



# **SSACN Spurdog Fact File**



## Welcome to SSACN's Spurdog Fact File

Spurdog are typical "elasmobranchs", they have a slow growth rate, high age at first maturity, low fecundity (i.e. low number of offspring) and long gestation period.

All these contribute to a low rate of population increase and make them particularly vulnerable to commercial fishing pressure.

It is generally accepted that fishing mature female sharks can lead to extreme sensitivity in the stock dynamics and a risk of severe depletion.

### Quick facts

- Spurdog *Squalus acanthias*; also known as spiny dogfish, or piked dogfish, another popular nickname is Greeneye because of its distinctive large Emerald coloured eye



- The spurdog is a slender shark that used to be found in shoals of many thousands all around the UK but in recent years has been reduced to small infrequent shoals
- In many parts of the UK it is now considered locally extinct.
- Spurdog are known to live for over 60 years
- Males mature at around 11 years of age, growing to 80-100 cm in length; females mature in 18-21 years and are slightly larger than males, reaching 100-130 cm.
- Mating takes place in the winter months, with gestation lasting 22-24 months (the longest of any vertebrate).

- The main pupping season (i.e. the period when the females give birth) is from August to December.
- They bear live young; Litters range between 2 and 11 but average 6 or 7.
- The size at birth ranges from 19-30cm, though is typically 26-28cm
- The common name "dogfish" originated from fishermen who described these fish as chasing smaller fish in large dog-like "packs".
- Spurdog is so named because they have two dorsal fins with long dart like spines located in front of the each fin.



- The species name *acanthias* refers to the shark's two spines. These are used defensively; if captured, the shark can arch its back to pierce its captor. Glands at the base of the spines secrete a mild poison.
- Spurdog vary in colour, from chocolate coloured to grey, but all are counter-shaded (having a lighter-coloured belly).
- Spurdog are opportunistic feeders that take a wide range of predominantly pelagic prey which includes whiting, herring, sprats, pilchards, garfish, sand eels, flatfish and cod species although they are known to take crustaceans and cephalopods (squid).
- Like most sharks, spurdog are key predators in marine food webs and therefore important to keeping oceans in balance.
- Other than man, spurdog are only predated on by marine mammals and larger sharks including porbeagle shark

## Why are they in trouble?

The high value spurdog has on the EU market has depleted domestic NE Atlantic stocks and appears to be driving the depletion of other stocks world-wide.

- Spurdog gather in same size and sex shoals.
- The demand for large fish often results in fisheries targeting aggregations of the larger pregnant females, which further hampers the population's reproductive capacity.
- As a result of the intense, long-term overfishing scientists from the International Council for Exploration of the Sea (ICES) have warned that the population may be in danger of collapse.
- Spurdog are listed as **critically endangered** by the International Union for Conservation of Nature (IUCN).
- ICES 2006 assessments showed a depletion of around 95% in the N.E. Atlantic spurdog stock and a severe reduction in abundance of females.

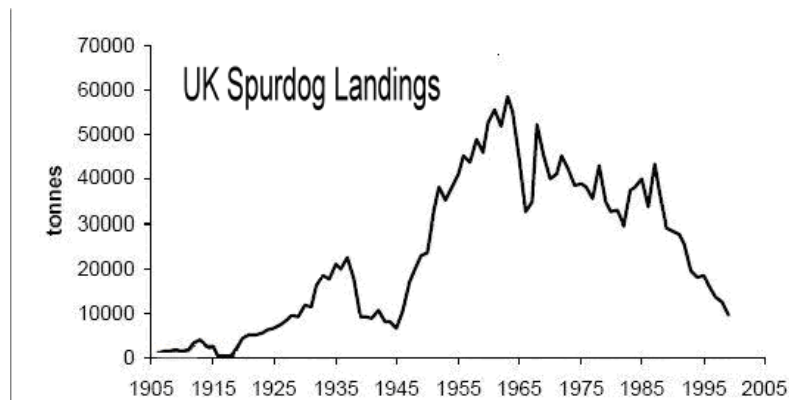
## How are SSACN working to protect spurdog?

SSACN have introduced The Scottish Shark Tagging Programme (SSTP) - [www.ssacn.org](http://www.ssacn.org) whose objectives are to :

- tag and record data on many of the shark species found within Scottish coastal waters
- Increase public awareness highlighting the need for shark protection
- Encourage use of "codes of best practice"
- Highlight sea anglers conservation efforts
- Show government agencies that sea anglers are a vital part of data gathering
- directly contribute to fisheries management

and to show that properly managed sea angling stocks can provide huge socio economic benefits.

To gather data for the SSTP, spurdog are caught by anglers using rod and line and are tagged using either computer readable data storage tags or 'dart' tags.



- Annual landings of spurdog were in excess of 60,000 tons at their peak.
- Due to the works of SSACN and other organisations recent landings have been reduced to a total allowable catch (TAC) of just 52 tons for whole of the UK for 2010.

## Where do they end up?

- In the UK, spurdog are sold in "fish and chip shops" as "rock salmon"; in France as "small salmon" (saumonette) and in Belgium it is sold as "sea eel" (zeepaling).
- Spurdog is also used as a component of liver oil, fertilizer and pet food.
- The fins and tails are processed into fin needles and are used in less expensive versions of shark fin soup in Chinese cuisine

They are quickly weighed, measured and tagged before being released and the information recorded is then stored on the SSTP database.

When the fish is recaptured it will give information about increase in growth weights, stock fluctuations and dynamics and migratory routes.

## How can you help?

By taking the time to read this you have taken your first steps towards helping Scotland's spurdog, you can carry on helping by:

- Adopting the codes of best practice recommended on [www.tagsharks.com](http://www.tagsharks.com)
- Quickly and safely releasing all spurdog.
- Taking part in the SSTP tagging programmes, see <http://www.tagsharks.com/tagging-programmes>
- Joining SSACN - [www.ssacn.org](http://www.ssacn.org)