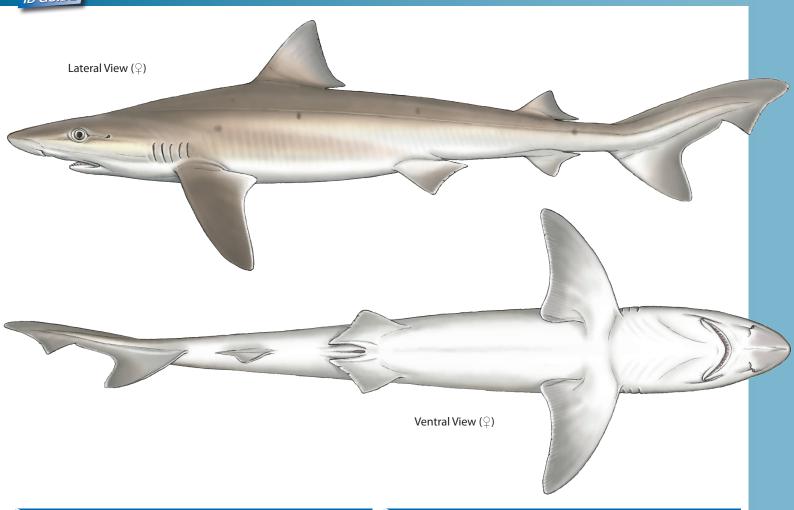
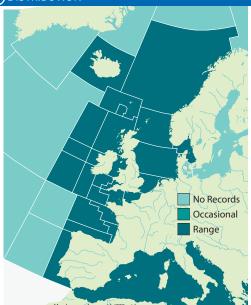
# Galeorhinus galeus



#### )SYNONYMS

Squalus galeus (Linnaeus 1758), Galeus vulgaris (Fleming 1828), Galeus canis (Bonaparte 1834), Galeus nilssoni (Bonaparte 1846), Galeus communis (Owen 1853), Galeus linnei (Malm 1877), Galeus australis (Macleay 1881), Galeorhinus australis (Macleay 1881), Galeorhinus zyopterus (Jordan & Gilbert 1883), Galeus zyopterus (Jordan & Gilbert 1883), Galeorhinus chilensis (Perez Canto 1886), Galeus chilensis (Perez Canto 1886), Galeus molinae (Philippi 1887), Carcharhinus cyrano (Whitley 1930), Galeorhinus vitaminicus (de Buen 1950).

#### DISTRIBUTION



The Tope Shark is found in the east Atlantic from Iceland to South Africa, including the Mediterranean where it is present but uncommon (Bester, Unknown; Walker et al., 2006). It is known from the southwest Atlantic, the west Indian Ocean and the Pacific Ocean (Bester, Unknown).

# COMMON NAMES

Tope Shark, Soupfin Shark, School Shark, Flake, Greyshark, Penny's Dog, Schnapper Shark, Sharpie Shark, Sweet William Shark, Vitamin Shark, Requin-hâ (Fr), Cazón (Es).

### )APPEARANCE

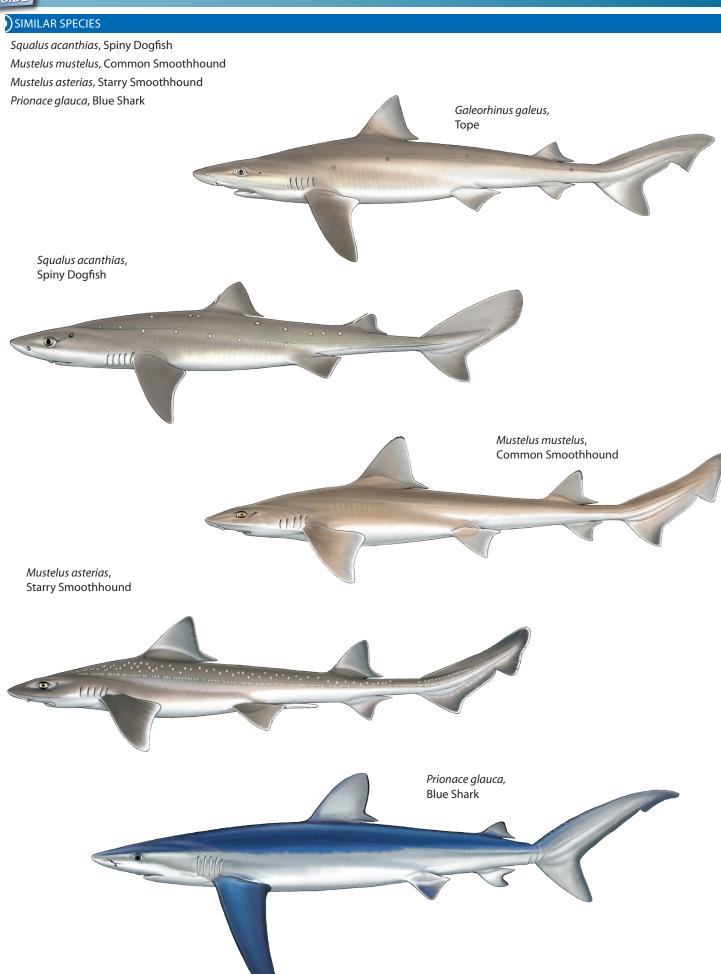
- Maximum total length of 193 ♂- 195 ♀cm.
- Second dorsal fin and anal fin approximately the same size.
- Large caudal lobe extending ~half the length of the dorsal caudal margin.
- Slender with a long snout and large mouth.
- Bluish grey to light brown colouration on dorsal surface.
- Paler ventral surface.

The Tope Shark is a large houndshark reaching lengths of nearly 200cm. The main distinguishing features are the small second dorsal fin (approximately the same size as the anal fin and located almost above it) and the large lobe on the caudal fin. A slender shark, its snout is very long and its mouth broad. The eyes are horizontally oval and are situated just in front of pronounced spiracles (Compagno, 1004)

Colouration varies from dark grey to light brown on the dorsal surface. Some light brown individuals have darker, almost black spots and juveniles (<60cm TL) have black markings on their fin tips. Juveniles also have white trailing edges on their pectoral fins. The ventral surface is paler to white (Barnes, 2008). The Tope Shark can reach a maximum age of 60 years (Bester, Unknown).





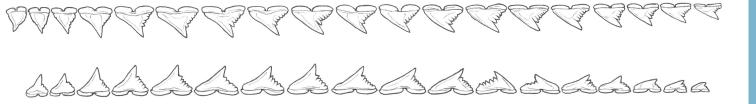


(Not to scale)

# Galeorhinus galeus

#### )TEETH

The teeth are blade-like with oblique cusps and distal cusplets in both jaws (Compagno, 1984).



## **ECOLOGY AND BIOLOGY**

#### HABITAT

The Tope Shark is an active, strong swimming shark found from shallow bays to ~550m. It is predominantly encountered near the seabed but has also been caught on pelagic longlines (Bester, Unknown). At higher latitudes such as European waters, the Tope Shark is highly migratory, moving towards the poles in summer and towards the equator in winter. In lower latitudes, it is known to migrate between shallow waters during the summer and deeper water in the winter months (Compagno, 1984). It is a strong swimmer capable of covering 35 miles a day (Walker *et al.*, 2006).

## DIET

The Tope Shark feeds on a variety of bony fishes, listed by the Florida Museum of Natural History as including pilchards, herring, sardines, anchovies, salmon, smelt, hake, cod, midshipmen, flying fish, barracuda, mackerel, tuna, croakers, wrasses, damselfishes, gobies, kelpfish, sole, halibut, scorpion fish, and sculpins. It also feeds on invertebrates such as squid, octopus, crabs, marine snails, and sea urchins (Bester, Unknown).

A 2001 study of the Tope Shark in Argentinean waters revealed that Hake, Cuskeels (*Genypterus blacodes* and *Raneya brasiliensis*), Silverside (*Odontesthes* sp.) and Squid (*Illex argentinus*) were the most common prey items (Rodriguez *et al.*, 2004). It appears that it is not inclined to scavenge due to the virtual absence of terrestrial animals, larger marine species and litter in its stomach. It is also less inclined to take stale or frozen bait, preferring hooks baited with fresh meat (Compagno, 1984).

#### ) REPRODUCTION

The Tope Shark is an ovoviviparous species, meaning it gives birth to live young. Sexual maturity is reached at a total length of 120–170cm for males and 130–185cm for females. This corresponds to an age of 8 and 11 years respectively (Compagno, 1984). It remains in sex segregated groups for the majority of the year with the exception of mating, which takes place during the spring (Shark Foundation, 2005). The gestation period is approximately 12 months, after which females move into shallow areas and bays to give birth to litters of 6–52 pups, depending on the size of the mother. These pups measure from 30–35cm in length and remain in the nursing areas for their first year or two (Walker *et al.*, 2006).

#### )EGGCASE

N/A







#### COMMERCIAL IMPORTANCE

One of the most widely fished shark species, its meat is used fresh and dried/salted for human consumption, its fins for the Asian shark fin trade, its liver for oil and its skin for leather products. In the period between 1936 and 1944, the Tope Shark was the mainstay of a massive shark fishery in the eastern Pacific, during which over 24,000,000 lbs (10,886.22 t) were landed, mainly for their vitamin A content. This fishery ended quite abruptly with the synthesis of vitamin A (Walker *et al.*, 2006).

The Tope Shark is a very popular species with recreational fishers as it is one of the largest species that can be targeted in UK waters and is renowned for its fight (SACN, 2008). The recreational angling sector is thought to be worth €25 billion across Europe. In comparison, the value of commercial landings in 1998 was only €20 billion (Pawson *et al.*, 2004). The vast majority of sharks caught by recreational anglers are returned alive and are increasingly being measured and tagged before release (Bester, Unknown).

## THREATS, CONSERVATION, LEGISLATION

Like most sharks, the Tope shark is extremely vulnerable to fishing pressure due to its slow maturity and low productivity. While there is no large scale directed fishery for the Tope Shark in European waters, it is regularly taken as bycatch of mixed demersal and pelagic fisheries, especially by French vessels fishing in the English Channel, Western Approaches and the northern Bay of Biscay (Walker et al., 2006). Rapidly declining populations have led to England and Wales imposing a ban on targeting the Tope Shark except using rod and line fishing methods. All Tope caught in this way must be returned to the sea alive or dead. Commercial fishermen cannot target the species and are limited to a 45kg/day bycatch limit, regardless of the fishing gear used (SACN, 2008).

#### IUCN RED LIST ASSESSMENT

Vulnerable (2005).

Data Deficient in northeast Atlantic.

#### HANDLING AND THORN ARRANGEMENT

- · Handle with care.
- · Sharp teeth.
- Abrasive skin.

# Tope Shark

# Galeorhinus galeus

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