



# MarLIN

## Marine Information Network

Information on the species and habitats around the coasts and sea of the British Isles

## Moon jellyfish (*Aurelia aurita*)

MarLIN – Marine Life Information Network  
Marine Evidence-based Sensitivity Assessment (MarESA) Review

Jessica Heard

2004-10-07

A report from:

The Marine Life Information Network, Marine Biological Association of the United Kingdom.

**Please note.** This MarESA report is a dated version of the online review. Please refer to the website for the most up-to-date version [<https://www.marlin.ac.uk/species/detail/2089>]. All terms and the MarESA methodology are outlined on the website (<https://www.marlin.ac.uk>)

This review can be cited as:

Heard, J.R. 2004. *Aurelia aurita* Moon jellyfish. In Tyler-Walters H. and Hiscock K. (eds) *Marine Life Information Network: Biology and Sensitivity Key Information Reviews*, [on-line]. Plymouth: Marine Biological Association of the United Kingdom. DOI <https://dx.doi.org/10.17031/marlinasp.2089.1>



The information (TEXT ONLY) provided by the Marine Life Information Network (MarLIN) is licensed under a Creative Commons Attribution-Non-Commercial-Share Alike 2.0 UK: England & Wales License. Note that images and other media featured on this page are each governed by their own terms and conditions and they may or may not be available for reuse. Permissions beyond the scope of this license are available [here](#). Based on a work at [www.marlin.ac.uk](http://www.marlin.ac.uk)

(page left blank)



*Aurelia aurita* medusoid adult amongst *Ascophyllum nodosum*.

Photographer: Sue Scott

Copyright: Sue Scott

See online review for  
distribution map

Distribution data supplied by the Ocean Biogeographic Information System (OBIS). To interrogate UK data visit the NBN Atlas.

Researched by	Jessica Heard	Refereed by	Admin
Authority	(Linnaeus, 1758)		
Other common names	-	Synonyms	-

## Summary

### 🔍 Description

*Aurelia aurita* has a smooth, flattened saucer-shaped bell (the umbrella) with eight simple marginal lobes. The umbrella is colourless, while the radial canals, oral arms and gonads are typically mauve, violet, reddish, pink or yellowish in colour. *Aurelia aurita* usually grows to approximately 25 cm in diameter but can reach 40 cm. The umbrella is quite thick, thinning towards the edge, with numerous short, hollow tentacles forming a fringe around the edge. These short tentacles are ringed by numerous stinging cells (nematocysts). There are four interfolded gonads that form a horseshoe or near circle shape in the centre of the umbrella. Eight branched and eight un-branched canals connect to the marginal ring-canal of the umbrella. The mouth is formed on a projection on the underside of the umbrella (the manubrium). Four thickened oral arms, each with a central groove, edged by thinner folded lips and lined with small tentacle-like processes approximately 2 mm long. The surface of the oral arms is covered with nematocysts, crowded together near the tips of the tentacles. The oral arms are slightly shorter than the radius of the umbrella. The stomach consists of four circular shaped interradial gastric pouches connected to the mouth by grooves.

### 📍 Recorded distribution in Britain and Ireland

*Aurelia aurita* can be found all round the coasts of Britain and Ireland.

### 📍 Global distribution

-

## Habitat

*Aurelia aurita* is Britain's most common jellyfish. It is sporadic in its appearance, forming massive local populations in some areas but totally absent in other areas for some years. *Aurelia aurita* is a pelagic species but may be found washed up on the shore. It is known to occur up estuaries and into harbours and is especially common in Scottish sea lochs.

## ↓ Depth range

-

## Q Identifying features

- Umbrella thins towards the edge and has a distinctive fringe of short, hollow tentacles.
- Four, purple-blue gonads form a characteristic horseshoe-shape, contained almost completely within the gastric cavity.
- Gonads do not extend below the sub-umbrella surface as in many other species of jellyfish.

## Additional information

*Aurelia aurita* has an interesting life history. The sexes are separate, the sperm are taken into the female via the mouth and fertilization occurs internally. Pits in the oral arms act as a temporary brood chamber holding the eggs until they develop into free-swimming larvae (planula larvae). Following a brief swimming period the planulae attach to hard substratum and develop into tiny sessile animals (scyphistomae). These reproduce by asexual budding and release free-swimming tiny immature jellyfish (ephyrae). The ephyrae feed on plankton and will generally reach maturity at around 3 months. However, some ephyrae may take up to two years to grow into sexually-reproducing adult medusae (Ruppert & Barnes, 1994).

*Aurelia aurita* feed, but not exclusively, on plankton and can at times occur in massive swarms, which may be so dense as to give the sea a uniform red colour and slow the passage of small boats (Russell, 1970).

## ✓ Listed by

## Further information sources

Search on:

  

## Bibliography

- Howson, C.M. & Picton, B.E., 1997. *The species directory of the marine fauna and flora of the British Isles and surrounding seas*. Belfast: Ulster Museum. [Ulster Museum publication, no. 276.]
- JNCC (Joint Nature Conservation Committee), 1999. *Marine Environment Resource Mapping And Information Database (MERMAID): Marine Nature Conservation Review Survey Database*. [on-line] <http://www.jncc.gov.uk/mermaid>
- Picton, B.E. & Costello, M.J., 1998. *BioMar* biotope viewer: a guide to marine habitats, fauna and flora of Britain and Ireland. [CD-ROM] *Environmental Sciences Unit, Trinity College, Dublin*.
- Ruppert, E.E. & Barnes, R.D., 1994. *Invertebrate zoology* (6th ed.). Fort Worth, USA: Saunders College Publishing.
- Russell, F.S., 1970. *The medusae of the British Isles. Vol II - Pelagic Scyphozoa, with a supplement to the first volume on hydromedusae*. Cambridge University Press

## Datasets

- Bristol Regional Environmental Records Centre, 2017. BRERC species records recorded over 15 years ago. Occurrence dataset: <https://doi.org/10.15468/h1n5p> accessed via GBIF.org on 2018-09-25.
- Centre for Environmental Data and Recording, 2018. Ulster Museum Marine Surveys of Northern Ireland Coastal Waters. Occurrence dataset <https://www.nmni.com/CEDaR/CEDaR-Centre-for-Environmental-Data-and-Recording.aspx> accessed via NBNAtlas.org on 2018-09-25.
- Cofnod – North Wales Environmental Information Service, 2018. Miscellaneous records held on the Cofnod database. Occurrence dataset: <https://doi.org/10.15468/hcgqsi> accessed via GBIF.org on 2018-09-25.
- Environmental Records Information Centre North East, 2018. ERIC NE Combined dataset to 2017. Occurrence dataset: <http://www.ericnortheast.org.uk/home.html> accessed via NBNAtlas.org on 2018-09-38
- Fenwick, 2018. Aphotomarine. Occurrence dataset <http://www.aphotomarine.com/index.html> Accessed via NBNAtlas.org on 2018-10-01
- Fife Nature Records Centre, 2018. St Andrews BioBlitz 2014. Occurrence dataset: <https://doi.org/10.15468/erweal> accessed via GBIF.org on 2018-09-27.
- Fife Nature Records Centre, 2018. St Andrews BioBlitz 2015. Occurrence dataset: <https://doi.org/10.15468/xtrbvj> accessed via GBIF.org on 2018-09-27.
- Kent Wildlife Trust, 2018. Kent Wildlife Trust Shoresearch Intertidal Survey 2004 onwards. Occurrence dataset: <https://www.kentwildlifetrust.org.uk/> accessed via NBNAtlas.org on 2018-10-01.
- Lancashire Environment Record Network, 2018. LERN Records. Occurrence dataset: <https://doi.org/10.15468/esxc9a> accessed via GBIF.org on 2018-10-01.
- Manx Biological Recording Partnership, 2017. Isle of Man wildlife records from 01/01/2000 to 13/02/2017. Occurrence dataset: <https://doi.org/10.15468/mopwow> accessed via GBIF.org on 2018-10-01.
- Manx Biological Recording Partnership, 2018. Isle of Man historical wildlife records 1990 to 1994. Occurrence dataset: <https://doi.org/10.15468/aru16v> accessed via GBIF.org on 2018-10-01.
- Marine Conservation Society, 2018. UK Jellyfish Sightings from 2003 to 2015. Occurrence dataset: <https://www.mcsuk.org/> accessed via NBNAtlas.org on 2018-10-01.
- Merseyside BioBank., 2018. Merseyside BioBank (unverified). Occurrence dataset: <https://doi.org/10.15468/iou2ld> accessed via GBIF.org on 2018-10-01.
- Merseyside BioBank., 2018. Merseyside BioBank Active Naturalists (unverified). Occurrence dataset: <https://doi.org/10.15468/smzyqf> accessed via GBIF.org on 2018-10-01.
- National Trust, 2017. National Trust Species Records. Occurrence dataset: <https://doi.org/10.15468/opc6g1> accessed via GBIF.org on 2018-10-01.
- NBN (National Biodiversity Network) Atlas. Available from: <https://www.nbnatlas.org>.
- North East Scotland Biological Records Centre, 2017. NE Scotland other invertebrate records 1800-2010. Occurrence dataset: <https://doi.org/10.15468/ijfxz> accessed via GBIF.org on 2018-10-01.
- OBIS (Ocean Biogeographic Information System), 2019. Global map of species distribution using gridded data. Available from: Ocean Biogeographic Information System. [www.iobis.org](http://www.iobis.org). Accessed: 2019-03-12
- Outer Hebrides Biological Recording, 2018. Invertebrates (except insects), Outer Hebrides. Occurrence dataset: <https://doi.org/10.15468/hpavud> accessed via GBIF.org on 2018-10-01.
- South East Wales Biodiversity Records Centre, 2018. SEWBREc Marine and other Aquatic Invertebrates (South East Wales). Occurrence dataset: <https://doi.org/10.15468/zxy1n6> accessed via GBIF.org on 2018-10-02.
- South East Wales Biodiversity Records Centre, 2018. Dr Mary Gillham Archive Project. Occurrence dataset: <http://www.sewbrec.org.uk/> accessed via NBNAtlas.org on 2018-10-02

Suffolk Biodiversity Information Service., 2017. Suffolk Biodiversity Information Service (SBIS) Dataset. Occurrence dataset: <https://doi.org/10.15468/ab4vwo> accessed via GBIF.org on 2018-10-02.

The Wildlife Information Centre, 2018. TWIC Biodiversity Field Trip Data (1995-present). Occurrence dataset: <https://doi.org/10.15468/ljc0ke> accessed via GBIF.org on 2018-10-02.

West Wales Biodiversity Information Centre, 2018. Seatrust Cetacean Records West Wales. Occurrence dataset: <https://doi.org/10.15468/ecsmqh> accessed via GBIF.org on 2018-10-02.