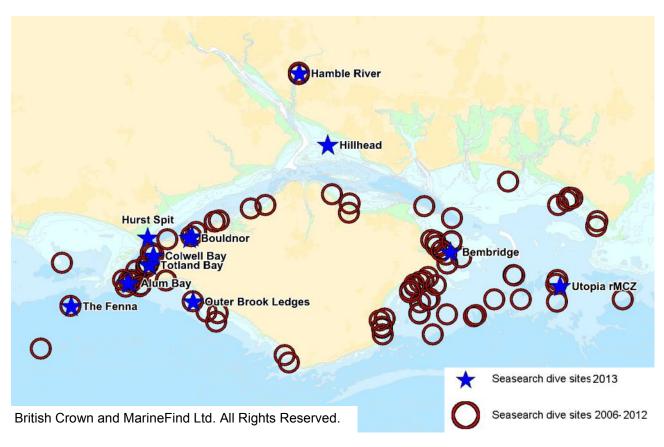


# **Seasearch Newsletter 2013**

Hello and welcome to our 2013 Seasearch Newsletter. Firstly, thank you to all of you who came diving with us! Despite having a very unlucky season with the weather and boat engine trouble resulting in many dive days being cancelled, we were able to rearrange many of these.

In total we organised 5 days of diving including 13 dive sites with two externally organised dives also taking place. In total 29 divers were involved this year, with 18 surveyor forms and 30 observer data forms having been submitted to us so far. In addition to this we have run two Observer courses with 16 participants.

This map shows where our Seasearch dives have taken place this year compared to previous years.









### **Site locations**



rMCZ area	Site Name	Latitude	Longitude	Survey depth (m)	Habitat Type
rMCZ 28: Utopia	Utopia	50°39.367 N	00°52.647 W	18	Rocky reef with mixed ground
rMCZ 20: The Needles	Alum Bay	50°39.850 N	01°34.784 W	6	Subtidal chalk
	Alum Bay	50°39.860 N	01°34.902 W	8	Subtidal chalk
	Totland Bay	50°40.965 N	01°32.826 W	4.6	Seagrass bed
	Totland Bay Pier	50°40.980 N	01°32.780 W	4.9	Wooden pier legs
	Totland Bay pier	50°41.003 N	01°32.757 W	5	Seagrass, timber pier and mixed ground.
	Colwell Bay	50°41.537 N	01°32.372 W	4.9	Seagrass bed
rMCZ 22: Bembridge	Bembridge	50°41.606 N	01°03.326 W	14	Sand and gravel
rMCZ 23: Yarmouth to	Bouldnor Cliff	50°42.710 N	01°28.620 W	10.4	Clay cliff and seabed with life apparent.
Cowes	Bouldnor	50°42.621 N	01°28.876 W	5.5	Clay seabed with sea- weed cover
	Outer Brook Ledges	50°38.677 N	01°28.541 W	13.4	Rocky reef
	Hurst Spit	50°42.656 N	01°32.939 W	3.3	Gravel bed
n/a	The Fenna	50°38.440 N	01°40.475 W	23.2	Wreck
	Hillhead	50°48.321 N	01°15.221 W	5.4	Fine sand
	Hamble River	50°52.805 N	01°17.933 W	7.6	Soft, muddy sediment

### The PANACHE project

Many of you will already know we are partners in a new EU-Interreg funded cross-channel Marine Protected Area monitoring programme taking place across the coasts of Southern England and France. This PANACHE project (<u>Protected Area Network Across the Channel Ecosystem</u>) aims to survey and monitor Marine Protected Areas on both sides of the Channel.

The project enlists volunteers or 'citizen scientists' like yourselves to collect subtidal and intertidal data which can then be used by statutory bodies to inform conservation decisions. There is a particular focus on non-native and climate change indicator species. This does not change the way Seasearch data is collected but provides an additional point of interest through the PANACHE key species list (see below).

The PANACHE project, which contributed funding to both Seasearch and our citizen science intertidal project Shoresearch, will continue to run next year and so we look forward to continuing to work with our UK and French project partners.



# **Overall findings**



Phylum			Most fraguestly recorded	Importance	
		No. species			
		recorded	species		
PORIFERA		28	Dysidea fragilis- goosebump sponge		
			Amphilectus fucorum- shredded carrot sponge	Common in British waters	
CNIDARIA	Hydrozoans	13	Tubularia indivisa- oaten pipe hydroid		
	•		Nemertesia antennina- antenna hydroid	Common in British waters	
	Anemones/corals	7 1	Anemonia viridis- snakelocks anemone		
			Cereus pedunculatus- daisy anemone	MC7 FOCL species	
	Staurozoa		Lucernariopsis campanulata— stalked jellyfish	MCZ FOCI species, UK BAP species	
			Pomatoceros sp.— keel worm	OK BAF species	
ANNELIDA		10	Lanice conchilega— sand mason worm	Common in British waters	
PHORONIDIA	Horseshoe worms	1	Phoronis hippocrepia	Common in British waters	
MORORIBIA				Some <i>Balanus</i> species are non-native	
	Barnacles	1	<i>Balanus</i> sp.	or climate change indicators.	
CRUSTACEA	Shrimps/prawns/	13	Cancer pagurus— brown/edible crab	Common in British wetom	
	lobsters/crabs		Necora puber— velvet swimming crab	Common in British waters	
	Gastropods	21	Calliostoma zizyphinum— painted top shell	Climate change indicator	
MOLLUSCA			Crepidula fornicata— slipper limpet	Invasive non-native	
WIOLLUSCA	Bivalves	3	Pholadidae– piddocks		
	Divalves		Ostrea edulis— native oyster	Oysters are an MCZ habitat FOCI	
BRYOZOA	BRYOZOA		<i>Flustra foliacea</i> — hornwrack	Common in British waters	
		23	Chartella papyracea	Common in British waters	
ECHINODERMATA		4	Asterias rubens – common starfish	Common in British waters	
			Crossaster papposus— common sunstar		
ASCIDIACEA		13	Aplidium punctum— club head sea squirt	Common in British waters	
			Botryllus schlosseri— star sea squirt		
PISCES	<b>Bony fish</b>	20	Pomatoschistus sp.— common/sand goby	Common in British waters	
PISCES			Gobiusculus flavescens— two spot goby  Calliblepharis ciliata— red fringe weed		
	Red	48	Halurus sp.	Some <i>Halurus</i> species are on the WFD reduced algae list.	
ALGAE			·		
	Brown	15	Dictyota dichotoma— brown fan weed	On the WFD reduced algae list. H.	
			<i>Halidrys siliquosa</i> – pod weed	siliquosa is a climate change indicator.	
	Green	4	<i>Ulva lactuca</i> — sea lettuce	On the WFD reduced algae list	
	Green		Cladophora sp.— green branched weed	On the Wild reduced algae list	
PLANTAE	Seagrass	1	Zostera marina— eelgrass	MCZ habitat FOCI and BAP species	
1	TOTAL	226			

**MCZ FOCI (Marine Conservation Zone Features of Conservation Importance) -** These are species or habitats which are threatened, rare or declining and should be protected as they may be more sensitive to pressures. Marine Conservation Zones should be designated to protect these species and habitats.

BAP species (Biodiversity Action Plan species) - Species and habitat types of conservation concern.

**WFD** species (Water Framework Directive species) - Algae used as water quality indicators by the Environment Agency.









### The PANACHE key species and where we found them!

Our new PANACHE project includes a list of species to keep an eye out for across the Channel. These species may be non-natives to our coast and so potentially having an impact on the native species, climate change indicators usually associated with colder or warmer conditions so finding them indicates our climate is changing, or species which are of conservation importance for the designation of the proposed Marine Conservation Zones (MCZs). Not all the species on this list are found in Hampshire and the Isle of Wight but several are found on our shores. Read on to find out more about the PANACHE key species we did find on Seasearch surveys this year, why they are on the list and where we found them.



### Seagrass (*Zostera* sp.)

This underwater plant can form dense meadows which capture carbon, and provide a great habitat for baby fish to hide in.

Why is it on the list? Seagrass beds are nationally rare and are easily damaged, they enhance biodiversity and act as a nursery ground for important fisheries species.

**Where have we found it?** Totland Bay, Totland pier and Colwell Bay.



### Wireweed (Sargassum muticum)

Originally from the Pacific this species is thought to have been used as a packing material for oysters.

Why is it on the list? This non-native seaweed can reproduce very rapidly and can compete with other seaweeds and seagrasses for light and space.

Where have we found it? Totland pier.



Outer Brook Ledges (Copyright Roland Brookes)

### Painted top shell (Calliostoma zizyphinum)

These molluscs have a distinctive pointed shape and come in a variety of colours, those with purple and red bands are the most common.

**Why is it on the list?** This is a climate change indicator species.

**Where have we found it?** Utopia rMCZ, Outer Brook Ledges, Totland Bay, Totland pier, The Fenna wreck, Bouldnor Cliff, Bouldnor and Alum Bay.



### Native Oyster (Ostrea edulis)

Native oysters used to be heavily fished in the Solent and have now become rare. Recent studies have shown an unbalanced sex ratio which my be contributing to a lack of population growth.

Why is it on the list? This species is listed as a UK Biodiversity Action Plan species because it is threatened, but the South Coast and Solent populations appear to be starting to recover.

**Where have we found it?** Totland pier, Bouldnor Cliff and Alum Bay.



# Stalked Jellyfish (*Lucernariopsis* campanulata)

These tiny jellyfish are unusual as they attach themselves to seagrasses and seaweeds rather than float freely in the water column like most jellyfish. The bright turquoise spots you can see in the photo are where the stinging cells are stored.

**Why is it on the list?** It is an MCZ FOCI species which means it is one of the animals the MCZs should be designated to protect.

Where have we found it? Colwell Bay (rMCZ 23: Yarmouth to Cowes). This is important because it proves the population is still there and provides further evidence that the government should designate this area as an MCZ.

# **2013 Dives**

### South Utopia (rMCZ 28: Utopia)

The rMCZ Utopia 28 site is located approximately 20 km (14nm) east of the Isle of Wight coast and incorporates an area of isolated bedrock and boulder reef habitat, interspersed with areas composed of cobbles, pebbles, sand and shell, and surrounded by extensive sediment. This area was named after the tope shark as it partly makes up a pupping ground for these species. It has been proposed as a Marine Conservation Zone because of the fragile coral and sponge communities found here, Utopia is one of only 2 areas in our region with these communities. Our first Seasearch dive of the year here found a large variety of sponges, bryozoans, hydroids and sea squirts on the boulders. On the mixed sediment around these boulders there was lots of hornwrack (*Flustra foliacea*) and nudibranch egg ribbons were frequently found.





### Bembridge (rMCZ 22: Bembridge)

The area of this very large rMCZ which we surveyed was north of the lifeboat station. Unfortunately bad weather conditions made the visibility on the dive poor, therefore surveying was very difficult. The dive took place on a slipper limpet bed many of the limpets had pieces of seaweed attached, lots of burrows were seen and some scallops.

### **Outer Brook Ledges (South Wight Maritime SAC)**



The South Wight Maritime Special area of Conservation covers much of the southern Isle of Wight waters and coastline, this area is protected due to the reefs and sea caves found here. The habitat on this dive was a series of clay gullies pitted with piddock holes and covered in hydroids, sponges and coral worms. Many potato crisp bryozoans (*Pentapora foliacea*) were found on the gullies some of these were large, at 40-50 cm across. A very rare green seaweed- *Derbesia tenuissima* was found here, this species is rarely found in England and records from the Isle of Wight are before 1990.

### **Totland Bay (rMCZ 20: The Needles)**

rMCZ 20 from the Needles up to Norton on the Isle of Wight has been put forward as an MCZ due to the chalk reefs and seagrass beds which are present in the area. This site was dived on two separate occasions, both close inshore, around the pier at Totland and in the seagrass beds close by. The wooden pier legs had been colonized by a variety of sponges, sea squirts, hydrozoans bryozoans and dense foliose algae in the upper meter. Cuttlefish eggs were found in the seagrass bed as were crabs, tube worms and anemones.



### **Hurst Spit**



This survey was conducted as the third dive of the day to see what could be found at a site we had not previously visited. This site was dominated by muddy sand with lots of slipper limpets on top providing an attachment surface for many different species of seaweed and some anemones. A few species of crab could be found hiding in amongst the rocks and shells.

### Alum Bay chalk wall (rMCZ 20: The Needles)

Two separate Seasearch dives were conducted here to try to collect as much data as possible about the species found, as the chalk reef is one of the features this rMCZ has been proposed for. The reef was covered in a short turf of sponges and hydroids as well as red seaweeds on upper rock surfaces. Piddocks had bored into the soft rock and tube worms were also seen.



### The Fenna

This dive showed how large ship wrecks can act as artificial reefs where many different animals congregate, a bit different to our usual dives but it provided some interesting species. Near to the wreck a cetacean skeleton was found, so one of our divers surfaced carrying the skull which we will put to good use! The Fenna lies three nautical miles west of the Needles, it is covered in a short animal turf and provides shelter for fish and crustaceans such as crabs, lobsters, bib, ling and conger eels.





# Bouldnor (rMCZ 23 Yarmouth to Cowes)

Bouldnor has some of the best clay and peat exposures in the region, rising up to 9m below the surface, this was once a cliff which is now submerged and is one of the reasons the area has been proposed as an MCZ. Both the clay cliff and the area around it were surveyed, there was an extensive cover of worms and crustaceans. Fossilised wood was also found embedded in the cliff. The site also has marine archeological significance.

# Colwell Bay (rMCZ 20: The Needles)

The aim of this dive was firstly to survey the seagrass bed in the bay, but also to look out for stalked jellyfish (*Lucernariopsis campanulata*) as they had been found here in 1996. These are a FOCI species for MCZ designation, however during the consultation the government said the evidence for them being in rMCZ 20 was too old and based on too few records. However, one eagle eyed buddy pair spotted some stalked jellyfish attached to the seagrass and took photos of four separate individuals which is enough for the authorities to consider it as reliable evidence. These photos have been sent off to add to the evidence base for rMCZ 20.



# **Update on marine conservation in Hampshire** and the Isle of Wight

### **Marine Conservation Zones**

As citizen scientists, Seasearchers are contributing data to help monitor recommended Marine Conservation zones (rMCZs) in our area. The areas shown in this map were submitted to Government from our coastal area for designation as Marine Conservation Zones. Nationally, 127 forward zones were put disappointingly only 27 of these have been designated, none of which were in our two



more phases of MCZ designation over the next three years, stating "this is just the beginning". Previously socio-economic costs and insufficient evidence were given as reasons for not designating our rMCZs. However, the Trust has been heavily involved in the evidence gathering and stakeholder process for MCZs and believe there is enough data to justify designation of all the sites put forward, including those in Hampshire and the Isle of Wight. We will continue to collect evidence and submit this to the government, hopefully this will be enough to convince them to protect our rMCZs in the next few years.

### **Revised Approach to Management of Fisheries with European Marine Sites**

Site Under European Marine (EMS) A spider crab in the seagrass at Totland which will be protected from beds and rocky reefs must be protected from destructive fishing activities dredging. All fishing byelaws are being currently being reviewed to ensure fishing activities cannot cause damage to habitats or species. Data collected by 'citizen science' projects run by the Trust are used to ensure that management decisions are based on the best available evidence. We are working closely with the Southern and Sussex Inshore **Fisheries** and Conservation Authorities (IFCAs) as the new bylaws are being drafted to ensure they are as effective as possible.



# Next season...



Date	Boat/Location	Activity	Price
Saturday 12th April	HIWWT HQ, Botley	Seasearch Observer Course	£40
Sunday 13th April	Penetrater, Gosport	Seasearch Dive Day	£35
Sunday 4th May	Wight Spirit, Lymington	Seasearch Dive Day	£35
Friday 23rd May	Wight Spirit, Lymington	Seasearch Dive Day	£35
Saturday 21st June	HIWWT HQ, Botley	Seasearch Observer Course	£40
Sunday 22nd June	Penetrater, Gosport	Seasearch Dive Day	£35
Saturday 19th July	Penetrater, Gosport	Seasearch Dive Day	£35
Saturday 16th August	Wight Spirit, Lymington	Seasearch Dive Day	£35
Friday 3rd October	Wight Spirit, Lymington	Seasearch Dive Day	£35

# **Booking**

If you would like to book on to any of our dive days just get in touch and I will send you a booking form, please make sure you remember to send over updated medical or insurance details if these have expired since last year. As always please can you pay by cheque so that if the dive day is cancelled we can just shred the cheque and you don't have to wait for a refund. Please send a separate cheque for each dive date and don't forget you may need to forward date your cheque if you are booking more than 6 months before the dive takes place as we won't bank the cheques until after the dives.



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# How to get involved



As always more information about Seasearch can be found on our website (http://www.hiwwt.org.uk/pages/seasearch.html).

To book onto to any of our courses or dive days, or to be added to the Seasearch mailing list to receive updates on Shoresearch events, simply contact Abbi on 01489 774439 or Abbi.Scott@hiwwt.org.uk.

If you know a group of local divers or a local dive club who would be interested in doing a Seasearch course just get in contact and we may be able to run one for you.

# Thank You!

We hope you have enjoyed our 2013 Seasearch Newsletter. Thank you very much to everyone who came to help us this year diving in all conditions and putting up with our terrible luck in terms of boats and weather!

We would like to extend a special thanks to Jenny Mallinson (ID expert), James Lucey (Seasearch tutor) and Vicky Ashcroft (data entry) for their assistance in running the project. Also to those of you who have sent in photos from Seasearches this year and let me use them to tell everyone about what we find during Seasearch in documents such as this!

I hope to see you on the boat Seasearching next year!

Abbi Scott (Assistant marine officer) - November 2013













