



# MarLIN

## Marine Information Network

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

## A sea cucumber (*Cucumaria frondosa*)

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

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2008-04-17

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/1425>]. All terms and the MarESA methodology are outlined on the website (<https://www.marlin.ac.uk>)

This review can be cited as:

Bleach, J. 2008. *Cucumaria frondosa* A sea cucumber. 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/marlin.sp.1425.1>



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*Cucumaria frondosa* in a laboratory.

Photographer: Hilmar Hinz

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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	John Bleach	Refereed by	Admin
Authority	(Gunnerus, 1767)		
Other common names	-	Synonyms	-

## Summary

### 🔍 Description

A sea cucumber with a cylindrical, dark brown or bluish-purple body, and very tough, leathery skin. A large sea cucumber up to 50 cm long when fully grown. The tentacles and mouth region can be quite colourful, with areas of white or red. The contractile tube feet are present in five distinct rows. The ten equal-sized tentacles are black and bushy when extended. Fenestrate plates (microscopic calcareous plates containing small holes) present in younger animals but may be absent in larger specimens.

### 📍 Recorded distribution in Britain and Ireland

Found around the Shetlands Islands and the Orkney Islands.

### 📍 Global distribution

-

### 🏠 Habitat

Found on the lower shore and shallow sublittoral, to perhaps 200 m, on coarse grounds, often among kelp holdfasts. It can also be found on rocky substrata.

### ↓ Depth range

## 🔍 Identifying features

- Cylindrical dark brown body up to 50 cm long.
- Tube feet arranged in five, double rows, occasionally occurring between the body radii (in the inter-radii).
- Ten black, bushy tentacles (when extended), usually of equal size.
- Tentacles and mouth region may be colourful.
- Often found among kelp holdfasts.

## 🏛️ Additional information

A detailed taxonomic description is provided by McKenzie (1991).

## ✓ Listed by

## 🔗 Further information sources

Search on:

   

## Bibliography

- Connor, D.W., Dalkin, M.J., Hill, T.O., Holt, R.H.F. & Sanderson, W.G., 1997a. Marine biotope classification for Britain and Ireland. Vol. 2. Sublittoral biotopes. *Joint Nature Conservation Committee, Peterborough, JNCC Report no. 230, Version 97.06., Joint Nature Conservation Committee, Peterborough, JNCC Report no. 230, Version 97.06.*
- Hayward, P., Nelson-Smith, T. & Shields, C. 1996. *Collins pocket guide. Sea shore of Britain and northern Europe*. London: HarperCollins.
- Hayward, P.J. & Ryland, J.S. (ed.) 1995b. *Handbook of the marine fauna of North-West Europe*. Oxford: Oxford University Press.
- 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>
- Lambert, P 1997. Family Cucumariidae UBC Press
- McKenzie, J.D., 1991. The taxonomy and natural history of north European dendrochirote holothurians (Echinodermata). *Journal of Natural History*, **25**, 123-171.

## Datasets

- NBN (National Biodiversity Network) Atlas. Available from: <https://www.nbnatlas.org>.
- 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