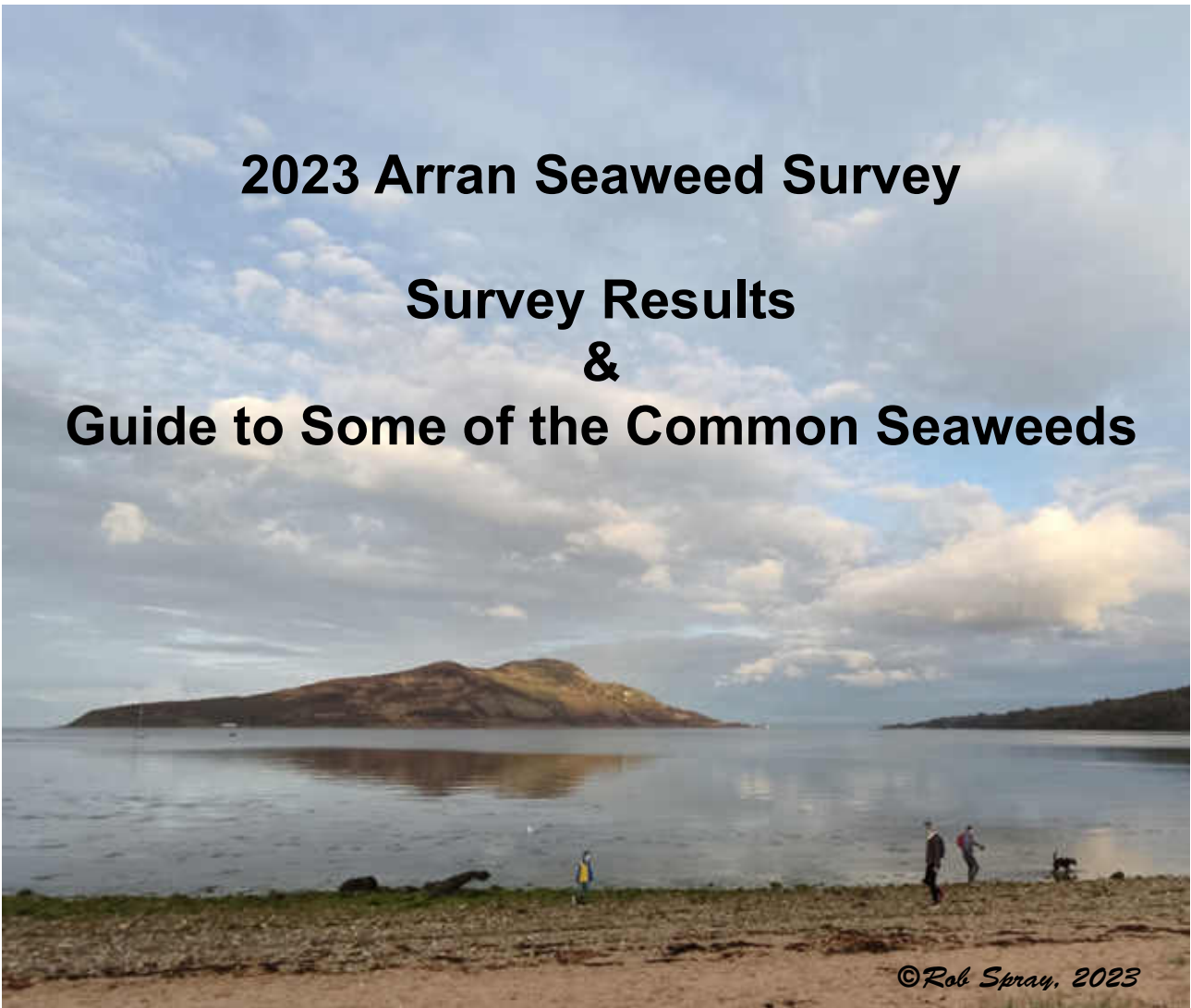


# 2023 Arran Seaweed Survey

## Survey Results & Guide to Some of the Common Seaweeds



© Rob Spray, 2023

Dawn Watson, Rob Spray & Lin Baldock



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Beach at Whiting Bay – a wall of Pepper Dulse.

A visit to the Isle of Arran was organised by Dawn Watson and Rob Spray in collaboration with the Community of Arran Seabed Trust<sup>1</sup> (COAST) with the aim of recording seaweeds on the shores and at shallow subtidal sites around the island. The survey was carried out between 30<sup>th</sup> April and the 5<sup>th</sup> of May 2023 and was undertaken by volunteer shore walkers, snorkelers and SCUBA divers. In total 12 divers, four snorkelers and four intertidal surveyors spent six days photographing, collecting, pressing and identifying subtidal and intertidal seaweeds around the coast of Arran, completing at least one intertidal and one subtidal survey each day. NatureScot confirmed that the proposed survey and minimal sample collection would not impact upon the designated features of the South Arran Marine Protected Area.

Laboratory facilities were hosted at the COAST centre at Lamlash, with most equipment being provided by the volunteers. In total 112 species of seaweeds were recorded during the survey with 63 species conserved as pressings.

In addition, at least one Seasearch survey form<sup>2</sup> was completed for every site. Results from volunteers are still being collated, but at least 302 taxa including seaweeds were recorded on 19 Seasearch forms (11 Survey forms and eight Observation forms). The pressed seaweed collection has been accepted by the herbarium at the Royal Botanic Garden Edinburgh.

A brief guide to some of the seaweeds recorded during the survey is attached to this report.



<sup>1</sup> <https://www.arrancoast.com/>

<sup>2</sup> <https://www.seasearch.org.uk/record>



## Survey sites

Location	Date	Start Lat	Start Lon	End Lat	End Lon	Activity
Whiting Bay	30 April 2023	55° 29.728'N	005° 05.489'W	55° 29.676'N	005° .475'W	Intertidal walk
Kildonan	01 May 2023	55° 26.456'N	005° 07.116'W	55° 26.454'N	005° 07.201'W	Intertidal walk
Kilmory	02 May 2023	55° 26.282'N	005° 14.073'W	55° 26.240'N	005° 14.134'W	Intertidal walk
Lochranza Castle	03 May 2023	55° 42.276'N	005° 17.537'W			Intertidal walk
Cave Beach, NE Arran	03 May 2023	55° 42.935'N	005° 14.547'W	55° 42.927'N	005° 14.458'W	Intertidal walk
Blackwaterfoot	04 May 2023	55° 30.081'N	005° 20.042'W	55° 30.056'N	005° 20.135'W	Intertidal walk
Lamlash Bay	04 May 2023	55° 31.812'N	005° 07.702'W	55° 31.808'N	005° 07.654'W	Intertidal walk
Clauchlands Point	01 May 2023	55° 32.931'N	005° 05.631'W	55° 32.910'N	005° 05.457'W	Shore Dive
Kildonan	02 May 2023	55° 26.415'N	005° 07.092'W			Shore Dive
Lochranza ferry beach	03 May 2023	55° 42.485'N	005° 18.119'W	55° 42.570'N	005° 18.129'W	Shore Dive
Imachar	04 May 2023	55° 36.458'N	005° 23.569'W	55° 36.602'N	005° 23.751'W	Shore Dive
Whiting Bay	04 May 2023	55° 29.370'N	005° 05.336'W			Night Dive
Whiting Bay	30 April 2023	55° 29.383'N	005° 05.562'W			Snorkel
Kildonan	01 May 2023	55° 26.44'N	005° 07.12'W			Snorkel
Kildonan	01 May 2023	55° 26.386'N	005° 07.103'W			Snorkel
Kilmory	02 May 2023	55° 26.25'N	005° 14.09'W			Snorkel
Clauchlands Point	02 May 2023	55° 32.916'N	005° 05.628'W			Snorkel
Blackwaterfoot	04 May 2023	55 ° 30.121'N	005° 19.981'W			Snorkel

Survey Locations at sites around Arran (all positions WGS84).

### Volunteer participants

**Organisers:** Dawn Watson (Seasearch East), Rob Spray (Seasearch East), Lucy Kay (COAST)

### Acknowledgements

We are very grateful to the Community of Arran Seabed Trust (COAST) for help in providing free access to facilities where samples could be sorted, identified and stored for the duration of the survey.

We particularly thank the volunteers who gave freely of their time and expertise ,coming from widely dispersed locations around Scotland and England. Michael Payne welcomed us to his home at Kildonan providing a seemingly endless supply of tea, cake and ice cream 🍷

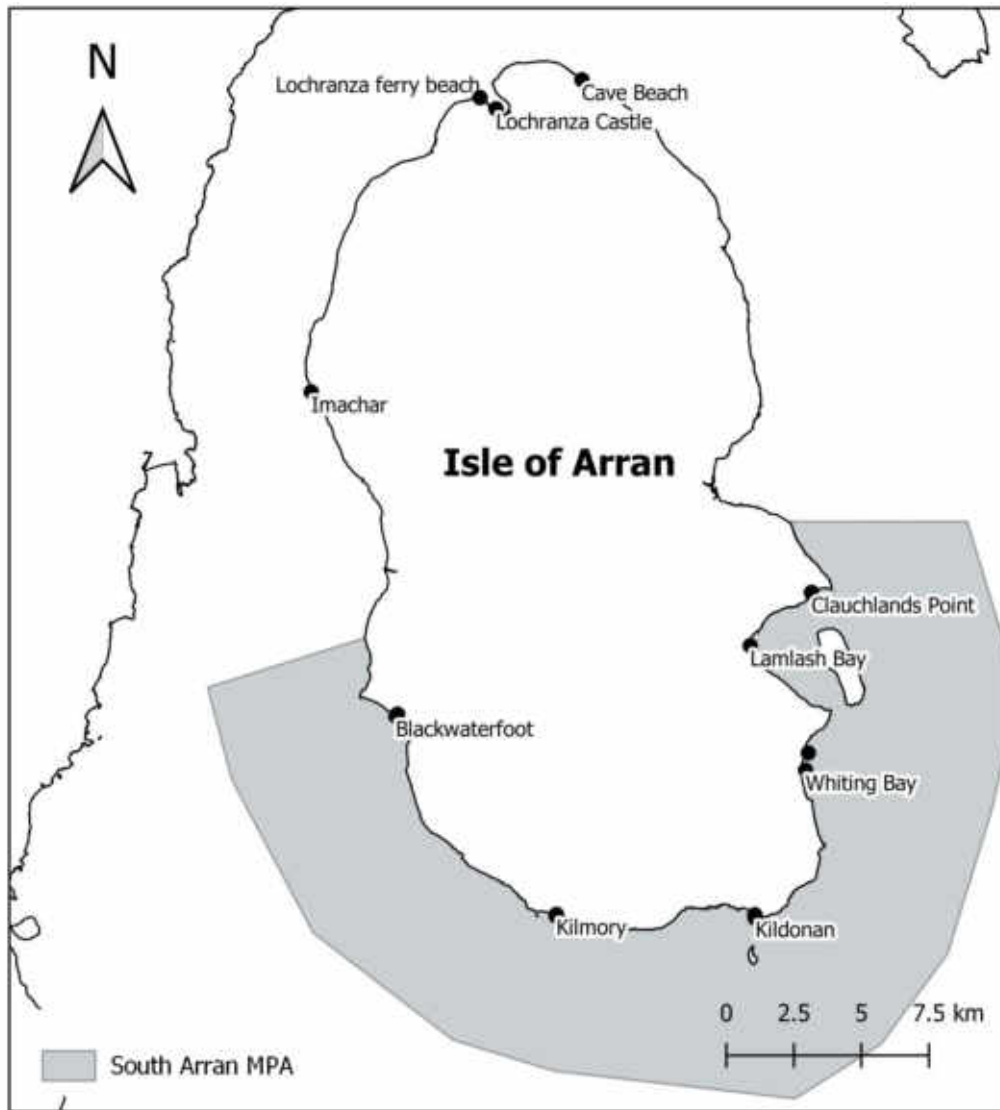
Claire Youdale took charge of compiling the collection of pressed seaweeds for the survey. She chased collectors, confirmed identifications, mounted the seaweeds and ensured that papers were changed regularly as the samples dried. This was a not inconsiderable task with a total of about 75 seaweed samples pressed.

**Divers:** Angeles Fernandez Peña, Christopher James, Claire Youdale, Emily Fowler, H el ene Corrieu, Iain Dixon, Jason Guthrie, Lin Baldock, Mark Johnson, Will Nash.

**Snorkelers:** Genine Keogh, Jenny Pope, Michael Payne, Valeska Andrews.

**Beach walkers:** Cicely Gill, Hayley Woodroffe, Lucy Kay, Martin Constantinides.





Locations of sites surveyed around Arran 2023  
 (also showing the extent of the South Arran MPA)  
 Contains OS data © Crown copyright and database right (2023)



Rock pool, Whiting Bay

## Taxa recorded during the Isle of Arran seaweed survey, 2023

Note this is a preliminary list which is likely to be revised once all data have been entered into the database.

### Porifera 12 taxa

*Amphilectus fucorum*  
*Cliona* sp boring form  
Crust beige with canals  
Crust orange with canals  
*Halichondria panicea*  
*Hymeniacion perlevis*  
Indet sponge on *Inachus* sp  
*Leucosolenia* sp  
*Oscarella* sp  
*Suberites* sp  
*Suberites pagurorum*  
*Sycon ciliatum*

### Ctenophora 3 spp

*Beroe cucumis*  
*Bolinopsis infundibulum*  
*Pleurobrachia pileus*

### Cnidaria 27 taxa

*Actinia equina*  
*Actinia fragacea*  
*Anemonia viridis*  
*Cereus pedunculatus*  
*Synarachnactis lloydii*  
*Coryne eximia*  
*Cyanea capillata*  
*Cyanea lamarckii*  
*Cylista elegans*  
*Dynamena pumila*  
*Edwardsiella carnea*  
*Halecium beanii*  
*Halecium halecinum*  
*Halopteris catharina*  
*Hydractinia echinata*  
Hydroid feathery indet  
Hydroid medusa indet  
*Metridium dianthus*  
*Nemertesia antennina*  
*Nemertesia ramosa*  
*Obelia dichotoma*  
*Obelia geniculata*  
*Rhizostoma pulmo*  
*Sertularella rugosa*  
*Staurostoma mertensii*  
*Urticina felina*  
*Virgularia mirabilis*

### Polychaeta 14 taxa

Arenicolidae sp  
*Chaetopterus* sp  
*Circeis spirillum*  
*Harmothoe* sp  
*Lanice conchilega*  
Phyllodoce sp + eggs  
Polychaete pink  
*Polydora* sp  
*Sabella pavonina*  
Sabellidae  
*Spirobranchus* sp

Spirorbinae  
*Spirorbis (Spirorbis) spirorbis*  
Terebellida

### Crustacea 34 taxa

Amphipoda sp  
*Cancer pagurus*  
Caprellidira  
*Carcinus maenas*  
*Cirripedia* sp  
*Chthamalus* sp  
*Eualus* sp  
*Galathea* sp  
*Galathea squamifera*  
*Hippolyte varians*  
*Hyas* sp  
*Idotea* sp  
*Inachus phalangium*  
*Inachus dorsettensis*  
*Jassa* sp  
*Ligia oceanica*  
*Liocarcinus depurator*  
*Liocarcinus navigator*  
*Macropodia* sp  
*Munida rugosa*  
Mysida  
*Necora puber*  
Paguridae  
*Pagurus bernhardus*  
*Pagurus cuanensis*  
*Palaemon* sp  
*Palaemon serratus*  
*Pisa* sp  
*Pisidia longicornis*  
*Sabelliphilus elongatus*  
*Semibalanus balanoides*  
Talitridae  
*Verruca stroemia*  
*Xantho pilipes*

### Mollusca 40 taxa

*Aequipecten opercularis*  
*Aplysia punctata*  
*Doris pseudoargus*  
Bivalve siphons  
*Buccinum undatum*  
*Crimora papillata*  
*Eledone cirrhosa*  
*Doto* sp  
*Elysia viridis*  
*Geitodoris planata*  
*Gibbula magus*  
*Hermatea bifida*  
*Heteranomia squamula*  
*Jorunna tomentosa* + eggs  
*Lacuna vincta* + eggs  
*Lepidochitona cinerea*  
*Limacia clavigera*  
*Littorina littorea*  
*Littorina obtusata/fabalis*  
*Littorina saxatillus* agg

*Littorina* sp  
*Loligo* sp eggs  
*Musculus subpictus*  
*Mya truncata*  
*Mya* sp  
*Mytilus edulis*  
*Nucella lapillus* + eggs  
Nudibranch eggs  
*Patella vulgata*  
*Patella* sp  
*Pecten maximus*  
*Rissoa lilacina*  
*Rissoa* sp  
*Steromphala cineraria*  
*Steromphala umbilicalis*  
*Tritia reticulata* + eggs  
*Tritia* sp  
*Trivia monacha*  
*Trivia* sp  
*Turritellinella tricarinata*

#### **Bryozoa 14 taxa**

*Alcyonidium diaphanum*  
*Bugulina flabellata*  
*Caberea boryi*  
*Celleporella hyalina*  
*Conopeum reticulum*  
*Crisia* sp  
Crust white  
*Cryptosula pallasiana*  
*Disporella hispida*  
*Electra pilosa*  
*Flustrellidra hispida*  
*Membranipora membranacea*  
*Schizoporella unicornis*  
*Scrupocellaria* sp

#### **Echinodermata 14 taxa**

*Amphipholis squamata*  
*Asterias rubens*  
*Astropecten irregularis*  
*Crossaster papposus*  
*Echinocardium cordatum*  
*Echinus esculentus*  
*Henricia* sp  
*Luidia ciliaris*  
*Marthasterias glacialis*  
*Ophiocomina nigra*  
*Ophiothrix fragilis*  
*Porania (Porania) pulvillus*  
*Psammechinus miliaris*  
*Stichastrella rosea*

#### **Tunicata 14 taxa**

*Aplidium turbinatum*  
*Ascidia mentula*  
*Asciidiella aspersa*  
*Asciidiella scabra*  
*Asciidiella* sp  
*Botrylloides leachii*  
*Botryllus schlosseri*  
*Clavelina lepadiformis*

***Corella eumyota* - non-native**

*Corella parallelogramma*  
Didemnidae sp  
*Diplosoma listeri*  
*Diplosoma* sp  
*Morchellium argus*

#### **Fish – Elasmobranchii 1 sp**

*Scyliorhinus canicula*

#### **Fish – Teleostei 23 taxa**

*Agonus cataphractus*  
Ammodytidae  
Blenniiformes sp  
*Buenia jeffreysii*  
*Callionymus lyra*  
*Dicentrarchus labrax*  
Gadidae juv  
Labridae juv  
*Labrus bergylta*  
*Lepadogaster candolii* + eggs  
*Lipophrys pholis* + eggs  
*Nerophis lumbriciformis*  
*Pholis gunnellus*  
*Pleuronectes platessa*  
*Pollachius* sp  
*Pomatoschistus flavescens*  
*Pomatoschistus pictus*  
*Pomatoschistus* sp  
*Spinachia spinachia*  
*Symphodus melops*  
*Syngnathus acus*  
*Taurulus bubalis*  
*Trisopterus minutus*

#### **Red Seaweeds – 61 taxa**

*Ahnfeltia plicata*  
***Bonnemaisonia hamifera* – non-native**  
*Calliblepharis jubata*  
*Calliblepharis ciliata*  
*Carradoriella elongata*  
*Catenella caespitosa*  
*Ceramium echionotum*  
*Ceramium* sp  
*Champia parvula*  
*Chondria dasyphylla*  
*Chondrus crispus*  
*Chylocladia verticillata*  
*Corallina officinalis*  
*Corallina* sp  
*Cryptopleura ramosa*  
*Cystoclonium purpureum*  
***Dasysiphonia japonica* – non-native**  
*Delesseria sanguinea*  
*Derbesia* sp  
*Dilsea carnosa*  
*Dumontia contorta*  
Coralline encrusting algae  
Non-calcareous encrusting red algae  
*Furcellaria lumbricalis*  
*Gelidium* sp  
Gracilariales  
*Halarachnion ligulatum*  
*Halurus flosculosus*

*Heterosiphonia plumosa*  
*Hypoglossum hypoglossoides*  
*Jania rubens*  
*Lomentaria articulata*  
*Lomentaria clavellosa*  
Maerl  
*Mastocarpus stellatus*  
*Membranoptera alata*  
*Nitophyllum punctatum*  
*Odonthalia dentata*  
*Osmundea hybrida*  
*Osmundea pinnatafida*  
*Osmundea* sp  
*Palmaria palmata*  
*Phycodrys rubens*  
*Phyllophora crispa*  
*Phyllophora pseudoceranoïdes*  
*Plocamium lyngbyanum*  
*Plocamium* sp  
*Polyides rotunda*  
*Polyneura bonnemaisonii*  
*Porphyra* sp  
*Pterothamnion plumula*  
*Ptilota gunneri*  
*Rhodophyllis divaricata*  
*Rhodothamniella floridula*

***Trailiella phase Bonnemaisonia hamifera* NN**

*Vertebrata byssoides*  
*Vertebrata fucoïdes*  
*Vertebrata lanosa*  
*Vertebrata nigra*

**Brown Seaweeds 38 taxa**

*Alaria esculenta*  
*Ascophyllum nodosum*  
*Ascophyllum nodosum* f. *mackayi*  
Brown jelly weed  
*Chorda filum*  
*Chordaria flagelliformis*  
*Cladostephus hirsutus*

***Colpomenia peregrina* – non-native**

*Cutleria multifida* *Aglaozonia*  
*Desmarestia aculeata*  
*Desmarestia ligulata*  
*Desmarestia viridis*  
*Desmarestia* sp  
*Dictyota dichotoma*

*Dictyota dichotoma* spiral form  
*Ectocarpus* sp  
*Elachista fucicola*  
Filamentous brown algae  
*Fucus ceranoides*  
*Fucus cottonii*  
*Fucus guiryi*  
*Fucus serratus*  
*Fucus spiralis*  
*Fucus vesiculosus*  
*Halopteris scoparia*  
*Halidryis siliquosa*  
*Laminaria digitata*  
*Laminaria hyperborea*  
*Leathesia marina*  
*Pelvetia canaliculata*  
*Petalonia fascia*  
*Porphyropsis coccinea*  
*Punctaria latifolia*  
*Saccharina latissima*  
*Saccorhiza polyschides*  
***Sargassum muticum* – non-native**  
*Scytosiphon lomentaria*  
*Sphacelaria cirrosa*  
*Spongonema tomentosum*

**Green Seaweeds – 11 taxa**

*Cladophora hutchinsiae*  
*Lychaete pellucida*  
*Cladophora rupestris*  
*Cladophora* sp  
*Monostroma grevillei*  
*Prasiola stipitata*  
*Rhizoclonium riparium*  
*Ulva fenestrata*  
*Ulva linza*  
*Ulva* ribbons  
*Ulva* tubular

**Others 5 taxa**

*Beggiatoa*  
Entoprocta  
Lichen – green crust  
*Zostera marina*  
Diatoms



# A Guide to Some Common Seaweeds on the Isle of Arran

Compiled by Lin Baldock



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## How to use the guide

This guide provides *in situ* images of many of the seaweeds encountered during the survey together with scans of pressed material where these were available. Some additional notes on identification have been added.

Seaweed colour is indicated by a red, green or brown frame around each page.

It is strongly recommended that once a tentative identification has been reached other resources are used for confirmation.

A good place to start is with the Seasearch guide:

Bunker et al (2017) Seaweeds of Britain and Ireland. Second Edition. Wild Nature Press pp312.

The following web site provides excellent images and descriptions of many common seaweeds in our area <https://seaweed.ie/descriptions/>

Two very useful guides to many red and some of the larger brown seaweeds are available here. Note that nomenclature is out of date for these publications.

A field key to the British red seaweeds. Field Studies Council Occasional Publication No.13 by Sue Hiscock [https://cdn.fieldstudiescouncil.net/fsj/1983\\_hiscock.pdf](https://cdn.fieldstudiescouncil.net/fsj/1983_hiscock.pdf)

A field key to the British brown seaweeds (Phaeophyta) by Sue Hiscock [https://cdn.fieldstudiescouncil.net/fsj/vol5.1\\_125a.pdf](https://cdn.fieldstudiescouncil.net/fsj/vol5.1_125a.pdf)

Up to date nomenclature can be tracked down here

<https://www.algaebase.org/> or here <https://www.marinespecies.org/msbias/>

Finally check distributions using the NBN Atlas <https://nbnatlas.org/>

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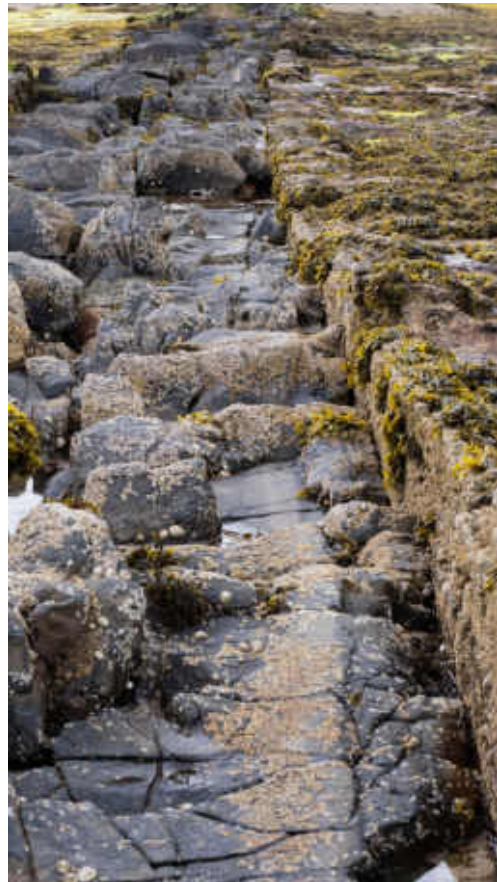
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Snorkelling, Kildonan  
©Rob Spray

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Dyke, Whiting Bay. Note lack of seaweeds on the smooth basalt surface.  
©Lin Baldock

A interesting find,  
Blackwaterfoot.  
©Rob Spray





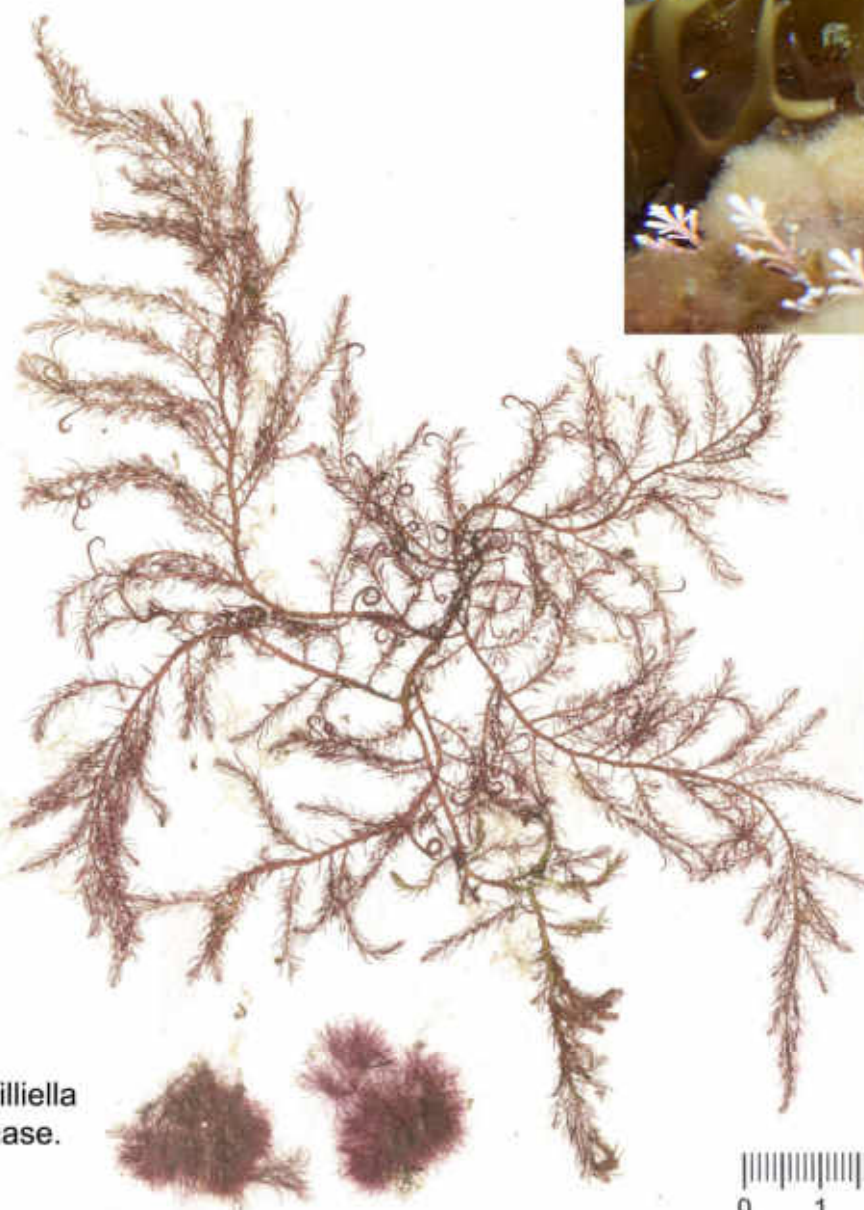
***Bonnemaisonia asparagoides* Bonnemaison's Fern Weed**



The bright magenta pink colour of this seaweed is distinctive. Widely distributed but rarely common at a site.



**Bonnemaisonia hamifera** Bonnemaison's Hook Weed



Trailliella phase.

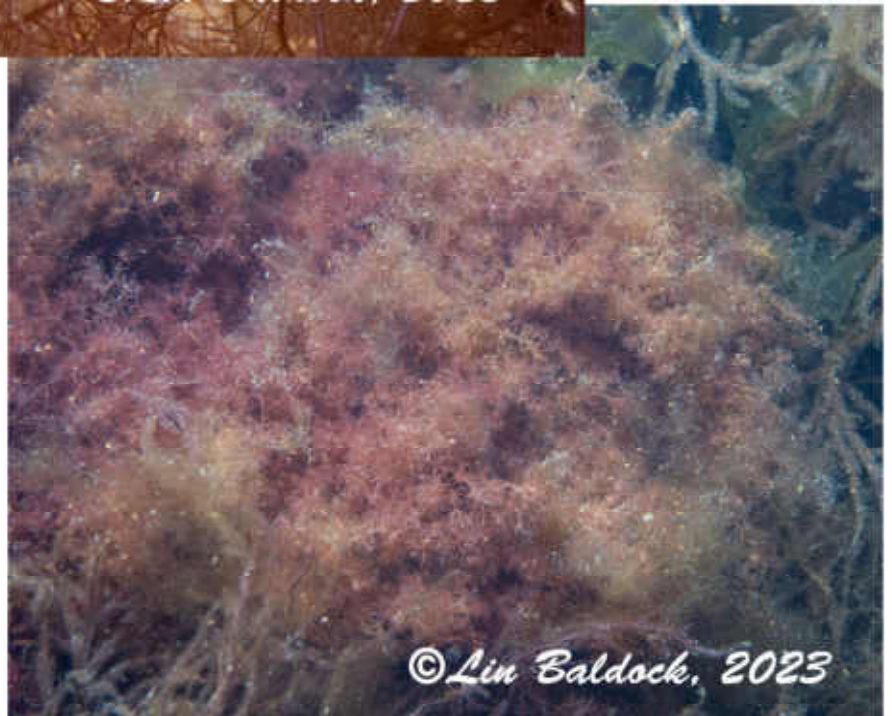
Distinctive hooks and pale pink colour in the field are characteristic of the gametophyte phase.

Fluffy dark red fading to almost yellow balls (Trailliella phase) typify the sporophyte which is very widely distributed.

This is a non-native species first recorded from Cornwall in 1893.



*Dasysiphonia japonica* Siphoned Japan Weed



Very fine, thread-like red stems with a rather amorphous arrangement of very fine branchlets. Often occurs in confused clumps.

A non-native species associated with aquaculture. The first UK record was in 1999 (Pembrokeshire). It is now common and very widely distributed on western coasts as far north as Shetland. It is very much under recorded.



***Cystoclonium purpureum* Purple Claw Weed**



A rather nondescript, pale, greyish red seaweed. It can be common in some habitats. Older specimens may have frond tips coiled like a pig's tail.



The reddish seaweed in this image is all Purple Claw Weed. It was common at Claunchlands Point.



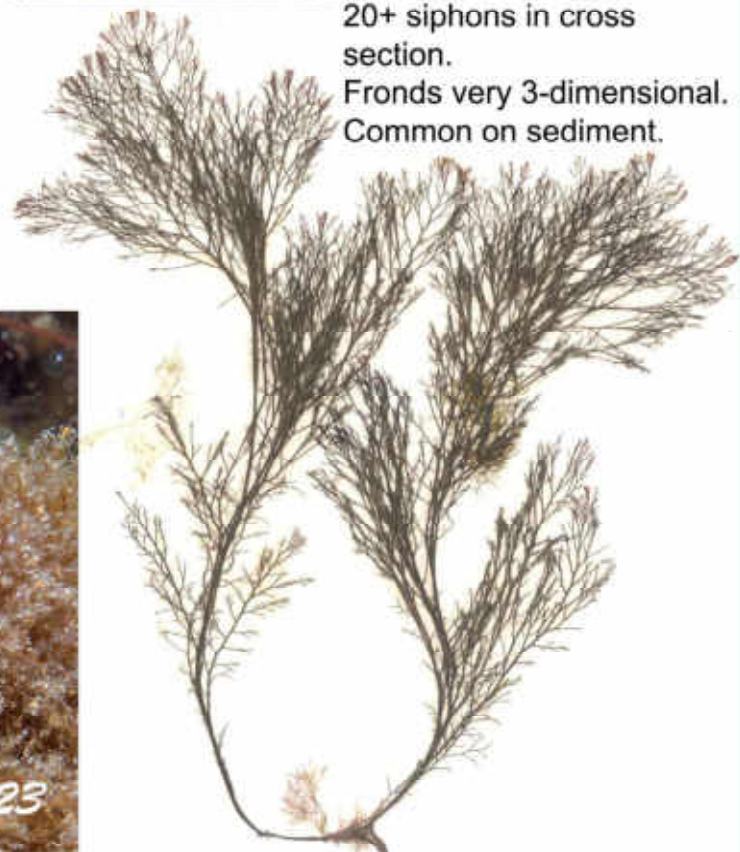


***Vertebrata fucoides* Black Siphon Weed**



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20+ siphons in cross section.  
Fronds very 3-dimensional.  
Common on sediment.



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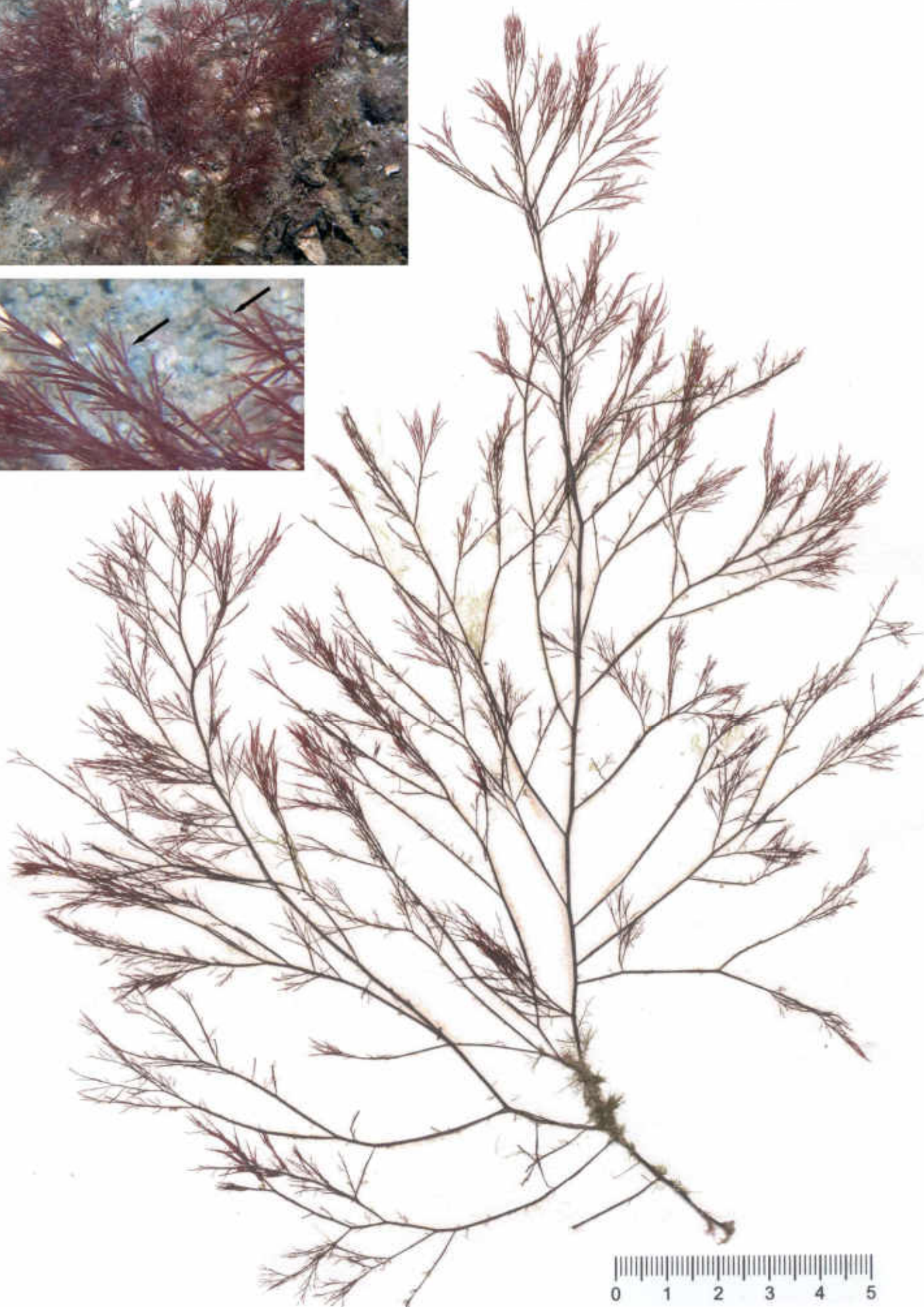
This brownish colour is characteristic.  
Compare carefully with other *Polysiphonia* and *Vertebrata* species.



***Carradoriella (Polysiphonia) elongata* Elongate Siphon Weed.**



Check for spindle shaped side branches (black arrows).  
Common in sediment habitats.





***Chylocladia verticillata* Juicy Whorl Weed**



Note branches in whorls for this species.  
Little Fat Sausage Weed (*Champia parvula*)  
is usually smaller and has opposite or  
alternate branching.



***Chondria dasyphylla* Diamond Cartilage Weed**



Note constricted base to the small, lateral branches. Here growing on a pebble in dead maerl gravel in Dorset. Often only isolated individuals. Widely distributed but rarely common at any one site.



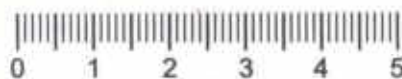


## *Gelidium* spp Straggle Weeds



These seaweeds occur in a dense turf mixed with other seaweeds from mid-shore into the upper subtidal.

This genus of seaweeds is extremely difficult to identify to species. Even the experts are not agreed on the characters useful for determining species. Record as *Gelidium* sp on Seasearch forms.





## ***Rhodothamniella floridula* Sand Binder**

Very fine, red filaments binding sediment.



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Intertidal habitat binding fine sand - Kildonan, Arran.



© *Lin Baldock, 2023*

Subtidal habitat, Clauchland's Point, Arran. Binding pebbles and dead maerl.



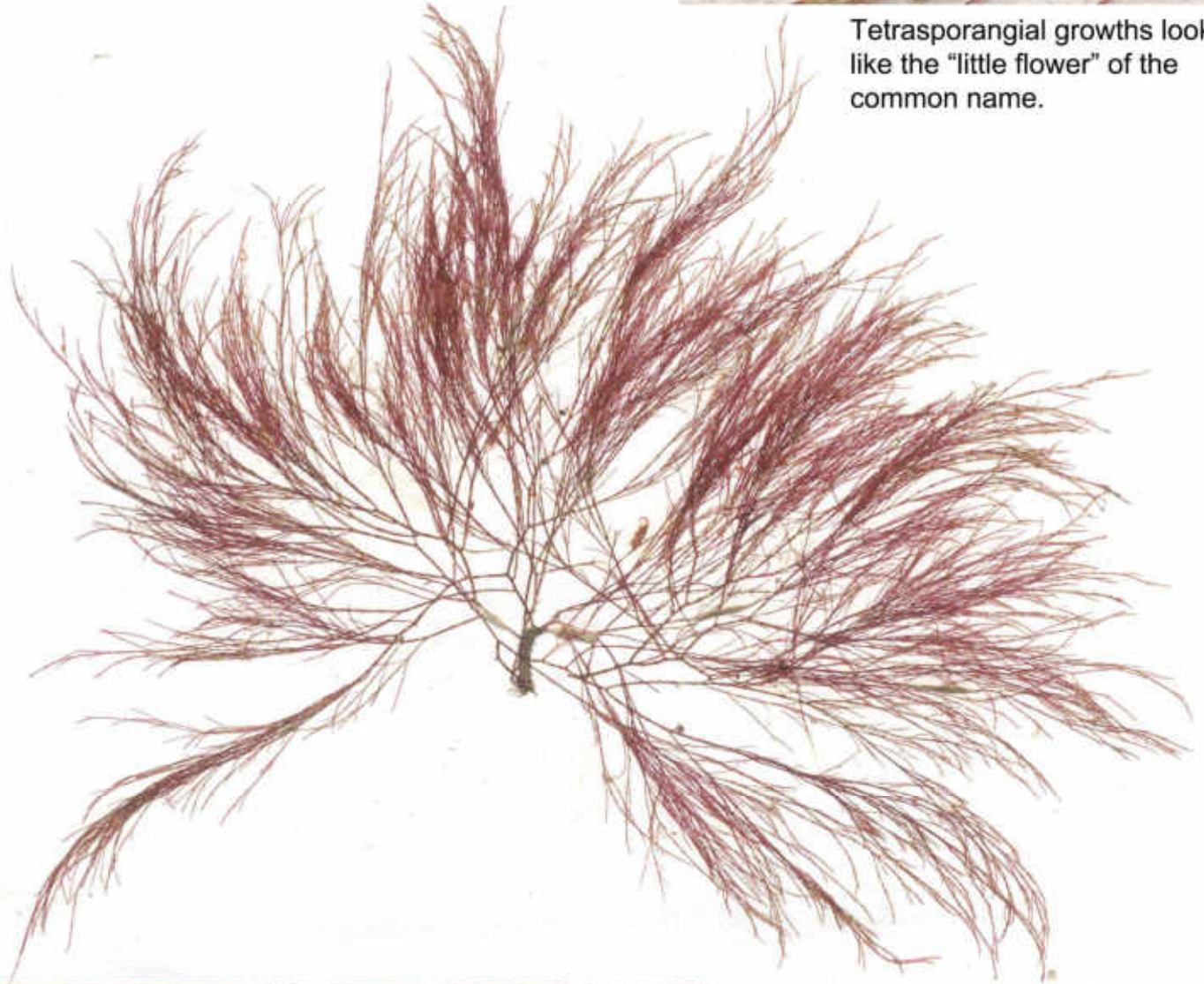
***Halurus flosculosus***  
**Mrs Griffiths's Little Flower**

This red weed grows as sometimes dense tufts of hair-like filaments. Each filament is made up of a series of cylindrical cells which are visible with the naked eye or a hand lens.

It was only found once during the present survey although it is very widely distributed around Britain.



Tetrasporangial growths look like the "little flower" of the common name.



Detail of cylindrical cells making up each filament.



*Delesseria sanguinea* Sea Beech



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This is a striking seaweed with a strong midrib. It bleaches almost green from mid-summer onwards and late in the year only the sturdy midribs remain.

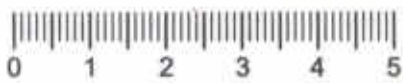




***Phycodrys rubens* Sea Oak**



Can form dense turf on rock  
Also very common on stipes  
of Forest Kelp (*Laminaria hyperborea*).



*Cryptopleura ramosa* Fine-Veined Crinkle Weed



This species is often iridescent, specially early in the season. Note veins clearly seen at base of fronds (arrow).



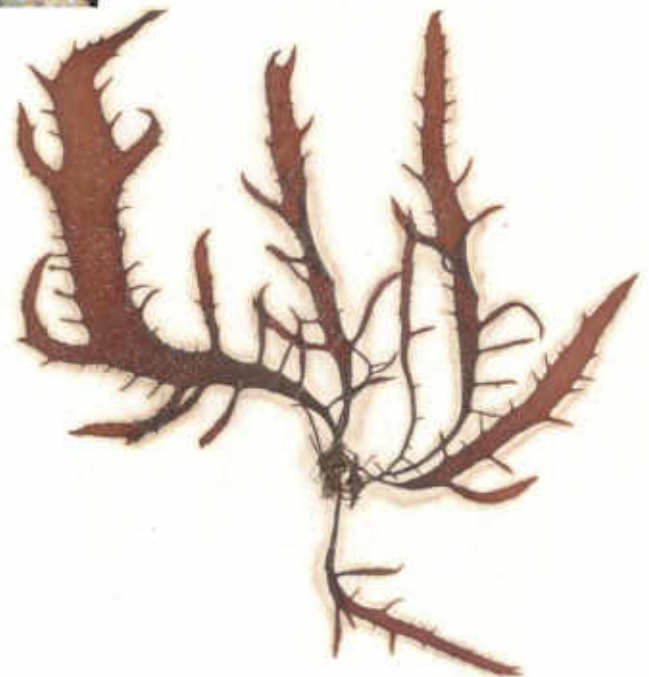


***Calliblepharis jubata* False Eyelash Weed**



False Eyelash Weed

Common in the shallow subtidal.  
Take care to distinguish from  
Eyelash Weed which has wider  
fronds and occurs much deeper.



Eyelash Weed - *Calliblepharis ciliata*

***Palmaria palmata* Dulse**



A fairly robust, flat red seaweed often growing in clumps from a holdfast. Young growth may be almost translucent. Specimens on the shore can bleach green. Very common on the stipes of Forest Kelp (*Laminaria hyperborea*).





## *Dilsea carnosa* Red Rags



A tough, leathery red seaweed. It is dark red in deeper water, bleaching yellow to greenish in the shallows as the summer progresses. Older blades can become very battered. Common but seldom seen in large quantities.





## *Nitophyllum punctatum* Spotted Scarf Weed



This red weed is almost translucent and soon bleaches to a pale greenish colour in shallow water (below).

Seasonally the pale elliptical patches of the male plant are conspicuous (above). The plant on the right has dark red oval spore patches (tetrasporangia).

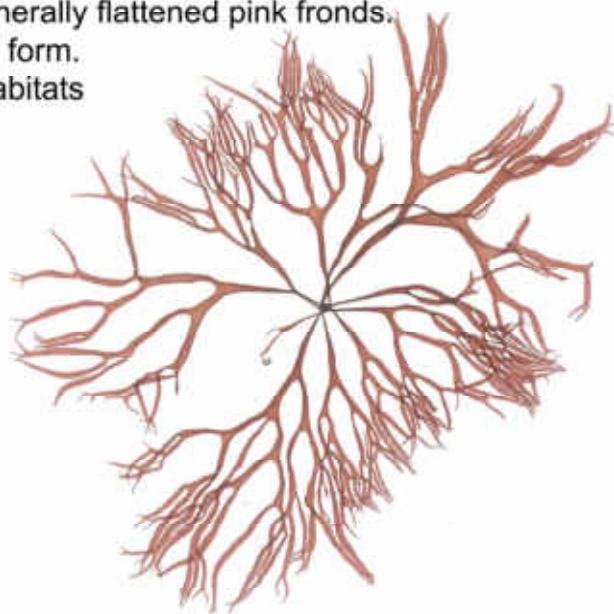




***Halarachnion ligulatum* Sea Spider Weed**



Delicate, translucent, generally flattened pink fronds.  
Very variable in size and form.  
Common on sediment habitats  
and on maerl.





***Chondrus crispus* Irish Moss**



Take care to distinguish from Grape Pip Weed (*Mastocarpus stellatus*) which appears to be impacted by climate change.

Grape Pip Weed has a gutter-shaped stipe. Irish Moss has a flat stipe.





***Heterosiphonia plumosa* Siphoned Feather Weed**



Distinctive, feather-like red fronds often trapping silt which may obscure the features. Frequent at most subtidal sites on rock and sediment.



## *Ptilota gunneri* Feathered Wing Weed



A delicate feathery seaweed typically growing on stipes of Forest Kelp (*Laminaria hyperborea*).

Apex (detail above) shows paired long & short lateral branches on every 2nd or 3rd cell.

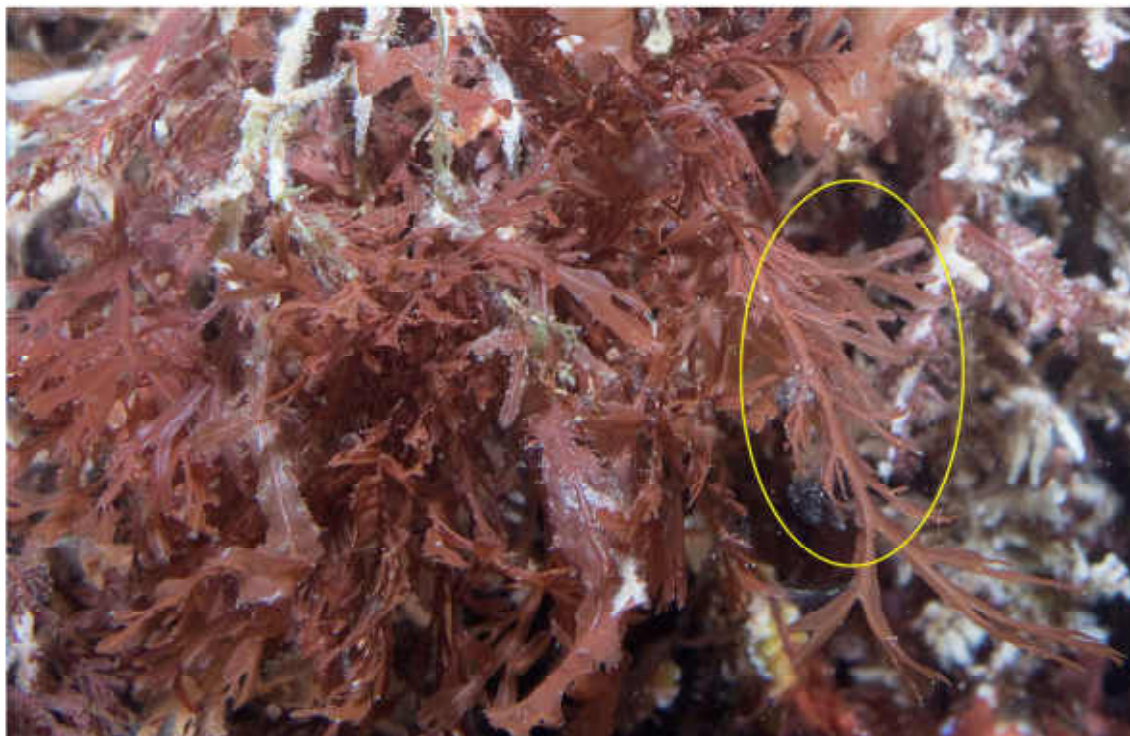
Left: branch with cystocarps of varying ages replacing the shorter lateral.

Take care to distinguish from Soft Feather Weed (*Plumaria plumosa*) which forms a pair of more or less equal branches on every cell at the apex.





***Membranoptera alata* Winged Weed**

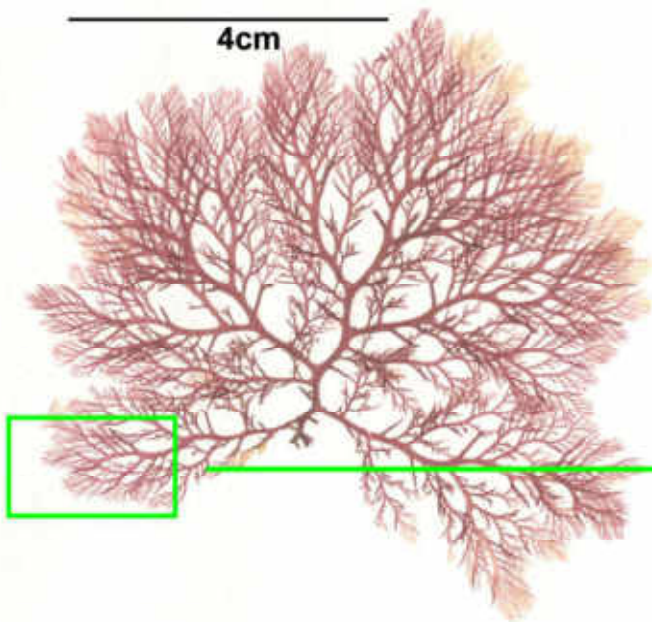


Here competing for space on the stipe of Forest Kelp (*Laminaria hyperborea*), Imachar  
The strongly developed midrib takes up most of the narrow blade.  
Lower subtidal and shallow sublittoral.  
A common epiphyte on Forest Kelp (*Laminaria hyperborea*).





***Plocamium lyngbyanum* Lyngbye's Cock's Comb**



**“Combs” with 5-7 teeth  
Tetrasporangial stichidia branched  
up to three times (see to right).**

**In Cartilagenous Cock's Comb  
(*Plocamium cartilagineum*)  
stichidia are simple.**



## *Odonthalia dentata* Northern Toothed Weed



The strongly toothed frond and narrow midrib are distinctive for this cartilaginous red weed. The colour darkens as the weed ages.





## *Lomentaria articulata* Bunny Ears



Forms clumps of articulated fronds looking rather like an animal made from modelling balloons. Forms turfs in the intertidal and is frequently found on stipes of Forest Kelp (*Laminaria hyperborea*).

The top image above shows a rather bleached example from the lower shore. The lower image is the more usual colour.

Right: detail of inflated articulated frond tips.

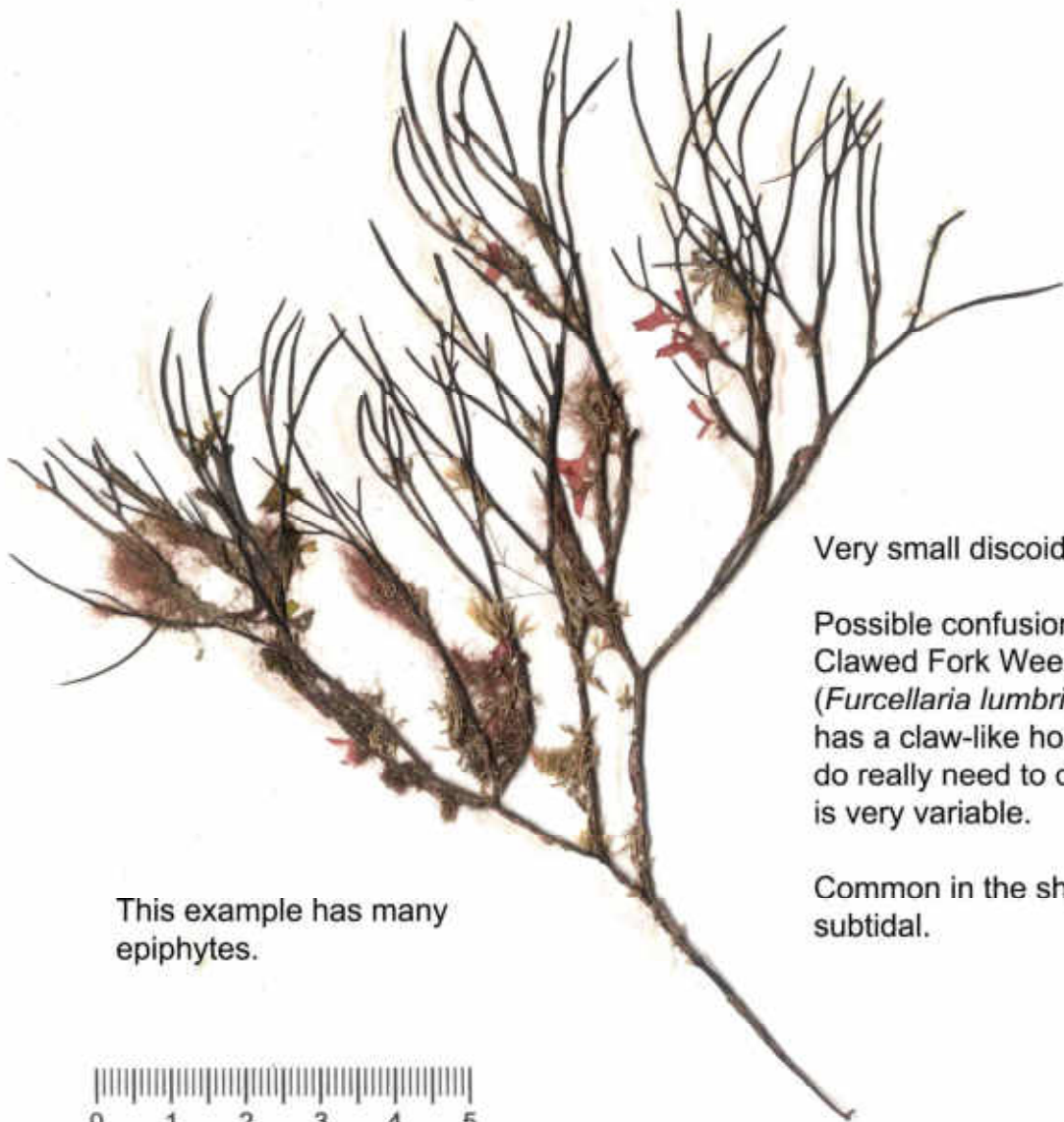




***Polyides rotunda* Discoid Fork Weed**



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This example has many epiphytes.

Very small discoid base.

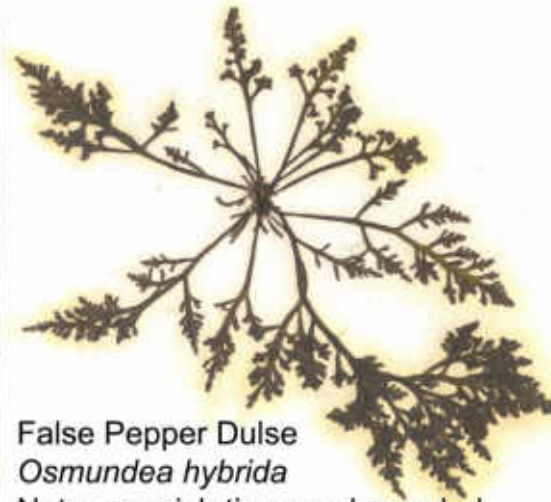
Possible confusion with Clawed Fork Weed (*Furcellaria lumbricalis*) which has a claw-like holdfast. You do really need to check. Colour is very variable.

Common in the shallow subtidal.





## Osmundea spp Pepper Dulses



False Pepper Dulse  
*Osmundea hybrida*  
Note greenish tinge and rounded stipe.

Intertidal only



Pepper Dulse

*Osmundea pinnatifida*

Flattened stipe. Intertidal only.

Check the holdfast - it should be a claw



Pepper Dulse

*Osmundea* sp

Flattened stipe.

Large, growing subtidally.

Check carefully before giving a species name.

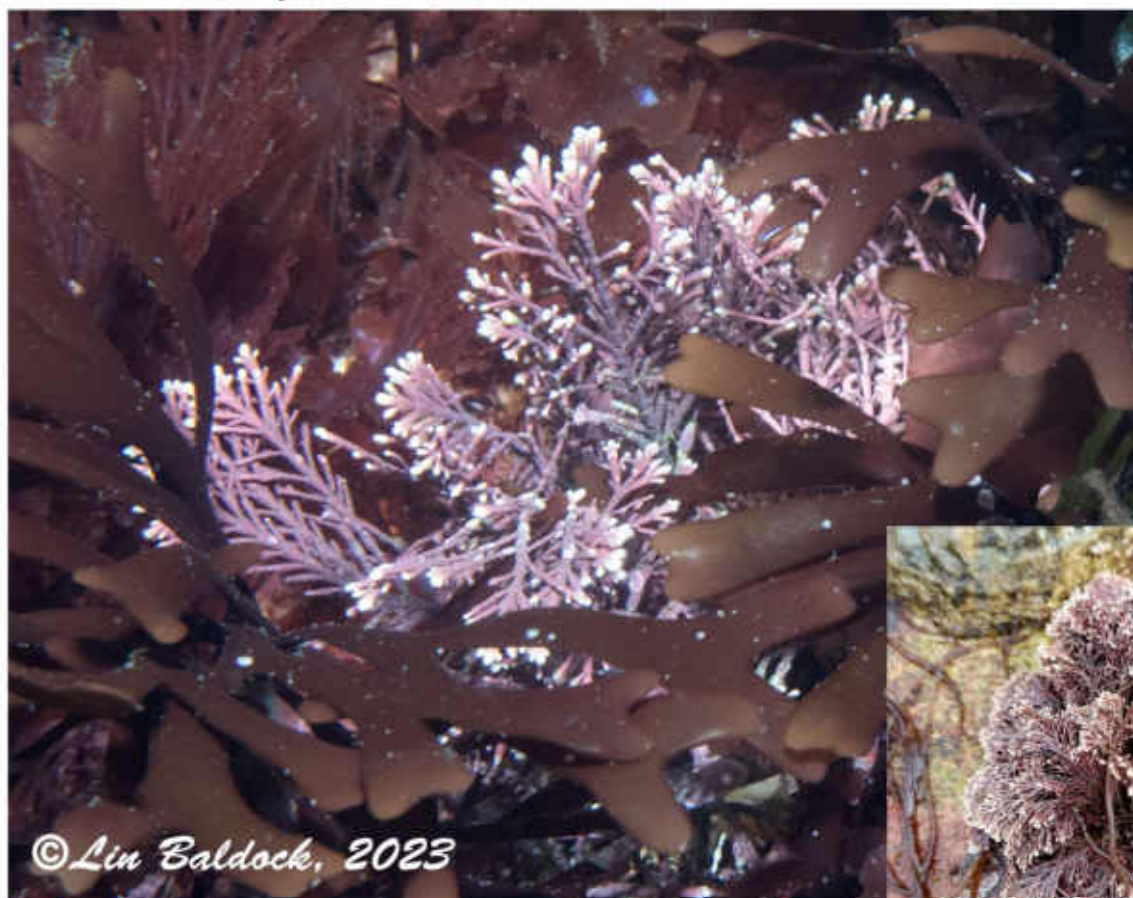


### ***Jania rubens* Slender-beaded Coral Weed**



Compact, rather soft pom-poms of pink coralline fronds attached to other algae, very often species of Hairy Sand Weed (*Cladostephus* sp). Sometimes found living loose among other algae or seagrass.

### ***Corallina* sp Coral Weed**



A rather stiff coralline alga. If subtidal (above) it is probably Common Coral Weed (*Corallina officinalis*). There are several other intertidal species (right) which require careful separation.





*Ulva fenestrata* (*lactuca*) Sea Lettuce



Note: there are many different species of Sea Lettuce, including several non-natives. It is not always possible to give an exact identification.



## *Cladophora rupestris* Common Green Branched Weed



The blue-green colour of this alga is distinctive where it grows on rock in the intertidal.

There are many other species of Green Branched Weed (*Cladophora*) found on the shore and shallow subtidal. These all need careful examination for accurate identification.

Note the yellow-green colour of the specimen on the left collected recorded as drift in Whiting Bay.





## *Alaria esculenta* Dabberlocks



A distinct, strong midrib and ruffled frond margins.

Sugar Kelp (*Saccharina latissima*) lacks a midrib.

In the subtidal fringe on more exposed shores.





## *Laminaria digitata* Oar Weed



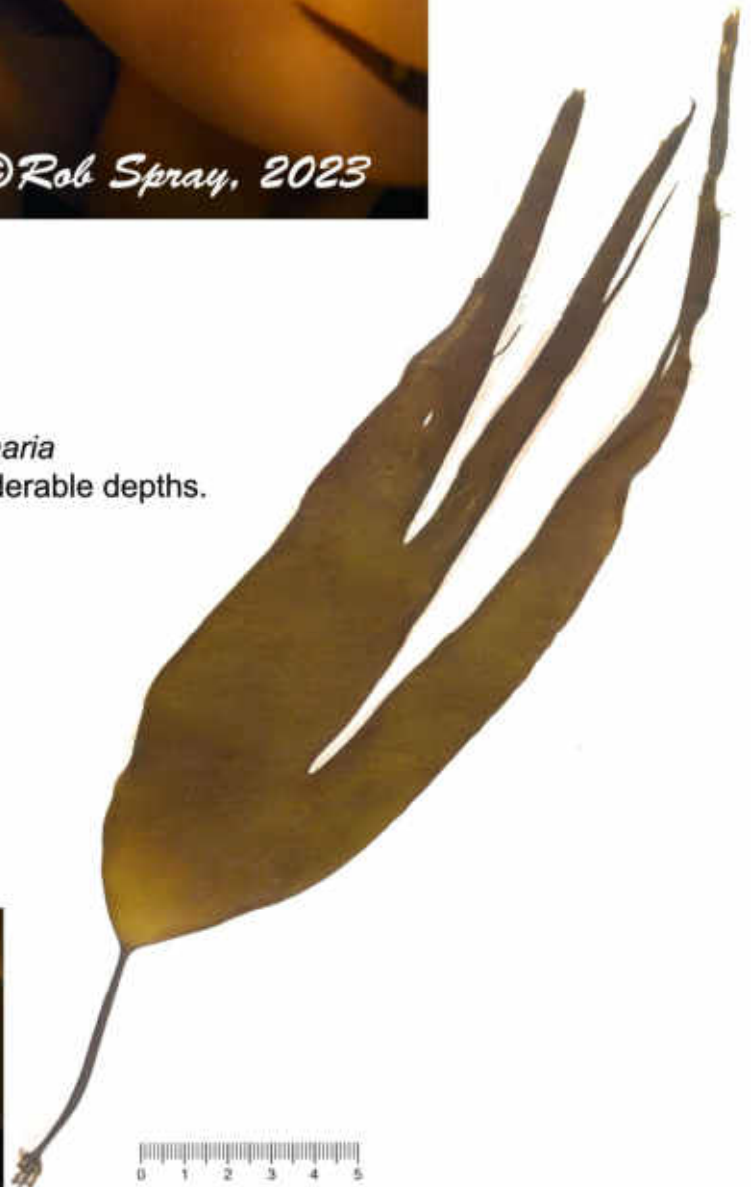
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Oar Weed never has other weeds growing on the stipe and grows in the subtidal fringe.

If there is a dense growth of other weeds on the stipe you are looking at Forest Kelp (*Laminaria hyperborea*) which occurs in the subtidal to considerable depths.

It is important to distinguish kelp species as they characterise different habitats.

Right: a juvenile frond of Oar Weed.  
A young Furbellows (*Saccorhiza polyschides*) would have a small knobble a short distance above the holdfast



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Forest Kelp stipe supporting a very dense growth of small red seaweeds including Sea Oak, Winged Weed and Feathered Wing Weed.



***Saccharina latissima* Sugar Kelp**



Juvenile fronds.  
Note small clawed  
holdfast.





## *Punctaria latifolia*



This semi-translucent brown seaweed typically grows in small groups attached to a pebble or on rock. The ruffled margins could lead to it being confused with juvenile Sugar Kelp which has a distinctive claw-like holdfast.





*Dictyota dichotoma* Brown Fan Weed



This species forms dense turfs of short, tightly curled fronds in the intertidal of exposed shores.





***Halidrys siliquosa* Pod Weed**



A robust brown seaweed growing among kelp and also in sediment areas on boulders where there is often some tide and scour.

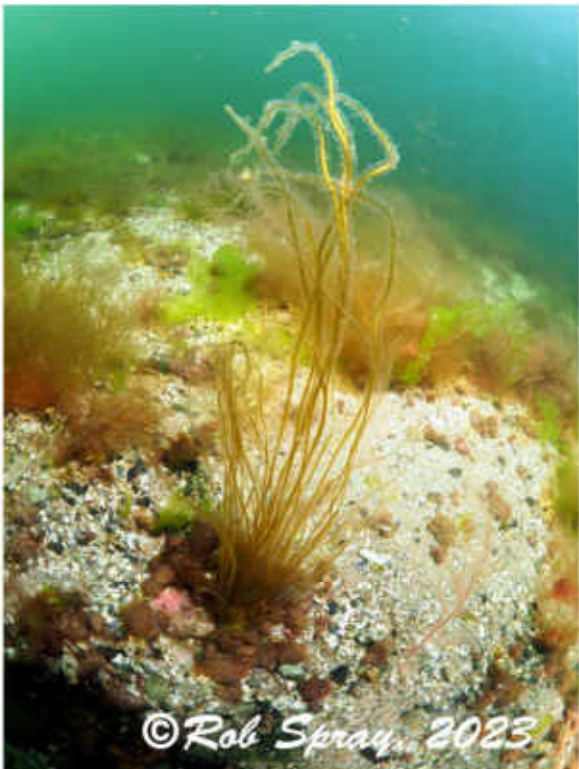
Top: large example among kelp  
Above: detail of frond.



***Chorda filum* Mermaid's Tresses**



Early in the season young fronds have a dense covering of fine hairs. These are lost later in the year and the long fronds collapse to the seabed in a tangle in the autumn.





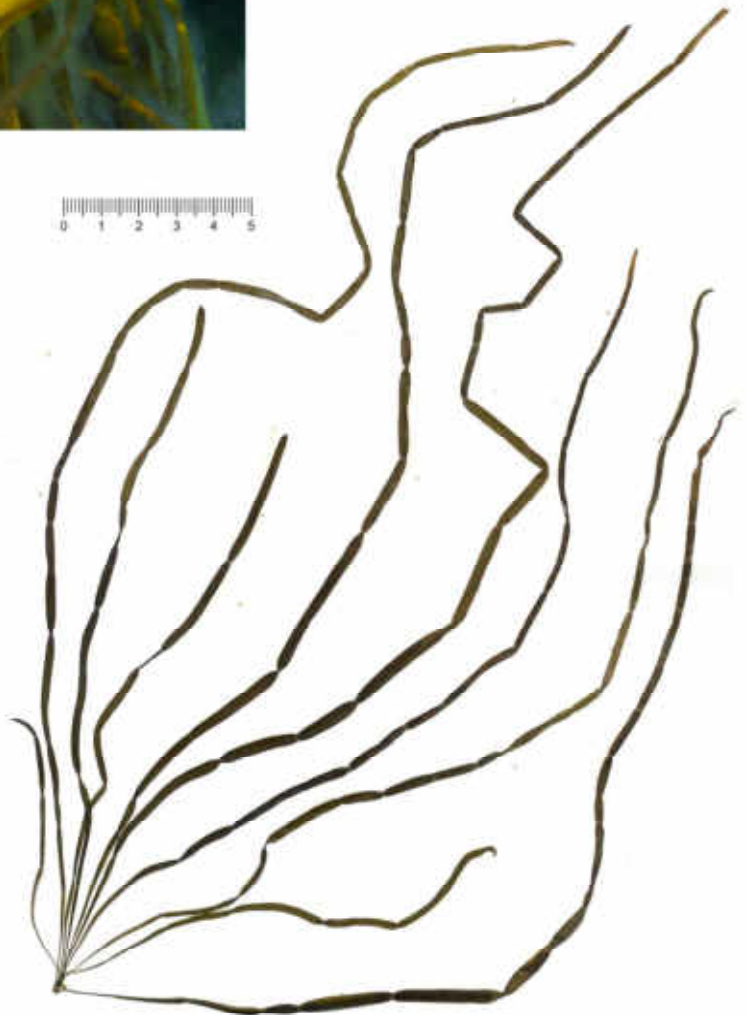
*Scytosiphon lomentaria*  
Chipolata Weed



© Dawn Watson, 2023

The hollow tubular fronds are constricted at intervals giving the impression of a string of chipolata sausages.

Occurs on the shore, in rock pools and the shallow subtidal.



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## *Colpomenia peregrina* Oyster Thief



Texture is thin and papery. Can grow up to 10cm in diameter. Intertidal and shallow subtidal.

Could be confused with Punctured Ball Weed (*Leathesia marina*) which forms typically smaller, fleshy balls.



A non-native first recorded in 1905 in the Scilly Isles. Probably under recorded around Scotland.



***Leathesia marina (difformis)* Punctured Ball Weed**



Forms rather fleshy, convoluted small balls on rock in the intertidal.

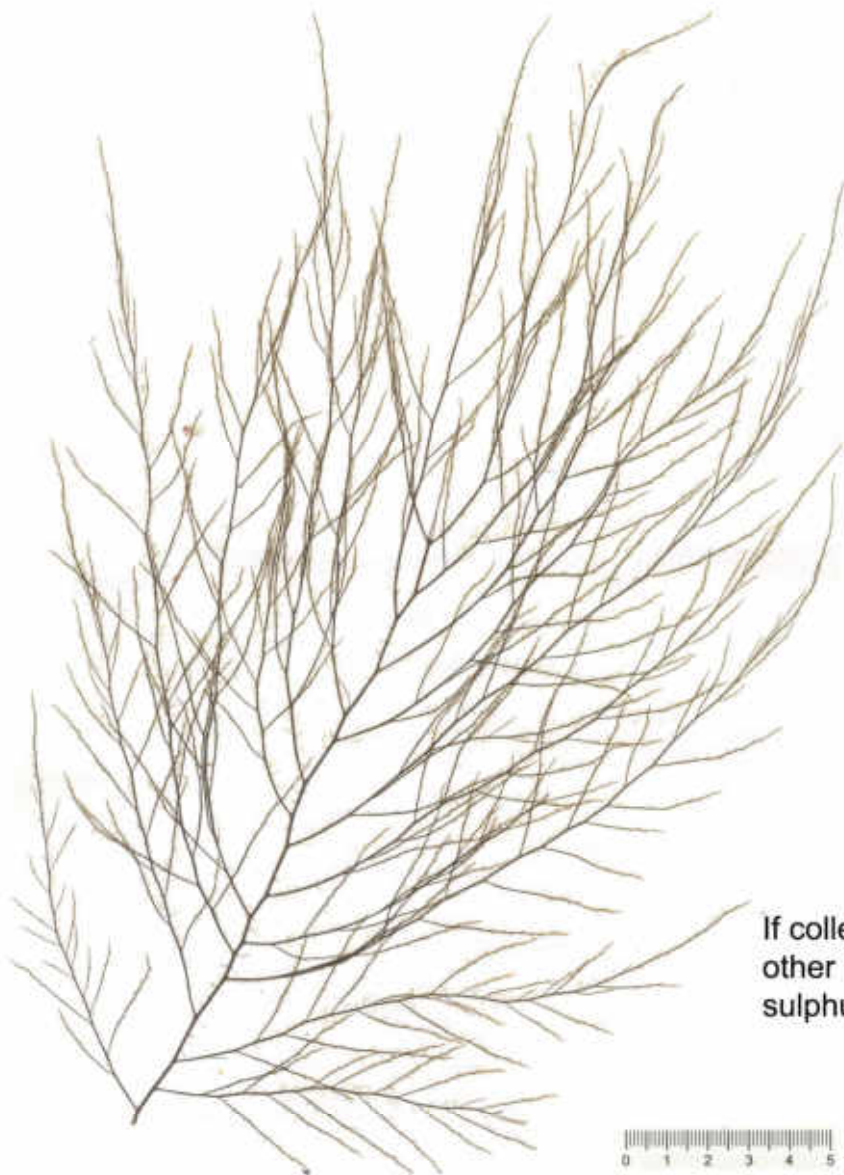
Could be confused with Oyster Thief (*Colpomenia peregrina*) which has a much more papery texture and can grow much larger.



***Desmarestia aculeata* Desmarest's Prickly Weed**



Detail showing "prickles". The very fine filaments seen here are soon lost, but give the alga a furry appearance early in the year.



If collecting this seaweed keep it separate from other collections since it has high levels of sulphuric acid which damages other seaweeds



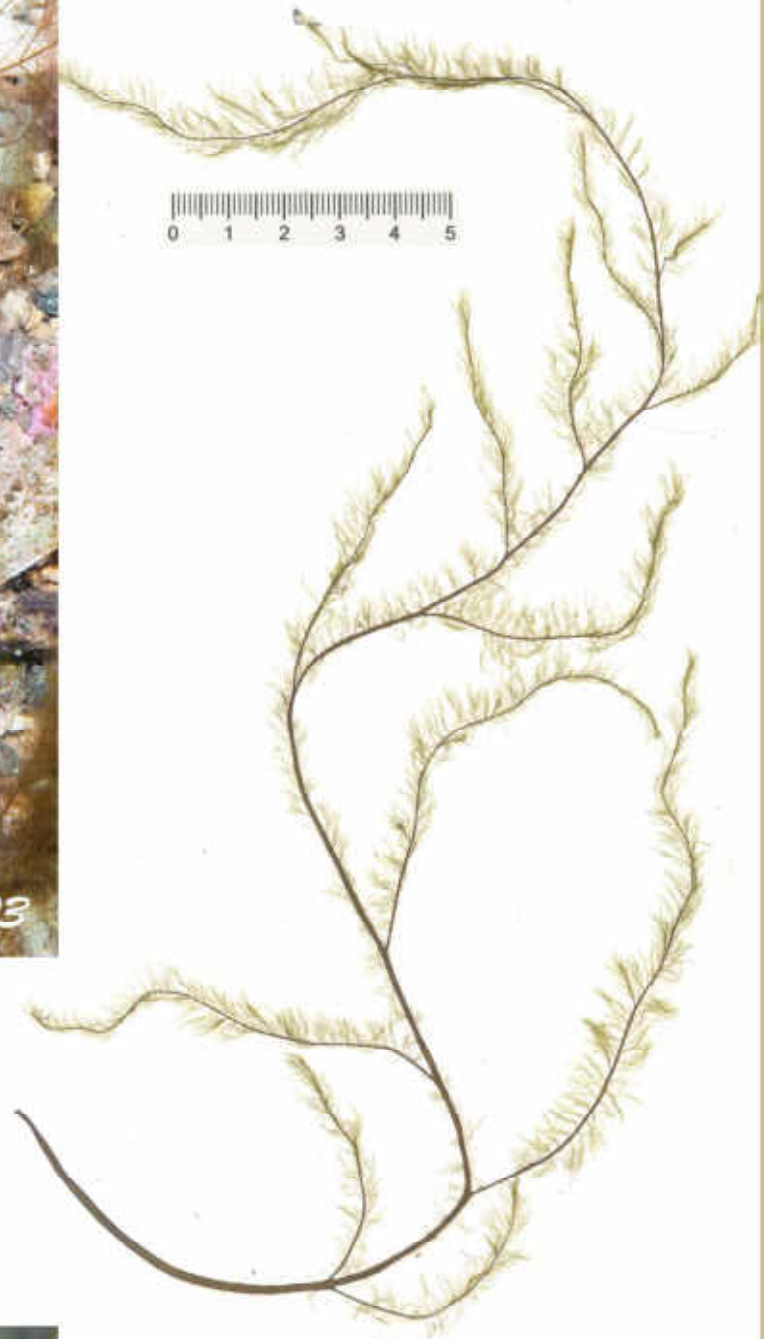
## *Desmarestia viridis* Desmarest's Green Weed



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Covered in very fine hairs early in the season. These are rapidly lost leaving bare, rounded stems growing to over 50cm in length.

If collecting this seaweed keep it separate from other collections since it has high levels of sulphuric acid which damages other seaweeds.

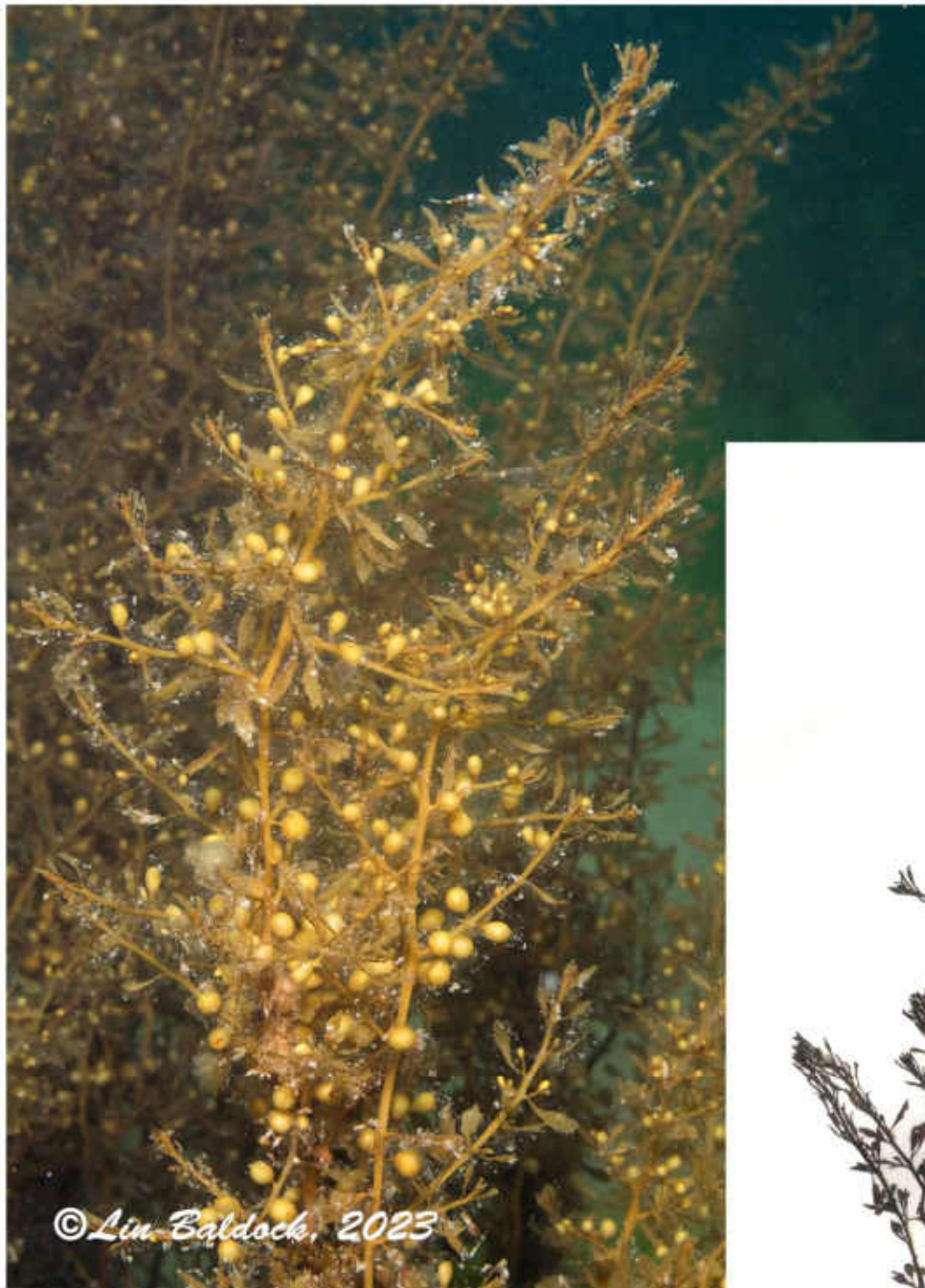


©Dawn Watson, 2023

Detail of fine hairs in the field.



## *Sargassum muticum* Wireweed



Tall, graceful golden-brown fronds with numerous small bladders. In rock pools and dense stands in the shallow subtidal.

A non-native species first recorded from the Isle of Wight in 1973.





## *Sphacelaria* sp Small Brown Feather Weed



Small pom-poms of fine brown filaments often growing on other algae. This species is likely to be *Sphacelaria cirrosa* growing as it is here on Desmarest's Prickly Weed (*Desmarestia aculeata*). Note also the tiny, very delicate red fronds of Rosy Dewdrops (*Porphyropsis coccinea*), another epiphyte of Desmarest's Prickly Weed. There are many other species of Brown Feather Weed.



***Pelvetia canaliculata* Channel Wrack**



Channel Wrack on the upper shore where it may not be covered by every high tide





***Fucus spiralis* Spiraled Wrack**



No bladders (check carefully), slight twist to frond may be evident. Reproductive structures without a margin. Grows on the shore above Bladder Wrack (*Ascophyllum nodosum*). It may be mixed with Guiry's Wrack (see below).



Reproductive structures of Guiry's Wrack (*Fucus guiryi*) with a sterile rim, a bit like ravioli



***Fucus vesiculosus* Bladder Wrack**



Reproductive tips are present here. Very few bladders are visible. You may have to look closely for them and make sure they are paired. In damp weather wracks can develop false bladders which are elongated along the frond margins and are not in pairs.



Paired bladders





***Fucus serratus* Serrated Wrack**



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The strongly toothed frond margins are distinctive. Serrated Wrack occurs low on the shore just above the Oar Weed (*Laminaria digitata*).



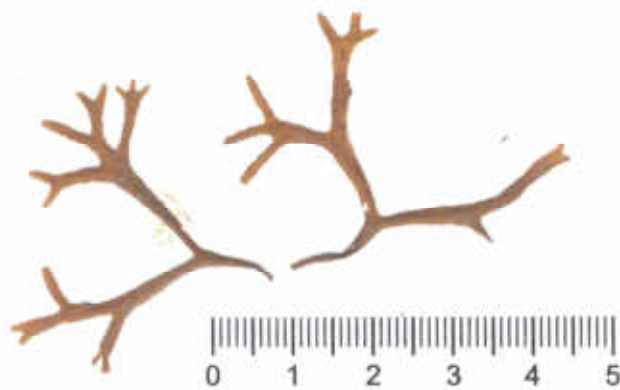
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## *Fucus cottonii* Moss Wrack



Moss Wrack growing high on the shore among a turf of salt marsh plants. It is not clear that this entity is a species in its own right. Gene sequencing studies in Ireland have shown that this miniaturised salt marsh form may be derived from either Spiraled Wrack or Bladder Wrack which are closely related and hybridise easily. Moss Wrack seems to be confined to locations with high precipitation and low salinity.





***Ascophyllum nodosum* Egg Wrack with  
the red *Vertebrata lanosa* Wrack Siphon Weed**



Egg Wrack at low water  
with reproductive structures  
and covered in a thick growth  
of Wrack Siphon Weed.

The free-living form of this  
seaweed f. *mackayi* was found  
on a sheltered shore near  
Lochranza Castle.