

Taxonomy	Scientific name with original description	Euthynnus affinis (Cantor, 1849)
	Common names (FAO nomenclature in red, c	other common names from IUCN red list or Fish or Sealife base)
	English	Kawakawa, Black skipjack, Diverg-bonito, Eastern little tuna, Little tunny(=Atl.black skipj), Mackerel tuna.
	French	Thonine orientale, Thonine commune.
	German	Falscher Bonito, Gefleckter Thunfisch.
	Spanish&Catallan	Bacoreta, Bacoreta oriental.
	Italian	Tonnetto indopacifico.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=96&GenusName=Euthynnus&SpeciesName=affinis&Stock Code=110
	Classification	Actinopterygii > Perciforme s> Scombridae > Scombrinae



*Image from Fishbase

	Geographical distribution	Indo-West Pacific species. It is found in warm waters including oceanic islands and archipelagos. A few stray specimens have
8		been collected in the eastern tropical Pacific.
	Habitat & Ecology	Occurs in open waters, but it always remains close to the shoreline. It is found to 50 m depth. The young may enter bays and harbors. Forms multi-species schools by size with other scombrid species comprising from 100 to over 5,000 individuals.
	Short description/Behaviour	This species is medium-sized fish with a robust, elongate and fusiform body. Teeth small and conical, in a single series. Pectoral finsare short, never reaching interspace between dorsal fins. Very slender caudal peduncle with a prominent lateral keel between 2 small keels at base of caudal fin. Body naked except for corselet and lateral line. It's black and dark blue with a complicated striped pattern which does not extend forward beyond middle of first dorsal fin. Lower sides and belly silvery white and several characteristic dark spots between pelvic and pectoral fins (but may not always be present).
Biolo	Size/Weight	Maximum size is 100 cm (FL) and common length is 60 cm (FL). The all-tackle game fish record is of a 13.15 kg fish caught off Isla Clarion, Revillagigedo Islands, Mexico, in the eastern Pacific (outside the usual range of this Indo-West Pacific species).
	Age	Longevity has been estimated at 6 years.
	Reproduction	This species spawns extensively, both geographically and temporally, throughout its range. Although spawning distributions of all three <i>Euthynnus</i> species have been reported to be restricted primarily to peripheral areas and around islands, spawning in the eastern tropical Pacific has been shown to be widely distributed from coastal to oceanic waters. The apparent length at 50% maturity for this species off India is 43 cm. A study conducted in Taiwan found the age at first maturity to be 2 years.
	Diet	Small fishes, especially on clupeoids and atherinids. It also feeds on squids, crustaceans and zooplankton.
	Natural predators	Marlins and sharks.
	Interest to fisheries	It is important in highly commercial fisheries
	Fishing method	Multisnecies fisheries with gill nets and nurse seines, but mainly by surface trolling
	Fishing area (according to FAO)	51+57
	Subareas	KAW (51+57)
S S	Stock assessment/institution responsible	2017/CTOI
	Type of assessement	Quantitative (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 47, 61, 71, 77 and 81. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).
rvation	IUCN Status	Least concern globally.
	Stock evalution date by IUCN	04/12/2009
	Population trend	
	Main threats	There are no major threats to this species. It is caught as bycatch in industrial purse seines. It seems that there are many catches of this species that are not reported, for example it is caught in Madagascar and Zanzibar (Tanzania).
nse	Conservation concerns	
Con	Conservation actions	There are no known conservation measures for this species. This is listed as a highly migratory species in Annex I of the 1982 Convention on the Law of the Sea. More information is needed on this species population and the impact of fisheries, especially as it seems that many catches are not being reported.

IUCN	https://www.iucnredlist.org/species/170336/6753804
Fishbase	https://www.fishbase.in/summary/Euthynnus-affinis.html
FAO	http://www.fao.org/fishery/species/3294/en



	Scientific name with original description	Sardina pilchardus (Walbaum, 1792)
	Common names (FAO nomenclature in red, o	ther common names from IUCN red list or Fish or Sealife base)
Taxonomy	English	European pilchard (=Sardine).
	French	Sardine commune, Sardine, Sardine d'Europe.
	German	Pilchard, Sardine.
	Spanish&Catallan	Sardina, Parrocha, <mark>Sardina europea,</mark> Xouba.
	Italian	Sardina, Faloppe, Gianchetto, Gianchettu vestiu, Majatica, Melelle, Nunnata, Paasetta, Palassiola, Parasina, Pesantone, Putina, Renga, Rengheta, Sadda, Sadduzza, Saldina, Saraca, Saraghina, Sard, Sarda, Sarda 'mperiali, Sarda fimminedda, Sardedda, Sardeja, Sardela, Sardella, Sardella de scaia, Sardena, Sardenna, Sardona.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=1350&GenusName=Sardina&SpeciesName=pilchardus& StockCode=1368
	Classification	Actinopterygii > Clupeiformes > Clupeidae > Alosinae



	*Image from http://www.omare.pt/pt/especie/sard	ina-pilchardus/
	Geographical distribution	Eastern Atlantic Ocean, where it is known from the Baltic and North seas south to Senegal. In the northeastern Atlantic, <i>S. pilchardus</i> is distributed from the British Isles south to Madeira and the Canary Islands, including the Mediterranean and Black seas. It is rare in Iceland, and it has been suggested that <i>S. pilchardus</i> is expanding its range northward in response to climate change.
	Habitat & Ecology	Forms schools, usually at depths between 25 to 55 or even 100 m by day, rising to 10 to 35 m at night.
	Short description/Behaviour	Body sub-cylindrical, belly rather rounded (but more compressed in juveniles). Last 2 anal fin rays enlarged.
>	Size/Weight	Maximum length is 27,5 cm (SL), and individuals reach 90% of maximum length by age 4.
Biolog	Age	The last age class recorded in the Bay of Biscay was 7 to 8 years old. The average generation length in the Northeastern Atlantic is estimated to be approximately 3.5 years. In the Mediterranean, maximum longevity of 4 years.
	Reproduction	Batch spawner of indeterminate fecundity which is adapted to coastal upwelling ecosystems. In some areas, changes in the intensity and frequency of upwelling events during the spawning season have negatively impacted recruitment of this species. In the Mediterranean Sea the species spawns in September-June, with a peak in autumn. In the Black Sea it spawns from June to August. Most individuals are mature at age 0 or age 1 (80 %) at a length of 14 cm.
	Diet	Planktonic crustaceans and also on larger organisms.
	Natural predators	
	latanat ta Galendar	This is a highly commercial enosies
	Ficking method	Purse seines, set nets, lampara nets, and small drift nets
	Fishing method	
	Subareas	37 PIL (37 6547) 6547
	Stock assessment/institution responsible	2018/CGPM
	Type of assessement	No information.
Use	Special remarks	During the 1990s, <i>S. pilchardus</i> successfully invaded the entire North Sea and adjacent regions, such as the Irish Sea, Skagerrak, Kattegat and western and central Baltic Sea. This is a species with high commercial importance, though not necessarily high value, throughout its range. It is also used as bait or fish food. It is the target of an important fishery on the Atlantic coast of the Iberian peninsula. This species dominates Mediterranean landings, accounting for 20% of Mediterranean annual landings and 25% of the whole European sardine production. 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, 27, Europe inland waters (excludes former USSR) and Asia inland waters. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).
		Near threatened in Europe
	Stock evalution date by IUCN	18-Oct-13
	Population trend	Unknown.
Conservation	Main threats	As the principal commercial species in the basin, this species is fished throughout the Mediterranean, and has undergone population declines due to over-exploitation which have prompted reductions in effort and fisheries closures, particularly in northwest. In the south-western Mediterranean, stocks from Morocco, which account for the majority of Mediterranean landings, are considered over-exploited and continue to face high levels of exploitation. Data from the Eastern Mediterranean are scarce. In the Southern and Eastern Mediterranean off the coast of Egypt, <i>S. pilchardus</i> is the second-most abundant component (10–15%) of the commercially-important purse-seine small pelagic fishery after <i>Sardinella aurita</i> . Although <i>S. pichardus</i> is caught in large numbers in the purse seine fishery operating east of Alexandria, the catch is comprised of small sized fish of low value. Recruitment fluctuations due to changes in local climactic and oceanographic regimes have been reported throughout the range of <i>S. pilchardus</i> .The combination of over-exploitation and unfavorable environmental conditions for the species may explain the decreasing trend of sardine and anchovy landings in the western Mediterranean.
	Conservation concerns	
	Conservation actions	This species undergoes varying degrees of stock evaluation and assessment throughout the European Assessment Zone. Regional Fisheries Management Organizations such as the International Council for the Exploration of the Sea (ICES) and the General Fisheries Commission for the Mediterranean (GFCM) which also set minimum landing sizes, area and seasonal closures, and gear/effort restrictions. The European Union has a minimum landing size adopted by countries in the Mediterranean Sea as 11 cm or 55 specimens per kg. There are no minimum landing sizes in the Black Sea. This species may be present in marine protected areas that fall within its distribution.

IUCN	https://www.iucnredlist.org/species/198580/45075369
Fishbase	https://www.fishbase.in/summary/Sardina-pilchardus.html
FAO	http://www.fao.org/fishery/species/2910/en



	Scientific name with original description	Trachurus Trachurus / Trachurus mediterraneus (Steindachner, 1868) (Factsheet about the Trachurus
Taxonomy	Sciencific name with original description	mediterraneus, since the common name in english is diferent in the other species)
	Common names (FAO nomenclature in red, o	other common names from IUCN red list or Fish or Sealife base)
	English	Mediterranean horse mackere, Black Sea horse mackerel, Common scad, Horse mackerel, Mediterranean scad.
	French	Chinchard à queue jaune, Chinchard, Saurel, Severau.
	German	Mittelmeer-Bastardmakrele, Mittelmeer-Stöcker.
	Spanish&Catallan	Sorell blancal, Chicharro, Jurel mediterráneo, Xurelo.
	Italian	Sugarello, Sauru jancu, Sugarella, Sugarello maggiore, Suro.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=1278&GenusName=Trachurus&SpeciesName=mediter
	Other	raneus&StockCode=1295
	Classification	Actinopterygii > Perciformes > Carangidae > Caranginae



*Image from Fishbase

	Geographical distribution Habitat & Ecology	 Restricted to the eastern Atlantic Ocean. In the northeastern Atlantic, is found from the Bay of Biscay to the Iberian peninsula, including the Mediterranean Sea. In the Mediterranean Sea, occurs from Iberian coasts, Balearic islands, Gulf of Lions, Ligurian Sea, central Tyrrhenian Sea, southern Tyrrhenian sea, Adriatic Sea, Cretan sea, Aegean Sea and Lebanese coasts. Near the bottom but is also at times in surface waters. It is a migratory species which forms large schools, often with other species of Trachurus. In the northwestern Mediterranean, juveniles of <i>T. mediterraneus</i> occur in shallow waters (< 30 m) during the summer. It has a relatively narrow preferential depth range of 20 to 80 metres, although its reported depth range is 0 to 500 metres.
Biology	Short description/Behaviour	Body elongate, fairly compressed. Large head with lower jaw projected. No distinctive markings except for a small, black opercular spot on edge near upper angle. Upper part of body and top of head dusky to nearly black or grey to bluish green, lower two thirds of body and head usually paler, whitish to silverycaudal fin yellowish.
	Size/Weight	In the Mediterranean, the maximum recorded size is 39.3 cm (TL) and the length at maturity is 19.1 cm (TL).
	Age	Maximum age of 10 to 12 years .
	Reproduction	The spawning season lasts from approximately April to June. In the eastern Mediterranean, <i>Trachurus mediterraneus</i> is sexually mature at age 2.
	Diet	Small-pelagic fishes especially sardines, anchovies, etc. and small crustaceans. Mysids are the most important prey item for small and medium sizes. The proportion of fishes in the diet increases in proportion to body size.
	Natural predators	
	Interest to fisheries	Is a commercial species, and is one of the most important commercial resources in the Mediterranean Sea
	Fishing method	Pelagic and bottom trawls, long-lines and purse seines (using light), traps and on-line gear. It can be caught by various gears such as seines and fixed nets.
	Fishing area (according to FAO)	37
se	Subareas	GSA 1, 5, 6, 7, 9, 10, 11
⊃	Stock assessment/institution responsible	STEFC
	Type of assessement	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 zones 27 and 34. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).
	ILICN Status	Least concern in Europe
	Stock evalution date by IUCN	41710
	Population trend	Unknown.
Conservation	Main threats	The contribution of <i>T. mediterraneus</i> to local fisheries differs in each sea. The total landings of <i>T. mediterraneus</i> drastically declined to nearly zero in the Black and Marmara Seas in 1988 due to overfishing in previous years. Stocks of <i>T. trachurus</i> , and of fishes of the genus Trachurus, are particularly difficult to assess. Additionally several stocks, such as the Western horse mackerel stock (<i>T. trachurus</i>), are characterized by spasmodic recruitment, that is, good recruitment only once in a generation. Additionally, <i>T. trachurus</i> , like other members of the genus, are likely indeterminate spawners, and therefor total fecundity is unknown. For these reasons, recommended Total Allowable Catches are advised to remain conservative.
	Conservation concerns	Catches of <i>Trachurus spp.</i> are often mixed in some zones.
	Conservation actions	<i>Trachurus mediterraneus</i> is considered a priority species for the General Fisheries Commission of the Mediterranean. Minimum length requirements for the EU is 15 cm (TL), 13 cm in Turkey, 10 cm in Ukraine, and 12 cm in Bulgaria and Romania.

IUCN	https://www.iucnredlist.org/species/198645/44766158
Fishbase	https://www.fishbase.in/summary/Trachurus-mediterraneus.html
FAO	http://www.fao.org/fishery/species/2311/en



-	Scientific name with original description	Pagellus erythrinus (Linnaeus, 1758)
	Common names (FAO nomenclature in red, o	other common names from IUCN red list or Fish or Sealife base)
	English	Common pandora, Becker, King of the breams, Spanish sea bream.
л уп	French	Pageot commun, Pageau, Pagel, Pageot.
lou	German	Rotbrasse, Rotbrassen.
Taxon	Spanish&Catallan	Pagell, Breca, Pajel.
		Pageloo fragolino, Albaro, Alboretto, Etr, Ettre, Fragolino, Fraolino, Fraulino, Fravolino, Lutrina, Lutrinu, Luuru, Luvaru,
	Italian	Medagia, , Medagiola,Pagao, Pagao veaxo, , Pagello, Pagello fragolino, Pagellu, Pagellu eru, Pageo, Parago, Ribon.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=893&GenusName=Pagellus&SpeciesName=erythrinus&S
	Other	tockCode=909
	Classification	Actinopterygii > Perciformes > Sparidae



*Image from Fishbase

	Geographical distribution	Eastern Atlantic and occurs from southern coasts of the British Isles, with records from the North Sea and Norway, southwards to Cape Verde and Senegal, including Madeira and the Canary Islands. It is present throughout the Mediterranean Sea and in the western Black Sea. Rarely recorded in Scandinavia. Various types of bottom (rock, gravel, sand, mud) to depths of 220 m, but mainly in the upper 100 m, the young occurring
	Habitat & Ecology	nearer to the shore. During winter, the stocks move into deeper waters.
	Short description/Behaviour	Body red without stripes or bars. Snout at least twice as long as the eye diameter.
	Size/Weight	The maximum total length of this species is 60 cm (SL), common length is 25 cm (SL).
080	Age	In the Canary Islands the oldest fish found was 10 years old. In the Mediterranean, 15-year old specimens were studied.
Biol	Reproduction	Protogynic hermaphrodites, females become males first in their third year with sizes of about 17 to 18 cm. Possibly two spawning periods in the southern Mediterranean. Length at which sex change possibly occurs is between 12.8 and 20.3 cm (FL). Reproduction occurs from spring to autumn depending on hydrological conditions. Spawning takes place in the summer months. In the Atlantic, spawning occurs in spring, extending sometimes until early summer. In the Mediterranean, spawning takes place from May to September. In the Canary archipelago, reproduction occurs when the temperature of the sea reaches the highest values. Sexual maturity occurs at 2 to 3 years of age. The absence of females in the largest size classes implies that sex conversion occurs in all fish.
	Diet	Omnivorous, with a predominantly carnivorous diet (polychaetes, brachyurans, fishes and cephalopods).
	Natural predators	
	Interest to fisheries	This is an important commercial food fish in the Mediterranean region.
	Fishing method	Bottom trawls, beach seines, on line gear, traps (Canary Islands), trammel nets, gill nets, bottom long lines and hand lines. The fishery there is semi-industrial and artisanal, and it is also taken as a sport fish.
	Fishing area (according to FAO)	37
Jse	Subareas	GSA (17, 18)
	Stock assessment/institution responsible	STEFC
	Type of assessement	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 zones 27 and 34. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).
	HICH Status	
	Stock evalution date by IUCN	20 May 12
Conservation	Population trend	
	Main threats	There is potential for localized declines from fishing.
	Conservation concerns	
		The species occurs in some marine protected areas in the Mediterranean Sea. The minimum size limit is 15 cm in Turkey.
	Conservation actions	In the Canary Islands, where conservation legislation on fisheries exists, a minimum size limit has been implemented for the species (220 mm, TL), but is of limited benefit because the minimum length which may be legally kept is smaller than the length at first maturity of males. This species is therefore susceptible to exploitation at a size when many other coexisting demersal species are mature or immature. Measures such as closed season or changes in fishing pattern would be desirable to safeguard the spawning stock and the recruits. It is recommended to implement fishing regulations to ensure that this species is not targeted during its short female reproductive period. More genetic information would be useful for the management of this species.

IUCN	https://www.iucnredlist.org/species/170224/42447973
Fishbase	https://www.fishbase.in/summary/Pagellus-erythrinus.html
FAO	http://www.fao.org/fishery/species/2368/en



	Scientific name with original description	Parapeneus longirostris (Lucas, 1846)		
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)			
۲	English	Deep-water rose shrimp.		
Тахопог	French	Crevette rose du large.		
	German	Rosa Garnele.		
	Spanish&Catallan	Gamba de altura, Gamba (official Spanish name), Gamba blanca.		
	Italian	Gambero rosa, Gambero bianco, Ammiru biancu (Sicily).		
	Other			
	Classification			



*Image from FAO

	Geographical distribution	East Atlantic, from Portugal to Angola and in the entire Mediterranean, and also in the West Atlantic, from Massachusetts, U.S.A. to French Guiana.			
ß	Habitat & Ecology	Bottom mud or muddy sand, depth 20 to 700 m, but usually between 150 and 400 m.			
	Short description/Behaviour				
90	Size/Weight	Maximum total length 160 mm (male), 186 mm (female), usually shorter 140 mm (male), 160 mm (female).			
Bi	Age				
	Reproduction				
	Diet				
	Natural predators				
	Interest to fisheries	Indicated as the most important commercial species of the Mediterranean coasts of Spain, France and Italy. Also in Algeria,			
		Tunisia, Greece and Turkey the species is of commercial value, although on a lesser scale.			
	Fishing method	Outside the Mediterranean the species is fished by trawlers in the area between S. Portugal and Rio de Oro and off Senegal.			
	Fishing area (according to FAO)	37			
Use	Subareas	GSA (1, 5, 6, 7, 17, 18, 19)			
	Stock assessment/institution responsible	STEFC			
	Type of assessement	No information.			
		The species has often been, incorrectly, indicated with the name Parapenaeus membranaceus . Each country has to verify			
	Special remarks	the local status of this stock, as it might be different from the one described above. Also, be aware that the minimum legal			
		catch weight diferes from one country to another (local leggislation apllies).			
E S	IUCN Status				
fic	Stock evalution date by IUCN				
Ž	Population trend	Not Evaluated			
ISE	Main threats				
lo lo	Conservation concerns				
0	Conservation actions				

IUCN	No page
Fishbase	No page
FAO	http://www.fao.org/fishery/species/2598/en



	Scientific name with original description	Aristeus antennatus (Risso, 1816)		
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)			
<u> </u>	English	Blue and red shrimp.		
Ē	French	Crevette rouge.		
P P	German	No information.		
X	Spanish&Catallan	Carabinero, Chorizo blanco, Gamba alistada, Gamba rosada.		
Ë	Italian	Gambero viola, Gámbao rossu-ciâeo, Gambero rosso chiaro, Gamero viola.		
	Other	https://www.sealifebase.ca/comnames/CommonNamesList.php?ID=25510&GenusName=Aristeus&SpeciesName=anten natus&StockCode=118		
	Classification	Malacostraca > Decapoda > Aristeidae		



	*Image from Sealifebase				
	Geographical distribution	Western Indian Ocean, Eastern Atlantic and the Mediterranean (Portugal to the Cape Verde Islands and the entire Mediterranean).			
	Habitat & Ecology	Demersal on muddy bottoms of slopes of continental shelf, in zones close to submarine canyons. Moves from depths of 200 m during the night to 800 m during the day, and changes location within the year. Depth range from 100 to 2200 m.			
8c	Short description/Behaviour				
	Size/Weight	Maximum length is 22 cm (TL).			
Ξ.	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	Small benthic invertebrates mainly crustaceans and polychaetes and also carrion.			
	Natural predators				
	Interest to fisheries	The species is highly esteemed as food.			
	Fishing method	Deep-sea trawlers off N.W. Africa and along the Mediterranean coasts of Spain, France, Italy and Malta.			
	Fishing area (according to FAO)	37			
	Subareas	GSA 1, 5			
Use	Stock assessment/institution responsible	STEFC			
	Type of assessement	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 zones 27, 34 and 51. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).			
u n	IUCN Status				
tic	Stock evalution date by IUCN				
۲3 د	Population trend	Not Evaluated			
ISE	Main threats				
on	Conservation concerns				
	Conservation actions				

IUCN	No page
Sealifebase	https://www.sealifebase.ca/summary/Aristeus-antennatus.html
FAO	http://www.fao.org/fishery/species/3422/en



	Scientific name with original description	Sepia officinalis (Linnaeus, 1758)		
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)			
	English	Common cuttlefish, Cuttlefish.		
h	French	Seiche commune, Casseron, Chakod, Chibia, Margade, Seiche.		
lou	German	Gemeiner, Gemeiner tintenfisch, Sepie, Tintenfisch.		
lo vo	Spanish&Catallan	Aluda, Castañuela, Choco, Chocón,Coca, Jibia, Jibión, Luda, Rellena, Relleno relleno, Sepia común, Sipionet, Sipia.		
[ax	Italian	Seppia, Pruppusiccia, Scarpetta, Scarpitelle, Scarpitta, Seccetella, Seece, Sepa, Sepia imperiale, Seppa, Seppia		
	Italiali	Meditteranea, Siccia.		
	Other	https://www.sealifebase.ca/comnames/CommonNamesList.php?ID=57474&GenusName=Sepia&SpeciesName=officinali		
	Other	s&StockCode=3953		
	Classification	Cephalopoda > Sepiida > Sepiidae		



	Geographical distribution	Northeast and east Atlantic Ocean and Mediterranean Sea extending from the Shetland Islands and Norway in the north, through the Mediterranean Sea to northwest Africa (i.e. to Senegal) in the south. It is not present in the Baltic Sea.
	Habitat & Ecology	Found in the subtidal zone to depths of 200 m, generally over sandy-muddy substrates. Presence in Portuguese waters indicates its tolerance for brackish water. Undegoes seasonal migrations between inshore waters in spring and summer and medium shelf grounds (around 100 m depth) in autumn and winter). Younger individuals tolerate lower salinities and more environmental instability than adults. Both adults and young bury in the sand during the day. Young are restricted to shallow water until their cuttlebones are fully formed.
	Short description/Behaviour	Swimming keel not extending proximally beyond base of club. From hatchlings to adults, exhibit light-induced burying behavior where most individuals hide in sand during the day and where prey is often ambushed.
>	Size/Weight	The common cuttlefish is a large species and can attain a maximum mantle length of 49 cm (ML) and body weight of 2 kg in temperate waters, and 300 mm and 2 kg in subtropical regions. Common size range from 15 to 25 cm.
08	Age	Life cycle under natural conditions, between 12 to 24 months.
Bio	Reproduction	In the Mediterranean large males return to shallow waters ahead of females with females and smaller individuals joining them throughout the spring and summer. Males demonstrate courtship behaviour and will guard females from rival males. Spawning occurs in shallow, inshore waters in April to July in the western Mediterranean and January to April off Senegal. During copulation, male grasp the female and inserts the hectocotylus into the female's mantle cavity where fertilization usually occurs. The eggs are attached to a range of substrates, including seaweed and shells, and are darkened with ink, in grape-like clusters. The duration of embryonic development is temperature dependent and ranges from 30 to 90 days. Those young that hatch in spring usually spawn in the autumn of the following year, those that hatch in autumn usually spawn in the spring of their second year. Male and female adults usually die shortly after spawning and brooding, respectively.
	Diet	It ambushes prey from its hiding place in the sand, feeding on a wide variety of prey including crustaceans, molluscs, polychaetes, small demersal fish as well as other cuttlefish (cannibalism is common when other prey abundances are low).
	Natural predators	Sharks, demersal fishes and other cephalopods.
	Interest to fisheries	Considered one of the most commercially important cephalopod species. Highly valued food item, especially in Japan, Korea, Italy and Spain.
	Fishing method	In the industrial fisheries, is trawled, either as a target species or as bycatch to demersal finfishes. The artisanal fisheries utilize a great variety of highly selective gear, such as spears, pots and traps, often combined with the use of light. One particular fishing method used in calm, transparent waters consists of luring the males with a live female attached to a thin line. Once the male has grabbed the female, both are pulled up, the male is detached, and the female lowered again. The live female, may be substituted with a mirror which causes the male to mistake his own image for the female.
Use	Fishing area (according to FAO)	37
	Subareas	GSA 17, 18
	Stock assessment/institution responsible	STEFC
	Type of assessement	No information.
	Special remarks	This species has potential for being raised in aquaculture, which may help prevent its overexploitation. 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 47. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies). This species has been raised successfully in aquaculture (Reid et al. 2005).
		Least concerne globally
	Stock evalution date by IUCN	15-Mar-09
	Population trend	Unknown.
Conservation	Main threats	One of the most important species for cephalopod fisheries in many countries but have been observed in recent years that it is heavily fished, e.g., Mediterranean. Also, a highly valued item especially in Japan, Korea, Italy and Spain. Ocean acidification caused by increased levels of carbon dioxide in the atmosphere is potentially a threat to all cuttlefish. Studies have shown that under high pCO2 concentrations, cuttlefishes actually lay down a denser cuttlebone which is likely to negatively affect buoyancy regulation. This species is a commercially important fisheries species in the Mediterranean Sea and off the west coast of Africa. It is intensively fished in the Mediterranean Sea and may be close to its sustainable limit. It is also caught as bycatch.
	Conservation concerns	It may be near its sustainable limit in the Mediterranean. Highest catches are recorded for Tunisia in the Mediterranean, and for Spain and Morocco off west Africa.
	Conservation actions	No conservation measures are currently needed for this species and none are in place. Further research is recommended regarding the population trends, distribution, life history traits and threats impacting this species.

IUCN	https://www.iucnredlist.org/species/162664/939991
Sealifebase	https://www.sealifebase.ca/summary/Sepia-officinalis.html
FAO	http://www.fao.org/fishery/species/2711/en



	Scientific name with original description	Xiphias gladius (Linnaeus, 1758)			
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)				
	English	Swordfish, Broadbill, Sword-fish.			
Л	French	spadon, Poisson épée.			
Тахопоп	German	Schwertfisch.			
	Spanish&Catallan	Emperador, Peix espasa, Aja para, Chichi spada, Emperador, Espada, Espardarte, Pez espada.			
	Italian	Pesce spada, Pei spa, Pesce spate, Pesse spada, Pisci spada, Pisci spata, Pisci spatu, Puddicinedda, Spadon, Spadottu, Spateddu.			
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=226&GenusName=Xiphias&SpeciesName=gladius&Stock Code=240			
	Classification	Actinopterygi > Perciformes > Xiphiidae			



*Image from http://www.cienciaviva.pt/peixes/home/index.asp?accao=showpeixe&id_especie=13&id_grupoespecie=1

IUCN	https	://www	.iucnredl	ist.org/speci	es/23148	/888298	352	
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FAO	http://www.fao.org/fishery/species/2503/en



	Scientific name with original description	Thunnus Alalunga (Bonnaterre, 1788)	
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)		
_	English	Albacore, Albacore tuna, Longfin tunny.	
Ē	French	Germon, Thon blanc.	
2	German	Germon, Thun, Thunfisch, Weißer Thun, Weißer Thunfisch.	
N N N N N N N N N N N N N N N N N N N	Spanish&Catallan	Bacora, Albacora, Atún, <mark>Atún blanco</mark> , Bonito del Norte.	
Ĕ	Italian	Tonno alalunga, Aa-lunga, Alalonga, Alalongu, Alalunga, Alilonga, Lalonga, Liccia, Tonno, Tonno bianco.	
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=142&GenusName=Thunnus&SpeciesName=alalung a&StockCode=156	
	Classification	Actinopterygii > Perciformes > Scombridae > Scombrinae	



*Image from Fishbase		
	Geographical distribution	Tropical and temperate waters of all the oceans including the Mediterranean Sea.
	Habitat & Ecology	Surface waters of 15.6 to 19.4°C. Deeper swimming, large albacore are found in waters of 13.5 to 25.2°C. Temperatures as low as 9.5°C may be tolerated for short periods. It is known to concentrate along thermal discontinuities.
logy	Short description/Behaviour	Anterior spines much higher than posterior spines giving the fin a strongly concave outline. Body with very small scales. Pectoral fins remarkably long, about 30% of fork length or longer in 50 cm or longer fish. Form mixed schools with skipjack tuna (<i>Katsuwonus pelamis</i>), yellowfin tuna (<i>Thunnus albacares</i>) and bluefin tuna (<i>T. maccoyii</i>), schools may be associated with floating objects, including sargassum weeds. Highly migratory species, Annex I of the 1982 Convention on the Law of the Sea.
Bio	Size/Weight	Maximum length is 140 cm (FL), common length is 100 cm (FL). Maximum published weight is 60.3 kg.
	Age	Longevity for this species may be as long as 13 years, in the South Atlantic and in the South Pacific.
	Reproduction	Immature fish recruit into fisheries in the western and eastern Pacific and then gradually move near their spawning grounds in the central and western Pacific before maturing. Spawning occurs at sea surface temperatures of 24°C or higher. Fecundity increases with size but there is no clear correlation between fork length and ovary weight and number of eggs. Maturity is attained at about 90 to 94 cm (FL) for females and 94 to 97 cm (FL) for males. Age of first maturity is estimated to be between 5 and 7 years.
	Diet	Fish, crustaceans and squids.
	Natural predators	
	Interest to fisheries	An important fishery exists for this species.
	Fishing method	Long-lining, live-bait fishing, purse seining, and trolling. The main fisheries are Spain, France, and Chinese Taipei. Surface fisheries concentrate mainly in the Bay of Biscay and the Azores and Canary Islands during summer and fall, taking young fish while longline vessels operate throughout the Atlantic year-round and target larger fish.
	Fishing area (according to FAO)	51+57
e	Subareas	ALB (51+57)
э́	Stock assessment/institution responsible	2018/CTOI
	Type of assessement	Quantitative (modèle)
	Special remarks	Often confused with juvenile <i>Thunnus obesus,</i> which also have very long pectorals but with rounded tips. 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, 27, 31, 34, 37, 41, 47, 61, 67, 71, 77, 81 and 87. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).
		Least concern in Europe
	Stock evalution date by IUCN	26-Jan-15
	Population trend	
	Main threats	In the Eastern Pacific it is a bycatch of swordfish fisheries.
c	Conservation concerns	
tio		This species is listed as a highly migratory species in Anney 1 of the 1982 Convention on the Law of the Sea. In the
Conserva	Conservation actions	north Atlantic, a total allowable catch (TAC) of 28,000 tonnes was established for 2010 and 2011 for the northern stock. TACs are also in place for the southern Atlantic albacore fishery. For the south Atlantic, the TAC for 2009–2011 is 29,900 and adjustments are made to reduce the TACs in the following year if the actual catch exceeds the TAC in a given year. The driftnet fishery for albacore has been banned since January 1st 2002 in the European Union countries and from 2004 in all the ICCAT Mediterranean countries, but it is known that illegal fishing activity still occurs in some areas. Ongoing monitoring of population and harvests trends is required for this species.

IUCN	https://www.iucnredlist.org/species/21856/18208821
Fishbase	https://www.fishbase.in/summary/Thunnus-alalunga.html
FAO	http://www.fao.org/fishery/species/2496/en



Biology

Diet

	Scientific name with original description	Dissostichus eleginoides (Smitt, 1898)	
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)		
>	English	Patagonian toothfish.	
E C	French	Légine australe.	
buc	German	Schwarzer Seehecht.	
ахс	Spanish&Catallan	Austromerluza negra, Mero.	
Ĥ	Italian	Moro oceanico.	
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=467&GenusName=Dissostichus&SpeciesName=eleginoi des&StockCode=481	
	Classification	Actinopterygii > Perciformes > Nototheniidae	



*Image from Fishbase Southeast Pacific and Southwest Atlantic, southern Chile round the coast to Patagonia (Argentina) and the Falkland Islands. Dissostichus eleginoides is also found In the Southwest Pacific (Macquarie Island) and in the Southern Ocean Geographical distribution (South Georgia). Also known from sub-Antarctic islands and seamounts of the Indian sector. Adults migrate to deeper habitats range 50 to 3850 m, usually 70 to 1500 m. Semi-pelagic juveniles become demersal at Habitat & Ecology 150-400 m. Body fusiform, rather elongate. A group of stronger canine teeth on each premaxilla and teeth on lower jaw uniserial, canine-like. Two lateral lines, the lower beginning below or anterior to the middle of the second dorsal fin. The body entirely covered with large and more or less smooth scales upper surface of head (except snout and preorbital area), Short description/Behaviour cheeks and operates with small scales. Brown-grey, with more or less indistinct darker markings. Juveniles without black crossbars. Maximum length is 215 cm (TL), common length is 70 cm (TL). Maximum published weight is 9.6 kg. Size/Weight Age Maximum reported age is 31 years. May spawn for the first time from around 8 to 10 years of age. Maturity leght range 38 to 60 cm. Reproduction

	Diet	Fishes and cephalopods.
	Natural predators	
	Interest to fisheries	The countries with the largest catches were Chile and Argentina.
	Fishing method	
	Fishing area (according to FAO)	58
	Subareas	TOP (58) (Crozet) and POK (1,2, 3a,4,6)
Se	Stock assessment/institution responsible	2017/CCAMLR
	Type of assessement	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 21, 41, 48, 81, 87 and 88. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies).
Ę	IUCN Status	
ti	Stock evalution date by IUCN	
Ka	Population trend	Net eveluated
ser	Main threats	Not evaluated
ü.	Conservation concerns	
Ŭ	Conservation actions	

IUCN	No page
Fishbase	https://www.fishbase.in/summary/Dissostichus-eleginoides.html
FAO	http://www.fao.org/fishery/species/2439/en



	Scientific name with original description	Katsuwonus pelamis (Linnaeus, 1758)
	Common names (FAO nomenclature in red, o	other common names from IUCN red list or Fish or Sealife base)
	English	Skipjack tuna, Atlantic bonito, Bonito, Oceanic bonito, Skipjack, Striped bellied bonito, Striped bellied tunny.
>	French	Listao, Bonite à ventre rayé, Bonitou, Bounicou, Listao.
ũ	German	Bauchstreifiger Bonito, Bonito, Echter Bonito.
axong	Spanish&Catallan	Bonítol de ventre ratllat, Bonítol radlat, Atún de altura, Bonita, Bonito de altura, Bonito de veintre rayado, Bonito del sur, Bonitol, Lampo, <mark>Listado,</mark> Llampua, Palomida.
16	Italian	Tonnetto striato, Culurita, Impiriali, Nzirru, Paamia, Paamitun, Palamatu, Palametto, Palamida, Palamitu, Palamitu 'mperiali, Palometta, Piuma, Tonina de Dalmazia, Tonnetto, Tonnetto striato.
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=107&GenusName=Katsuwonus&SpeciesName=pelamis& StockCode=121
	Classification	Actinopterygii > Perciformes > Scombridae > Scombrinae



*Image from Fishbase Tropical and warm-temperate waters. Not found in the Black Sea. Highly migratory species, Annex I of the 1982 Convention Geographical distribution on the Law of the Sea. Found in offshore waters, depth range 0 to 260 m. Habitat & Ecology Body fusiform, elongate and rounded. Teeth small and conical, in a single series. Pectoral fins short and 2 flaps. A strong keel on each side of caudal-fin base between 2 smaller keels. Colour of back dark purplish blue, lower sides and belly silvery, with 4-6 very conspicuous longitudinal dark bands which in live specimens may appear as discontinuous lines of Biology Short description/Behaviour dark blotches. Exhibit a strong tendency to school in surface waters with birds, drifting objects, sharks, whales and may show a characteristic behavior like jumping, feeding, foaming, etc. Maximum published length is 110 cm (FL), and common length is 80 cm (FL). Maximum published weight is 34.5 kg. Size/Weight Age Maximum reported age is 12 years. Spawn throughout the year in the tropics, eggs released in several portions. In tropical waters, reproductively active female Reproduction skipjack tuna spawn almost daily. Maturity leght is 40 cm, range 40 to 45 cm.

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Diet	Fishes, crustaceans, cephalopods and mollusks. Cannibalism is common.
Natural predators	Large pelagic fishes.

	Interest to fisheries	
	Fishing method	Trolling on light tackle using plugs, spoons, feathers, or strip bait.
	Fishing area (according to FAO)	51+57
	Subareas	SKJ (51+57)
Jse	Stock assessment/institution responsible	2018/CTOI
	Type of assessement	Quantitative (modèle)
		Each country has to verify the local status of this stock, as it might be different from the one described above. This specie is
	Special remarks	also native from FAO zones 21, 27, 31, 34, 37, 41, 47, 61, 67, 71, 77, 81 and 87. Also, be aware that the minimum legal catch
		weight diferes from one country to another (local leggislation apllies).
Ę	IUCN Status	
tio	Stock evalution date by IUCN	
<u>S</u>	Population trend	Not evaluated
ser	Main threats	NOL EValuated
ü	Conservation concerns	
Ŭ	Conservation actions	

IUCN	No page	
Fishbase	https://www.fishbase.in/summary/Katsuwonus-pelamis.html	
FAO	No page	



Biology

	Scientific name with original description	Thunnus obesus (Lowe, 1839)	
	Common names (FAO nomenclature in red, other common names from IUCN red list or Fish or Sealife base)		
λ.	English	Bigeye tuna, Big-eye tuna, Bigeye tunny, <mark>Blackfin tuna</mark> .	
οu	French	Thon obèse, Patudo, Thon à nageoires noires, Thon aux grands yeux, Thon obèse(=Patudo), Thon ventru.	
ŭ	German	Großaugen-Thunfisch, Großaugenthun.	
ax	Spanish&Catallan	Atún aleta negra, Patudo.	
	Italian	Tonno obeso.	
	Other	https://www.fishbase.in/ComNames/CommonNamesList.php?ID=146&GenusName=Thunnus&SpeciesName=obesus&Stock	
		Code=160	
	Classification	Actinopterygii > Perciforme s> Scombridae > Scombrinae	



*Image from Fishbase Circumglobal in tropical and temperate seas. It is not found in the Mediterranean. Geographical distribution Variation in occurrence is closely related to seasonal and climatic changes in surface temperature and thermocline. Juveniles and small adults school at the surface in monospecific groups or mixed with other tunas, and may be associated with Habitat & Ecology floating objects. Adults stay in deeper waters. This species is mostly found above 500 m, but can dive deeper (1500 m). This large species is robust, fusiform body, slightly compressed from side to side. Dorsal fins are separated only by a narrow interspace, the second is followed by 8 to 10 finlets and the anal fin is followed by 7-10 finlets. Pectoral fins moderately long, in large specimens (over 110 cm, FL), but very long (as long as in *Thunnus alalunga*) in smaller specimens. Colour of back Short description/Behaviour metallic dark blue, lower sides and belly whitish. A lateral iridescent blue band runs along sides in live specimens, first dorsal fin deep yellow, second dorsal and anal fins light yellow, finlets bright yellow edged with black. Maximum published length is 250 cm (TL), and common length 180 cm (FL). Maximum published weight is 210 kg. Size/Weight Longevity for this species may vary by region. Estimated maximum age for this species in the Western Pacific is 16 years, in Age the Indian Ocean is 8 years, in the Atlantic Ocean is 9 years, and in the Eastern Pacific is 5 years.

Reproduction	Multiple spawner that may spawn every one or two days over several months. They spawn over periods of the full moon, and spawn throughout the year in tropical waters. Although spawning apparently occurs widely across the equatorial Pacific Ocean, the greatest reproductive potential appears to be in the eastern Pacific. Spawning is primarily at night between 19:00 and 04:00 hr. The average mature female spawned every 2.6 days. Age at first maturity is estimated to be about 2 years. However, is reported sexual maturity for this species at 100 to 130 cm at an age of about 3 years old.
Diet	Fishes, cephalopods and crustaceans during the day and at night.
Natural predators	Large billfish and toothed whales.

Use	Interest to fisheries	This species is an extremely valuable fishery resource (especially for the sashimi market).
	Fishing method	Initially, was taken by longline vessels, but with the expansion of the fishery using fish-aggregating devices (FADs) since 1993 the purse seine fishery has taken an increasing proportion of the Bigeye Tuna catch.
	Fishing area (according to FAO)	51+57
	Subareas	BET (51)
	Stock assessment/institution responsible	2017/CTOI
	Type of assessement	Quantitative (modèle)
	Special remarks	Males tend to dominate the catches over the entire size range. 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, 27, 31, 34, 41, 47, 61, 67, 71, 77, 81 and 87. Also, be aware that the minimum legal catch weight diferes from one country to another (local leggislation apllies). The all-tackle game fish record is of a 197.31 kg fish caught off Cabo Blanco, Peru in 1957 (IGFA 2011)

Conservation	IUCN Status	Vulnerable globally.
	Stock evalution date by IUCN	18-Feb-11
	Population trend	Decreasing.
	Main threats	Overfishing is occurring primarily in the Western Pacific, with adult biomass having declined about 20% over the past decade and if fishing mortality continues at current levels, the biomass is predicted to reduce to about half the MSY level. In addition, this species may undergo further declines if the mortality of the species in bycatch of the Skipjack Tuna fishery cannot be reduced. In the Atlantic this stock is exploited by three major gears/fisheries: longline (50–60%), purse seine (25%) and pole-and-line (15%). It is important to note the use of high-tech FADs in the Gulf of Guinea and increases in effort due to vessels coming from the Indian Ocean, will increase already high levels of fishing mortality of juvenile Bigeye Tuna.
	Conservation concerns	
	Conservation actions	This species is listed as a highly migratory species in Annex I of the 1982 Convention on the Law of the Sea. In the Pacific, several countries such as Ecuador, Colombia and Peru have created closures for this species. The vast majority of the catch is from Ecuador in this region. SPC made a recommendation to reduce catches in the Pacific. In Taiwan, the fleet has been reduced by 183 Bigeye long-line vessels (which is more than 30% of fishing capacity). As of December 2009, NOAA has put into place catch limits for US pelagic longline fisheries in Western and Central Pacific Ocean for 2009, 2010 and 2011 having determined that the Pacific Ocean population is subject to overfishing. Under this rule, the U.S. will reduce its longline catch of Bigeye Tuna from the 2004 baseline catch of 4,181 metric tons (mt) to 3,763 mt. In the Atlantic, the Scientific, Technical and Economic Committee for Fisheries (STECF) recommends that the total catch does not exceed 85,000 t. Recommendation 04-01 also implemented a new, smaller closure for the surface fishing in the area 0–5°N, 10–20°W during November in the Gulf of Guinea.

IUCN	https://www.iucnredlist.org/species/21859/9329255
Fishbase	https://www.fishbase.in/summary/Thunnus-obesus.html
FAO	http://www.fao.org/fishery/species/2498/en