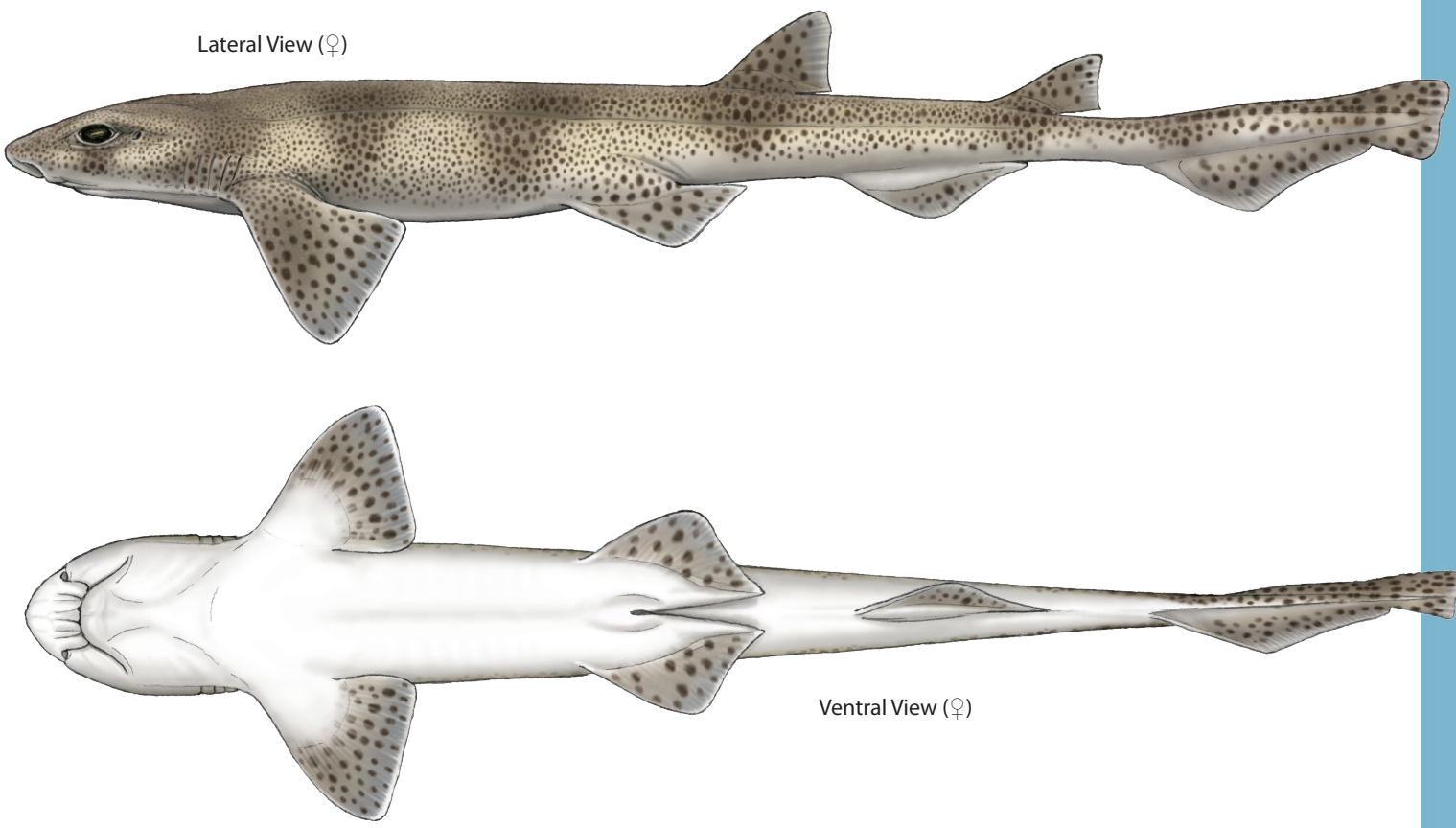
Smallspotted Catshark

Scyliorhinus canicula



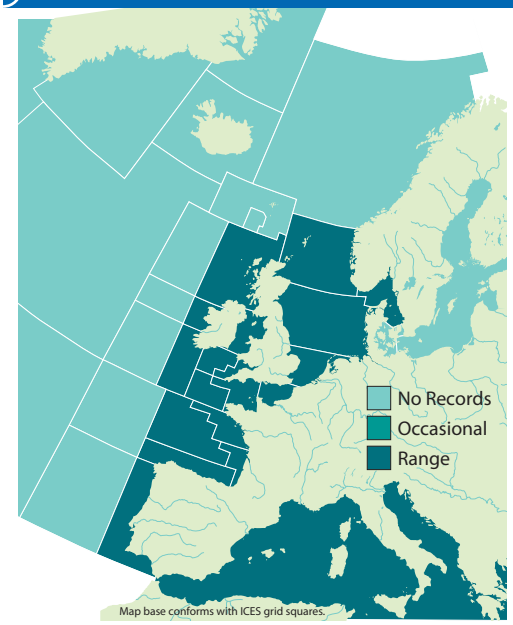
COMMON NAMES

Smallspotted Catshark, Lesser Spotted Dogfish, Rough Hound, Rock Salmon, Sandy Dogfish, Doggie, Petite Roussette (Fr), Pintarroja (Es).

SYNONYMS

Squalus canicula (Linnaeus, 1758), *Squalus catulus* (Linnaeus, 1858), *Squalus elegans* (Blainville, 1825), *Scyllium spinacipellitum* (Vaillant, 1888), *Scellium acutidens* (Vaillant, 1888), *Scylliorhinus canicula var. albomaculata* (Pietschmann, 1907), *Catulus duhamelii* (Garman, 1913).

DISTRIBUTION



The Small Spotted Catshark is known throughout the northeast Atlantic and Mediterranean from Norway and the British Isles to Senegal and possibly the Ivory Coast (Compagno, 1984).

APPEARANCE

- First dorsal fin set behind pelvic fins.
- Second dorsal fin behind anal fin.
- Almost straight caudal fin with well developed ventral lobe.
- Nasal furrows **do** reach the mouth.
- Reported maximum size of 100cm, rarely seen larger than 80cm.
- Pale brown dorsally with pattern of numerous dark spots.
- Ventrally white.

Most commonly encountered around the coasts of northern Europe, the Small Spotted Catshark is a small, slender catshark with attractive colouring. The snout is prominent with well developed nasal flaps that reach the mouth and cover the nasal furrows. This distinguishes the Small Spotted Catshark from the Nursehound, *Scyliorhinus stellaris*, in which they reach only halfway to the mouth. The pectoral fins are relatively large. The first dorsal fin is set behind the pelvic fins and the origin of the second dorsal fin is above the end of the anal fin. There are no dorsal spines. The caudal fin is long and almost straight with a large ventral lobe (Compagno, 1984). There is some sexual dimorphism in the Small Spotted Catshark; males have longer heads with longer, narrower mouths for example. For a full discussion see Filiz & Taşkavak (2006) or Ellis and Shackley (1995).

On the dorsal surface the Small Spotted Catshark is light brown to grey with a pattern of numerous dark spots on the back and fins. Ventrally it is white. The maximum recorded size for the Small Spotted Catshark is 100cm total length although it is rarely found larger than 80cm (Pizzolla, 2008).

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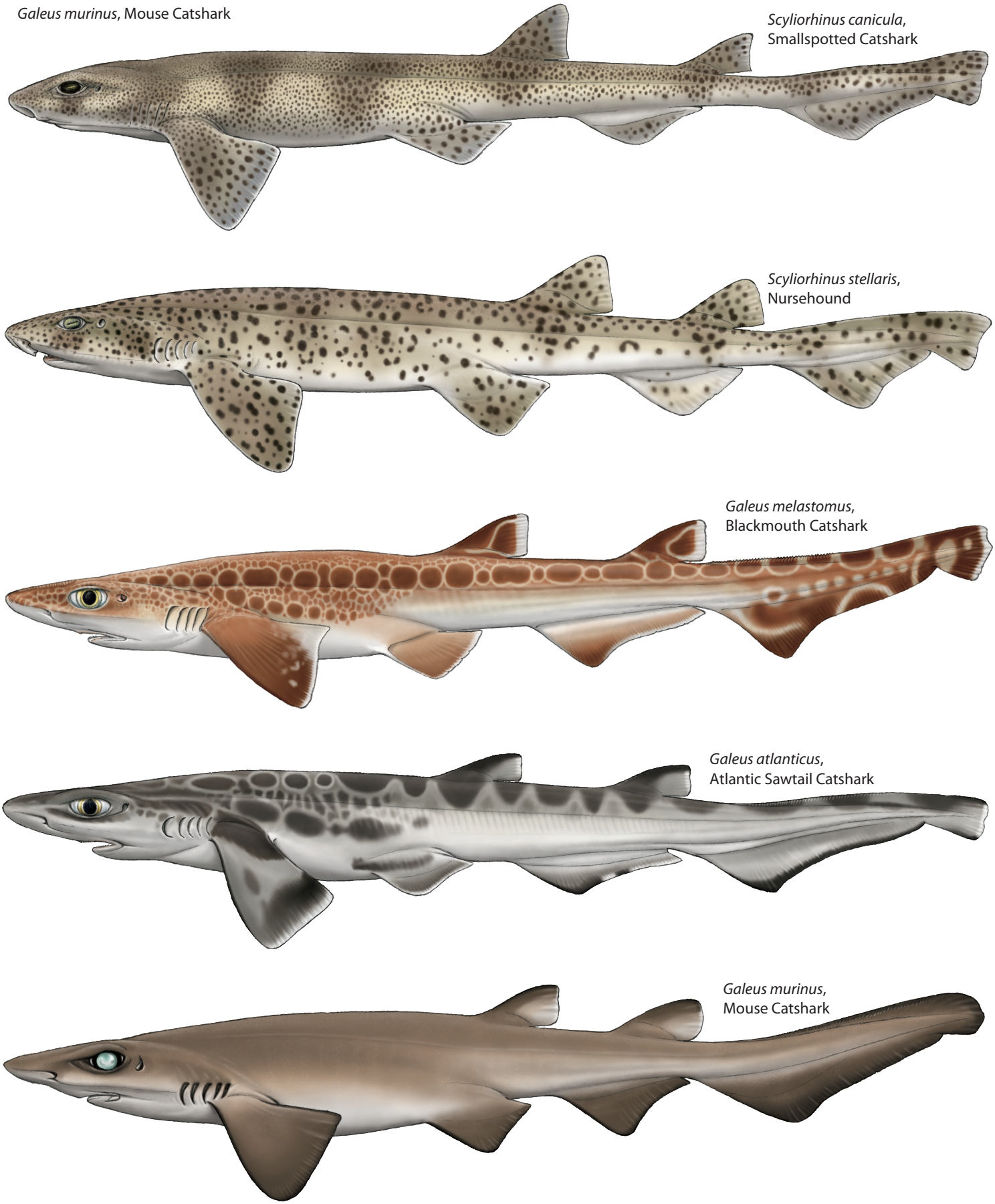
Smallspotted Catshark

SIMILAR SPECIES

Scyliorhinus stellaris, Nursehound
Galeus melastomus, Blackmouth Catshark
Galeus atlanticus, Atlantic Sawtail Catshark
Galeus murinus, Mouse Catshark



(Not to scale)

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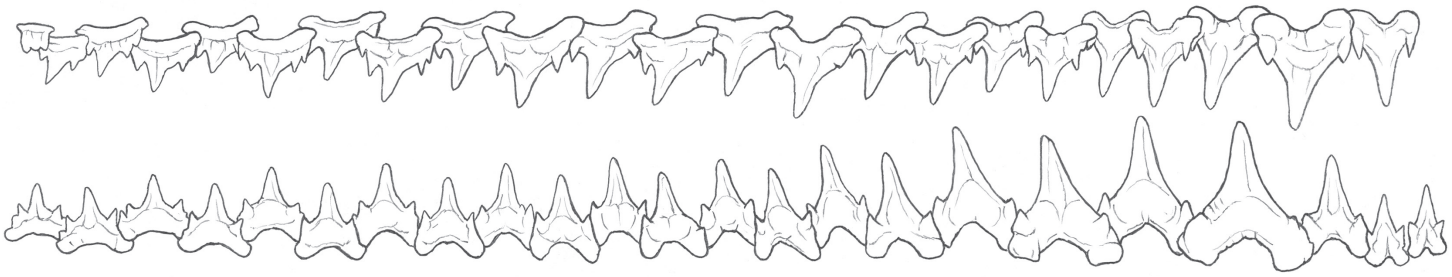
Scyliorhinus canicula

TEETH

Nine different tooth types have been recorded from the Smallspotted Catshark. These range from strongly oblique with single cusps to erect with five cusps (Gajić, Unknown). Males have wider mouths and longer teeth than females (Ellis and Shackley, 1995).



ECOLOGY AND BIOLOGY

HABITAT

The Smallspotted Catshark is a bottom dwelling shark most usually found over sand, mud, algae, gravel and rocky bottoms from the shallow sublittoral to depths of 400m, although it is much less common below 100m (Compagno, 1984). It is a nocturnal predator which spends the day resting on the bottom. In this state it may allow divers to get extremely close and may not react when handled, although this is not advised (Scott, 2003).

It has been reported from the waters around Plymouth, UK and in the Cantabrian Sea that during the summer females are found significantly more often than males. It has also been reported from Plymouth waters that this trend is reversed in the winter with males dominant. This is thought to be related to females coming inshore to lay their eggs during the warmer months (Ivory *et al*., 2004).

DIET

Research from the Isle of Man has suggested that the Smallspotted Catshark is an opportunistic predator on a wide range of macrobenthic fauna with hermit crabs, cockles and whelks dominant prey items. Other items included various crabs, callianassid shrimps, bivalve molluscs, holothurians, polychaetes and herring when available. It appears that dietary preferences change with age; younger animals prefer small crustaceans, older animals prefer hermit crabs and molluscs. It was also observed that feeding intensity was highest during the summer, at least in part due to the higher availability of prey (Lyle, 1983).

REPRODUCTION

Male Smallspotted Catsharks reach first maturity at around 49cm, with 50% of individuals mature by 53.5cm (6.6 years) and 100% of individuals mature at 62cm. Females reach first maturity at around 52cm, with 50% of individuals mature by 57cm (7.9 years) and 100% of individuals mature at 69cm. These values only apply to the northeast Atlantic, particularly to Irish waters. In the warmer Mediterranean Sea, the Small Spotted Catshark grows and matures more rapidly (Ivory *et al*., 2004). It has been noted that as males mature their dentition changes with the teeth becoming longer and sharper. This is likely due to reproductive behaviour as Lyle (1983) showed there is no significant difference between the diet of males and females (Lyle, 1983). Males use these longer teeth to hold the females during copulation (Filiz and Taşkavak, 2006).

Females lay their eggs during spring and early summer in near shore nursery grounds. These eggs usually measure 4cm by 2cm and they are never longer than 6cm, not including tendrils. These eggcases can be found washed up in clumps all around the coasts of Europe and can be seen by divers (Shark Trust, 2005). The embryos develop for 5–11 months depending on the sea temperature, most usually between 8 and 9 months. The young are born measuring 9–10cm (Compagno, 1984).

EGGCASE

- 4cm in length (excluding horns).
- 2cm in width.
- Long tendrils at each corner (Shark Trust, 2005).

Similar eegcase to the Nursehound, *Scyliorhinus stellaris*.

Supported by:

Smallspotted Catshark

COMMERCIAL IMPORTANCE

The Small Spotted Catshark is taken in commercial fisheries across its range and larger individuals are sometimes retained for human consumption. The majority are discarded however (Gibson *et al*., 2006). Recreational anglers tend to regard them as a pest as they will take almost any bait, reducing catches of target fish.

THREATS, CONSERVATION, LEGISLATION

One of the most abundant elasmobranchs in the northeast Atlantic and Mediterranean, the Small Spotted Catshark is regularly taken in near-shore fisheries and is sometimes landed for human consumption. The majority of those taken by commercial fisherman and almost all of those taken by recreational anglers are discarded (Gibson *et al*., 2006). Studies have shown that post-discard survival rates are extremely high, around 98% (Revill *et al*., 1983).

Although localised depletion may have occurred in some areas, such as the Wadden Sea off Malta, surveys have shown that populations are stable or are even increasing throughout the majority of its range. However, continued monitoring of landing and discard data is important to avoid any future declines (Gibson *et al*., 2006).

IUCN RED LIST ASSESSMENT

Least Concern (2008).

HANDLING AND THORN ARRANGEMENT

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

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Shark Trust; 2010. An Illustrated Compendium of Sharks, Skates, Rays and Chimaera. Chapter 1: The British Isles and Northeast Atlantic. Part 2: Sharks.

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