

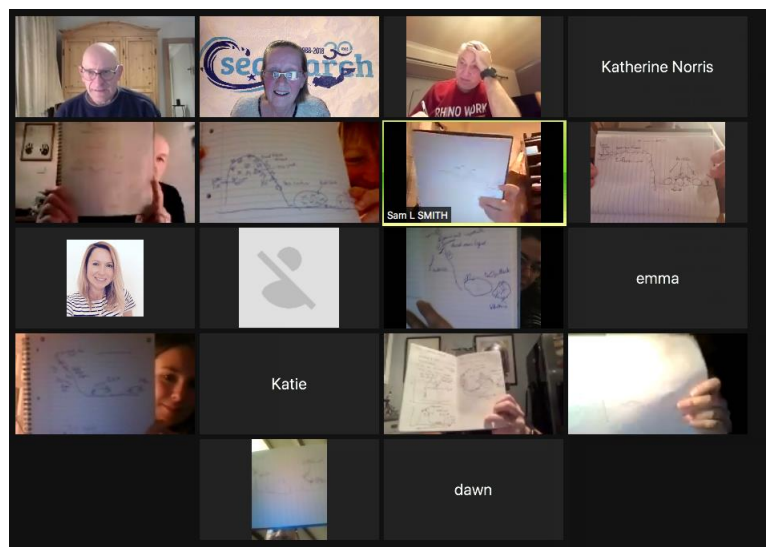
North West England

Seasearch Site Surveys 2021

This report summarises the activities of Seasearch Northwest England including results of surveys carried out during 2021.

Training

The year started out with the first Observer course, primarily requested by Lunesdale SAC who are keen to explore NW Waters. It was a fabulous turnout with 5 divers from Lunesdale and 17 divers in total. This was held over 5 evenings at the end of January. The standard of the sample forms was really high. A second Observer course was run primarily for Furness SAC who also returned a high standard of sample forms, which was very promising for prospective surveys.



Surveys

Roa Island

Roa Island is the southernmost point of the Furness Peninsula in Cumbria. Historically it was an island only accessible by boat or across the sands at low tide then a causeway was built during the 19th century along with a pier from which provides a ferry service to Piel Island. This is the mouth of the Walney Channel (which has provided data from Natural England in the past) and it is from this jetty that divers surveyed the area.

We had 2 trips out to Roa Island organised by Lunesdale (Jul 04) and Furness (Jul 17) SACs to complement the Observer courses held earlier in the year. These 2 surveys were 2 weeks apart and during the interim, it was discovered that the channel had been dredged, which is done periodically to maintain depth for access to Barrow Docks. The terrain was noticeably siltier on the second dive but a period of calm weather allowed it to settle.



04 Jul 2021



17 Jul 2021

The seabed was a mixture of cobbles, pebbles, sand and the occasional small boulder. It was a very rich site, the first couple of metres dominated by mixed seaweeds *Fucus serratus* (saw wrack), *Saccharina latissima* (Sugar kelp) *Laminaria digitata* (Oar weed), *Halidrys siliquosa* (Sea Oak), *Chorda filum* (Mermaid's tresses), *Ulva lactuca* (Sea lettuce) and *Cryptopleura ramosa* (Fine veined crinkle weed). In between the seaweeds, *Halichondria panicea* (Breadcrumb sponge) dominated with crabs – *Inachus sp* (sponge spider crab) and *Carcinus maenas* (Shore crab). Going slightly deeper, no more than 6 m as beyond this, the channel deepens to a sedimentary bottom, the seaweeds were a little more sparse but similar with the addition of *Dilsea carnosa* (Red rags) and *Delesseria sanguinea* (Sea beech). The breadcrumb sponge remained dominant and the cobbles and pebbles attracted more life – one buddy pair was lucky enough to spot 4 common lobsters on their dive!

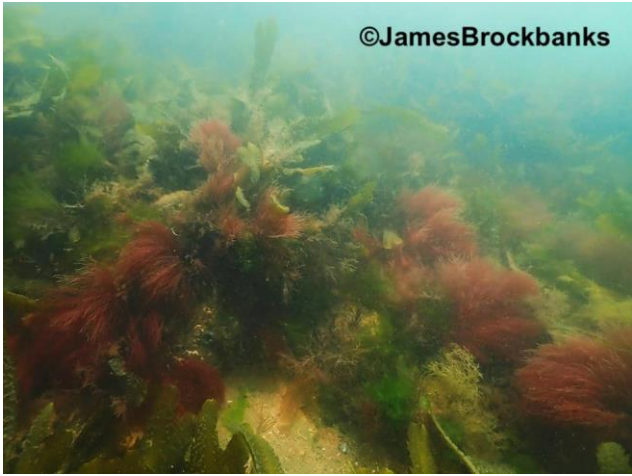
Most phyla were represented including sponges *Scypha ciliata*, *Suberites ficus*, and *Haliclona oculata* (purse, sea orange and mermaid's glove sponges). Plenty of *Urticina felina* (Dahlia anemones) and the odd deadmen's fingers were spotted. Artic cowries (*Trivia artica*) and a lovely *Dentronotus* nudibranch were also snapped.

Ascidians were a bit rarer in their presence – *Diplosoma* and *Dendrodoa grossularia* were present but only in small patches and there was little fish activity - a couple of flat fish, sticklebacks but we did see several fair sized *Taurulus bubalis* (Long spined scorpion fish).

It is a very interesting site with lots of biodiversity and one of the few shore dives available in NW England. It is hoped that we can go further up the Walney Channel to revisit some of the sites previously surveyed by Natural England.

Photos







Walney Island

September 25th we took advantage of flat calm conditions and set out to west Walney Island. Conditions were quite challenging – very low viz, low light levels and a drift made for very basic forms but we did the best we could given these factors and managed to recognise 2 habitats plus several species. Sea weeds were mainly recorded – *Ulva lactuca* (sea lettuce) *Chorda filum* (mermaids tresses) and *Fucus serratus* (saw wrack). A couple of fish were spotted – mainly gobies and one *Scyliorhinus canicula* (cat shark). The site showed there was life, particularly over a cobbled bottom and worth another visit.



Duke's Dock Liverpool

Since the opening of The Albert Dock complex for leisure purposes in 1986, the marine life has taken hold and continues to flourish. The main features of the habitat are silt seabed and stone dock walls. Water quality is paramount as this is a public place thus the marine life is very important in helping to achieve this. Diving is restricted to November – March inclusive, as there is an Aqua Gym in place during the summer months.

A combination of the restrictions as to when we could dive plus COVID meant we hadn't dived the Docks since February 2020 but we managed to squeeze in a dive at the beginning of December on a surprisingly mild day, which allowed us to fill out forms on the dockside.

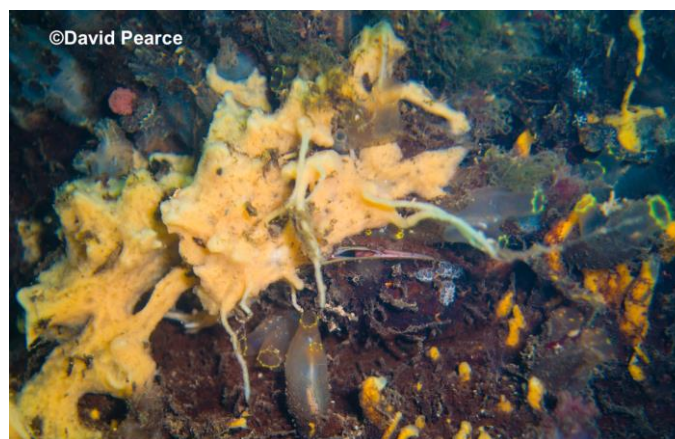
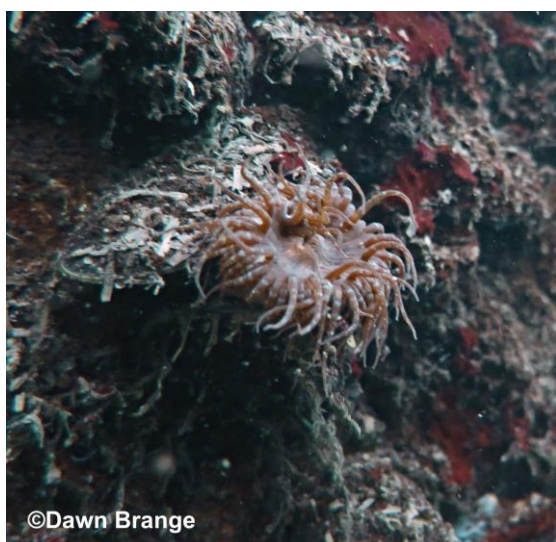
There had been a couple of storms on the weeks preceding the dive reducing the visibility, which was uncharacteristic. There was also a heavy amount of litter in the docks – glass bottles, tin cans, umbrellas, shoes, plastic, scooters..... A lot of these did form structures for life to colonise. The inflatables from the Aqua gym had been removed but there were lots of mooring buoys still in place. It would be interesting to survey these buoys – a plan for our next dive in January 2022.

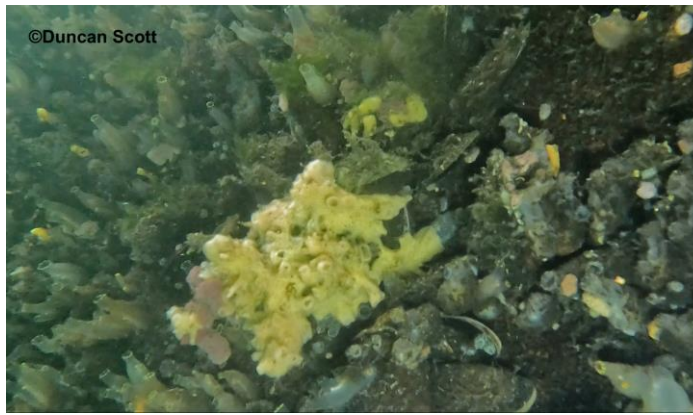
Mytilus edulis (edible mussels) continue to be the dominant species. These are very apparent on both the dock wall and the silty bottom. Other species present included *Ciona intestinalis* (yellow fluted sea squirts), *Diadumene cincta* (orange anemone) and sponges (*Halichondria bowerbanki*). All of these are important filter feeding species and help maintain the clarity of the water. We did see several invasive species - *Styela clava* (leathery sea squirt) and *Ficopomatus enigmaticus* (Australian tubeworm).

Carcinus maenas (shore crabs) continued to crawl over the bottom and scale the walls; peering into the cracks between the brick work we were sure to spy *Gobius niger* (black goby) – but be quick as they quickly retreated to evade being photographed! A new species was observed – a small anemone with striped tentacles - *Anthopleura ballii* which is quite exciting as the nearest record is The Isle of Man.

The dock life continues to thrive and I think it would benefit from another litter pick to prevent it becoming jammed with artefacts.

Photos





Summing up

Despite Covid restrictions, it has been a really great year for Seasearch Northwest England. We managed to revisit Roa Island after many years; the monitoring of Liverpool docks continues and we managed to put a new pin on the map namely the west side of Walney Island which is increasing our knowledge of Morecombe Bay. We have also delivered the Observer course via Zoom which has proved to be very successful. We could not have done this without the enthusiasm and commitment of Furness and Lunesdale SACs.

Species List

Scientific Name	Common Name	Roa Island	Walney Island	Duke's Dock
Porifera				
<i>Halichondria bowerbanki</i>				R
<i>Halichondria panicea</i>	Breadcrumb sponge	C		
<i>Amphilectus ficorum</i>	Shredded carrot sponge	R		
<i>Scypha ciliata</i>	Purse sponge	R		
<i>Suberites ficus</i>	Sea orange	R		
<i>Haliclona oculata</i>	Mermaids glove sponge	R		
	Chimney sponge	R		
<i>Diplosoma sp</i>		R		
<i>Myxilla incrustans</i>		R		
	Yellow Encrusting sponge			C
Cnidaria				
<i>Aurelia aurita</i>	Moon jelly			O

<i>Diadumene cincta</i>	Small orange stalked anemone			O
<i>Urticina felina</i>	Dahlia anemone	O	O	
<i>Cereus pedunculatus</i>	Daisy anemone	F		
<i>Obelia</i>	Kelp fir	C		
<i>Cylista elegans</i>	Elegant anemone	R		
<i>Alcyonium digitatum</i>	Deadmen's fingers	R		
<i>Hydrallmania falcata</i>	Helter skelter hydroid	O		
	Feathery hydroids	O		
<i>Kirchenpaueria sp</i>		F		
<i>Sagartia troglodytes</i>		O		
<i>Anemonia viridis</i>	Snakelocks anemone	R		
<i>Nemertesia sp</i>	Antenna hydroid	O		
<i>Tubularia indivisa</i>	Oaten pipe hydroid	R		
<i>Anthopleura balli</i>	a			R
Crustaceans				
<i>Mysid shrimp</i>				R
<i>Carcinus maenas</i>	Shore crab	C		C
<i>Palaemon serratus</i>				R
<i>Balanus sp</i>	Barnacles	O	O	
<i>Inachus spp</i>	Sponge crab	C		
<i>Pagurus bernhardus</i>	Large hermit crab	R		
<i>Necora puber</i>	Velvet swimming crab	C		
<i>Cancer pagurus</i>	Edible crab	O		
	Small hermit crabs	O		
<i>Homarus gammarus</i>	Common lobster	R		
<i>Macropodia sp</i>	Long legged spider crab	R		

Molluscs				
<i>Mytilus edulis</i>	Edible/common mussels	O		C
<i>Buccinum undatum</i>	Common whelk	O		
<i>Doris pseudoargus</i>	Sea lemon	R plus eggs		
<i>Steromphala sp</i>	Top shells	R		
<i>Trivia arctica</i>	Artic cowrie	O		
<i>Dentronotus sp</i>		R		
<i>Trivia monacha</i>	European cowrie	R		
	Bivalve siphons	R		
	Cockle – empty shells	R		
	Variegated scallops - empty shells	R		
	Oyster non native - empty shells	R		
	Mussels - empty shells	F		
Ascidian				
<i>Ciona intestinalis</i>	Yellow ringed sea squirt			F
<i>Botryllus schlosseri</i>				R
<i>Ascidella sp</i>				C
<i>Botrylloides spp</i>		R		R
<i>Styela clava</i>	Leathery sea squirt			O
<i>Diplosoma sp</i>		R		
<i>Dendrodoa grossularia</i>		R		
Fish				
<i>Gobius niger</i>				O
<i>Gobiusculus flavescens</i>	2 spot goby	R		
	Fry (unknown)			O

	Flounder	R		
<i>Gasterosteus aculeatus aculeatus</i>	Stickleback	R		R
<i>Pholis gunnellus</i>	Butter fish	R		
<i>Scyliorhinus canicula</i>	Cat Shark		R	
<i>Limanda limanda</i>	Dab	R		
	Flat fish	R		
<i>Taurulus bubalis</i>	Long-spined scorpion fish	R		
<i>Pomatoschistus sp</i>	Goby	R	R	R
Algae				
<i>Ulva lactuca</i>	Sea lettuce	R	R	
<i>Ulva sp</i>		R		
	Non-calcareous red algal mat			F
<i>Heterosiphonia</i>			P	
<i>Cladophora</i>		R		
<i>Dilsea carnosa</i>	Red rags	O		
<i>Halidrys siliquosa</i>	Sea Oak	O		
<i>Corda filum</i>	Mermaid's tresses	O	O	
<i>Fucus serratus</i>	Saw wrack	F	P	
<i>Chondrus crispus</i>	Irish moss	O	O	
<i>Dictyota dichotoma</i>		O		
<i>Saccharina latissima</i>	Sugar kelp	F	A	
	Fluffy brown seaweeds	O		
<i>Plocamium sp</i>	Cock's comb	R		

<i>Cryptopleura ramosa</i>	Fine veined crinkle weed	O		
<i>Delesseria sanguinea</i>	Sea beech	O		
	Pink paint weed	R	O	
<i>Laminaria digitata</i>	Oar weed	R		
<i>Caliblepharis ciliata</i>	Eyelash weed	R	P	
<i>Bryopsis sp</i>		R		
<i>Pelvetia canaliculata</i>		R		
<i>Halurus flosculosus</i>		O		
<i>Sargassum muticum</i>	Wire weed	O		
	Leafy red seaweeds	F	C	C
	Feathery red seaweeds	F	F	
	Branching red seaweeds	O	R	
	Small green fluffy algae			R
Worms				
<i>Ficopomatus enigmaticus</i>				R
<i>Sabella pavonina</i>	Peacock worm	R		
<i>Terebellidae</i>		O		
<i>Pomatoceros sp</i>	Keel worms	F	C	
<i>Lineus longissimus</i>		R		
Echinoderms				
<i>Ophiura spp</i>	Brittle sand stars	R		
<i>Asterias rubens</i>	Common starfish	F	C	
<i>Henrica sp</i>	Bloody Henry		P	
Bryozoans				
<i>Bugulidae</i>	Spiral bryozoans	R		

<i>Membranipora membranacea</i>	Sea mat	R	O	
<i>Alcyonidium diaphanum</i>	Mermaids glove bryozoan	R	R	
<i>Electra pilosa</i>		R		

Acknowledgements

Thank you to all who have the tenacity to dive NW England. It is a challenging area but one which has a rich variety of life and we have been rewarded with some interesting dives.

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Seasearch is a partnership between the Marine Conservation Society (MCS), The Wildlife Trusts, statutory nature conservation bodies and others, co-ordinated nationally by MCS and co-ordinated and delivered locally in England by Wildlife Trust and MCS local co-ordinators. For more information on Seasearch and to see all of the partners involved nationally, please visit www.seasearch.org.uk or email info@seasearch.org.uk

