



Dorsal View (♀)

Ventral View (♀)

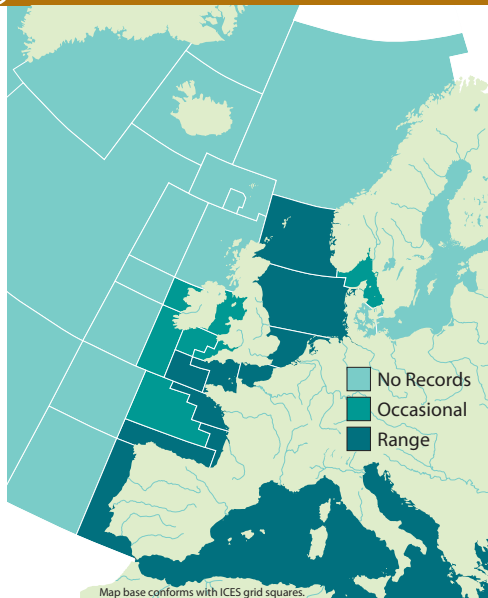
COMMON NAMES

Common Stingray, Blue Stingray, Fire Flaire, Pastenague Commune (Fr), Raya Latigo Comun (Es).

SYNONYMS

Raja pastinaca (Linnaeus, 1758), *Trygon pastinaca* (Cuvier, 1817), *Trygon vulgaris* (Risso, 1826), *Pastinaca laevis* (Gray, 1854), *Dasybatus (Dasybatus) pastinacus* (Garman, 1913).

DISTRIBUTION



The Common Stingray is found along east Atlantic coasts from southern Norway to the Canary Islands and the Azores, rarely including the Baltic Sea (Greenberg, 2008; Whitehead *et al.*, 1986). Also found throughout the Mediterranean and Black Seas (Whitehead *et al.*, 1986).

It has been suggested that records from South

DISTRIBUTION CONTINUED

Africa, Namibia and Angola are not *D. pastinaca* but a subspecies, *D. chrysonota chrysonota*. Likewise, it has been suggested that the Blue Stingray from Senegal is not *D. pastinaca* but a subspecies, *D. chrysonota marmorata*. The range of this subspecies could stretch from the Congo as far into the southern Mediterranean as Tunisia (Cowley and Compagno, 1993). *D. chrysonota* has now been accepted as a distinct species containing the two subspecies *D. c. chrysonota* and *D. c. marmorata*, effectively limiting the range of the Common Stingray from the northern Mediterranean to southern Norway (ITIS, Unknown).

APPEARANCE

- Short snout with almost straight leading edges of disc.
- Long thin tail, 1.3–1.5 times the length of the body.
- Up to 12cm long spine ~1/3 of the way along the tail.
- Spine with maximum 74 (♀)–98 (♂) serrations.
- Dorsal surface uniform grey-brown to olive.
- Ventral surface white with a wide, dark margin.
- Up to 60cm disc width (DW) and 250cm total length (TL).

The Common Stingray is the only true stingray species regularly encountered in UK waters, easily distinguishable from the Rajiformes (skates) and Torpediniformes (torpedo rays) by its long, whip-like tail, lack of dorsal fins and large, stinging spine. The tail has relatively short and deep membranous folds along the upper and lower surface, which originate at around the level of the spine (Whitehead *et al.*, 1986). It has a short snout which barely protrudes from the almost straight leading edge of the pectoral fins, the corners of which are obtuse and rounded. Inside the mouth there are 5 bulbous papillae on the lower surface (Whitehead *et al.*, 1986).

The colouration of the dorsal surface is generally solid brown but varies from grey to olive green. The ventral surface is white with a wide brown or grey margin along the edges (Whitehead *et al.*, 1986). The maximum observed disc width is 60cm and the maximum total length is 250cm, although this is unusual (IBSS, Unknown; Ferretti *et al.*, 2005). The maximum recorded age from the Mediterranean is 10 years, but captive animals of up to 21 years old have been reported (Ismen, 2003; AnAge, Unknown).

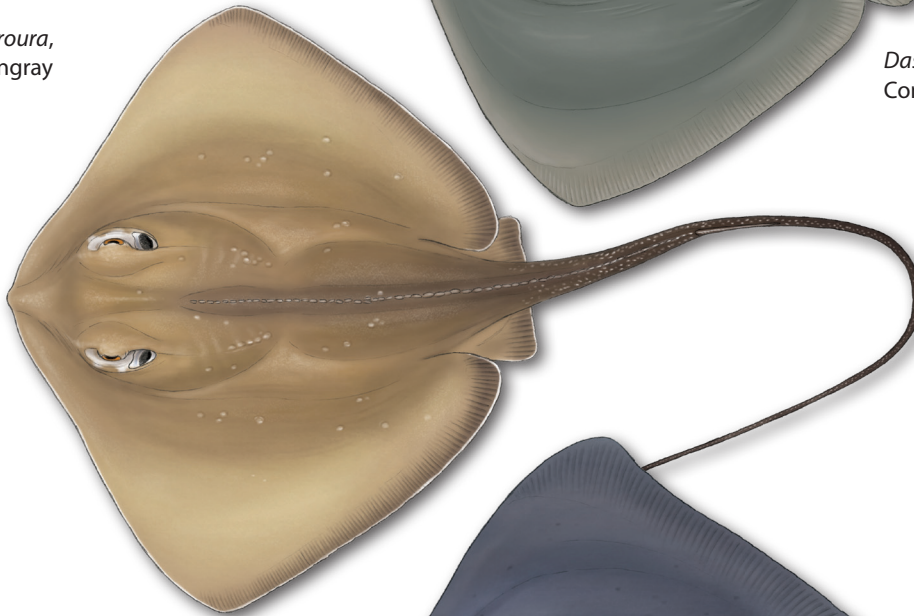
SIMILAR SPECIES

Dasyatis centroura, Roughtail Stingray

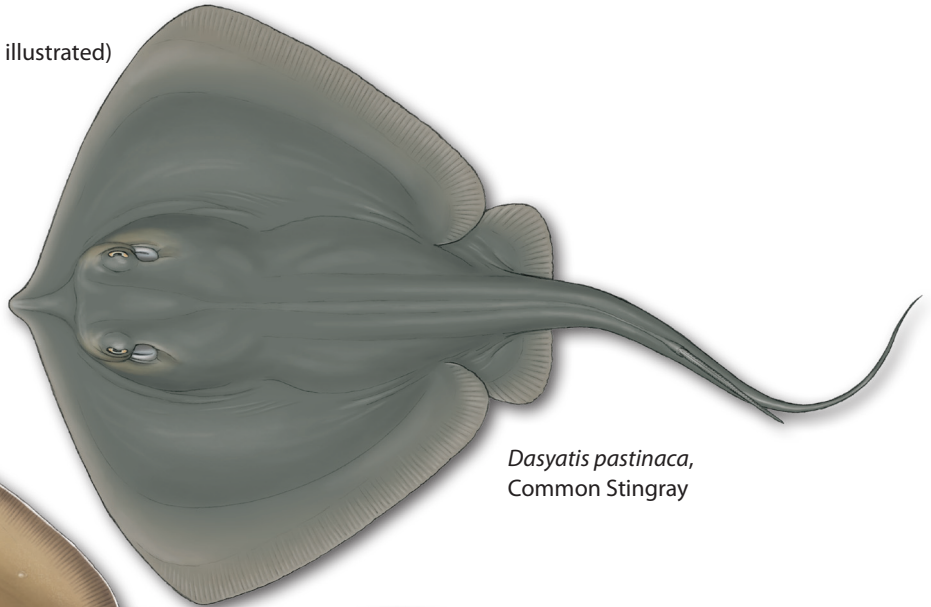
Pteroplatytrygon tortonesi, Tortonese's Stingray (not illustrated)

Pteroplatytrygon violacea, Pelagic Stingray

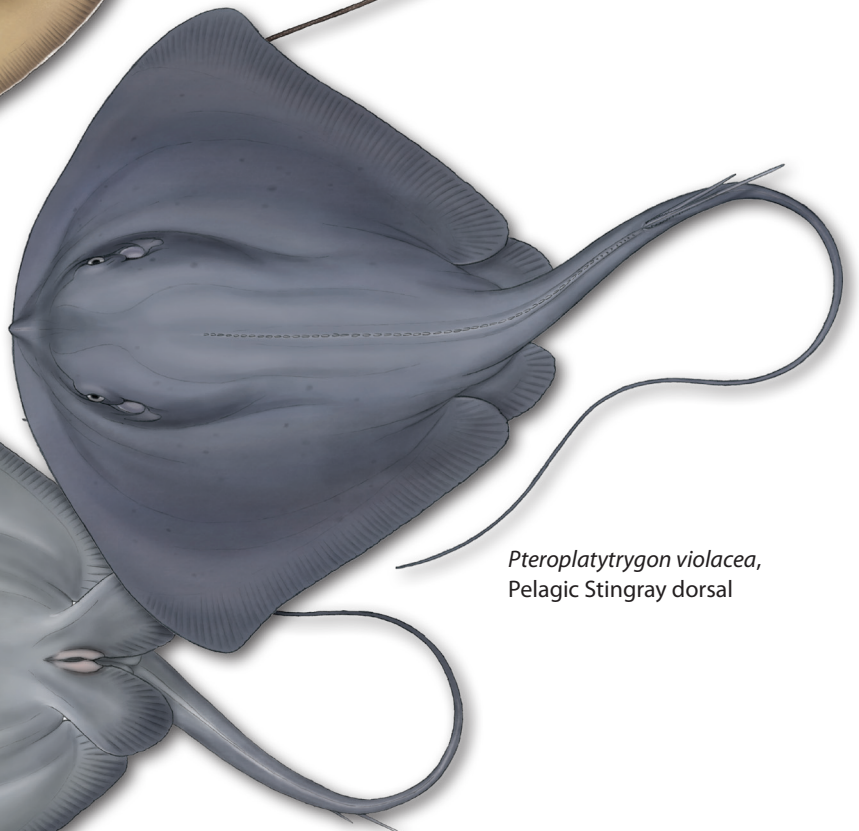
Dasyatis centroura,
Roughtail Stingray



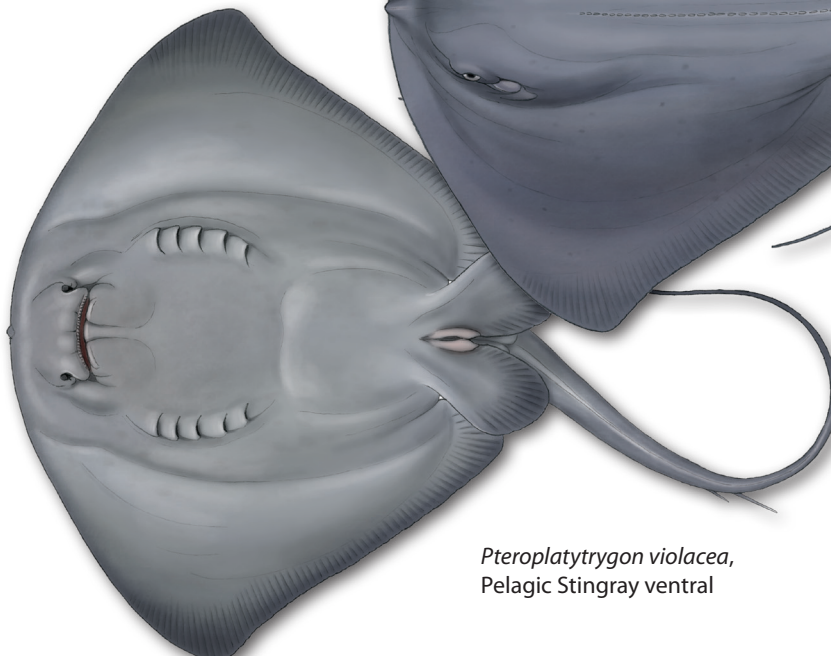
Dasyatis pastinaca,
Common Stingray



Pteroplatytrygon violacea,
Pelagic Stingray dorsal



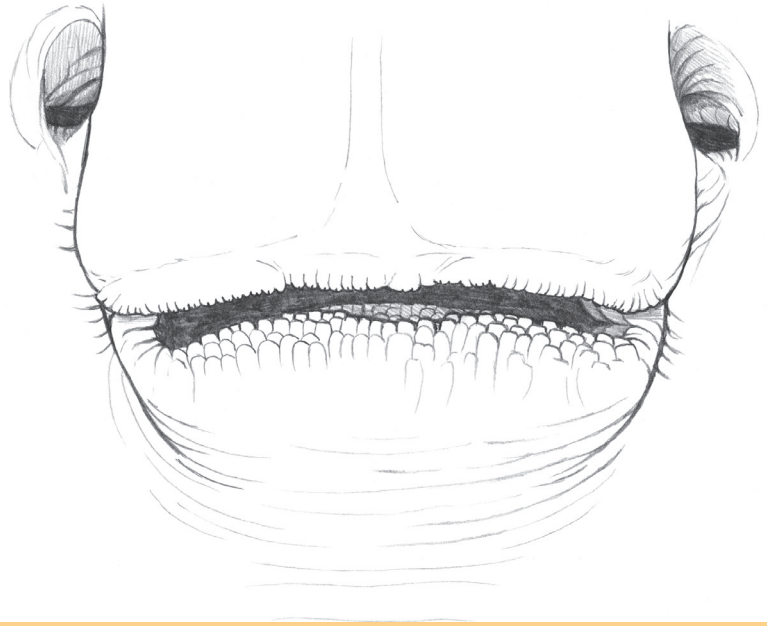
Pteroplatytrygon violacea,
Pelagic Stingray ventral



(Not to scale)

TEETH

The teeth are arranged into 28–43 rows (Van der Elst and Borchert, 1997).



ECOLOGY & BIOLOGY

HABITAT

A benthic species, the Common Stingray is encountered over sandy substrates in marine and estuarine habitats. It is found from the shallows to around 200m (650ft), but is most common to 60m (200ft) (Serena, 2005).

EGGCASE

N/A

DIET

The Common Stingray preys on a variety of bottom dwelling invertebrates, predominantly crustaceans but also small fish and molluscs (Ismen, 2003; Luna, 2009). Anglers seeking the species generally use worms, crustaceans and squid and fish strips as bait (Go Fishing, 2009).

REPRODUCTION

The Common Stingray is an ovoviparous species. Ovoviviparity, or leicithotrophic viviparity, is a means of reproduction whereby the embryos develop within the female (Martin, Unknown). They are encased in a thin membrane which is retained in the uterus and nourished by the mother. In the Dasyatidae, Gymnuridae and Myliobatidae families, this nourishment is given through thousands of long threads called trophonemata which feed 'uterine milk' (protein-rich histotroph) straight into the embryos oesophagus through the spiracles (Martin, 1994).

In the Mediterranean, male Common Stingrays mature at a total length of around 43cm with a disc width of around 22cm. Females mature slightly larger around 46cm in length and 24cm wide (Ismen, 2003). The gestation period is around 4 months and 4-7 young are born (IBSS, Unknown). In the Balearics, large numbers of Common Stingray come inshore to warm, sheltered areas where they give birth during May. In other parts of the Mediterranean, parturition is reported to occur between May and September (Ismen, 2003).

COMMERCIAL IMPORTANCE

The shallow depth distribution of the Common Stingray makes it particularly vulnerable to small-scale inshore fisheries such as the Balearic Islands trammel net fishery, where it can constitute up to 40% of the elasmobranch biomass caught (Gibson *et al.*, 2006). It can also be taken by bottom trawls, bottom-set longlines and hook-and-line fishing (Serena, 2005). Its wings are marketed smoked and dried-salted for human consumption and it is also used for fishmeal and oil (Luna, 2009).

THREATS, CONSERVATION, LEGISLATION

Little is known of the status of the Common Stingray, though its shallow depth range makes it particularly vulnerable to inshore fisheries. Populations appear to be fairly stable in the Mediterranean, although comparative trawl data from the Adriatic Sea shows a decrease in abundance. In the northeast Atlantic, populations appear to be low and it may have been extirpated from the Bay of Biscay (Gibson *et al.*, 2006).

Some Sea Fisheries Committees (SFC) around the UK have byelaws which stipulate a minimum disc width (DW) for landed skates and rays, measured from the extreme tips of the pectoral fins. The SFC's which implement these and the details are shown in the table below.

SFC	DW (cm)	Other
Cumbria	45	Cannot land wings less than 22cm in their maximum dimension
Kent & Essex	40	Cannot land wings less than 19cm in their maximum dimension
Southern	40	Cannot land wings less than 20cm in their maximum dimension
South Wales	45	Cannot land wings less than 22cm in their maximum dimension
States of Guernsey	36	

(Cumbria SFC, Unknown; Kent & Essex SFC, Unknown; South Wales SFC, Unknown; Southern SFC, 2006; NFFO, 2004)

Due to the relative rarity of their capture in UK waters however, such localised management strategies are unlikely to be significant for the conservation of wider populations (Fowler *et al.*, 2005).

IUCN RED LIST ASSESSMENT

Data Deficient (2008).

Near Threatened in northeast Atlantic.

HANDLING AND THORN ARRANGEMENT

- Handle with care.
- Large venomous spine on tail.
- In extreme cases can cause temporary paralysis (Wölfel, 1994).



REFERENCES

- ANAGE, Unknown. *Dasyatis pastinaca*. The Animal Ageing & Longevity Database. <http://genomics.senescence.info/species/>.
- COWLEY, P. D., COMPAGNO, L. J. V. 1993. A Taxonomic Re-evaluation of the Blue Stingray from Southern Africa (Myliobatiformes: Dasyatidae). *South African Journal of Marine Science*, Vol. 13 (1): 135-149 (15).
- CUMBRIA SFC. Unknown. Minimum Fish Sizes. www.cumbriasfc.org.uk.
- FERRETTI, F., MYERS, R. A., SARTOR, P., SERENA, F. 2005. Long Term Dynamics of the Chondrichthyan Fish Community in the Upper Tyrrhenian Sea. ICES. Copenhagen, Denmark.
- FOWLER, S. L., CAVANAGH, R. D., CAMHI, M., BURGESS, G. H., CAILLIET, G. M., FORDHAM, S. V., SIMPFENDORFER, C. A., MUSICK, J. A. 2005. Sharks, Rays and Chimaeras: The Status of the Chondrichthyan Fishes. IUCN SSC Shark Specialist Group. IUCN Publications. Cambridge, UK.
- GIBSON, C., VALENTI, S. V., FOWLER, S. L., FORDHAM, S. V. 2006. The Conservation Status of Northeast Atlantic Chondrichthyans; Report of the IUCN Shark Specialist Group Northeast Atlantic Regional Red List Workshop. VIII + 76pp. IUCN SSC Shark Specialist Group.
- GO FISHING. 2009. Sting Ray – *Dasyatis pastinaca*. www.gofishing.co.uk.
- GREENBERG, R. 2008. Guide to European Elasmobranches. Oceana. Madrid, Spain.
- IBSS, Unknown. Mediterranean Fishes: *Dasyatis pastinaca* (Linnaeus, 1758). <http://atlases.ibss.org.ua>.
- ISMEN, A. 2003. Age, Growth, Reproduction and Food of Common Stingray (*Dasyatis pastinaca* L., 1758) in Iskenderun Bay, the Eastern Mediterranean. *Fisheries Research*, Vol. 60 (1): 169-176.
- ITIS. Unknown. ITIS Standard Report Page: *Dasyatis chrysonota*. www.itis.gov.
- KENT & ESSEX SFC. Unknown. Minimum Fish Sizes. www.kentandessex-sfc.co.uk.
- LUNA, S. M. 2009. *Dasyatis pastinaca*: Common Stingray. Fishbase. www.fishbase.org.
- MARTIN, R. 1994. From Here to Maternity. ReefQuest Centre for Shark Research. www.elasmo-research.org.
- MARTIN, R. Unknown. Elasmobranch Reproductive Modes. ReefQuest Centre for Shark Research. www.elasmo-research.org.
- NFFO. 2004. Official Yearbook and Diary. Grimsby, UK.
- SCHWARTZ, F. J. 2007. A survey of tail spine characteristics of stingrays frequenting African, Arabian to Chagos-Maldivic Archipelago waters. *Smithiana*, Publications in Aquatic Biodiversity, Bulletin 8: 41-52.
- SERENA, F. 2005. Field Identification Guide to the Sharks and Rays of the Mediterranean and Black Sea. FAO. Rome, Italy.
- SOUTH WALES SFC. 2008. Skate and Ray – Minimum Size. www.swsfc.org.uk.
- SOUTHERN SFC. 2008. Minimum Landing Size. www.southernsfc.org.uk.
- VAN DER ELST, R., BORCHERT, P. 1997. A Guide to the Common Sea Fishes of Southern Africa. Random House Struik. Cape Town, South Africa.
- WHITEHEAD, P. J. P., BAUCHOT, M. L., HUREAU, J. C., NIELSEN, J., TORTONESE, E. (Eds.). 1986. Fishes of the Northeast Atlantic and Mediterranean. UNESCO. Paris, France.
- WÖLFL, D. 1994. The poisonous fishes of the Croatian Adriatic. *Draga*.

Text: Richard Hurst.

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Shark Trust; 2009. An Illustrated Compendium of Sharks, Skates, Rays and Chimaera. Chapter 1: The British Isles. Part 1: Skates and Rays.

Any amendments or corrections, please contact:
The Shark Trust
4 Creykes Court, The Millfields
Plymouth, Devon PL1 3JB
Tel: 01752 672008/672020
Email: enquiries@sharktrust.org

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