

Angelshark (*Squatina squatina*)

Proposed action: Inclusion on CMS Appendices I and II
Proponent: Monaco



Overview

Shark species around the world face a wide variety of threats, including being caught as bycatch. The overexploitation of the Angelshark, *Squatina squatina* for its meat, skin, and liver has made studying the species very difficult. The species' seasonal north-south and onshore-offshore migrations are poorly documented largely because of the species' scarcity. The available data shows the population decrease has caused some local or regional extinctions over most of its range, resulting in *Squatina squatina* being listed as Critically Endangered on the IUCN Red List. The decrease is largely due to targeted fisheries and, more recently, being caught incidentally as bycatch. The species is only adequately protected in some parts of its range and enforcement is lacking, which is why it is necessary to list the species on Appendices I and II.

Biology and Distribution

Squatina squatina is nocturnal, swimming at night and usually lying buried in sediment by day with only its eyes and dorsal fins protruding. It is an ambush predator that feeds primarily on bony fishes, cephalopods, skates, crustaceans and mollusks. The species is a high level trophic predator. The eggs hatch inside the mother and litters of 7–25 pups are born after a 6 to 12-month gestation period. Reproductive habits of *S. squatina* vary depending on geographic location. The reproductive cycle may be two or three years long, with a resting period between litters. Pups occupy shallow water nursery grounds, which provide a refuge from large predators.

S. squatina is a medium-sized benthic coastal shark that is endemic to shelf seas in the Northeast and Eastern Central Atlantic, Mediterranean and adjacent seas. The species is no longer encountered in most areas of the northern Mediterranean, where it has been extirpated or at least commercially-extinct. The species' last remaining stronghold is around the Canary Islands, but it is still recorded very infrequently across much of its former coastal range. In the south of its range, in the Canary Islands, the species is observed in shallow inshore waters in winter, but moves into deeper cooler water during the summer months.

Population Status and Threats

Squatina squatina is assessed as Critically Endangered globally and in the Mediterranean on the IUCN's Red List. The species is also protected under the United States Endangered Species Act (ESA). One study found that the species is at high risk of extinction throughout its range. The Angelshark family (Squatinae) has been identified as the second most threatened family of all sharks and rays in the world.

Bycatch in trawl and trammel net fisheries pose the greatest, most widespread threats to the species. Recreational angling and disturbance from dive tourism are threats at remaining aggregation sites. Most of its

range is subject to intense demersal fisheries. This species is highly vulnerable from birth onwards to bycatch in the benthic trawls, set nets and bottom longlines which operate through most of its range and habitat.

Uses

Angelsharks were an important target species 50 to 100 years ago. The meat was consumed, the skin was used for sandpaper, and the liver was a source of oil. Angelshark fins may enter the international shark fin trade in East Asia. However, due to population declines and modern trawl and fishing technology, these sharks are no longer a target species in those fisheries. Angelsharks are sometimes sought after by sports anglers, though the anglers can be helpful if they are participating in tag and release programs. This species is also attractive for dive tourism, which can cause a disturbance for populations in the Canary Islands. Angelsharks may also be targeted for live display in aquaria.

Conservation Measures

Trawling has been prohibited in the Canary Islands since 1986, which may have helped this isolated Angelshark population to persist. The species is legally protected in part of its range through legislation in Monaco, the UK and Spain, and incidentally in some marine protected areas where trawl and net fisheries are prohibited (e.g. in Spain and Turkey). Regional EU and GFCM fisheries prohibitions and listings under regional agreements (OSPAR, HELCOM, Barcelona and Bern Conventions) should provide protection and a framework for further action.

Expert Advice

The Scientific Counsel finds that the Angelshark meets all criteria for inclusion in Appendices I and II of the Convention. The Council determined that a significant proportion of the highly depleted and fragmented Angelshark population is migratory. The species is strongly recommended for inclusion in Appendices I and II.

CALL TO ACTION

Benefits from listing this species under CMS Appendices I and II depend on concrete follow-up actions. If properly implemented, listing *Squatina squatina* could:

- ensure improved protection and encourage actions to prevent bycatch;
- decrease the amount of recreational activities affecting the species; and
- facilitate regional cooperation toward conservation of shared populations and key habitats.

We urge CMS Parties to support inclusion of *Squatina squatina* on CMS Appendices I and II at CoP12.

References

Information in this fact sheet is based on the CMS listing proposal and relevant IUCN Red List assessments.