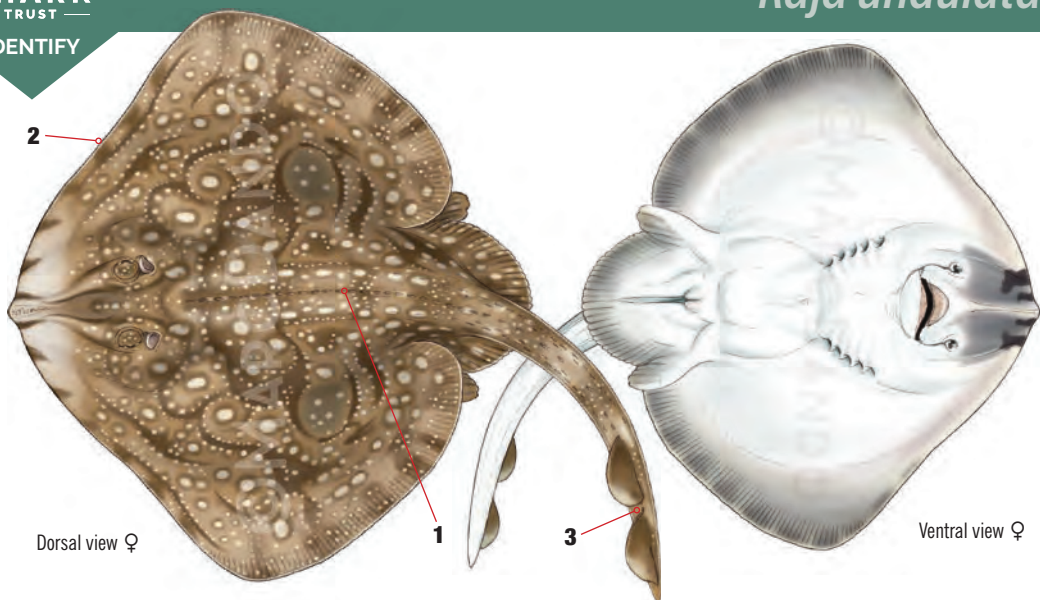


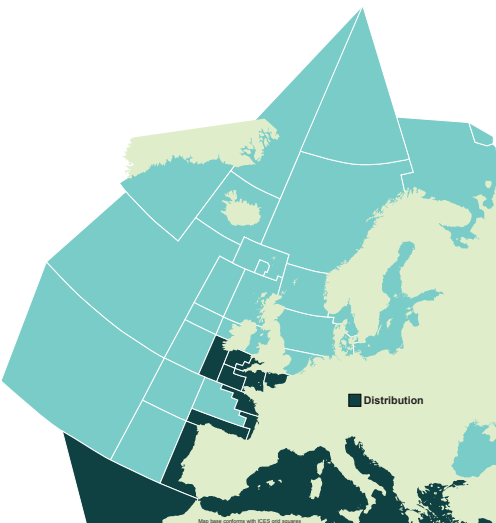


SCIENTIFIC NAME

Raja undulata Lacepède, 1802

DISTRIBUTION

Patchy distribution in the Northeast Atlantic from southwest British Isles to Senegal, including the Canary Islands, and Western Mediterranean Sea.¹⁻⁴



COMMON NAMES

UNDULATE RAY, Undulate Skate, Painted Ray, Wellenlinien-Rochen (DEU), Raya Mosaica (ESP), Raie Brunette (FRA), Razza Ondulata (ITA), Raia-curva (PRT), Golfrog (NLD).

IDENTIFICATION AND COLOUR

- 1 Median row of 20–55 thorns from nape to first dorsal fin. Parallel rows occasionally present in adult females.^{2,4}
 - 2 Undulated anterior disc margin.^{2,4}
 - 3 0–2 interdorsal thorns.^{2,4}
- Dorsal surface greenish yellow to greyish brown.^{2,4}
 - Pattern of undulating dark bands bordered by rows of small white spots.^{2,4}
 - Other larger white spots present.^{2,4}
 - Ventral surface white with grey margins.^{2,4}

SIZE AND BIOLOGY

- Birth: 14cm.
- Matures: female 75–84cm; male 71–78cm.⁹
- Max. TL: 114cm, possibly to 120cm.^{2,4,5}
- Age at maturity: female 9 years; male 7.5 years.⁶
- Oviparous, eggcases usually laid between March and September.²
- Females produce around 30 eggcases annually.⁴
- Juveniles primarily feed on small crustaceans; adults feed on larger benthic crustaceans and teleosts.²

EGGCASE

- ▶ 32–37mm wide.⁷
- ▶ 72–89mm long (excl. horns).⁷
- ▶ No lateral keels.⁷
- ▶ Similar eggcase to Spotted Ray, *Raja montagui*.⁷



SIMILAR SPECIES

Cuckoo Ray *Leucoraja naevus*

Blonde Ray
Raja brachyura

Small-eyed Ray
Raja microcellata

Spotted Ray
Raja montagui

Brown Ray *Raja miraletus* (not illus.)
Rough Ray *Raja radula* (not illus.)



TEETH



- ▶ Small teeth, inner series of teeth fairly flat and with blunt cusp, middle series pointed, outer series chisel-edged.²
- ▶ Teeth set in a mosaic pattern.²
- ▶ Upper jaw: 40–50.⁴

CONSERVATION STATUS*

- ▶ IUCN Red List: Global: Endangered (2009)
Europe: Near Threatened (2015)
Mediterranean: Near Threatened (2016)
- ▶ A medium sized skate with a relatively slow growth rate. Its discrete populations may make it susceptible to localised depletion. The degree of genetic exchange between populations is unknown.^{1,3,5,6}

COMMERCIAL IMPORTANCE

- ▶ A commercially important species in those inshore areas where it is locally common.^{1,3}
- ▶ Bycatch of demersal fisheries using beam, trawl and trammel net gear. Utilised for human consumption where retained.^{1,3}
- ▶ Caught in recreational fisheries.^{1,3}

MANAGEMENT*

- ▶ Subject to prohibitions and regulations under the CFP.

REFERENCES

- 1 Coelho *et al.* 2009.
- 2 Ebert & Stehmann. 2013.
- 3 Ellis *et al.* 2015.
- 4 Last *et al.* 2016.
- 5 Ellis *et al.* 2012.
- 6 Coelho & Erzini. 2006.
- 7 Gordon *et al.* 2016.

HABITAT

- ▶ Demersal to 200m, primarily <100m, most abundant <50m.^{2,4,5}
- ▶ Found on sandy and muddy substrates on the continental shelf and inshore in outer estuaries and lagoons.^{2,4,5}
- ▶ Locally abundant in some areas of its range e.g. English Channel.^{2,4}