

Spiny Dogfish

SPECIES

Spiny Dogfish (*Squalus acanthias*)

OTHER NAMES

Shark, Dogfish



ABOUT

The spiny dogfish belongs to the family *Squalidae*. It is found in British Columbia (BC) coastal waters from the surface to a depth of 730 metres (2,400 feet). The average adult length is between 75 to 105 cm (30-40 inches), though lengths up to 130 cm (50 inches) have been recorded. The spiny dogfish is long lived, slow growing, and has an estimated life span of 30 to 40 years, although ages up to 100 years have been determined for dogfish in BC waters.

Minimum market size of mid-water trawl-caught spiny dogfish is 66 cm (26 inches).

STOCK STATUS

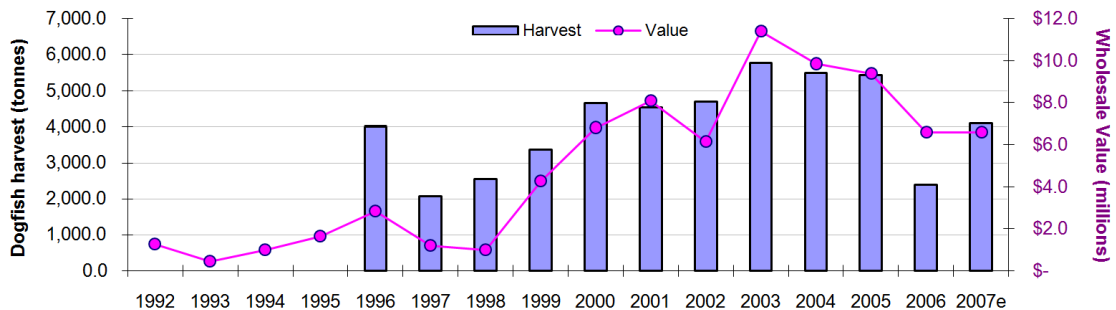
BC dogfish populations are under assessment. Current harvest rates are low and considered sustainable (*DFO - Fisheries Management*).

MANAGEMENT

BC's spiny dogfish fishery is managed federally by Fisheries and Oceans Canada (DFO) under the new Integrated Groundfish program (*See: Integrated Groundfish Information Sheet*) that was put in place April 2006. The objective of the integrated groundfish program is to improve stock management through bycatch monitoring, reduced discarding, and requiring harvesters to be accountable for all catch (*DFO - Fisheries Management*).

PRODUCT VALUE

Approximately 4,100 tonnes of BC dogfish sold for \$6.6 million in 2007 (*BC Seafood Industry Year in Review*).



e: estimate

LIFE HISTORY

The spiny dogfish is a small schooling shark that forms groups of hundreds or thousands of individuals of the same sex and size. This shark is gray/brown on its dorsal side and pale gray/white on its ventral side. As with most sharks, the tail fin is asymmetrical with a large upper lobe.

Sexual maturity in males is reached at a total length of about 64 cm (25 inches) and 10 years of age. Females reach sexual maturity at a later age, around 16 years, at which time they are about 82 cm (32 inches) in total length. The spiny dogfish is ovoviviparous and fertilization is internal. The male inserts one clasper into the female oviduct orifice and injects sperm along a groove on the clasper's dorsal section. Immediately following fertilization the eggs are surrounded by thin shells. The gestation length is the longest known for sharks at an estimated 18-22 months. Litters range between 2 and 11, but average 6 or 7.

The spiny dogfish is an opportunistic feeder eating whatever prey is abundant. In general, their diet is comprised of small fishes such as sardines, cod, pollock, hake, herring, and ratfish. They also eat invertebrates such as krill, crabs, polychaete worms, jellyfish, ctenophores, amphipods, squid and octopus.

PRODUCTS

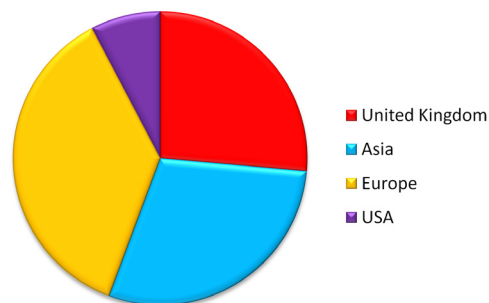
Spiny dogfish is available as back and belly flaps, as well as fins and tails.

PRODUCT MARKET

Spiny dogfish is exported to Europe, with most of it going to Germany. Fins and tails are primarily destined for Asia.

MARKET TREND

Export value has declined since 2004.

**LINKS**

DFO - Fisheries Management Plans: www.pac.dfo-mpo.gc.ca/ops/fm/fishmgmt_e.htm

BC Seafood Industry Year in Review: www.env.gov.bc.ca/omfd/reports/index.html

BCSeafood.ca: www.bcseafood.ca/index.php

Fish and Seafood Online: <http://www.ats-sea.agr.gc.ca/sea-mer/index-eng.htm>