

# Seasearch North Wales 2022 Summary Report



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## Seasearch North Wales 2022

Seasearch is a volunteer marine habitat and species surveying scheme for recreational divers and snorkellers in Britain and Ireland. It is led by the Marine Conservation Society and delivered in partnership with other organisations including local Wildlife Trusts.

This report summarises the Seasearch activity that took place in North Wales in 2022. Although organised boat surveys had to be cancelled primarily due to poor weather conditions on the day with strong winds making diving impossible, a number of organised Seasearch events took place along with surveys undertaken independently by Seasearchers, resulting in a mix of dive, snorkel and shore surveys completed. The snorkel surveys enabled some new sites not easily accessible for diving to be visited and, along with the shore surveys, supported broader participation in Seasearch through the year. Collectively all this activity has continued the collection of marine habitat and species data to contribute to the national knowledge base.

This report includes summaries of the sites surveyed and identifies any rare or unusual species and habitats that were encountered and any Welsh priority marine habitats and species. This report does not include all of the detailed data as this has been entered into the Marine Recorder database and supplied to Natural Resources Wales for use in its marine conservation activities. The species data is also available online through the National Biodiversity Network Atlas, nbnatlas.org.

Data from North Wales in 2022 comprises a total of 24 forms (3 Survey forms and 21 Observation forms) from 13 different sites.

North Wales Seasearch region extends from Aberystwyth to the Dee. Seasearch in North Wales is coordinated by the Seasearch North Wales regional coordinator Holly Date. Lucy Kay entered the data into Marine Recorder. Overall guidance and support are provided by the National Seasearch Coordinator, Charlotte Bolton.

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### 1. North Wales summary 2022

In 2022 the North Wales Seasearch activities had a strong focus on shore-based surveys with dive, snorkel and intertidal surveys completed. In total 13 sites were surveyed, the majority around Anglesey.

Four boat-based events were planned to focus on gap-filling, fragile sponge habitats and invasive non-native species (in particular slipper limpet Crepidula fornicata in the Menai Strait). Unfortunately none of these were able to take place - appalling weather conditions on the day resulted in the cancellation of three of the boat surveys and there were insufficient participants to run the fourth. Despite this, a number of organised Seasearch activities took place. On days when planned boat dives had to be cancelled, snorkel or shore surveys were organised as an alternative so that the planned survey event opportunity was not lost. Several new sites were surveyed as a result



of snorkellers having access to areas not readily accessible for shore diving. More records from intertidal and shallow sublittoral zones have also provided a greater number of records for species such as the shanny *Lipophrys pholis* and other species which are generally not that commonly recorded from dive surveys that tend to focus on deeper water habitats.

Eight separate organised events took place during July and October in 2022. In July North



Wales Seasearchers contributed to a bioblitz at Llanbedrog on the South Llŷn coast, with divers and snorkellers taking part. The data from this is being submitted separately through iRecord as part of the bioblitz data entry.

Also in July, a shore dive survey event with a particular focus on invasive non-native species was successfully held at Newry beach Holyhead harbour.

The kelp surveys that were started in 2021 as a joint initiative between Seasearch North Wales and the North Wales Wildlife Trust continued with a snorkel survey day

held at Porth Nobla on Anglesey on the 9<sup>th</sup> July. The surveyors benefitted from glorious sunshine and excellent underwater visibility and lots of kelp.

A joint dive and snorkel survey was organised at Porth Eilian on the north Anglesey coast in July when the planned boat dive for Church Bay had to be cancelled. Traeth Bach (Cemaes Bay) on the north Anglesey coast provided a sheltered alternative for another joint dive and snorkel survey event on the 20<sup>th</sup> August when shore diving

at Criccieth on the south Llŷn coast





had to be cancelled because of the weather. Intertidal surveys were undertaken on separate days in July and October at three sites on Anglesey (Church Bay (Porth Swtan), Traeth Bach (Cemaes Bay) and Cemlyn Bay) when planned boat and shore dive/snorkel surveys had to be cancelled because of poor weather with strong winds on the day.

As well as the organised Seasearch events, a number of independent surveys were also undertaken, all accessed from the shore.

The mix of dive, snorkel and shore surveys that took place in 2022 have provided a wider range of opportunities for people to be involved with Seasearch than would have been provided by dive surveys alone. The snorkel and shore surveys have attracted new participants and have enabled people who would otherwise have been unlikely to become involved with Seasearch to take part in surveys.

A total of 24 forms were completed in 2022 comprising 3 Survey forms (1 qualification form and 1 form completed for a shore survey) and 21 Observation forms (8 qualification forms, all

for snorkel surveys). Of the Observation forms, 14 were from snorkel surveys and 4 were from shore surveys making a total of 5 forms overall for shore surveys. All the shore survey forms were completed as a group form by all participants taking part. A total of 26 people (including dive and snorkel buddies) took part in Seasearch surveys in 2022 with 4 of them completing qualifying observation forms and 1 completing a qualifying Survey form. Three Seasearchers completed their 5 qualifying forms for their Observer qualifications.



A Seasearch Observer course was held in November run by North Wales Seasearch Coordinator Holly Date and National Coordinator Charlotte Bolton. Sixteen people from across the UK took part in the course.

The records from 2022 include habitats and species listed on Section 7 of the Environment (Wales) Act 2016 and species considered rare, scarce or unusual records as described below.

#### Nationally important habitats and species, Section 7 species and habitats, Wales Environment Act 2016

• Zostera marina seagrass bed was recorded at Rhoscolyn, a location where seagrass bed has been recorded in previous surveys.

# Nationally rare and scarce species, unusual records and those of limited geographic distribution

Records of species more commonly found in the south and south-west of the UK:

- Gem anemone *Aulactinia verrucosa*, a southern species that reaches its northern limit in the British Isles, was recorded at a number of locations on the northwest and west coasts of Anglesey (Church Bay/Porth Swtan, Traeth Llydan and Cable Bay (Porth Trecastell))
- Plaice *Pleuronectes platessa*, recorded at Newry Beach

#### Non-native species

A few invasive non-native species were recorded during the 2022 North Wales Seasearch dives:

- The brown seaweed Sargassum muticum was recorded at 6 sites (Cemlyn (rare), Traeth Crigyll (occasional), Rhoscolyn (common) Cable Bay/Porth Trecastell (present), Porth Cwyfan (common) and Porth Dinllaen (common))
- Brown seaweed oyster thief *Colpomenia peregrina* was recorded at 4 sites (Cemlyn Bay, Newry Beach, Rhoscolyn and Porth Cwyfan)
- Red seaweed Dasysiphonia japonica, recorded as frequent at Newry Beach.

# 3. North Wales dive site descriptions

#### 3.1 Anglesey - south east, north, north-west and west coasts

In 2022, divers, snorkellers and shore surveyors explored a range of different sites on the south-east, north, north-west and west coasts of Anglesey, with all sites accessed from the shore. Twelve different sites were surveyed with 3 Survey forms and 20 Observation forms completed. There were a mix of dive, snorkel and shore surveys undertaken, with 13 of the observation forms for snorkel surveys and 4 four shore surveys. One of the Survey forms was for a shore survey, making a total of 5 forms overall for shore surveys.

The sites visited in 2022 are described below in an order that runs anti-clockwise from the south-east corner of Anglesey round to the west coast.

#### Human activities and impacts

Only a limited amount of waste material or human structures were recorded at the sites visited: a discarded lobster pot, discarded can, dive mask, fishing line and frisbee, a mooring rope and a sewage pipe outlet.

#### 3.1.1 Traeth Gwyn (Fedw Fawr shore)

A snorkel survey was completed close to high water recording habitats and species present in the upper and mid-intertidal areas (down to 5.9m ACD). The survey encompassed the main beach area and rocky habitat on the west and east sides of the bay. Rocky reef supported



mixed seaweeds with typical rocky shore brown seaweeds (Pelvetia canaliculata, Fucus spiralis, Fucus vesiculosus and Ascophyllum nodosum) and other species including Chondrus crispus, Osmundia pinnatifida and Mastocarpus stellatus. Beadlet anemones Actinia equina were common as were barnacles Semibalanus balanoides, Patella vulaata keelworms limpets and Spirobranchus sp; a lot of barnacle spat was seen on the rocks. Blue mussels Mytilus edulis were recorded as present and there were several

different species of littorinid snails present. A dense covering of green seaweed (Ulva sp. and other species) covered boulders in front of a freshwater input at the western end of the beach. Nearby anglers reported catching mackerel Scomber scombrus and several cat shark Scyliorhinus sp.

#### 3.1.2 Porth Eilian

Two dive surveys and a snorkel survey were undertaken at Porth Eilian on three separate dates in July and August. Porth Eilian is a shallow bay on the north Anglesey coast that faces north-northeast. Rocky cliffs originating



from the Cambrian period encircle the sides of the bay with a shallow



sandy area in the middle.

The dive surveys and snorkel survey recorded similar species covering habitats from the low intertidal into the shallow infralittoral down to 2.5m BCD.

Rocky reef provided the predominant habitat surveyed with some cobbles and pebbles, and then sand and gravel further away from the rocky sides of the bay. On the rocky reef dense oarweed *Laminaria digitata* led into *Laminaria hyperborea* kelp park and mixed red and brown seaweeds; *Dictyota dichotoma, Delessaria sanguinea, Ceramium* sp., *Calliblepharis ciliata* 

and Corallina officinalis were common with other species present in lesser abundance (including Dilsea carnosa, Palmaria palmata, Chondrus crispus and encrusting pink algae). A short animal turf of bryozoans (Cellaria spp. common), sea squirts (Morchellium argus, Clavellina lepadiformis and Ascidiella aspersa) and amphipod tubes was present amongst the mixed seaweeds. A variety of mobile species were seen including lobster Homarus gammarus, lesser spotted cat shark Scyliorhinus canicula, ballan wrasse Labrus bergylta, corkwing wrasse



Symphodus melops, rock goby Gobius paganellus, two spot goby Pomatoschistus flavescens, spider crab Maja brachydactyla, edible crab Cancer pagurus, shore crab Carcinus maenas and top shells Steromphala umbilicalis and S. cineraria.

The shallow sand habitat was not surveyed in detail but species present included sandmason worm *Lanice conchilega*, lugworm *Arenicola* sp., netted dog whelk *Tritia reticulata*, burrowing anemone *Cerianthus lloydii* and bootlace weed *Chorda filum*.

#### 3.1.3 Traeth Bach (Cemaes Bay)

Cemaes is a village on the north coast of Anglesey with a small, picturesque bay that faces a north-westerly direction. Rugged rocky reef with ridges and gullies forms the sides of the bay

with areas of more mixed ground and gravel and sand in the central part.

Dive and snorkel surveys were undertaken here in August and a shore survey was completed in October. The dive and snorkel surveys recorded some similar habitats and species, with the dive survey extending slightly deeper (to 3.6m BCD) than the snorkel survey



(to 1.1m BCD), with the surveys also encompassing the middle and low-intertidal part of the shore.

Rocky reef formed the predominant habitat with a mix of boulder, cobbles and pebbles, gravel and sand also present. Bladder wrack *Fucus vesiculosus* and Serrated wrack *Fucus serratus* 



was common on the middle and low shore, respectively, leading into kelp forest (*Laminaria digitata* and *Laminaria hyperborea*) and mixed seaweeds (including *Dilsea carnosa*, pink encrusting seaweed, *Palmaria palmata* and *Phycodrys rubens*) in slightly deeper water. Sea mat *Membranipora membranacea* was present on the kelp fronds. Limpets *Patella vulgata* and beadlet anemones *Actinia equina* were common and a limited amount of sponge (*Halichondria panicea, Suberites* sp. and *Amphilectus fucorum*) was seen. The sediment areas supported lugworm *Arenicola* sp., sandmason worms *Lanice conchilega*, gobies *Pomatoschistus* sp. and bootlace weed *Chorda filum*.

Quite a large range of mobile species were recorded including juvenile gadoids, sand eels *Ammodytes* sp., wrasse (*Labrus* 

bergylta, Symphodus melops and Ctenolabrus rupestris), shanny Lipophrys pholis, shortspined scorpion fish Taurulus bubalis, crustaceans (shore crab Carcinus maenas and prawn Palaemon serratus) and gastropod molluscs (Steromphala cineraria and Littorina littorea).

The shore survey in October focussed on an area of intertidal rocky reef (bedrock, boulders and cobbles) where there were also a number of rockpools present of various sizes and elevations on the shore. A variety of seaweed species were present but not in particularly high abundance, apart from *Cladophora* sp. which was



*Cladophora* sp. which was common. Quite a wide range of sessile and mobile fauna were seen, the most abundant being shore crab *Carcinus* 



*maenas*, hermit crabs, limpets, snakelocks anemone *Anemonia viridis* and barnacles. Sandy areas supported lugworm *Arenicola* sp., and sandmason worms *Lanice conchilega*. A lot of daisy anemones *Cereus pedunculatus* were present in the rockpools.

#### 3.1.4 Cemlyn Bay

Two separate shore surveys were completed at Cemlyn Bay in October. Cemlyn Bay is another bay on the north coast of Anglesey. It faces a north easterly direction and has a unique, elliptical shingle ridge (Esgair Cemlyn) separating the fully marine embayment on the



northern side from a brackish shallow lagoon on the southern side. The shore surveys took place over the same general part of the intertidal shore on the north side of the shingle ridge, in an area of predominantly rocky reef and patches of boulders, cobbles and pebbles with many variously sized rockpools present. One of the surveys also explored a deep rock gully at the eastern side of the shore.

Intertidal fucoid seaweeds *Pelvetia* canaliculata, Ascophyllum nodosum and Fucus serratus were common as were some other seaweeds (*Cladophora* sp., *Chondrus crispus*,

*Polysiphonia* sp., and *Corallina officinalis*), with other seaweeds also present but in lesser abundance. The brown non-native seaweeds wireweed *Sargassum muticum* and the oyster thief *Colpomenia peregrina* were present but in low abundance.

Sessile and mobile fauna were present on the rocky reef and in the rockpools including limpets (*Patella vulgata* and other species), barnacles, littorinid molluscs (*Steromphala umbilicalis*, S. *cineraria, Littorina saxatilis*), beadlet anemones *Actinia equina*, snakelocks anemone *Anemonia viridis*, dahlia anemone *Urticina felina*,



spirorbid worms, light-bulb seasquirts *Clavelina lepadiformis*, star sea squirt *Botryllus schlosseri*, cushion star *Asterina gibbosa*, shrimp, common prawn *Palaemon serratus*, rockling



and shanny *Lipophrys pholis*. Small patches of encrusting bryozoa were present on the underside of some of the rocks.

The deep gully extended to mean low water with gradation of species vertically and horizontally. The gully supported some similar species to

the main rocky habitats with egg wrack Ascophyllum nodosum and serrated wrack Fucus serratus common as were some other seaweed species (Chondrus crispus, Corallina officinalis, Cladophora sp., Lomentaria articulata, Polysiphonia sp.). The orange encrusting sponge Hymeniacidon perlevis was common and snakelocks and beadlet anemones were frequent. There were many limpets, dog whelk Nucella lapillus and common periwinkles present in the gully.



#### 3.1.5 Church Bay (Porth Swtan) South

Church Bay (Porth Swtan) is located on the NW corner of Anglesey and faces due west. A shore survey was undertaken in July over the intertidal area encompassing the upper, middle



and part of the lower shore.

Bedrock reef was the dominant habitat type with some boulders, cobbles and pebbles with sand between the stones and on the upper part of the beach. Some rockpools were present on the shore. Seaweed provided the

main cover on

the rocks with serrated wrack *Fucus serratus*, pink coral weed *Corallina officinalis* and encrusting pink seaweed common. Spiral and channelled wrack (*Fucus spiralis* and *Pelvetia canaliculata*) were present in the upper shore but not particularly abundant.

A variety of sessile and mobile fauna were recorded: barnacles, limpets, spirorbid worms, beadlet anemones *Actinia equina*, snakelocks anemones *Anemonia viridis*, purple top shells *Steromphala umbilicalis* and dog whelk *Nucella lapillus* were all



common and other species present in lower abundance including blue mussel *Mytilus edulis* (rare) and

encrusting orange sponge *Hymeniacidon perlevis* (occasional). Gem anemone *Aulactinia verrucosa* was recorded as present; this is a southern species that reaches its northern limit in the British Isles and this, along with other Anglesey sites where this species was recorded in 2022, provide a useful addition to the records of gem anemones in this part of the UK.

#### 3.1.6 Newry Beach

Newry beach is a readily accessible and popular dive site within Holyhead harbour adjacent

to the Holyhead maritime museum. Two survey dives were undertaken on the same day in July from the beach to the west side of the museum.

A pebble and cobble beach leads into a gently sloping seabed of boulders and cobbles grading into finer sediment down to approximately 3.6m BCD dominated by heavily silted sugar kelp *Saccharina latissima* and mixed red, brown and green seaweeds, with the red seaweeds *Cystoclonium purpureum* and *Polyides rotunda* and brown seaweed *Asperococcus* sp. common. The invasive

non-native red seaweed *Dasysophonia japonica* was frequent in this habitat; this species has been recorded for a number of years at this location. Another non-native species the brown seaweed oyster thief *Colpomenia peregrina* was also present in this habitat. The seasquirts *Ascidiella aspersa* (common) and *Ascidia mentula* (frequent) were a notable component of





this shallow rocky habitat. There were signs of life in the sediment between the rocks with terebellid polychaete worms frequent. Grey topshells *Steromphala cineraria* were frequent with two other molluscs king scallop *Pecten maximum* (occasional) and netted dog whelk *Tritia* 



*reticulata* (rare) seen. Two-spotted gobies *Pomatoschistus flavescens* were abundant with occasional dragonets *Callionymus* sp. and lesser spotted cat shark *Scyliorhinus canicula* (rare).

Beyond the shallow rocky area the seabed continued to slope gently into deeper water transitioning to an extensive area of mud with abundant gobies *Pomatoschistus* sp., many

terebellid worms and lobe shells *Philine quadripartita* (both common) and slender sea pens *Virgularia mirabilis* in low numbers (only recorded as present). The slender sea pens are an unusual occurrence in North Wales and it is only because of the shelter provided by the harbour walls and the development of the mud habitat that they are found here.

#### 3.1.7 Rhoscolyn

Two separate snorkel surveys were undertaken in June and August and a shore survey was completed in October.

The survey in June covered part of the central area of Rhoscolyn bay from the mid/low intertidal down to 1.2m BCD. There was almost equal coverage of rocky reef and areas of cobbles and pebbles with occasional boulders and areas of sand and gravel in the area surveyed. The predominant marine life comprised a mix of brown, red and green seaweeds

with some mobile fauna. Serrated wrack *Fucus serratus* was common as was encrusting pink seaweed on the rocks. The invasive non-native brown seaweeds wireweed *Sargassum muticum* and oyster thief *Colpomenia peregrina* were also common. Other seaweed species were present in lower abundance:



*Fucus vesiculosus, Ascophyllum nodosum, Chondrus crispus, Palmaria palmata, Ulva* sp. and *Chorda filum.* A small amount of sessile fauna was recorded, light bulb seasquirts *Clavelina lepadiformis* and limpets *Patella vulgata* (occasional) and snakelocks anemones *Anemonia viridis* (rare). There were a range of mobile species seen including purple and grey topshells (*Steromphala umbilicalis* and *S. cineraria*), candy striped flatworm *Prostheceraeus vittatus*, mysids, flatfish, shanny *Lipophrys pholis*, gobies *Pomatoschistus* sp., dog whelk *Nucella lapillus* and shore crab *Carcinus maenas*. Sea gooseberries, ctenophores, were common in the surrounding water.

Sparse seagrass *Zostera marina* was present at one point of the dive growing amongst cobbles and surrounded by wireweed *Sargassum muticum*.

The second snorkel survey in August covered part of the western side of the bay over predominantly rocky reef with some boulders, cobbles, pebbles and sand. Many similar species were recorded as for the earlier survey, but notable differences were the presence of seagrass bed (*Zostera marina* recorded as common), a lower abundance of wireweed (*Sargassum muticum* only recorded as present), and marine life associated with the sediment habitats (lugworms *Arenicola* sp., sandmason worms *Lanice conchilega*, shrimp *Crangon Crangon* and daisy anemones *Cereus pedunculatus*). Small sprat-like fish were abundant in the water column.

The shore survey completed in October focussed on the western side of the bay, an area



dominated by rocky reef with some adjacent patches of sand. The survey covered the upper and mid intertidal areas of the shore. Intertidal brown fucoid seaweeds *Pelvetia canaliculata*, *Fucus spiralis* and *Fucus vesiculosus* provided the main plant cover, along with green seaweed *Cladophora* sp., and a localised abundance of gutweed *Ulva* sp. A limited

number of sessile and mobile fauna were recorded with numerous beadlet anemones *Actinia equina* and common periwinkles *Littorina littorea* (both common).

#### 3.1.8 Traeth Crigyll (Rhosneigr)

A single snorkel survey was undertaken at Traeth Crigyll by the village of Rhosneigr on the west coast of Anglesey in June, encompassing the intertidal area down to 1.7m ACD. The shore was predominantly cobbles and pebbles with bedrock reef, boulders, sand and gravel also present.

Mixed seaweeds dominated the rocks with mid-shore and lower shore brown seaweeds present: bladder wrack *Fucus vesiculosus* occasional, and egg wrack *Ascophyllum nodosum* and the lower shore serrated wrack *Fucus serratus* common. Unidentified fluffy green seaweed and red *Polysiphonia* sp.



seaweed were also common. The invasive non-native brown seaweed wireweed Sargassum muticum was occasional. Barnacles and limpets were the most abundant fauna but several mobile species were seen, including sea hare *Aplysia punctata* (occasional), grey topshell Steromphala cineraria (common), thick top shell *Phorcus lineatus* (occasional), common periwinkle *Littorina littorea* (occasional) and beadlet anemone *Actinia equina* (present). Small sprat-like fish, clupeidae, were common in the water. In sandy areas lugworm *Arenicola* sp. were present.

#### 3.1.9 Traeth Llydan

A snorkel survey was undertaken at Traeth Llydan at the southern end of the village of Rhosneigr in July, surveying along the south side of a small rocky promontory that extends out into the sea. Several snorkellers took part in the survey with the results recorded on two Observation forms.

Boulders formed the dominated substrate



with bedrock reef, cobbles and pebbles, sand and gravel also present. The survey covered from the sublittoral fringe to 3.2m BCD. Kelp park and mixed seaweeds provided the main seabed cover with a range of mobile species present. Kelps oar weed *Laminaria digitata* and furbelows *Saccorhiza polyschides* were common and cuvie *Laminaria hyperborea* and sugar



latissima kelp Saccharina were occasional, with several different species of red seaweed present as well. A variety of mobile species were seen with several different fish species recorded: shore crab Carcinus maenas, spot gobies two Pomatoschistus flavescens, corkwing wrasse Symphodus melops, Ballan wrasse Labrus bergylta and pollack Pollachius pollachius were common with several other

fish species in lesser abundance including gurnard, lesser spotted cat shark *Scyliorhinus canicula*, shanny *Lipophrys pholis* and pipefish (Syngnathidae). Beadlet anemones *Actinia equina*, snakelocks anemones *Anemonia viridis*, keelworms *Spirobranchus* sp., limpets and barnacles were the main sessile fauna but none in high abundance. The gem anemone *Aulactinia verrucosa* was recorded as rare at this site. Ctenophores and sand eels *Ammodytes* sp. were present in the water with the sand eels recorded as common.



#### 3.1.10 Porth Nobla



A single snorkel survey was undertaken at Porth Nobla near Rhosneigr in July, on the north side of the bay encompassing an area dominated by bedrock reef with some boulders, cobbles, pebbles and sediment also present. The survey

covered the lower shore area and shallow infralittoral

down to 1.3m BCD. Serrated wrack *Fucus serratus* was common in the lower shore area, leading into kelp forest and kelp park with mixed seaweeds in slightly deeper water (*Laminaria digitata* and *L. hyperborea* both common). Dulse *Palmaria palmata* was also a prominent species within the seaweed community. Corkwing wrasse *Symphodus melops* were common at this site.



#### 3.1.11 Cable Bay (Porth Trecastell)

A single snorkel survey was undertaken at Cable Bay in July along mainly rocky reef on the

southern side of the bay encompassing sublittoral fringe and shallow infralittoral habitats down to 1.2m BCD. As well as bedrock reef, boulders, cobbles, pebbles, gravel and sand habitats were also present.

Kelp forest (*Laminaria digitata*, *L. hyperborea* and *Saccorhiza polyschides*) and mixed seaweeds provided the



dominant seabed cover. A number of different seaweed species were recorded: pink encrusting seaweed, Corallina officinalis, Heterosiphonia plumosa, Dilsea carnosa, Palmaria



palmata, Ulva sp., Himanthalia elongata, Mastocarpus stellatus, Chondrus crispus, Chorda filum and the invasive non-native brown wireweed Sargassum muticum (recorded as present). A wide variety of sessile and mobile fauna were seen at this site, many recorded in low abundance or as 'present'. Gem anemone Aulactinia verrucosa was recorded as common in gravelly pebble areas. Of the mobile species two spot gobies Pomatoschistus flavescens and corkwing wrasse Symphodus melops were common. Abundant lugworm Arenicola sp. casts were present in sediment areas

and there were abundant ctenophores present in the water.

#### 3.1.12 Porth Cwyfan

A single snorkel survey was undertaken at Porth Cwyfan in July covering an area in the middle part of this west-facing bay on the west coast of Anglesey. Boulders, cobbles and pebbles were the dominant seabed substrate with smaller areas of bedrock reef and sediment also present.



other seaweed species were present in lower abundance including, Laminaria digitata, Dictyota sp., Fucus vesiculosus, Fucus serratus, pink and brown encrusting seaweeds, Chorda filum, Osmundea sp., Corallina sp., Jania rubens, Palmaria palmata, Delessaria sanguinea, Polyides rotunda, Dilsea carnosa, Chondrus crispus, Mastocarpus stellatus, Calliblepharis ciliata, Lomentaria articulata, Desmarestia ligulata and the non-native oyster thief Colpomenia peregrina.

A limited variety of sessile fauna was recorded and, apart from barnacles which were common on the rocks, most were in low abundance or recorded as present. Sessile fauna included encrusting sponge,



light bulb sea squirt Clavelina lepadiformis, keelworms Spirobranchus sp., spirorbid worms and snakelocks anemones Anemonia viridis. A range of different gastropod molluscs were seen including numerous pheasant shells Tricolia pullus on the brown seaweed Desmarestia ligulata. Other mobile species included crustaceans and fish (several goby species. Pomatoschistus sp., leopard spotted goby Thorogobius ephippiatus and two spot gobies Pomatoschistus flavescens) and ballan wrasse Labrus bergylta all in low abundance.

#### 3.2 North Llŷn

In 2022 one snorkel survey was undertaken at Porth Dinllaen with one Observation form completed. The survey confirmed the presence of *Zostera marina* seagrass bed at a location to the east of Porth Dinllaen village as well as recording the marine life present on a small rocky outcrop situated adjacent to the shore. A couple of barren channels were observed in the seagrass bed which might indicate impact from boating activity although this could not be confirmed.

#### 3.2.1 Porth Dinllaen

A snorkel survey was undertaken alongside a small rocky outcrop to the east of Porth Dinllaen village on the north coast of the Llŷn Peninsula. Surrounding the rocky outcrop were areas of sand, cobbles and pebbles.





Mixed red, brown and green seaweeds

dominated the rocky habitat. Pod weed

Halidrys siliguosa, fork weed Furcellaria

*lumbricalis* and fine brown seaweed *Sphacelaria* spp. were most abundant,

as was the invasive non-native brown

seaweed wireweed Sargassum muticum

which was common. A large variety of

Kelp forest and mixed seaweeds dominated the rocky reef with Laminaria digitata and Saccorhiza polyschides both common and L. hyperborea occasional. Serrated wrack Fucus



serratus was also common as was the invasive non-native brown wireweed Sargassum muticum growing alongside the reef. Barnacles were the most abundant species of fauna recorded on the rock with several different mobile species seen (gastropod molluscs and crustaceans). Zostera marina seagrass bed was present in the adjacent area of sediment and netted dog whelk Tritia reticulata and shrimp Crangon crangon were also present in the sediment habitat.

## 4. Training and data

#### 4.1 Training and qualifications

A successful Observer course was run in November with 16 participants from across the UK. The course was run by North Wales Seasearch Coordinator Holly Date and National Coordinator Charlotte Bolton.

Three Seasearchers, Paul Smith, Samantha Webb and Dawn Thomas, completed their 5 qualifying forms for their Observer qualification.

#### 4.2 Forms

A total of 24 forms were completed in 2022, comprising 3 Survey forms (1 qualification form and 1 form completed for a shore survey) and 21 Observation forms (8 qualification forms, all for snorkel surveys). Of the Observation forms, 14 were from snorkel surveys and 4 were from shore surveys making a total of 5 forms for shore surveys overall. All the shore survey forms were completed as a group form by all participants taking part. The large number of snorkel and shore surveys indicates a wide range of opportunities for Seasearch being realised in 2022; the snorkel and shore surveys have involved people who would otherwise be unlikely to become involved with Seasearch but, as snorkellers or shore surveyors, have been able to participate.

Forms were also completed for the Llanbedrog Bioblitz event in July, but the information from these is being submitted separately through iRecord as part of the bioblitz data.

A total of 26 people (including dive and snorkel buddies) took part in Seasearch surveys in 2022 with 4 of them completing qualifying observation forms and 1 completing a qualifying Survey form.

All data has been entered onto Marine Recorder and is available on the JNCC National Biodiversity Network Atlas.

### 5. Acknowledgements

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#### Photo credits

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