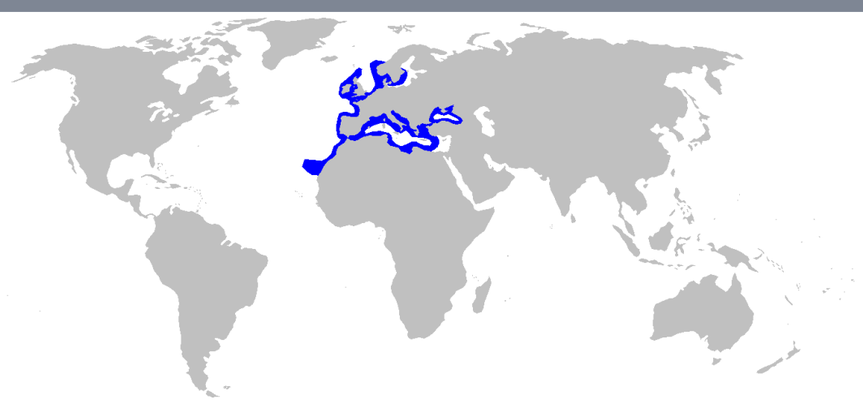
Angel shark
(Squatina squatina)

Scientific Classification:

Class: Chondrichthyes (fish with cartilogenous skeletons)
Order: Squatinformes
Family: Squatindae
Genus: *Squatina*
Species: *S. squatina*
(Linnaeus, 1758).

Distribution



This species' ranges from the Atlantic coasts of Europe - Ireland and the U.K., to Morocco, the Canaries, the Mediterranean coasts of Europe, Africa and the Levant, and the Black Sea (Whitehead *et al*., 1984).More than 90% of total shark tagged by Inland Fisheries Ireland (IFI) showed Tralee and Clew Bay, Co. Kerry being the centre of he species distribution. in Ireland. IFI data also show a decline of over 95% of angel shark since the 1980s, promting a critically endandered listing by the IUCN (Ferretti *et al.*,2015).

Ecology

Habitat: It inhabits sandy and muddy bottoms, in shallow depths of 5-100m (Whitehead *et al*., 1984). Found in coastal and esturaine waters and around features such as sandbanks in depths of 5- 150 m. Thought to undergoe large-scale coastal migratory patterns, heading north in the summer and returning south in the winter. Nocturnal foraging behaviour - resting in the substrate with all but the eyes and spiracles visible.

Diet: Ambush predators with a corresponding stationary bottom-dwelling habit - they possess extensible jaws that can rapidly snap upwards to capture prey and have long, needle-like teeth. Angel shark bury themselves in sand or mud lying in wait for preyfeed on teleost fish, e.g. flatfish species, and demersal fish - skate, crustaceans and molluscs (Morey *et al*., 2006).

Species Identification:

Morphology:
A). Dorsoventrally flattened and broad pectoral fins that give them a strong resemblance to rays.
B). Two medium sized dorsal fins (primary & secondary) an no anal fin
C). Ventral lobe of caudal fin slightly larger
D). 5 gill slits on its back
E) two spiracles behind each eye

Teeth:
- 18 to 22 oblique cusp cutting teeth in both jaws.

Colouration:
Greyish brown dorsal colouration. Small white and dark spots. Some populations have light white lines creating a pathwork pattern dorsally, ventrally white.

Size:
Adults reach a maximum length of 2.5 meters. Males (80- 1.32m) ♂ are smaller than females ♀ (1.28 - 1.69 m). Neonates born between 20-30cm TL (Roux, 1984).

Biology

Thermoregulation:Angelsharks are ectothermic× animals which must use heat acquired from the environment and behavioral adaptations to regulate body temperature and heterothermic i.e having a body temperature that fluctuates with that of the immediate environment; having no mechanism or a poorly developed mechanism for regulating internal body temperature.

Reproduction:
Angel shark has a lecithotrophic viviparous reproduction mode (Budker 1958, Capapé et al. 1990) In other words, is live bearing, producing 7-25 embryos i.e. they are ovoviviparous, which means their young is born in eggs that gestate in the womb until they hatch. The pups live off a small yolk sac until they are born. Angel sharks produce litters of up to 13 pups, after a gestation period is 10 months.

Lifespan: 35+ years