

Pacific Oyster

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Species Description

Scientific name: *Magallana gigas* or *Crassostrea gigas*

AKA: Japanese oyster

Native to: NW Pacific and Sea of Japan

Habitat: Usually found in estuaries, attached to firm bottom substrates, rocks, debris and shells from the lower intertidal zone to depths of 40 m.

The pacific oyster is a filter feeding bi-valve, it is whitish-grey in colour with purple streaks and spots. It has an elongated rough shell which can grow to 20 - 30cm in size, although marketable size is 6 - 12cm.

The 2 valves are unequal in shape and size. The left valve is slightly convex, while the right valve is quite deep and cup shaped. Both shells have radial ribs, while the right shell also has 6 or 7 bold irregular folds. One valve is usually cemented to a hard surface.

Larvae are initially free-swimming, developing for 2-3 weeks before finding a suitable clean and hard substratum on which to settle. They can attach to rocks, or can settle in muddy or sandy areas (attached to smaller rocks, shell or debris), or to other oysters, which leads to reef building. A sea temperature of 18 – 20°C is necessary for spawning.

Reef building can lead to local environmental impacts by displacing native species and their habitat. They also impact upon the functioning of the ecosystem and food web by altering nutrient and microbial assemblages and activity.

Magallana gigas has also lead to the introduction of other non-native invasive species, it is widely acknowledged *Sargassum muticum* was introduced with pacific oyster spat importation.

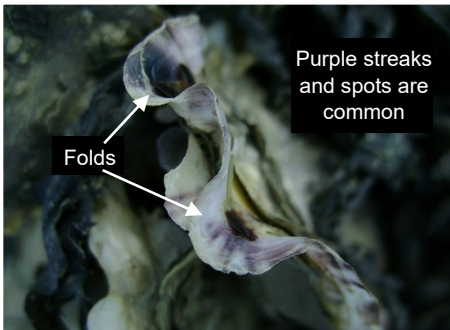


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Report any sightings via; CEDaR Online Recording - <https://www2.habitas.org.uk/records/ISI>, iRecord app or Invasive Species Northern Ireland website - <http://invasivespeciesni.co.uk/report-sighting>

Identification throughout the year

Pacific oyster are present in the same location throughout the year.

Field signs

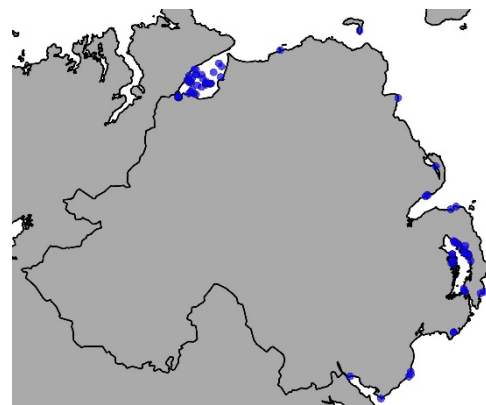
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At low tide, pacific oysters can be visible, attached to a hard surface or partially covered in mud or sandy. Dead shells can often be found along the shore.

Distribution

Mainly recorded where pacific oyster farming occurs



Source: NBN Atlas Northern Ireland – available
<https://northernireland-species.nbnatlas.org/species/NHMSYS0021185273>
Check website for current distribution

Similar Species

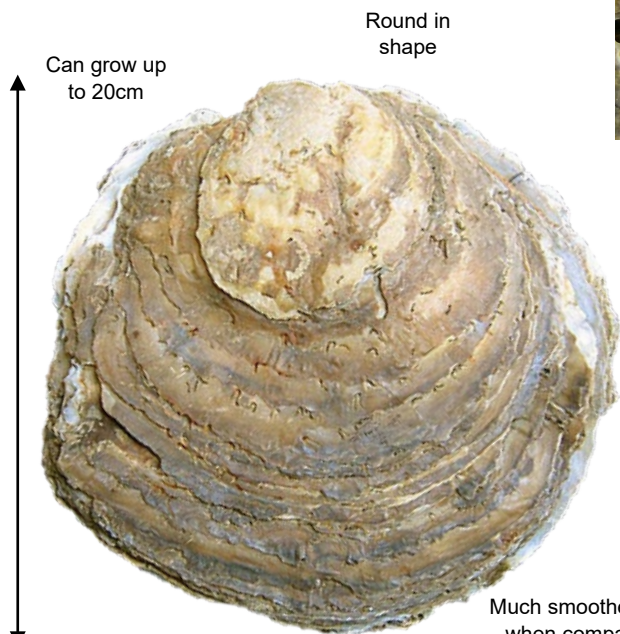
Native oyster

AKA: European or flat oyster
(*Ostrea edulis*)

Over fishing lead to a dramatic decline in *O. edulis*. They can still be found in the wild in Northern Ireland, but in low numbers.



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Can grow up to 20cm

Round in shape

Much smoother shells when compared to pacific oyster

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References and further reading:

CABI datasheet *Crassostrea gigas* (Pacific oyster) available
<https://www.cabi.org/isc/datasheet/87296>
Herbert, R.J.H., Humphreys, J., Davies, C.J. *et al.* Ecological impacts of non-native Pacific oysters (*Crassostrea gigas*) and management measures for protected areas in Europe. *Biodivers Conserv* **25**, 2835–2865 (2016). <https://doi.org/10.1007/s10531-016-1209-4>
MarLIN (The Marine Life Information Network) Species list Pacific oyster (*Magallana gigas*): available
<https://www.marlin.ac.uk/species/detail/1676>
Nehring, S. (2011): NOBANIS – Invasive Alien Species Fact Sheet – *Crassostrea gigas*. – From: Online Database of the European Network on Invasive Alien Species – NOBANIS. Available
<https://www.nobanis.org/globalassets/speciesinfo/c/crassostrea-gigas/crassostrea-gigas.pdf>

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