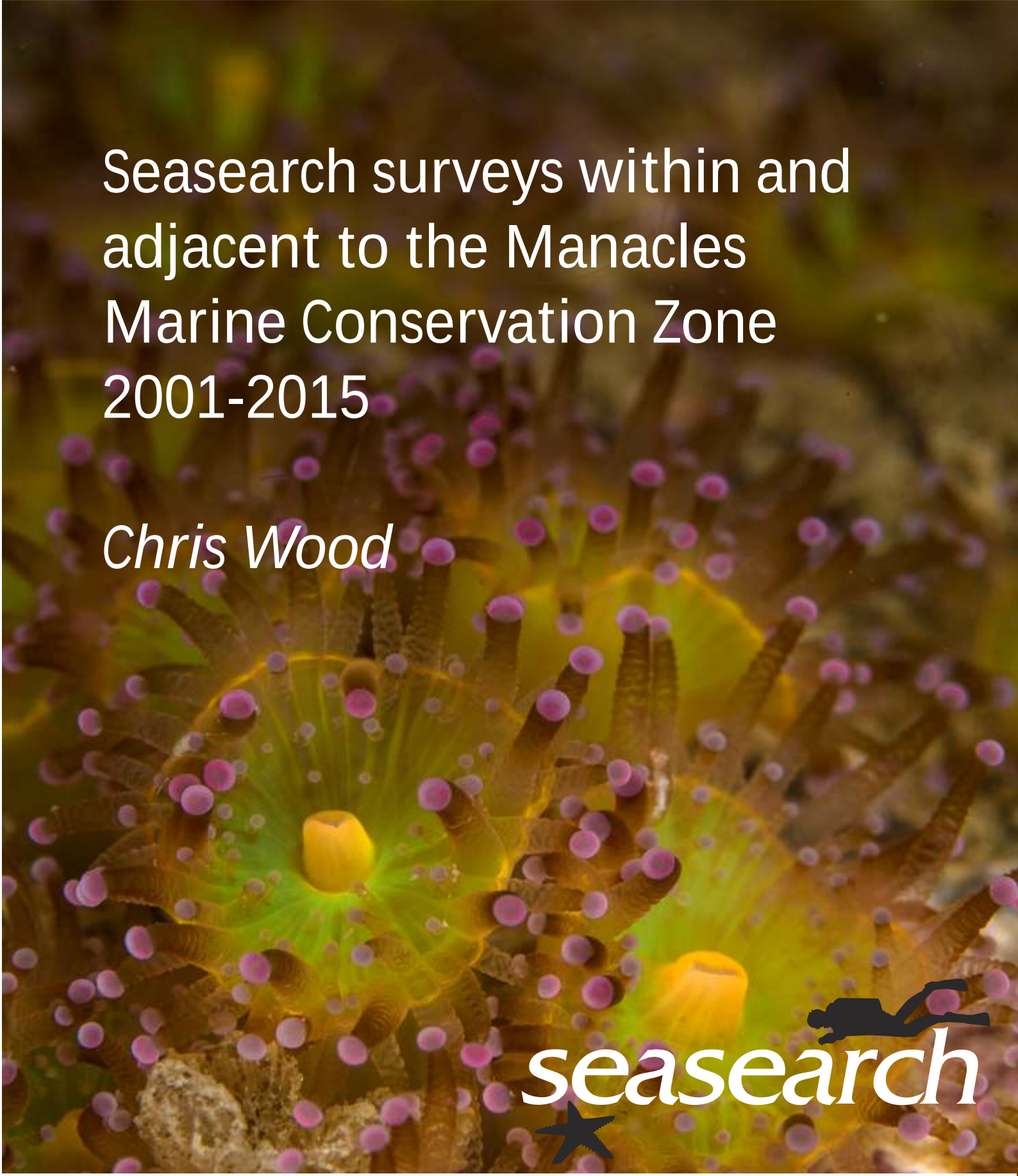
# Seasearch surveys within and adjacent to the Manacles Marine Conservation Zone 2001-2015

*Chris Wood*



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THE wildlife TRUSTS

PORTHKERRIS DIVERS LAND AND SEA SPORTS

## ACKNOWLEDGEMENTS

Seasearch would like to thank all of the volunteer divers over the years who have contributed to the records made in the Manacles area. Many of them have been individuals but organised dives have also been carried out organised by the Marine Conservation Society and Cornwall Wildlife Trust.

Many of the dives have been from local boats and we thank both Dive Action and Porthkerris Dive Centre for taking us to the sites surveyed.

In 2015 all of the boat surveys were organised by Porthkerris Dives Centre and we would like to thank Mike and Jo Anselmi for their valuable support for these surveys.

Almost all of the records made were by Seasearch volunteers. However the Wildlife Trusts organised one day of diving using a professional (but Seasearch trained) team and we thank them for access to their records.

Dr Matthew Witt, Environment and Sustainability Institute, University of Exeter, produced the maps throughout this report.

We would like to thank those who have contributed photographs or this report. They are Mark Webster, Tony Sutton, Sally Sharrock and Porthkerris Dive Centre. Other photographs are by the author.

Finally the author would like to thank Dr Charlotte Bolton (Seasearch), Dr Jean-Luc Solandt (Marine Conservation Society), Dr Matthew Witt (Exeter University) and Mike Anselmi (Porthkerris Dive Centre) for their reading of and contributions to this report.


Cover Images:
Front: Jewel Anemones
Back: Rocky Reef near Maen Land
both by Mark Webster

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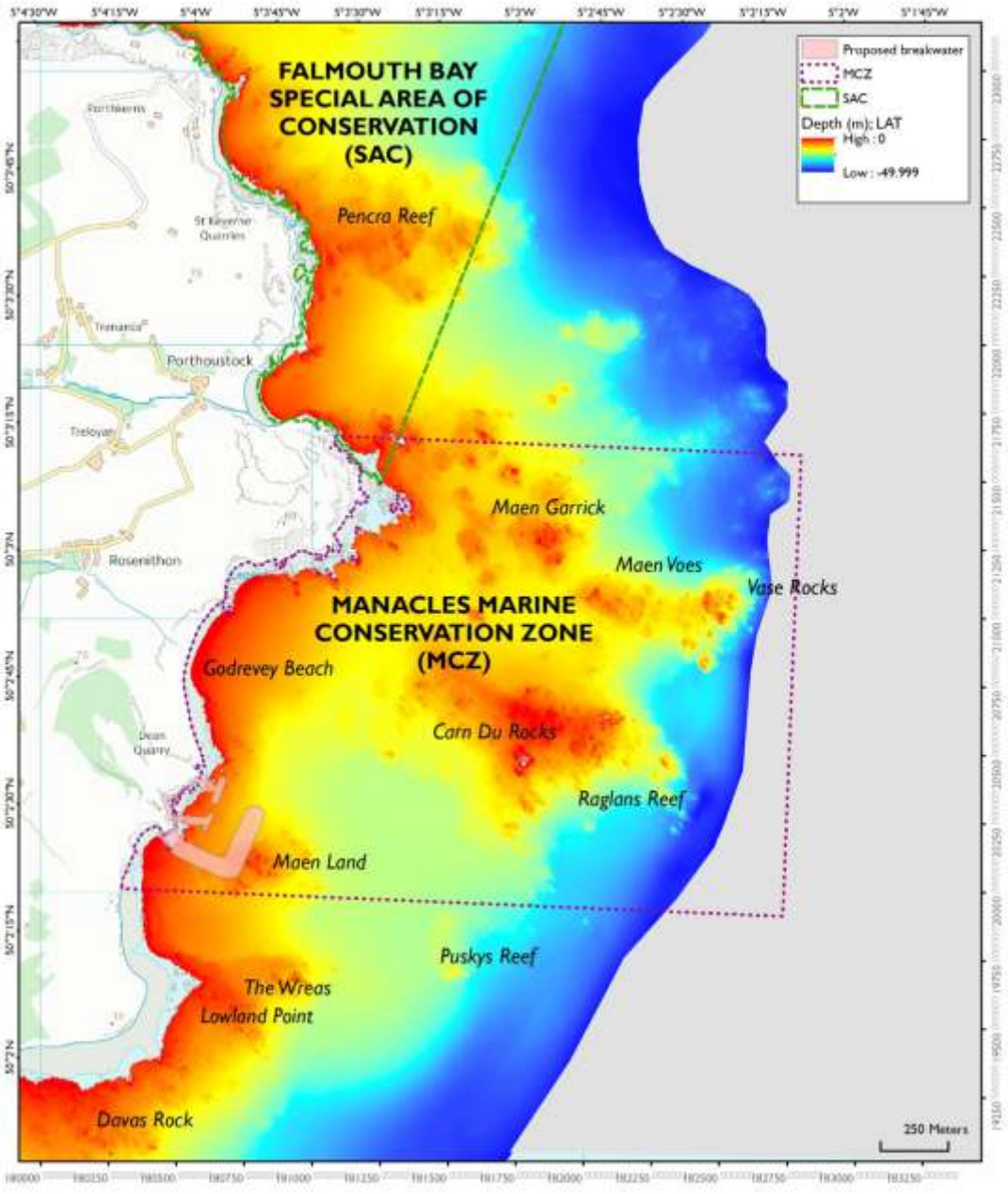


Figure 1: Survey area and site names

# INTRODUCTION AND SURVEY AREAS

This report is a summary of the sublittoral habitat and species information collected by volunteer Seasearch divers and others in the area of the Manacles close to St Keverne on the eastern side of the Lizard peninsula, Cornwall.

There are two conservation designations which cover parts of the area:

The Fal and Helford Special Area of Conservation (SAC) lies mostly to the north of the Manacles but extends as far south as Manacle Point just south of Porthoustock. It is shown outlined in blue in Figure 1 and dates from 2005 (Fal and Helford SAC UK0013112). The surveys undertaken at Porthkerris, and Porthoustock lie within this designation and are referred to as within the SAC throughout this report. The reefs at Pencra Head are bisected by the SAC boundary but have been included within it for the purposes of this report.

The Manacles Marine Conservation Zone (MCZ) was designated in 2013 (Ministerial Order 2013 No13). The designation stretches from near Porthoustock to Dean Quarry and includes the Manacles rocks. Survey sites within this area are referred to as within the MCZ throughout this report. The designation was amended in 2016 to include additional species and habitats (Ministerial order 2016 No 27).

The survey area and conservation designations are shown in Figure1.

Seasearch surveys in the area commenced in 2003 and have continued each year. In 2015 a much higher level of survey effort was achieved because of the potential proposal for the re-opening of Dean Quarry which is on the shoreline and adjacent to the MCZ. The locations of the Seasearch surveys are shown in Figure 2. For all of the pre-2015 surveys a single entry point is shown for each survey. In 2015 separate entry and exit points were recorded and thus the extent of seabed surveyed is more apparent.

There are areas included in the Seasearch surveys which are outside either of these designations: Surveys off Pencra Head straddle the SAC designation (see above) which is a straight line between Manacle Point and St Anthony's Head outside Falmouth. To the south of the Manacles MCZ Seasearch surveys include sites just south of the boundary around Lowland Point, The Wreas and Puskys Reef. There is also an outlying Seasearch survey off Chynalls Point south of Coverack.

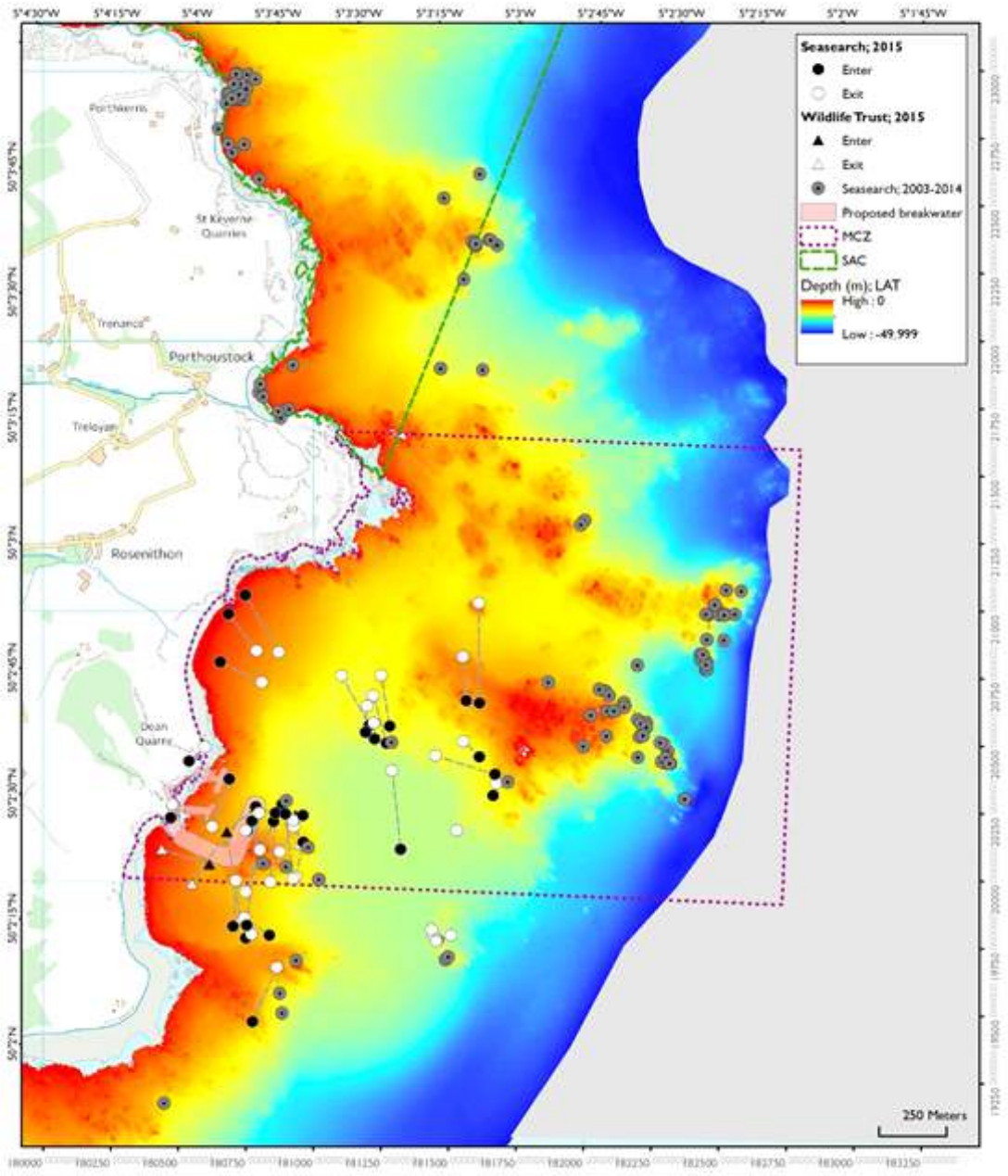


Figure 2: Seasearch survey locations

# 1. SURVEYS UNDERTAKEN

This section describes the surveys undertaken which are the basis for this report. The great majority of these have been undertaken by volunteer divers and have used the Seasearch methodology.

## 1a Seasearch 2001-2014

Volunteer Seasearch surveys were undertaken within the Manacles area and were organised by the Marine Conservation Society and the Cornwall Wildlife Trust. The organised surveys were augmented by records from individual Seasearchers diving either with their clubs or with local dive operators. 151 Seasearch Survey and Observation Forms were completed in the area from Porthkerris Point in the north to Chynalls Point in the south. The locations of these surveys are shown in Figure 2. In addition to the general surveys, specific surveys of pink sea fans *Eunicella verrucosa* were made from many of the same sites. These involved the collection of information on density, size and condition of pink sea fans and the presence of associated species, sea fan anemones *Amphianthus dohrnii*, sea fan nudibranchs *Tritonia nilsodneri* and false cowries *Simnia* spp.

The results of all of these surveys have been included in the habitats and species sections which follow and in the biotope and species lists in the Appendices. The following survey reports have also been produced and can be accessed from the Seasearch website, www.seasearch.org.uk/achievements

Pink Sea Fan Survey 2001-2002 (MCS)
Manacles Weekend 25th-27th July 2003 (MCS)
Pink Sea Fan surveys in Cornwall 2004-5 (CWT)
Manacles - May & August 2005 (MCS)
Pink Sea Fan Survey 2004-2006 (MCS/Seasearch)
Sea Fan Survey Report 2014 (MCS/Seasearch)

## 1b Seasearch 2015

Volunteer Seasearch surveys were undertaken on 9 days between 25th April and 26th September 2015. The surveys were co-ordinated by Porthkerris Dive Centre, who provided boat cover, and the Seasearch elements were organised by MCS and CWT. The organised surveys specifically targeted sites which could be affected by the re-opening of Dean Quarry. These dives produced 38 Seasearch forms of which 36 were Survey Forms and 2 Observation Forms.

## 1c Wildlife Trusts National Dive Team

One day of survey was carried out by the Wildlife Trust's National Dive Team. The team used the Seasearch recording methodology and produced 5 Seasearch Survey Form records.

## 1d Additional Photographic Records

In addition to the Seasearch records photographic records were made by other divers during the Seasearch surveys. Where these add species or habitat data they have also been included in this report.

# 2. HABITATS PRESENT IN THE MANACLES AREA

This section describes the habitats listed in conservation designations and other habitats which are either characteristic or important in the Manacles area. A full list of habitats/biotopes recorded on Seasearch surveys is in Appendix 1 and the location of the reef habitats surveyed is shown in Figure 3.

Habitats were recorded in two ways. For the more detailed Survey Form data detailed habitats were assigned by an experienced post survey analyst using the JNCC MNCR 04.05 set of biotopes. This has been subsequently updated to v15.03 but the changes do not affect any of the biotopes assigned. The MNCR bitotopes are divided into Littoral, Infralittoral and Circalittoral. Littoral refers to shoreline habitats which may be exposed at extreme low water. Infralittoral refers to shallow, seaweed dominated, habitats below extreme low water and circalittoral refers to animal dominated habitats, usually below about 15m depth.

For the Observation Forms, which are not divided by habitat, the recorder identifies broad habitat types seen throughout the survey dive.

## 2a Habitats protected by Special Area of Conservation designation (SAC)

The primary reasons for the designation of the Fal and Helford SAC are for its subtidal sandbanks, intertidal sand and mud flats, large shallow bays and Atlantic salt meadows. These habitats are limited in the part of the SAC within this study area. However, records were made of infralittoral fine sand (SS.SSa.CFiSa and SS.SSa.IFiSa.IMoSa) at Porthoustock and of circalittoral muddy sand (SS.SSa.CmuSa) at Pencra Reef. Reefs are also a qualifying feature of the SAC, but not a primary reason for its selection.

Reefs are the major feature of that part of the SAC which is within this study area. The reef sites in the SAC and the biotopes/Seasearch seabed cover types identified in each are:

Drawna Rocks, Porthkerris

MNCR Biotopes

| | |
|---|---|
| LR.HLR.MusB | Mussel and/or barnacle communities |
| IR.HIR.KFaR | Kelp with cushion fauna and/or foliose red seaweeds |
| IR.HIR.KFaR.FoR | Foliose red seaweeds on exposed lower infralittoral rock |
| IR.HIR.KFaR.LhypFa | *Laminaria hyperborea* forest with a faunal cushion (sponges and polyclinids) and foliose red seaweeds on very exposed upper infralittoral rock |
| IR.HIR.KSed.LsacChoR | *Laminaria saccharina, Chorda* filum and dense red seaweeds on shallow unstable infralittoral boulders or cobbles |
| IR.HIR.KSed.LsacSac | *Laminaria saccharina* and/or *Saccorhiza polyschides* on exposed infralittoral rock |
| IR.HIR.KSed.Sac | *Saccorhiza polyschides* and other opportunistic kelps on disturbed sublittoral fringe rock |
| IR.LIR.K.LhypLoch | Mixed *Laminaria hyperborea* and *Laminaria ochroleuca* forest on moderately exposed or sheltered infralittoral rock |
| IR.LIR.K.LhypLsac | Mixed *Laminaria hyperborea* and *Laminaria saccharina* on sheltered infralittoral rock |
| IR.MIR.KR | Kelp and red seaweeds (moderate energy infralittoral rock) |
| IR.MIR.KR.Lhyp | *Laminaria hyperborea* and foliose red seaweeds on moderately exposed infralittoral rock |
| IR.MIR.KR.LhypT.Ft | *Laminaria hyperborea* forest, foliose red seaweeds and a diverse fauna on tide-swept upper infralittoral rock |
| IR.MIR.KR.LhypVt | *Laminaria hyperborea* on moderately exposed vertical rock. |
| IR.MIR.KR.XFoR | Dense foliose red seaweeds on silty moderately exposed infralittoral rock |
| IR.MIR.KT | Kelp and seaweed communities in tide-swept sheltered conditions |

| | |
|---|---|
| CR.FCR.Cv | Circalittoral caves and overhangs |
| CR.HCR.XFa | Mixed faunal turf communities |
| CR.HCR.XFa.CvirCri | *Corynactis viridis* and a mixed turf of crisiids, *Bugula, Scrupocellaria*, and *Cellaria* on moderately tide-swept exposed circalittoral rock |
| CR.HCR.XFa.SpAnVt | Sponges and anemones on vertical circalittoral bedrock |
| CR.MCR.EcCr | Echinoderms and crustose communities |

Seasearch Cover Types

| | |
|---|---|
| KR | Kelp forest |
| KP | Kelp park |
| MS | Mixed seaweeds |
| SAT | Short animal turf on rocks |
| TAT | Tall animal turf in rocks |

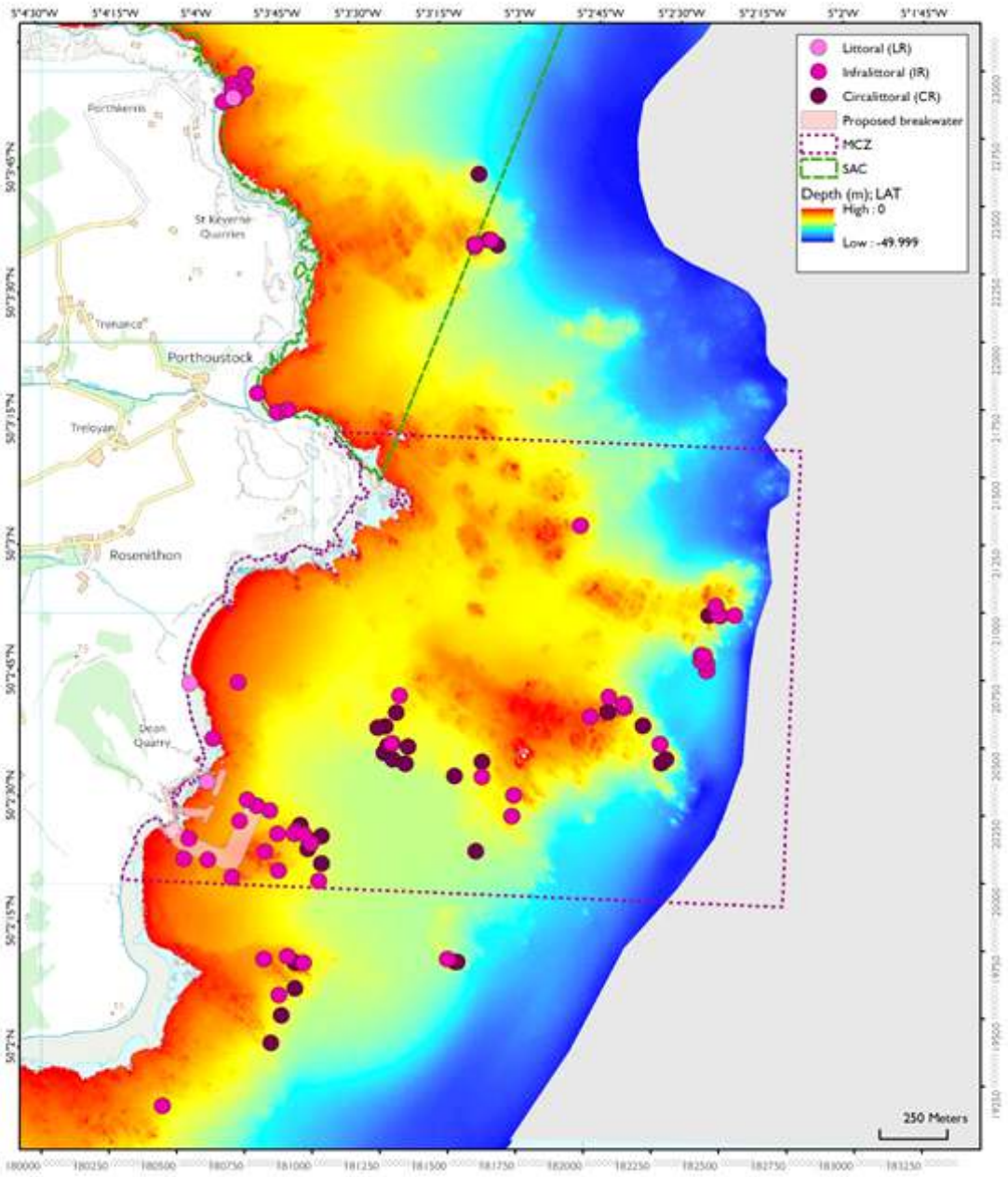


Figure 3: Reef habitats in the survey area

Pencra Head

MNCR Biotopes

| | |
|---|---|
| IR | Infralittoral Rock |
| IR.HIR.KSed.LsacSac | *Laminaria saccharina* and/or *Saccorhiza polyschides* on exposed infralittoral rock |
| IR.MIR.KR | Kelp and red seaweeds (moderate energy infralittoral rock) |
| CR.HCR.XFa | Mixed faunal turf communities |
| CR.HCR.XFa.ByErSp | Bryozoan turf and erect sponges on tide-swept circalittoral rock |
| CR.HCR.XFa.ByErSp.Eun | *Eunicella verrucosa* and *Pentapora foliacea* on wave-exposed circalittoral rock |
| CR.HCR.XFa.CvirCri | *Corynactis viridis* and a mixed turf of crisiids, *Bugula, Scrupocellaria*, and *Cellaria* on moderately tide-swept exposed circalittoral rock |
| CR.HCR.XFa.SpAnVt | Sponges and anemones on vertical circalittoral bedrock |
| CR.MCR.EcCr | Echinoderms and crustose communities |

Seasearch Cover Types

| | |
|---|---|
| KR | Kelp forest |
| KP | Kelp park |
| MS | Mixed seaweeds |
| SAT | Short animal turf on rocks |
| TAT | Tall animal turf in rocks |

The sites surveyed at Pencra Head are bisected by the SAC boundary.

## 2b Habitats listed in the Manacles Marine Conservation Zone (MCZ) designation (as amended in 2016)

The Manacles MCZ designation includes the following habitats as features of the area:

| | |
|---|---|
| Intertidal coarse sediment | Maintain in favourable condition |
| Subtidal coarse sediment | |
| Subtidal sand | Maintain in favourable condition |
| Subtidal macrophyte dominated sediment | Recover to favourable condition |
| Subtidal mixed sediments | |
| Maerl beds | Recover to favourable condition |
| Moderate energy intertidal rock | Maintain in favourable condition |
| Moderate energy infralittoral rock | Maintain in favourable condition |
| Moderate energy circalittoral rock | Maintain in favourable condition |

Intertidal coarse sediment

Seasearch is a sublittoral survey and no records were made of intertidal coarse sediments.

Subtidal coarse sediment

These habitats support a number of priority species such as Plaice, *Pleuronectes platessa,* and Sand Eels, Ammodytidae. They also support other rare or uncommon species such as the sponge *Adreus fascicularis*, Curled Octopus, *Eledone cirrhosa*, Red Mullet *Mullus surmuletus* and Red Gurnard *Chelidonichthys cuculus*. As the main focus of the Manacles MCZ is the rock habitats, sediment habitats are much less common and are concentrated in the areas adjacent to Dean Quarry where all of the species above have been recorded. They may also occur on the eastern boundary of the MCZ where we did not survey due to the depths involved. Biotopes identified at the Maen Land and Dean Quarry sites are:

| | |
|---|---|
| SS.SCS | Sublittoral coarse sediment |
| SS.SCS.ICS | Infralittoral coarse sediment |

| | |
|---|---|
| SS.SCS.ICS.SLan | Dense *Lanice conchilega* and other polychaetes in tide-swept infralittoral sand and mixed gravelly sand |
| SS.SCS.CCS | Circalittoral coarse sediment |
| SS.SCS.CCS.NMix | *Neopentadactyla mixta* in circalittoral shell gravel or coarse sand |

Subtidal sand

Records were made of infralittoral fine sand (SS.SSa.CFiSa and SS.SSa.IFiSa.IMoSa) at Godrevy Beach within the MCZ and at Porthoustock just outside it and of circalittoral muddy sand (SS.SSa.CMuSa) at Pencra Reef, also outside the MCZ.

Subtidal macrophyte dominated sediment

A single record of kelp and seaweed communities on sublittoral sediment (SS.SMp.KSwSS) at Dean Quarry.

Subtidal mixed sediments

A single record of *Cerianthus lloydii* and other burrowing anemones in circalittoral muddy mixed sediment (SS.SMx.CMx.CIloMx) at Drawna Rocks/Porthkerris.

Maerl Beds

Maerl was recorded from a number of sites in the area: The Wall (2 records as common), Spyridian Vagliano (3 records, as occasional and rare), Carn Du (1 record as occasional), Carn Du maerl (2 records as abundant and occasional), Maen Land (1 record as frequent), Dean Point (1 record as frequent) and Dean Quarry (3 records as rare). At none of these sites was the density and extent of living maerl sufficient to justify the term maerl bed. However, as the aim of the designation is to improve maerl beds to a favourable condition, the presence of maerl, either alive or dead, is relevant to this objective. The locations of the records are shown in Figure 4 and it can be seen that the majority are in close proximity to Dean Quarry rather than elsewhere in the MCZ. The SACFORN abundance scale used for species records is explained on page 43.

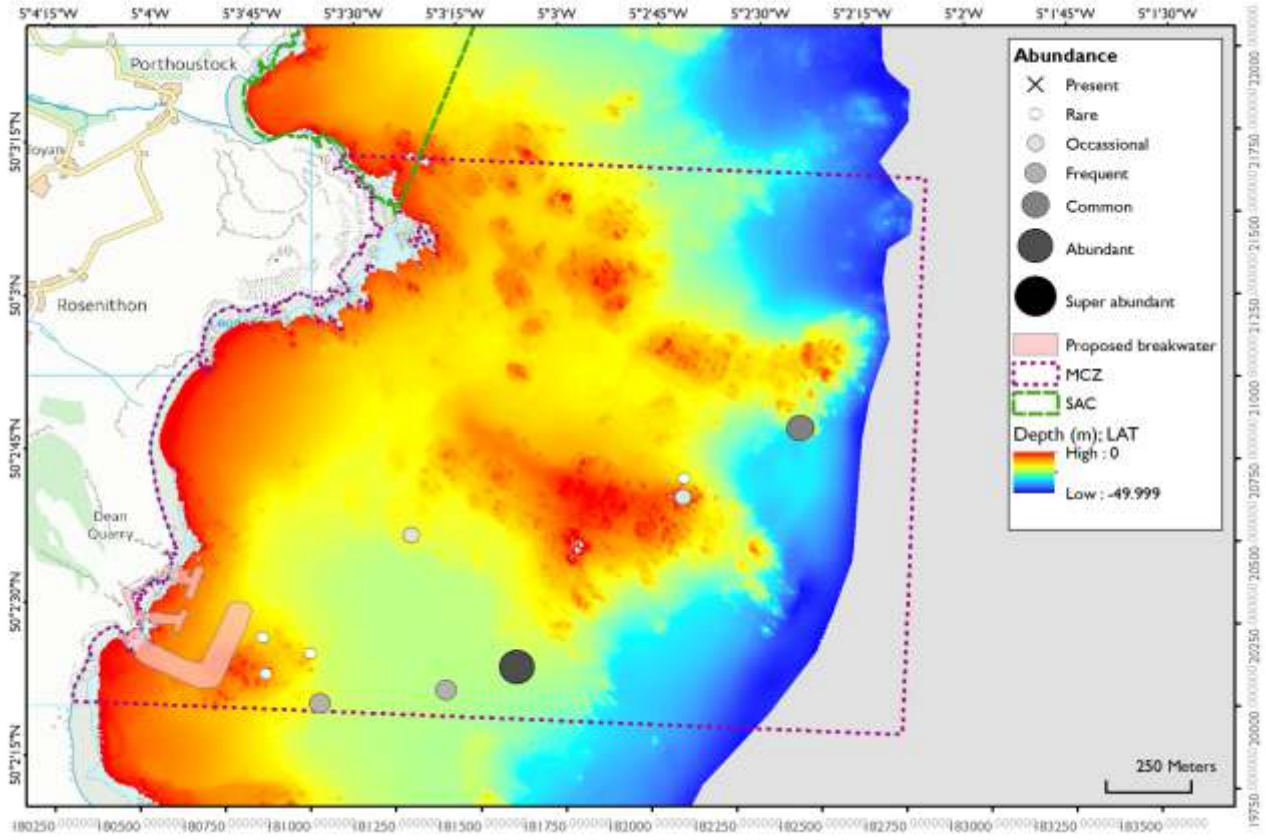


Figure 4: Maerl records (all species)

Figure 5: Coarse sediment with occasional maerl near Dean Quarry

Moderate energy intertidal rock

Seasearch is a sublittoral survey and does not generally target intertidal habitats. One record of Barnacles and fucoids on moderately exposed shores (LR.MLR.BF) was made at Dean Quarry. This habitat is, however likely to be much more widespread in the study area.

Moderate energy infralittoral rock

There are 33 records of moderate energy infralittoral rock biotopes in the Seasearch records, together with 220 infralittoral Seasearch seabed cover types (kelp forest 59 records, kelp park 56 records, mixed seaweeds 105 records). The Seasearch seabed cover types are not classified by energy level. These habitats are distributed throughout the study area and include the following from Maen Land and Dean Quarry.

Kelp and red seaweeds (moderate energy infralittoral rock) (IR.MIR.KR), 1 record
*Laminaria hyperborea* forest and foliose red seaweeds on moderately exposed upper infralittoral rock (IR.MIR.KR.Lhyp.Ft), 1 record
Grazed *Laminaria hyperborea* park with coralline crusts on lower infralittoral rock (IR.MIR.KR.Lhyp.GzPk), 1 record
*Laminaria hyperborea* park and foliose red seaweeds on moderately exposed lower infralittoral rock (IR.MIR.KR.Lhyp.Pk), 1 record
*Laminaria hyperborea* on tide-swept, infralittoral rock (IR.MIR.KR.LhypT), 5 records
*Laminaria hyperborea* forest and foliose red seaweeds on tide-swept upper infralittoral mixed substrata (IR.MIR.KR.LhypTX.Ft), 1 record
*Laminaria hyperborea* park with hydroids, bryozoans and sponges on tide-swept lower infralittoral rock (IR.MIR.KR.LhypT.Pk), 1 record
Dense foliose red seaweeds on silty moderately exposed infralittoral rock (IR.MIR.KR.XFoR), 1 record.
Kelp Forest (Seasearch KR), 5 records
Kelp Park (Seasearch KP), 2 records
Mixed Seaweeds (Seasearch MS), 6 records

Moderate energy circalittoral rock

There are 7 records of moderate energy circalittoral rock biotopes in the Seasearch records, together with 235 animal turf based Seasearch seabed cover types (short animal turf 135 records, tall animal turf 95 records). The Seasearch seabed cover types are not classified by energy level. These habitats are distributed throughout the study area and include the following from Maen Land and Dean Quarry.

Short animal turf (Seasearch SAT), 6 records
Tall animal turf (Seasearch TAT), 5 records

## 2c Other important habitats

High Energy Rock Habitats

Whilst moderate energy rock habitats have been listed in the Manacles MCZ designation we believe that these do not encompass some of the characteristic features for which the MCZ has been designated as these occur exclusively or primarily in high energy biotopes. Therefore high energy infralittoral and circalittoral rock are equally important to the moderate energy habitats listed.

Biotope or Habitat descriptions only include commonly occurring species and thus some of the specific species features in the Manacles designation (sea fan anemone, spiny lobster and stalked jellyfish) do not appear in biotope descriptions.
However, two of the features which are clearly of importance, in that they appear in the Defra Manacles Marine Conservation Zone Factsheet, are pink sea fans, *Eunicella verrucosa* and jewel anemones, *Corynactis viridis.*

The Factsheet states that:
"This rocky habitat supports well known species such as sea-fan and anemone,"
The habitat is illustrated by a picture of "Jewel anemones growing on rocky surfaces"

The two tables which follow are results of a search of the JNCC Habitat Classification for occurrences of these two species in habitat descriptions.

**Search the Marine Habitat Classification**

**Search results**

Your search for "**Eunicella verrucosa**" within the habitat description found **3** results:

| Code | Habitat Title |
|---|---|
| CR.HCR.XFa.ByErSp | Bryozoan turf and erect sponges on tide-swept circalittoral rock |
| CR.HCR.XFa.ByErSp.Eun | *Eunicella verrucosa* and *Pentapora foliacea* on wave-exposed circalittoral rock |
| CR.HCR.XFa.SpAnVt | Sponges and anemones on vertical circalittoral bedrock |

This search demonstrates that pink sea fans would be expected to be significant enough features of the biotope to be included in the description only in high energy circalittoral rock biotopes (CR.HCR) in the table above. The habitats which we believe to be particularly prominent at the Manacles are highlighted in red.

## Search the Marine Habitat Classification

### Search results

Your search for "**Corynactis viridis**" within the habitat description found **21** results:

| Code | Habitat Title |
|---|---|
| LR.FLR.CvOv.SpByAs | Sponges, bryozoans and ascidians on deeply overhanging lower shore bedrock or caves |
| IR.HIR.KFaR.AlaAnCrSp | *Alaria esculenta* forest with dense anemones and crustose sponges on extremely exposed infralittoral bedrock |
| IR.HIR.KFaR.LhypFa | *Laminaria hyperborea* forest with a faunal cushion (sponges and polyclinids) and foliose red seaweeds on very exposed upper infralittoral rock |
| IR.HIR.KFaR.LhypPar | Sparse *Laminaria hyperborea* and dense *Paracentrotus lividus* on exposed infralittoral limestone |
| IR.HIR.KFaR.LhypR.Pk | Laminaria hyperborea park with dense foliose red seaweeds on exposed lower infralittoral rock |
| IR.HIR.KFaR.LhypR.Loch | Mixed *Laminaria hyperborea* and *Laminaria ochroleuca* forest on exposed infralittoral rock |
| IR.HIR.KFaR.LhypRVt | *Laminaria hyperborea* and red seaweeds on exposed vertical rock |
| IR.LIR.K.LhypLoch | Mixed *Laminaria hyperborea* and *Laminaria ochroleuca* forest on moderately exposed or sheltered infralittoral rock |
| IR.FIR.SG.CrSpAsAn | Anemones, including *Corynactis viridis*, crustose sponges and colonial ascidians on very exposed or wave surged vertical infralittoral rock |
| CR.HCR.FaT | Very tide-swept faunal communities |
| CR.HCR.FaT.CTub.CuSp | *Tubularia indivisa* and cushion sponges on tide-swept turbid circalittoral bedrock |
| CR.HCR.XFa.ByErSp | Bryozoan turf and erect sponges on tide-swept circalittoral rock |
| CR.HCR.XFa.ByErSp.DysAct | Mixed turf of bryozoans and erect sponges with *Dysidea fragilis* and *Actinothoe sphyrodeta* on tide-swept wave-exposed circalittoral rock |
| CR.HCR.XFa.ByErSp.Sag | Mixed turf of bryozoans and erect sponges with *Sagartia elegans* on tide-swept ciraclittoral rock |
| CR.HCR.XFa.CvirCri | *Corynactis viridis* and a mixed turf of crisiids, *Bugula*, *Scrupocellaria*, and *Cellaria* on moderately tide-swept exposed circalittoral rock |
| CR.HCR.XFa.SpAnVt | Sponges and anemones on vertical circalittoral bedrock |
| CR.MCR.EcCr.CarSwi.Aglo | *Caryophyllia smithii*, *Swiftia pallida* and *Alcyonium glomeratum* on wave-sheltered circalittoral rock |
| CR.MCR.EcCr.CarSp | *Caryophyllia smithii*, sponges and crustose communities on wave-exposed circalittoral rock |
| CR.MCR.EcCr.CarSp.Bri | Brittlestars overlying coralline crusts, *Parasmittina trispinosa* and *Caryophyllia smithii* on wave-exposed circalittoral rock |
| CR.MCR.EcCr.CarSp.PenPcom | *Caryophyllia smithii* and sponges with *Pentapora foliacea*, *Porella compressa* and crustose communities on wave-exposed circalittoral rock |
| CR.FCR.FouFa.AdigMsen | *Alcyonium digitatum* and *Metridium senile* on moderately wave-exposed circalittoral steel wrecks |

There are eight infralittoral rock (IR) biotopes listed in the table which include *Corynactis viridis* in the habitat description. Six of these are high energy biotopes (IR.HIR), one is a low energy biotope (IR.LIR) and one is a feature biotope (IR.FIR). None of them are moderate energy biotopes.

There are twelve circalittoral rock biotopes listed in the table which include *Corynactis viridis* in the biotope description. Seven of these are high energy biotopes (CR.HCR), four are moderate energy biotopes (CR.MCR) and one is a feature biotope (CR.FCR). Of the four moderate energy biotopes two contain in the biotope named species which have a northerly distribution (*Swiftia pallida* and *Porella compressa*) and would not be appropriate biotopes to use in Cornwall.

Again the biotopes which we believe to be particularly characteristic of the Manacles are highlighted in red. None of these are moderate energy biotopes.

We therefore conclude that in an area such as the Manacles which is characterised by these two species, the biotopes which support them would be expected to be largely high energy biotopes. This is borne out in the biotopes assigned to Seasearch samples from the area.

| Biotope | Biotope Code | Number of Occurrences | Percentage of biotopes in this category |
|---|---|---|---|
| Infralittoral Rock | IR | 4 | 5% |
| High Energy Infralittoral Rock | IR.HIR | 37 | 49% |
| Moderate Energy Infralittoral Rock | IR.MIR | 29 | 38% |
| Low Energy Infralittoral Rock | IR.LIR | 2 | 3% |
| Features of Infralittoral Rock | IR.FIR | 4 | 5% |
| Circalittoral Rock | CR | 1 | 1% |
| High Energy Circalittoral Rock | CR.HIR | 102 | 85% |
| Moderate Energy Circalittoral Rock | CR.MIR | 6 | 5% |
| Low Energy Circalittoral Rock | CR.LIR | 0 | 0 |
| Features of Circalittoral Rock | CR.FIR | 13 | 10% |

The table shows that in the Manacles area 85% of circalittoral biotopes and 49% of infralittoral biotopes are high energy biotopes and only 5% of circalittoral biotopes and 38% of infralittoral biotopes are moderate energy biotopes.

There is no doubt that the Manacles, because the coastline is open to the east, is not as exposed as westerly facing coastlines. Equally tidal streams do not exceed 1.5 knots and thus the area cannot in general be considered to be tide-swept. It is likely that these two factors led to the conclusion that only moderate energy biotopes would occur and thus to only moderate energy habitat features being listed. However, this is not borne out by the communities living on the rocky surfaces, which are characteristic of high energy biotopes. We conclude that these high energy habitats are at least as important as the moderate energy habitats listed in the maintenance of the biodiverse rock communities which the MCZ designation is intended to maintain in a favourable condition.

The locations of the high and moderate energy rock biotopes are shown in Figure 6.

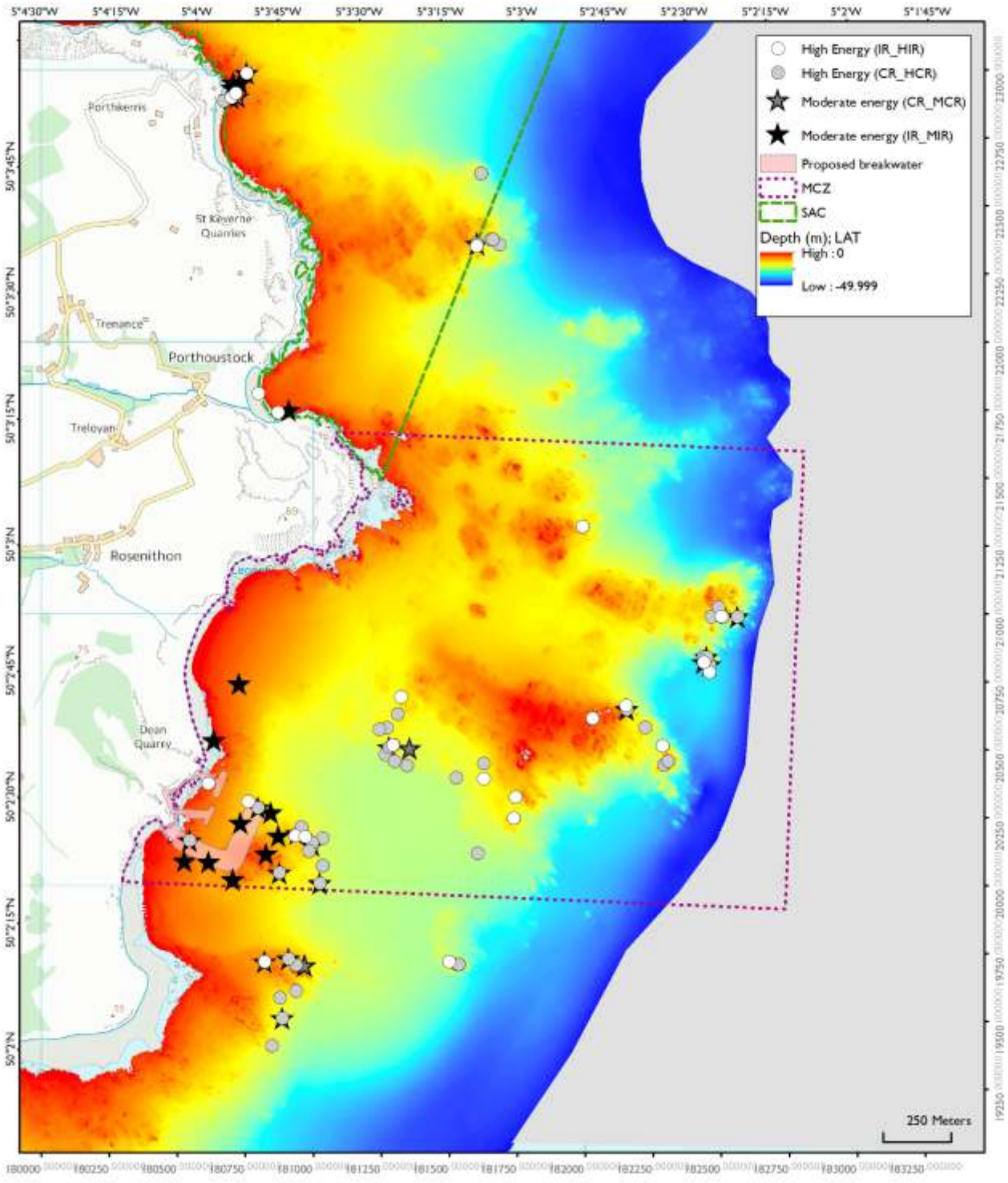


Figure 6: Moderate and high energy rock biotopes

The high energy rock biotopes are distributed throughout the study area, in the SAC, MCZ and outside either, and include the following from Maen Land and Dean Quarry.

| | |
|---|---|
| IR.HIR.KFaR | Kelp with cushion fauna and/or foliose red seaweeds |
| IR.HIR.KFaR.FoR | Foliose red seaweeds on exposed lower infralittoral rock |
| IR.HIR.KSed.Sac | *Saccorhiza polyschides* and other opportunistic kelps on disturbed sublittoral fringe rock |
| CR.HCR.XFa | Mixed faunal turf communities |
| CR.HCR.XFa.ByErSp | Bryozoan turf and erect sponges on tide-swept circalittoral rock |
| CR.HCR.XFa.ByErSp.Eun | E*unicella verrucosa* and *Pentapora foliacea* on wave-exposed circalittoral rock (Photo, Figure 8) |
| CR.HCR.XFa.CvirCri | *Corynactis viridis* and a mixed turf of crisiids, *Bugula, Scrupocellaria*, and *Cellaria* on moderately tide-swept exposed circalittoral rock (Photo, Figure 7) |


Figure 7: CR.HCR.XFA.CVirCri biotope


Figure 8: CR.HCR.XFa.ByErSp.Eun biotope

# 3. SPECIES PRESENT IN THE MANACLES AREA

This section identifies the species of particular interest in the Manacles area, both those listed in the MCZ designation and the species that characterise the area. It also identifies the species which are of interest because they are nationally scarce or rare, or have a restricted south-westerly distribution. A full list of all of the species recorded during the Seasearch surveys is given in Appendix 2.

## 3a Species listed in the MCZ designation

Although the Manacles MCZ factsheet (DEFRA, 2013) under the heading Why is this site important? says it "is known to cover an area that is rich in marine biodiversity", only three species were listed in the original Manacles MCZ designated list of features, Sea fan anemone, *Amphianthus dohrnii*, Spiny Lobster/Crawfish, *Palinurus elephas* and Stalked jellyfish, *Haliclystus auricula*. Pink Sea Fan, *Eunicella verrucosa*, was added in 2016.

Sea Fan Anemone, *Amphianthus dohrnii*

Figure 9: Sea Fan Anemone, *Amphianthus dohrnii.*

The sea fan anemone is a rarely recorded species which is found almost exclusively on the two species of sea fans, *Eunicella verrucosa* in SW England and *Swiftia pallida* on the west coast of Scotland. Whilst the literature (Manuel 1981) suggests it can also be found attached to other firm rod-like structures, such as hydroid stems, there are no records within the Seasearch dataset of it not on sea fans. This anemone has not been recorded on sea fans in Wales or Ireland. In England there are individual Seasearch records from Lundy, Devon (2014) and Lyme Bay, Dorset (2005), but the majority of records come from the south coasts of Devon and Cornwall and the Isles of Scilly.
In Seasearch surveys in 2001-2002 the Manacles was identified as the area with the highest concentration of sea fan anemones (Wood 2003). In the later 2004-2006 surveys, Pencra Reef, immediately to the north of the Manacles was identified as one of two areas with the highest numbers of anemones (Wood, 2008). The wider Manacles area is thus of national importance for this species and the aim of the MCZ designation is to maintain the population in favourable condition. It may be assumed that as a Priority (formerly Biodiversity Action Plan) Species and a species protected by the Wildlife and Countryside Act 1981, it is also the aim to maintain the population throughout an area of national importance for the species and thus the wider Manacles area beyond the confines of the MCZ boundary are of equal importance to sites within the MCZ.

The locations of all of the Seasearch records of this species in the survey area are shown in Figure 29. The 2015 data includes records from 4 sites close to Dean Quarry: Maen Land (1 record – rare, Carn Du backbone (3 records – frequent, frequent and rare), Puskys Reef (4 records – frequent, frequent, occasional and rare), and Little Wrea (2 records – occasional and rare). Of these sites Maen Land is within the MCZ and in the area which could be physically affected by the harbour works, Carn Du backbone is within the MCZ and within 1km of the harbour works, Puskys and Little Wrea are just outside the southern boundary of the MCZ but within 1km and 250m respectively of the harbour works.

Conclusion: The wider Manacles area is nationally significant for its *Amphianthus dohrnii* population. The species occurs within the area likely to be directly impacted by the harbour works but is not common. However there are larger populations close to the harbour works which could potentially be affected by development.

Spiny Lobster/Crawfish, *Palinurus elephas*

*Palinurus elephas* is a large crustacean which is both easily recorded by volunteer divers and yet of which there are relatively few recent records before 2015. Fishing pressure is thought to have dramatically reduced populations throughout UK waters.

Within the Seasearch dataset there are only three records of this species between 2003 and 2014. These were all from Maen Land (in the dataset referred to as Brod's Mound or Mason's Mount) and were in 2005 and 2006. The 2015 data includes records from 4 sites close to Dean Quarry: Maen Land (2 records – rare), Carn Du backbone (1 record – occasional), Pinnacle West of Carn Du (1 record – occasional) and Puskys Reef (2 records – both rare). Of these four sites Maen Land is within the MCZ and in the area which could be physically affected by the harbour works, Carn Du backbone and the Pinnacle to its west are both within the MCZ and within 1km of the harbour works and Puskys is just outside the southern boundary of the MCZ but within 1km of the harbour works.

Conclusion: Within the wider Manacles area the area around the proposed harbour works is the most important for this species. The object of MCZ designation is to recover the population and sites close to Dean Quarry appear to be important to this objective.

Figure 10: Crawfish or Spiny Lobster, *Palinurus elephas*

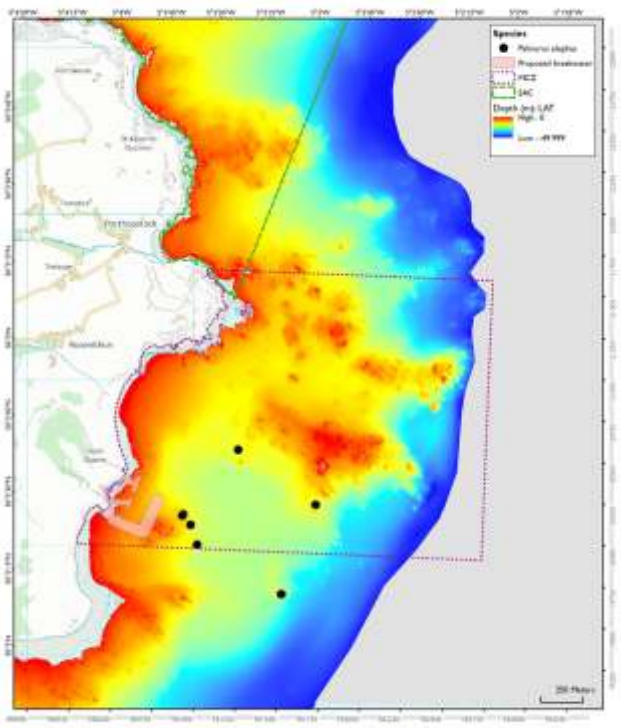
Figure 11: Crawfish or Spiny Lobster, *Palinurus elephas* records

Stalked jellyfish, *Haliclystus auricula*

There are a number of closely related species of stalked jellyfish. The species named in the MCZ designation is *Haliclystus auricula*, but *Haliclystus octoradiatus* is very similar. The Priority Species (formerly BAP) listing also includes *Lucernariopsis cruxmelitensis* and *L. campanulata*. There are seven records of stalked jellyfishes for the survey area in the Seasearch database. They are all from shallow, often intertidal, sites – Drawna Rocks at Porthkerris, Porthoustock Bay and, in 2015, Godrevy Beach just north of the Dean Quarry jetty. Diving surveys are not the best method of recording stalked jellyfish and, together with the cryptic nature of these animals, it is likely that these records significantly underestimate the numbers present.

Figure 12: Stalked jellyfish, Godrevy Beach

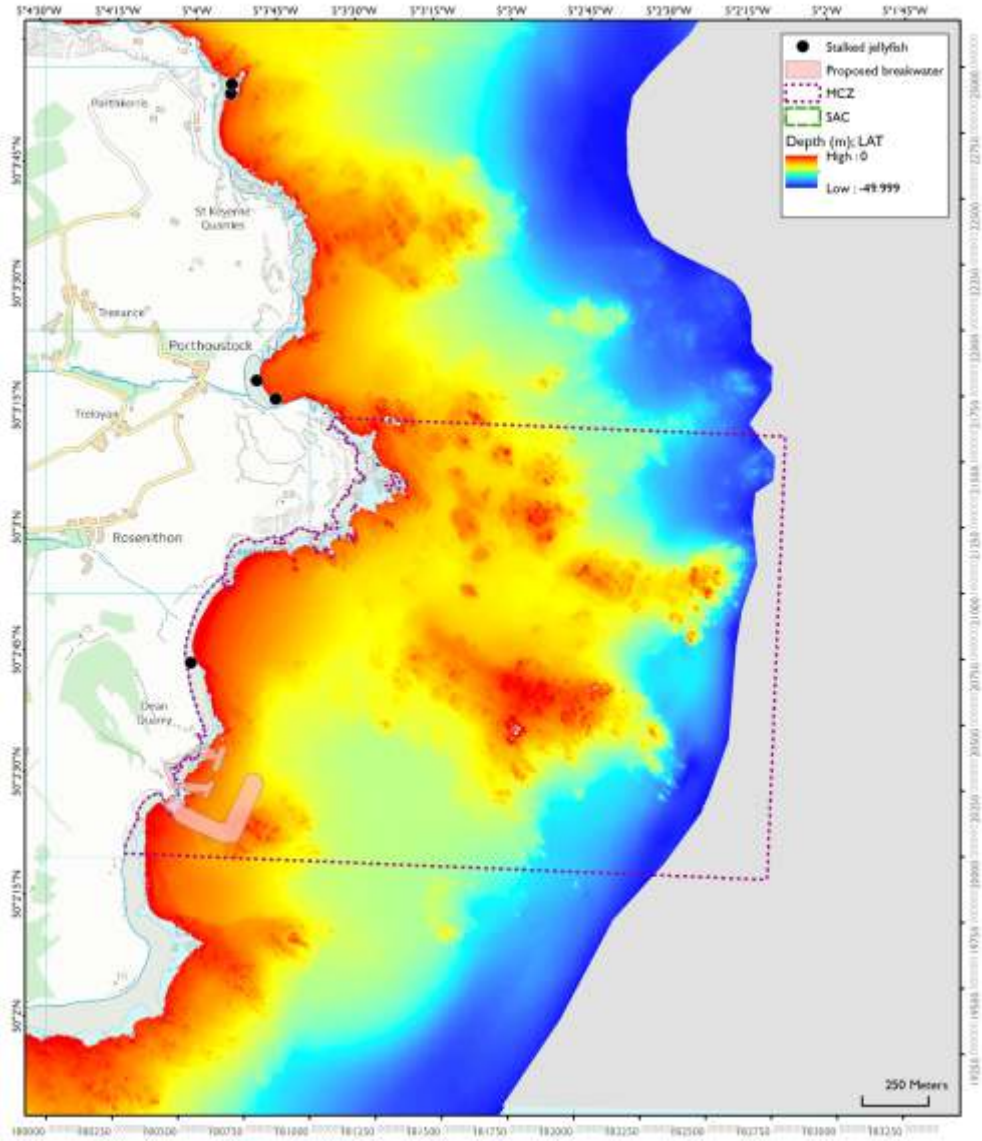


Figure 13: Stalked jellyfish records

Conclusion: Stalked jellyfishes are present in the Manacles area and can be found immediately north of the existing Dean Quarry jetty in an area likely to be physically impacted by harbour works.

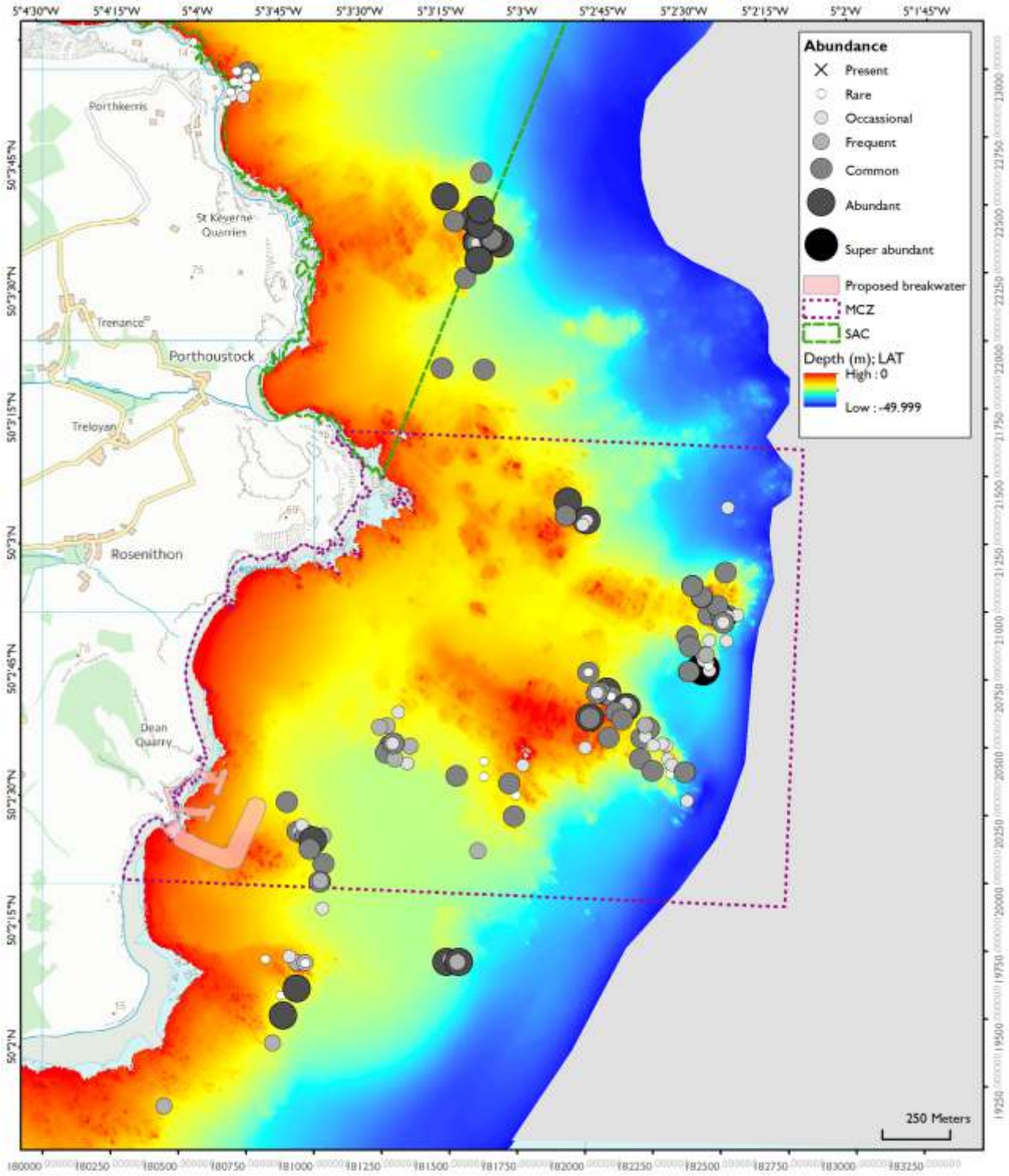


Figure 14: Pink Sea Fan, *Eunicella verrucosa*, records

Pink Sea Fan, *Eunicella verrucosa*

This species is a characterising species in the wider Manacles area, which has one of the densest populations in England (Wood, 2003 & 2008 and Pikesley et.al. 2015). As well as being a Priority Species in its own right, the Pink Sea Fan is fundamental to the existence of the Sea Fan Anemone, *Amphianthus dohrnii* which is listed in the MCZ designation. The Pink Sea Fan was added to the list of designated specis for the Manacles MCZ in 2016.

The most dense populations of Pink Sea Fans occur in flattish rock and boulder habitats below 20m depth, rather than on the sides of the pinnacles themselves. In these areas densities of over 5 colonies per square metre can be found. Many of these sites are close to the interface between rock and sediment habitats and are therefore vulnerable to physical disturbance, ether from bottom fishing or additional sediment deposition due to storms or human activities.

The locations of all of the Seasearch records of this species in the survey area are shown in Figure 16. The 2015 data includes records from 6 sites close to Dean Quarry: Maen Land (4 records – 2 common, frequent, rare), Near Dean Quarry (4 records – 1 abundant, 2 occasional and 1 rare), SE of Manacle Point (3 records, common, frequent and occasional), Carn Du area (15 records – 3 common, 6 frequent, 2 occasional and 4 rare), Puskys Reef (8 records – 2 abundant, 1 common, 3 frequent, and 2 occasional), and The Wreas (6 records – 1 abundant, 2 frequent, 1 occasional and 1 rare). Of these four sites, Maen Land and near Dean Quarry, are within the MCZ and in the area which could be physically affected by the harbour works, SE of Manacle Point and Carn Du backbone are both within the MCZ and within 1km of the harbour works, Puskys and Little Wrea are both just outside the southern boundary of the MCZ but within 1km and 250m respectively of the harbour works.


Figure 15: Sea fan forest at Little Wrea


Figure 16: Large individual sea fan near Maen Land

Conclusion: The wider Manacles area is nationally significant for its' *Eunicella verrucosa* population. This species occurs throughout the study area and is present within the area likely to be directly impacted by the harbour works but is not common. There are also dense populations close to the harbour works which could potentially be affected by development. The species is critical to the presence of the sea fan anemone, *Amphianthus dohrnii,* and both are listed species in the MCZ designation.

## 3b Other priority species

The following species, whilst not listed in the MCZ designation, are all included in the List of Habitats and Species of principal importance in England (Section 41 of The Natural Environment and Rural Communities (NERC) Act), which replaced the Biodiversity Action Plan designation. They form an important part of the rich marine biodiversity of the Manacles area.

### Plaice, *Pleuronectes platessa*

Plaice are found in sediment habitats and, because of the focus on rock areas in earlier Seasearch surveys, do not appear in the species list before 2015. In 2015 our surveys looked at all habitats close to Dean Quarry and the potential harbour works, and thus sediment habitats were covered for the first time. There are 9 records of this species in 2015. Three are from areas which could be physically affected by harbour works (Maen Land, and Dean Point), 3 are from sediment areas just north of the quarry (Godrevy Beach) and three from sediment areas just to the south (The Wreas).


Figure 17: Plaice, *Pleuronectes platessa,* near Dean Quarry

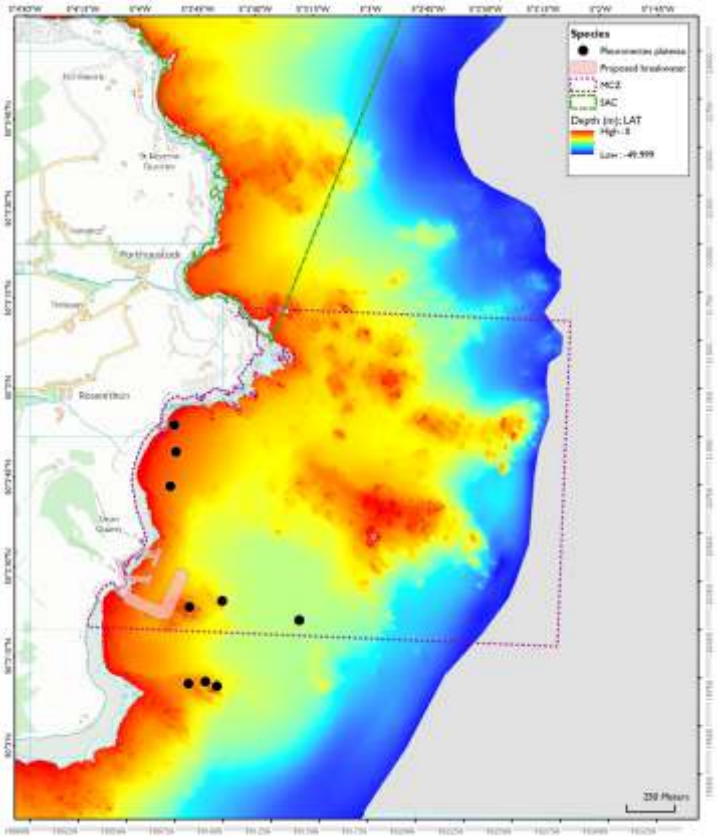


Figure 18: Plaice, *Pleuronectes platessa,* records

Conclusion: There are populations of this priority species both in sediment areas likely to be directly affected by harbour works at Dean Quarry and sediment areas immediately to the north and the south. Maintaining sediment habitats in a favourable condition should include the species which depend on them.

### Ling, *Molva molva* and Anglerfish, L*ophius piscatorius*

These two priority fish species have been recorded from rocky habitats in the Manacles area in past surveys but were not observed in 2015. All of the records come either from the Manacles rocks themselves or from Pencra Reef to the north.

## 3c Other characterising, rare and unusual species

The following species are either characteristic of the Manacles area and make a major contribution to what the MCZ factsheet (DEFRA 2013) describes as the 'rich marine biodiversity', or are species which are rarely recorded or have a limited distribution in British waters. Their presence in the Manacles area is important in maintaining the health and distribution of these species.

Soft Corals – *Alcyonium digitatum, Alcyonium glomeratum* and *Alcyonium hibernicum*

There are three species of soft corals in British waters and all are present in the Manacles area.

*Alcyonium digitatum,* Dead Men's Fingers is one of the most often recorded invertebrate species in the Manacles area with 160 records in earlier surveys and a further 55 records during the 2015 surveys. It is found in rocky habitats, normally in the circalittoral zone. There are records from all parts of the survey area, including Maen Land , which could be physically affected by harbour works. It has a widespread UK distribution.

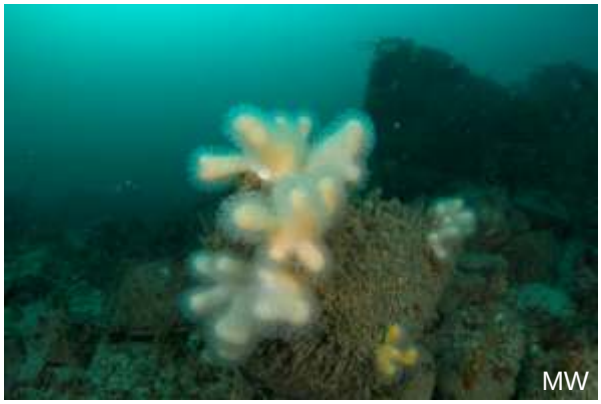


Figure 19: Dead Men's Fingers, *Alcyonium digitatum,* near Dean Quarry

*Alcyonium glomeratum*, Red Fingers, is a much less often recorded species in British waters and has a westerly distribution. It is regularly recorded in the Manacles area, from similar rocky habitats but always in the circalittoral zone. There are 63 records from the earlier surveys and 24 records in 2015. It frequently occurs in the same habitats as pink sea fans in the 20m+ depth zone and is present off Maen Land where it could be directly affected by harbour works and also in deeper habitats to the east (Carn Du sites), south east (Puskys) and south (The Wreas) of Dean Quarry.


Figure 20: Red Fingers, *Alcyonium glomeratum,* off Maen Land

*Alcyonium hibernicum,* Pink fingers, is a much more scarce species and has a similar but more patchy westerly distribution to *A. glomeratum*. There are only two records from the Manacles area, from Drawna Rocks, Porthkerris in 2011 and from Carn Du in 2015. The latter site is within 1km of the Dean Quarry harbour works.


Figure 21: Pink Fingers, *Alcyomium hibernicum,* off Carn Du

The locations of all records of these three species are shown in Figure 22.

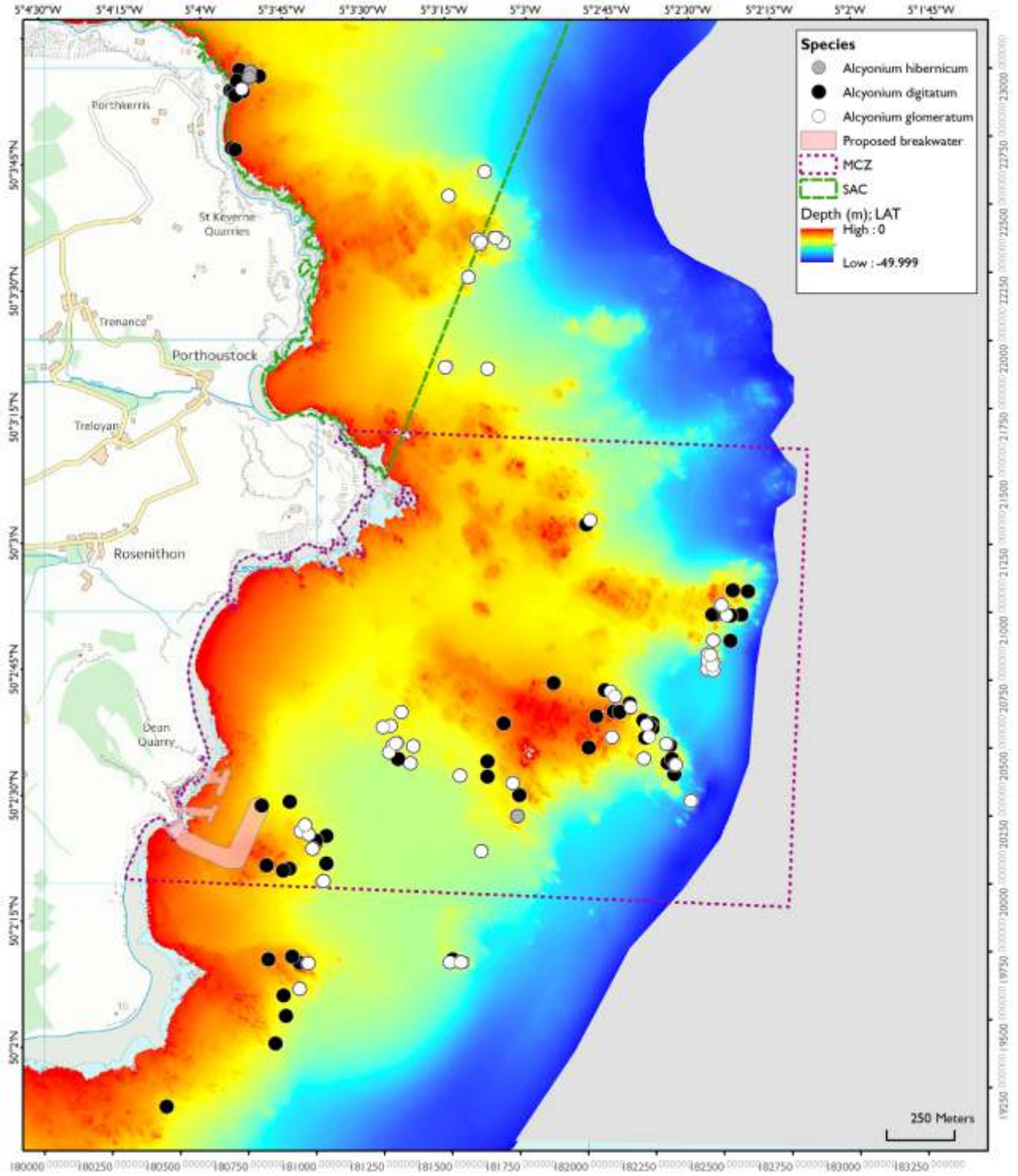


Figure 22: Records of soft corals, *Alcyonium digitatum, A. glomeratum* and *A. hibernicum*

Jewel Anemones, *Corynactis viridis*

Jewel anemones are a characteristic species of circalittoral rocky habitats on western, Atlantic facing, coasts of the British Isles. They commonly form large aggregations spanning many square metres of vertical bedrock and, only in the least sedimented areas, horizontal bedrock and boulders.

Jewel anemones are clearly considered to be a characteristic species of the Manacles MCZ as they are pictured in the MCZ Factsheet. There are 144 Seasearch records from the earlier surveys and 43 additional records in 2015. The earlier records are mostly from the Manacles Rocks themselves but do include Maen Land (aka Mason's Mount) and other sites near to the potential works at Dean Quarry, Carn Du, Puskys , Lowland Point and The Wreas. The 2015 records confirm their presence at all of these sites and they were recorded as abundant at Maen Land and Puskys Reefs.

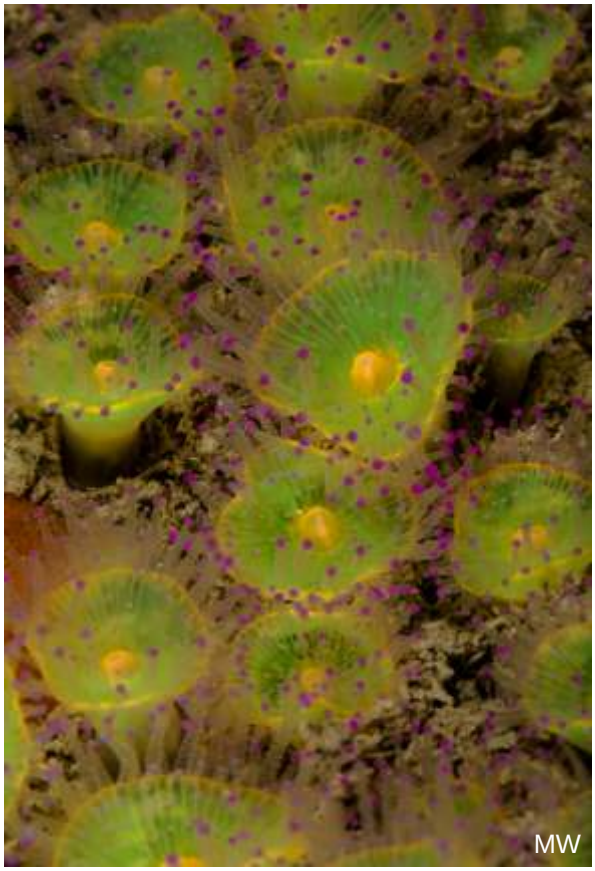


Figure 23: Jewel Anemones, *Corynactis viridis,* near Dean Quarry

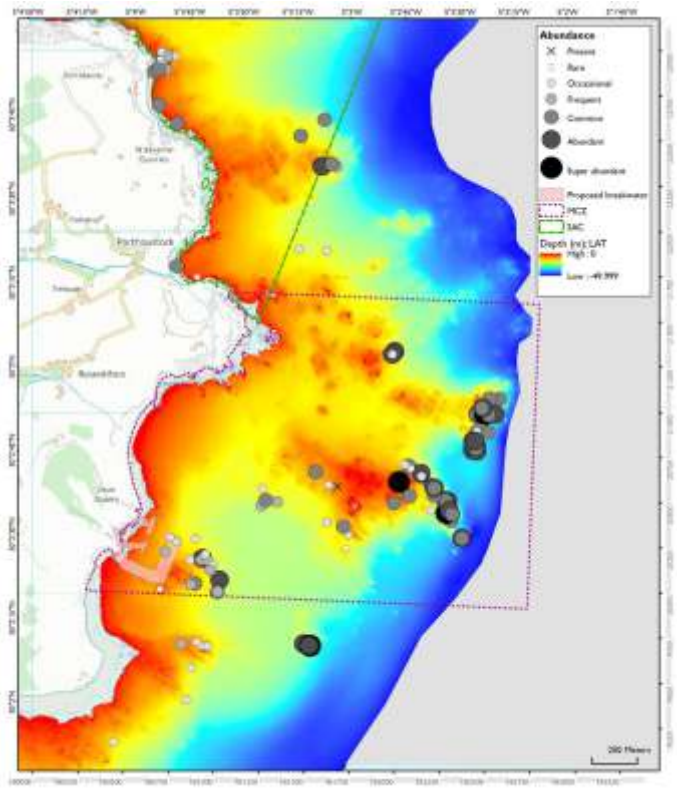


Figure 24: Jewel Anemone, *Corynactis viridis,* records


Figure 25: Jewel anemones in multiple colour varieties at Carn Du

Potato Crisp Bryozoan (Ross Coral), *Pentapora folicacea*

This is a conspicuous fragile colonial bryozoan which is characteristic of clean Atlantic waters. It has been frequently recorded in the Manacles area, with 92 records from earlier surveys and a further 37 in 2015. It is frequently found in the same habitats as pink sea fans and red fingers and, because of its brittle nature, is easily damaged by physical abrasion. In 2015 it was recorded as rare from Maen Land there were also records from all of the deeper rocky sites near Dean Quarry. It was common at 5 sites around Carn Du.


Figure 26: Potato Crisp Bryozoan, *Pentapora foliacea,* near Dean Quarry

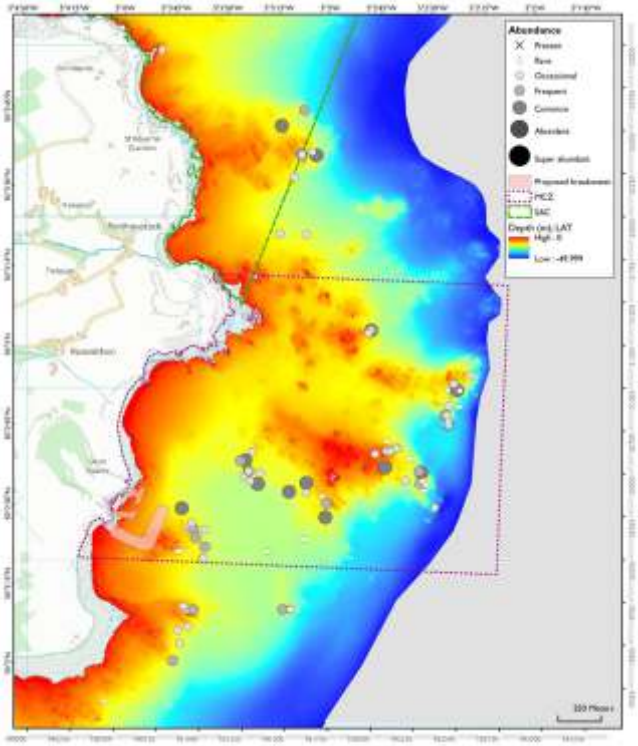


Figure 27: Potato Crisp Bryozoan, *Pentapora foliacea* records

Sea Fan Nudibranch, *Tritonia nilsodhneri* and Sea Fan False Cowrie, *Simnia hiscocki*

These two species, like *Ampianthus dohrnii* discussed above, are dependent on pink sea fans as a food source and for settlement.

Records of both species are available from general Seasearch surveys and the dedicated pink sea fan surveys. There are 84 records of *T. nilsodhneri* up to 2014 and a further 27 in 2015. For *S. hiscocki* the records are 14 and 1. The records for both species in 2015 are from circalittoral sites near the Dean Quarry jetty, including Carn Du, Puskys and The Wreas and coincide with the areas of high numbers of pink sea fans.

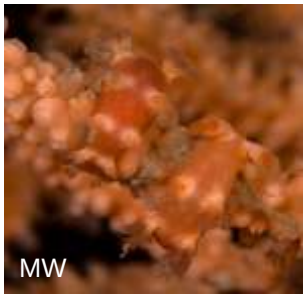


Figure 28: Pair of Sea Fan Nudibranchs, *Tritonia nilsodhneri*, near Dean Quarry

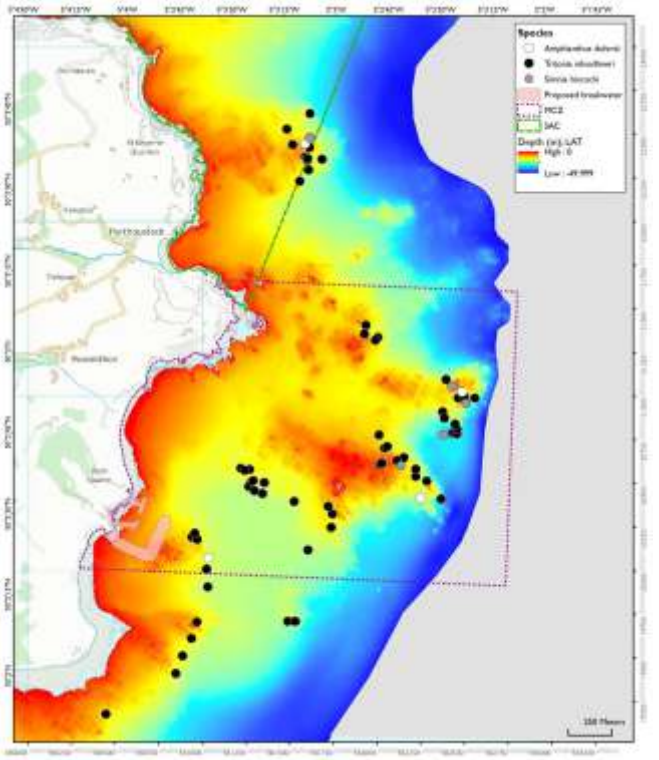


Figure 29: Records of species associated with Pink Sea Fan – *Amphianthus dohrnii, Tritonia nilsodhneri* and *Simnia hiscocki*

There are also a significant number of records of the very similar false cowrie, *Simnia patula,* which lives on Dead Men's Fingers. The two species were not formally separated until 2011.

Brown Fan Weeds, *Dictyota dichotoma* and *Dictyopteris polypodoides*

These are two characteristic brown seaweeds which can be dominant species on the lower infralittoral rocky surfaces below the kelp line. *D. dichotoma* is a widely distributed species, occurring all around the British Isles, but *D. polypodioides* is only found in south-west England, west Wales and Ireland. There are 29/27 records in the Seasearch surveys up to 2014 and 36/44 in 2015.

Scarce or rarely recorded sponges, *Adreus fascicularis, Axinella damicornis* and *Thymosia guernei*

*Adreus fascicularis* is in the JNCC Rare UK Marine Species list. It is typically found in areas where there is a thin veneer of mobile coarse sediment over circalittoral rock. It has a south-westerly distribution. There is one record of this species from 2015 SE of Manacle Point.

*Axinella damicornis,* the Crumpled Duster Sponge, is in the JNCC Scarce species list. It has a south-westerly distribution and is normally found in circalittoral rock habitats amongst other yellow branching sponges, soft corals, orange sea squirts and soft corals. There is one record in 2015 from Puskys Reef.

*Thymosia guernei* , the Mashed Potato Sponge, is also in the JNCC Scarce species list. It also has a westerly distribution and is found on vertical or overhanging circalittoral rock. There is one record in 2015, from Carn Du.

All three of these sponges are rarely recorded and their presence at the Manacles helps to demonstrate the marine biodiversity of the area.


Figure 30: *Adreus fascicularis*

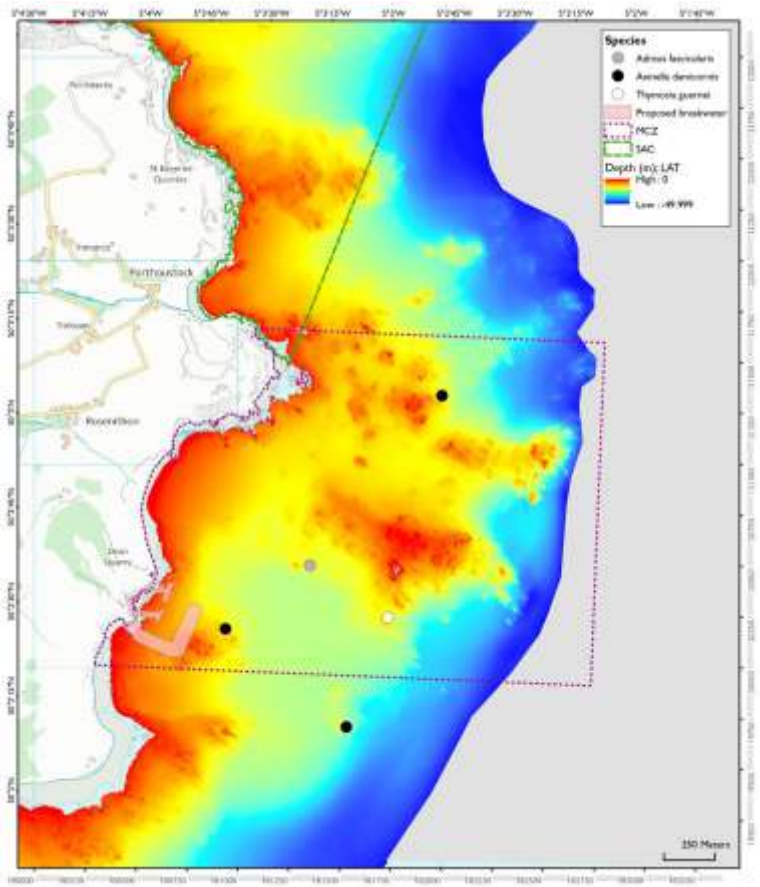


Figure 31: Records of scare and rare sponges

Northerly species, *Axinella infundibuliformis* and *Porania pulvillus*

*Axinella infundibuliformis*, the Prawn Cracker Sponge, is most often recorded in Scotland, though there are occasional records throughout western Britain and Ireland. There are two records from the Manacles, one from Carn Du in 2005 and one from Puskys Reef in 2015.

*Porania pulvillus,* the Red Cushion Star, is another species normally recorded on the west coast of Scotland. It rarely occurs off south-west England. All of the Seasearch records are in the last three years and come from Pencra Head in 2013 and 2014 and two records in 2015 from near Dean Quarry and SE of Manacle Point.


Figure 32: Red Cushion Star, *Porania pulvillus* near Dean Quarry

Cluster Anemones, *Parazoanthus axinellae* and *Parazoanthus anguicomus*

These two closely related colonial anemone species are normally quite different in colour. *P. axinellae* is bright yellow and is found on all west coasts of Britain and Ireland, but is nowhere common. *P. anguicomus* is white and is normally found in Scotland. However there is some confusion between occasionally occurring white forms of *P. axinellae* and *P anguicomus* in southwestern Britain (Wood 2013). Both species are listed in the JNCC Scarce Species List.


Figure 33: Yellow Cluster Anemones, *Parazoanthus axinellae*, at Maen Land

Both yellow and white *Parazoanthus* have been recorded from the Manacles area. *P. axinellae* was recorded from four sites close to Dean Quarry in 2015, including Maen Land, which could be physically affected by harbour works. At Carn Du it was recorded as common, which is a high abundance for this species. There are 5 earlier Seasearch records of *P. axinellae* and 1 of *P. anguicomus* from sites on the Manacles themselves and from Pencra Head to the north.

Trumpet Anemone, *Aiptasia mutabils*

This anemone has a south-westerly distribution. It is included in the JNCC Scarce Species List, but may be locally abundant in the south-west, usually on shallow, infralittoral, rock. There are two Seasearch records from the Manacles area, at Porthoustock and Porthkerris. It was not recorded in 2015 near Dean Quarry.

Indian Feathers hydroid, *Gymnangium montagui*

This is a distinctive hydroid with a south-westerly distribution and is a characteristic component of the circalittoral fauna, often found in habitats with pink sea fans, potato crisp bryozoans and branching and massive sponges. There are earlier Seasearch records from Pencra Head, and Maen Garrick to the north of Dean Quarry and also from Little Wrea immediately to the south. In 2015 there were records from Maen Land and also from sites nearby including SE of Manacle Point, various sites near Carn Du and Puskys Reef.


Figure 34: Indian Feathers Hydroid, *Gymnangium montagui,* off Manacle Point

Sponge Sea Slug, *Doris sticta*

This is one of the sea slugs or nudibranchs included in JNCC Scarce Species list and has a south-westerly distribution. There is only one record from the Manacles area, from Pencra Head in 2013.

Southerly fish species, *Tripterygion delaisi, Parablennius ruber* and *Mullus surmuletus*

Black Face Blenny, *Tripterygion delaisi*, is a shallow water reef fish which had not been recorded in Britain and Ireland until 1977. It is common in the Channel Islands and west coasts of France and Spain. Drawna Rocks at Porthkerris is the most westerly record of this species in England, others being in south Devon and Dorset. It has been recorded every year since 2011 and there must be a resident population. It was not found during the 2015 surveys close to Dean Quarry but suitable shallow water habitats exist and both Porthoustock and Dean Quarry would be natural range extensions.


Figure 35: a mating pair of Black Faced Blennies, *Tripterygion delaisi*

Red Blenny, *Parablennius ruber*. This species was first recorded from England in 2002 (Goodwin and Picton 2007) from the Isles of Scilly, but it is also found on exposed westerly coasts of Ireland and Scotland. The first record from the mainland of England was from The Manacles in 2009 and there is only one other record on the National Biodiversity Network, from Hand Deeps south of Rame Head in 2012. Both of these are Seasearch records (www.nbn.org.uk). The Red Blenny was not recorded during the 2015 Seasearch surveys. Like the Black Face Blenny, Red blennies are reef fish and likely to be present throughout the year.

Red Mullet, *Mullus surmuletus,* is primarily a Mediterranean fish but does occur all around the coasts of Britain and Ireland, particularly in the summer months (Kay and Dipper 2009). Most of English records are from the south coasts of Cornwall, Devon and Dorset. There are 5 Seasearch records from the Manacles area, mostly from Porthkerris, but there is one 2005 record from Maen Land (aka Mason's Mount).

Tassel Weed, *Carpomitra costata*

This brown seaweed is in the JNCC Scarce Species list and has a primarily south-western distribution (Bunker *et.al*. 2012). There are 5 Seasearch records from the Manacles area of which two, in 2015, were at Maen Land, and thus in the area which could be physically affected by harbour works, and The Wreas, immediately to the south.

Non-native seaweeds, *Sargassum muticum* and *Asparagopsis armata*

These seaweeds are both introduced species which have spread rapidly in suitable habitats along most of the western coasts of Britain and Ireland (Bunker et.al. 2012). Wireweed, *Sargassum muticum*, has been mostly recorded from Porthkerris and Porthoustock where suitable shallow sheltered habitats occur. There is a 2007 record from Maen Land but it was not found during our 2015 surveys in the Dean Quarry area. Harpoon weed, *Asparagopsis armata*, has been recorded in the same areas, and there was a single record in 2015 from Godrevy Beach, immediately to the north of the Dean Quarry site.

Other rarely encountered sediment species

Curled Octopus, *Eledone cirrhosa*, Cuttlefish, *Sepia officinalis*, Red Gurnard, *Asptrigla cuculus* and Sand Star, *Astropecten irregularis* are all species relatively rarely recorded by divers which were recorded in the sediment habitats between Dean Quarry and Carn Du in 2015. They are mobile species which demonstrate the biodiversity of this particular habitat within the MCZ which is easily overlooked because of the abundant fauna of the rocky areas.

Figure 36: Curled octopus, *Eledone cirrhosa*

Figure 37: Cuttlefish, *Sepia officinalis*

Figure 38: Red Gurnard, *Asptrigla cuculus*

Figure 39: Sand Star, *Astropecten irregularis*

# 4. IMPACT OF DEAN QUARRY WORKS ON HABITATS AND SPECIES IN THE AREA

## 4a Background and methods

The stimulus for carrying out Seasearch surveys in the Manacles area has been the known marine biodiversity of the area which has led to it being a prime location for scuba diving for many years. From 2001 to 2013 the focus has been on providing data to assist in the designation of marine protected areas, and for the protection of the pink sea fan colonies and the associated species.

Data on pink sea fans led to the following statement and recommendation (Wood 2008)

*(7.02) The greatest densities of sea fans occur at the Manacles, the Plymouth Drop Off and on a number of wrecks off south Devon and Cornwall. None of these sites receive any special protection to reflect their importance.*

*(7.06) In the case of The Manacles a new designation is likely to be appropriate to reflect the rich rocky reefs and the presence of not only pink sea fans but also Amphianthus dohrnii and many other anemones, soft corals and other species.*

Seasearch provided data both to the Finding Sanctuary project and also to Defra and welcomed the eventual designation of the Manacles MCZ. However we felt the designation as it eventually appeared was deficient in that it failed to identify the pink sea fan as a species to be maintained in a favourable condition, despite the sea fan anemone, which is totally dependent on the sea fan, being so listed. We also considered that the moderate energy rock habitats listed in the designation did not adequately reflect the biodiversity which the designation was intended to protect and recommended the inclusion of high energy rock habitats which are characterised by Pink Sea Fans, Jewel Anemones and other species which are prolific in the Manacles area.

Renewed impetus for surveys came in 2015 when it was proposed to re-open the dormant Dean Quarry and both considerably extend the loading facilities and increase the level of usage of the site beyond any previous levels. These would have made the Dean Quarry operations (which extend into the MCZ) much more significant in scale and impact than those at Porthoustock, which lies in the Fal and Helford SAC.

The proposals at the time of our studies were for replacement of the old disused loading jetty (Figure 40) with a new breakwater some 500m in length built out to the Maen Land rocks and creating a sheltered loading area with two smaller jetties to facilitate the loading of two vessels at a time and allowing for a 24hour operation. Both the new breakwater and jetties would be entirely within the MCZ. The outline of these works is shown in all of the maps in this report


Figure 40: The existing jetty

Figure 41: Existing jetty in swelly conditions

We recognise that alternative options may exist if the quarry were to be re-opened. There is an existing jetty which is in very poor condition and can only be accessed from the sea at high tide. The existing jetty is also exposed to southerly and south-easterly swells (Figure 41) and these two factors make its use impracticable for any significant scale of quarrying operations. Access by road is completely impracticable and thus if quarrying operations were to be resumed at anything other than a very low level (less than at Porthoustock) new loading facilities of some sort would be required.

This section therefore seeks to identify the likely impacts of additional loading facilities of any sort at Dean Quarry on the marine environment, both during construction and subsequent use. As this is a marine report we have not considered the impacts on the terrestrial environment, the landscape or local residents. This does not mean that these are not important, merely that they are outside our remit.

In assessing the potential impact of the new works we have identified three zones of influence. These are:

1. The area directly physical affected by the harbour works
2. The area which would be likely to be affected by sedimentation as a result of the construction works and by sedimentation and disturbance during loading and transport operations,
3. The wider Manacles area which could be affected by any wider-scale sedimentation or disturbance occurring outside normal operations.

These zones have been derived from two sources:

1. The footprint of the breakwater and jetty proposals and the distance from it
2. The effect of tidal movements distributing any sediment disturbed by construction or operations whilst in use.

Figure 42 shows the distance of the areas surveyed from the proposed breakwater/jetty.

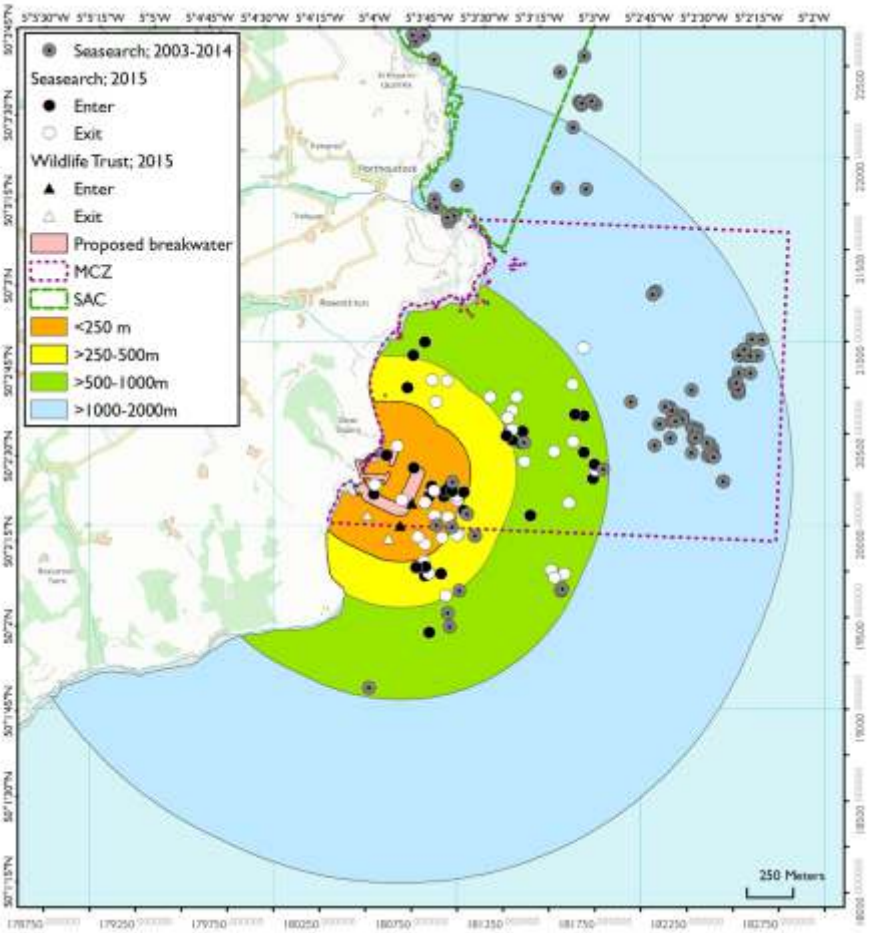


Figure 42: Distance of survey sites from Dean Quarry

Maen Land rocks and the area between them and the quarry shoreline would be subject to direct physical damage from the breakwater and jetty construction. This area would also have permanent impacts from changing current flows and loading and manoeuvring operations.

Within 500m of the site are the sediment habitats between the shore and Carn Du.

Within 1000m of the site is all of Godrevy Bay to the north of the Quarry, rocky sites to the west of Carn Du, the Puskys reef and the reefs off Lowland Point, including Davas Rock.

All of the outer Manacles Rocks (including Vase Rock, Pen-Win and Raglans) are within 2000m of the site, as are the shallower inner rocks including Maen Voes, Maen Garrick and other reefs off Manacle Point.

All of the Manacles MCZ is within 2000m of the site except of a small north-eastern corner of deep water.

Figure 43 shows the impact of tidal movements. There are two sources of information:

Tidal streams diagram A from the Admiralty Chart Approaches to Falmouth. This is situated 700m SE of Carn Du rocks. Tidal current direction is around $30^0$ on the flood tide and $200^0$ on the ebb tide. Maximum stream is 1.7kt at springs and 0.7kt on neaps.

National Oceanographic Centre (NOC) data. The position is 2,200m SSE of Carn Du. Tidal current direction is around $30^0$ on the flood tide and $215^0$ on the ebb tide. Maximum stream is 1.0kt at springs and 0.5kt on neaps.

Whilst these two sources are broadly comparable, the Admiralty data is closer to the Manacles rocks and suggests the tidal streams may be accelerated by closeness to the rocks. Unfortunately we were unable to gather any data from the channel between Dean Quarry and Carn Du but streams here are likely to be greater because of the constrictions caused by the Manacles rocks themselves.

Figure 43 shows the direction and distance of the tidal flows. It shows that at spring tides there is a water movement over the tidal cycle of 13km (7.1nm) whilst at neap tides this is 6km (3.3nm). Both figures are based on the Admiralty Chart data. Because of the direction of the tidal streams the effects of any waterborne sediment or pollutants will be accentuated in a northerly and southerly direction. To the north they are likely to be amplified by the constriction between Manacle Point and the Manacles Rocks which is likely to cause stronger tidal movements than at either of the tidal sample points which are outside the influence of the rocks.

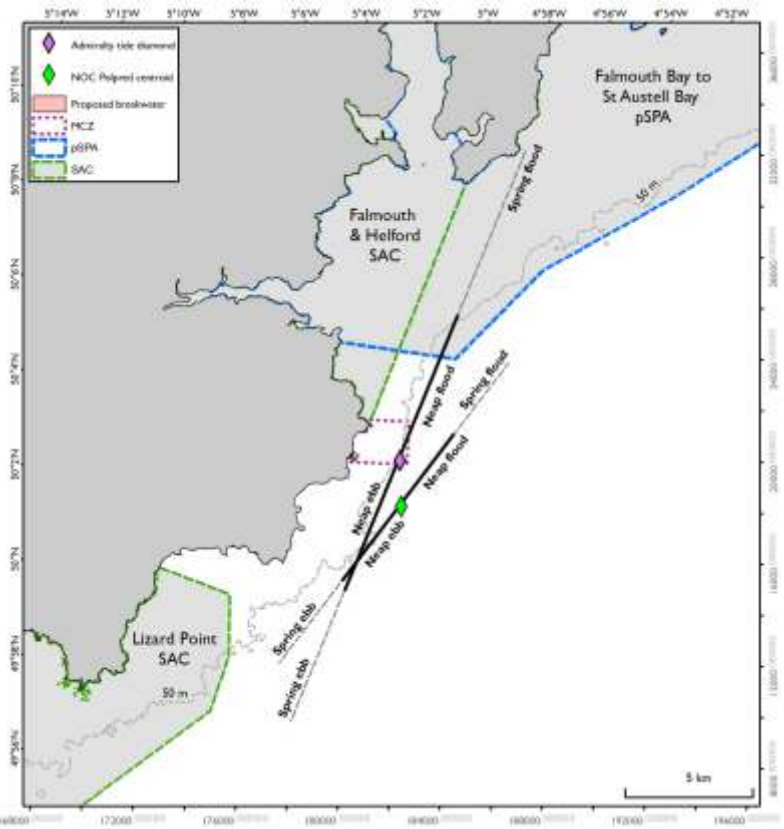


Figure 43: Tidal Streams

Based on the sources above, for the purposes of this report we have identified three putative Impact Zones. They are:

1 Direct Impact Zone – all areas within 250m of the breakwater/jetty proposals. These include Maen Land Rocks, sediment areas to the north and north east of Maen Land, circalittoral reefs east of Maen Land and reefs and sediment areas to the south between Maen Land and Lowland Point/The Wreas.
2 Secondary Impact Zone – areas within 1000m radius of the site and areas to the north and south where the tidal currents would carry any sediments or mobile pollutants. These include Godrevy beach, Manacle Point and the reefs offshore from it, including Maen Garrick, Pencra Reef and Prothoustock, Carn Du and the whole of the sediment area between it and Dean Quarry, Puskys Reef, Lowland Point, The Wreas and Davas Rock.
3 Wider Manacles area – areas greater than 1000m from the site and outside the direct tidal influence of the site. These include the Outer Manacles Rocks and Porthkerris.

The areas are shown in Figure 44.

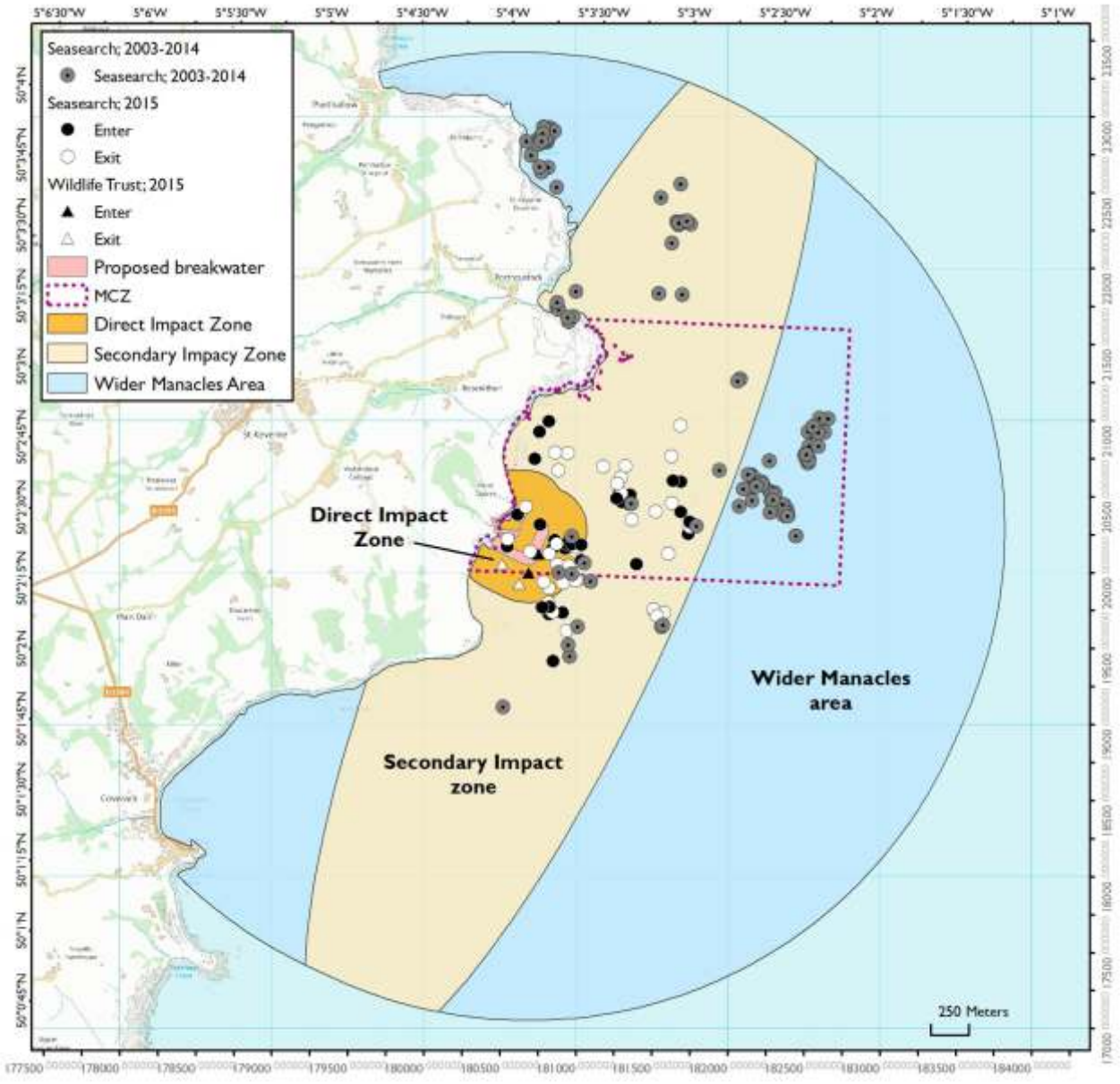


Figure 44: Impact Zones

## 4b Direct Impact Zone

This area contains littoral, sublittoral and circalittoral habitats. 75% of the area is within the Manacles MCZ, the remainder lying outside the southern boundary. All of the habitats and species listed below would be directly impacted both by construction works and sedimentation and pollutants during loading and shipping operations.

The littoral and upper infralittoral habitats lie alongside the disused quarry and consist of boulders and bedrock with areas of mobile cobbles, pebbles and sand. They were not surveyed in detail because of the nature of Seasearch surveys which concentrate on sublittoral habitats and species. However one snorkel survey was carried out along the shoreline immediately to the north of the proposed works, and partly in this area. The survey recorded stalked jellyfish as frequent attached to shallow water algae. One species of stalked jellyfish is listed in the MCZ designation to be maintained in a favourable condition. However 3 stalked jellyfish species are listed as priority species in England (Natural Environment and Rural Communities (NERC) Act 2006 -Section 41: Species of Principal Importance in England), *Haliclystus auricula*, *Lucernariopsis campanulata and Lucernariopsis cruxmelitensis.* Stalked jellyfish are difficult to identify to species level in the field, and we did not attempt to do so. However it is clear that there are priority littoral species immediately to the north of the quarry which would be damaged by construction and operational works and would thus not be 'maintained in a favourable condition'.

Figure 12 shows a stalked jellyfish recorded at the southern end of Godrevy Beach, next to Dean Quarry.

Maen Land is a series of infralittoral pinnacles of which the highest point we surveyed is 4m below chart datum. The chart shows it to break the surface at LW springs. Upper surfaces are covered in a dense kelp forest of *Laminaria hyperborea* with a wide range of other red and brown seaweeds including *Heterosiphonia plumosa, Delessaria sanguinea* and *Callophyllis laciniata*. This is a moderate energy infralittoral rock habitat for which the aim of the MCZ is to 'maintain in favourable condition'. Maen Land is within the MCZ and would be built over thus leading to loss of this habitat.

The overhangs and vertical rock faces forming the sides of the pinnacles are dominated by a short faunal turf which includes a variety of massive and encrusting sponges, cup-corals and jewel anemones, hydroids, and bryozoans as well as mobile species – starfish, sea urchins, sea cucumbers, and territorial fish. The latter include a number of wrasse species as well as Tompot Blenny and topknot. Again most of this habitat would be built over to form the outer breakwater.

East of Maen Land the seabed drops to circalittoral rock dominated by jewel anemones and sea fans. It is within the MCZ. The habitats CR.HCR.XFa.ByErSp.Eun and CR.HCR.XFa.CvirCri are both classed as high energy habitats but are typical of the Manacles area. In addition to pink sea fans, both crawfish, *Palinurus elephas*, and sea fan anemone, *Amphianthus dohrnii*, were recorded here and all are listed in the MCZ designation. Whilst this area would not be built over in the breakwater proposals it does lie immediately east of those works and there would be likely to be significant impact during construction works. Contrary to the aims of the MCZ, the construction would be likely to adversely affect the population and habitat of crawfish, sea fan anemone and pink sea fans.

North of Maen Land the seabed is a sediment of coarse sand and gravel with shell debris. For the most part the sediment is formed into waves and this is the area where there is sparse live maerl in the troughs between the sediment waves. Whist the maerl observed was not sufficient to be described as a living maerl bed, it is the aim of the MCZ to recover maerl beds to favourable condition. This is the part of the MCZ where there is the most maerl and if it is to recover this is the area from which it would need to start. The remaining maerl is clearly under threat as, in addition to the possible breakwater works, there was an area which appeared to have been trawled as the waves had been flattened out, the amount of empty shells increased and there appeared to be much less burrowing fauna. This is also an area which could be potentially impacted by prop wash from manoeuvring vessels using the new loading facilities.

South of Maen Land there is also a sediment seabed until reaching The Wreas some 250m to the south. This is of coarse sand with shell pieces and lies outside the MCZ. Maerl was not recorded in this habitat and the main visible fauna was gravel sea cucumbers, *Neopentadactyla mixta*, and sand mason worms*, Lanice conchilega*. The same habitat occurs between Maen Land and the Dean Quarry shoreline.

## 4c Secondary Impact Zone

The habitats and species likely to be affected by any sediments suspended and transported by the tidal currents during construction or any current borne pollutants during the operation of the loading jetties are described by distance from Dean Quarry, with the closest habitats (which would be likely to be those most affected), described first.

Maerl and sediment habitats to the east and south east of Dean Quarry. There is an area of circalittoral sediments about 500m wide between Maen Land and the reefs around the Carn Du rocks and the submerged Puskys Reef. This is an extension of the area described above immediately north and north east of Maen Land and comprises a stable very coarse sediment of maerl gravel and shell pieces. Whilst maerl gravel makes up 85% of the substrate only 5% is living. However, this is the nearest we have recorded to a living maerl bed within the MCZ and is likely to be critical to the recovery of this habitat to a favourable condition. The MCZ boundary bisects this habitat with the northern part (approx. 66%) within the MCZ and the southern part (approx. 33%) outside the southern boundary.

Infralittoral and circallittoral reefs at The Wrea and Davas Rock. These areas are to the south of Dean Quarry but are directly in the ebb flow for any discharges from the quarry area. This is an area which could also be affected by changes in tidal streams if a solid breakwater is built from the Quarry shoreline to Maen Land rocks. Any interruptions to tidal flows, or eddies could affect the amount of planktonic organisms in the water column and thus affect filter feeders, of which Pink Sea Fans would be a prime example.
Shallow areas of reef (15-18m bsl) are dominated by kelp park (both *Saccorhiza polyschides* and *Laminaria hyperborea*) with an understorey of red and brown algae. A little deeper (18-21m bsl) the kelps and red algae thin out and are replaced by sponges, soft corals, hydroids, anemones and Pink Sea Fans. At Little Wrea (24-26m) there is an extensive 'forest' of Pink Sea Fans (Pictured in Figure 14), which is one of the most abundant in the whole of the Manacles area. Sea Fan Anemone, *Amphianthuis dohrnii* was recorded as occasional in this habitat (a high level of abundance for this rare species).
Davas Rock lies a little further south and Pink Sea Fans were also frequent here.
This area lies outside the southern boundary of the MCZ but is of similar importance especially for Pink Sea Fans and Sea Fan Anemone.

Puskys Reef is 1km ESE of Dean Quarry. It rises 10m from a surrounding seabed at 26m bsl. The upper surfaces are dominated by Oaten Pipe Hydroids, *Tubularia indivisa*, which are characteristic of current-swept areas. There are frequent jewel anemones here but they become superabundant on vertical faces. Antenna Hydroids, *Nemertesia antennina*, soft corals, cup corals and featherstars also occur in the lush faunal turf. At the base of the pinnacle there is an open flattish seabed of large boulders interspersed with coarse sand and cobbles. Pink Sea Fans were abundant here, together with cup corals, Orange Sea Squirts and a variety of branching and massive sponges. These habitats are all typical Manacles pinnacle habitats and all are classified as high energy biotopes. Whilst this area is outside the MCZ boundary, it is typical of the Manacles area and equally diverse. In addition to Jewel Anemones and Pink Sea Fans, both Sea Fan Anemones and Crawfish were recorded, species listed for maintaining in or recovering to a favourable condition in the MCZ.

Carn Du, Pinnacle West of Carn Du and SE of Manacle Point. This area is within the MCZ and within 1km of Dean Quarry. Carn Du rock forms the exposed part of an arc of reefs about 500m in length which forms the north-eastern edge of the maerl and sediment habitats described above. The shallow parts of the reefs (down to 15m bsl) are dominated by kelp forest. The main species is Furbelows, *Saccorhiza polyschides*, but both Cuvie, *Laminaria hyperborea* and the south-westerly Golden Kelp, *Laminaria ochroleuca*, are also present, particularly in the shallowest areas. Below the kelp zone (15-20m bsl), upward facing surfaces of bedrock and boulders are dominated by smaller brown algae, especially Netted Wing Weed, *Dictyopteris polypodioides*, which is another south-westerly species. This is an unusual habitat and there is no MNCR biotope code which adequately reflects it.

Circalittoral rock habitats are found both on vertical sides of bedrock pinnacles from 16m bsl and on open bedrock and boulders below 20m bsl). The vertical faces are dominated by Jewel Anemones, *Corynactis viridis* and all three UK soft corals, the nationally scarce *Alcyonium hibernicum,* the regional *Alcyonium glomeratum* and the widespread *Alcyonium digitatum*. Pink Sea Fans are found in gullies in this habitat but are most common on the open boulder surfaces below 24m. MCZ listed species Crawfish, *Palinurus elephas* and Sea Fan Anemone, *Amphianthus dohrnii* are also present. All of these circalittoral habitats are high energy in terms of biotopes because of the species found, which are characteristic of the Manacles area and MCZ. Many of the species recorded, including Pink Sea Fans and Sea Fan Anemones, are filter feeders and would be adversely affected by any increase in suspended sediments caused either by construction works or loading and transportation operations.

Godrevy Beach lies immediately to the north of Dean Quarry. Much of the intertidal zone is of boulders with gravel and pebbles between them. There is a kelp forest containing *Laminaria digitata* and *L. hyperborea*, with an understorey of red and brown seaweeds. This is the area in which stalked jellyfish were recorded as frequent.

Further from the shore, and in the direct flood flow from Dean Quarry, the seabed is of coarse sand with small waves and a little shell debris. The visible infauna consists primarily of worm tubes, both *Lanice conchilega* and other unidentified parchment tubes. Mobile fauna includes Plaice, *Pleuronectes platessa,* a priority species, Brill, *Scophthalmus rhombus*, and both sand eels and large numbers of juvenile gadoid fish. There is evidence of disturbance to this habitat with regular track marks, presumably caused by a bottom fishing dredge or trawl.

*Lanice* and other worm species are essential for transferring oxygen from open water into surficial sediments within our seas (Braekman et al., 2014). As such, they enrich the seabed, making the upper sand layers inhabitable by many forms of life that would otherwise not have the oxygen supply necessary to support higher life forms. Areas where *Lanice* beds have been degraded are more susceptible to eutrophication. *Lanice* beds also stabilise sediments, that in turn, stops erosion during storms and extreme tides. Increased sediment loading from nearby construction works, or the effects of prop wash during operations could adversely impact this essential ecosystem engineer.

A further risk associated with ports and marinas is the opportunity for non-native, sometimes invasive, species to establish themselves.

## 4d Wider Manacles Area

The wider Manacles area includes the outer Manacles reefs which are not immediately next to or in the direct tidal flow from the Dean Quarry site. It also includes coastal sites which are protected from significant impact by topography and tidal streams such as Porthoustock Bay and Porthkerris/Drawna Rocks. The outer reefs contain many of the priority species and habitats listed in the MCZ designation but do not include the sediment habitats which are primarily concentrated in the Dean Quarry part of the MCZ.

The marine life and habitats in these areas would be unlikely to be affected by normal operations of a loading facility at Dean Quarry. Increased shipping movements would pass in close proximity and The Manacles has seen many ships wrecked in the past. With modern navigational aids the risk would be lessened though not entirely removed.

Some non-native seaweeds, such as Harpoon Weed, *Asparagogis armata*, and Wireweed, *Sargassum muticum*, are already found in the Manacles area. However, other relatively widely dispersed species such as Leathery Sea Squirt, *Styela clava* and Slipper Limpet, *Crepidula fornicata*, appear to be absent and it would be unfortunate to provide a conduit for the introduction of new non-native species through the movement of shipping.

There would be more concern over the impact of sedimentation during construction works on this wider area. The extent of sedimentation would depend on the scale of works and the method of operation, but in general terms the greater the scale of the construction the more material would be required to be moved and deposited and thus the greater potential impact on the MCZ as a whole, including the wider Manacles area.

# CONCLUSIONS

Seasearch has been collecting data on subtidal habitats and species in the Manacles area since 2001. As early as 2003 (Wood, 2003) we identified The Manacles as one of two areas in the UK with the densest populations of Pink Sea Fans and also containing populations of the Sea Fan Anemone (then a Biodiversity Action Plan species because of its rarity).

## Conservation Designations

Subsequent conservation designations: Fal and Helford Special Area of Conservation – 2007, and Manacles Marine Conservation Zone - 2013, have recognised the importance of this area for marine biodiversity. However the boundaries in both cases are straight lines which do not reflect subtidal reality. The boundary of the Fal and Helford SAC bisects important reef habitats at Pencra Head and the Manacles MCZ excludes areas to the south which are equally important for the habitats and species it seeks to protect (Lowland Point, Pusky's reef, The Wreas and Davas Rock).

## Habitats

The MCZ designation seeks to maintain the areas of subtidal sand, coarse and mixed sediments and recover the maerl habitats to a favourable condition. Within the MCZ both of these habitats are concentrated close to Dean Quarry and could be significantly adversely affected by development in that area.

The MCZ designation seeks to maintain moderate energy infralittoral and sublittoral rock habitats. These are distributed throughout the wider Manacles area including Maen Land and Dean Quarry which would be the focus of any development.

High energy rock habitats, which include characteristic species such as Pink Sea Fans and Jewel Anemones, are at least as important as moderate energy rock for the maintenance of the biodiverse communities which the MCZ designation seeks to protect. High energy habitats are well represented both at Maen Land and Dean Quarry as well as in the surrounding area, including areas outside the MCZ boundary.

There are coarse sediment habitats close to Maen Land/Dean Quarry which support a number of priority, rare and uncommon species.

## Species

Sea Fan Anemone, *Amphianthus dohrnii* is listed in the MCZ designation and the Manacles was identified as a hotspot for this rare species as long ago as 2003 based on Seasearch surveys throughout Britain and Ireland in 2001-2002 (Wood, 2003). In 2015 it was found at four sites close to Maen Land/Dean Quarry, two within the MCZ and two just outside it.

Within the wider Manacles area, the area around Maen Land/Dean Quarry is the most important for the Spiny Lobster/Crawfish, *Palinurus elephas*. The object of MCZ designation is to recover the population and the sites close to Dean Quarry appear to be the ones most critical to this objective.

Stalked jellyfishes are present in the Manacles area and can be found immediately north of the existing Dean Quarry jetty in an area likely to be physically impacted by harbour works.

The wider Manacles area is nationally significant for its Pink Sea Fan, *Eunicella verrucosa,* population. This species occurs throughout the study area. It is present at Maen Land where it would be likely to be directly impacted by the harbour works. There are also dense populations at Carn Du, The Wreas and Puskys reef which are all close to Dean Quarry and could potentially be affected by development. The species is critical to the presence of the Sea Fan Anemone, *Amphianthus dohrnii* and both are listed species in the MCZ designation.

There are populations of Plaice, *Pleuronectes platessa*, a priority species, both in sediment areas likely to be directly affected by harbour works at Dean Quarry and in sediment areas immediately to the north and the south. Maintaining sediment habitats in a favourable condition would benefit mobile species, such as this, which depend on them. They would also continue to support populations of sand eels, important species in the food chain which in turn support other mobile species.

Soft corals are characteristic species of the SAC and MCZ and all 3 UK species have been recorded. They are distributed throughout the wider Manacles area, including at Maen Land/Dean Quarry.
Jewel Anemones, *Corynactis viridis* and Potato Crisp Bryozoan, *Pentapora foliacea*, are also characterising species and the former is given as an example of the biodiversity in the area in the Manacles MCZ Factsheet (Defra 2013). Both species are also distributed throughout the wider Manacles area, including at Maen Land/Dean Quarry.

Sea Fan Nudibranch, *Tritonia nilsodhneri* and Sea Fan False Cowrie, *Simnia hiscocki,* are also characteristic of the Manacles area and, like *Ampianthus dohrnii* above, are dependent on pink sea fans as a food source and for settlement.

There are a number of other typically south-western species of seaweeds and anemones and a number of scarce or rarely recorded sponges in the Manacles area, including sites close to Maen Land/Dean Quarry.

There are a number of species with a northerly distribution, and which are rarely recorded in south-west England in the Manacles area, including Maen Land/Dean Quarry.

There are a number of southerly fish species in the Manacles area. For one of them, the Red Blenny, *Parablennius ruber*, the Manacles represents one of only two sites on the English mainland where they have been recorded.

There are a number of characteristic sediment dwelling species in the area including Curled Octopus, Cuttlefish, Red Gurnard and Sand Star, all of which are concentrated in the Maen Land/Dean Quarry part of the MCZ.

MCZ and Impact of Dean Quarry works

Seasearch has identified the Manacles as an important area for marine biodiversity, especially for Pink Sea Fans and Sea Fan Anemones, since 2003 (Wood, 2003). We welcome the MCZ designation (as amended in 2016) which reflects this though we would wish to see High Energy rock included as a habitat feature to be maintained in a favourable condition.

The focus of our surveys in 2015 was the area around Dean Quarry, including Maen Land rock immediately offshore, because of proposal to re-open and significantly expand the loading facilities associated with it.

We recognise that the existing loading facilities would be inadequate for anything other than the relatively low level of activity previously undertaken. Proposals mooted in 2015 included a completely new breakwater with two 200m arms, largely built over Maen Land rock, and two new loading jetties protected by it.

The physical impact on Maen Land rock and the areas around it and between it and the shore would be dramatic as it would be either built over or directly physically affected by the building of the breakwater and jetties. This area contains both habitats identified in the MCZ designation for maintenance in a favourable condition and species listed both for maintenance and recovery of the populations. Obliteration of that habitat would clearly be totally contradictory to the intent of MCZ designation.

The area immediately adjacent to Maen Land also includes the most significant area of maerl in the whole of the MCZ. This is a habitat for which the aim of the MCZ is to recover to a favourable condition. Construction of a new breakwater and jetties would be completely contrary to this aim.

The shoreline to the north of Dean Quarry contains stalked jellyfish which are also listed for maintenance in a favourable condition.

We therefore conclude that all of the habitats and species listed in the MCZ designation are found at Maen Land/Dean Quarry and likely to be directly physically affected by the construction of a new breakwater and loading jetties.

Outside the area of direct physical impact there would be significant impacts due to sedimentation created during construction works and carried by the tidal streams. There would also be longer term impacts from changed current flows created by the construction of a breakwater and sedimentation and pollution from loading activities, including prop wash from vessels. This could adversely affect both the areas of sediment, and maerl and also diverse rock habitats containing habitats and species listed in the MCZ designation both inside and immediately to the south of the MCZ boundary. It is particularly significant that the maerl and other sediment habitats listed in the MCZ designation are only found close to Maen Land/Dean Quarry and would thus all be adversely affected by construction and use of an enlarged quarry.

The outer reefs also contain many of the priority species and habitats listed in the MCZ designation but do not include the sediment habitats which are primarily concentrated in the Dean Quarry part of the MCZ. The adverse impact on the outer reefs and the Fal and Helford SAC could be limited but this would depend on how construction works and future operations were carried out. Operations would include significant shipping operations which bring two other possible impacts, the danger of collision in an area with extensive shallow rocks (and many older shipwrecks!) and the introduction of non-native species for which port facilities and shipping movements are a significant vector.

# APPENDICES

Both Appendices show the records by site name, whether they are in the SAC, MCZ or neither and which of the three Impact Zones described in Section 4 they fall within.

## Appendix One: Habitats/Biotopes

This Appendix lists all of the habitats/biotopes recorded.

There are two main categories used in the surveys:
JNCC MNCR 04:05 Biotopes: These are normally assigned to Seasearch Survey (higher level) data by a post-survey data analyst. They may be assessed as certain (C) where the biotope described closely matches on of the pre-determined range of biotopes, or as uncertain (U) where the biotope described is broadly similar to the biotopes in the classification but is not a clear match. The suite of biotopes has subsequently been updated from Version 04.05 to 15.03 but this does not affect any of those identified.

Seasearch Seabed Cover Types: These are normally assigned to Seasearch Observation Form data and are assessed by the recorder. They are much broader categories than the MNCR Biotopes and easily identified by a non-expert.

## Appendix Two: Species

This Appendix lists all of the Species records made. They are listed by Phylum, which are arranged alphabetically. This is the format currently adopted by the Marine Recorder database.
Abundances from each record generally use the semi-quantitative SACFORN scale (Superabundant, Abundant, Common, Frequent, Occasional and Rare). Where only presence was recorded this is shown as P.
The appendix also identifies species protected by the Wildlife and Countryside Act, and Priority Species (Natural Environment and Rural Communities (NERC) Act 2006, Section 41: Species of Principal Importance in England), and nationally Scarce and Rare species as defined by JNCC.

| APPENDIX ONE: HABITATS/BIOTOPES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Biotope Code | Description | Site | Source | | | Designation | | | Impact | | |
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | Direct | Secondary | Wider area |
| LITTORAL BIOTOPES (MNCR) | | | | | | | | | | | |
| LR.HLR.MusB | Mussel and/or barnacle communities | Drawna Rocks | 1U | | | 1U | | | | | 1U |
| LR.HLR.FR | Robust fucoid and/or red seaweed communities | Godrevey Bay | | 1C | | | 1C | | 1C | | |
| LR.MLR.BF | Barnacles and fucoids on moderately exposed shores | Dean Quarry (North) | | 1C | | | 1C | | 1C | | |
| SUBLITTORAL BIOTOPES (SEASEARCH SEABED COVER TYPES) | | | | | | | | | | | |
| KF | Kelp Forest (Infralittoral Rock) | Drawna Rocks/Porthkerris | 9 | 1 | | 10 | | | | | 10 |
| | | Porthoustock | 4 | | | 4 | | | | 4 | |
| | | Pencra Reef | 2 | | | 2 | | | | 2 | |
| | | Pen Win | 5 | | | | 5 | | | 5 | |
| | | Woodford's Wall | 5 | | | | 5 | | | | 5 |
| | | Spyridian Vagliano wreck | 2 | | | | 2 | | | | 2 |
| | | Maen Voes | 1 | | | | 1 | | | | 1 |
| | | Raglans | 5 | | | | 5 | | | | 5 |
| | | SE of Manacle Point | | 3 | | | 3 | | | 3 | |
| | | Pinnacle W of Carn Du | 2 | | | | 2 | | | 2 | |
| | | Carn Du | 1 | | | | 1 | | | 1 | |
| | | Maen Land | 4 | | | | 4 | | 4 | | |
| | | Puskys | 1 | | | | | 1 | | 1 | |
| | Kelp Park (Lower Infralittoral Rock) | Drawna Rocks/Porthkerris | 15 | | | 15 | | | | | 15 |
| | | Porthoustock | 2 | | | 2 | | | | 2 | |
| | | Pencra Reef | 3 | | | 3 | | | | 3 | |
| | | Maen Garrick | 3 | | | | 3 | | | 3 | |
| | | Pen Win | 3 | | | | 3 | | | | 3 |
| | | Vase Rock | 2 | | | | 2 | | | | 2 |
| | | Woodford's Wall | 3 | | | | 3 | | | | 3 |
| | | Spyridian Vagliano wreck | 2 | | | | 2 | | | | 2 |
| | | Maen Voes | 1 | | | | 1 | | | | 1 |
| | | Raglans | 5 | | | | 5 | | | | 5 |
| | | Pinnacle W of Carn Du | 1 | | | | 1 | | | 1 | |
| | | Dean Point | 1 | | | | 1 | | 1 | | |
| | | Maen Land | 1 | | | | 1 | | 1 | | |
| | | Lowland Reef | 1 | | | | | 1 | | 1 | |
| | | Puskys | 1 | | | | | 1 | | 1 | |
| | | Chynalls Point | 1 | | | | | 1 | | 1 | |
| | Mixed Seaweeds (Infralittoral Rock) | Drawna Rocks/Porthkerris | 14 | 1 | | 15 | | | | | 15 |
| | | Porthoustock | 5 | | | 5 | | | | 5 | |
| | | Pencra Reef | 8 | | | 8 | | | | 8 | |
| | | Maen Garrick | 2 | | | | 2 | | | 2 | |
| | | Pen Win | 4 | | | | 4 | | | | 4 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vase Rock | 2 | | | 2 | | | | 2 | | |
| | Woodford's Wall | 8 | | | 8 | | | | 8 | | |
| | Spyridian Vagliano | 5 | 1 | | 6 | | | | 6 | | |
| | Mohegan wreck | 4 | | | 4 | | | | 4 | | |
| | Maen Voes | 3 | | | 3 | | | | 3 | | |
| | Raglans | 8 | | | 8 | | | | 8 | | |
| | SE of Manacle Point | | 3 | | 3 | | | 3 | | | |
| | Pinnacle W of Carn Du | 3 | | | 3 | | | 3 | | | |
| | Dean Point | 1 | | | 1 | | 1 | | | | |
| | Maen Land | 5 | | | 5 | | 5 | | | | |
| | Puskys | 2 | | | | 2 | | 2 | | | |
| Short Animal Turf (Circalittoral Rock) | Drawna Rocks/Porthkerris | 13 | 1 | 14 | | | | | 14 | | |
| | Porthoustock | 3 | | 3 | | | | 3 | | | |
| | Pencra Reef | 9 | | 9 | | | | 9 | | | |
| | Maen Garrick | 5 | | | 5 | | | 5 | | | |
| | Pen Win | 5 | | | 5 | | | | 5 | | |
| | Vase Rock | 4 | | | 4 | | | | 4 | | |
| | Woodford's Wall | 10 | | | 10 | | | | 10 | | |
| | Spyridian Vagliano | 6 | 1 | | 7 | | | | 7 | | |
| | Mohegan | 4 | | | 4 | | | | 4 | | |
| | Maen Voes | 5 | | | 5 | | | | 5 | | |
| | Raglans | 14 | | | 14 | | | | 14 | | |
| | SE of Manacle Point | | 2 | | 2 | | | 2 | | | |
| | Pinnacle W of Carn Du | 3 | | | 3 | | | 3 | | | |
| | Dean Point | 1 | | | 1 | | 1 | | | | |
| | Maen Land | 5 | | | 5 | | 5 | | | | |
| | Lowland Reef | 1 | | | | 1 | | 1 | | | |
| | Puskis | 3 | | | | 3 | | 3 | | | |
| | Chynalls Point | 1 | | | | 1 | | 1 | | | |
| Tall Animal Turf (Circalittoral Rock) | Drawna Rocks/Porthkerris | 5 | | 5 | | | | | 5 | | |
| | Porthoustock | 1 | | 1 | | | | 1 | | | |
| | Pencra Reef | 10 | | 10 | | | | 10 | | | |
| | Maen Garrick | 4 | | | 4 | | | 4 | | | |
| | Pen Win | 7 | | | 7 | | | | 7 | | |
| | Vase Rock | 6 | | | 6 | | | | 6 | | |
| | Woodford's Wall | 6 | | | 6 | | | | 6 | | |
| | Spyridian Vagliano | 6 | | | 6 | | | | 6 | | |
| | Mohegan wreck | 4 | | | 4 | | | | 4 | | |
| | Maen Voes | 2 | | | 2 | | | | 2 | | |
| | Raglans | 13 | | | 13 | | | | 13 | | |
| | SE of Manacle Point | | 2 | | 2 | | | 2 | | | |
| | Pinnacle W of Carn Du | 3 | | | 3 | | | 3 | | | |
| | Dean Point | 1 | | | 1 | | 1 | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Maen Land | 5 | | | 5 | | | 5 | | | |
| | | Lowland Reef | 5 | | | | 5 | | | 5 | | |
| | | Chynalls Point | 1 | | | | 1 | | | 1 | | |
| | Encrusting Pink Algae | Drawna Rocks/Porthkerris | 4 | | | 4 | | | | | | 4 |
| | | Porthoustock | 2 | | | 2 | | | | 2 | | |
| | | Pencra Reef | 5 | | | 5 | | | | 5 | | |
| | | Maen Garrick | 1 | | | | 1 | | | 1 | | |
| | | Pen Win | 3 | | | | 3 | | | | | 3 |
| | | Vase Rock | 2 | | | | 2 | | | | | 2 |
| | | Woodford's Wall | 2 | | | | 2 | | | | | 2 |
| | | Spyridian Vagliano | 1 | | | | 1 | | | | | 1 |
| | | Mohegan | 1 | | | | 1 | | | | | 1 |
| | | Raglans | 4 | | | | 4 | | | | | 4 |
| | | SE of Manacle Point | | 2 | | | 2 | | | 2 | | |
| | | Pinnacle W of Carn Du | 2 | | | | 2 | | | 2 | | |
| | | Maen Land | 5 | | | | 5 | | 5 | | | |
| | | Puskys | 2 | | | | | 2 | | 2 | | |
| | | Chynalls Point | 1 | | | | | 1 | | 1 | | |
| | Sediment with life apparent (Sublittoral Sediment) | Drawna Rocks/Porthkerris | 1 | 2 | | 3 | | | | | | 3 |
| | | Porthoustock | 3 | | | 3 | | | | 3 | | |
| | | Pencra Reef | 4 | | | 4 | | | | 4 | | |
| | | Maen Garrick | 1 | | | | 1 | | | 1 | | |
| | | Mohegan | 2 | | | | 2 | | | | | 2 |
| | | Spyridian Vagliano | | 1 | | | 1 | | | | | 1 |
| | | Maen Voes | 1 | | | | 1 | | | | | 1 |
| | | SE of Manacle Point | | 1 | | | 1 | | | 1 | | |
| | | Dean Point | 1 | | | | 1 | | 1 | | | |
| | | Maen Land | 5 | | | | 5 | | 5 | | | |
| | Barren Sediment (Sublittoral Sediment) | Drawna Rocks/Porthkerris | 1 | | | 1 | | | | | | 1 |
| | | Maen Voes | 1 | | | | 1 | | | | | 1 |
| | | Raglans | 1 | | | | 1 | | | | | 1 |
| | | Chynalls Point | 1 | | | | | 1 | | 1 | | |
| SUBLITTORAL BIOTOPES (MNCR) | | | | | | | | | | | | |
| IR | Infralittoral rock (and other hard substrata) | Pencra Reef | 1C | | | 1C | | | | 1C | | |
| | | Pen Win | 1C | | | | 1C | | | | | 1C |
| | | Woodford's Wall | 2C | | | | 2C | | | | | 2C |
| IR.FIR.IFou | Infralittoral fouling seaweed communities | Porthoustock | 1U | | | 1U | | | | 1U | | |
| | | Spyridian Vagliano | 1U | | | | 1U | | | | | 1U |
| IR.HIR.KFaR | Kelp with cushion fauna and/or foliose red seaweeds | Drawna Rocks/Porthkerris | 1U | | | 1U | | | | | | 1U |
| | | Maen Garrick | 1U | | | | 1U | | | 1U | | |
| | | Vase Rock | 1C, 1U | | | | 1C, 1U | | | | | 1C, 1U |
| | | Woodford's Wall | 1C | | | | 1C | | | | | 1C |
| | | Maen Voes | 1U | | | | 1U | | | | | 1U |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Dean Quarry | | 1U | | 1U | | 1U | | | |
| IR.HIR.KFaR.FoR | Foliose red seaweeds on exposed lower infralittoral rock | Drawna Rocks/ Porthkerris | 1U | | 1U | | | | | | 1U |
| | | Maen Voes | 1U | | | 1U | | | | | 1U |
| | | Carn Du South Backbone | | 1C | | 1C | | | 1C | | |
| | | Maen Land | | 1C | | 1C | | 1C | | | |
| | | SW of Maen Land | | 1C | | 1C | | 1C | | | |
| | | Puskys | 1C | | | | 1C | | 1C | | |
| IR.HIR.KFaR.LhypFa | Laminaria hyperborea forest with a faunal cushion (sponges and polyclinids) and foliose red seaweeds on very exposed upper infralittoral rock | Drawna Rocks/ Porthkerris | 1C | | 1C | | | | | | 1C |
| IR.HIR.KFaR.LhypR | Laminaria hyperborea with dense foliose red seaweeds on exposed infralittoral rock | Porthoustock | 1C | | 1C | | | | 1C | | |
| IR.HIR.KFaR.LhypR.Ft | Laminaria hyperborea forest with dense foliose red seaweeds on exposed upper infralittoral rock | Vase Rock | 1C | | | 1C | | | | | 1C |
| IR.HIR.KFaR.LhypR.Loch | Mixed Laminaria hyperborea and Laminaria ochroleuca forest on exposed infralittoral rock | Raglans | 1U | | | 1U | | | | | 1U |
| IR.HIR.KFaR.LhypR.Pk | Laminaria hyperborea park with dense foliose red seaweeds on exposed lower infralittoral rock | Mohegan wreck | 1C | | | 1C | | | | | 1C |
| IR.HIR.KSed.LsacChoR | Laminaria saccharina, Chorda filum and dense red seaweeds on shallow unstable infralittoral boulders or cobbles | Drawna Rocks/Porthkerris | 1U | | 1U | | | | | | 1U |
| | | Porthoustock | 1C | | 1C | | | | 1C | | |
| IR.HIR.KSed.LsacSac | Laminaria saccharina and/or Saccorhiza polyschides on exposed infralittoral rock | Drawna Rocks/Porthkerris | 1C | | 1C | | | | | | 1C |
| | | Pencra Reef | 1C | | 1C | | | | 1C | | |
| | | Porthoustock | 1C | | 1C | | | | 1C | | |
| | | Woodford's Wall | 1U | | | 1U | | | | | 1U |
| | | The Wreas | | 1C | | | 1C | | 1C | | |
| IR.HIR.KSed.Sac | Saccorhiza polyschides and other opportunistic kelps on disturbed sublittoral fringe rock | Drawna Rocks/Porthkerris | 1C | | 1C | | | | | | 1C |
| | | SE of Manacle Point | | 1C | | 1C | | | 1C | | |
| | | Pinnacle W of Carn Du | 1C | 1U | | 1C, 1U | | | 1C, 1U | | |
| | | Carn Du SW | | 1C | | 1C | | | 1C | | |
| | | Carn Du S | | 1C | | 1C | | | 1C | | |
| | | Dean Quarry N | | 1C | | 1C | | 1C | | | |
| IR.MIR.KR | Kelp and red seaweeds (moderate energy infralittoral rock) | Drawna Ropcks/Porthkerris | | 1U | 1U | | | | | | 1U |
| | | Pencra Reef | 2U | | 2U | | | | 2U | | |
| | | Woodford's Wall | 2U | | | 2U | | | | | 2U |
| | | Mohegan wreck | 1U | | | 1U | | | | | 1U |
| | | Godrevey Bay | | 1C | | 1C | | | 1C | | |
| | | Maen Land | | 1U | | 1U | | 1U | | | |
| | | The Wreas | | 1C | | | 1C | | 1C | | |
| IR.MIR.KR.Ldig.Bo | Laminaria digitata and under-boulder fauna on sublittoral fringe boulders | Godrevey Bay | | 1C | | 1C | | | 1C | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IR.MIR.KR.Lhyp | Laminaria hyperborea and foliose red seaweeds on moderately exposed infralittoral rock | Drawna Rocks/Porthkerris | 1U | | | 1U | | | | | 1U | | | |
| IR.MIR.KR.Lhyp.Ft | Laminaria hyperborea forest and foliose red seaweeds on moderately exposed upper infralittoral rock | Godrevey Bay | | 1C | | | 1C | | | 1C | | | | |
| | | Maen Land | | 1C | | | 1C | | 1C | | | | | |
| IR.MIR.KR.Lhyp.GzFt | Grazed Laminaria hyperborea forest with coralline crusts on upper infralittoral rock | Woodford's Wall | 1C | | | | 1C | | | | 1C | | | |
| IR.MIR.KR.Lhyp.GzPk | Grazed Laminaria hyperborea park with coralline crusts on lower infralittoral rock | Vase Rock | 1C | | | | 1C | | | | 1C | | | |
| | | Maen Land | 1C | | | | 1C | | 1C | | | | | |
| IR.MIR.KR.Lhyp.Pk | Laminaria hyperborea park and foliose red seaweeds on moderately exposed lower infralittoral rock | Maen Land | | 1C | | | 1C | | 1C | | | | | |
| IR.MIR.KR.LhypT | Laminaria hyperborea on tide-swept, infralittoral rock | Maen Land | | 1U | 4C | | 4C, 1U | | 4C, 1U | | | | | |
| IR.MIR.KR.LhypT.Ft | Laminaria hyperborea forest, foliose red seaweeds and a diverse fauna on tide-swept upper infralittoral rock | Drawna Rocks/Porthkerris | 2C | | | 2C | | | | | 2C | | | |
| IR.MIR.KR.LhypT.Pk | Laminaria hyperborea park with hydroids, bryozoans and sponges on tide-swept lower infralittoral rock | Maen Land | | | 1C | | 1C | | 1C | | | | | |
| | | The Wreas | | iU | | | | 1U | | 1U | | | | |
| IR.MIR.KR.LhypTX.Ft | Laminaria hyperborea forest and foliose red seaweeds on tide-swept upper infralittoral mixed substrata | Porthoustock | 1C | | | iC | | | | 1C | | | | |
| | | Dean Quarry | | 1C | | | 1C | | 1C | | | | | |
| IR.MIR.KR.LhypTX.Pk | Laminaria hyperborea park and foliose red seaweeds on tide-swept lower infralittoral mixed substrata | Woodford's Wall | 1C | | | | 1C | | | | 1C | | | |
| IR.MIR.KR.LhypVt | Laminaria hyperborea on moderately exposed vertical rock. | Drawna Rocks/Porthkerris | 1C | | | 1C | | | | | 1C | | | |
| IR.MIR.KR.XFoR | Dense foliose red seaweeds on silty moderately exposed infralittoral rock | Drawna Rocks/Porthkerris | | 1U | | 1U | | | | | 1U | | | |
| | | Maen Land | | 1U | | | 1U | | 1U | | | | | |
| IR.MIR.KT | Kelp and seaweed communities in tide-swept sheltered conditions | Drawna Rocks/Porthkerris | 1C | | | 1C | | | | | 1C | | | |
| IR.LIR.K.LhypLoch | Mixed Laminaria hyperborea and Laminaria ochroleuca forest on moderately exposed or sheltered infralittoral rock | Drawna Rocks/Porthkerris | 1C | | | 1C | | | | | 1C | | | |
| IR.LIR.K.LhypLsac | Mixed Laminaria hyperborea and Laminaria saccharina on sheltered infralittoral rock | Drawna Rocks/Porthkerris | 1U | | | 1U | | | | | 1U | | | |
| CR | Circalittoral rock (and other hard substrata) | Woodford's Wall | 1C | | | | 1C | | | | 1C | | | |
| CR.FCR.Cv | Circalittoral caves and overhangs | Drawna Rocks/Porthkerris | 1U | | | 1U | | | | | 1U | | | |
| | | Porthoustock | 1U | | | 1U | | | | 1U | | | | |
| CR.FCR.FouFa | Circalittoral fouling faunal communities | Mohegan | 2C | | | | 2C | | | | 2C | | | |
| CR.FCR.FouFa.AdigMsen | Alcyonium digitatum and Metridium senile on moderately wave-exposed circalittoral steel wrecks | Mohegan | 1C | | | | 1C | | | | 1C | | | |
| CR.HCR.FaT.CTub | Tubularia indivisa on tide-swept circalittoral rock | Raglans | 1C | | | | 1C | | | | !C | | | |
| | | Puskys | 1C | 2C | | | | 3C | | 3C | | | | |
| CR.HCR.FaT.CTub.Adig | Alcyonium digitatum with dense Tubularia indivisa and anemones on strongly tide-swept circalittoral rock | Raglans | iU | | | | 1U | | | | 1U | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CR.HCR.XFa | Mixed faunal turf communities | Drawna Rocks/Porthkerris | 1U | | | 1U | | | | | 1U | | | |
| | | Pencra Reef | 10C,1U | | | 10C,1U | | | | 10C,1U | | | | |
| | | Vase Rock | 2U | | | | 2U | | | | 2U | | | |
| | | Mohegan wreck | 1C | | | | 1C | | | | 1C | | | |
| | | Raglans | 1C,2U | | | | 1C,2U | | | | 1C,2U | | | |
| | | W Carn Du | | 2C | | | 2C | | | 2C | | | | |
| | | SW Carn Du | | 1C | | | 1C | | | 1C | | | | |
| | | Godrevey Bay | | 1U | | | 1U | | | 1U | | | | |
| | | Maen Land | | 2C | 2C | | 4C | | 4C, 1U | | | | | |
| | | The Wreas | | 1C | | | | 1C | | 1C | | | | |
| | | Puskys | | 2C | | | | 2C | | 2C | | | | |
| CR.HCR.XFa.ByErSp | Bryozoan turf and erect sponges on tide-swept circalittoral | Pencra Reef | 1C | | | 1C | | | | 1C | | | | |
| | | SE of Manacle Point | | 1C | | | 1C | | | 1C | | | | |
| | | Maen Land | | | 1C | | 1C | | 1C | | | | | |
| | | Dean Quarry | | 2C,1U | | | 2c,1U | | 2C,1U | | | | | |
| | | The Wreas | | 2C | | | | 2C | | 2C | | | | |
| CR.HCR.XFa.ByErSp.Eun | Eunicella verrucosa and Pentapora foliacea on wave-exposed circalittoral rock | Pencra Reef | 5C,1U | | | 5C,1U | | | | | | | | |
| | | Maen Garrick | 1C | | | 1C | | | | 1C | | | | |
| | | Mohegan wreck | 2C | | | | 2C | | | | 2C | | | |
| | | SE of Manacle Point | | 1C | | | 1C | | | 1C | | | | |
| | | Pinnacle W of Carn Du | | 3C,2U | | | 3C,2U | | | 3C,2U | | | | |
| | | Carn Du S | | 2C | | | 2C | | | 2C | | | | |
| | | Carn Du maerl | | 1C | | | 1C | | | 1C | | | | |
| | | Dean Quarry | | 1U | | | 1U | | 1U | | | | | |
| | | Maen Land | | 2C | | | 2C | | 2C | | | | | |
| | | Lowland Reef | | 1C,1U | | | 1C,1U | | 1C,1U | | | | | |
| | | The Wreas | | 1C | | | | 1C | | 1C | | | | |
| | | Puskis | | 3C | | | | 3C | | 3C | | | | |
| CR.HCR.XFa.CvirCri | Corynactis viridis and a mixed turf of crisiids, Bugula, Scrupocellaria, and Cellaria on moderately tide-swept | Pencra Reef | 1C | | | 1C | | | | 1C | | | | |
| | | Maen Garrick | 1U | | | 1U | | | | 1U | | | | |
| | | Vase Rock | 3C | | | | 3C | | | | 3C | | | |
| | | Pen-Win | 1U | | | | 1U | | | | 1U | | | |
| | | Woodford's Wall | 6C,1U | | | | 6C,1U | | | | 6C,1U | | | |
| | | Maen Voes | 1U | | | | 1U | | | | 1U | | | |
| | | Raglans | 2C | | | | 2C | | | | 2C | | | |
| | | Maen Land | | 1C | | | 1C | | 1C | | | | | |
| | | Puskys | | 5C | | | | 5C | | 5C | | | | |
| CR.HCR.XFa.SpAnVt | Sponges and anemones on vertical circalittoral bedrock | Drawna Rocks/Porthkerris | 1C | | | 1C | | | | | 1C | | | |
| | | Pencra Reef | 2C | | | 2C | | | | 2C | | | | |
| | | Woodford's Wall | 1C,1U | | | | 1C,1U | | | | 1C,1U | | | |
| | | Raglans | 1U | | | | 1U | | | | 1U | | | |

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| | | Pinnacle W of Carn Du | | 1C,1U | | | 1C,1U | | | 1C,1U | | |
| | | Carn Du S | | 1C | | | 1C | | | 1C | | |
| | | Dean Quarry | | 1C | | | 1C | | 1C | | | |
| | | Maen Land | 1C | 1C | 1C | | 3C | | 3C | | | |
| CR.MCR.EcCr | Echinoderms and crustose communities | Drawna Rocks/Porthkerris | 1U | | | 1U | | | | | | 1U |
| | | Pencra Reef | 1U | | | 1U | | | | 1U | | |
| CR.MCR.EcCr.UrtScr | Urticina felina and sand-tolerant fauna on sand-scoured or covered circalittoral rock | SE of Manacle Point | | 1C,1U | | | 1C,1U | | | 1C,1U | | |
| | | The Wreas | | 1C,1U | | | | 1C,1U | | 1C,1U | | |
| SS.SCS | Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands) | Maen Land | 1C | | | | 1C | | 1C | | | |
| SS.SCS.CCS | Circalittoral coarse sediment | Drawna Rocks/Porthkerris | 1C | | | 1C | | | | | | 1C |
| | | Pencra Reef | 4C | | | 4C | | | | 4C | | |
| | | Vase Rock | 1C | | | | 1C | | | | | 1C |
| | | Pen-Win | 1C | | | | 1C | | | | | 1C |
| | | SE of Manacle Point | | 1C | | | 1C | | | 1C | | |
| | | Carn Du maerl | | 1U | | | 1U | | | 1C | | |
| | | Dean Point maerl | | 1C | | | 1C | | | 1C | | |
| | | Godrevey Bay | | 1C | | | 1C | | | 1C | | |
| | | Maen Land | 1C | 2C | | | 3C | | 3C | | | |
| | | Lowland Point | 1U | | | | | 1U | | 1U | | |
| | | The Wreas | | 2C | | | | 2C | | 2C | | |
| | | Puskys | | 1C | | | | 1C | | 1C | | |
| SS.SCS.CCS.Nmix | Neopentadactyla mixta in circalittoral shell gravel or coarse | Drawna Rocks/Porthkerris | 2C | | | 2C | | | | | | 2C |
| | | Dean Quarry | | 2C | | | 2C | | 2C | | | |
| | | Maen Land | | 4C | | | 4C | | 4C | | | |
| SS.SCS.CCS.PomB | Pomatoceros triqueter with barnacles and bryozoan crusts on unstable circalittoral cobbles and pebbles | Porthoustock | 1U | | | 1U | | | | 1U | | |
| SS.SCS.ICS | Infralittoral coarse sediment | Drawna Rock/Porthkerris | 2C | | | 2C | | | | | | 2C |
| | | Dean Quarry | | 2C | | | 2C | | 2C | | | |
| | | Maen Land | | | 4C | | 4C | | 4C | | | |
| SS.SCS.ICS.SLan | Dense Lanice conchilega and other polychaetes in tide-swept infralittoral sand and mixed gravelly sand | The Wreas | | 1U | | | | 1U | | 1U | | |
| SS.SCS.ICS.SSh | Sparse fauna on highly mobile sublittoral shingle (cobbles and | Drawna Rocks/Porthkerris | 1C,1U | 1C | | 2C,1U | | | | | | 2C,1U |
| SS.SMx.CMx.CIloMx | Cerianthus lloydii and other burrowing anemones in circalittoral muddy mixed sediment | Drawna Rocks/Porthkerris | 1C | | | 1C | | | | | | 1C |
| SS.SSa.CMuSa | Circalittoral muddy sand | Pencra Reef | 1C | | | 1C | | | | 1C | | |
| SS.SSa.CFiSa | Circalittoral fine sand | Godrevey Bay | | 1C | | | 1C | | | 1C | | |
| SS.SSa.IFiSa.IMoSa | Infralittoral mobile clean sand with sparse fauna | Godrevey Bay | | 1C | | | 1C | | | 1C | | |
| | | Porthoustock | 1C | | | 1C | | | | 1C | | |
| SS.SMp.KSwSS | Kelp and seaweed communities on sublittoral sediment | Dean Quarry | | 1C | | | 1C | | 1C | | | |

APPENDIX TWO: SPECIES LIST

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| PHYLUM ANNELIDA: Segmented Worms | | | | | | | | | | | | | | |
| *Annelida sp. indet.* | | Pencra Reef | R | | | R | | | | | | | R | |
| | | Penwin | R | | | | R | | | | | | | R |
| *Marionina glandulifera* | | Pencra Reef | C | | | C | | | | | | | C | |
| *Arenicola marina* | Lugworm | Pencra Reef | O | | | O | | | | | | | O | |
| | | Minstrel | R | | | | R | | | | | | | R |
| | | Godrevy Beach | | R | | | R | | | | | | R | |
| *Nerilla antennata* | | Pencra Reef | C | | | C | | | | | | | C | |
| | | Spyridian Vagliano | O | | | | O | | | | | | | O |
| *Eulalia viridis* | Greenleaf Worm | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Sabellidae sp. Indet.* | | Woodford's Wall | F | | | | F | | | | | | | F |
| | | Spyridian Vagliano | 2R | | | | 2R | | | | | | | 2R |
| | | Maen Land | R | | R | | 2R | | | | | 2R | | |
| *Bispira volutacornis* | Double spiral | Drawna Rocks/Porthkerris | 5R | R | | 6R | | | | | | | | 6R |
| | | Pencra Reef | 3O,1R | | | 3O, 1R | | | | | | | 3O,1R | |
| | | Vase, Pen-Win, Woodfords Wall | 1O,1R | | | | 1O,1R | | | | | | | 1O,1R |
| | | Maen Garrick | R | | | | | | | | | | | |
| | | Maen Voes | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | | 1O,3R | O | | 20,3R | | | | | 2O,3R | | |
| | | Carn Du | | 2R | | | 2R | | | | | | 2R | |
| | | Puskys | | R | | | | R | | | | | R | |
| | | The Wreas | R | R | | | | 2R | | | | | 2R | |
| | | Davas Rcck | O | | | | | O | | | | | O | |
| *Pseudopotamilla reniformis* | | Pen-Win | R | | | | R | | | | | | | R |
| *Sabella pavonnina* | | Woodford's Wall | 2R | | | | | | | | | | | |
| | | Maen Land | | R | | | R | | | | | R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Serpulidae* | | Pencra Reef | R | | | R | | | | | | | R | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| *Filograna implexa* | | Pencra Reef | 2R | | | 2R | | | | | | | 2R | |
| *Protula tubularia* | | Pencra Reef | R | | | R | | | | | | | R | |
| *Salmacina dysteri* | Coral Worm | Pencra Reef | 2R | | | 2R | | | | | | | 2R | |
| | | Maen Garrick | 2O | | | 2O | | | | | | | 2O | |
| | | Carn Du | C | | | | C | | | | | | C | |
| *Serpula vermicularis* | | Woodford's Wall | R | | | | R | | | | | | | R |
| | | Manacle Point | | R | | | R | | | | | | R | |
| *Spirobranchus sp.* | Keelworm | Drawna Rocks/Porthkerris | F,4O,2R | F,2O | | 2F,6O,2R | | | | | | | | 2F,6O,2R |
| | | Porthoustock | C,O | | | C,O | | | | | | | C,O | |
| | | Vase, Pen-Win, Woodfords Wall | A,F,O | | | | A,F,O | | | | | | | A,F,O |
| | | Manacle Point | | A,C,O | | | A,C,O | | | | | | A,C,O | |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | C,O | | | C,O | | | | | | C,O | |
| | | Maen Land, Dean Quarry | | F,R | 2R | | F,3R | | | | | F,3R | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | The Wreas | F | | | | | F | | | | | F | |
| *Spirobranchus triqueter* | Keelworm | Pencra Reef | F | | | F | | | | | | | F | |
| | | Maen Voes | F | | | | F | | | | | | | F |
| | | Carn Du | | 2C | | | 2C | | | | | | 2C | |
| | | Maen Land | O | F | | | O,F | | | | | O,F | | |
| | | The Wreas | | O | | | | O | | | | | O | |
| *Spirorbis sp* | | Drawna Rocks/Porthkerris | F,3R | 3O | | F,3O,3R | | | | | | | | F,30,3R |
| | | Porthoustock | C | | | C | | | | | | | C | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Mohegan | C | | | | C | | | | | | | C |
| | | Godrevey Beach | | A | | | A | | | | | | A | |
| | | Maen Land/Dean Quarry | | 2O | | | 2O | | | | | 2O | | |
| | | Lowland Reef | O | | | | O | | | | | | O | |
| | | The Wreas | | O | | | | O | | | | | O | |
| | | Woodford's Wall | R | | | | R | | | | | | | R |
| | | Maen Voes | R | | | | R | | | | | | | R |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Dean Point Maerl | | R | | | R | | | | | | R | |
| | | Maen Land | | F | | | F | | | | | F | | |
| *Pherusa plumosa* | | Davas Rcck | O | | | | | O | | | | | O | |
| *Terebellidae* | | Porthoustock | C | | | C | | | | | | | C | |
| | | Godrevey Beach | | F,O | | | F,O | | | | | | F,O | |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | O | R | | O,R | | | | | O,R | | |
| *Amaenea trilobata* | | Mohegan | C | | | | C | | | | | | | C |
| *Eupolymnia nebulosa* | | Pen Win | P | | | | P | | | | | | | P |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| *Lanice conchilega* | Sand Mason | Drawna Rocks/Porthkerris | f,4O,6R | | | F,4O,6R | | | | | | | | F,4O,6R |
| | | Pencra Reef | F,2R | | | F,2R | | | | | | | F,2R | |
| | | Maen Garrick | O,R | | | O,R | | | | | | | O,R | |
| | | Porthoustock | 2R,2P | | | 2R,2P | | | | | | | 2R,2P | |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Spyridian Vagliano | O | | | | O | | | | | | | O |
| | | Manacle Point | | 2O,R | | | 2O,R | | | | | | 2O,R | |
| | | Carn Du | O | | | | O | | | | | | O | |
| | | Carn Du /Dean Point maerl | | 2F | | | 2F | | | | | | 2F | |
| | | Godrevey Beach | | 2O | | | 2O | | | | | | 2O | |
| | | Maen Land/Dean Quarry | 2O,R | 2F,3O,3R | f,3O | | 3F,8O,4R | | | | | 3F,8O,4R | | |
| | | The Wreas | O | A,C,F | | | | A,C,F,O | | | | | A,C,F,O | |
| | | Davas Rcck | O | | | | | O | | | | | O | |

| PHYLUM CRUSTACEA | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Amphipoda* | | Raglans | 2A | | | | 2A | | | | | | | | 2A |
| *Jassa falcata* | | Maen Voes | 2C | | | | 2C | | | | | | | | 2C |
| *Scinidae* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | | O |
| | | Pencra Reef | R | | | R | | | | | | | | R | |
| *Cancer pagurus* | Edible Crab | Drawna Rocks/Porthkerris | 2O,8R | | | 2O,8R | | | | | | | | | 2O,8R |
| | | Pencra Reef | O,5R | | | O,5R | | | | | | | | O,5R | |
| | | Maen Garrick | R | | | R | | | | | | | | R | |
| | | Porthoustock | R | | | R | | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,8R | | | | 2O,8R | | | | | | | | 2O,8R |
| | | Maen Voes | R | | | | R | | | | | | | | R |
| | | Mohegan | R | | | | R | | | | | | | | R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | | R |
| | | Raglans | 2O,2R | | | | 2O,2R | | | | | | | | 2O,2R |
| | | Manacle Point | | F,O,P | | | F,O,P | | | | | | | F,O,P | |
| | | Carn Du | R | O,3R | | | O,4R | | | | | | | O,4R | |
| | | Carn Du /Dean Point maerl | | R | | | R | | | | | | | R | |
| | | Godrevey Beach | | O,R | | | O,R | | | | | | | O,R | |
| | | Maen Land/Dean Quarry | 3R | C,2O,9R | O,3R | | C,3O,15R | | | | | | C,3O,15R | | |
| | | The Wreas | | 3R | | | | 3R | | | | | | 3R | |
| | | Puskys | R | 2O,R | | | | 2O,2R | | | | | | 2O,2R | |
| | | Davas Rcck | R | | | | | R | | | | | | R | |
| *Corystes cassivelaunus* | Masked Crab | Godrevey Beach | | O | | | O | | | | | | | O | |
| *Crangon crangon* | Brown Shrimp | Minstrel | O | | | | O | | | | | | | O | |
| | | Maen Land/Dean Quarry | O | | | | O | | | | | | | O | |
| *Galathea sp.* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | | 2R |
| | | Raglans | R | | | | R | | | | | | | | R |
| *Galathea squamifera* | | Porthoustock | C | | | C | | | | | | | | C | |
| *Galathea strigosa* | Spiny Squat | Drawna Rocks/Porthkerris | 3R | | | 3R | | | | | | | | | 3R |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | | 2R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | | R |
| | | Raglans | O | | | | O | | | | | | | | O |
| | | Carn Du | | R | | | R | | | | | | | R | |
| | | Maen Land | O | | | | O | | | | | | O | | |
| *Inachus sp.* | Sponge Spider | Drawna Rocks/Porthkerris | C,3O,6R | R | | C,3O,7R | | | | | | | | | C,3O,7R |
| | | Dean Point Maerl | | R | | | R | | | | | | | R | |
| *Inachus phalangium* | Sponge Spider | Drawna Rocks/Porthkerris | R | R | | 2R | | | | | | | | | 2R |
| | | Maen Land | | | R | | R | | | | | | R | | |
| *Macropodia rostrata* | Scorpion Spider | Godrevey Beach | | R | | | R | | | | | | | R | |
| *Maja squinado* | Spiny Spider Crab | Drawna Rocks/Porthkerris | C,F,7O,6R,2P | R | | C,F,7O,7R,2P | | | | | | | | | C,F,7O,7R,2P |
| | | Pencra Reef | 5R | | | 5R | | | | | | | | 5R | |
| | | Porthoustock | 3O,R,P | | | 3O,R,P | | | | | | | | 3O,R,P | |
| | | Vase, Pen-Win, Woodfords Wall | C,6R | | | | C,6R | | | | | | | C,6R | |
| | | Maen Voes | O | | | | O | | | | | | | O | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Mohegan | 3R,P | | | | 3R,P | | | | | | 3R,P | |
| | | Spyridian Vagliano | R | | | | R | | | | | | R | |
| | | Raglans | O,R | | | | O,R | | | | | | | O,R |
| | | Carn Du | | 3R | | | 3R | | | | | | 3R | |
| | | Godrevey Beach | | O,R | | | O,R | | | | | | O,R | |
| | | Maen Land/Dean Quarry | R | 3R | | | 3R | | | | | 3R | | |
| | | The Wreas | R | R | | | | 2R | | | | | 2R | |
| | | Puskys | 2R | | | | | 2R | | | | | 2R | |
| | | Chynalls Point | R | | | | | R | | | | | | R |
| *Homarus gammarus* | Lobster | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Porthoustock | O,2R | | | O,2R | | | | | | | O,2R | |
| | | Maen Land | R | | | | R | | | | | R | | |
| | | Lowland Reef | R | | | | R | | | | | | R | |
| *Hyas araneus* | Sea Toad | Minstrel | R | | | | R | | | | | | | R |
| | | Maen Land | O | | | | O | | | | | O | | |
| *Paguridae* | Hermit Crabs | Drawna Rocks/Porthkerris | O,R | | | O,R | | | | | | | | O.R |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Godrevey Beach | | F | | | F | | | | | | F | |
| | | Maen Land | | F | | | F | | | | | F | | |
| *Pagurus bernhardus* | Common Hermit Crab | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Minstrel | O | | | | O | | | | | | | O |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Carn Du | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | O,R | | | O,R | | | | | | O,R | |
| | | Maen Land/Dean Quarry | O | 2O | 2O | | 5O | | | | | 5O | | |
| | | The Wreas | 2R | O,R | | | | O,3R | | | | | O,3R | |
| *Pagurus prideaux* | | Godrevey Beach | | 2C | | | 2C | | | | | | 2C | |
| | | Dean Point Maerl | | O | | | O | | | | | | O | |
| *Palaemon serratus* | Serrated Prawn | Drawna Rocks/Porthkerris | O,2R | | | O,2R | | | | | | | | O,2R |
| | | Porthoustock | C,O | | | C,O | | | | | | | C,O | |
| | | Maen Land | O,R | | | | O,R | | | | | O,R | | |
| *Palinurus elephas* | Crawfish, Spiny Lobster | Carn Du | | O,R | | | O,R | | | YES | | | O,R | |
| | | Maen Land | 3R | R | R | | 5R | | | YES | | 5R | | |
| | | Puskys | | 2R | | | | 2R | | YES | | | 2R | |
| *Liocarcinus depurator* | Harbour Swimming Crab | Godrevey Beach | | R | | | R | | | | | | R | |
| *Necora puber* | Velvet Swimming Crab | Drawna Rocks/Porthkerris | 3O,3R,P | R | | 3O,4R,P | | | | | | | | 3O,4R,P |
| | | Pencra Reef | 4R | | | 4R | | | | | | | 4R | |
| | | Maen Garrick | 2O,R | | | 2O,R | | | | | | | 2O,R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,8R | | | | 2O,8R | | | | | | 2O,8R | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Vase, Pen-Win, Woodfords Wall | 2O,8R | | | | 2O,8R | | | | | | 2O,8R | |
| | | Maen Voes | R | | | | R | | | | | | R | |
| | | Mohegan | 2R | | | | 2R | | | | | | 2R | |
| | | Spyridian Vagliano | R | | | | R | | | | | | R | |
| | | Minstrel | R | | | | R | | | | | | R | |
| | | Raglans | C,O | | | | C,O | | | | | | C,O | |
| | | Carn Du | | 3O | | | 3O | | | | | | 3O | |
| | | Maen Land/Dean Quarry | 2O | 2R | 2R | | 20,4R | | | | | 20,4R | | |
| | | The Wreas | R | | | | | R | | | | | R | |
| | | Puskys | O,R | 2R | | | | O,3R | | | | | O,3R | |
| | | Lowland Reef | 2R | | | | | 2R | | | | | 2R | |
| *Porcellana platycheles* | Broad Clawed Porcelain Crab | Godrevey Beach | | R | | | R | | | | | | R | |
| *Portumnus latipes* | | Godrevey Beach | | R | | | R | | | | | | R | |
| *Xantho pilipes* | | Carn Du | | R | | | R | | | | | | R | |
| *Mysidae* | | Porthoustock | P | | | P | | | | | | | P | |
| *Lepas (Anatifa) anatifera* | Common Goose Barnacle | Pencra Reef | R | | | R | | | | | | | P | |
| *Semibalanus balanoides* | | Drawna Rocks/Porthkerris | A | | | A | | | | | | | | A |
| | | Porthoustock | C | | | C | | | | | | | C | |
| *Austrominius modestus* | | Drawna Rocks/Porthkerris | P | | | P | | | | | | | | P |
| *Balanus sp.* | | Pencra Reef | C | | | C | | | | | | | C | |
| | | Maen Land | | | F,O | | F,O | | | | | F,O | | |
| *Balanus balanus* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Perforatus perforatus* | | Drawna Rocks/Porthkerris | C | | | C | | | | | | | | C |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| *Chthamalus stellatus* | | Drawna Rocks/Porthkerris | A | | | A | | | | | | | | A |
| *Megatrema anglicum* | Cup Coral | Manacle Point | | P | | | P | | | | | | P | |
| *Verruca stroemia* | | Pencra Reef | O | | | O | | | | | | | O | |
| *Cirripedia* | Barnacles | Drawna Rocks/Porthkerris | 2C | | | 2C | | | | | | | | 2C |
| | | Pencra Reef | F,O | | | F,O | | | | | | | F,O | |
| | | Porthoustock | C,3O | | | C,3O | | | | | | | C,3O | |
| | | Raglans | 2P | | | | 2P | | | | | | | 2P |
| | | Carn Du | | 2F,2O | | | 2F,2O | | | | | | 2F,2O | |
| | | Godrevey Beach | | S,F | | | S,F | | | | | | S,F | |
| | | Maen Land/Dean Quarry | | A,O | | | A,O | | | | | A,O | | |
| | | Puskys | | O | | | | O | | | | | O | |
| | | The Wreas | | 2O | | | | 2O | | | | | 2O | |
| | | Davas Rock | C | | | | | C | | | | | C | |
| | | | | | | | | | | | | | | |
| PHYLUM PYCNOGONIDA | | | | | | | | | | | | | | |
| *Pycnogonida* | Sea Spiders | Pencra Reef | R | | | R | | | | | | | R | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Mohegan | 2R | | | | 2R | | | | | | | 2R |
| | | Raglans | R | | | | R | | | | | | | R |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| PHYLUM BRYOZOA | | | | | | | | | | | | | | |
| Unidentified bryozan crusts | | Drawna Rocks/Porthkerris | C,O | F | | C,F,O | | | | | | | | C,F,O |
| | | Pencra Reef | O | | | O | | | | | | | O | |
| | | Porthoustock | F,O | | | F,O | | | | | | | F,O | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Maen Voes | C | | | | C | | | | | | | C |
| | | Raglans | C,R,2P | | | | C,R,2P | | | | | | | C,R,2P |
| | | Manacle Point | | P | | | P | | | | | | P | |
| | | Carn Du | | 2F,5O | | | 2F,5O | | | | | | 2F,5O | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | | 4O | | 4O | | | | | 4O | | |
| | | The Wreas | C | | | | | C | | | | | C | |
| | | Davas Rock | F | | | | | F | | | | | F | |
| *Reptadeonella violacea* | | Mohegan | O | | | | O | | | | | | | O |
| *Pentapora foliacea* | Potato Crisp Bryozoan | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Pencra Reef | 2C,4F,12O,4R | | | 2C,4F,12O,4R | | | | | | | 2C,4F,12O,4R | |
| | | Maen Garrick | 2C,4O | | | 2C,4O | | | | | | | 2C,4O | |
| | | Vase, Pen-Win, Woodfords Wall | 2C,4F,10O,6R | | | | 2C,4F,10O,6R | | | | | | | 2C,4F,10O,6R |
| | | Maen Voes | 2C,2O | | | | 2C,2O | | | | | | | 2C,2O |
| | | Mohegan | 2O,3R | | | | 2O,3R | | | | | | | 2O,3R |
| | | Spyridian Vagliano | O | R | | | O,R | | | | | | | O,R |
| | | Raglans | 2C,2F,3O,5R | | | | 2C,2F,3O,5R | | | | | | | 2C,2F,3O,5R |
| | | Manacle Point | | 3O,P | | | 3O,P | | | | | | 3O,P | |
| | | Carn Du | F,O,R | 5C,2F,3O,2R | | | 5C,3F,4O,3R | | | | | | 5C,3F,4O,3R | |
| | | Carn Du /Dean Point maerl | | 2R | | | 2R | | | | | | 2R | |
| | | Maen Land/Dean Quarry | F,5O | 2F,2O,R | O,R | | 3F,8O,2R | | | | | 3F,8O,2R | | |
| | | Lowland Reef | 2O,R | | | | | 2O,R | | | | | 2O,R | |
| | | The Wreas | 2O | 2F,2O | | | | 2F,4O | | | | | 2F,4O | |
| | | Puskys | F,R | O,2R | | | | F,O,3R | | | | | F,O,3R | |
| | | Davas Rock | R | | | | | R | | | | | R | |
| | | Chynalls Point | O | | | | | O | | | | | | O |
| *Schizomavella sp.* | | Carn Du | | O | | | O | | | | | | O | |
| *Schizomavella linearis* | | Carn Du | | O | | | O | | | | | | O | |
| *Bicellariella* | | Maen Voes | A | | | | A | | | | | | | A |
| *Bicellariella ciliata* | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| *Bugula sp.* | Spiral Bryozoans | Drawna Rocks/Porthkerris | 2R | | | 2R | | | | | | | | 2R |
| | | Pencra Reef | R | | | R | | | | | | | R | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | 3O | | | | 3O | | | | | | | 3O |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mohegan | F | | | | F | | | | | | | | F | |
| | | Spyridian Vagliano | O | | | | O | | | | | | | | O | |
| | | Raglans | A,C,F | | | | A,C,F | | | | | | | | A,C,F | |
| | | Maen Land/Dean Quarry | F | C,F,2O,R | 2O | | C,2F,4O,R | | | | | C,2F,4O,R | | | | |
| | | Lowland Reef | 2O,R | | | | | 2O,R | | | | | | 2O,R | | |
| *Bugula flabellata* | | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | | R | |
| | | Pencra Reef | R | | | R | | | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | | O | |
| | | Carn Du | | O | | | O | | | | | | | O | | |
| | | Maen Land | | R | | | R | | | | | R | | | | |
| | | The Wreas | | O | | | | O | | | | | | O | | |
| *Bugula plumosa* | | Drawna Rocks/Porthkerris | | O | | O | | | | | | | | | O | |
| | | Pencra Reef | 3F,R | | | 3F,R | | | | | | | | 3F,R | | |
| | | Vase, Pen-Win, Woodfords Wall | 2P | | | | 2P | | | | | | | | 2P | |
| | | Minstrel | O | | | | O | | | | | | | | O | |
| | | Carn Du | C,O | | | | C,O | | | | | | | C,O | | |
| | | Maen Land | | R | | | R | | | | | R | | | | |
| | | Puskys | P | | | | | P | | | | | | P | | |
| *Bugula turbinata* | | Drawna Rocks/Porthkerris | 2O | | | 2O | | | | | | | | | 2O | |
| | | Pencra Reef | R | | | R | | | | | | | | R | | |
| | | Manacle Point | | 2O | | | 2O | | | | | | | 2O | | |
| *Scrupocellaria* | | Carn Du | | 2A | | | 2A | | | | | | | 2A | | |
| *Scrupocellaria scruposa* | | Carn Du | | 2C | | | 2C | | | | | | | 2C | | |
| *Cellaria spp.* | | Drawna Rocks/Porthkerris | | F | | F | | | | | | | | | F | |
| | | Pencra Reef | A,C,O | | | A,C,O | | | | | | | | A,C,O | | |
| | | Vase, Pen-Win, Woodfords Wall | 2A,3F,2O,2P | | | | 2A,3F,2O,2P | | | | | | | | 2A,3F,2O,2P | |
| | | Mohegan | A | | | | A | | | | | | | | A | |
| | | Raglans | 2F | | | | 2F | | | | | | | | 2F | |
| | | Manacle Point | | O,P | | | O,P | | | | | | | O,P | | |
| | | Carn Du | | 2C,5F,O | | | 2C,5F,O | | | | | | | 2C,5F,O | | |
| | | Carn Du /Dean Point maerl | | A,R | | | A,R | | | | | | | A,R | | |
| | | Maen Land/Dean Quarry | | O,2R | 3O | | 4O,2R | | | | | 4O,2R | | | | |
| | | Puskys | | C,O,R,2P | | | | C,O,R,2P | | | | | | C,O,R,2P | | |
| | | Lowland Reef | 2O | | | | | 2O | | | | | | 2O | | |
| | | The Wreas | R | 2C,3F | | | | 2C,3F,R | | | | | | 2C,3F,R | | |
| *Cellaria fistulosa* | | Pencra Reef | R | | | R | | | | | | | | R | | |
| | | Vase, Pen-Win, Woodfords Wall | C | | | | C | | | | | | | | C | |
| | | Maen Voes | C | | | | C | | | | | | | | C | |
| | | Raglans | O | | | | O | | | | | | | | O | |
| *Cellaria sinuosa* | | Carn Du | | O | | | O | | | | | | | O | | |
| *Cellepora sp.* | | Porthoustock | R | | | R | | | | | | | | R | | |
| *Cellepora pumicosa* | Pumice Bryozoan | Pencra Reef | P | | | P | | | | | | | | P | | |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | | 2R | |
| | | Mohegan | F | | | | F | | | | | | | | F | |
| | | Raglans | 2O | | | | 2O | | | | | | | | 2O | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | C,F,2O,2R | | | C,F,2O,2R | | | | | | C,F,2O,2R | |
| | | Maen Land/Dean Quarry | | 4O,R | | | 4O,R | | | | | 4O,R | | |
| | | Puskys | | 2O | | | | 2O | | | | | 2O | |
| *Omalosecosa ramulosa* | Monkey Puzzle Bryozoan | Pencra Reef | F,2O,P | | | F,2O,P | | | | | | F,2O,P | | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Maen Voes | R | | | | R | | | | | | | R |
| | | Carn Du | F | 2R | | | F,2R | | | | | | F,2R | |
| | | Carn Du /Dean Point maerl | | R | | | R | | | | | | R | |
| *Electra pilosa* | Frosty Sea mat | Drawna Rocks/Porthkerris | 3F,3R | | | 3F,3R | | | | | | | | 3F,3R |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Maen Garrick | F | | | F | | | | | | | F | |
| | | Vase, Pen-Win, Woodfords Wall | 2A,C,F,O | | | | 2A,C,F,O | | | | | | | 2A,C,F,O |
| | | Mohegan | C | | | | C | | | | | | | C |
| | | Maen Voes | 2C | | | | 2C | | | | | | | 2C |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Carn Du | | 2A,C.F.2O,R | | | 2A,C.F.2O,R | | | | | | 2A,C.F.2O,R | |
| | | Godrevey Beach | | C,2O | | | C,2O | | | | | | C,2O | |
| | | Maen Land/Dean Quarry | | O | 2O | | 3O | | | | | 3O | | |
| | | The Wreas | | C | | | | C | | | | | C | |
| | | Davas Rcck | C,F | | | | | C,F | | | | | C,F | |
| *Escharoides coccinea* | | Manacle Point | | O | | | O | | | | | | O | |
| *Flustra foliacea* | | Drawna Rocks/Porthkerris | 2O | | | 2O | | | | | | | | 2O |
| | | Maen Land | | R | | | R | | | | | R | | |
| *Celleporella* | | Manacle Point | | C | | | C | | | | | | C | |
| *Celleporella hyalina* | | Drawna Rocks/Porthkerris | | O | | O | | | | | | | | O |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | C | | | C | | | | | | C | |
| *Membranipora membranacea* | Sea Mat | Drawna Rocks/Porthkerris | A,7C,5F,3O,2R | | | A,7C,5F,3O,2R | | | | | | | | A,7C,5F,3O,2R |
| | | Pencra Reef | A,C,F,3O | | | A,C,F,3O | | | | | | | A,C,F,3O | |
| | | Porthoustock | 2C,O,R | | | 2C,O,R | | | | | | | 2C,O,R | |
| | | Maen Garrick | F | | | F | | | | | | | F | |
| | | Vase, Pen-Win, Woodfords Wall | A,3C,2F,2O | | | | A,3C,2F,2O | | | | | | | A,3C,2F,2O |
| | | Maen Voes | S,A,C.F | | | | S,A,C.F | | | | | | | S,A,C.F |
| | | Minstrel | C | | | | C | | | | | | | C |
| | | Raglans | 2C | | | | 2C | | | | | | | 2C |
| | | Manacle Point | | C | | | C | | | | | | C | |
| | | Carn Du | A,2C | A,C.F,2O | | | 2A,3C.F,2O | | | | | | 2A,3C.F,2O | |
| | | Godrevey Beach | | A,C | | | A,C | | | | | | A,C | |
| | | Maen Land/Dean Quarry | A,C,O | 2C,2F,2O,2R | C,2O | | A,4C,2F,5O,2R | | | | | A,4C,2F,5O,2R | | |
| | | Lowland Reef | O | F | | | | O,F | | | | | O,F | |
| | | The Wreas | O,F | | | | | O,F | | | | | O,F | |
| | | Davas Rock | A,F | | | | | A,F | | | | | A,F | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Parasmittina sp.* | | Maen Voes | O | | | | O | | | | | | | O |
| | | Carn Du | 2O | | | | 2O | | | | | | 2O | |
| | | Maen Land | O | | | | O | | | | | O | | |
| *Parasmittina trispinosa* | | Pencra Reef | F,3O | | | F,3O | | | | | | | F,3O | |
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | F,2O | | | F,2O | | | | | | F,2O | |
| | | Maen Land | | R | | | R | | | | | R | | |
| *Alcyonidium sp.* | | Pencra Reef | 2O | | | 2O | | | | | | | 2O | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Carn Du | O | | | | O | | | | | | O | |
| | | Maen land | O | | | | O | | | | | O | | |
| *Alcyonidium diaphanum* | Finger bryozoan | Drawna Rocks/Porthkerris | F,3O,3R | R | | F,3O,4R | | | | | | | | F,3O,4R |
| | | Pencra Reef | 2F,7O,R,P | | | 2F,7O,R,P | | | | | | | 2F,7O,R,P | |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Maen Garrick | C,O,2R | | | C,O,2R | | | | | | | C,O,2R | |
| | | Vase, Pen-Win, Woodfords Wall | A,F,2O,R,P | | | | A,F,2O,R,P | | | | | | | A,F,2O,R,P |
| | | Maen Voes | 2C | | | | 2C | | | | | | | 2C |
| | | Mohegan | 3O,R | | | | 3O,R | | | | | | | 3O,R |
| | | Spyridian Vagliano | O | | | | O | | | | | | | O |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Manacle Point | | 2O | | | 2O | | | | | | 2O | |
| | | Carn Du | | 6F,3O,R | | | 6F,3O,R | | | | | | 6F,3O,R | |
| | | Maen Land/Dean Quarry | O,P | 3F,5O,3R | C,F | | C,4F,56O,3R,P | | | | | C,4F,56O,3R,P | | |
| | | Lowland Reef | O | | | | | O | | | | | O | |
| | | The Wreas | C,O | F,O,R | | | | C,2O,R | | | | | C,2O,R | |
| | | Puskys | | O,2R | | | | O,2R | | | | | O,2R | |
| *Crisa spp.* | Sea Mosses | Drawna Rocks/Porthkerris | A,3C,F | F | | A,3C,2F | | | | | | | | A,3C,2F |
| | | Maen Garrick | F,O | | | F,O | | | | | | | F,O | |
| | | Vase, Pen-Win, Woodfords Wall | F | | | | F | | | | | | | F |
| | | Mohegan | 2O,R | | | | 2O,R | | | | | | | 2O,R |
| | | Raglans | F,2P | | | | F,2P | | | | | | | F,2P |
| | | Carn Du | | A,3C,2F,O | | | A,3C,2F,O | | | | | | A,3C,2F,O | |
| | | Godrevey Beach | | 2C | | | 2C | | | | | | 2C | |
| | | Maen Land/Dean Quarry | | A,3F,7O,R | F,4O | | A,4F,11O,R | | | | | A,4F,11O,R | | |
| | | Lowland Reef | R | | | | | R | | | | | R | |
| | | The Wreas | | 2O | | | | 2O | | | | | 2O | |
| | | Davas Rcck | C | | | | | C | | | | | C | |
| *Crisia denticulata* | | Drawna Rocks/Porthkerris | | A | | A | | | | | | | | A |
| | | Spyridian Vagliano | P | | | | P | | | | | | | P |
| | | Maen Land | | A | | | A | | | | | A | | |
| *Disporella hispida* | | Maen Land | | R | | | R | | | | | R | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| PHYLUM PISCES | FISHES | | | | | | | | | | | | | |
| *Conger conger* | Conger Eel | Drawna Rocks/Porthkerris | 2R | | | 2R | | | | | | | | 2R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Carn Du | R | | | | R | | | | | | R | |
| | | Maen Land | R | | | | R | | | | | R | | |
| *Belone belone* | Garfish | Maen Voes | O | | | | O | | | | | | | O |
| *Pollachius pollachius* | Pollack | Drawna Rocks/Porthkerris | 4C,2F,12O,4R | 2O,R | | 4C,2F,14O,5R | | | | | | | | 4C,2F,14O,5R |
| | | Pencra Reef | 6O,4R,P | | | 6O,4R,P | | | | | | | 6O,4R,P | |
| | | Maen Garrick | 2O,P | | | 2O,P | | | | | | | 2O,P | |
| | | Porthoustock | F,2O | | | F,2O | | | | | | | F,2O | |
| | | Vase, Pen-Win, Woodfords Wall | 2C,F,11O,5R | | | | 2C,F,11O,5R | | | | | | | 2C,F,11O,5R |
| | | Mohegan | C,2O,R | | | | C,2O,R | | | | | | | C,2O,R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Maen Voes | 2O,R | | | | 2O,R | | | | | | | 2O,R |
| | | Minstrel | O | | | | O | | | | | | | O |
| | | Raglans | C,F,O,7R | | | | C,F,O,7R | | | | | | | C,F,O,7R |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Carn Du | O | F,4O,2R | | | F,5O,2R | | | | | | F,5O,2R | |
| | | Carn Du/Dean Point maerl | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | C,R | | | C,R | | | | | C,R | | |
| | | Maen Land/Dean Quarry | C,3O | A,F,4O,R | 3C,3F,2O | | A,4C,4F,9O,R | | | | | A,4C,4F,9O,R | | |
| | | Puskys | | 5O | | | | 5O | | | | | 5O | |
| | | Davas Rock | O | | | | | O | | | | | O | |
| *Pollachius virens* | Saithe/Coley | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Mohegan | R | | | | R | | | | | | | R |
| *Trisopterus luscus* | Bib/Pouting | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | R |
| | | Pencra Reef | 2O | | | 2O | | | | | | | 2O | |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Maen Garrick | 2C,R | | | 2C,R | | | | | | | 2C,R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,3R | | | | 2O,3R | | | | | | | 2O,3R |
| | | Mohegan | 2C,O | | | | 2C,O | | | | | | | 2C,O |
| | | Spyridian Vagliano | C,3O,2R | | | | C,3O,2R | | | | | | | C,3O,2R |
| | | Carn Du | | R | | | R | | | | | | R | |
| | | Maen Land | | F | R | | F,R | | | | | F,R | | |
| | | Puskys | | R | | | | R | | | | | R | |
| | | Chynalls Point | O | | | | | O | | | | | O | |
| *Trisopterus minutus* | Poor Cod | Drawna Rocks/Porthkerris | 2O,R | | | 2O,R | | | | | | | | 2O,R |
| | | Pencra Reef | 4O | | | 4O | | | | | | | 4O | |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | O,2R | | | | O,2R | | | | | | | O,2R |
| | | Mohegan | C,O | | | | C,O | | | | | | | C,O |
| | | Spyridian Vagliano | O | | | | O | | | | | | | O |
| | | Maen Voes | C | | | | C | | | | | | | C |
| | | Raglans | C,O | | | | C,O | | | | | | | C,O |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Manacle Point | | R | | | R | | | | | | R | | |
| | | Carn Du | | 2R | | | 2R | | | | | | 2R | | |
| *Ciliata mustela* | Five-bearded Rockling | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | | R |
| *Molva molva* | Ling | Pencra Reef | 4R | | | 4R | | | | | | | 4R | | |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | | 2R |
| | | Spyridian Vagliano | 2R | | | | 2R | | | | | | | | 2R |
| *Spinachia spinachia* | Sea Stickleback | Drawna Rocks/Porthkerris | P | | | P | | | | | | | | | P |
| | | Porthoustock | O | | | O | | | | | | | O | | |
| *Lophius piscatorius* | Anglerfish/Monkfi | Pencra Reef | 4R | | | 4R | | | | YES | | | 4R | | |
| | | Mohegan | R | | | | R | | | YES | | | | | R |
| *Mugiliformes* | Mullet | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | | R |
| *Chelon labrosus* | Thicklip Grey | Maen Land/Dean Quarry | | R | | | R | | | | | R | | | |
| *Ammodytes sp.* | Sand Eels | Drawna Rocks/Porthkerris | O,C | | | O,C | | | | | | | | | O,C |
| | | Manacle Point | | O | | | O | | | | | | O | | |
| | | Carn Du Maerl | | C | | | C | | | | | | C | | |
| | | Dean Point Maerl | | F | | | F | | | | | | F | | |
| | | Godrevey Beach | | O,C | | | O,C | | | | | | O,C | | |
| | | Maen Land/Dean Quarry | C | C,F,O | 2F,O | | 2C,3F,2O | | | | | 2C,3F,2O | | | |
| | | The Wreas | | A,2C | | | | A,2C | | | | | A,2C | | |
| *Ammodytes tobianus* | Lesser Sandeel | Drawna Rocks/Porthkerris | | F | | F | | | | | | | | | F |
| | | Porthoustock | C | | | C | | | | | | | | | C |
| | | Minstrel | O | | | | O | | | | | | | | O |
| | | Maen Land | F,O | | C | | C,F,O | | | | | C,F,O | | | |
| *Hyperoplus lanceolatus* | Lance/Greater Sandeel | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| | | Godrevey Beach | | O | | | O | | | | | | O | | |
| | | Maen Land | R | | | | R | | | | | R | | | |
| | | The Wreas | | F,R | | | | F,R | | | | | F,R | | |
| *Coryphoblennius galerita* | Montagu's Blenny | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| *Lipophrys pholis* | Shanny | Godrevey Beach | | C | | | C | | | | | | C | | |
| *Parablennius gattorugine* | Tompot Blenny | Drawna Rocks/Porthkerris | 3O,2R | R | | 3O,3R | | | | | | | | | 3O,3R |
| | | Pencra Reef | R | | | R | | | | | | | R | | |
| | | Vase, Pen-Win, Woodfords Wall | 4R | | | | 4R | | | | | | | | 4R |
| | | Maen Voes | R | | | | R | | | | | | | | R |
| | | Mohegan | R | | | | R | | | | | | | | R |
| | | Spyridian Vagliano | 2R | | | | 2R | | | | | | | | 2R |
| | | Raglans | R | | | | R | | | | | | | | R |
| | | Carn Du | | R | | | R | | | | | | R | | |
| | | Maen Land | 2O,R | R | | | 2O,2R | | | | | 2O,2R | | | |
| *Parablennius ruber* | Red Blenny | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | R | | | | R |
| *Callionymus sp.* | Dragonets | Drawna Rocks/Porthkerris | 2O | | | 2O | | | | | | | | | 2O |
| | | Dean Point Maerl | | F | | | F | | | | | | F | | |
| | | Maen Land | | | C,O,R | | C,O,R | | | | | C,O,R | | | |
| *Callionymus lyra* | Common | Drawna Rocks/Porthkerris | C,3F,2O,R | | | C,3F,2O,R | | | | | | | | | C,3F,2O,R |
| | | Pencra Reef | R | | | R | | | | | | | R | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Porthoustock | F,O | | | F,O | | | | | | | F,O | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | F | | | | F | | | | | | | F |
| | | Maen Land/Dean Quarry | | 2O,R | R | | 2O,2R | | | | | 2O,2R | | |
| | | The Wreas | | F,R | | | | F,R | | | | | F,R | |
| | | Davas Rock | O | | | | | O | | | | | O | |
| *Callionymus reticulatus* | Reticulated Dragonet | Manacle Point | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | A,C | | | A,C | | | | | | A,C | |
| *Trachurus trachurus* | Horse Mackerel | Vase, Pen-Win, Woodfords Wall | 2O | | | | 2O | | | | | | | 2O |
| | | Dean Point Maerl | | R | | | R | | | | | | R | |
| *Gobiusculus flavescens* | Two Spot Goby | Drawna Rocks/Porthkerris | A,2C,6F,5O | F,O,R | | A,2C,7F.6O,R | | | | | | | | A,2C,7F.6O,R |
| | | Pencra Reef | 2P | | | 2P | | | | | | | 2P | |
| | | Porthoustock | 2C,F,O | | | 2C,F,O | | | | | | | 2C,F,O | |
| | | Vase, Pen-Win, Woodfords Wall | C,2F | | | | C,2F | | | | | | C,2F | |
| | | Maen Voes | C,2F | | | | C,2F | | | | | | C,2F | |
| | | Minstrel | R | | | | R | | | | | | R | |
| | | Raglans | F | | | | F | | | | | | F | |
| | | Godrevey Beach | | C,F | | | C,F | | | | | | C,F | |
| | | Maen Land/Dean Quarry | F,2O | F,O,R | 2F | | 4F,3O,R | | | | | 4F,3O,R | | |
| | | The Wreas | 3O | 2O | | | | 5O | | | | | 5O | |
| | | Puskys | | R | | | | R | | | | | R | |
| | | Davas Rcck | F | | | | | F | | | | | F | |
| *Pomatoschistus sp.* | Common and Sand Gobies | Drawna Rocks/Porthkerris | C,F | | | C,F | | | | | | | | C,F |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Godrevey Beach | | C | | | C | | | | | | C | |
| | | Maen Land/Dean Quarry | F | F,3O | | | 2F,3O | | | | | 2F,3O | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Davas Rock | F | | | | | F | | | | | F | |
| *Pomatoschistus minutus* | Sand Goby | Maen Garrick | R | | | R | | | | | | | R | |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | A | | | A | | | | | | A | |
| *Thorogobius ephippiatus* | Leopard Spot Goby | Drawna Rocks/Porthkerris | 4O | 2R | | 4O,2R | | | | | | | | 4O,2R |
| | | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | 2R |
| | | Maen Voes | R | | | | R | | | | | | | R |
| | | Mohegan | 3R | | | | 3R | | | | | | | 3R |
| | | Spyridian Vagliano | R | | | | R | | | | | | R | |
| | | Manacle Point | | 2O | | | 2O | | | | | | 2O | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Maen Land | O,R | | R | | O,2R | | | | | O,2R | | | |
| | | Puskys | | R | | | | R | | | | | R | | |
| | | Davas Rock | R | | | | | R | | | | | R | | |
| *Centrolabrus exoletus* | Rock Cook | Drawna Rocks/Porthkerris | 9C,2F,50,R | 3F,3O | | 9C,5F,80,R | | | | | | | | | 9C,5F,80,R |
| | | Pencra Reef | C,F,4O,2R | | | C,F,4O,2R | | | | | | | C,F,4O,2R | | |
| | | Porthoustock | R | | | R | | | | | | | R | | |
| | | Maen Garrick | C,3O | | | C,3O | | | | | | | C,3O | | |
| | | Vase, Pen-Win, Woodfords Wall | 3C,8O,R | | | | 3C,8O,R | | | | | | | | 3C,8O,R |
| | | Maen Voes | F,2O | | | | F,2O | | | | | | | | F,2O |
| | | Mohegan | O | | | | O | | | | | | | | O |
| | | Spyridian Vagliano | 2O,R | | | | 2O,R | | | | | | | | 2O,R |
| | | Minstrel | O | | | | O | | | | | | | | O |
| | | Raglans | C,F,4O,2R | | | | C,F,4O,2R | | | | | | | | C,F,4O,2R |
| | | Manacle Point | A,2O | | | | A,2O | | | | | | A,2O | | |
| | | Carn Du | 2C,F | 3F,O | | | 2C,4F,O | | | | | | 2C,4F,O | | |
| | | Maen Land/Dean Quarry | 3O,R | 4F,O,R | 5O | | 4F,9O,R | | | | | 4F,9O,R | | | |
| | | The Wreas | 2O | F,O,R | | | | F,3O,R | | | | | F,3O,R | | |
| | | Puskys | | F,4O | | | | F,4O | | | | | F,4O | | |
| | | Davas Rock | F | | | | | F | | | | | F | | |
| *Ctenolabrus rupestris* | Goldsinny | Drawna Rocks/Porthkerris | 5C,F,4O,2R | O,R | | 5C,F,5O,3R | | | | | | | | | 5C,F,5O,3R |
| | | Pencra Reef | C,2F,9O,4R | | | C,2F,9O,4R | | | | | | | C,2F,9O,4R | | |
| | | Porthoustock | R | | | R | | | | | | | R | | |
| | | Maen Garrick | 4O | | | 4O | | | | | | | 4O | | |
| | | Vase, Pen-Win, Woodfords Wall | 4C,F,11O,3R | | | | 4C,F,11O,3R | | | | | | 4C,F,11O,3R | | |
| | | Maen Voes | 2C,F | | | | 2C,F | | | | | | 2C,F | | |
| | | Mohegan | C,F,O | | | | C,F,O | | | | | | C,F,O | | |
| | | Spyridian Vagliano | 3O,2R | | | | 3O,2R | | | | | | 3O,2R | | |
| | | Minstrel | C | | | | C | | | | | | C | | |
| | | Raglans | 2F,4O,3R | | | | 2F,4O,3R | | | | | | 2F,4O,3R | | |
| | | Manacle Point | | C,6O | | | C,6O | | | | | | C,6O | | |
| | | Carn Du | 2O | 4C,F,2O,R | | | 4C,F,2O,R | | | | | | 4C,F,2O,R | | |
| | | Maen Land/Dean Quarry | C,F,4O | F,7O,2R | F,3O,2R | | C,2F,14O,4R | | | | | C,2F,14O,4R | | | |
| | | The Wreas | 2O | F,2O,R | | | | E,4O,R | | | | | E,4O,R | | |
| | | Puskys | R | 4O,2R,P | | | | 4O,3R,P | | | | | 4O,3R,P | | |
| | | Davas Rock | F | | | | | F | | | | | F | | |
| *Labrus bergylta* | Ballan Wrasse | Drawna Rocks/Porthkerris | 9C,4F,12O,6R | F,4O | | 9C,5F,16O,6R | | | | | | | | | 9C,5F,16O,6R |
| | | Pencra Reef | 2F,16O,6R | | | 2F,16O,6R | | | | | | | 2F,16O,6R | | |
| | | Porthoustock | 5O | | | 5O | | | | | | | 5O | | |
| | | Maen Garrick | 3O | | | 3O | | | | | | | 3O | | |
| | | Vase, Pen-Win, Woodfords Wall | 3C,3F,16O,6R | | | | 3C,3F,16O,6R | | | | | | | | 3C,3F,16O,6R |
| | | Maen Voes | 4O | | | | 4O | | | | | | | | 4O |
| | | Mohegan | 5O.R | | | | 5O.R | | | | | | | | 5O.R |
| | | Spyridian Vagliano | 4O | | | | 4O | | | | | | | | 4O |
| | | Minstrel | R | | | | R | | | | | | | | R |
| | | Raglans | C,F,10O,4R | | | | C,F,10O,4R | | | | | | | | C,F,10O,4R |
| | | Manacle Point | | 2C,F | | | 2C,F | | | | | | 2C,F | | |
| | | Carn Du | 2O | C,5O,3R | | | C,7O,3R | | | | | | C,7O,3R | | |
| | | Godrevey Beach | | O | | | O | | | | | | O | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Maen Land/Dean Quarry | C,5O | 2F,10O,6R | 3O,2R | | C,2F,18O,8R | | | | | C,2F,18O,8R | | |
| | | Lowland Reef | O | | | | | O | | | | | O | |
| | | The Wreas | 2O | 3O | | | | 5O | | | | | 5O | |
| | | Puskys | 2F,O | 3O,R | | | | 2F,4O,R | | | | | 2F,4O,R | |
| | | Davas Rock | O | | | | | O | | | | | O | |
| | | Chynalls Point | O | | | | | O | | | | | | O |
| *Labrus mixtus* | Cuckoo Wrasse | Drawna Rocks/Porthkerris | 5C,F,4O | F,R | | 5C,2F,4O,R | | | | | | | | 5C,2F,4O,R |
| | | Pencra Reef | 2C,2F,16O,7R | | | 2C,2F,16O,7R | | | | | | | 2C,2F,16O,7R | |
| | | Maen Garrick | C,2O,R | | | C,2O,R | | | | | | | C,2O,R | |
| | | Vase, Pen-Win, Woodfords Wall | 5C,F,10O,5R | | | | 5C,F,10O,5R | | | | | | | 5C,F,10O,5R |
| | | Maen Voes | C,2O | | | | C,2O | | | | | | | C,2O |
| | | Mohegan | F,6O,R | | | | F,6O,R | | | | | | | F,6O,R |
| | | Spyridian Vagliano | F,4O | | | | F,4O | | | | | | | F,4O |
| | | Minstrel | R | | | | R | | | | | | | R |
| | | Raglans | 2F,6O.4R | | | | 2F,6O.4R | | | | | | | 2F,6O.4R |
| | | Manacle Point | | A,O,2R | | | A,O,2R | | | | | | A,O,2R | |
| | | Carn Du | 2C,2O | F,3C,9O,R | | | F,5C,11O,R | | | | | | F,5C,11O,R | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | 3C,F,2O,R | 4F,6O,3R | C,3F | | 4C,8F,8O,4R | | | | | 4C,8F,8O,4R | | |
| | | The Wreas | F,3O | 4O | | | | F,7O | | | | | F,7O | |
| | | Puskys | O | 5O | | | | 6O | | | | | 6O | |
| | | Davas Rock | F,O | | | | | F,O | | | | | F,O | |
| | | Chynalls Point | O | | | | | O | | | | | | O |
| *Symphodus melops* | Corkwing Wrasse | Drawna Rocks/Porthkerris | C,F,2O,2P | O,R | | C,F,3O,R,2P | | | | | | | | C,F,3O,R,2P |
| | | Pencra Reef | 2R | | | 2R | | | | | | | 2R | |
| | | Porthoustock | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | O,R | | | | O,R | | | | | | | O,R |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Mohegan | R,P | | | | R,P | | | | | | | R,P |
| | | Minstrel | R | | | | R | | | | | | | R |
| | | Raglans | 2O | | | | 2O | | | | | | | 2O |
| | | Carn du | O | | | | O | | | | | | O | |
| | | Godrevey Beach | C,R | | | | C,R | | | | | | C,R | |
| | | Maen Land/Dean Quarry | C | O,R | 2O | | C,3O,R | | | | | C,3O,R | | |
| | | The Wreas | R | | | | | R | | | | | R | |
| *Dicentrarchus labrax* | Sea Bass | Maen Voes | O | | | | O | | | | | | | O |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Raglans | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | O | R | | | O,R | | | | | O,R | | |
| *Mullus surmuletus* | Red Mullet | Drawna Rocks/Porthkerris | O,2R | 2R | | O,4R | | | | | | | | O,4R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Maen Land | R | | | | R | | | | | R | | |
| *Chirolophis ascanii* | Yarell's Blenny | Maen Land | R | | | | R | | | | | R | | |
| *Echiichthys vipera* | Lesser Weever | Porthoustock | R | | | R | | | | | | | R | |
| *Tripterygion delaisi* | Black Face Blenny | Drawna Rocks/Porthkerris | C,5R | F,R | | C,F,6R | | | | | | | | C,F,6R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Platichthys flesus* | Flounder | Porthoustock | | 3R | | 3R | | | | | | | 3R | | |
| *Pleuronectes platessa* | Plaice | Godrevey Beach | | A,O,R | | | A,O,R | | | YES | | | A,O,R | | |
| | | Maen Land/Dean Quarry | | 2R | | | 2R | | | YES | | 2R | | | |
| | | Dean Point Maerl | | R | | | R | | | YES | | | R | | |
| | | The Wreas | | O,2R | | | | O,2R | | YES | | | O,2R | | |
| *Scophthalmus rhombus* | Brill | Godrevey Beach | | R | | | R | | | | | | R | | |
| *Zeugopterus punctatus* | Topknot | Drawna Rocks/Porthkerris | 3R | R | | 4R | | | | | | | | 4R | |
| | | Pencra Reef | R | | | R | | | | | | | R | | |
| | | Mohegan | R | | | | R | | | | | | | R | |
| | | Manacle Point | | R | | | R | | | | | | R | | |
| | | Maen Land | | R | | | R | | | | | R | | | |
| *Taurulus bubalis* | Long Spined Sea Scorpion | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R | |
| | | Pencra Reef | R,P | | | R,P | | | | | | | R,P | | |
| | | Maen Voes | R | | | | R | | | | | | | R | |
| | | Puskys | R | | | | | R | | | | | R | | |
| *Chelidonichthys sp.* | Gurnard | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R | |
| *Chelidonichthys cuculus* | Red Gurnard | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | R | |
| | | Maen Land | R | | | | R | | | | | R | | | |
| | | The Wreas | | R | | | | R | | | | | R | | |
| *Syngnathus acus* | Greater Pipefish | Drawna Rocks/Porthkerris | O,6R | R | | O.7R | | | | | | | | O,7R | |
| | | Pencra Reef | R,P | | | R,P | | | | | | | R,P | | |
| | | Porthoustock | 2R | | | 2R | | | | | | | 2R | | |
| | | Mohegan | R | | | | R | | | | | | | R | |
| | | Maen Land | | R | | | R | | | | | R | | | |
| *Mola mola* | Ocean Sunfish | Carn Du | R | | | | R | | | | | | R | | |
| *Zeus faber* | John Dory | Drawna Rocks/Porthkerris | 4R | | | 4R | | | | | | | | 4R | |
| | | Porthoustock | 2P | | | 2P | | | | | | | 2P | | |
| | | The Wreas | R | | | | | R | | | | | R | | |
| *Scyliorhinus canicula* | Lesser Spotted Catshark | Pencra Reef | 4R | | | 4R | | | | | | | 4R | | |
| | | Porthoustock | P | | | P | | | | | | | P | | |
| | | Manacle Point | | R | | | R | | | | | | R | | |
| | | Carn Du | | 3R | | | 3R | | | | | | 3R | | |
| | | Godrevey Beach | | R | | | R | | | | | | R | | |
| | | Maen Land/Dean Quarry | | O,6R | | | O,6R | | | | | O,6R | | | |
| | | Puskys | | 3R | | | | 3R | | | | | 3R | | |
| PHYLUM ASCIDIACEA | SEASQUIRTS | | | | | | | | | | | | | | |
| *Clavelina lepadiformis* | Light Bulb Sea Squirt | Drawna Rocks/Porthkerris | 2F,4O,2R | R | | 2F,4O,3R | | | | | | | | 2F,4O,3R | |
| | | Pencra Reef | 4R | | | 4R | | | | | | | 4R | | |
| | | Porthoustock | O,2R | | | O,2R | | | | | | | O,2R | | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,R | | | | 2O,R | | | | | | | 2O,R | |
| | | Mohegan | O,R,2P | | | | O,R,2P | | | | | | | O,R,2P | |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R | |
| | | Raglans | O,R | | | | O,R | | | | | | | O,R | |
| | | Maen Land/Dean Quarry | R | 2O,R | | | 2O,2R | | | | | 2O,2R | | | |
| | | Lowland Reef | O | | | | | O | | | | | O | | |
| *Diazona violacea* | Football Sea | Minstrel | R | | | | R | | | | | | | R | |
| *Diplosoma listerianum* | | Mohegan | O | | | | O | | | | | | | O | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Diplosoma spongiforme* | Sponge Sea Squirt | Drawna Rocks/Porthkerris | P | | | P | | | | | | | | P |
| | | Pencra Reef | R,P | | | R,P | | | | | | R,P | | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Raglans | O,R | | | | O,R | | | | | | | O,R |
| | | Maen Land/Dean Quarry | | R | | | R | | | | | R | | |
| | | Davas Rock | O | | | | | O | | | | | O | |
| *Lissoclinum perforatum* | Perforated Sea Squirt | Drawna Rocks/Porthkerris | F,O | | | F,O | | | | | | | | F,O |
| | | Porthoustock | F,O | | | F,O | | | | | | F,O | | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,R | | | | 2O,R | | | | | | | 2O,R |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Maen Land/Dean Quarry | | 2O,3R | | | 2O,3R | | | | | 2O,3R | | |
| *Aplidium punctum* | Club Head Sea Squirt | Drawna Rocks/Porthkerris | 4F,2O | O | | 4F,3O | | | | | | | | 4F,3O |
| | | Pencra Reef | F,2O,2R | | | F,2O,2R | | | | | | | F,2O,2R | |
| | | Vase, Pen-Win, Woodfords Wall | C,O | | | | C,O | | | | | | | C,O |
| | | Mohegan | F,O,2R | | | | F,O,2R | | | | | | | F,O,2R |
| | | Spyridian Vagliano | F,O | | | | F,O | | | | | | | F,O |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Maen Land/Dean Quarry | | F,2O,3R | | | F,2O,3R | | | | | F,2O,3R | | |
| | | The Wreas | 2O,R | | | | | 2O,R | | | | | 2O,R | |
| *Aplidium turbinatum* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Morchellium argus* | Four Spotted Sea Squirt | Drawna Rocks/Porthkerris | F,2O,R,P | R | | F,2O,2R,P | | | | | | | | F,2O,2R,P |
| | | Porthoustock | O,R | | | O,R | | | | | | | O,R | |
| | | Mohegan | P | | | | P | | | | | | | P |
| | | Maen Land | | R | | | R | | | | | R | | |
| *Pycnoclavella aurilucens* | Sparkling Sea Squirt | Pencra Reef | R | | | R | | | | | | | R | |
| | | The Wreas | | O | | | | O | | | | | O | |
| *Ascidia mentula* | Red Sea Squirt | Drawna Rocks/Porthkerris | C,O,R | | | C,O,R | | | | | | | | C,O,R |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Ascidia virginea* | Pink Edged Sea Squirt | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Ascidiella aspersa* | Fluted Sea Squirt | Maen land | R | | | | R | | | | | R | | |
| *Phallusia mammillata* | Phallic Sea Squirt | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| *Ciona intestinalis* | Yellow Rimmed Sea Squirt | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Corella eumyota* | | Porthoustock | O | | | O | | | | | | | O | |
| *Corella parallelogramma* | Toby Jug Sea Squirt | Porthoustock | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Carn Du Maerl | | R | | | R | | | | | | R | | |
| | | Maen Land | | R | | | R | | | | | R | | | |
| *Pyura sp.* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| *Botryllus schlosseri* | Star Sea Squirt | Drawna Rocks/Porthkerris | F,7O,R | O | | F,8O,R | | | | | | | | | F,8O,R |
| | | Pencra Reef | O,R | | | O,R | | | | | | | O,R | | |
| | | Porthoustock | O | | | O | | | | | | | O | | |
| | | Maen Garrick | O | | | O | | | | | | | O | | |
| | | Vase, Pen-Win, Woodfords Wall | 2O | | | | 2O | | | | | | | | 2O |
| | | Mohegan | 2R | | | | 2R | | | | | | | | 2R |
| | | Spyridian Vagliano | F,O | | | | F,O | | | | | | | | F,O |
| | | Manacle Point | | R | | | R | | | | | | R | | |
| | | Carn Du | | 2O,2R | | | 2O,2R | | | | | | 2O,2R | | |
| | | Godrevey Beach | | R | | | R | | | | | | R | | |
| | | Maen Land | | | O,R | | O,R | | | | | O,R | | | |
| | | The Wreas | F,O | | | | | F,O | | | | | F,O | | |
| | | Davas Rock | O | | | | | O | | | | | O | | |
| *Dendrodoa grossularia* | Gooseberry Sea Squirt | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | | R |
| | | Lowland Reef | R | | | | | R | | | | | R | | |
| *Polycarpa sp.* | | Maen Land | | | O | | O | | | | | O | | | |
| *Stolonica socialis* | Orange Sea Squirt | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| | | Pencra Reef | C,3F,2O,R | | | C,3F,2O,R | | | | | | | C,3F,2O,R | | |
| | | Porthoustock | P | | | P | | | | | | | P | | |
| | | Vase, Pen-Win, Woodfords Wall | C,2O | | | | C,2O | | | | | | | | C,2O |
| | | Carn Du | | C,F,3O | | | C,F,3O | | | | | | C,F,3O | | |
| | | Maen Land/Dean Quarry | | C,F,3O | | | C,F,3O | | | | | C,F,3O | | | |
| | | The Wreas | | O | | | | O | | | | | O | | |
| | | Puskys | | F | | | | F | | | | | F | | |
| | | Davas Rock | F | | | | | F | | | | | F | | |
| PHYLUM CNIDARIA | | | | | | | | | | | | | | | |
| SUBPHYLUIM ANTHOZOA | ANEMONES AND CORALS | | | | | | | | | | | | | | |
| *Actinia equina* | Beadlet Anemone | Drawna Rocks/Porthkerris | F,R | | | F,R | | | | | | | | | |
| | | Porthoustock | C,R | | | C,R | | | | | | | | | |
| | | Godrevey Beach | | O | | | O | | | | | | | | |
| *Actinia fragacea* | Strawberry | Drawna Rocks/Porthkerris | 3O,2R | | | 3O,2R | | | | | | | | | |
| | | Porthoustock | C | | | C | | | | | | | | | |
| | | Godrevey Beach | O | | | | O | | | | | | O | | |
| *Anemonia viridis* | Snakelocks Anemone | Drawna Rocks/Porthkerris | 3C,2F,15O,4R | O,2R | | 3C,2F,16O,6R | | | | | | | | | 3C,2F,16O,6R |
| | | Porthoustock | F,O,R | | | F,O,R | | | | | | | F,O,R | | |
| | | Godrevey Beach | | F,O | | | F,O | | | | | | F,O | | |
| | | Maen Land/Dean Quarry | | 6R | 2O,2R | | 2O,8R | | | | | 2O,8R | | | |
| | | The Wreas | | R | | | | R | | | | | R | | |
| *Urticina felina* | Dahlia Anemone | Drawna Rocks/Porthkerris | 4O,2R | | | 4O,2R | | | | | | | | | 4O,2R |
| | | Porthoustock | R,2P | | | R,2P | | | | | | | R,2P | | |
| | | Maen Garrick | R | | | R | | | | | | | R | | |
| | | Mohegan | 2R | | | | 2R | | | | | | 2R | | |
| | | Raglans | 2F,2O,2R | | | | 2F,2O,2R | | | | | | 2F,2O,2R | | |
| | | Manacle Point | | 2O | | | 2O | | | | | | 2O | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | 2R | R | | 3R | | | | | 3R | | |
| | | Lowland Reef | R | | | | | R | | | | | R | |
| | | The Wreas | | O,R | | | | O,R | | | | | O,R | |
| *Aiptasia mutabilis* | Trumpet | Drawna Rocks/Porthkerris | O | | | O | | | | | S | | | O |
| | | Porthoustock | P | | | P | | | | | S | | P | |
| *Capnea sanguinea* | Imperial | The Wreas | R | | | | | R | | | | | P | |
| *Edwardsia sp.* | Worm Anemone | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Peachia cylindrica* | Clock Face | Drawna Rocks/Porthkerris | F,4R | | | F,4R | | | | | | | | F,4R |
| | | Maen Land/Dean Quarry | R | 2O,3R | | | 2O,4R | | | | | 2O,4R | | |
| *Adamsia palliata* | Cloak Anemone | Godrevey Beach | | 2C | | | 2C | | | | | | 2C | |
| | | Dean Point Maerl | | O | | | O | | | | | | O | |
| *Amphianthus dohrnii* | Sea Fan Anemone | Pencra Reef | F,3O,2R | | | F,3O,2R | | | | YES | R | | F,3O,2R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | YES | R | | | R |
| | | Carn Du | R | 2F,R | | | 2F,2R | | | YES | R | | 2F,2R | |
| | | Maen land | | R | | | R | | | YES | R | R | | |
| | | Puskys | | 2F,O,R | | | | 2F,O,R | | YES | R | | 2F,O,R | |
| | | The Wreas | | O,R | | | | O,R | | YES | R | | O,R | |
| *Metridium senile* | Plumose | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Pencra Reef | O | | | O | | | | | | | O | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | 3C,F,4O,R | | | | 3C,F,4O,R | | | | | | | 3C,F,4O,R |
| | | Mohegan | C,O | | | | C,O | | | | | | | C,O |
| | | Minstrel | O | | | | O | | | | | | | O |
| | | Raglans | A,16C,2F,3O,R | | | | A,16C,2F,3O,R | | | | | | | A,16C,2F,3O,R |
| | | Puskys | | O,R | | | | O,R | | | | | O,R | |
| *Actinothoe sphyrodeta* | White Striped Anemone | Vase, Pen-Win, Woodfords Wall | 3O,R | | | | 3O,R | | | | | | | 3O,R |
| | | Maen Voes | F | | | | F | | | | | | | F |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Raglans | 2O,3R | | | | 2O,3R | | | | | | | 2O,3R |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Cereus pedunculatus* | Daisy Anemone | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Raglans | R | | | | R | | | | | | | R |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | | O,R | | | O,R | | | | | O,R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Sagartia elegans* | Elegant Anemone | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Pencra Reef | O,R | | | O,R | | | | | | | O,R | |
| | | Porthoustock | O | | | O | | | | | | | O | |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | C,6O,3R | | | | C,6O,3R | | | | | | | C,6O,3R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Maen Voes | 2O | | | | 2O | | | | | | | | 2O |
| | | Mohegan | F,2O,R | | | | F,2O,R | | | | | | | | F,2O,R |
| | | Raglans | 2A,7C,7O,R | | | | 2A,7C,7O,R | | | | | | | | 2A,7C,7O,R |
| | | Manacle Point | | 2R | | | 2R | | | | | | | 2R | |
| | | Maen Land/Dean Quarry | O | R | | | O,R | | | | | O,R | | | |
| | | The Wreas | | R | | | | R | | | | | | R | |
| | | Lowland Reef | O | | | | | O | | | | | | O | |
| *Alcyonium digitatum* | Dead Men's | Drawna Rocks/Porthkerris | C,F,5O,5R | | | C,F,5O,5R | | | | | | | | | C,F,5O,5R |
| | | Pencra Reef | 4A,15C,5F,12O, | | | 4A,15C,5F,12O, | | | | | | | | 4A,15C,5F,12O, | |
| | | Maen Garrick | A,2C,F.3O | | | A,2C,F.3O | | | | | | | | A,2C,F.3O | |
| | | Vase, Pen-Win, Woodfords Wall | 10C,5F,15O | | | | 10C,5F,15O | | | | | | | | 10C,5F,15O |
| | | Maen Voes | A,3C,F,O | | | | A,3C,F,O | | | | | | | | A,3C,F,O |
| | | Mohegan | 8C,6O,P | | | | 8C,6O,P | | | | | | | | 8C,6O,P |
| | | Spyridian Vagliano | 6O,R | O | | | 7O,R | | | | | | | | 7O,R |
| | | Minstrel | O | | | | O | | | | | | | | O |
| | | Raglans | A,3C,4F,7O,R | | | | A,3C,4F,7O,R | | | | | | | | A,3C,4F,7O,R |
| | | Manacle Point | | A,2C,F,P | | | A,2C,F,P | | | | | | | A,2C,F,P | |
| | | Carn Du | 2C,2F | 3A,8C,2O | | | 3A,10C,2F,2O | | | | | | | 3A,10C,2F,2O | |
| | | Carn Du Maerl | | O | | | O | | | | | | | O | |
| | | Maen Land | 4C,F,3O | 3C,3F,4O,2R | A,C,O | | A,8C,4F,8O,2R | | | | | A,8C,4F,8O,2R | | | |
| | | The Wreas | 2C,O | 3F,3O,R | | | | 2C,3F,4O,R | | | | | | 2C,3F,4O,R | |
| | | Lowland Reef | C,2O | | | | | C,2O | | | | | | C,2O | |
| | | Puskys | 2C,O | 5F,5O,R | | | | 2C,5F,6O,R | | | | | | 2C,5F,6O,R | |
| | | Davas Rcck | P | | | | | P | | | | | | P | |
| | | Chynalls Point | C | | | | | C | | | | | | | C |
| *Alcyonium glomeratum* | Red Fingers | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | | O |
| | | Pencra Reef | A,C,2F,11O,9R | | | A,C,2F,11O,9R | | | | | | | | A,C,2F,11O,9R | |
| | | Maen Garrick | 4O | | | 4O | | | | | | | | 4O | |
| | | Vase, Pen-Win, Woodfords Wall | 2F,3O,8R | | | | 2F,3O,8R | | | | | | | | 2F,3O,8R |
| | | Maen Voes | O,2R | | | | O,2R | | | | | | | | O,2R |
| | | Mohegan | F | | | | F | | | | | | | | F |
| | | Spyridian Vagliano | R | | | | R | | | | | | | | R |
| | | Raglans | C,O,3R | | | | C,O,3R | | | | | | | | C,O,3R |
| | | Manacle Point | | 2O,R | | | 2O,R | | | | | | | 2O,R | |
| | | Carn Du | 4O | F,5O,2R | | | F,9O,2R | | | | | | | F,9O,2R | |
| | | Carn Du Maerl | | R | | | R | | | | | | | R | |
| | | Maen Land/Dean Quarry | 3O,2R | 2R | R | | 3O,5R | | | | | 3O,5R | | | |
| | | The Wreas | | O,R | | | | O,R | | | | | | O,R | |
| | | Puskys | R | 3O,2R | | | | 3O,3R | | | | | | 3O,3R | |
| *Alcyonium hibernicum* | Pink Fingers | Drawna Rocks/Porthkerris | O | F | | O,F | | | | | S | | | | O,F |
| | | Carn Du | | O | | | O | | | | S | | | O | |
| *Eunicella verrucosa* | Pink Sea Fan | Drawna Rocks/Porthkerris | O,11R | | | O,11R | | | YES | YES | S | | | | O,11R |
| | | Pencra Reef | 4A,17C,5F,8O,2R | | | 4A,17C,5F,8O,2R | | | YES | YES | S | | | 4A,17C,5F,8O,2 | |
| | | Maen Garrick | A,2C,3O,R | | | A,2C,3O,R | | | YES | YES | S | | | A,2C,3O,R | |
| | | Vase, Pen-Win, Woodfords Wall | S,6C,4F,12O,4R | | | | S,6C,4F,12O,4R | | YES | YES | S | | | | S,6C,4F,12O,4R |
| | | Maen Voes | 2C,F,O,R | | | | 2C,F,O,R | | YES | YES | S | | | | 2C,F,O,R |
| | | Mohegan | A,7C,F,3O | | | | A,7C,F,3O | | YES | YES | S | | | | A,7C,F,3O |
| | | Spyridian Vagliano | C,F,O,R | R | | | C,F,O,2R | | YES | YES | S | | | | C,F,O,2R |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Raglans | 13O,4R | | | | 13O,4R | | YES | YES | S | | | 13O,4R |
| | | Manacle Point | | C,F,O | | | C,F,O | | YES | YES | S | | C,F,O | |
| | | Carn Du | 4C,O | 3C,5F,2O,3R | | | 7C,5F,3O,3R | | YES | YES | S | | 7C,5F,3O,3R | |
| | | Carn Du Maerl | | F | | | F | | YES | YES | S | | F | |
| | | Maen Land/Dean Quarry | 5C,F | A,2C,F,2O,2R | 2C,R | | A,7C,2F,2O,2R | | YES | YES | S | A,7C,2F,2O,2R | | |
| | | The Wreas | A,O,R | A,2F,O,2R | | | | 2A,2F,2O,3R | YES | YES | S | | 2A,2F,2O,3R | |
| | | Lowland Reef | 2F | | | | | 2F | YES | YES | S | | 2F | |
| | | Puskys | A,C,O | 2A,C,3F,2O | | | | 3A,2C,3F,3O | YES | YES | S | | 3A,2C,3F,3O | |
| | | Davas Rock | F | | | | | F | YES | YES | S | | F | |
| | | Chynalls Point | C | | | | | C | YES | YES | S | | | C |
| *Cerianthus lloydii* | Burrowing Anemone | Drawna Rocks/Porthkerris | 4C,2F,3O,2R | O,2R | | 4C,2F,4O,4R | | | | | | | | 4C,2F,4O,4R |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Godrevey Beach | | 2R | | | 2R | | | | | | 2R | |
| | | Maen Land/Dean Quarry | | 2O,23R | | | 2O,23R | | | | | 2O,23R | | |
| *Corynactis viridis* | Jewel Anemone | Drawna Rocks/Porthkerris | 5C,7O,4R | C,2F,2R | | 6C,2F,7O,6R | | | | | | | | 6C,2F,7O,6R |
| | | Pencra Reef | 3A,7C,3F,5O,3R,P | | | 3A,7C,3F,5O,3R,P | | | | | | | 3A,7C,3F,5O,3R,P | |
| | | Maen Garrick | 2A,4C,O | | | 2A,4C,O | | | | | | | 2A,4C,O | |
| | | Porthoustock | C,R | | | C,R | | | | | | | C,R | |
| | | Vase, Pen-Win, Woodfords Wall | S,15A,11C,3F,5O | | | | S,15A,11C,3F,5O | | | | | | | S,15A,11C,3F,5O |
| | | Maen Voes | S,A,3C,O | | | | S,A,3C,O | | | | | | | S,A,3C,O |
| | | Mohegan | A,3C,3F,3O | | | | A,3C,3F,3O | | | | | | | A,3C,3F,3O |
| | | Spyridian Vagliano | C,2O | R | | | C,2O,R | | | | | | | C,2O,R |
| | | Raglans | S,5A,10C,2O,2R | | | | S,5A,10C,2O,2R | | | | | | | S,5A,10C,2O,2R |
| | | Manacle Point | | C,F,O,P | | | C,F,O,P | | | | | | C,F,O,P | |
| | | Carn Du | 2C,F | 2F,5O,R | | | 2C,3F,5O,R | | | | | | 2C,3F,5O,R | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | 2C,2F,3O | A,3F,5O,3R | A,2F,O,R | | 2A,2C,7F,9O,4R | | | | | 2A,2C,7F,9O,4R | | |
| | | The Wreas | O | F,3O | | | | F,4O | | | | | F,4O | |
| | | Lowland Reef | C,2O | | | | | C,2O | | | | | C,2O | |
| | | Puskys | A,O | S,3A,2F,O | | | | S,4A,2F,2O | | | | | S,4A,2F,2O | |
| | | Davas Rock | O | | | | | O | | | | | O | |
| | | Chynalls Point | C | | | | | C | | | | | | C |
| *Caryophyllia inornata* | Southern Cup Coral | Drawna Rocks/Porthkerris | | F | | F | | | | | R | | | R |
| | | Carn Du | | R | | | R | | | | R | | R | |
| | | Maen Land | | R | | | R | | | | R | R | | |
| *Caryophyllia smithii* | Devonshire Cup Coral | Drawna Rocks/Porthkerris | A,5C,2F,8O,5R | A,F,O,R | | 2A,5C,3F,9O,6R | | | | | | | | 2A,5C,3F,9O,6R |
| | | Pencra Reef | 3A,9C,7F,7O,2R,P | | | 3A,9C,7F,7O,2R,P | | | | | | | 3A,9C,7F,7O,2R,P | |
| | | Maen Garrick | A,2C,O,R | | | A,2C,O,R | | | | | | | A,2C,O,R | |
| | | Porthoustock | F | | | F | | | | | | | F | |
| | | Vase, Pen-Win, Woodfords Wall | 2A,C,2F,13O,3R | | | | 2A,C,2F,13O,3R | | | | | | | 2A,C,2F,13O,3R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Maen Voes | F,2O | | | | F,2O | | | | | | | | F,2O |
| | | Mohegan | 6C,7O,R | | | | 6C,7O,R | | | | | | | | 6C,7O,R |
| | | Spyridian Vagliano | F,5O | O | | | F,6O | | | | | | | | F,6O |
| | | Minstrel | O | | | | O | | | | | | | | O |
| | | Raglans | 2F,3O,2R | | | | 2F,3O,2R | | | | | | | | 2F,3O,2R |
| | | Manacle Point | | F,2O | | | F,2O | | | | | | | F,2O | |
| | | Carn Du | C,O | 2A,6C,3F,O | | | 2A,7C,3F,2O | | | | | | | 2A,7C,3F,2O | |
| | | Carn Du Maerl | | F | | | F | | | | | | | F | |
| | | Godrevey Beach | | 2O | | | 2O | | | | | | | 2O | |
| | | Maen Land/Dean Quarry | 2C,2F,O,R | 4F,8O,2R | 2C,F,3R | | 4C,5F,9O,6R | | | | | | 4C,5F,9O,6R | | |
| | | The Wreas | 2O,R | 2C,2F,2O | | | | 2C,2F,4O,R | | | | | | 2C,2F,4O,R | |
| | | Lowland Reef | 3O | | | | | 3O | | | | | | 3O | |
| | | Puskys | O | C,2F,3O | | | | C,2F,4O | | | | | | C,2F,4O | |
| | | Davas Rock | F | | | | | F | | | | | | F | |
| *Hoplangia durotrix* | Weymouth Carpet Coral | Drawna Rocks/Porthkerris | R | | | R | | | | | R | | | | R |
| *Balanophyllia regia* | Scarlet and Gold Star Coral | Drawna Rocks/Porthkerris | 4O | C | | C,4O | | | | | S | | | | C,4O |
| *Epizoanthus couchii* | Sandy Creeplet | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | | O |
| | | Mohegan | O | | | | O | | | | | | | | O |
| | | Raglans | O | | | | O | | | | | | | | O |
| | | Maen Land | R | F | | | F,R | | | | | | F,R | | |
| *Isozoanthus sulcatus* | Ginger Tiny | Drawna Rocks/Porthkerris | O,2R | | | O,2R | | | | | | | | | O,2R |
| | | Carn Du | | O,R | | | O,R | | | | | | | O,R | |
| | | Maen Land/Dean Quarry | | 2O | | | 2O | | | | | | 2O | | |
| *Parazoanthus anguicomus* | White Cluster Anemone | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | S | | | | R |
| *Parazoanthus axinellae* | Yellow Cluster Anemone | Pencra Reef | O,2R | | | O,2R | | | | | S | | | O,2R | |
| | | Maen Garrick | O,R | | | O,R | | | | | S | | | O,R | |
| | | Manacle Point | | O | | | O | | | | S | | | O | |
| | | Carn Du | | C | | | C | | | | S | | | C | |
| | | Maen Land/Dean Quarry | | O,R | | | O,R | | | | S | | O,R | | |
| SUBPHYLUM HYDROZOA | HYDROIDS | | | | | | | | | | | | | | |
| *Garveia nutans* | | Mohegan | O | | | | O | | | | | | | | O |
| | | Puskys | O | | | | O | | | | | | | O | |
| *Corymorpha nutans* | Nodding Hydroid | Porthoustock | 2R | | | 2R | | | | | | | | 2R | |
| | | Maen Land/Dean Quarry | | 3O | | | 3O | | | | | | 3O | | |
| | | The Wreas | | R | | | | R | | | | | | R | |
| *Ectopleura larynx* | | Puskys | | O | | | | O | | | | | | O | |
| *Tubularia indivisa* | Oaten Pipe Hydroid | Vase, Pen-Win, Woodfords Wall | 2C,5O,R | | | | 2C,5O,R | | | | | | | | 2C,5O,R |
| | | Mohegan | O | | | | O | | | | | | | | O |
| | | Maen Voes | 2C | | | | 2C | | | | | | | | 2C |
| | | Raglans | S,4A,C,O,2R | | | | S,4A,C,O,2R | | | | | | | | S,4A,C,O,2R |
| | | Manacle Point | | 2F | | | 2F | | | | | | | 2F | |
| | | Puskys | | 2C,F,O | | | | 2C,F,O | | | | | | 2C,F,O | |
| *Aglaophenia sp.* | | Pencra Reef | 5O | | | 5O | | | | | | | | 5O | |
| | | Mohegan | 2O | | | | 2O | | | | | | | | 2O |
| | | Spyridian Vagliano | | P | | | P | | | | | | | | P |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Carn Du | O | | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | 2F | F | 2C,0 | | 2C,3F,O | | | | | 2C,3F,O | | |
| | | Puskys | O | | | | | O | | | | | O | |
| *Aglaophenia kirchenpaueri* | | Drawna Rocks/Porthkerris | O | O | | 2O | | | | | | | | 2O |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | 2O,2R | | | 2O,2R | | | | | 2O,2R | | |
| *Aglaophenia pluma* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Pencra Reef | C | | | C | | | | | | | C | |
| | | Manacle Point | | A,R | | | A,R | | | | | | A,R | |
| | | Carn Du | | 2O | | | 2O | | | | | | 2O | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | 2O | | | | | 2O | | | | | 2O | |
| *Aglaophenia tubulifera* | | Pencra Reef | F,3O,R | | | F,3O,R | | | | | | | F,3O,R | |
| | | Maen Garrick | O,R | | | O,R | | | | | | | O,R | |
| | | Manacle Point | | 3O | | | 3O | | | | | | 3O | |
| | | Carn Du | | 2A,5C,5F,O | | | 2A,5C,5F,O | | | | | | 2A,5C,5F,O | |
| | | Carn Du Maerl | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | 2O,R | | | 2O,R | | | | | 2O,R | | |
| | | The Wreas | F | O | | | | O | | | | | O | |
| | | Puskys | | 2O,2R | | | | 2O,2R | | | | | 2O,2R | |
| *Gymnangium montagui* | Indian Feathers Hydroid | Pencra Reef | C,3R | | | C,3R | | | | | | | C,3R | |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Manacle Point | | 3F,R | | | 3F,R | | | | | | 3F,R | |
| | | Carn Du | | F,7O,R | | | F,7O,R | | | | | | F,7O,R | |
| | | Maen Land/Dean Quarry | | 2F,R | | | 2F,R | | | | | 2F,R | | |
| | | The Wreas | O | | | | | O | | | | | O | |
| *Obelia sp.* | | Pencra Reef | A | | | A | | | | | | | A | |
| | | Manacle Point | | C | | | C | | | | | | C | |
| | | Carn Du | C,F | | | | C,F | | | | | | C,F | |
| | | Maen Land | F | | | | F | | | | | F | | |
| *Obelia geniculata* | Kelp Fur | Drawna Rocks/Porthkerris | 8C,F,3O,R,P | F | | 8C,2F,3O,R,P | | | | | | | | 8C,2F,3O,R,P |
| | | Pencra Reef | C,C,R | | | C,C,R | | | | | | | C,C,R | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Porthoustock | 3C,F,O | | | 3C,F,O | | | | | | | 3C,F,O | |
| | | Vase, Pen-Win, Woodfords Wall | 2C,F,2O,3R | | | | 2C,F,2O,3R | | | | | | | 2C,F,2O,3R |
| | | Maen Voes | A,2F,O | | | | A,2F,O | | | | | | | A,2F,O |
| | | Mohegan | P | | | | P | | | | | | | P |
| | | Minstrel | C | | | | C | | | | | | | C |
| | | Raglans | 2C | | | | 2C | | | | | | | 2C |
| | | Carn Du | | F | | | F | | | | | | F | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | A,C | | | A,C | | | | | | A,C | |
| | | Maen Land/Dean Quarry | C,F | 2F | C,O | | 2C,3F,O | | | | | 2C,3F,O | | |
| | | Lowland Reef | O | | | | | O | | | | | O | |
| | | The Wreas | | 2R | | | | 2R | | | | | 2R | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Davas Rock | A,C | | | | | A,C | | | | | A,C | | |
| *Rhizocaulus verticillatus* | | Maen Land | | R | | | R | | | | | R | | | |
| *Halecium beanii* | | Carn Du | O | | | | O | | | | | | O | | |
| *Halecium halecinum* | Herring Bone Hydroid | Pencra Reef | F,2O | | | F,2O | | | | | | | F,2O | | |
| | | Maen Garrick | O | | | O | | | | | | | O | | |
| | | Maen Voes | R | | | | R | | | | | | | R | |
| | | Mohegan | C | | | | C | | | | | | | C | |
| | | Manacle Point | | O | | | O | | | | | | O | | |
| | | Carn Du | O | 2C,2O,R | | | 2C,3O,R | | | | | | 2C,3O,R | | |
| | | Maen Land/Dean Quarry | | F,O | | | F,O | | | | | F,O | | | |
| | | The Wreas | O,R | F,2O,R | | | | F,3O,2R | | | | | F,3O,2R | | |
| | | Puskys | | C,O,P | | | | C,O,P | | | | | C,O,P | | |
| *Halopteris catharina* | | Pencra Reef | C | | | C | | | | | | | C | | |
| *Schizotricha frutescens* | | Manacle Point | | R | | | R | | | | | | R | | |
| *Kirchenpaueria pinnata* | | Vase, Pen-Win, Woodfords Wall | 2O | | | | 2O | | | | | | | 2O | |
| | | Maen Land | | R | | | R | | | | | R | | | |
| *Nemertesia antennina* | Antenna Hydroid | Drawna Rocks/Porthkerris | F,O | | | F,O | | | | | | | | F,O | |
| | | Pencra Reef | A,10C,2F,9O | | | A,10C,2F,9O | | | | | | | A,10C,2F,9O | | |
| | | Maen Garrick | 3C,F,2O | | | 3C,F,2O | | | | | | | 3C,F,2O | | |
| | | Vase, Pen-Win, Woodfords Wall | 4A,17C,5F, | | | | 4A,17C,5F, | | | | | | | 4A,17C,5F, | |
| | | Maen Voes | A,C,3O | | | | A,C,3O | | | | | | | A,C,3O | |
| | | Mohegan | 5C,2F,3O,R | | | | 5C,2F,3O,R | | | | | | | 5C,2F,3O,R | |
| | | Spyridian Vagliano | C,2F | O | | | C,2F,O | | | | | | | C,2F,O | |
| | | Minstrel | O | | | | O | | | | | | | O | |
| | | Raglans | S,3A,7C,O,3R | | | | S,3A,7C,O,3R | | | | | | | S,3A,7C,O,3R | |
| | | Manacle Point | | A,2C,O,P | | | A,2C,O,P | | | | | | A,2C,O,P | | |
| | | Carn Du | C,F | A,C,5F,5O | | | A,2C,6F,5O | | | | | | A,2C,6F,5O | | |
| | | Carn Du Maerl | | O | | | O | | | | | | O | | |
| | | Maen Land/Dean Quarry | 3C,F | C,3F,O,4R | A,2O | | A,4C,4F,3O,4R | | | | | A,4C,4F,3O,4R | | | |
| | | Lowland Reef | O | | | | | O | | | | | O | | |
| | | The Wreas | | 4O,R | | | | 4O,R | | | | | 4O,R | | |
| | | Puskys | O | A,3C,O,R | | | | A,3C,2O,R | | | | | A,3C,2O,R | | |
| *Nemertesia ramosa* | Branched Antenna Hydroid | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O | |
| | | Pencra Reef | F,5O,2R | | | F,5O,2R | | | | | | | F,5O,2R | | |
| | | Maen Garrick | O,R | | | O,R | | | | | | | O,R | | |
| | | Vase, Pen-Win, Woodfords Wall | 2C,F,O,2R | | | | 2C,F,O,2R | | | | | | | 2C,F,O,2R | |
| | | Maen Voes | O | | | | O | | | | | | | O | |
| | | Mohegan | A,2O | | | | A,2O | | | | | | | A,2O | |
| | | Spyridian Vagliano | 2O | | | | 2O | | | | | | | 2O | |
| | | Raglans | 3C,O,2R | | | | 3C,O,2R | | | | | | | 3C,O,2R | |
| | | Manacle Point | | 2R | | | 2R | | | | | | 2R | | |
| | | Carn Du | | 4O,R | | | 4O,R | | | | | | 4O,R | | |
| | | Maen Land/Dean Quarry | O | F,2R | | | F,O,2R | | | | | F,O,2R | | | |
| | | Lowland Reef | R | | | | | R | | | | | R | | |
| | | The Wreas | | O,2R | | | | O,2R | | | | | O,2R | | |
| | | Puskys | O | P | | | | O,P | | | | | O,P | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Polyplumaria flabellata* | | Pencra Reef | O | | | O | | | | | | | O | |
| *Sertulariidae* | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Amphisbetia operculata* | | Carn Du Maerl | | R | | | R | | | | | | R | |
| *Diphasia alata* | | Pencra Reef | O | | | O | | | | | | | O | |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Diphasia margareta* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Carn Du Maerl | | F | | | F | | | | | | F | |
| *Hydrallmania falcata* | | Maen Land/Dean Quarry | | R | | | R | | | | | R | | |
| *Sertularella sp.* | | Maen Land/Dean Quarry | | 2O | 2O | | 4O | | | | | 4O | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Sertularella gayi* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| | | Vase, Pen-Win, Woodfords Wall | 2F | | | | 2F | | | | | | | 2F |
| | | Manacle Point | | O,R | | | O,R | | | | | | O,R | |
| | | Carn Du | | F,8O | | | F,8O | | | | | | F,8O | |
| | | The Wreas | O | | | | | O | | | | | O | |
| | | Davas occk | F | | | | | F | | | | | F | |
| *Sertularella polyzonias* | | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | R |
| | | Manacle Point | | O | | | O | | | | | | O | |
| *Sertularia sp.* | Squirrel's Tail Hydroids | Pencra Reef | F,O | | | F,O | | | | | | | F,O | |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| SUBPHYLUM SCYPHOZOA | JELLYFISH | | | | | | | | | | | | | |
| *Apolemia uvaria* | | The Wreas | R | | | | | R | | | S | | R | |
| *Rhizostoma pulmo* | Barrel Jellyfish | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | R |
| | | Godrevey Beach | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | | 2R | 3R | | 5R | | | | | 5R | | |
| *Cyanea lamarckii* | Blue Lion's Mane | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| *Chrysaora hysoscella* | Compass Jellyfish | Vase, Pen-Win, Woodfords Wall | O,2R | | | | O,2R | | | | | | | O,2R |
| | | Carn Du | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | R | | | R | | | | | | R | |
| | | The Wreas | | F | | | | F | | | | | F | |
| | | Puskys | | F | | | | F | | | | | F | |
| *Aurelia aurita* | Moon Jelly | Drawna Rocks/Porthkerris | P | | | P | | | | | | | | P |
| *Lucernariopsis campanulata* | Stalked Jellyfish | Drawna Rocks/Porthkerris | | R | | R | | | | YES | | | | R |
| *Lucernariopsis cruxmelitensis* | Stalked Jellyfish | Drawna Rocks/Porthkerris | R | R | | 2R | | | | YES | | | | 2F |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Haliclystus sp.* | Stalked Jellyfish | Drawna Rocks/Porthkerris | | R | | R | | | | YES | | | | | R |
| | | Godrevey Beach | | R | | | R | | | YES | | | | R | |
| *Haliclystus auricula* | Stalked Jellyfish | Drawna Rocks/Porthkerris | R | | | R | | | | YES | | | | | R |
| | | Porthoustock | R | | | R | | | | YES | | | | R | |
| *Beroe sp.* | | Porthoustock | R | | | R | | | | | | | | R | |
| *Beroe cucumis* | | Godrevey Beach | | O | | | O | | | | | | | O | |
| PHYLUM ECHINODERMATA | | | | | | | | | | | | | | | |
| *Asterias rubens* | Common Starfish | Drawna Rocks/Porthkerris | 6C,5F,8O,5R | | | 6C,5F,8O,5R | | | | | | | | | 6C,5F,8O,5R |
| | | Pencra Reef | A,4C,2F,7O,2R | | | A,4C,2F,7O,2R | | | | | | | | A,4C,2F,7O,2R | |
| | | Maen Garrick | 2C,3O | | | 2C,3O | | | | | | | | 2C,3O | |
| | | Vase, Pen-Win, Woodfords Wall | 9C,3F,14O,3R | | | | 9C,3F,14O,3R | | | | | | | | 9C,3F,14O,3R |
| | | Maen Voes | C,4O | | | | C,4O | | | | | | | | C,4O |
| | | Mohegan | C,2F,3O,2R | | | | C,2F,3O,2R | | | | | | | | C,2F,3O,2R |
| | | Spyridian Vagliano | 2C,2O | | | | 2C,2O | | | | | | | | 2C,2O |
| | | Raglans | 2C,4F,4O,2R | | | | 2C,4F,4O,2R | | | | | | | | 2C,4F,4O,2R |
| | | Manacle Point | | O | | | O | | | | | | | O | |
| | | Carn Du | O,2R | O | | | 2O,2R | | | | | | | 2O,2R | |
| | | Maen Land/Dean Quarry | F,3O | F,O,5R | | | 2F,4O,5R | | | | | 2F,4O,5R | | | |
| | | Lowland Reef | 2F,2O | | | | | 2F,2O | | | | | | 2F,2O | |
| | | The Wreas | 3C,O | | | | | 3C,O | | | | | | 3C,O | |
| | | Puskys | 2F,O,R | | | | | 2F,O,R | | | | | | 2F,O,R | |
| | | Davas Rock | O | | | | | O | | | | | | O | |
| *Marthasterias glacialis* | Spiny Starfish | Drawna Rocks/Porthkerris | 11C,F,20O,8R | F,O,2R | | 11C,2F,21O,10R | | | | | | | | | 11C,2F,21O,10R |
| | | Pencra Reef | 5C,4F,21O,2R | | | 5C,4F,21O,2R | | | | | | | | 5C,4F,21O,2R | |
| | | Maen Garrick | C,3O,R | | | C,3O,R | | | | | | | | C,3O,R | |
| | | Porthoustock | C,3O,2R | | | C,3O,2R | | | | | | | | C,3O,2R | |
| | | Vase, Pen-Win, Woodfords Wall | 3C,6F,13O,6R | | | | 3C,6F,13O,6R | | | | | | | | 3C,6F,13O,6R |
| | | Maen Voes | C,3O | | | | C,3O | | | | | | | | C,3O |
| | | Mohegan | 2C,7O,R,P | | | | 2C,7O,R,P | | | | | | | | 2C,7O,R,P |
| | | Spyridian Vagliano | 6O | | | | 6O | | | | | | | | 6O |
| | | Raglans | C,5O,7R | | | | C,5O,7R | | | | | | | | C,5O,7R |
| | | Manacle Point | | 2C,5O | | | 2C,5O | | | | | | | 2C,5O | |
| | | Carn Du | F,2O,R | 2A,8O,4R | | | 2A,F,10O,5R | | | | | | | 2A,F,10O,5R | |
| | | Godrevey Beach | | 3R | | | 3R | | | | | | | 3R | |
| | | Maen Land/Dean Quarry | C,2F,5O | 2F,9O,12R | C,3F,4O,2R | | 2C,7F,18O,14R | | | | | 2C,7F,18O,14R | | | |
| | | Dean Point Maerl | | R | | | R | | | | | | | R | |
| | | Lowland Reef | 2F | | | | | 2F | | | | | | 2F | |
| | | The Wreas | 2C,2O | 4O,5R | | | | 2C,6O,5R | | | | | | 2C,6O,5R | |
| | | Puskys | 2F,O,R | 2O,3R | | | | 2F,3O,4R | | | | | | 2F,3O,4R | |
| | | Davas Rock | F | | | | | F | | | | | | F | |
| | | Chynalls Point | R | | | | | R | | | | | | | R |
| *Stichastrella rosea* | | Pencra Reef | R | | | R | | | | | | | | R | |
| *Astropecten irregularis* | Sand Star | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| | | Raglans | 2R | | | | 2R | | | | | | | | 2R |
| | | Godrevey Beach | | 3O | | | 3O | | | | | | | 3O | |
| | | Maen Land/Dean Quarry | R | R | 2R | | 4R | | | | | 4R | | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Luidia ciliaris* | Seven Armed Starfish | Drawna Rocks/Porthkerris | 3O,4R | R | | 3O,5R | | | | | | | | 3O,5R |
| | | Pencra Reef | 2C,11O,7R | | | 2C,11O,7R | | | | | | | 2C,11O,7R | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | 3C,F,9O.7R | | | | 3C,F,9O.7R | | | | | | | 3C,F,9O.7R |
| | | Maen Voes | 3O,R | | | | 3O,R | | | | | | | 3O,R |
| | | Mohegan | 6O,4R | | | | 6O,4R | | | | | | | 6O,4R |
| | | Spyridian Vagliano | 3O,R | O | | | 4O,R | | | | | | | 4O,R |
| | | Minstrel | R | | | | R | | | | | | | R |
| | | Raglans | C,F,3O,6R | | | | C,F,3O,6R | | | | | | | C,F,3O,6R |
| | | Manacle Point | | 2R | | | 2R | | | | | | 2R | |
| | | Carn Du | 5O,2R | C,7O | | | C.12O.2R | | | | | | C.12O.2R | |
| | | Maen Land/Dean Quarry | 5O,2R | 3O,5R | 3R | | 8O.10R | | | | | 8O.10R | | |
| | | Lowland Reef | O,R | | | | | O,R | | | | | O,R | |
| | | The Wreas | R | 4O,2R | | | | 4O,3R | | | | | 4O,3R | |
| | | Puskys | | F,2O,R | | | | F,2O,R | | | | | F,2O,R | |
| | | Davas Rock | F | | | | | F | | | | | F | |
| *Henricia sp.* | Bloody Henry Starfish | Drawna Rocks/Porthkerris | 6O,6R | | | 6O,6R | | | | | | | | 6O,6R |
| | | Pencra Reef | 9O,7R,P | | | 9O,7R,P | | | | | | | 9O,7R,P | |
| | | Maen Garrick | 3R | | | 3R | | | | | | | 3R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,4R | | | | 2O,4R | | | | | | | 2O,4R |
| | | Mohegan | 4R,P | | | | 4R,P | | | | | | | 4R,P |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Raglans | F,3O,4R | | | | F,3O,4R | | | | | | | F,3O,4R |
| | | Manacle Point | | 2O,4R | | | 2O,4R | | | | | | 2O,4R | |
| | | Carn Du | R | 4C,5O,2R | | | 4C,5O,3R | | | | | | 4C,5O,3R | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | 2O,3R | 6O,6R | 2O | | 10O,9R | | | | | 10O,9R | | |
| | | Lowland Reef | O,R | | | | | O,R | | | | | | O,R |
| | | The Wreas | R | 5R | | | | 6R | | | | | | 6R |
| | | Puskys | | 2R | | | | 2R | | | | | | 2R |
| | | Davas Rock | O | | | | | O | | | | | | O |
| *Asterina gibbosa* | Cushion Star | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Asterina phylactica* | | Drawna Rocks/Porthkerris | 2O,2R | | | 2O,2R | | | | | | | | 2O,2R |
| *Porania pulvillus* | Red Cushion Star | Pencra Reef | 2R | | | 2R | | | | | | | 2R | |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | | R | | | R | | | | | R | | |
| *Antedon bifida* | Common | Drawna Rocks/Porthkerris | 2O | | | 2O | | | | | | | | 2O |
| | | Pencra Reef | A,2C,2F,2O,2R | | | A,2C,2F,2O,2R | | | | | | | A,2C,2F,2O,2R | |
| | | Vase, Pen-Win, Woodfords Wall | 3A,3C,F,4O,R | | | | 3A,3C,F,4O,R | | | | | | | 3A,3C,F,4O,R |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Raglans | A,2C,2F,4O,R | | | | A,2C,2F,4O,R | | | | | | | A,2C,2F,4O,R |
| | | Manacle Point | | 2C,O | | | 2C,O | | | | | | 2C,O | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Carn Du | C,F,2O,R | | | | C,F,2O,R | | | | | | C,F,2O,R | | |
| | | The Wreas | | O,P | | | | O,P | | | | | O,P | | |
| | | Puskys | | 2C,2F | | | | 2C,2F | | | | | 2C,2F | | |
| | | Lowland Reef | R | | | | | R | | | | | R | | |
| *Echinus esculentus* | Common Sea | Drawna Rocks/Porthkerris | 6C,4F,9O,3R | O | | 6C,4F,10O,3R | | | | | | | | 6C,4F,10O,3R | |
| | | Pencra Reef | 7C,4F,17O,5R | | | 7C,4F,17O,5R | | | | | | | 7C,4F,17O,5R | | |
| | | Porthoustock | C | | | C | | | | | | | C | | |
| | | Maen Garrick | 2C,4O | | | 2C,4O | | | | | | | 2C,4O | | |
| | | Vase, Pen-Win, Woodfords Wall | 9C,2F,20O,R | | | | 9C,2F,20O,R | | | | | | | 9C,2F,20O,R | |
| | | Maen Voes | 2C,F,3O | | | | 2C,F,3O | | | | | | | 2C,F,3O | |
| | | Mohegan | C,11O,2R | | | | C,11O,2R | | | | | | | C,11O,2R | |
| | | Spyridian Vagliano | 2C,4O,2R | | | | 2C,4O,2R | | | | | | | 2C,4O,2R | |
| | | Raglans | C,5O,3R | | | | C,5O,3R | | | | | | | C,5O,3R | |
| | | Manacle Point | | 2F,2O,R,P | | | 2F,2O,R,P | | | | | | 2F,2O,R,P | | |
| | | Carn Du | 2F,2O | 3F,9O,R | | | 5F,11O,R | | | | | | 5F,11O,R | | |
| | | Dean Point Maerl | | R | | | R | | | | | | R | | |
| | | Maen Land/Dean Quarry | 2C,F,4O | 4C,2F,3O,3R | 3C,F,3O | | 9C,4F,10O,3R | | | | 9C,4F,10O,3R | | | | |
| | | Lowland Reef | C,O,R | | | | | C,O,R | | | | | C,O,R | | |
| | | The Wreas | 4O | C,4O,R | | | | C,8O,R | | | | | C,8O,R | | |
| | | Puskys | 3O | F,5O | | | | F,8O | | | | | F,8O | | |
| | | Davas Rock | R | | | | | R | | | | | R | | |
| | | Chynalls Point | C | | | | | C | | | | | | C | |
| *Echinocardium cordatum* | Sea Potato | Porthoustock | 2P | | | 2P | | | | | | | 2P | | |
| | | Maen Land/Dean Quarry | | | R | | R | | | | R | | | | |
| | | The Wreas | | R | | | | R | | | | | R | | |
| *Holothuria forskali* | Cotton Spinner | Drawna Rocks/Porthkerris | 2O,6R | | | 2O,6R | | | | | | | | 2O,6R | |
| | | Pencra Reef | 5C,5F,17O,2R | | | 5C,5F,17O,2R | | | | | | | 5C,5F,17O,2R | | |
| | | Maen Garrick | C,3O | | | C,3O | | | | | | | C,3O | | |
| | | Vase, Pen-Win, Woodfords Wall | 5C,7F,11O,5R | | | | 5C,7F,11O,5R | | | | | | | 5C,7F,11O,5R | |
| | | Maen Voes | 2C,O,R | | | | 2C,O,R | | | | | | | 2C,O,R | |
| | | Mohegan | C,O,R,P | | | | C,O,R,P | | | | | | | C,O,R,P | |
| | | Spyridian Vagliano | C,2R | | | | C,2R | | | | | | | C,2R | |
| | | Raglans | C,3O,7R | | | | C,3O,7R | | | | | | | C,3O,7R | |
| | | Manacle Point | | F,2O,R | | | F,2O,R | | | | | | F,2O,R | | |
| | | Carn Du | 2O,R | 2F,6O,2R | | | 2F,8O,3R | | | | | | 2F,8O,3R | | |
| | | Maen Land/Dean Quarry | C,4O,R | 2F,3O,6R | C,F | | 2C,3F,7O,7R | | | | 2C,3F,7O,7R | | | | |
| | | Lowland Reef | C,F | | | | | C,F | | | | | C,F | | |
| | | The Wreas | 2O,R | 2O | | | | 4O,R | | | | | 4O,R | | |
| | | Puskys | 3O | 3F,2O,R | | | | 3F,5O,R | | | | | 3F,5O,R | | |
| | | Davas Rock | O | | | | | O | | | | | O | | |
| | | Chynalls Point | O | | | | | O | | | | | | O | |
| *Aslia lefevrii* | Brown Crevice Sea Cucumber | Drawna Rocks/Porthkerris | F,5O,4R | | | F,5O,4R | | | | | | | | F,5O,4R | |
| | | Pencra Reef | F,7O,R | | | F,7O,R | | | | | | | F,7O,R | | |
| | | Maen Garrick | 2O,R | | | 2O,R | | | | | | | 2O,R | | |
| | | Vase, Pen-Win, Woodfords Wall | C,O | | | | C,O | | | | | | | C,O | |
| | | Maen Voes | 4O | | | | 4O | | | | | | | 4O | |
| | | Raglans | O | | | | O | | | | | | | O | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Carn Du | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | 2O | 6O,3R | | | 8O,3R | | | | | 8O,3R | | |
| | | Puskys | R | O,R | | | | O,2R | | | | | O,2R | |
| *Ocnus lacteus* | | Drawna Rocks/Porthkerris | O,R | | | O,R | | | | | | | | O,R |
| *Pawsonia saxicola* | White Crevice Sea Cucumber | Drawna Rocks/Porthkerris | 2O,R | | | 2O,R | | | | | | | | 2O,R |
| | | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| | | Maen Garrick | 2O | | | 2O | | | | | | | 2O | |
| | | Vase, Pen-Win, Woodfords Wall | O,2R | | | | O,2R | | | | | | | O,2R |
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Raglans | F,O | | | | F,O | | | | | | | F,O |
| | | Carn Du | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | | 2F,4O,R | | | 2F,4O,R | | | | | 2F,4O,R | | |
| | | Puskys | O | O | | | | 2O | | | | | 2O | |
| | | Lowland Reef | C | | | | | C | | | | | C | |
| *Neopentadactyla mixta* | Gravel Sea Cucumber | Drawna Rocks/Porthkerris | 2F,O,2R | | | 2F,O,2R | | | | | | | | 2F,O,2R |
| | | Pencra Reef | C,O,R | | | C,O,R | | | | | | | C,O,R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | | 2F,4O,R,P | | | 2F,4O,R,P | | | | | 2F,4O,R,P | | |
| *Ophiuridae* | Brittle Stars | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | 2R |
| | | Maen Land/Dean Quarry | | 2O | R | | 2O,R | | | | | 2O,R | | |
| *Acrocnida brachiata* | | Godrevey Beach | | A,O | | | A,O | | | | | | A,O | |
| | | Maen Land | | O | | | O | | | | | O | | |
| *Amphiura securigera* | | Carn Du Maerl | | R | | | R | | | | | | R | |
| *Ophiactis balli* | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | F,R | | | F,R | | | | | | F,R | |
| *Ophiopholis aculeata* | | Maen Garrick | R | | | R | | | | | | | R | |
| *Ophiopsila annulosa* | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Ophiothrix fragilis* | Common | Porthoustock | R | | | R | | | | | | | R | |
| | | Maen Land | O | | | | O | | | | | O | | |
| *Ophiura ophiura* | Sand Brittlestar | Drawna Rocks/Porthkerris | 2R | | | 2R | | | | | | | | 2R |
| | | Godrevey Beach | | C,O | | | C,O | | | | | | C,O | |
| PHYLUM MOLLUSCA | MOLLUSCS | | | | | | | | | | | | | |
| *Bivalvia* | | Maen Land/Dean Quarry | | C,F | | | C,F | | | | | C,F | | |
| *Ensis spp.* | Razor Clams | Carn Du Maerl | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | C,F | | | C,F | | | | | | C,F | |
| | | Maen Land/Dean Quarry | C | F,P | C,F,O,2R | | 2C,2F,O,2R,P | | | | | 2C,2F,O,2R,P | | |
| | | The Wreas | | C | | | | C | | | | | C | |
| *Mytilus edulis* | Blue Mussel | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Pecten maximus* | Great Scallop | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Pencra Reef | O | | | O | | | | | | | | O |
| | | Manacle Point | | O | | | O | | | | | | O | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| *Lutraria lutraria* | Otter Shell | Maen Land/Dean Quarry | | | O | | O | | | | | O | | |
| *Callista chione* | | Godrevey Beach | | R | | | R | | | | | | R | |
| *Dosinia* | | Maen Land/Dean Quarry | | | F,2O | | F,2O | | | | | F,2O | | |
| *Loligo* | Squid | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | R |
| | | Pencra Reef | 2R | | | 2R | | | | | | | 2R | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Eledone cirrhosa* | Curled Octopus | Maen Land/Dean Quarry | | 2R | | | 2R | | | | | 2R | | |
| *Sepia officinalis* | Common | Drawna Rocks/Porthkerris | 3O,4R | R | | 3O,5R | | | | | | | | 3O,5R |
| | | Porthoustock Bay | O,R | | | O,R | | | | | | | | O,R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | C | | 2R | | C,2R | | | | | C,2R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Calliostoma zizyphinum* | Painted Topshell | Drawna Rocks/Porthkerris | 2C,2F,2O,R | R | | 2C,2F,2O,2R | | | | | | | | 2C,2F,2O,R |
| | | Pencra Reef | 3O,2R | | | 3O,2R | | | | | | | | 3O,2R |
| | | Maen Garrick | O | | | O | | | | | | | | O |
| | | Vase, Pen-Win, Woodfords Wall | 12O,6R | | | | 12O,6R | | | | | | | 12O,6R |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Mohegan | 2O,R | | | | 2O,R | | | | | | | 2O,R |
| | | Spyridian Vagliano | O,R | | | | O,R | | | | | | | O,R |
| | | Raglans | 4O,4R | | | | 4O,4R | | | | | | | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | 2O,7R | O | | 3O,7R | | | | | 3O,7R | | |
| | | Lowland Reef | F | | | | | F | | | | | F | |
| | | The Wreas | F,R | R | | | | F,2R | | | | | F,2R | |
| | | Puskys | O | 3R | | | | O,3R | | | | | O,3R | |
| *Patellidae* | Limpets | Drawna Rocks/Porthkerris | C | | | C | | | | | | | | C |
| | | Godrevey Beach | | A | | | A | | | | | | A | |
| | | Maen Land/Dean Quarry | | F | | | F,2O | | | | | F,2O | | |
| *Patella pellucida* | Brue Rayed | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Porthoustock Bay | O,R | | | O,R | | | | | | | | O,R |
| | | Godrevey Beach | | C | | | C | | | | | | C | |
| | | Maen Land/Dean Quarry | | F | | | F,2O | | | | | E,2O | | |
| | | The Wreas | F | | | | | F | | | | | F | |
| *Patella vulgata* | Common Limpet | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Porthoustock Bay | O,R | | | O,R | | | | | | | | O,R |
| *Trochidae* | | Godrevey Beach | | C | | | C | | | | | | C | |
| *Gibbula sp.* | Topshells | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Raglans | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | O | | | | O | | | | | O | | |
| *Gibbula cineraria* | Grey Topshell | Drawna Rocks/Porthkerris | 4F,3O,2R | O | | 4F,4O,2R | | | | | | | | 4F,4O,2R |
| | | Maen Garrick | F | | | F | | | | | | | F | |
| | | Porthoustock Bay | C,O | | | C,O | | | | | | | | C,O |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Mohegan | 2O,R | | | | 2O,R | | | | | | | 2O,R |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | A,F | | | A,F | | | | | | A,F | |
| | | Maen Land/Dean Quarry | | F,O,3R | F | | 2F,O,3R | | | | | 2F,O,3R | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Gibbula magus* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Porthoustock Bay | 2R | | | 2R | | | | | | | | 2R |
| *Gibbula umbilicalis* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Aplysia* | | Maen Land/Dean Quarry | | | R | | R | | | | | R | | |
| *Aplysia punctata* | Sea Hare | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Mohegan | 2R,P | | | | 2R,P | | | | | | | 2R,P |
| | | Raglans | R | | | | R | | | | | | | R |
| | | Manacle Point | | R | | | R | | | | | | R | |
| *Philine aperta* | | Godrevey Beach | | O | | | O | | | | | | O | |
| *Lacuna vincta* | | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | R |
| *Euspira catena* | Commn Necklace Shell | Porthoustock Bay | R | | | R | | | | | | | | R |
| | | Godrevey Beach | | O,R | | | O,R | | | | | | O,R | |
| | | Maen Land/Dean Quarry | | | 3R | | 3R | | | | | 3R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| *Simnia hiscocki* | Sea Fan False Cowrie | Pencra Reef | O,R | | | O,R | | | | | | | O,R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Carn Du | | R | | | R | | | | | | R | |
| *Simnia patula* | False Cowrie | Pencra Reef | F,4O,P | | | F,4O,P | | | | | | | F,4O,P | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Spyridian Vagliano | O | | | | O | | | | | | | O |
| | | Manacle Point | | 2O | | | 2O | | | | | | 2O | |
| | | Carn Du | | 2F,4O,R | | | 2F,4O,R | | | | | | 2F,4O,R | |
| | | Maen Land/Dean Quarry | R | | | | R | | | | | R | | |
| | | The Wreas | | O | | | | O | | | | | O | |
| | | Puskys | O | 2O,3R | | | | 2O,3R | | | | | 2O,3R | |
| *Rissoa sp.* | | Vase, Pen-Win, Woodfords Wall | P | | | | P | | | | | | | P |
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Raglans | R | | | | R | | | | | | | R |
| *Trivia sp.* | Cowries | Drawna Rocks/Porthkerris | O,R | | | O,R | | | | | | | | O,R |
| *Trivia arctica* | Arctic Cowrie | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Pencra Reef | O,R | | | O,R | | | | | | | O,R | |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Maen Land/Dean Quarry | | 3R | | | 3R | | | | | 3R | | |
| | | Lowland Reef | F | | | | | F | | | | | F | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Trivia monacha* | European Cowrie | Drawna Rocks/Porthkerris | O,R | O | | 2O,R | | | | | | | | 2O,R |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Raglans | R | | | | R | | | | | | | R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Carn Du Maerl | | R | | | R | | | | | | R | | |
| | | Maen Land/Dean Quarry | | R | | | R | | | | | R | | | |
| | | The Wreas | | R | | | | R | | | | | R | | |
| *Nucella lapillus* | Dog Whelk | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | | O |
| | | Godrevey Beach | | C | | | C | | | | | | C | | |
| *Nassarius incrassatus* | Thick Lipped Dog Whelk | Pencra Reef | O | | | O | | | | | | | O | | |
| | | Mohegan | O,R | | | | O,R | | | | | | | | O,R |
| | | Raglans | O | | | | O | | | | | | | | O |
| | | Lowland Reef | R | | | | | R | | | | | R | | |
| *Nassarius reticulatus* | Netted Dog Whelk | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | | O |
| | | Porthoustock Bay | C,F,2R | | | C,F,2R | | | | | | | | | C,F,2R |
| | | Vase, Pen-Win, Woodfords Wall | 3F | | | | 3F | | | | | | | | 3F |
| | | Mohegan | 2O,R | | | | 2O,R | | | | | | | | 2O,R |
| | | Godrevey Beach | | C | | | C | | | | | | C | | |
| | | Maen Land/Dean Quarry | O | | O | | 2O | | | | | 2O | | | |
| *Cadlina laevis* | | Drawna Rocks/Porthkerris | 3R | | | 3R | | | | | | | | | 3R |
| | | Pencra Reef | 3R | | | 3R | | | | | | | 3R | | |
| | | Maen Garrick | R | | | R | | | | | | | R | | |
| | | Maen Land/Dean Quarry | | 2R | | | 2R | | | | | 2R | | | |
| | | Lowland Reef | R | | | | | R | | | | | R | | |
| *Discodoris rosi* | | Drawna Rocks/Porthkerris | | R | | R | | | | | R | | | | R |
| *Doris sticta* | Sponge Sea Slug | Pencra Reef | R | | | R | | | | | S | | R | | |
| *Doto sp.* | | Vase, Pen-Win, Woodfords Wall | C,O,R | | | | C,O,R | | | | | | | | C,O,R |
| | | Raglans | C | | | | C | | | | | | | | C |
| | | Carn Du | | F | | | F | | | | | | F | | |
| | | The Wreas | | F | | | | F | | | | | F | | |
| *Doto fragilis* | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | | R |
| | | Manacle Point | | R | | | R | | | | | | R | | |
| *Doto pinnatifida* | | Vase, Pen-Win, Woodfords Wall | 2C,2F,2O,R | | | | 2C,2F,2O,R | | | | | | | | 2C,2F,2O,R |
| | | Puskys | | F | | | | F | | | | | F | | |
| *Facelina auriculata* | | Maen Land/Dean Quarry | | R | | | R | | | | | R | | | |
| *Flabellina sp.* | | Drawna Rocks/Porthkerris | 2R | | | 2R | | | | | | | | | 2R |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | | O |
| | | Mohegan | 2R | | | | 2R | | | | | | | | 2R |
| | | Raglans | O | | | | O | | | | | | | | O |
| *Flabellina browni* | | Mohegan | R | | | | R | | | | | | | | R |
| | | Raglans | 2R | | | | 2R | | | | | | | | 2R |
| *Flabellina lineata* | | Porthoustock Bay | P | | | P | | | | | | | | | P |
| | | Pencra Reef | 2R | | | 2R | | | | | | | 2R | | |
| | | Vase, Pen-Win, Woodfords Wall | 3O | | | | 3O | | | | | | | | 3O |
| | | Mohegan | O,R | | | | O,R | | | | | | | | O,R |
| | | Maen Land/Dean Quarry | | | R | | R | | | | | R | | | |
| | | Puskys | | O,2R | | | | O,2R | | | | | O,2R | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Flabellina pedata* | | Mohegan | O,R | | | | O,R | | | | | | | O,R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | | R | | | R | | | | | R | | |
| | | The Wreas | | O,R | | | | O,R | | | | | O,R | |
| | | Puskys | 2R | | | | | 2R | | | | | 2R | |
| *Goniodoris nodosa* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Pencra Reef | 2P | | | 2P | | | | | | | 2P | |
| *Lomanotus genei* | | Maen Garrick | R | | | R | | | | | | | R | |
| *Acanthodoris pilosa* | | Drawna Rocks/Porthkerris | C,R | | | C,R | | | | | | | | C,R |
| | | Pencra Reef | O,R | | | O,R | | | | | | | O,R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Maen Voes | O,R | | | | O,R | | | | | | | O,R |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | R | R | | | R | | | | | R | | |
| | | Lowland Reef | R | | | | | R | | | | | R | |
| | | The Wreas | R | | | | | R | | | | | R | |
| *Diaphorodoris luteocincta* | Fried Egg Sea Slug | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Pencra Reef | 3R,P | | | 3R,P | | | | | | 3R,P | | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Maen Land/Dean Quarry | | C,O,4R | | | C,O,4R | | | | | C,O,4R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Diaphorodoris luteocincta var. alba* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Onchidoris muricata* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Mohegan | R | | | | R | | | | | | | R |
| *Crimora papillata* | | Pencra Reef | R | | | R | | | | | | | R | |
| *Limacia clavigera* | | Drawna Rocks/Porthkerris | O,R | | | O,R | | | | | | | | O,R |
| | | Pencra Reef | 2R,P | | | 2R,P | | | | | | | 2R,P | |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | 2R | |
| | | Maen Voes | R | | | | R | | | | | | R | |
| | | Spyridian Vagliano | 2O,R | | | | 2O,R | | | | | | 2O,R | |
| | | Raglans | O | | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | R | | R | | R | | | | | R | | |
| | | Lowland Reef | O | | | | | O | | | | | O | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Polycera* | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | 2R |
| *Polycera faeroensis* | Yellow Edged Polycera | Vase, Pen-Win, Woodfords Wall | F,3O,2R | | | | F,3O,2R | | | | | | | F,3O,2R |
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Raglans | 2O,2R | | | | 2O,2R | | | | | | | 2O,2R |
| | | Manacle Point | R | | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | O,R | | | | O,R | | | | | O,R | | |
| | | The Wreas | | 2R | | | | 2R | | | | | 2R | |
| | | Puskys | O | 2F,O | | | | 2F,2O | | | | | 2F,2O | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Polycera quadrilineata* | Lined Polycera | Vase, Pen-Win, Woodfords Wall | O,2R | | | | O,2R | | | | | | | O,2R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| *Janolus cristatus* | Crystal Sea Slug | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | 2R |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Cuthona amoena* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Tritonia nilsodhneri* | Sea Fan Sea Slug | Pencra Reef | 3F,5O,3R | | | 3F,5O,3R | | | | | S | | 3F,5O,3R | |
| | | Maen Garrick | 2O | | | 2O | | | | | S | | 2O,R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,6R | | | | 20,6R | | | | S | | | 20,6R |
| | | Maen Voes | 2O | | | | 2O | | | | S | | | 2O |
| | | Mohegan | 2R | | | | 2R | | | | S | | | 2R |
| | | Spyridian Vagliano | O | | | | O | | | | S | | | O |
| | | Raglans | O,R | | | | O,R | | | | S | | | O,R |
| | | Manacle Point | | O,R | | | O,R | | | | S | | O,R | |
| | | Carn Du | C,2R | C,3F,5O,R | | | 2C,3F,5O,3R | | | | S | | 2C,3F,5O,3R | |
| | | Carn Du Maerl | | R | | | R | | | | S | | R | |
| | | Maen Land/Dean Quarry | O,2R | F,R | 2F | | 3F,3R | | | | S | 3F,3R | | |
| | | The Wreas | O | 2O,R | | | | 3O,R | | | S | | 3O,R | |
| | | Puskys | C | C,2F,2R | | | | 2C,2F,2R | | | S | | 2C,2F,2R | |
| | | Davas Rock | R | | | | | R | | | S | | R | |
| PHYLUM NEMERTA | RIBBON WORMS | | | | | | | | | | | | | |
| *Lineus longissimus* | | Raglans | R | | | | R | | | | | | | R |
| *Tubulanus annulatus* | | Drawna Rocks/Porthkerris | O,2R | R | | O,3R | | | | | | | | O,3R |
| | | The Wreas | | R | | | | R | | | | | R | |
| PHYLUM PHORONIDA | HORSESHOE WORMS | | | | | | | | | | | | | |
| *Phoronis sp.* | Horseshoe Worm | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| PHYLUM PLATYHELMINTHES | | FLATWORMS | | | | | | | | | | | | |
| *Prostheceraeus vittatus* | Candy Striped Flatworm | Drawna Rocks/Porthkerris | F,3O,6R | F | | 2F,3O,6R | | | | | | | | 2F,3O,6R |
| | | Pencra Reef | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Mohegan | 2O,2R | | | | 2O,2R | | | | | | | 2O,2R |
| | | Spyridian Vagliano | 2R | | | | 2R | | | | | | | 2R |
| | | Maen Land/Dean Quarry | | O,4R | | | O,4R | | | | | O,4R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | | R | | | | R | | | | | R | |
| PHYLUM PORIFERA | SPONGES | | | | | | | | | | | | | |
| Porifera | unidentifed sponges | Drawna Rocks/Porthkerris | 2C,R | | | 2C,R | | | | | | | | 2C,R |
| | | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,R | | | | 2O,R | | | | | | | 2O,R |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Raglans | 2O | | | | 2O | | | | | | | 2O |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Godrevey Bay | | C | | | C | | | | | | C | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | | F | | | | F | | | | | F | |
| | unidentifed sponge crusts | Drawna Rocks/Porthkerris | 2C,F,3O | F,O | | 2C,2F,4O | | | | | | | | 2C,2F,4O |
| | | Pencra Reef | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | F,4O,R,P | | | | F,4O,R,P | | | | | | | F,4O,R,P |
| | | Maen Voes | F | | | | F | | | | | | | F |
| | | Spyridian Vagliano | F | | | | F | | | | | | | F |
| | | Raglans | 2C,F,2O,2R | | | | 2C,F,2O,2R | | | | | | | 2C,F,2O,2R |
| | | Carn Du | | 2O,R | | | 2O,R | | | | | | 2O,R | |
| | | Godrevey Bay | | F,R | | | F,R | | | | | | F,R | |
| | | Maen Land/Dean Quarry | | 2F,O,R | 2O,R | | 2F,3O,2R | | | | | 2F,3O,2R | | |
| | | The Wreas | F | C,R,P | | | | C,F,R,P | | | | | C,F,R,P | |
| | | Puskys | | R | | | | R | | | | | R | |
| *Clathrina coriacea* | White Lace Sponge | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Maen Land/Dean Quarry | | 2O | | | 2O | | | | | 2O | | |
| *Grantia compressa* | Flattened Purse Sponge | Vase, Pen-Win, Woodfords Wall | 2O | | | | 2O | | | | | | | 2O |
| | | Raglans | O | | | | O | | | | | | | O |
| *Leucosolenia* | Spiky Lace Sponge | Drawna Rocks/Porthkerris | C,F | | | C,F | | | | | | | | C,F |
| | | Pencra Reef | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | F,O | | | | F,O | | | | | | | F,O |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | | O,R | | | O,R | | | | | O,R | | |
| | | The Wreas | | R | | | | R | | | | | R | |
| | | Puskys | O | R | | | | O,R | | | | | O,R | |
| *Sycon ciliatum* | Purse Sponge | Drawna Rocks/Porthkerris | C,O,3R | | | C,O,3R | | | | | | | | C,O,3R |
| | | Pencra Reef | 2O,5R | | | 2O,5R | | | | | | | 2O,5R | |
| | | Porthoustock | R | | | R | | | | | | | R | |
| | | Maen Garrick | 2O | | | 2O | | | | | | | 2O | |
| | | Vase, Pen-Win, Woodfords Wall | C,4O,3R | | | | C,4O,3R | | | | | | | C,4O,3R |
| | | Mohegan | 4O | | | | 4O | | | | | | | 4O |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Raglans | F,2O,2R | | | | F,2O,2R | | | | | | | F,2O,2R |
| | | Carn Du | | O | | | O | | | | | | | O |
| | | Maen Land/Dean Quarry | | 3F,4O,R | | | 3F,4O,R | | | | | 3F,4O,R | | |
| | | The Wreas | | O,R | | | | O,R | | | | | O,R | |
| | | Puskys | F | F,4O | | | | 2F,4O | | | | | 2F,4O | |
| *Dercitus bucklandi* | Black Tar Sponge | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Pachymatisma johnstonia* | Elephant Hide Sponge | Maen Garrick | R | | | R | | | | | | | R | | |
| | | Vase, Pen-Win, Woodfords Wall | 2R | | | | 2R | | | | | | | | 2R |
| | | Raglans | R | | | | R | | | | | | | | R |
| | | Carn Du | | 3O | | | 3O | | | | | | 3O | | |
| | | Maen Land/Dean Quarry | O | R | | | O,R | | | | | O,R | | | |
| | | Puskys | | R | | | | R | | | | | R | | |
| *Thymosia guernei* | Mashed Potato Sponge | Carn Du | | R | | | R | | | | S | | R | | |
| *Aplysilla rosea* | | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | | R |
| *Aplysilla sulfurea* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | | O |
| *Dysidea fragilis* | Goosebump | Drawna Rocks/Porthkerris | F,O,2R | O,R | | F,2O,3R | | | | | | | | | F,2O,3R |
| | | Pencra Reef | 2O | | | 2O | | | | | | | | 20 | |
| | | Porthoustock | R | | | R | | | | | | | | | R |
| | | Maen Garrick | R | | | R | | | | | | | R | | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | | R |
| | | Maen Land/Dean Quarry | | O,3R | | | O,3R | | | | | O,3R | | | |
| | | The Wreas | | R | | | | R | | | | | R | | |
| | | Puskys | | R | | | | R | | | | | R | | |
| *Cliona celata* | Boring Sponge | Drawna Rocks/Porthkerris | C,2O,2R | | | C,2O,2R | | | | | | | | | C,2O,2R |
| | | Pencra Reef | C,3F,2OO,3R | | | C,3F,2OO,3R | | | | | | | C,3F,2OO,3R | | |
| | | Maen Garrick | 3O,2R | | | 3O,2R | | | | | | | 3O,2R | | |
| | | Vase, Pen-Win, Woodfords Wall | C,F,21O,2R | | | | | | | | | | | | C,F,21O,2R |
| | | Maen Voes | C | | | | | | | | | | | | C |
| | | Mohegan | O,2R | | | | | | | | | | | | O,2R |
| | | Spyridian Vagliano | O | | | | | | | | | | | | O |
| | | Minstrel | R | | | | | | | | | | | | R |
| | | Raglans | 3C,5O,4R | | | | | | | | | | | | 3C,5O,4R |
| | | Manacle Point | | 3O | | | 3O | | | | | | 3O | | |
| | | Carn Du | 2O | 2C,F,5O,4R | | | 2C,F,7O,4R | | | | | | 2C,F,7O,4R | | |
| | | Maen Land/Dean Quarry | 5O | F,2O,3R | O,2R | | F,8O,4R | | | | | F,8O,4R | | | |
| | | Lowland Point | F,O | | | | | F,O | | | | | F,O | | |
| | | The Wreas | O,R | 3O,6R | | | | 4O,7R | | | | | 4O,7R | | |
| | | Puskys | | 2O,2R | | | | 2O,2R | | | | | 2O,2R | | |
| | | Davas Rock | O | | | | | O,R | | | | | O,R | | |
| | | Chynalls Point | C | | | | | C | | | | | | | C |
| *Adreus fascicularis* | | Manacle Point | | R | | | R | | | | S | | R | | |
| *Polymastia boletiformis* | Hedgehog Sponge | Pencra Reef | 10O,4R | | | 10O,4R | | | | | | | 10O,R | | |
| | | Maen Garrick | 2R | | | 2R | | | | | | | 2R | | |
| | | Vase, Pen-Win, Woodfords Wall | O,R | | | | O,R | | | | | | | | O,R |
| | | Mohegan | P | | | | P | | | | | | | | P |
| | | Manacle Point | | F,R | | | F,R | | | | | | F,R | | |
| | | Carn Du | R | 2O | | | 2O,R | | | | | | 2O,R | | |
| | | Maen Land/Dean Quarry | 2O | C,3F,R | O | | C,3F,3O,R | | | | | C,3F,3O,R | | | |
| | | Lowland Point | R | | | | | R | | | | | R | | |
| | | The Wreas | | F,O,2R | | | | F,O,2R | | | | | F,O,2R | | |
| | | Puskys | | R | | | | R | | | | | R | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Polymastia penicillus* | Chimney Sponge | Drawna Rocks/Porthkerris | 4R | | | 4R | | | | | | | | 4R |
| | | Pencra Reef | 2O,4R | | | 2O,4R | | | | | | | 2O,4R | |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Spyridian Vagliano | R | | | | R | | | | | | | R |
| | | Manacle Point | | F,R | | | F,R | | | | | | F,R | |
| | | Carn Du | | 3R | | | 3R | | | | | | 3R | |
| | | Maen Land/Dean Quarry | O | F,2O,R | | | F,2O,R | | | | | F,2O,R | | |
| | | The Wreas | | 2O,R | | | | 2O,R | | | | | 2O,R | |
| *Stelligera sp.* | | Maen Land/Dean Quarry | | 2O | R | | 2O,R | | | | | 2O,R | | |
| *Stelligera rigida* | | Pencra Reef | 2O,P | | | 2O,P | | | | | | | 2O,P | |
| | | Vase, Pen-Win, Woodfords Wall | O | | | | O | | | | | | | O |
| | | Mohegan | 2R | | | | 2R | | | | | | | 2R |
| | | Raglans | R | | | | R | | | | | | | R |
| | | Manacle Point | | P | | | P | | | | | | P | |
| | | Carn Du | | 2O,4R | | | 2O,4R | | | | | | 2O,4R | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | The Wreas | | 3R | | | | 3R | | | | | 3R | |
| *Stelligera stuposa* | | Drawna Rocks/Porthkerris | 3O | O | | 4O | | | | | | | | 4O |
| | | Pencra Reef | F | | | F | | | | | | | F | |
| | | Vase, Pen-Win, Woodfords Wall | F | | | | F | | | | | | | F |
| | | Manacle Point | | 2O | | | 2O | | | | | | 2O | |
| | | Carn Du | | 2F,4O,R | | | 2F,4O,R | | | | | | 2F,4O,R | |
| | | The Wreas | | F,2O,R | | | | F,2O,R | | | | | F,2O,R | |
| | | Puskys | | R,P | | | | R,P | | | | | R,P | |
| *Homaxinella subdola* | | Mohegan | R | | | | R | | | | | | | R |
| *Pseudosuberites sulphureus* | | Carn Du | | R | | | R | | | | | | R | |
| *Suberites sp.* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| | | Maen Land/Dean Quarry | | 2R | R | | 3R | | | | | 3R | | |
| *Suberites carnosus* | | Drawna Rocks/Porthkerris | C,R | | | C,R | | | | | | | | C,R |
| | | Pencra Reef | O | | | O | | | | | | | O | |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | O,2R | | | O,2R | | | | | | O,2R | |
| | | The Wreas | | 2O,2R | | | | 2O,2R | | | | | 2O,2R | |
| | | Puskys | | 2R | | | | 2R | | | | | 2R | |
| *Suberites ficus* | | Pencra Reef | O,2R | | | O,2R | | | | | | | O,2R | |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | 4R | | | | 4R | | | | | | | 4R |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | | 2O,2R | | | 2O,2R | | | | | 2O,2R | | |
| | | Lowland Point | F | | | | | F | | | | | F | |
| *Tethya citrina* | Golf Ball Sponge | Drawna Rocks/Porthkerris | 3O,3R | O | | 4O,3R | | | | | | | | 4O,3R |
| | | Pencra Reef | 2O,R | | | 2O,R | | | | | | | 2O,R | |
| | | Mohegan | F,P | | | | F,P | | | | | | | F,P |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Manacle Point | | 2O | | | 2O | | | | | | 2O | | |
| | | Carn Du | | 3R | | | 3R | | | | | | 3R | | |
| | | Maen Land/Dean Quarry | | 4O,2R | | | 4O,2R | | | | | 4O,2R | | | |
| | | The Wreas | | 2R | | | | 2R | | | | | 2R | | |
| | | Puskys | | O,R | | | | O,R | | | | | O,R | | |
| *Axinella sp.* | | Pencra Reef | O | | | O | | | | | | | O | | |
| | | Maen Land/Dean Quarry | | O | 2O | | 3O | | | | | 3O | | | |
| | | Puskys | F | R | | | | F,R | | | | | F,R | | |
| *Axinella damicornis* | Crumpled Duster Sponge | Maen Garrick | O | | | O | | | | | S | | O | | |
| | | Maen Land/Dean Quarry | | R | | | R | | | | S | R | | | |
| | | Puskys | | R | | | | R | | | S | | R | | |
| *Axinella dissimilis* | Yellow Staghorn Sponge | Pencra Reef | 4O,3R | | | 4O,3R | | | | | | | 4O,3R | | |
| | | Maen Garrick | R | | | R | | | | | | | R | | |
| | | Vase, Pen-Win, Woodfords Wall | O,R | | | | O,R | | | | | | | O,R | |
| | | Maen Voes | O | | | | O | | | | | | | O | |
| | | Manacle Point | | R | | | R | | | | | | R | | |
| | | Carn Du | F | 3O,4R | | | 3O,4R | | | | | | 3O,4R | | |
| | | Maen Land/Dean Quarry | 3O | O | 2O | | 6O | | | | | 6O | | | |
| | | Lowland Point | R | | | | | R | | | | | R | | |
| | | The Wreas | | O,R | | | | O,R | | | | | O,R | | |
| | | Puskys | | F,4R | | | | F,4R | | | | | F,4R | | |
| *Axinella infundibuliformis* | Prawn Cracker Sponge | Carn Du | | R | | | R | | | | | | R | | |
| | | Puskys | | R | | | | R | | | | | R | | |
| *Ciocalypta penicillus* | Tapered Chimney Sponge | Pencra Reef | R | | | R | | | | | | | R | | |
| | | Maen Garrick | O | | | O | | | | | | | O | | |
| | | Manacle Point | | O | | | O | | | | | | O | | |
| | | Carn Du | | 2O | | | 2O | | | | | | 2O | | |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | | |
| | | The Wreas | | F,2O | | | | F,2O | | | | | F,2O | | |
| *Halichondria panicea* | Breadcrumb Sponge | Drawna Rocks/Porthkerris | R,P | | | R,P | | | | | | | | R,P | |
| | | Porthoustock | 2O | | | 2O | | | | | | | | 2O | |
| | | Raglans | F | | | | F,P | | | | | | | F,P | |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | | |
| *Haliclona sp.* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O | |
| | | Pencra Reef | O | | | O | | | | | | | O | | |
| *Haliclona fistulosa* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R | |
| | | Carn Du | | R | | | R | | | | | | R | | |
| | | The Wreas | | R | | | | R | | | | | R | | |
| *Haliclona oculata* | Mermaid's Glove | Pencra Reef | 2O | | | 2O | | | | | | | 2O | | |
| | | Vase, Pen-Win, Woodfords Wall | O,R | | | | O,R | | | | | | | O,R | |
| | | Mohegan | O | | | | O | | | | | | | O | |
| | | Spyridian Vagliano | F | | | | F,P | | | | | | | F,P | |
| | | Raglans | R | | | | R | | | | | | | R | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| | | Carn Du Maerl | | O | | | O | | | | | | O | |
| | | Lowland Point | 2O | | | | | 2O | | | | | 2O | |
| | | Puskys | | O | | | | O | | | | | O | |
| *Haliclona simulans* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Haliclona viscosa* | Volcano Sponge | Drawna Rocks/Porthkerris | O,2R | O | | 2O,2R | | | | | | | | 2O,2R |
| | | Porthoustock | R | | | R | | | | | | | | R |
| | | Pencra Reef | O,4R | | | O,4R | | | | | | | O,4R | |
| | | Maen Garrick | O,2R | | | O,2R | | | | | | | O,2R | |
| | | Vase, Pen-Win, Woodfords Wall | 2O,4R | | | | 2O,4R | | | | | | | 2O,4R |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Carn Du | | 4O,R | | | 4O,R | | | | | | 4O,R | |
| | | Maen Land/Dean Quarry | R | 2F,O,R | | | 2F,O,2R | | | | | 2F,O,2R | | |
| | | Puskys | | 2O | | | | 2O | | | | | 2O | |
| | | Davas Rock | R | | | | | R | | | | | R | |
| *Desmacidon fruticosum* | | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| *Amphilectus fucorum* | Carrot Sponge | Drawna Rocks/Porthkerris | O,2R | F,R | | F,O,3R | | | | | | | | F,O,3R |
| | | Pencra Reef | A,R | | | A,R | | | | | | | A,R | |
| | | Raglans | F | | | | F,P | | | | | | | F,P |
| | | Maen Land/Dean Quarry | | C,F,5O,2R | | | C,F,5O,2R | | | | | C,F,5O,2R | | |
| *Hemimycale columella* | Crater Sponge | Drawna Rocks/Porthkerris | A,C,2F,4O,3R | F,O | | A,C,3F,5O,3R | | | | | | | | A,C,3F,5O,3R |
| | | Pencra Reef | 5O,5R | | | 5O,5R | | | | | | | 5O,5R | |
| | | Porthoustock | O | | | O | | | | | | | | O |
| | | Maen Garrick | F,O,R | | | F,O,R | | | | | | | F,O,R | |
| | | Vase, Pen-Win, Woodfords Wall | C,F,8O,R | | | | C,F,8O,R | | | | | | | C,F,8O,R |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Mohegan | 4O | | | | 4O | | | | | | | 4O |
| | | Spyridian Vagliano | 2R | | | | 2R | | | | | | | 2R |
| | | Raglans | F,O,3R | | | | F,O,3R | | | | | | | F,O,3R |
| | | Manacle Point | | O,R | | | O,R | | | | | | O,R | |
| | | Carn Du | | 5O | | | 5O | | | | | | 5O | |
| | | Maen Land/Dean Quarry | O | F,8O,3R | O,3R | | F,10O,6R | | | | | F,10O,6R | | |
| | | Lowland Point | O | | | | | O | | | | | O | |
| | | The Wreas | O | O,3R | | | | 2O,3R | | | | | 2O,3R | |
| | | Davas Rock | O | | | | | O | | | | | O | |
| *Phorbas fictitius* | | Carn Du | | O,R,P | | | O,R,P | | | | | | O,R,P | |
| *Clathria atrasanguinea* | | Pencra Reef | A | | | A | | | | | | | A | |
| *Myxilla incrustans* | | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Raglans | F,O | | | | F,O | | | | | | | F,O |
| *Raspailia hispida* | | Drawna Rocks/Porthkerris | 2O | | | 2O | | | | | | | | 2O |
| | | Pencra Reef | 2O | | | 2O | | | | | | | 2O | |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Manacle Point | | R | | | R | | | | | | R | |
| | | Carn Du | | 5O,R | | | 5O,R | | | | | | 5O,R | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | The Wreas | | 2R | | | | 2R | | | | | 2R | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Raspailia ramosa* | Chocolate Finger Sponge | Drawna Rocks/Porthkerris | 2O,R | | | 2O,R | | | | | | | | 2O,R |
| | | Pencra Reef | 6O,2R | | | 6O,2R | | | | | | | 6O,2R | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | O,R | | | | O,R | | | | | | | O,R |
| | | Maen Voes | O | | | | O | | | | | | | O |
| | | Mohegan | O,R | | | | O,R | | | | | | | O,R |
| | | Raglans | 2O | | | | 2O | | | | | | | 2O |
| | | Manacle Point | O | | | | O | | | | | | O | |
| | | Carn Du | 8O,R | | | | 8O,R | | | | | | 8O,R | |
| | | Carn Du Maerl | O | | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | F,O,R | O | | F,2O,R | | | | | F,20,R | | |
| | | Lowland Point | O | | | | | O | | | | | O | |
| | | The Wreas | O | 2F,2O,2R | | | | 2F,3O,2R | | | | | 2F,3O,2R | |
| | | Puskys | | R | | | | R | | | | | R | |
| ALGAE: Class PHAEOPHYCAE | | BROWN SEAWEEDS | | | | | | | | | | | | |
| *Phaeophyceae* | Unidentified brown seaweeds | Drawna Rocks/Porthkerris | | C | | C | | | | | | | | C |
| | | Pencra Reef | C | | | C | | | | | | | C | |
| | | Spyridian Vagliano | C | | | | C | | | | | | | C |
| | | Raglans | C,F | | | | C,F | | | | | | | C,F |
| | | Carn Du | | F | | | F | | | | | | F | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | Maen Land/Dean Quarry | C | C,F,O | 2C,2O | | 3C,F,3O | | | | | 3C,F,3O | | |
| | | The Wreas | A,O | | | | | A,O | | | | | A,O | |
| | | Puskys | A | | | | | A | | | | | A | |
| *Desmarestia sp.* | | Carn Du | | C,O | | | C,O | | | | | | C,O | |
| *Desmarestia aculeata* | Landladies' Wig | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Porthoustock | O | | | O | | | | | | | | O |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| | | The Wreas | | O | | | | O | | | | | O | |
| *Desmarestia ligulata* | Desmarest's Flattened Weed | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Pencra Reef | O,R | | | O,R | | | | | | | O,R | |
| | | Vase, Pen-Win, Woodfords Wall | C,F | | | | C,F | | | | | | | C,F |
| | | Maen Voes | C,O | | | | C,O | | | | | | | C,O |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Manacle Point | | A,2O | | | A,2O | | | | | | A,2O | |
| | | Carn Du | | 2C,F,2O | | | 2C,F,2O | | | | | | 2C,F,2O | |
| | | Maen Land/Dean Quarry | | F,2O | 2F,O | | 3F,3O | | | | | 3F,3O | | |
| | | The Wreas | | C | | | | C | | | | | C | |
| *Desmarestia viridis* | Desmarest's Green Weed | Drawna Rocks/Porthkerris | | F | | F | | | | | | | | F |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Dictyopteris polypodioides* | Netted Wing Weed | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Pencra Reef | C,2O | | | C,2O | | | | | | | C,2O | |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | 2A,2C,2F,O | | | | 2A,2C,2F,O | | | | | | | 2A,2C,2F,O |
| | | Maen Voes | 2C,O | | | | 2C,O | | | | | | | 2C,O |
| | | Spyridian Vagliano | C,F | | | | C,F | | | | | | | C,F |
| | | Mohegan | 2C,2O,R,P | | | | 2C,2O,R,P | | | | | | | 2C,2O,R,P |
| | | Manacle Point | | A | | | A | | | | | | A | |
| | | Carn Du | F | 3A,3C,5F,5O | | | 3A,3C,6F,5O | | | | | | 3A,3C,6F,5O | |
| | | Maen Land/Dean Quarry | F | F,4O,3R | 2C,F,2O | | 2C,3F,6O,3R | | | | | 2C,3F,6O,3R | | |
| | | Lowland Point | C | | | | | C | | | | | C | |
| | | The Wreas | C | C,F,3O | | | | 2C,F,3O | | | | | 2C,F,3O | |
| | | Puskys | | R | | | | R | | | | | R | |
| | | Davas Rock | A,C | | | | | A,C | | | | | A,C | |
| *Dictyota dichotoma* | Brown Fan Weed | Drawna Rocks/Porthkerris | C,5F,O | O | | C,5F,2O | | | | | | | | C,5F,2O |
| | | Pencra Reef | C,F,O | | | C,F,O | | | | | | | C,F,O | |
| | | Porthoustock | R | | | R | | | | | | | | R |
| | | Maen Garrick | R | | | R | | | | | | | R | |
| | | Vase, Pen-Win, Woodfords Wall | 3F,4O | | | | 3F,4O | | | | | | | 3F,4O |
| | | Maen Voes | 2C | | | | 2C | | | | | | | 2C |
| | | Spyridian Vagliano | F | | | | F | | | | | | | F |
| | | Mohegan | 2P | | | | 2P | | | | | | | 2P |
| | | Raglans | F | | | | F | | | | | | | F |
| | | Manacle Point | | A,3C,O,P | | | A,3C,O,P | | | | | | A,3C,O,P | |
| | | Carn Du | | 2C,4F,6O | | | 2C,4F,6O | | | | | | 2C,4F,6O | |
| | | Carn Du Maerl | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | F | 2F,8O,2R | A,C,F,O | | A,C,3F,9O,2R | | | | | A,C,3F,9O,2R | | |
| | | Lowland Point | R | | | | | R | | | | | R | |
| | | The Wreas | | 3F,2O | | | | 3F,2O | | | | | 3F,2O | |
| | | Puskys | | C,F | | | | C,F | | | | | C,F | |
| *Taonia atomaria* | Dotted Peacock Weed | The Wreas | | O | | | | O | | | | | O | |
| *Leathesia marina* | | Drawna Rocks/Porthkerris | F | | | F | | | | | | | | F |
| *Fucus serratus* | Serrated Wrack | Drawna Rocks/Porthkerris | 2O | p | | 2O,P | | | | | | | | 2O,P |
| | | Porthoustock | O | | | O | | | | | | | | O |
| | | Godrevey Beach | | C | | | C | | | | | | C | |
| | | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Himanthalia elongata* | Thongweed | Drawna Rocks/Porthkerris | 3C,O,R | F,R | | 3C,F,O,2R | | | | | | | | 3C,F,O,2R |
| | | Porthoustock | R | | | R | | | | | | | | R |
| | | Minstrel | C | | | | C | | | | | | | C |
| | | Maen Land/Dean Quarry | O | | | | O | | | | | O | | |
| | | Godrevey Beach | | 2O | | | 2O | | | | | | 2O | |
| *Bifurcaria bifurcata* | Brown Tuning Fork Weed | Porthoustock | R | | | R | | | | | | | | R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Cystoseira sp.* | Bushy Wracks | Maen Land/Dean Quarry | | | 2R | | 2R | | | | | 2R | | | |
| *Halidrys siliquosa* | Sea Oak/Podweed | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | | R |
| | | The Wreas | | 2R | | | | 2R | | | | | | 2R | |
| *Sargassum muticum* | Wireweed | Drawna Rocks/Porthkerris | 3C,3O,6R | O | | 3C,4O,6R | | | | | | | | | 3C,4O,6R |
| | | Porthoustock | O | | | O | | | | | | | | | O |
| | | Maen Land/Dean Quarry | O | | | | O | | | | | O | | | |
| *Alaria esculenta* | Dabberlocks | Drawna Rocks/Porthkerris | 2C,F,3O | | | 2C,F,3O | | | | | | | | | 2C,F,3O |
| | | Porthoustock | 2O,R | | | 2O,R | | | | | | | | | 2O,R |
| | | Godrevey Beach | | R | | | R | | | | | | | R | |
| | | Maen Land/Dean Quarry | | F | | | F | | | | | F | | | |
| *Chorda filum* | Mermaid's | Drawna Rocks/Porthkerris | 9C,F,5O | 2F,2O | | 9C,3F,7O | | | | | | | | | 9C,3F,7O |
| | | Porthoustock | 3C,2O | | | 3C,2O | | | | | | | | | 3C,2O |
| | | Maen Land/Dean Quarry | F,O | | | | F,O | | | | | F,O | | | |
| *Laminaria spp.* | Kelps | Drawna Rocks/Porthkerris | 2C,3O,P | A | | A,2C3O,P | | | | | | | | | A,2C3O,P |
| | | Pencra Reef | 2C,O | | | 2C,O | | | | | | | | 2C,O | |
| | | Porthoustock | 2C,P | | | 2C,P | | | | | | | | | 2C,P |
| | | Maen Garrick | C | | | C | | | | | | | | C | |
| | | Vase, Pen-Win, Woodfords Wall | A,C,O,2P | | | | A,C,O,2P | | | | | | | | A,C,O,2P |
| | | Spyridian Vagliano | C,R | | | | C,R | | | | | | | | C,R |
| | | Raglans | 2C,O | | | | 2C,O | | | | | | | | 2C,O |
| | | Manacle Point | | 2C | | | 2C | | | | | | | 2C | |
| | | Carn Du | C | | | | C | | | | | | | C | |
| | | Lowland Point | O | | | | | O | | | | | | O | |
| | | Puskys | A | | | | | A | | | | | | A | |
| *Laminaria digitata* | Oarweed | Drawna Rocks/Porthkerris | F,C | | | F,C | | | | | | | | | F,C |
| | | Vase, Pen-Win, Woodfords Wall | F | | | | F | | | | | | | | F |
| | | Raglans | O | | | | O | | | | | | | | O |
| | | Godrevey Beach | | A | | | A | | | | | | | A | |
| | | Maen Land/Dean Quarry | | | O,R | | O,R | | | | | O,R | | | |
| *Laminaria hyperborea* | Forest Kelp/Cuvie | Drawna Rocks/Porthkerris | 3A,7C,2F,P | C,F | | 3A,8C,3F,P | | | | | | | | | 3A,8C,3F,P |
| | | Pencra Reef | A,2C,F,O | | | A,2C,F,O | | | | | | | | A,2C,F,O | |
| | | Porthoustock | 3C,O | | | 3C,O | | | | | | | | | 3C,O |
| | | Maen Garrick | C | | | C | | | | | | | | C | |
| | | Vase, Pen-Win, Woodfords Wall | A,4C,7O | | | | A,4C,7O | | | | | | | | A,4C,7O |
| | | Maen Voes | C,2O | | | | C,2O | | | | | | | | C,2O |
| | | Spyridian Vagliano | O | | | | O | | | | | | | | O |
| | | Mohegan | 3O,R | | | | 3O,R | | | | | | | | 3O,R |
| | | Minstrel | C | | | | C | | | | | | | | C |
| | | Raglans | A,C | | | | A,C | | | | | | | | A,C |
| | | Manacle Point | | O,R | | | O,R | | | | | | | O,R | |
| | | Carn Du | C,F,O | 2O | | | C,F,32O | | | | | | | C,F,32O | |
| | | Godrevey Beach | | A,2C | | | A,2C | | | | | | | A,2C | |
| | | Maen Land/Dean Quarry | 2C,2F | S,4A,3F,O,4R | 4A,O | | S,8A,2C,5F,2O,4R | | | | | S,8A,2C,5F,2O,4R | | | |
| | | The Wreas | | 3F,2R | | | | 3F,2R | | | | | | 3F,2R | |
| | | Puskys | O | | | | | O | | | | | | O | |
| | | Davas Rock | O | | | | | O | | | | | | O | |
| | | Chynalls Point | O | | | | | O | | | | | | | O |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Laminaria ochroleuca* | Golden Kelp | Drawna Rocks/Porthkerris | 2O,3R | | | 2O,3R | | | | | | | | 2O,3R |
| | | Pencra Reef | F | | | F | | | | | | | F | |
| | | Porthoustock | O | | | O | | | | | | | | O |
| | | Raglans | F | | | | F | | | | | | | F |
| | | Manacle Point | | C,O | | | C,O | | | | | | C,O | |
| | | Maen Land/Dean Quarry | | | C,O | | C,O | | | | | C,O | | |
| *Saccharina latissima* | Sugar Kelp | Drawna Rocks/Porthkerris | 3C,2F,6O,R | F,R | | 3C,3F,6O,2R | | | | | | | | 3C,3F,6O,2R |
| | | Pencra Reef | F,6O,3R | | | F,6O,3R | | | | | | | F,6O,3R | |
| | | Porthoustock | 2C,2O,R,P | | | 2C,2O,R,P | | | | | | | | 2C,2O,R,P |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Spyridian Vagliano | F,R | | | | F,R | | | | | | | F,R |
| | | Mohegan | O | | | | O | | | | | | | O |
| *Colpomenia peregrina* | Oyster Thief | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| *Cladostephus spongiosus* | Hairy Sand Weed | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Halopteris filicina* | Sea Fern Weed | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Carpomitra costata* | Tassel Weed | Drawna Rocks/Porthkerris | R | | | R | | | | | S | | | R |
| | | Pencra Reef | F | | | F | | | | | S | | F | |
| | | Mohegan | R | | | | R | | | | S | | | R |
| | | Maen Land/Dean Quarry | | O | | | O | | | | S | O | | |
| | | The Wreas | | R | | | | R | | | S | | R | |
| *Saccorhiza polyschides* | Furbellows | Drawna Rocks/Porthkerris | 5C,F,2O,2R | F,O | | 5C,2F,3O,2R | | | | | | | | 5C,2F,3O,2R |
| | | Pencra Reef | A,C,3O | | | A,C,3O | | | | | | | A,C,3O | |
| | | Porthoustock | 4C,O | | | 4C,O | | | | | | | | 4C,O |
| | | Maen Garrick | O | | | O | | | | | | | O | |
| | | Vase, Pen-Win, Woodfords Wall | 2A,5C,F,R | | | | 2A,5C,F,R | | | | | | | 2A,5C,F,R |
| | | Maen Voes | S,A,C,F,O | | | | S,A,C,F,O | | | | | | | S,A,C,F,O |
| | | Spyridian Vagliano | O | | | | O | | | | | | | O |
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Raglans | 2C,F | | | | 2C,F | | | | | | | 2C,F |
| | | Manacle Point | | 3C | | | 3C | | | | | | 3C | |
| | | Carn Du | A,C | 2A,C,3O,2R | | | 3A,2C,3O,2R | | | | | | 3A,2C,3O,2R | |
| | | Godrevey Beach | | C,F,O | | | C,F,O | | | | | | C,F,O | |
| | | Maen Land/Dean Quarry | F | A,3O | 3F,R | | A,4F,3O,R | | | | | A,4F,3O,R | | |
| | | The Wreas | C,O | C,R | | | | 2C,O,R | | | | | 2C,O,R | |
| | | Davas Rock | A,O | | | | | A,O | | | | | A,O | |
| ALGAE: Class CHLOROPHYCEAE | | GREEN SEAWEEDS | | | | | | | | | | | | |
| *Chlorophyta* | unidentified green seaweeds | Drawna Rocks/Porthkerris | C,F | | | C,F | | | | | | | | C,F |
| | | Porthoustock | 2C | | | 2C | | | | | | | | 2C |
| *Bryopsis sp.* | Mossy Feather Weed | Mohegan | R | | | | R | | | | | | | R |
| *Cladophora sp.* | Green Branched Weed | Maen Land/Dean Quarry | | | R | | R | | | | | R | | |
| *Ulva sp.* | Sea Lettuce | Drawna Rocks/Porthkerris | C,2F,5O,R | F,P | | C,3F,5O,R,P | | | | | | | | C,3F,5O,R,P |
| | | Porthoustock | 5O | | | 5O | | | | | | | | 5O |
| | | Maen Land/Dean Quarry | | F,O | | | F,O | | | | | F,O | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Ulva intestinalis* | Gut Weed | Godrevey Beach | | C | | | C | | | | | | C | |
| *Ulva lactuca* | Sea Lettuce | Drawna Rocks/Porthkerris | 2C,2O,2R | F | | 2C,F,2O,2R | | | | | | | | 2C,F,2O,2R |
| | | Porthoustock | 3R | | | 3R | | | | | | | | 3R |
| | | Minstrel | C | | | | C | | | | | | | C |
| | | Godrevey Beach | | C | | | C | | | | | | C | |
| | | Maen Land/Dean Quarry | O | | C,2R | | C,2R | | | | | C,2R | | |
| ALGAE: Class RHODOPHYCEAE | | RED SEAWEEDS | | | | | | | | | | | | |
| Rhodophyta | Unidentified red seaweeds | Drawna Rocks/Porthkerris | 8C,2R,2P | 2F | | 8C,2F,2R,2P | | | | | | | | 8C,2F,2R,2P |
| | | Pencra Reef | 3F,O,R | | | 3F,O,R | | | | | | | 3F,O,R | |
| | | Porthoustock | 2C,2P | | | 2C,2P | | | | | | | | 2C,2P |
| | | Maen Garrick | C,2O | | | C,2O | | | | | | | C,2O | |
| | | Vase, Pen-Win, Woodfords Wall | 4C,3O,4P | | | | 4C,3O,4P | | | | | | | 4C,3O,4P |
| | | Maen Voes | S,A | | | | S,A | | | | | | | S,A |
| | | Spyridian Vagliano | 2C,P | | | | 2C,P | | | | | | | 2C,P |
| | | Mohegan | 2C,P | | | | 2C,P | | | | | | | 2C,P |
| | | Raglans | 2C,2F,O | | | | 2C,2F,O | | | | | | | 2C,2F,O |
| | | Manacle Point | | 3C,F | | | 3C,F | | | | | | 3C,F | |
| | | Carn Du | O | 2F,3O,2R | | | 2F,4O,2R | | | | | | 2F,4O,2R | |
| | | Carn Du Maerl | | R | | | R | | | | | | R | |
| | | Godrevey Beach | | C,F | | | C,F | | | | | | C,F | |
| | | The Wreas | C,F | 2C,3O | | | | 3C,F,3O | | | | | 3C,F,3O | |
| | | Puskys | C,F | C,R | | | | 2C,F,R | | | | | 2C,F,R | |
| Rhodophycota indet. | non-calcareous red crusts | Pencra Reef | 3O | | | 3O | | | | | | | 3O | |
| encrusting algae indet. *Corallinaceae/ Lithothamnion* | Pink encrusting algae | Drawna Rocks/Porthkerris | 5O,3R,P | O,R | | 6O,4R,P | | | | | | | | 6O,4R,P |
| | | Pencra Reef | 3F,2O | | | 3F,2O | | | | | | | 3F,2O | |
| | | Porthoustock | C,F,2O,2R,2P | | | C,F,2O,2R,2P | | | | | | | | C,F,2O,2R,2P |
| | | Maen Garrick | 2O | | | 2O | | | | | | | 2O | |
| | | Vase, Pen-Win, Woodfords Wall | 3C,F,4O,2R | | | | 3C,F,4O,2R | | | | | | | 3C,F,4O,2R |
| | | Maen Voes | 2O | | | | 2O | | | | | | | 2O |
| | | Spyridian Vagliano | F,O | P | | | F,O,P | | | | | | | F,O,P |
| | | Mohegan | 2O | | | | 2O | | | | | | | 2O |
| | | Raglans | 2C,O | | | | 2C,O | | | | | | | 2C,O |
| | | Manacle Point | | 2C,3P | | | 2C,3P | | | | | | 2C,3P | |
| | | Carn Du | O | A,8O,R | | | A,9O,R | | | | | | A,9O,R | |
| | | Godrevey Beach | | 2A,F | | | 2A,F | | | | | | 2A,F | |
| | | Maen Land/Dean Quarry | F,O | 2F,2O,2R,P | F,5O | | 4F,8O,2R,P | | | | | 4F,8O,2R,P | | |
| | | The Wreas | 2C | 2O,F | | | | 2C,F,2O | | | | | 2C,F,2O | |
| | | Puskys | O | | | | | O | | | | | O | |
| | | Chynalls Point | O | | | | | O | | | | | | O |
| *Ahnfeltia plicata* | Black Scour Weed | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| *Asparagopsis armata* | Harpoon Weed | Drawna Rocks/Porthkerris | 2F,2O | R | | 2F,2O,R | | | | | | | | 2F,2O,R |
| | | Porthoustock | O | | | O | | | | | | | | O |
| | | Godrevey Beach | | R | | | R | | | | | | R | |
| *Ceramium sp.* | | Drawna Rocks/Porthkerris | | O,2R | | O,2R | | | | | | | | O,2R |
| | | Godrevey Beach | | C,O | | | C,O | | | | | | C.O | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Pterothamnion plumula* | Bushy Feather Weed | Maen Land/Dean Quarry | | R | | | R | | | | | R | | |
| *Heterosiphonia plumosa* | Siphoned Feather Weed | Drawna Rocks/Porthkerris | A,C,F,2O,2R | | | A,C,F,2O,2R | | | | | | | | A,C,F,2O,2R |
| | | Pencra Reef | 2O,R | | | 2O,R | | | | | | | 20,R | |
| | | Porthoustock | R | | | R | | | | | | | | R |
| | | Mohegan | 2F | | | | 2F | | | | | | | 2F |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | 3C,2F,O | | | 3C,2F,O | | | | | 3C,2F,O | | |
| | | The Wreas | | 2C | | | | 2C | | | | | 2C | |
| | | Puskys | | O | | | | O | | | | | O | |
| | | Davas Rock | F | | | | | F | | | | | F | |
| *Apoglossum ruscifolium* | Veined Tongue Weed | Maen Land/Dean Quarry | | O | | | O | | | | | O | | |
| *Cryptopleura ramosa* | Fine Veined Crinkle Weed | Drawna Rocks/Porthkerris | P | | | P | | | | | | | | P |
| *Delesseria sanguinea* | Sea Beech | Drawna Rocks/Porthkerris | 2C,5F,2O,3R | | | 2C,5F,2O,3R | | | | | | | | 2C,5F,2O,3R |
| | | Pencra Reef | 2F,3O,3R | | | 2F,3O,3R | | | | | | | 2F,3O,3R | |
| | | Maen Garrick | C,O | | | C,O | | | | | | | C,O | |
| | | Vase, Pen-Win, Woodfords Wall | A,3C,5O,P | | | | A,3C,5O,P | | | | | | | A,3C,5O,P |
| | | Spyridian Vagliano | 2F | | | | 2F | | | | | | | 2F |
| | | Mohegan | C,3O | | | | C,3O | | | | | | | C,3O |
| | | Raglans | O | | | | O | | | | | | | O |
| | | Manacle Point | | A,C,2O | | | A,C,2O | | | | | | A,C,2O | |
| | | Carn Du | | A,3C,O,R | | | A,3C,O,R | | | | | | A,3C,O,R | |
| | | Maen Land/Dean Quarry | | A,C,4F,3O | 5O | | A,C,4F,8O | | | | | A,C,4F,8O | | |
| | | Lowland Point | O | | | | | O | | | | | O | |
| | | The Wreas | | F,O | | | | F,O | | | | | F,O | |
| | | Puskys | | R | | | | R | | | | | R | |
| | | Davas Rock | F | | | | | F | | | | | F | |
| *Drachiella spectabilis* | Rainbow Weed | Drawna Rocks/Porthkerris | F,2O | | | F,2O | | | | | | | | F,2O |
| | | Porthoustock | O,R,P | | | O,R,P | | | | | | | O,R,P | |
| | | Mohegan | C,2O | | | | C,2O | | | | | | | C,2O |
| | | Vase, Pen-Win, Woodfords Wall | O,R | | | | O,R | | | | | | | O,R |
| | | Manacle Point | | c | | | C | | | | | | C | |
| | | Godrevey Beach | | F | | | F | | | | | | F | |
| | | Maen Land/Dean Quarry | | O,R | | | O,R | | | | | O,R | | |
| *Erythroglossum laciniatum* | Flat Tongue Weed | Carn Du | | 2C | | | 2C | | | | | | 2C | |
| | | Maen Land/Dean Quarry | | | F,O | | F,O | | | | | F,O | | |
| *Hypoglossum hypoglossoides* | Under Tongue Weed | Drawna Rocks/Porthkerris | F,O | | | F,O | | | | | | | | F,O |
| | | Mohegan | R | | | | R | | | | | | | R |
| *Membranoptera alata* | Winged Weed | Drawna Rocks/Porthkerris | R | | | R | | | | | | | | R |
| | | Porthoustock | O | | | O | | | | | | | | O |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mohegan | O | | | | O | | | | | | | O |
| | | Carn Du | | 2C | | | 2C | | | | | | 2C | |
| *Nitophyllum punctatum* | Spotted Scarf Weed | Carn Du | | P | | | P | | | | | | P | |
| *Phycodrys rubens* | Sea Oak | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | R |
| | | Manacle Point | | 2A,O | | | 2A,O | | | | | | 2A,O | |
| | | Godrevey Beach | | F | | | F | | | | | | F | |
| | | Maen Land/Dean Quarry | | 3O | | | 3O | | | | | 3O | | |
| *Polyneura sp.* | | Maen Land/Dean Quarry | | | R | | R | | | | | R | | |
| *Polyneura bonnemaisonii* | Crimson Veined Weed | Manacle Point | | R | | | R | | | | | | R | |
| *Brongniartella byssoides* | Brongniart's Thread Weed | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Osmundea pinnatifida* | Pepper Dulse | Drawna Rocks/Porthkerris | F | | | F | | | | | | | | F |
| | | Minstrel | C | | | | C | | | | | | | C |
| | | Godrevey Beach | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | O | | | | O | | | | | O | | |
| *Polysiphonia sp.* | Siphon Weed | Maen Land/Dean Quarry | | 3R | F,O,R | | F,O,4R | | | | | F,O,4R | | |
| *Polysiphonia elongata* | Elongate Siphon Weed | Godrevey Beach | | O | | | O | | | | | | O | |
| *Ptilota gunneri* | Feathered Wing Weed | Carn Du | 2A | | | | 2A | | | | | | 2A | |
| *Corallina sp.* | Coral Weeds | Drawna Rocks/Porthkerris | 6O | O | | 7O | | | | | | | | 7O |
| | | Porthoustock | C,F | | | C,F | | | | | | | | C,F |
| | | Vase, Pen-Win, Woodfords Wall | C,F | | | | C,F | | | | | | | C,F |
| | | Mohegan | 2O | | | | 2O | | | | | | | 2O |
| *Corallina officinalis* | Common Coral | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Godrevey Beach | | C,F | | | C,F | | | | | | C,F | |
| | | Maen Land/Dean Quarry | O | F | | | O,F | | | | | O,F | | |
| *Maerl indet* | Maerl | Drawna Rocks/Porthkerris | R | | | R | | | | Y | | | | R |
| | | Spyridian Vagliano | O | R | | | O,R | | | Y | | | | O,R |
| | | Carn Du Maerl | | A,O | | | A,O | | | Y | | | A,O | |
| | | Maen Land/Dean Quarry | | 3R | | | 3R | | | Y | | | 3R | |
| | | Dean Point Maerl | | F | | | F | | | Y | | F | | |
| *Gelidium spinosum* | Spiny Straggle | Maen Land/Dean Quarry | | R | | | R | | | | | R | | |
| *Calliblepharis ciliata* | Red Fringed | Drawna Rocks/Porthkerris | S,2C,O,2R | R | | S,2C,O,3R | | | | | | | | S,2C,O,3R |
| | | Pencra Reef | F,O,R | | | F,O,R | | | | | | | F,O,R | |
| | | Maen Voes | C | | | | C | | | | | | | C |
| | | Spyridian Vagliano | O,P | | | | O,P | | | | | | | O,P |
| | | Mohegan | R | | | | R | | | | | | | R |
| | | Raglans | 2R | | | | 2R | | | | | | | 2R |
| | | Manacle Point | | C,F,2O | | | C,F,2O | | | | | | C,F,2O | |
| | | Carn Du | | 4O | | | 4O | | | | | | 4O | |
| | | Maen Land/Dean Quarry | | F,2O,R | | | F,2O,R | | | | | F,2O,R | | |
| | | The Wreas | F | O | | | | F,O | | | | | F,O | |
| | | Davas Rock | F | | | | | F | | | | | F | |
| *Rhodophyllis sp.* | Great Rose Weed | Carn Du | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | | O | O | | 2O | | | | | 2O | | |

| Scientific Name | Common Name | Site | Source | | | Designation | | | Status | | | Impact | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasearch 2003-14 | Seasearch 2015 | WT 2015 | SAC | MCZ | Outside | WCA | Priority | Scarce/ Rare | Direct | Secondary | Wider area |
| *Dilsea carnosa* | Red Rags | Drawna Rocks/Porthkerris | C,2F,7O,3R | O,R | | C,2F,8O,4R | | | | | | | | C,2F,8O,4R |
| | | Pencra Reef | O,R | | | O,R | | | | | | | O,R | |
| | | Porthoustock | 2O,2R | | | 2O,2R | | | | | | | | 2O,2R |
| | | Vase, Pen-Win, Woodfords Wall | C,F,O,R,P | | | | C,F,O,R,P | | | | | | | C,F,O,R,P |
| | | Maen Voes | C | | | | C | | | | | | | C |
| | | Spyridian Vagliano | P | | | | P | | | | | | | P |
| | | Mohegan | 2O | | | | 2O | | | | | | | 2O |
| | | Raglans | C | | | | C | | | | | | | C |
| | | Manacle Point | | C | | | C | | | | | | C | |
| | | Carn Du | | 2O | | | 2O | | | | | | 2O | |
| | | Godrevey Beach | | F,R | | | F,R | | | | | | F,R | |
| | | Maen Land/Dean Quarry | C | 4O,3R | | | C,4O,3R | | | | | C,4O,3R | | |
| | | The Wreas | | O | | | | O | | | | | O | |
| | | Puskys | O | | | | | O | | | | | O | |
| | | Chynalls Point | O | | | | | O | | | | | | O |
| *Chondrus crispus* | Irish Moss | Drawna Rocks/Porthkerris | 3O | | | 3O | | | | | | | | 3O |
| | | Porthoustock | 2O | | | 2O | | | | | | | | 2O |
| | | Godrevey Beach | | 2C,F | | | 2C,F | | | | | | 2C,F | |
| | | Maen Land/Dean Quarry | | 2O | | | 2O | | | | | 2O | | |
| | | The Wreas | | F,O | | | F,O | | | | | | F,O | |
| *Callophyllis laciniata* | Beautiful Fan | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| | | Vase, Pen-Win, Woodfords Wall | P | | | | P | | | | | | | P |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Carn Du | | O | | | O | | | | | | O | |
| | | Maen Land/Dean Quarry | R | 2F,3O,2R | O | | 2F,3O,3R | | | | | 2F,3O,3R | | |
| *Kallymenia reniformis* | Beautiful Kidney Weed | Pencra Reef | F | | | F | | | | | | | F | |
| | | Manacle Point | | O | | | O | | | | | | O | |
| | | Carn Du | O | 2O,R | | | 3O,R | | | | | | 3O,R | |
| | | Maen Land/Dean Quarry | O | | 2F,2O,R | | 2F,3O,R | | | | | 2F,3O,R | | |
| *Meredithia sp.* | | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | O |
| *Meredithia microphylla* | Mermaid's Ear | Drawna Rocks/Porthkerris | | O | | O | | | | | | | | O |
| *Mastocarpus stellatus* | Grape Pip Weed | Drawna Rocks/Porthkerris | F | | | F | | | | | | | | F |
| | | Porthoustock | O | | | O | | | | | | | | O |
| | | Godrevey Beach | | 2O | | | 2O | | | | | | 2O | |
| *Schottera nicaeensis* | Shaded Weed | Drawna Rocks/Porthkerris | F | | | F | | | | | | | | F |
| | | Vase, Pen-Win, Woodfords Wall | 2O | | | | 2O | | | | | | | 2O |
| | | Maen Land/Dean Quarry | | F,2O,R | | | F,2O,R | | | | | F,2O,R | | |
| *Stenogramma interruptum* | Papery Fan Weed | Manacle Point | | O | | | O | | | | | | O | |
| | | Godrevey Beach | | F | | | F | | | | | | F | |
| | | Maen Land/Dean Quarry | | O | O | | 2O | | | | | 2O | | |
| *Sphaerococcus coronopifolius* | Berry Wart Cress | Porthoustock | R | | | R | | | | | | | | R |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Hildenbrandia sp.* | Hildenbrand's Red Weed | Vase, Pen-Win, Woodfords Wall | P | | | | P | | | | | | | | P |
| | | Maen Voes | F | | | | F | | | | | | | | F |
| *Nemalion helminthoides* | Sea Noodle | Godrevey Beach | | O | | | O | | | | | | | O | |
| *Scinaia sp.* | Scina's Weeds | Drawna Rocks/Porthkerris | 4O,R | R | | 4O,2R | | | | | | | | | 4O,2R |
| | | Porthoustock | R | | | R | | | | | | | | | R |
| | | Mohegan | R | | | | R | | | | | | | | R |
| | | Carn Du | | R | | | R | | | | | | | R | |
| | | Davas Rock | F | | | | | F | | | | | | F | |
| *Palmaria palmata* | Dulse | Drawna Rocks/Porthkerris | | R | | R | | | | | | | | | R |
| | | Vase, Pen-Win, Woodfords Wall | R | | | | R | | | | | | | | R |
| | | Spyridian Vagliano | 2O | | | | 2O | | | | | | | | 2O |
| | | Godrevey Beach | | A,O | | | A,O | | | | | | | A,O | |
| | | Maen Land/Dean Quarry | | F,2O,R | 2O | | F,4O,R | | | | | | F,4O,R | | |
| | | The Wreas | O | F | | | | F,O | | | | | | F,O | |
| *Plocamium sp.* | Cock's Comb | Drawna Rocks/Porthkerris | O | | | O | | | | | | | | | O |
| | | Pencra Reef | 2F | | | 2F | | | | | | | | 2F | |
| | | Vase, Pen-Win, Woodfords Wall | F,O | | | | F,O | | | | | | | | F,O |
| | | Manacle Point | | P | | | P | | | | | | | P | |
| | | Carn Du | | R,P | | | R,P | | | | | | | R,P | |
| | | Maen Land/Dean Quarry | | F,3R | 3O | | F,3O,3R | | | | | | F,3O,3R | | |
| *Lomentaria articulata* | Bunny Ears | Drawna Rocks/Porthkerris | 2O | O | | 3O | | | | | | | | | 3O |
| | | Porthoustock | O | | | O | | | | | | | | | O |
| | | Godrevey Beach | | C | | | C | | | | | | | C | |
| *Rhodymenia sp.* | | Maen Land/Dean Quarry | | F | | | F | | | | | | F | | |
| *Rhodymenia holmesii* | Holmes's Rose Weed | Maen Land/Dean Quarry | | F | | | F | | | | | | F | | |
| *Rhodymenia pseudopalmata* | Rosy Fan Weed | Carn Du | | O | | | O | | | | | | | O | |
| | | Maen Land/Dean Quarry | | O,2R | | | O,2R | | | | | | O,2R | | |
| ANGIOSPERMAE | SEAGRASSES | | | | | | | | | | | | | | |
| *Zostera marina* | Eelgrass | Drawna Rocks/Porthkerris | 2R | | | 2R | | | | Y | | | | | 2R |
| | | | | | | | | | | | | | | | |

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