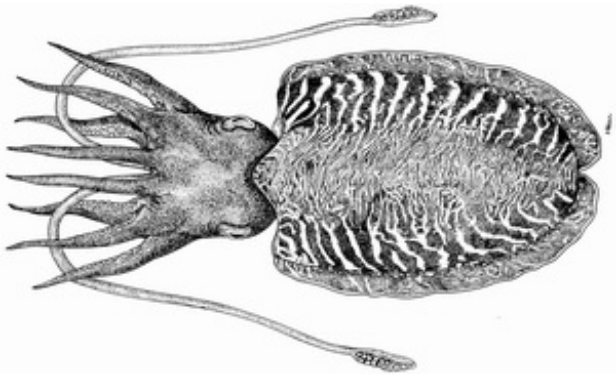
Species Fact Sheets

Sepia officinalis (Linnaeus, 1758)



Black and white drawing:

Sepia officinalis: Photograph (R.Patzner): (click for more)

FAO Names

En - Common cuttlefish, Fr - Seiche commune, Sp - Sepia común.
3Alpha Code: CTC Taxonomic Code: 3210200202

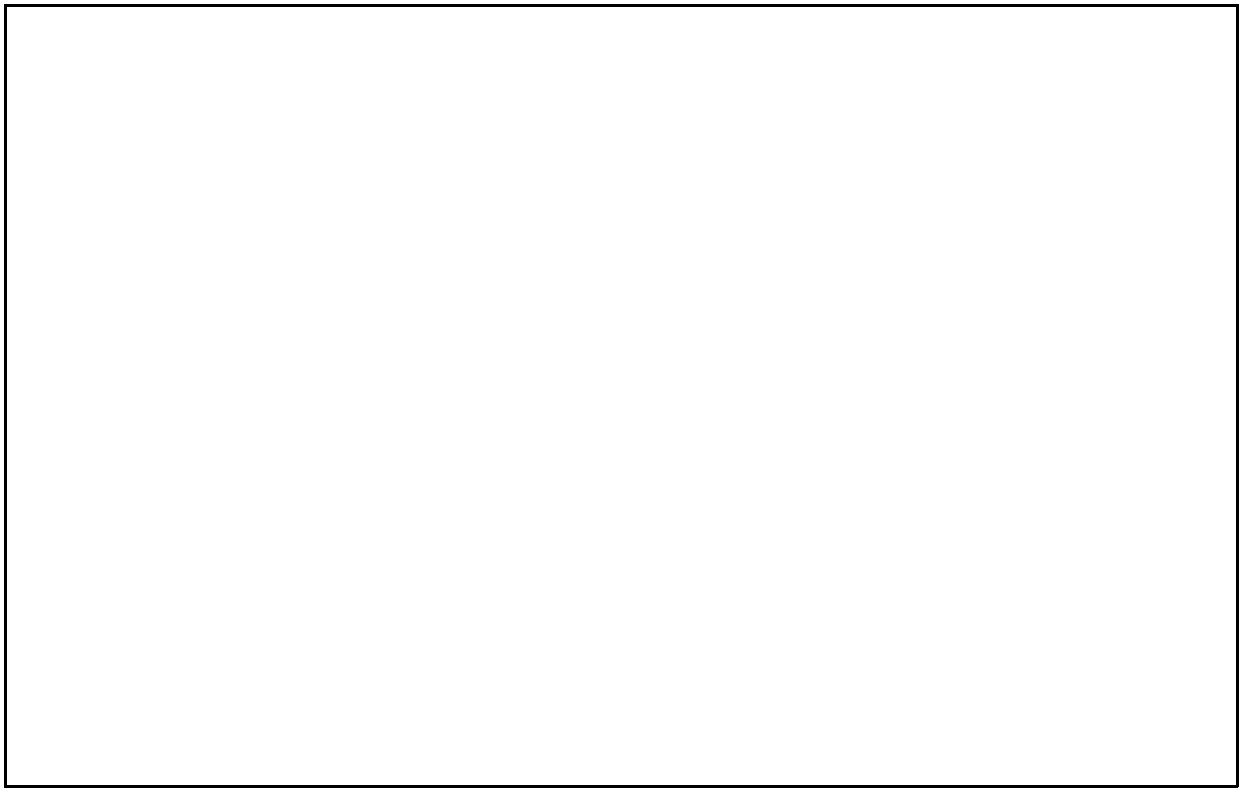
Scientific Name with Original Description

Sepia officinalis Linnaeus, 1758, Syst.Nat., ed. 10:658.

Diagnostic Features

Tentacular club with 5 or 6 suckers in each transverse row, the median ones moderately enlarged; swimming keel not extending proximally beyond base of club. Left arm IV hectocotylized by reduction in size of suckers in proximal 5 to 8 horizontal rows (*S. officinalis* type) or in proximal 8 to 13 rows (*S. hierredda* type); dorsal protective membrane of normal width (*S. officinalis* type) or little developed (*S. hierredda* type); cuttlebone anteriorly and posteriorly rounded (not acuminate), with parallel sides and a weak spine visible in juveniles, but embedded in chitin in adults, the striated zone not extending past midpoint of length (*S. officinalis* type), cuttlebone acuminate at both ends, with a spine also in adults and striations sometimes extending past midpoint of length (*S. hierredda* type).

Geographical Distribution



Launch the Aquatic Species Distribution map viewer

Eastern Atlantic: from the Baltic and North Seas to South Africa; Mediterranean Sea.

Habitat and Biology

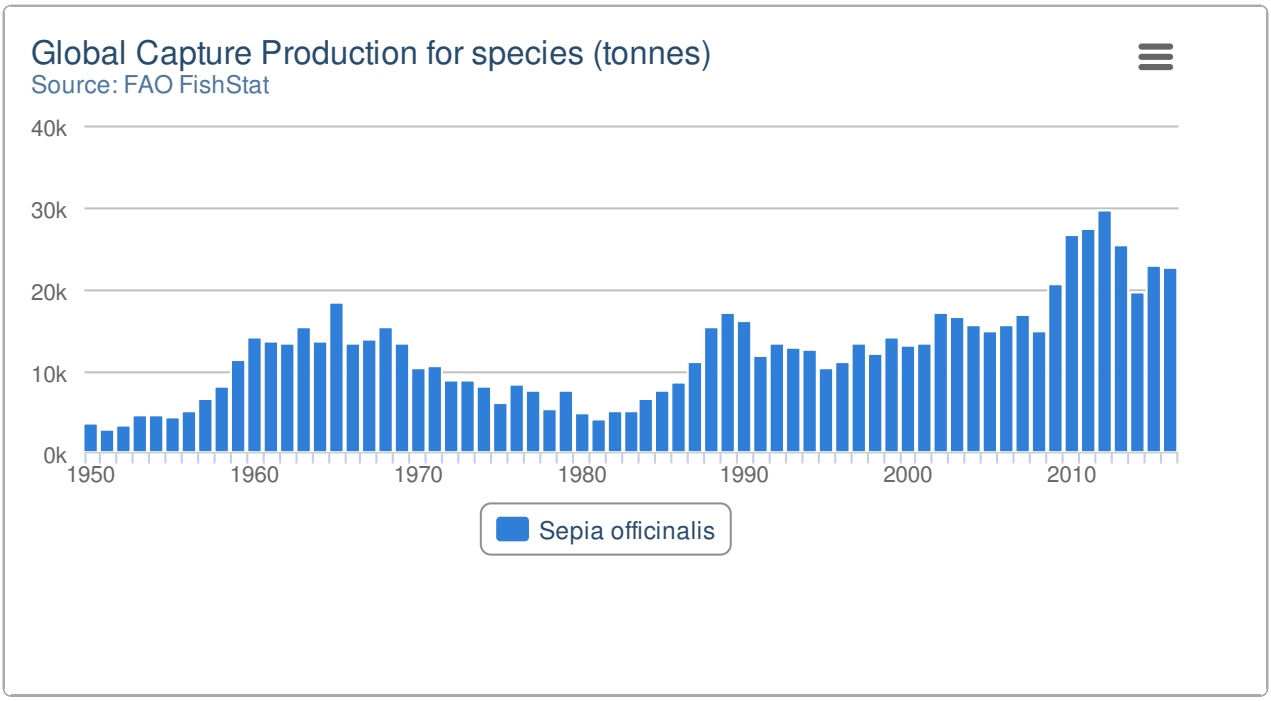
A demersal, neritic species occurring predominantly on sandy to muddy bottomsfrom the coastline to about 200 m depth, but most abundant in the upper 100 m; larger individuals are encountered in the deeper part of the range.Seasonal migrations (mainly vertical) have been shown to occur in all stocks. For the population off Senegal, Bakhaykho & Drammeh (1982) suggest a seasonal north-south, and an offshore-inshore migration pattern. In the western Mediterranean, in early spring, large individuals leave the deeper water, where they spend the winter, to migrate into shallower water (males precede females by about a week). This group is followed by a succession of smaller cuttlefish arriving in shallow waters throughout the summer. In autumn the gradual descent beings. Spawning occurs in shallow waters, throughout the year, with peaks at water temperatures from 13° to 15°C: in the western Mediterranean, between April and July, off Senegal and on the Sahara Banks between January and April (primarily big adults); there is a second minor spawning peak of medium and small-sized individuals in late summer and early autumn.
Males may carry up to 1 400 spermatophores, females between 150 and 4 000 eggs, depending on their size. Eggs measure from 8 to 10 mm in diameter and are attached in grape-like clusters to seaweeds, debris, shells and other substrates. They hatch after 30 to 90 days depending on temperature (21.5 ° to 15°C, respectively). The total length of hatchlings is 7 or 8 mm. Growth rate varies directly with temperature and inversely with size (Pascual, 1978). Larvae hatched in early summer from the spring brood usually participate in the autumn spawning of the following year, while those from the autumn brood spawn in spring in their second year of life. Thus, the two cycles alternate. Males predominate in the adult phase because of massive postspawning mortality among large females. Food consists of small molluscs, crabs, shrimps, other cuttlefishes, and juvenile demersal fishes. Cannibalism is common and has been interpreted as "strategy" to overcome temporary shortage of adequately sized prey (Caddy, 1979). Daily feeding rates of 10 to 30% of body weight in juveniles do not seem unlikely, in view of the high growth rate and the relatively short lifespan (up to 2 years in the fishery).Predators of common cuttlefish include sharks, sparids and other demersal fishes and cuttlefishes.

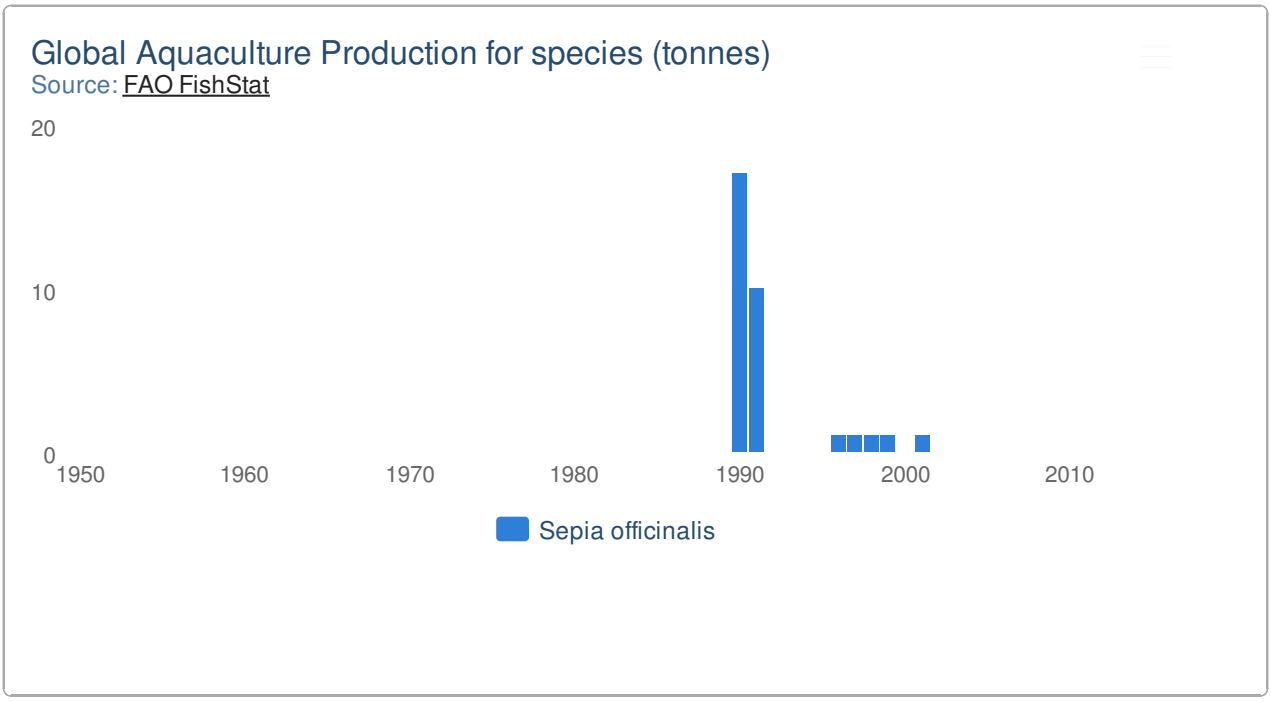
Size

Maximum mantle length 45 cm, weight up to 4 kg in temperate waters, but only little more than 30 cm and 2 kg in subtropical seas. Common sizes in the West Saharan fisheries range between 15 and 25 cm. In that area, length at first maturity is 13.5 cm mantle length in females, and between 12 and 14 cm in males. Off Tunisia, length at first maturity is 12 cm in females, and 10 cm in males.

Interest to Fisheries

An important commercial resource throughout its range. World catches attributed to this species varied between 8 500 and 14 000 t in recent years. The catch reported for 1981 totalled 12 800 t, taken almost exclusively by Italy in the Mediterranean (Fishing Area 37) (FAO, 1983). Prominent catches of unidentified cuttlefishes (*Sepia* spp. and *Sepiola* spp.), most of which are believed to be *S. officinalis*, also are taken off West Africa (Fishing Area 34). In 1981, these catches amounted to about 29 100 t showing a slight decrease against previous years. For many years Spain has taken the largest catches in this area. The finfish discarded by Spanish cuttlefish trawlers was estimated at approximately 63% in 1976 and included more than 90 species categories, primarily, sparids (*Pagellus erythrinus* and *P. acarne*), jack mackerels (*Trachurus* spp.), flatfishes, electric rays (*Torpedo* spp.), and weevers (*Trachinus* spp.) (Bravo de Laguna, Fernandez & Santana, 1976). While the Japanese share in the West African cuttlefish catches went down drastically, Moroccan participation in this fishery, which started only in 1980, is steadily increasing. Senegalese catches remained relatively stable over the last 5 years (FAO, 1983). It is suspected, that the overall effort exceeds the optimum level and that present catch levels could be maintained or even increased with reduced effort (Caddy, 1981).
In the industrial fisheries, common cuttlefish is primarily trawled, either as a target species or as bycatch to demersal finfishes. On the other hand, 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.
Common cuttlefish is usually marketed fresh and frozen, and is a highly appreciated food item, particularly in Japan, Republic of Korea, Italy and Spain. Aquaculture has been tried experimentally and also appears promising for large-scale ventures.The total catch reported for this species to FAO for 1999 was 14 638 t. The countries with the largest catches were Tunisia (6 622 t) and Greece (3 123 t).





Local Names

ALGERIA : Choubai , Chouebi , Seiba , Seich , Sepia , Seppio .

BULGARIA : Sepija .

CYPRUS : Soupia .

EGYPT : Sobbeit .

FINLAND : Mustekala , Sepia .

FRANCE : Casseron , Chibia , Margade , Seiche , Seppia Corsica:.

GERMANY : Gemeiner Tintenfisch , Sepie .

GREECE : Soupia .

ISRAEL : Dyonon refui .

ITALY : Pruppusiccia , Scarpetta , Scarpitta , Scarpitelle (juveniles) , Secce , Seccetella , Sepa , Sepia imperiale , Seppa , Seppia , Siccia .

JAPAN : Mongoika , Yoroppa kouika .

LEBANON : Sabbidije .

LIBYA : Shoubia .

MALTA : Sicca .

MONACO : Supia .

MOROCCO : Chubei , Seiche .

NETHERLANDS : Gewone Inktvis , Zeekat .

PORTUGAL : Chêco , Chôco , Choco Madeira:.

ROMANIA : Sepia .

SENEGAL : Seíche .

SPAIN : Aluda , Castañuela , Choco , Chocón , Coca , Jibia , Jibión , Luda , Rellena , Relleno , Sipia , Sipionet .

TUNISIA : Choubei .

Chouebi : Seche , Sibia , Sipia , Soubia .

TURKEY : Sübye .

UK : Cuttlefish .

former USSR : Kora katitza .

YUGOSLAVIA : Sipa .

Remarks

Several subspecies have been named for various populations throughout the very broad latitudinal range of this species, but it seems best to refer here only to the species until their systematics and distributions are better understood. The species has been successfully reared in aquaculture experiments of medium scale (Minervini, Sequi & Barbato, 1982).

Source of Information

FAO Species catalogue VOL. 3. Cephalopods of the world An Annotated and Illustrated Catalogue of Species of Interest to FisheriesClyde F.E. Roper Michael J. Sweeney Cornelia E. Nauen 1984. FAO Fisheries Synopsis No. 125, Volume 3

Bibliography

Bakhaykho & Drammeh, (1982, biology of Senegalese stocks) Fisheries Committee for the Eastern Central Atlantic (CECAF) (1982, stock assessment); Conseil général des pêches pour la Méditerranée (CGPM) (1982, stock parameter for the Mediterranean).

Caddy, (1981, ecological role and management consideration in northwest African fisheries)

Fischer, (1973, Species Identification Sheets, Mediterranean and Black Sea, fishing area 37)

Hatanaka, (1979a, spawning seasion northwest African stocks)

Mangold-Wirz, (1963, biology, western Mediterranean)

Pascual, (1978, growth and food conversion in aquarium conditions)

Roper & Sweeney, (1981, Species Identification Sheets, eastern central Atlantic, fishing areas 34/47 in part)