Nausicaá
BOULOGNE-SUR-MER

SUMARiS

How to recognise the main species of skates and rays in the Channel and the North Sea ?

GUIDE FOR THE GENERAL PUBLIC

Interreg
2 Seas Mers Zeeën
European Regional Development Fund

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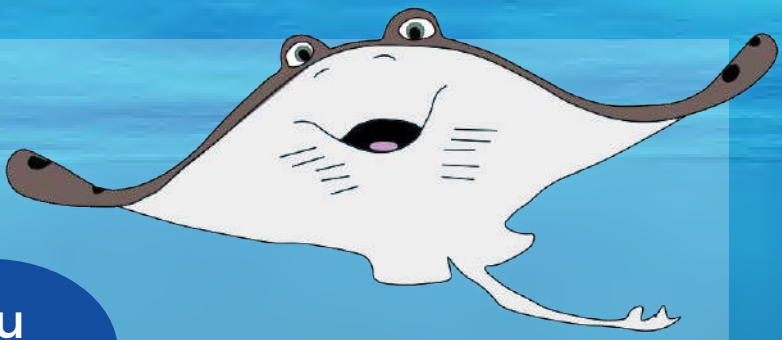

Did you know ?

In the Channel and the North Sea, there are 10 to 20 different species of rays and skates.
You can mostly find:

- Thornback ray
- Undulate ray
- Spotted ray
- Blonde ray
- Cuckoo ray
- Small-eyed ray

Most of them can be found on fishmonger stalls of this area.

Good knowledge of the anatomy, range, also degree of harvesting by the fishery is necessary to evaluate the state of the species.

Currently, this information is missing. Therefore, it is difficult for scientists and the European Union to have specific and precise advice on each of these rays and skates.

True or false?

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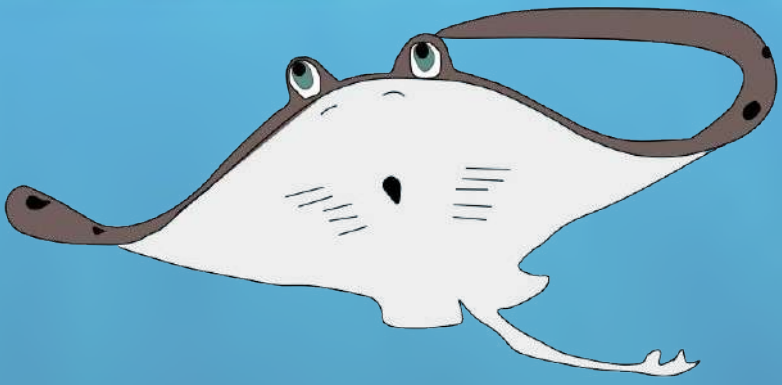


1) TRUE or FALSE?

Rays and skates are cousins of sharks.

2) TRUE or FALSE?

Rays and skates eat seaweed because they are vegetarian.

3) TRUE or FALSE?

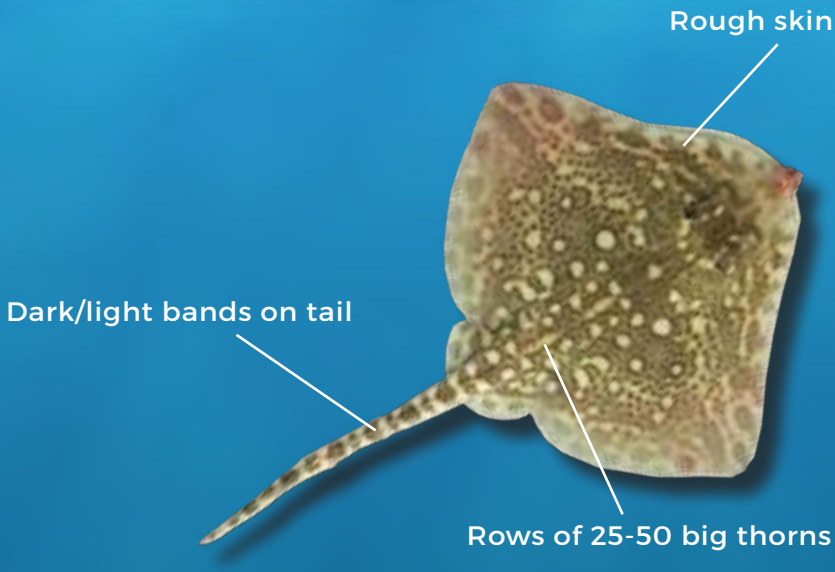
All species of rays and skates lay eggs.

1) True! Rays and skates are flat sharks. Like sharks they do not have fishbones but a skeleton made of cartilage (Elasmobranchii).

2) False! Rays and skates are carnivorous, they eat for example small fish, shrimps, crabs and molluscs.

3) True and false! Some species of rays and skates lay eggs: they are called oviparous. The hatching occurs at sea. Empty eggs called eggcases, can be found washed up on the beach. In other species, eggs hatch out in the mother's belly before birth: they are ovoviviparous. Other species have their babies growing inside, like mammals ; they are viviparous.

THORNBACK RAY

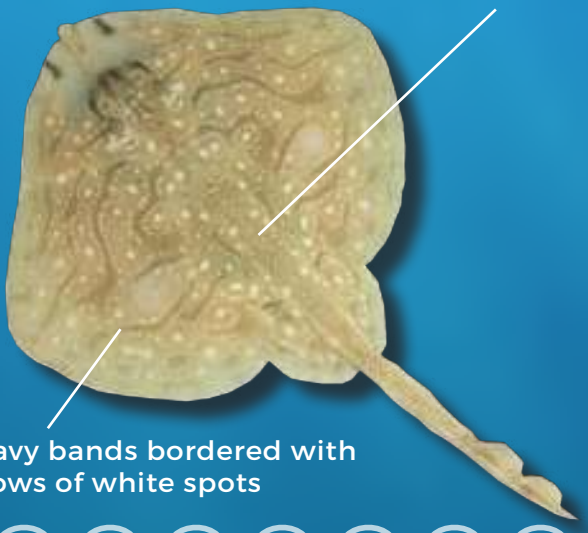


The thornback ray, *Raja clavata*, lives between 20 and 577m deep, in the Atlantic ocean (from Norway to South Africa) and in the Mediterranean sea.

EGG OF A THORNBACK RAY

*Lateral keel : Prominent ridge alongside of the body

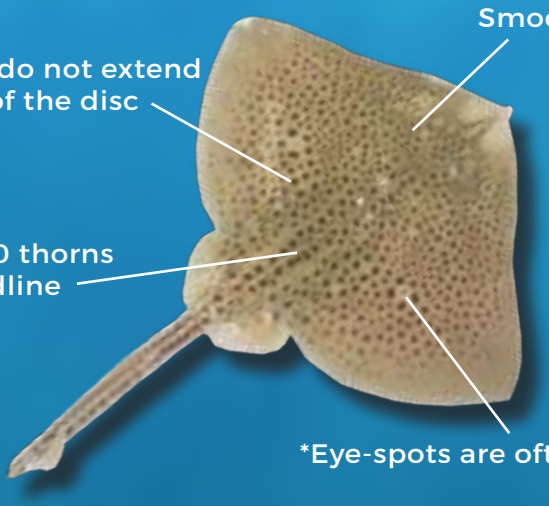
UNDULATE RAY



The undulate ray, *Raja undulata*, lives between 50 and 200m deep, in the Eastern Atlantic Ocean (from Ireland to Senegal) in the Western Mediterranean Sea.

EGG OF AN UNDULATE RAY

SPOTTED RAY

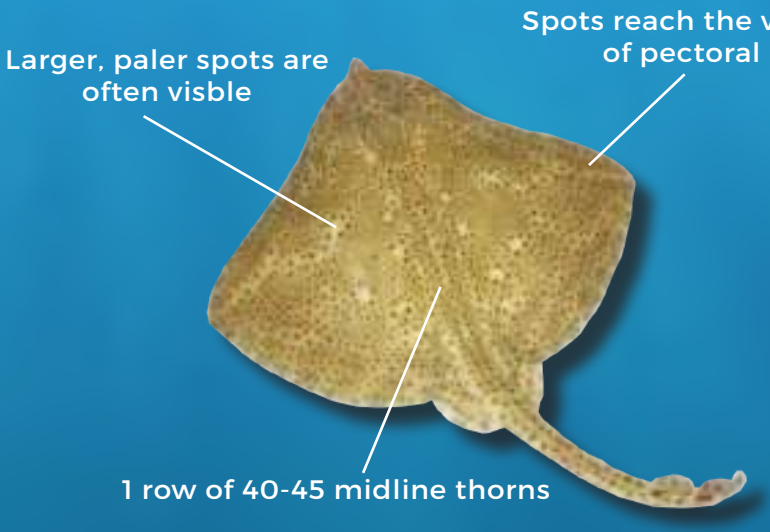


The spotted ray *Raja montagui*, lives between 20 and 345m deep, in the Atlantic Ocean (from Norway to Morocco) and in the Mediterranean Sea.

EGG OF A SPOTTED RAY

*Eye-spot = spots shaped like an eye

BLONDE RAY

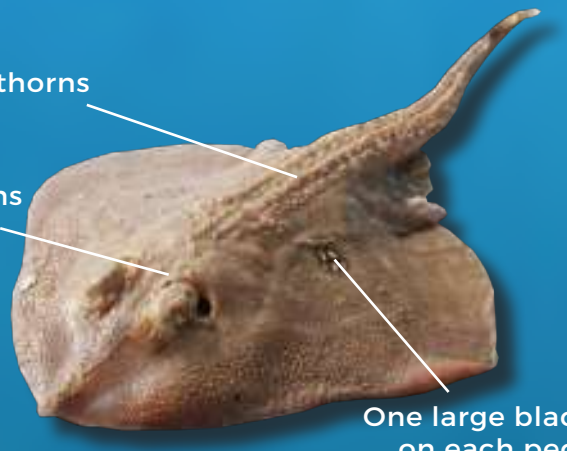


The blonde ray, *Raja brachyura*, lives between 10 and 380m deep, mainly around 40m deep, in the Atlantic Ocean (from Norway to Morocco) and in the Mediterranean Sea.

EGG OF A BLONDE RAY

*Lateral keel : Prominent ridge alongside of the body

CUCKOO RAY

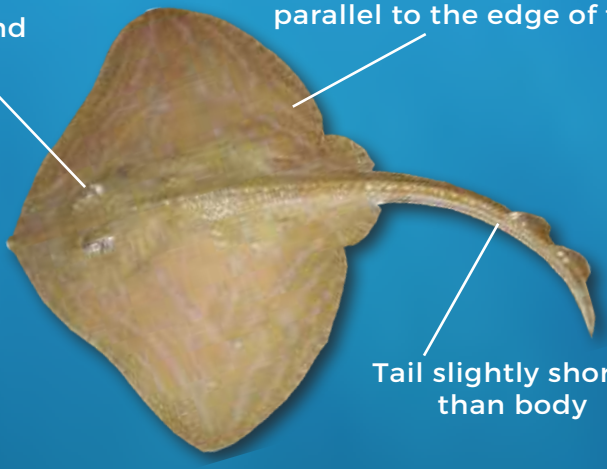


The cuckoo ray, *Leucoraja naevus*, lives between 20 and 500m deep (mainly around 100 and 200m deep), in the Atlantic Ocean (from Norway to Morocco) and in the Mediterranean Sea.

EGG OF A CUCKOO RAY

*Eye-spot = spots shaped like an eye

SMALL-EYED RAY



The small-eyed ray, *Raja microocellata*, lives from the coast to oceanic depths around 100m deep, in the Atlantic Ocean (from Ireland to Morocco).

EGG OF A SMALL-EYED RAY

*Lateral keel : Prominent ridge alongside of the body

The 6 main species of rays and skates

Thornback ray

Cuckoo ray

Blonde ray

in the Channel and the North Sea

Spotted ray

Undulate ray

Small-eyed ray

SUMARiS project

for a sustainable management of rays

SUMARiS (SUstainable MAnagement of Rays and Skates), a 3 year project, is financed by the European programme Interreg 2 Seas. It gathers all skateholders: fishermen, scientists, politicians, aquariums, etc. from 4 different European countries (the UK, Belgium, France and the Netherlands). They work together to find out more about rays and skates in the Channel and the North Sea.

The aim of the project is to contribute to a sustainable management of marine ressources in the Channel and in the North Sea which could show the real state of rays and skates stocks.

FROM NORD

Kent & Essex IFCA Kent & Essex Inshore Fisheries and Conservation Authority

Ifremer

ILVO Flanders Research Institute for Agriculture, Fisheries and Food

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Cefas

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aquimer Le pôle des produits aquatiques