarily translate into high levels of realised gene flow.
	Conservation actions	This species has undergone regional Red List Assessment in the Mediterranean (VU), the Baltic Sea (NT), and the ECA (LC). This species is widely distributed in the Northeast Atlantic. The distributional limit in the Baltic Sea is the Kattegat - there is no specific management plan for this stock. <i>Merluccius merluccius</i> is a priority species for the General Fisheries Commission for the Mediterranean (GFCM). It is regulated through fishing effort controls, selectivity, fishing closures, minimum landing size, etc. in the GSAs. There are also some national regulations regarding minimum landing size (e.g., in Turkey, minimum landing size is 25 cm, in Morocco minimum size is 20 cm) and an EC regulation for minimum landing size of 20 cm. It occurs in some marine protected areas. Recommendations for this species are: implementation of GFCM recommendations (fishing effort controls, selectivity, fishing closures, minimum landing size, etc.) and improved enforcement of fishing controls in the Mediterranean Sea.

IUCN	https://www.iucnredlist.org/species/198562/45792063
Fishbase	https://www.fishbase.in/summary/Merluccius-merluccius.html
FAO	http://www.fao.org/fishery/species/2238/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Gadus morhua</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Atlantic cod, Codling, Haberdine.
	French	Morue de l'Atlantique, Cabillaud, Morue, Morue commune, Morue franche.
	German	Cod, Dorsch, Kabeljau, Ostseedorsch.
	Spanish&Catalan	Bacallà, Bacalao del Atlántico, Torsk.
	Italian	Merluzzo nordico, Merluzzo bianco.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=69&GenusName=Gadus&SpeciesName=morhua&StockCode=79
Classification	Actinopterygii > Gadiformes > Gadidae	



*Image from Fishbase

Biology	Geographical distribution	North Atlantic Ocean and adjacent waters of the Arctic Ocean. It's found from Greenland south to Cape Hatteras in the western Atlantic Ocean. In the northeastern Atlantic, <i>G. morhua</i> is known from Svalbard and the Barents Sea south to the British Isles and the northern Bay of Biscay, including the region around Bear Island. The distribution extends for variable distances to the north, depending upon climate trends.
	Habitat & Ecology	It is found to depths of 600 m, but usually between 150 - 200 m. Widely distributed in a variety of habitats, from the shoreline down to the continental shelf. Juveniles prefer shallow (less than 10-30 m depth) sublittoral waters with complex habitats, such as seagrass beds, areas with gravel, rocks, or boulder, which provide protection from predators. Adults are usually found in deeper, colder waters.
	Short description/Behaviour	A conspicuous barbel on the lower jaw, and light lateral line, curved above the pectoral fins. Color varies from brownish to greenish or gray dorsally and on upper sides, becoming pale and silvery ventrally. During the day, form schools and swim about 30-80 m above the bottom, dispersing at night to feed. Migrate between spawning, feeding and overwintering areas, mostly within the boundaries of the respective stocks. Migrations >200 km are rare occurrences.
	Size/Weight	Maximum length is 200 cm (TL), and common length is 100 cm (TL). Maximum published weight is 96 kg.
	Age	Longevity is reported to be as high as 20 to 25 years.
	Reproduction	Spawning occurs in winter and beginning of spring, where big schools are formed. Spawning sites are in offshore waters, at or near the bottom, in 50-200 m depth and 0-12 °C (preferred range 0-6°C). May form spawning aggregations in the water column when bottom temperatures are unsuitable. Different spawning areas may be used in subsequent years. Classified as a determinate multiple spawner. Older and larger cod had been found to produce larger eggs with neutral buoyancy at lower salinities. <i>Gadus morhua</i> aggregates to particular geographic localities annually to spawn, many of which are well-known in the Northeastern Atlantic.
	Diet	Larvae and postlarvae feed on phytoplankton, while juveniles feed predominantly on small crustaceans. Older juveniles and adults feed on fishes and benthic organisms such as polychaetes and echinoderms.
	Natural predators	Top-predator in the ecosystem.

Use	Interest to fisheries	It is one of the most important commercial fish species.
	Fishing method	Bottom otter trawls and pelagic trawls. Devices such as handlines and cod traps are being recently replaced by gillnets (especially in Newfoundland). Other types of gear used are longlines, Danish seines, purse seines, twin beam trawls, light trawls, shrimp trawls and pound nets.
	Fishing area (according to FAO)	27
	Subareas	I-II
	Stock assessment/institution responsible	2018/CIEM
	Type of assessment	Quantitative (modèle...)
	Special remarks	The following 13 stocks are recognized in European marine assessment region: Northeastern Arctic Cod, Norwegian Coastal Cod, Iceland, Eastern Baltic, Western Baltic, Kattegat, North Sea (including Eastern Channel and Skagerrak), Irish Sea, Rockall, West of Scotland, Celtic Sea, Faroe Bank, Faroe plateau. Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 21, 31, 41 and African inland waters. This specie was introduced and exists in the Mediterranean and Black Sea (FAO zone 37). Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies).

Conservation	IUCN Status	Least concern in Europe.
	Stock evaluation date by IUCN	15-Oct-13
	Population trend	Increasing.
	Main threats	All of the Northeastern Atlantic stocks, with the exception of the Celtic Sea stock have suffered prolonged periods of decline since 1970 extending into the mid-2000s. However, in the mid 2000s and early 2010s, some Eastern Atlantic stocks have exhibited reversals in this declining trend. By far, the greatest threat to <i>G. morhua</i> is over-exploitation. Additionally, variability in climate has contributed to variability in recruitment, growth, and natural mortality. Cooling events during the last 3 decades of the 20th century contributed to the rapid decline of Northwest Atlantic stocks, and changes in life-history traits and in the biotic environment are contributing to an unexpectedly slow recovery. Cod have been subjected to changes in climate and fishing intensity for centuries, however detailed information on declines and recoveries comes primarily from the last 30 to 40 years. The Atlantic Cod has also lost spawning grounds in parts of its range (Baltic Sea) due to oxygen deficiency.
	Conservation concerns	
Conservation actions	All stocks for this species are currently under management plans with annual total allowable catches, temporal and spatial closures, protected areas, and various gear restrictions and rebuilding plans. Reductions in exploitation rate led to the improvement of some cod stocks in the Eastern Atlantic, however it is notable that despite stringent management measures, some cod stocks in the eastern Atlantic remain in poor condition. <i>Gadus morhua</i> was assessed as Vulnerable (VUA2b + A2c) in the HELCOM 2013 assessment.	

IUCN	https://www.iucnredlist.org/species/8784/45097319
Fishbase	https://www.fishbase.in/summary/Gadus-morhua.html
FAO	http://www.fao.org/fishery/species/2218/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Glyptocephalus cynoglossus</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Witch flounder.
	French	Plie cynoglosse (Balai), Witch.
	German	Zungenbutt, Rotzunge, Hundszunge.
	Spanish&Catalan	Gallo inglés, Mando, Mendo , Mendo falsó lenguado.
	Italian	Passera atlantica, Passera lingua di cane.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=26&GenusName=Glyptocephalus&SpeciesName=cynoglossus &StockCode=36
Classification	Actinopterygii > Pleuronectiformes > Pleuronectidae > Pleuronectinae	



*Image from <http://www.seawater.no/fauna/chordata/cynoglossus.html>

Biology	Geographical distribution	Found on both sides of the Atlantic Ocean. In the northeastern Atlantic Ocean, <i>G. cynoglossus</i> ranges from the northern part of the Bay of Biscay to Kattegat and the adjacent part of the Baltic Sea, along the entire Norwegian coast to as far as the Murman coast, Russia, and the southern and western coasts of Iceland.
	Habitat & Ecology	Prefers fine sediments including clay, muddy sand, and pure mud. Juveniles recruit to the benthos at sizes 5 to 6 cm at depths shallower than those of the adult population. The species occurs over a depth range of 18 to 1,600 m. Adults are mostly found at depths of 45 to 400 m.
	Short description/Behaviour	Pectoral fin of eyed side shorter than head. Distal part of pectoral fin blackish. Large mucus pores on the blind side of the head. Uniform coloration, rough scales. Body elongated with complete straight lateral line.
	Size/Weight	Medium-sized species attaining maximum sizes to 60 cm (SL). Females grow to a larger size than males. In Icelandic waters, females reach 36 to 40 cm in ten years, while males were reported to reach 33 cm in ten years. Maximum published weight is 2.5 kg.
	Age	Maximum reported age is 25 years.
	Reproduction	In the Irish Sea, this species spawns in late March to May. Sexual maturity is attained in 3 to 4 years and spawns between May and September.
	Diet	Crustaceans, worms, brittle stars, and fishes.
	Natural predators	
Use	Interest to fisheries	Commercially important bycatch in some Nephrops fisheries.
	Fishing method	There are no directed fisheries for this species except for an occasional directed fishery in Skagerrak.
	Fishing area (according to FAO)	27
	Subareas	IIIa-IV-VIId
	Stock assessment/institution responsible	2017/CIEM
	Type of assessment	Qualitative (tendance)
	Special remarks	Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zone 21. Also, be aware that the minimum legal catch weight diferes from one country to another (local legislation applies).
Conservation	IUCN Status	Least concern in Europe.
	Stock evaluation date by IUCN	18-Oct-14
	Population trend	Stable.
	Main threats	This species appears as bycatch in commercial fisheries. Unknown quantities are also discarded at sea.
	Conservation concerns	
	Conservation actions	There are several species-specific measures in place for <i>G. cynoglossus</i> . Advice on management is provided by the International Council for the Exploration of the Sea (ICES), which advises that landings should not exceed 1,574 tonnes within the ICES management area, in the northeastern Atlantic Ocean. Species-specific issues highlighted by ICES include the difficulties in calculating total catches of <i>G. cynoglossus</i> due to insufficient data regarding discard rates. Overall, landings have declined in the past ten years with the exception of the Skagerrak and Kattegat area where landings increased in 2012. There is no Minimum Landing Size (MLS) implemented for European Union (EU) waters, however, a MLS of 28 cm is enforced at a local level in Germany, Denmark, the Netherlands, Scotland, and Sweden as well as some coastal areas of England. An EU total allowable catch is set for the Norwegian Sea and North Sea areas for this species and another pleuronectid, <i>Microstomus kitt</i> .

IUCN	https://www.iucnredlist.org/species/18214757/45790104
Fishbase	https://www.fishbase.in/summary/Glyptocephalus-cynoglossus.html
FAO	http://www.fao.org/fishery/species/3358/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Pleuronectes platessa</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	European plaice, Hen fish, Plaice, Plaice-fluke.
	French	Plie d'Europe, Carrelet, Plie commune, Plie, Plie d'Europe.
	German	Goldbutt, Scholle, Schullen.
	Spanish&Catalan	Palaia anglesa, Solla europa, Solla europea , Solla.
	Italian	Platessa, Passera, Passera di mare, Solla.
	Other	https://www.fishbase.se/ComNames/CommonNamesList.php?ID=1342&GenusName=Pleuronectes&SpeciesName=platessa&stockCode=1360
Classification	Actinopterygii > Pleuronectiformes > Pleuronectidae > Pleuronectinae	



*Image from Fishbase

Biology	Geographical distribution	From the western Mediterranean and along all European Atlantic coasts to the White and Barents Seas; absent from northern Baltic, Black and Caspian Seas. It is found around almost the entire coasts of the British Isles and Ireland. It has been regularly reported from freshwaters in the Kanin Peninsula (Barents Sea). It is occasionally reported from freshwater outside Barents Sea basin, but individuals might be misidentified as <i>P. flesus</i> . It is also recorded from Iceland. The species is near-endemic to European waters, with a very small extension outside European waters along a small part of the northwestern Moroccan Atlantic coast.
	Habitat & Ecology	It is found in sea water and in estuaries, rarely entering freshwaters. It is most common from 1-50 m, but found to 500 m depth. Adults live on mixed bottoms, the older the deeper the occurrence; small individuals are usually seen on bathing beaches. Reported as resident intertidal species with homing behavior.
	Short description/Behaviour	Upper side brown or greenish brown with irregularly distributed bright red or orange spots. The underside is white. Lateral line straight, slightly curved above pectoral fin. At about 10 mm (SL), the left eye moves to the right side, pigmentation develops and juveniles switch to a benthic habitat, moving to the sea bed and migrating to their nursery grounds in estuaries and along sandy coasts. Once mature, the animals migrate between spawning grounds and feeding areas. Active at night in the very shallow water while day time is spent buried in the sand. Stationary for long periods.
	Size/Weight	The maximum size is 100 cm (SL), common length is 40 cm (TL). Maximum published weight is 7 kg.
	Age	The maximum age observed in the biological samples taken routinely in the North Sea since the 1950s are 30 years in females and 25 years in males. The maximum reported age is 50 years.
	Reproduction	Their spawning migrations can be long. Adult spawn when the temperature is around 6 °C It spawns at sea, in January-June, in deep water, at temperatures of around 6°C. Spawning occurs in offshore waters. Age at maturation is at 2 to 3 years in males and 4 to 5 years in females, with plaice from northern areas maturing at an older age and larger size than plaice from the south.
	Diet	Benthic invertebrates such as bivalves, polychaetes, crustaceans (e.g. amphipods, mysids and small shrimps). Large plaice feed on molluscs and sandeels.
	Natural predators	
Use	Interest to fisheries	The most important flatfish for fisheries in Europe. The species is harvested for human consumption, and for sport fishing.
	Fishing method	Exploited in mixed fisheries using bottom trawls, and locally in a directed fisheries using gill nets.
	Fishing area (according to FAO)	27
	Subareas	IIIa-IV-VIIdfg
	Stock assessment/institution responsible	2018/CIEM
	Type of assessment	Qualitative (tendance)
	Special remarks	Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 21 and 34. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation applies).
Conservation	IUCN Status	Least concern in Europe.
	Stock evaluation date by IUCN	04-Feb-15
	Population trend	Increasing.
	Main threats	Is currently recovering from overexploitation, and spawning stock biomass shows an increasing trend over the last five to 10 years. Substantial numbers of undersized plaice are caught in small meshed fisheries directed at brown shrimps, sole and Nephrops. Oil and gas exploitation occur in the distribution area of the species. Since the species critically depend on the size and quality of their nursery grounds, any anthropogenic activities that adversely impact nursery areas will have a negative impact on the species.
	Conservation concerns	Changes in the environmental conditions have been disadvantageous. Populations in Kattegat and Danish belts decreased in 1980's and early 1990's due to discharge of nutritive salts.
Conservation actions	The species is currently recovering from overexploitation that occurred in the 1970 and 1980s; spawning stock biomass has shown an increasing trend over the last five to 10 years. The species occurs in numerous marine protected areas throughout its range.	

IUCN	https://www.iucnredlist.org/species/135690/55118705
Fishbase	https://www.fishbase.in/summary/Pleuronectes-platessa.html
FAO	http://www.fao.org/fishery/species/3354/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Cancer pagurus</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Edible crab , European edible crab, Ox crab.
	French	Tourteau .
	German	Taschenkrebs.
	Spanish&Catalan	Buey, Buey de mar .
	Italian	Granciporro atlantico.
	Other	https://www.sealifebase.ca/comnames/CommonNamesList.php?ID=26786&GenusName=Cancer&SpeciesName=pagurus&StockCode=1864
Classification	Malacostraca > Decapoda > Cancridae	



*Image from Sealifebase

Biology	Geographical distribution	Eastern Atlantic and the Mediterranean: from northwest Morocco to Atlantic coast of Europe.
	Habitat & Ecology	From the intertidal area to the depth of 100 m, common at depths 6 to 40 m. Regularly found just above low tide mark. Inhabits rocky or sandy bottom.
	Short description/Behaviour	Front with 5 blunt teeth, not produced beyond outline of carapace. Pincers large and smooth, without spinules. Last four pairs of legs similar, roughened by numerous groups of very short stiff black hairs, but without true spines or spinules. Colour pale reddish brown, at places more yellowish brown, juveniles more purplish. The colour more or less uniform, without a special pattern. Tips of fingers of chelae black.
	Size/Weight	Maximum length is 20 cm (CL).
	Age	
	Reproduction	Members of the order Decapoda are mostly gonochoric. Precopulatory courtship ritual is common (through olfactory and tactile cues); usually indirect sperm transfer.
	Diet	Carnivore.
	Natural predators	
Use	Interest to fisheries	This is the most important edible crab fishery in Europe.
	Fishing method	Traps (in Europe) and as by catch in trawl fisheries.
	Fishing area (according to FAO)	27
	Subareas	VII-VIIIabd
	Stock assessment/institution responsible	2018/Ifremer
	Type of assesement	Qualitative (modèle)
	Special remarks	Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 34 and 37. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation appllies).
Conservation	IUCN Status	Not evaluated
	Stock evaluation date by IUCN	
	Population trend	
	Main threats	
	Conservation concerns	
	Conservation actions	

IUCN	No page
Fishbase	https://www.sealifebase.ca/summary/Cancer-pagurus.html
FAO	http://www.fao.org/fishery/species/2627/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Scophthalmus maximus</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Turbot, Breet, Britt, Butt.
	French	Turbot.
	German	Haandreiß, Steinbutt, Steinbutte.
	Spanish&Catalan	Rèmol empexinat, Rodabalho, Rodaballo .
	Italian	Rombo chiodato, Passira pitrus, Petroso, Rombo, Rombo di soglio, Rombo gigante, Rombo maggiore, Rombo veaxo, Romme, Rumbu, Rumbulu de fangu, Rumme petruse, Rummo, Rummo veaxo, Rummulu, Soazo.
	Other	https://www.fishbase.se/ComNames/CommonNamesList.php?ID=1348&GenusName=Scophthalmus&SpeciesName=maximus&stockCode=1366
Classification	Actinopterygii > Pleuronectiformes > Scophthalmidae	



*Image from Fishbase

Biology	Geographical distribution	Eastern Atlantic Ocean, where it is known from southern Iceland and Norway south to Western Sahara. It is also found in most of the Baltic Sea except for the Bothnian Bay. In the Mediterranean Sea, this species is known primarily from the western and central basins, including the Adriatic Sea, Hellenic Seas, and in the Gulf of Lion. The species also occurs in the Black Sea, Sea of Marmara, and Azov Sea.
	Habitat & Ecology	Lives on sandy, rocky or mixed substrata, it is rather common in brackish waters. The species is found over a depth range from less than 1 m to 100 m. In the spring, juveniles and adults move to the coast, and in winter they move towards deeper waters (in excess of 30 m in the central Baltic). Adults of this species can tolerate cooler water temperatures in the northern areas of the North Sea which are too low for juveniles to survive.
	Short description/Behaviour	Body almost circular. Eye side without scales but with large bony tubercles. Larvae are initially symmetric but, at the end of the metamorphosis (day 40-50, 25 mm), the right eye moves to the left side, losing its initial bilateral symmetry.
	Size/Weight	Maximum length is 100 cm (SL). Growth rate differs between sexes, such that females become much larger than males, being that the common length is 50 cm (TL) for males and 70 cm (TL) for females. In the Mediterranean, the maximum recorded size is 79.0 cm (TL) and the length. This species may reach weights of 25 kg.
	Age	In the Adriatic Sea, maximum age was 18 years, with individuals above 10 years of age being rare in samples. In the Black Sea, a maximum age of 10 years was observed. In the North Sea maximum age appears to be 13 years. Based on age-structure data in the Baltic Sea, the average age was about 7 years.
	Reproduction	Spawning usually happens between the months of February and April in the Mediterranean and from May to July in the Atlantic. Sequenced spawning every 2-4 days. Tagging studies from different areas in the Baltic Sea show that Turbot have high spawning site fidelity, with 95% of fishes moving less than 30 km from the spawning site. Migrations of this species from the nursery grounds in the southeastern part to more northern areas have been recorded in the North Sea. In the North Sea, age at 50% maturity was 4.5 years. In the Baltic Sea, females mature at 20 cm at an age of 4 years, while males mature a year earlier at 15 cm. In the Mediterranean, the length at maturity for females is 50 cm (TL) and for males is 42.5 cm (TL).
	Diet	Bottom-living fishes (sand-eels, gobies, etc.), and also, to a lesser extent, on larger crustaceans and bivalves.
Natural predators		

Use	Interest to fisheries	Highly esteemed food fish.
	Fishing method	Beam trawls, seines, trammel nets, longlines, gillnets and otter trawls.
	Fishing area (according to FAO)	27
	Subareas	IV
	Stock assessment/institution responsible	2017/CIEM
	Type of assessment	Qualitative (modèle)
	Special remarks	<i>Scophthalmus maximus</i> is bred in captivity and is thought to be an excellent candidate for aquaculture in Europe. Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 34 and 37. This specie was introduced and exists on the Southwest Pacific (FAO zone 81). Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies).

Conservation	IUCN Status	Vulnerable in Europe.
	Stock evaluation date by IUCN	14-Oct-13
	Population trend	Decreasing.
	Main threats	Its entire depth range is within the range of commercial fishing activity. As such, this species is taken as bycatch in a number of fisheries. Because <i>S. maximus</i> is fast-growing and large relative to other flatfishes, gear with smaller mesh sizes may catch younger, smaller individuals resulting in high fishing pressure on immature fish. This species is sexually dimorphic, with females reaching larger sizes than males and more likely to be taken by fisheries. The principal threat to <i>S. maximus</i> is over-exploitation. Population declines have been documented throughout this species' range. Due to the size dimorphism and current regulation of minimum landing size the majority of landed fish consist of females.
	Conservation concerns	ICES did not provide advice for <i>S. maximus</i> fisheries until 2012. In the Skagerrak and Kattegat targeted fisheries probably did not begin until before the 1960s when the <i>S. maximus</i> stock was large. Currently, this species is only caught as bycatch and gillnet fisheries in the area. Landings from 2012 were ~189 t which is almost double that of the previous year.
Conservation actions	<i>Scophthalmus maximus</i> is likely to benefit from effort reductions for targeted species such as Sole and Plaice. In the North Sea, ICES advises that catches of <i>S. maximus</i> should not exceed 2,978 t. An official minimum landing size has yet to be implemented for this species but Belgian and Dutch producer organizations have adopted voluntary minimum landing sizes of 25 cm to 30 cm. In the Skagerrak and Kattegat (North Sea: Division IIIa), ICES advises that catches for this area not exceed 102 tonnes in 2014. HELCOM recommends a management plan to regulate the fishery in the HELCOM area. In the Baltic Sea, ICES advises that catches not exceed 220 tonnes in the region. Turbot is currently protected from fishing during spawning season in the Southern Baltic Sea and also benefits from a Swedish marine reserve in the Baltic proper.	

IUCN	https://www.iucnredlist.org/species/198731/45790581
Fishbase	https://www.fishbase.in/summary/Scophthalmus-maximus.html
FAO	http://www.fao.org/fishery/culturedspecies/Psetta_maxima/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Solea solea</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English (UK)	Common sole, Dover sole, Sole.
	French	Sole commune, Sole.
	German	Seezunge, Zunge.
	Spanish&Catalan	Llenguado, Lenguado común , Lenguao.
	Italian	Sogliola, Lengua, Linguata, Linguatolla, Palai, Palaia, Palaria, Paraiozza, Pilaja, Seva, Sfgogio zentil, Sfogia, Sfogio, Sfoja, Sfuee, Soggia, Sogliola comune, Túppiti, Túppiti veraci.
	Other	https://www.fishbase.se/ComNames/CommonNamesList.php?ID=525&GenusName=Solea&SpeciesName=solea&StockCode=541
Classification	Actinopterygii > Pleuronectiformes > Soleidae	



*Image from Fishbase

Biology	Geographical distribution	Eastern Atlantic, southward from Trondheim Fjord (including North Sea and western Baltic) to Senegal, including Cape Verde and the Canary and Madeira Islands. In the Mediterranean Sea, it is present throughout the basin, including the Adriatic Sea, Gulf of Lion, Ligurian Sea, Ionian Sea and Tyrrhenian Sea, Aegean Sea and the Hellenic Seas. It is also present in the Bosphorus and the south-west Black Sea.
	Habitat & Ecology	It burrows into sandy and muddy substrata from 0 to 200 m, but is more typically found at depths of 10 to 60 m. It retreats to deeper water during winter. It is frequently present in coastal lagoons in the south of France. Retreat to deeper water during winter. Juveniles are found during the first 2 to 3 years in coastal nurseries (bays and nurseries).
	Short description/Behaviour	Body oval, flat, asymmetric and covered with rectangular ctenoid scales. Eyes located on right side of head, except in reversed individuals. Mouth arched and inferior. Usually solitary.
	Size/Weight	In the Mediterranean, the maximum recorded size is 37 cm (TL). The maximum size reported for this species is 70 cm (SL). Maximum published weight is 3 kg.
	Age	The maximum observed age in biological samples collected in the North Sea since 1960 is 42 years in males and 38 years in females. This species reaches a maximum age of 26 years (maybe off Norway).
	Reproduction	Waden sea is the most important nursery area. In most regions, spawning occurs in coastal waters down to 30 m, except for the Bay of Biscay where spawning occurs further offshore over deeper water. Spawning takes place in shallow coastal waters at temperatures of 6 - 12°C, and mainly during the months of February to May (for example, off the coasts of Galicia), although in warmer areas (such as the Mediterranean), it can occur at the beginning of the winter. Reproduction starts after 3-5 years of age, when 25 to 30 cm size is reached. Males mature at a smaller size and age than females.
	Diet	Harpacticoid copepods, while juveniles and adults prey on a variety of benthic invertebrates with crustaceans and polychaetes being the dominant prey. In the Gulf of Lion, polychaetes represent the 80% of the diet.
	Natural predators	
Use	Interest to fisheries	High commercial interest. It has been targeted by fishing fleets in European waters since the early nineteenth century.
	Fishing method	Trawls and seines throughout its range. In the North Sea, this species is principally caught in mixed flatfish beam-trawl fisheries.
	Fishing area (according to FAO)	27+37
	Subareas	VIIeHk-VIIIabD-GSA 17
	Stock assessment/institution responsible	2018/CIEM and STEFC
	Type of assessment	No information.
	Special remarks	Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zone 34. This specie was introduced and exists on the Southwest Pacific (FAO zone 81). Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies).
Conservation	IUCN Status	Least concern in Europe.
	Stock evaluation date by IUCN	14-Oct-13
	Population trend	Unknown.
	Main threats	<i>Solea solea</i> is a species with high commercial interest. In many parts of its range, juveniles are also taken in estuaries which may be an important nursery ground. This species is also taken as bycatch in commercial trawling throughout its range. <i>Solea senegalensis</i> is now extending its range to the western Mediterranean Sea and is thought to be competing with <i>S. solea</i> , at least in the northwest part of the basin.
	Conservation actions	<i>Solea solea</i> is subject to varying levels of management throughout its range. In the northeast Atlantic Total Allowable Catch (TAC) restrictions are in place, and generalized fishing effort is regulated. In the Mediterranean, stock status of this species is largely unknown, and there is a need for more effective management, including reductions in fishing effort and an improvement in exploitation patterns. There are some issues taxonomic regarding the validity of <i>S. aegyptiaca</i> , which may be a synonym of <i>S. solea</i> . More research is need regarding this species taxonomy and population information.

IUCN	https://www.iucnredlist.org/species/198739/87698320
Fishbase	https://www.fishbase.in/summary/Solea-solea.html
FAO	http://www.fao.org/fishery/species/3367/en



SPECIES FACTSHEET

Taxonomy	Scientific name with original description	<i>Thunnus thynnus</i> (Linnaeus, 1758)
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)	
	English	Atlantic bluefin tuna, Bluefin tuna, Bluefin tunny, Northern bluefin tuna.
	French	Thon rouge de l'Atlantique, Thon rouge, Thon rouge du nord.
	German	Atlantischer Thunfisch, Blauflossen Thun, Großer Thun, Roter Thun, Thune, Thunfisch.
	Spanish&Catalan	Golfàs, Tonyina, Atun, Atún, Atún rojo, Atún rojo del Atlántico .
	Italian	Tonno rosso, Barilaro, Franzillottu, Musciame de tonno, Scampiru, , Ton, Tonne , Tonno, Tonno rosso, Tunina, Tunnacchiolu, Tunnacchiu, Tunnachiello, Tunnu, Tunnu da castagnara.
	Other	https://www.fishbase.se/ComNames/CommonNamesList.php?ID=147&GenusName=Thunnus&SpeciesName=thynnus&StockCode=161
Classification	Actinopterygii > Perciformes > Scombridae > Scombrinae	



*Image from Fishbase

Biology	Geographical distribution	Atlantic Ocean, where it is primarily found in the North Atlantic. In the eastern Atlantic, it is present from Norway to the Canary Islands. It is also present in the Mediterranean Sea.
	Habitat & Ecology	Seasonally can be found close to shore and can tolerate a wide range of temperatures. This species schools by size, sometimes together with Albacore, Yellowfin, Bigeye, Skipjack, etc.
	Short description/Behaviour	A very large species. The second dorsal fin higher than the first and the pectoral fins are very short. Lower sides and belly silvery white with colorless transverse lines alternated with rows of colorless dots. The first dorsal fin is yellow or bluish, the second reddish-brown, the anal fin and finlets dusky yellow and edged with black and the median caudal keel is black in adults.
	Size/Weight	Adult growth is considerably slower, with about 10 years needed to reach two thirds of maximum length. This species has a maximum size over 300 cm (FL), but is more common to 200 cm (FL). Maximum Size is 458 cm (TL).
	Age	Live up to 40 years in the western Atlantic. Longevity is at least 35 years and possibly to 50 years. Maximum age is around 32 years, although age composition structure has also changed over time (e.g., there are more younger individuals).
	Reproduction	Spawning occurs when sea surface temperatures are between 22.6 and 27.5 °C and 22.5 and 25.5 °C in the Gulf of Mexico and Mediterranean Sea, respectively. Spawning occurs between June and August in the Mediterranean Sea. Eggs are released directly to the water column and hatch after 2 days. Spawning grounds are mainly known from the Gulf of Mexico and the Mediterranean Sea, but the presence of mature individuals and larvae far from these areas (e.g. Bahamas and central North Atlantic Ocean) suggest that other spawning grounds may also be utilized. Appears to display homing behaviour. Most individuals first spawn closer to age 12. There are distinct behaviours during the spawning time, most noticeably with changes in diving times and depths. Was reported that there is spawning site fidelity for this species both in the Mediterranean Sea and in the Gulf of Mexico.
	Diet	Juveniles prey mainly on zooplankton and small pelagic coastal fishes, sub-adults prey on medium pelagic fishes, shrimps and cephalopods, while adults prey mainly on cephalopods and larger fishes.
Natural predators		

Use	Interest to fisheries	This is a highly valued species for the Japanese sashimi markets. It is also an important gamefish particularly in the United States and Canada.
	Fishing method	Longline, trap and baitboat for the east Atlantic, and purse-seine, longline and traps for the Mediterranean. Recreational fishing may also be a relevant but unquantified source of fishing mortality on Bluefin Tuna.
	Fishing area (according to FAO)	27+37
	Subareas	BFT (27) + (37)
	Stock assessment/institution responsible	2017/ICCAT
	Type of assessment	Quantitative (modèle...)
	Special remarks	May be confused with several other tunas, these are typically much smaller and easily distinguished by specific patterns of stripes, bands or dots. Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is also native from FAO zones 21, 31, 34, 41 and 47. Also, be aware that the minimum legal catch weight differs from one country to another (local legislation applies).

Conservation	IUCN Status	Near threatened in Europe.
	Stock evaluation date by IUCN	26-Jan-15
	Population trend	Decreasing.
	Main threats	Historically, it has been heavily overfished throughout its range resulting in substantial declines in the populations. In addition, <i>T. thynnus</i> is also used for commercial fish farming in the Mediterranean Sea, where juveniles are caught and raised in pens. This may pose substantial threats to the population of <i>T. thynnus</i> for a number of reasons. Individuals are removed from the breeding stock, and this is not always adequately accounted for in the landings statistics. In addition, there is evidence of localized pollution from maintaining the large pens, which may also be impacting spawning tunas and other species in the Mediterranean. Rearing in captivity may also impact the reproductive function of adults through changes in germ cell proliferation and apoptosis. The population in the Black Sea appears to have been extirpated, though the direct cause is unclear. Overexploitation, shipping noise, and changed environmental conditions have been implicated, but the mechanisms are obscure, largely undocumented, and unquantified.
Conservation concerns	This species was present in the western Atlantic from Canada to Brazil, including the Gulf of Mexico and the Caribbean Sea. However over the last 20 to 36 years, the species has not been recorded off the coast of Brazil and there are no records of Bluefin Tuna in southern Brazil in the 21st century.	
Conservation actions	The International Commission for the Conservation of the Atlantic Tuna (ICCAT) was established in 1967. Fisheries quotas have been in place since 1982, and a comprehensive pluri-annual recovery action plan adopted by the ICCAT contracting parties in 2007, including time closure for fishing activities and mandated reduction in fishing capacity. However, many conservation measures are not fully enforced and illegal catch continues. Enforcement of the existing measures is needed to prevent extinction of this species. Also, although the Bluefin Tuna probably has more data collected on it than most other fish species, uncertainties in the data make much of it unreliable. It is crucial to improve the quality of data if fisheries managers are going to be able to improve their methods. Additionally, in the Commission required that the SCRS (Standing Committee on Research and Statistics) provide the scientific basis for the Commission to establish a recovery plan with the goal of achieving BMSY through 2022 with at least 60% of probability. <i>Thunnus thynnus</i> was assessed as Endangered globally and in the Mediterranean.	

IUCN	https://www.iucnredlist.org/species/21860/97778482
Fishbase	https://www.fishbase.in/summary/Thunnus-thynnus.html
FAO	http://www.fao.org/fishery/species/3296/en