Elasmobranch Welfare Guidance

The information presented here is designed to inform fishers and promote size-based discards. However, the conservation challenges faced by elasmobranchs, and their interactions with recreational and commercial fisheries, provides impetus to employ catch-return methods whenever possible, regardless of size.

In addition, best welfare practices also ensure that post-release survival of elasmobranchs is maximised. By improving animal handling and the fishing techniques used, we increase the survivability of the elasmobranchs returned to the sea, promoting population growth and maintenance of ecological functions.

Welfare guidance

Use barbless or de-barbed hooks. Barbless circle hooks are recommended when fishing for elasmobranchs or in areas where elasmobranchs are known to be present.
Purpose: To enable easy unhooking and minimise damage caused, therefore reducing mortality post catch and release

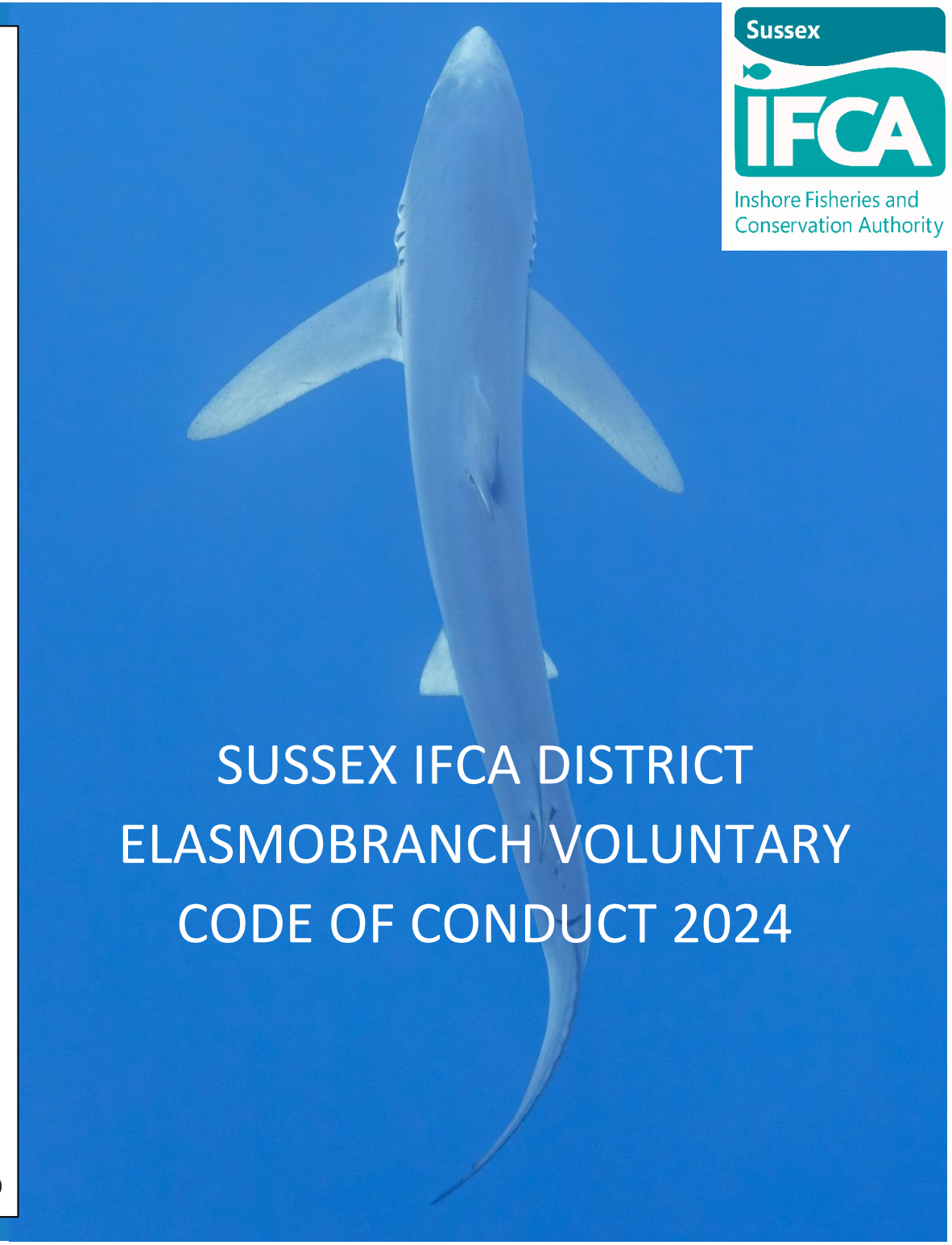
Avoid inboarding whenever possible, especially with large sharks. If inboarding, return elasmobranchs to the water as promptly as possible, without causing damage to the gills and eyes. Ensure animals are being lifted from the tail and provide support to the underside; rays can also be lifted using one hand on each side/wing.
Purpose: To minimise damage to vital organs and increase potential survivability of returned elasmobranchs

Use landing nets to lift elasmobranchs into boats and unhook while in the landing net. Handle with wet hands and using a landing mat; continually support and wet the animal while unhooking and photographing.
Purpose: To promote good handling and unhooking practice to minimise damage and increase potential survivability of returned elasmobranchs

Return females if suspected of carrying eggs/pups, for example females with an unusually thick and gravid mid-section
Purpose: To promote population growth and recruitment of juvenile elasmobranchs

Exercise discretion when particularly large elasmobranchs are caught, they are more vulnerable to handling and inboarding due to increased weight; minimise time spent out the water and consider taking photographs of trophy fish rather than retaining
Purpose: To protect the larger, more fecund elasmobranchs that make disproportionately large contributions to recruitment and population growth

If retaining fish dispatch fish quickly and cleanly
Purpose: For fish welfare



Sussex IFCA
Inshore Fisheries and Conservation Authority

SUSSEX IFCA DISTRICT ELASMOBRANCH VOLUNTARY CODE OF CONDUCT 2024

Elasmobranch conservation

Many species of elasmobranchs (sharks and rays) are overfished, and populations have declined substantially, both internationally and within UK waters, including in Sussex. Research indicates that a high proportion of elasmobranchs caught in UK waters are landed before reproducing, suggesting that size-based management would be effective.

Elasmobranchs are subject to increased risk of overfishing because:
- They are slow growing and take a long time to reach breeding age
- They have a long gestation and produce relatively few young

Prohibited & non-TAC species

The following list comprises species that occur in waters off Sussex for which there is currently no total allowable catch (TAC) for commercial fishers and live individuals of all sizes must be returned promptly, species prohibited for recreational anglers are also denoted:

- Angel shark/Monkfish (*Squatina squatina*)*
- Basking shark (*Cetorhinus maximus*)*
- Common blue skate (*Dipturus batis*)
- Porbeagle shark (*Lamna nasus*)
- Shortfin mako (*Isurus oxyrinchus*)
- Thresher shark (*Alopias vulpinus*)
- Tope shark (*Galeorhinus galeus*)**

***Also prohibited for recreational anglers**

**Tope is not non-TAC but cannot be targeted, except by catch-and-release anglers. Commercial bycatch limit of 45kg/day live-weight whole

Voluntary recommended minimum sizes

The following species-specific minimum size recommendations aim to reduce the landings of immature individuals and thereby improve recruitment and the sustainability of populations.

It is recommended that throughout the year, individuals below the following recommended minimum sizes are promptly returned:

Common name *Species name*	IUCN status*	Global trend	Current commercial management in Sussex IFCA district	Minimum size (cm – TL**)	
		SHARKS		M	F
Blue shark ***Prionace glauca***	NT	⇩	**Targeting, discarding**, and transhipping **prohibited**; catch limit; (recommended min. size for recreational fishers only)	210	215
Common smoothhound ***Mustelus mustelus***	EN	⇩	Transhipping prohibited; record landings separately	95	115
Lesser spotted dogfish ***Scyliorhinus canicula***	LC	Stable	Transhipping prohibited; record landings separately	55	60
Nursehound/Bull Huss ***Scyliorhinus stellaris***	NT	⇩	Transhipping prohibited; record landings separately	80	80
Tope shark ***Galeorhinus galeus***	CR	⇩	**Targeting** and transhipping **prohibited**; catch limit; longliners not permitted to retain	80	90
Starry smoothhound ***Mustelus asterias***	NT	⇩	Transhipping prohibited; record landings separately	75	85
		RAYS		M	F
Blonde ray ***Raja brachyura***	NT	⇩	Transhipping prohibited; catch limit; record landings separately; min. size	80	85
Cuckoo ray ***Leucoraja naevus***	LC	?	Transhipping prohibited; catch limit; record landings separately; min. size	60	60
Small-eyed ray ***Raja microocellata***	NT	⇩	Transhipping prohibited; catch limit; record landings separately; min. size	70	80
Spotted ray ***Raja montagui***	LC	Stable	Transhipping prohibited; catch limit; record landings separately; min. size	55	60
Thornback ray ***Raja clavata***	NT	⇩	Transhipping prohibited; catch limit; record landings separately; min. size	65	75
Undulate ray ***Raja undulata***	EN	⇩	Transhipping prohibited; catch limit; record landings separately; min. and max size, closed season (May-Aug)	78	78

*** IUCN classifications: LC = Least concern; NT = Near threatened; VU = Vulnerable to extinction; EN = Endangered; CR = Critically endangered**

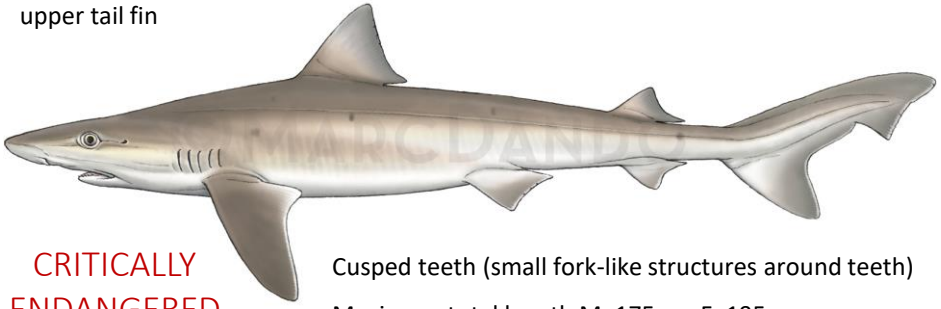
****** All minimum sizes given in **centimetres** and refer to **total length (head to tail) – TL**

For further info. see Shark Trust Fisheries Advisories for Western Region UK, VIId

Tope shark - *Galeorhinus galeus* – MUST BE RETURNED

Blue-grey to light brown with pale/white underside; a slim and streamline shark

Anal fin directly below second dorsal fin and similar in size; distinct/large lobe on upper tail fin



CRITICALLY ENDANGERED

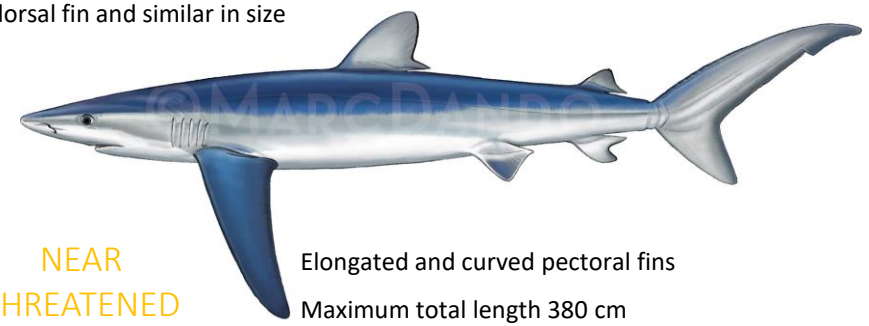
Cusped teeth (small fork-like structures around teeth)

Maximum total length M: 175 cm F: 195 cm

Blue shark - *Prionace glauca*

Dark blue with metallic blue flanks and white underside; slender with pointed snout

First dorsal fin closer to pelvic fin than pectoral fin; anal fin directly below second dorsal fin and similar in size



NEAR THREATENED

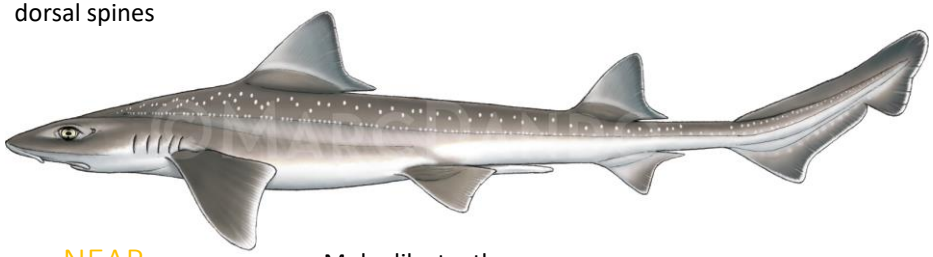
Elongated and curved pectoral fins

Maximum total length 380 cm

Starry smoothhound- *Mustelus asterias*

Grey-brown with white underside; rows of white spots often present on flanks

Large pectoral and pelvic fins; anal fin much smaller than second dorsal fin; no dorsal spines



NEAR THREATENED

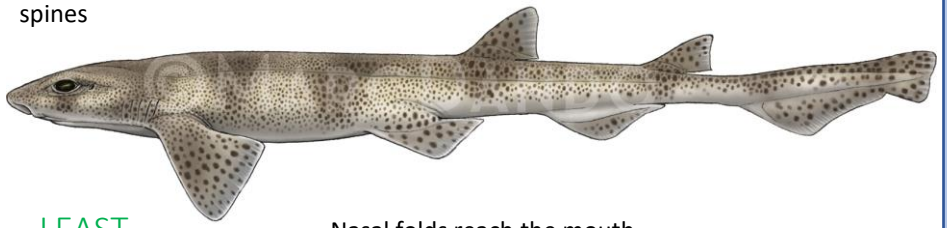
Molar like teeth

Maximum total length 130cm

Lesser spotted dogfish - *Scyliorhinus canicula*

Pale yellow/beige/brown with uniform cream underside; many black spots; can also have white spots

First dorsal fin larger than second and set relatively far back on body; no dorsal spines



LEAST CONCERN

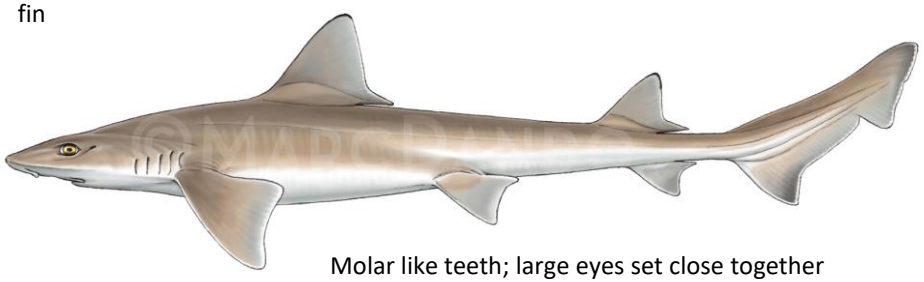
Nasal folds reach the mouth

Maximum total length 85 cm

Common smoothhound - *Mustelus mustelus*

Uniformly grey-brown with white underside; dark spots on some individuals

Moderately large pectoral and pelvic fins; anal fin much smaller than second dorsal fin



ENDANGERED

Molar like teeth; large eyes set close together

Maximum total length M: 110 cm F: 160cm

Nursehound/Bull Huss - *Scyliorhinus stellaris*

Cream/brown with white underside; large and small dark spots; can also have white spots; quite stocky

First dorsal fin larger than second and set relatively far back on body; no dorsal spines

NEAR THREATENED

Nasal folds do not reach the mouth

Maximum total length 160 cm

Sussex IFCA – Shark and Ray ID Guide

SHARKS

Sussex IFCA Inshore Fisheries and Conservation Authority

This guide has been developed in association with the Shark Trust and is adapted from their Shark & Ray ID guides

SHARK TRUST

Sussex IFCA – Shark and Ray ID Guide

RAYS

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Cuckoo ray - *Leucoraja naevus*

Dorsal side: Light grey/brown with large black/yellow spot on each wing. Small thorns throughout

3-5 rows of thorns along tail joining to 2 central rows on the body

Up to 13 thorns present around each eye

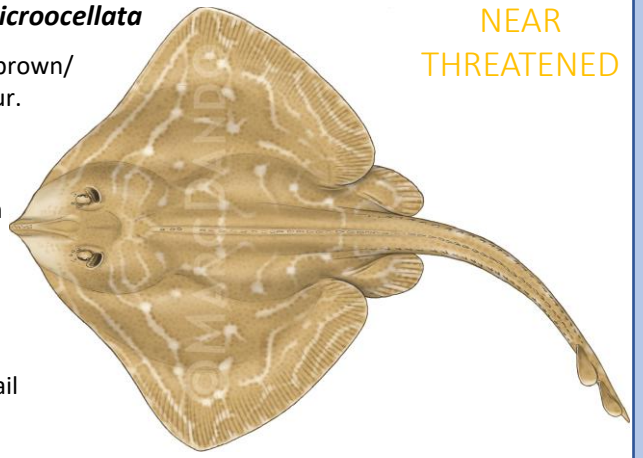
Underside: White with grey edges

Max total length M: 65 cm F: 75 cm

LEAST CONCERN

Small-eyed ray - *Raja microocellata*

NEAR THREATENED



Dorsal side: Typically pale brown/ greyish olive green in colour. Pale stripes and blotches

Row of ~50 central thorns extending to first dorsal fin

Noticeably small eyes; thorns present around eye

Underside: Pale/white

Body slightly longer than tail

Max total length 90 cm

Blonde ray - *Raja brachyura*

NEAR THREATENED

Dorsal side: Pale/greyish brown with many small dark spots up to wing edge, and few, larger, symmetrical pale spots

Females/juveniles have central row of 40-45 thorns; males have gaps in thorn row

Underside: Pale/white

Relatively short snout compared to other species

Max total length 120 cm

Spotted ray - *Raja montagui*

Dorsal side: Smooth. Greyish brown to yellow with multiple dark spots; do not reach wing edge, ring of dark spots on wings resembling an eye

Row of 20-50 thorns running from nape to first dorsal fin. 1-2 interdorsal thorns

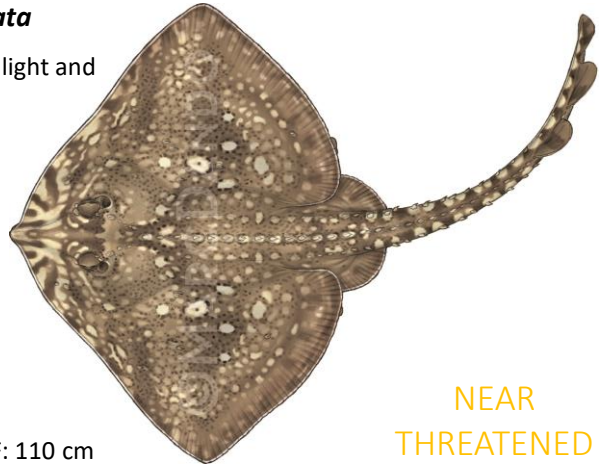
Underside: White with dark edges

Broad wings; tips almost at right angles

Max total length 80 cm

LEAST CONCERN

Thornback ray - *Raja clavata*



Dorsal side: Brown-grey with light and dark blotches. Small thorns throughout

Alternating light and dark bands present on tail

Row of 30-50 central thorns; large individuals have lateral rows of hooked thorns

Underside: Cream with grey posterior/back edges

Max total length M: 105 cm F: 110 cm

NEAR THREATENED

Undulate ray - *Raja undulata*

ENDANGERED

Dorsal side: Greenish yellow/brown; undulating dark bands lined with white spots. Other large white spots

Row of 20-55 central thorns running from nape to first dorsal fin. Some females have adjacent rows. Up to 2 interdorsal thorns

Underside: White with grey edges

Front edge of discs has a waved/ undulated appearance

Max total length 115 cm

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