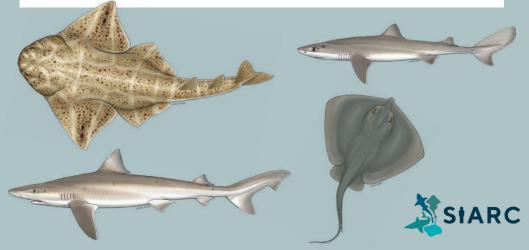
POCKET GUIDE

SHARKS, SKATES & RAYS WALES





DELIVERY PARTNERS















COLLABORATIVE PARTNERS



































FUNDERS





Mewn Partneriaeth à Llywodraeth Cymru In Partnership with Welsh Government



Heritage Fund







INTRODUCTION

Project SIARC (Sharks Inspiring Action and Research with Communities)

The marine environment in Wales is teeming with life; beneath the often-murky waters are little understood species of shark, skate and ray (elasmobranchs) of conservation importance. Project SIARC is catalysing links between fishers, researchers, communities and government to

collaborate and safeguard elasmobranchs and support a green recovery in Wales. It is a multidisciplinary project led by Zoological Society of London and Natural Resources Wales, and completed in partnership with five delivery partners and 15 collaborative partners.

WORKING WITH FISHERS

Project SIARC works closely with recreational, commercial and charter boat fishers across Wales, building on relationships developed through Angel Shark Project: Wales. Fishers in Wales have detailed knowledge of their seas and are stewards of elasmobranch conservation, providing vital data on current and historic encounters. Working together we can better understand and improve elasmobranch conservation to safeguard the future of these species and sustainable fishing in Wales.

This guide has been developed in association with the Shark Trust and is adapted from their *Pocket Guide to Sharks, Skates & Rays of the British Isles*. It will be shared with fishers who are part of Project SIARC, in collaboration with the Angling Cymru Sea Anglers and the Welsh Fishermen's Association.









HOW TO USE THIS GUIDE

Divided into sharks and skates/rays, the species cards are listed in alphabetical order by scientific name. We encourage you to arrange the pages in the order that serves you best (e.g. by species most commonly encountered).

KEY ID FEATURES:

Key external characteristics including shape, colour, thorns and distinctive features.

COMMON NAMES:

The most widely used name is given in bold, followed by additional common names.

DEPTH RANGE:

The maximum known depth range for this species.

SIZE & BIOLOGY:

Features size at birth and maturity and details of gestation/egg deposition (where known).

MANAGEMENT RELEVANT TO WALES:

A broad summary of whether any regulation/ legislation is applicable in Wales.

SIMILAR SPECIES:

Commonly confused species.

FAO CODE:

Three letter code unique to each species.



IUCN RED LIST STATUS:

Conservation statuses according to Global and European assessments.

MAXIMUM TOTAL LENGTH:

Measured from the tip of the snout to the tip of the tail/wing tip to wing tip.



MANAGEMENT MEASURES

In Wales, many shark species are subject to management under the European Union (Withdrawal) Act 2018, Regional Fisheries Management Organisations (RFMO) regulation, and national legislation e.g. the Wildlife and Countryside Act 1981.

All sharks caught by UK and EU fishing vessels are subject to Regulation (EU) 605/2013 (amending 1185/2003) which requires that fins remain naturally attached to the body until first point of landing, easing enforcement and aiding identification.

Commercial fisheries: The Shark Trust's Fisheries Advisories are updated annually and provide the most current legislative information; they are available at www.sharktrust.org/advisories.

Recreational fishers: While some species have management covering recreational activities, we encourage all fishers to follow best-practice guidance to safely release elasmobranchs as quickly as possible, to minimise stress on the animal.

Contact Natural Resources Wales or email **siarc@zsl.org** for additional details.

CONSERVATION STATUSES

IUCN RED LIST CATEGORIES

NE

Not Evaluated: not yet evaluated against IUCN Red List criteria



Data Deficient: inadequate information exists to make an assessment



Least Concern: low risk of extinction.

NT

Near Threatened: close to qualifying for a threatened category in the near future.

VU

Vulnerable: high risk of extinction in the wild.

EN

Endangered: very high risk of extinction in the wild.

CR

Critically Endangered: extremely high risk of extinction in the wild



Best practice guide to safely release Angelsharks if accidentally caught

Angelsharks should not be targeted, but this guidance has been developed with fishers to reduce mortality if they are accidentally caught. It can also be used for other shark, skate and ray species.

Unhooking

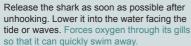




Record the size and sex of the shark. Male sharks have two claspers (long appendages) behind the pelvic fin. This helps us to understand population structure. Unhook the Angelshark in the water on the side of the boat. If you have to cut the leader, cut it as close to the hook as possible. Water



Releasing





Advice on fishing tackle

supports the internal organs.

Always use barbless non-stainless circle hooks (or a circle hook with the barb flattened down). To reduce the chance of gut hooking so that it is easier to unhook the shark. Use a strong line. To reduce the likelihood of the line snapping and the shark trailing gear.



Handling (ONLY if necessary)

Never hold the shark just by its tail, its fins or by the gills; you need to support the underside of the shark. To support the internal organs and reduce chance of injury.



Landing aboard the boat (ONLY if necessary)

All interaction with sharks should be minimised. If you need to land aboard the boat to unhook safely, use a large landing net. Never use a gaff. To support the internal organs and reduce chance of injury.

Place it on a cool, wet, soft surface (e.g. a wet towel). Place a towel soaked in seawater over the eyes. To keep it calm and stop thrashing.

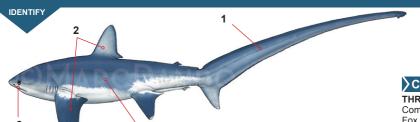


Reporting

Report your accidental capture on www.angelsharkproject.com/map

Siarc Thresher Shark Alopias vulpinus





COMMON NAMES

THRESHER SHARK, Common Thresher Shark, Fox Shark.

DEPTH RANGE

From surface to ~650m.

KEY ID FEATURES

- Upper caudal lobe greatly elongated, as long as rest of body.
- 2 Large first dorsal and pectoral fins.
- 3 Pointed snout with small, arched mouth.
- 3 Bluish grey to dark grey on top. White below.

SIZE & BIOLOGY

Birth: 120–150cm. **Matures**: ♀ 260–465cm; ♂ 260–420cm. **Gestation period**: Litters of 2–6 pups born in spring/ summer after a nine month gestation.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited to target, however can be retained if caught as bycatch (See Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Bigeye Thresher Shark Alopias superciliosus























BASKING SHARK. Bone Shark, Elephant Shark.

DEPTH RANGE

From surface to >1.200m.

KEY ID FEATURES

- Large gill slits almost encircle head.
- Pointed bulbous snout (elongated in juveniles).
- Huge subterminal mouth.

SIZE & BIOLOGY

Birth: 150-200cm.

Matures: ♀ 690–980cm: ♂ 400–750cm.

Gestation period: Est. 1–3.5 years; litter size 1–6 pups.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (See Fisheries Advisory).

Recreational fishers: Prohibited species (Wildlife and Countryside Act 1981).

SIMILAR SPECIES

Porbeagle Shark Lamna nasus

Greenland Shark Somniosus microcephalus













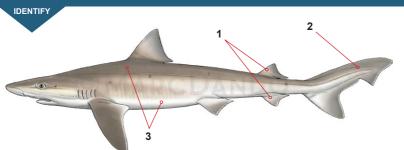












DEPTH RANGE

KEY ID FEATURES

- 1 Small second dorsal fin, same size as anal fin and directly above it.
- 2 Very large caudal lobe.
- Blue-grey to light brown above. Pale to white below.

SIZE & BIOLOGY

Birth: 30-40cm

Matures: ♀ 130–185cm; ♂ 120–170cm (varies regionally).

Gestation period: ~12 months. Litters of 6-52 pups.

Globa

Europe

195cm

Age at maturity: $9 \cdot 11 - 17$ years; $\sqrt{9} \cdot 9 - 13$ years.











TOPE. School Shark.

From surface to 470m

Commercial fisheries: Prohibited species for longliners (See Fisheries Advisory). Recreational fishers: Prohibited to fish for Tope other than with rod and line - those fishing from boats must not land their catches ashore (Tope (Prohibition of Fishing Order) (Wales) 2008).

MANAGEMENT RELEVANT TO WALES

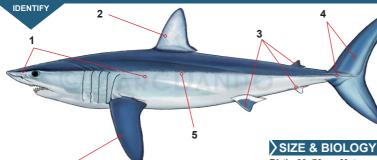
SIMILAR SPECIES

Spiny Dogfish Squalus acanthias Starry Smoothhound Mustelus asterias Common Smoothhound Mustelus mustelus



Shortfin Mako Isurus oxyrinchus





Seasonal -

warmer months

COMMON NAMES

SHORTFIN MAKO, Mako, Blue Pointer

DEPTH RANGE

From surface to 890m.

Birth: 60–70cm. **Matures**: ♀ 270–300cm: ♂ 195cm. Gestation period: Litters of 4-25 pups after a 15-18 month gestation period.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Retention is prohibited (See Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Porbeagle Lamna nasus Blue Shark Prionace glauca

KEY ID FEATURES

- Streamlined body with long, pointed snout.
- Large first dorsal and pectoral fins.
- Small second dorsal, anal and pelvic fins.
- Crescent shaped caudal fin with single keel.
- 5 Metallic blue on top, white below, with distinct demarcation line along flank.











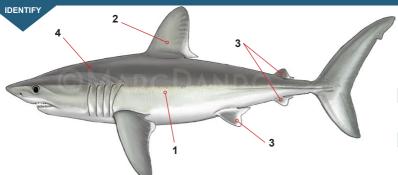












Seasonal – warmer months

COMMON NAMES

PORBEAGLE, Atlantic Mackerel Shark.

DEPTH RANGE

From surface to 1,800m. Primarily to 200m.

KEY ID FEATURES

- Large, stocky tapered body.
- 2 Large first dorsal fin with white free rear tip.
- 3 Very small second dorsal, pelvic and anal fins.
- 4 Dark blue to grey on top, pale below.

SIZE & BIOLOGY

Birth: 60–80cm. **Matures**: ♀ 245cm; ♂ 195cm. **Gestation period**: Litters of 1–5 pups after a 8–9 month gestation. Birth occurs in spring/summer.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (See Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Shortfin Mako Shark Isurus oxyrinchus











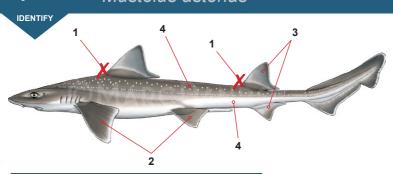






Starry Smoothound Mustelus asterias





COMMON NAMES

STARRY SMOOTHHOUND. Stellate Smoothhound. Aristotle's Shark

DEPTH RANGE

From surface to ≥100m

KEY ID FEATURES

- No dorsal spines present.
- Large pectoral and pelvic fins.
- Second dorsal fin much larger than anal fin.
- Grev to grev-brown dorsally. Rows of white spots may be present on flanks. White below.

SIZE & BIOLOGY

Birth: 28–32cm. **Matures**: ♀ 83–91cm: ♂ 72–85cm. Gestation period: Litters of 2-25 pups in summer after a gestation period of ~12 months.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. Recreational fishers: No species-specific management.

SIMILAR SPECIES

Common Smoothhound Mustelus mustelus Tope Galeorhinus galeus Spiny Dogfish Squalus acanthias













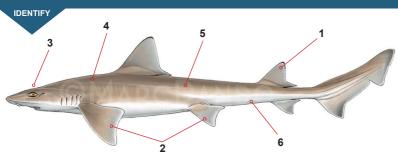






Common Smoothound Mustelus mustelus





COMMON NAMES COMMON SMOOTHHOUND.

Grev Mouth Dog. Common Houndshark, Smooth Dogfish, Sweet William

DEPTH RANGE

Shallows to at least 350m

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. Recreational fishers: No species-specific management.

SIMILAR SPECIES

Starry Smoothhound Mustelus asterias Tope Galeorhinus galeus Spiny Dogfish Squalus acanthias

KEY ID FEATURES

- Second dorsal fin much larger than anal fin.
- Moderately large pectoral and pelvic fins.
- Large, close set eves.
- Uniform grey to grey brown dorsally.
- No white spots, some specimens with dark spots.
- White ventrally.

SIZE & BIOLOGY

Birth: 39cm. **Matures**: ♀ 80cm; ♂ 70–74cm Gestation period: Litters of 4-15 pups after a 10-11 month gestation period.











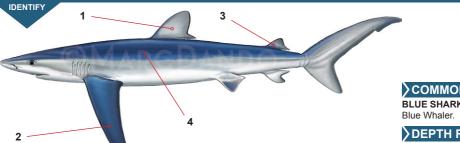












BLUE SHARK, Blue Dog,

DEPTH RANGE

From surface to 1.160m.

KEY ID FEATURES

- First dorsal fin set back from pectoral fins.
- Long, curved pectoral fins.
- 3 Second dorsal fin equal in size to, and directly above anal fin
- 4 Dark blue on top, metallic blue on flanks and white below.

SIZE & BIOLOGY

Birth: 35–44cm. **Matures**: ♀ 221cm; ♂ 182–281cm. Gestation period: 9-12 months; litters size 4-135 pups (avg. 35).

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Bycatch quota allowance (See Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Shortfin Mako Shark Isurus oxyrinchus Tope Galeorhinus galeus













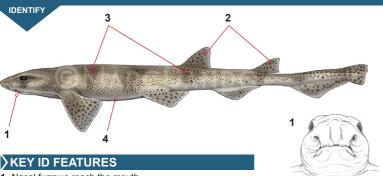






Smallspotted Catshark Scyliorhinus canicula





COMMON NAMES

SMALLSPOTTED CATSHARK, Lesser Spotted Dogfish, Doggie.

DEPTH RANGE

From surface to at least 300m, primarily to 100m.

- Nasal furrows reach the mouth.
- 2 Second dorsal fin smaller than the first
- 3 Creamy beige with numerous small dark spots and occasionally scattered white spots on top, sometimes 7-8 dusky saddles visible.
 - Cream below

SIZE & BIOLOGY

Birth: 9–10cm. **Matures**: \$\overline{9}\$ 52–65cm: \$\overline{9}\$ 49–55cm. Gestation period: Oviparous, eggcases primarily laid November to July. Incubation periods of 5–11 months reported.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. Recreational fishers: No species-specific management.

SIMILAR SPECIES

Nursehound Scyliorhinus stellaris Blackmouth Catshark Galeus melastomus















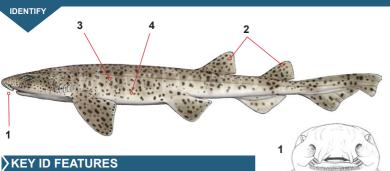






Nursehound Scyliorhinus stellaris





COMMON NAMES

NURSEHOUND, Huss, Bull Huss, Greater Spotted Dogfish.

DEPTH RANGE

From 20m to 125m.

THE TEATORES

- 1 Nasal furrows do not reach the mouth.
- 2 Second dorsal fin smaller than first.
- 3 Creamy brown dorsally, numerous large and small dark brown spots, sometimes interspersed with white spots. 7–8 saddles sometimes visible across back.
- 4 White below.

SIZE & BIOLOGY

Birth: 16cm.

Gestation period: Oviparous, eggs more commonly laid in spring/summer; incubation period up to 9 months.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. **Recreational fishers**: No species-specific management.

SIMILAR SPECIES

Smallspotted Catshark Scyliorhinus canicula Blackmouth Catshark Galeus melastomus









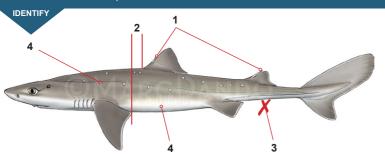












SPURDOG. Spiny Dogfish. Piked Dogfish.

DEPTH RANGE

From surface to 1.446m.

KEY ID FEATURES

- Large, ungrooved dorsal spines.
- First dorsal fin originates behind pectoral fin rear tips.
- No anal fin.
- Grev to bluish grev on top with row of white spots on flanks. Pale below.

SIZE & BIOLOGY

Birth: 18–30cm. **Matures**: ♀ 66–82cm; ♂ 52–70cm. Age at maturity: 10-20 years. Max. age est: 30 years. Gestation period: 18-24 months. Litters of 1-32 pups.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (Exemptions apply. See Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Tope Galeorhinus galeus Starry Smoothhound Mustelus asterias Common Smoothhound Mustelus mustelus











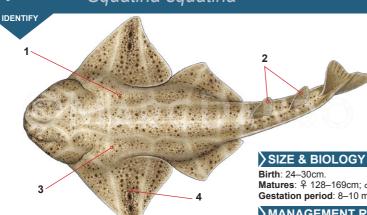






Angelshark Squatina squatina





COMMON NAMES

ANGELSHARK. Monkfish.

DEPTH RANGE

Shallows to 150m

Matures: ♀ 128–169cm: ♂ 80–132cm.

Gestation period: 8-10 months. Litters of 7-25 recorded.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (See Fisheries

Advisorv).

Recreational fishers: Prohibited species (Wildlife and

Countryside Act 1981).

SIMILAR SPECIES

None in region.



dark blotches. 4 Broad pectoral fins.

KEY ID FEATURES

Broad, flattened body.

Dorsal fins set back on tail.





Top-side grey to red-brown with small white spots and





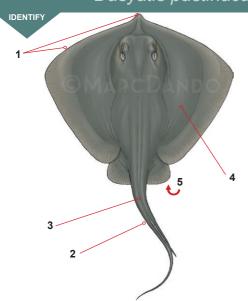






Common Stingray Dasyatis pastinaca





COMMON NAMES

COMMON STINGRAY. Blue Stingray.

DEPTH RANGE

Shallows to 200m, most commonly to 60m.

KEY ID FEATURES

- Short snout with straight leading edges of disc.
- 2 Long, thin tail up to 1.5 times the length of the body.
- 3 Spine on tail up to 12cm long with serrations.
- 4 Dorsal surface uniform dark brown-grey to olive.
- 5 Ventral surface white with dark margins.

SIZE & BIOLOGY

Birth: 12cm.

Matures: ♀ 38–41cm: ♂ 30–31cm.

Gestation period: ~4 months. Litters of 4-9 pups.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. Recreational fishers: No species-specific management.

SIMILAR SPECIES

Pelagic Stingray Pteroplatytrygon violacea













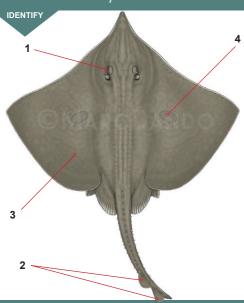






Blue Skate Dipturus batis





COMMON NAMES

BLUE SKATE. Common Skate.

DEPTH RANGE

600m, most commonly ~100m.

KEY ID FEATURES

- 1 Iris of eye pale yellow.
- 2 Two small dorsal fins with short space between them.
- 3 Top-side brownish, often with pale spots and streaks.
- 4 Oval eyespot on inner wings with yellowish outer margin and darker centre

SIZE & BIOLOGY

Birth: 21cm. **Matures**: ♀ 123cm: ♂ 115cm.

Gestation period: Oviparous, eggcases laid in spring/summer.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (see Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Flapper Skate Dipturus intermedius White Skate Rostroraja alba











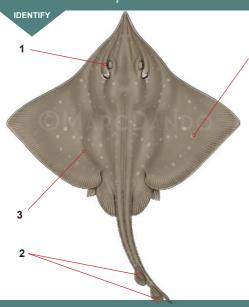






Flapper Skate Dipturus intermedius





COMMON NAMES

FLAPPER SKATE, Common Skate. Previously known as Blue Skate prior to recognition of two species.

DEPTH RANGE

600m, most commonly ~200m.

>KEY ID FEATURES

- 1 Iris of eye olive-green.
- 2 Two small dorsal fins with long space between them.
- 3 Top-side dark olive-green with pale spots, becoming grevish brown with growth.
- 4 Circular markings on wings made up of grouped pale spots.

SIZE & BIOLOGY

Birth: 29cm. Matures: ♀ 197cm; ♂ 185cm. Gestation period: Oviparous, eggcases laid in spring/summer.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Blue Skate *Dipturus batis* White Skate *Rostroraja alba*













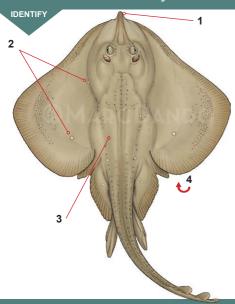






Sandy Ray Leucoraja circularis





COMMON NAMES

SANDY RAY. Sandy Skate.

DEPTH RANGE

From 70 to 800m

KEY ID FEATURES

- 1 Short snout with bluntly angled tip.
- 2 4-6 symmetrical creamy spots on each wing.
- 3 Top-side light brown (sandy) to red brown.
- 4 Under-side white.

SIZE & BIOLOGY

Matures: ♀ >90cm; ♂ 73cm.

Gestation period: Oviparous; females lay their eggs from August to November.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Quota applies. Must report to species level when caught (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Shagreen Ray Leucoraja fullonica, Cuckoo Ray Leucoraja naevus, Small-eyed Ray Raja microocellata















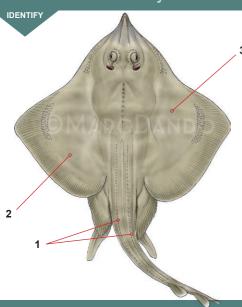






Shagreen Ray Leucoraja fullonica





COMMON NAMES

SHAGREEN RAY. Fuller's Rav.

DEPTH RANGE

From 30 to 550m

KEY ID FEATURES

- 1 2 rows of ~50 large thorns either side of the midline to first dorsal fin
- 2 Top-side solid ash/grev brown.
- Inconspicuous darker lines may be visible across body.

SIZE & BIOLOGY

Matures: ♀ >82cm: ♂ 75–82cm

Gestation period: Oviparous, little else known.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Quota applies. Must report to species level when caught (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Sandy Ray Leucoraja circularis Small-eved Ray Raia microocellata











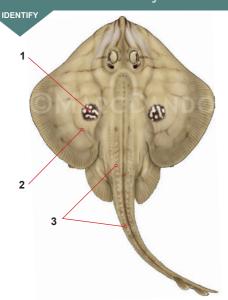












CUCKOO RAY. Cuckoo Skate.

DEPTH RANGE

From 30 to 500m, most commonly to 200m.

KEY ID FEATURES

- 1 Top-side light grey to brown with large black and yellow eyespot on each wing.
- 2 Dorsal surface prickly/entirely spinulose.
- 3 3–5 rows of thorns along tail, joining 2 median rows of thorns on trunk.

SIZE & BIOLOGY

Birth: 9–12cm. **Matures**: ♀ 53–60cm; ♂ 50–57cm. **Gestation period**: Oviparous, females produce ~100 eggcases throughout the year.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Quota applies. Must report to species level when caught (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Spotted Ray Raja montagui, Sandy Ray Leucoraja circularis













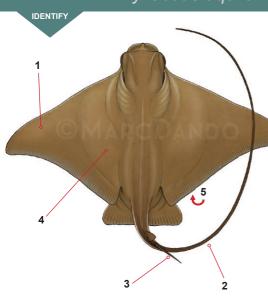






Common Eagle Ray Myliobatis aquila





COMMON NAMES

COMMON EAGLE RAY, Bull Ray, Sea Eagle, Whip-ray, Toad-fish.

DEPTH RANGE

From surface to 100m.

KEY ID FEATURES

- 1 Wide body with sharply angled wings.
- 2 Tail 2–2.5 times length of body (when undamaged).
- 3 Serrations on venomous spine.
- 4 Dorsal surface uniformly dusky bronze to almost black with no markings.
- 5 Ventral surface white with darker margins.

SIZE & BIOLOGY

Birth: <19cm DW. **Matures**: ♀ 43–60cm DW; σ³ 32–40cm DW. **Gestation period**: 6–8 months. Litters of 3–7 pups.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. **Recreational fishers**: No species-specific management.

SIMILAR SPECIES

None in region.









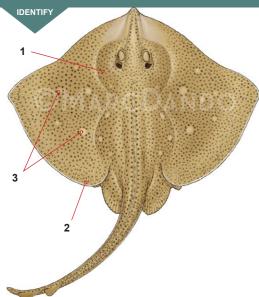












BLONDE RAY. Roker.

DEPTH RANGE

From 0 to 900m, most commonly to <150m.

>KEY ID FEATURES

- 1 Top-side pale brown to grey-brown covered in dark spots.
- 2 Spots extend to very edge of wings.
- 3 Larger, paler spots often scattered symmetrically on disc.

SIZE & BIOLOGY

Birth: 16-18cm. Matures: 80-90cm.

Gestation period: Oviparous, eggcases laid between February and August. Incubation lasts ~7 months.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Quota applies. Must report to species level when caught (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Spotted Ray Raja montagui, Thornback Ray R. clavata, Small-eyed Ray R. microocellata, Undulate Ray R. undulata











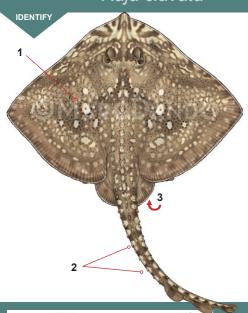






SIARC Thornback Ray Raja clavata





COMMON NAMES

THORNBACK RAY, Thornback Skate, Roker,

DEPTH RANGE

From 10 to 300m

KEY ID FEATURES

- 1 Top-side dark brown to light grey with marbled pattern. Highly variable patterning and colouring.
- 2 Tail with alternating light and dark crossbars.
- 3 Under-side white with dark margins.

SIZE & BIOLOGY

Birth: 10–13cm. **Matures**: ♀ 60–85cm; ♂ 60–77cm. Gestation period: Oviparous, females produce ≤150 eggcases annually.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Quota applies. Must report to species level when caught (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Blonde Ray Raja brachyura Spotted Ray Raja montagui













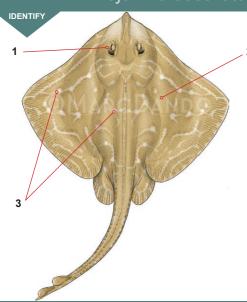






Small-eyed Ray Raja microocellata





COMMON NAMES

SMALL-EYED RAY, Painted Ray.

DEPTH RANGE

From surface to 100m.

KEY ID FEATURES

- Noticeably small eyes.
- 2 Top-side pale sandy brown to olive grey.
- 3 Light bands running almost parallel to margins of disc with lighter streaks and spots in regular patterns.

SIZE & BIOLOGY

Birth: 10–13cm. **Matures**: ~58cm. **Gestation period**: Oviparous, females produce 54–61 eggcases annually.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Should be immediately released if caught in ICES area 7a (see Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Sandy Ray *Leucoraja circularis*, Shagreen Ray *L. fullonica*, Blonde Ray *Raja brachyura*, Undulate Ray *R. undulata*









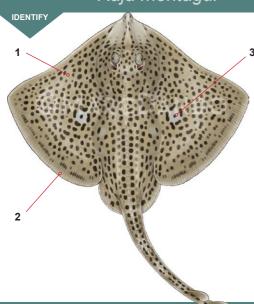












SPOTTED RAY, Spotted Skate.

DEPTH RANGE

From 30 to 150m, rarely to 530m.

KEY ID FEATURES

- Top-side pale grey-brown to yellow.
- Numerous dark spots which do not extend to very edge of disc.
- 3 Ring of dark spots on each wing giving the appearance of an 'eyespot' sometimes present.

SIZE & BIOLOGY

Birth: 8–10cm. **Matures**: \$%\$ 49–70cm; $$\sigma^{7}$ 40–66cm$. **Gestation period**: Oviparous, \$%\$ lay 60–70 eggcases per year.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Quota applies. Must report to species level when caught (see Fisheries Advisory). Recreational fishers: No species-specific management.

SIMILAR SPECIES

Blonde Ray *Raja brachyura*, Thornback Ray *R. clavata*, Cuckoo Ray *Leucoraja naevus*













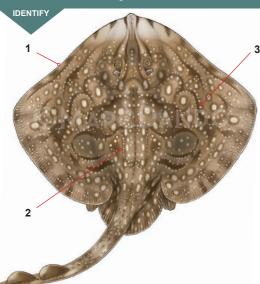






SIARC Undulate Ray Raja undulata





COMMON NAMES

UNDULATE RAY. Painted Ray.

DEPTH RANGE

200m, primarily <100m.

KEY ID FEATURES

- Undulating anterior disc margin.
- 2 Top-side greenish yellow to greyish brown.
- 3 Pattern of dark wavy bands bordered by rows of small white spots.

SIZE & BIOLOGY

Birth: 14cm. **Matures**: ? 75–84cm: 3^7 71–78cm.

Age at maturity: 9 years; 6 7.5 years.

Gestation period: Females produce ~30 eggcases annually.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Should be immediately released if caught (see Fisheries Advisory).

Recreational fishers: No species-specific management.

SIMILAR SPECIES

Blonde Ray Raja brachyura, Small-eyed Ray Raja microocellata, Spotted Ray Raja montagui









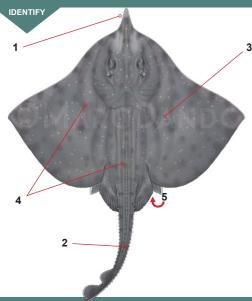












WHITE SKATE. White-bellied Skate.

DEPTH RANGE

From shallows to 400m.

KEY ID FEATURES

- 1 Long, narrow snout.
- 2 Tail slightly shorter than body.
- 3 Top-side grey-blue in adults, red-brown in juveniles.
- 4 Pattern of light and dark spots and blotches.
- 5 Under-side white with dark margins.

SIZE & BIOLOGY

Birth: 30cm. **Matures**: ♀ 130cm; ♂ 120cm.

Gestation period: Oviparous, females produce 55–158 eggcases annually. Incubation lasts ~15 months.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: Prohibited species (See Fisheries Advisory). Recreational fishers: Prohibited species (Wildlife and Countryside Act 1981).

SIMILAR SPECIES

Blue Skate Dipturus batis, Flapper Skate D. intermedius











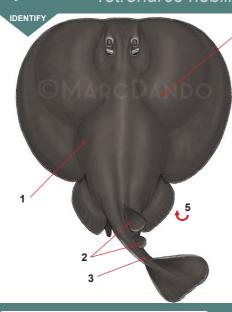






Atlantic Torpedo Ray Tetronarce nobiliana





COMMON NAMES

ATLANTIC TORPEDO RAY, Atlantic Electric Ray, Great Torpedo Ray.

DEPTH RANGE

From 0 to 925m.

KEY ID FEATURES

- 1 Round, fleshy body.
- 2 Two close-set dorsal fins.
- 3 Short, thick tail with large caudal fin.
- 4 Top-side dark grey to purple-brown.
- 5 Under-side creamy white with dark margins.

SIZE & BIOLOGY

Birth: 20cm.

Gestation period: Litters of up to 60 pups after ~12 month gestation.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. **Recreational fishers**: No species-specific management.

SIMILAR SPECIES

Marbled Torpedo Ray Torpedo marmorata













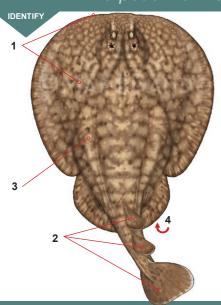




Marbled Torpedo Ray

Torpedo marmorata





COMMON NAMES

MARBLED TORPEDO RAY, Marbled Electric Ray, Numbfish.

DEPTH RANGE

From surface to 200m, most commonly 10 to 30m.

KEY ID FEATURES

- 1 Thick, rounded body with straight leading edge.
- 2 Short, thick tail with large caudal fin and two close-set dorsal fins.
- 3 Top-side brown with marbled pattern.
- 4 Under-side creamy white with darker margin.

SIZE & BIOLOGY

Birth: 10-14cm.

Matures: ♀ 40cm; ♂ 30cm.

Gestation period: ~10 months. Litters of 5–32 pups.

MANAGEMENT RELEVANT TO WALES

Commercial fisheries: No species-specific management. **Recreational fishers**: No species-specific management.

SIMILAR SPECIES

Atlantic Torpedo Ray Tetronarce nobiliana

















Project SIARC is kindly funded by Welsh Government's Nature Networks Fund, National Lottery Heritage Fund, and On the Edge











This guide was produced in August 2022

Find out more at www.projectsiarc.com



www.facebook.com/projectsiarc



www.twitter.com/projectsiarc



www.instagram.com/projectsiarc