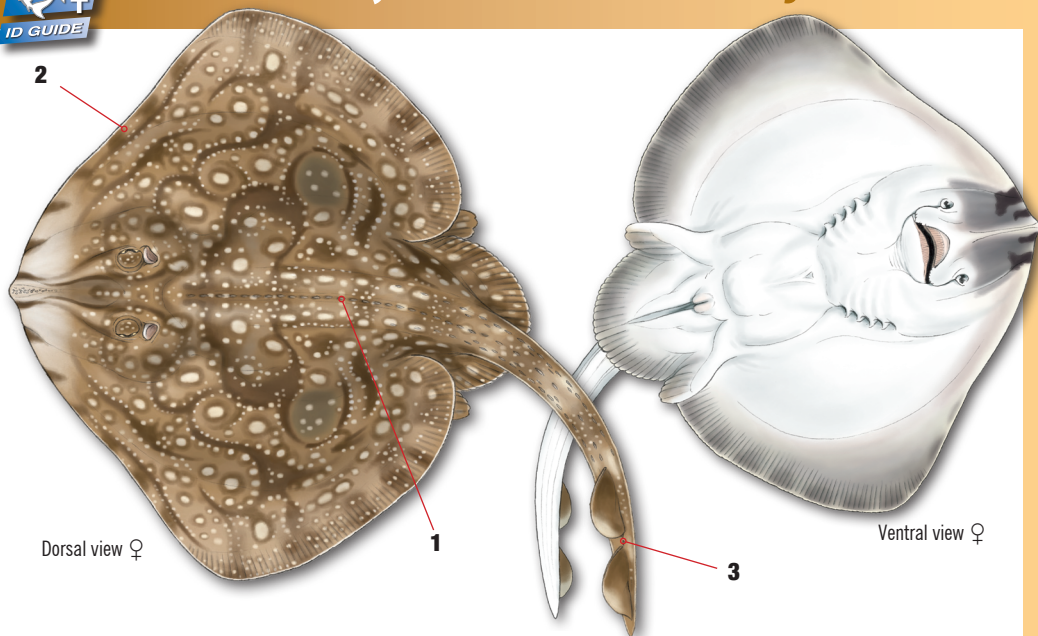


Undulate Ray

Raja undulata



Dorsal view ♀

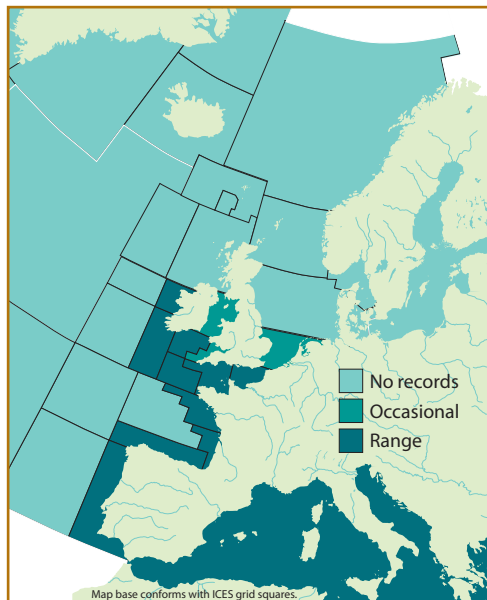
Ventral view ♀

SCIENTIFIC NAME

Raja undulata (Lacepède, 1802).

DISTRIBUTION

Senegal to the southern and western coasts of the British Isles including the western Mediterranean. East to the Canary Isles^x.



COMMON NAME

UNDULATE RAY, Painted Ray, Undulate Skate, Raie Brunette (Fr), Raya mosaica (Es), Razza ondulata (It), Golfrog (Ne).

IDENTIFICATION

- 1** 1 row of 20–55 thorns on midline in males, 3 in females.
- 2** Anterior disc margin undulates strongly.
- 3** 2 interdorsal thorns^x.

COLOUR

- Dorsal surface light yellow to black.
- Pattern of dark, wavy bands bordered by rows of white spots.
- Other larger white spots present.
- Ventral surface white with darker margins^{vi}.

BIOLOGY AND SIZE

- Born: ~14cm. Mature: 75cm ♀, 73cm ♂. Max TL: > 100cm^v.
- Juveniles feed mostly on small crustaceans, molluscs and fish. Adults specialise in crustaceans^{viii}.
- Eggs are laid from March to September^x.

SIMILAR SPECIES

- *Raja radula*, **Rough Ray**
- *Raja microocellata*, **Small-eyed Ray**
- *Raja miraletus*, **Brown Ray**
- *Raja montagui*, **Spotted Ray**

HABITAT

- Demersal, 10–200m^v.
- Most common from 10–30m, catches decreasing rapidly with depthⁱⁱⁱ.
- Prefer sandy and soft mud substrates^v.

CONSERVATION STATUS

- Vulnerable to overexploitation as they have a patchy distribution, mature at a large size and produce few young. Populations have declined but details are uncertain^{vii}.
- **Red List status:** Endangered (2008).

COMMERCIAL IMPORTANCE

- Previously a commercially important species targeted across much of its range by trawl and trammel net fisheries^v.
- In southern Portugal constituted >40% of all elasmobranchs taken by trammel netsⁱⁱⁱ.
- 2009 – Prohibition on commercial fishers retaining this species in ICES areas VI, VII, VIII & IX.

HANDLING AND THORN ARRANGEMENT

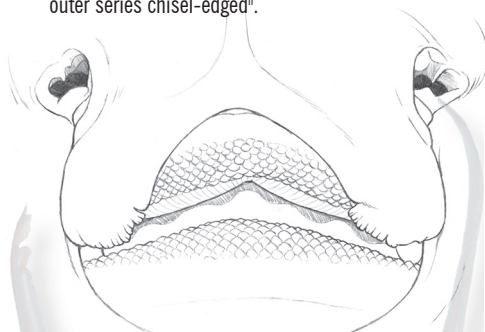
- Handle with care.
- Row of strong thorns on midline.
- Sometimes thorns between dorsal fins.

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TEETH

- 40–50 rows of teeth in upper jaw.
- Inner series wedge-shaped, middle series pointed, outer series chisel-edgedⁱⁱ.



EGGCASE



- 1 70–90mm in length (excluding horns).
- 2 45–60mm in width.
- 3 No keels^{ix}.

Similar eggcase to the Spotted Ray, *Raja montagui*.
(Eggcase shown actual size.)