# Dorset Seasearch: Annual summary report 2016



The 2016 Seasearch season in Dorset was very productive: 14 days of organised Seasearch diving were arranged, two Seasearch Observer courses were run with 20 divers attending and a survey of the Peacock Worm beds in Poole Harbour was completed. The 2016 plans, boat booking etc. were set up by Charlotte Bolton and the first half of the diving season was managed under her auspices. Lin Baldock took over at the end of July when Charlotte moved on to the role of National Seasearch coordinator.

## The Dives

#### **Planned Seasearch Dives**

Brownsea Peacock Worm Survey: nine divers were involved in this survey which extended over three days
at the beginning of June, one survey day was lost to poor weather conditions. Ten locations were surveyed:
seven in Wych Channel to the north of Brownsea and three in Blood Alley Lake to the south of the island.
Survey results were provided in a report to Natural England to support the argument for extending the SSSI
designation to include subtidal features in Poole Harbour.



Spiny Seahorse (*Hippocampus guttulatus*) photographed in the Wych Channel, Poole Harbour at a site where there have been a number of seahorse records over the years.

Peacock worm (*Sabella pavonina*) habitat in the western Wych Channel, Poole Harbour. The species does not form dense beds at this site in contrast with those in South Deep where dense stands up to 50cm high develop, supporting sea squirts and sponges in particular.







Peacock worm stands in Blood Alley Lake



Poole Harbour Subtidal Survey Phase 2 Surveys of 14 sites in South Deep, one in Ramshorn Lake and at Pottery Pier were undertaken by five divers over a series of dates in August and September to complete the review of Peacock Worm habitats in Poole Harbour. Slack water is essential for carrying out the survey work and the best times start about 14:00 so we were returning to the slip at Cobbs Quay in the dark by the middle of September. Earlier in the year the survey team had to compete with the toing and froing of trip boats and pleasure craft exploring the narrow channels in South Deep. Results of these two surveys have been submitted to Natural England in a brief report prepared by Lin Baldock: *Poole Harbour Subtidal Survey* – 2016. A report to Natural England, January 2017.







Stands of Peacock Worms in South Deep, Poole Harbour







Fauna in South Deep (L to R): the rare sponge Suberites massa, a sea cucumber, Mermaid's Glove sponge (Haliclona oculata)

• West Bay with Ruby J a series of evening dives with targets to the south and west of West Bay: 25<sup>th</sup> May, 8<sup>th</sup> June, 22<sup>nd</sup> June, 6<sup>th</sup> July. Two evening dives were lost to poor weather and high winds and a couple of the others were extremely gloomy with surface visibility down to less than 200m. A series of sites were selected to target silty, low boulder and bedrock reef features adding information to the database in support of the Lyme Bay SAC where reefs are one of the qualifying features.



Left Imperial Anemone (Jammy Dodger) Capnea sanguinea Ruby's Mud

> **Right**: Adult and juvenile Pink Seafans Stennis Ledges



• Lyme Regis with Blue Turtle four dives over a weekend all within the area covered by the Statutory Instrument (SI) for Lyme Bay which prohibits the use of mobile fishing gear within the area. Saturday's first dive to a site about 1km within the SI boundary was very interesting for the find of chalk outcrops at a diving depth of about 25m. Subtidal chalk outcrops qualify as a habitat Feature of Conservation Interest (FOCI) and as such warrant particular attention. Sea squirts were prominent at the site, notably a bright blue didemnid. The second dive was on a site of bedrock reef with Pink Seafans and a mixed bryozoan/hydroid turf. Sunday was planned for a site on Lyme Roughs which as its name suggests was an area of stony reef with a rich sea squirt community together with erect sponges and large colonies of Potato Crisp Bryozoan. The second dive was a low lying rocky reef with significant accumulations of silty sediment over rock. The community was represented by hydroids, erect bryozoa, Pink Seafans and sponges.



Caldera Edge

Left: Sea squirts and sponges

Right: broken chalk reef and short faunal turf



**West Bay** again with Ruby J with the specific aim of obtaining ground truthing data for the Chesil Beach and Stennis Ledges MCZ. The first dive was on a series of low bedrock ledges southwest of Wyke Regis with well-developed colonies of Potato Crisp Bryozoan and fine examples of Pink Seafans always good to record since it is a protected feature of these rocky reefs. The mixed sediment between the ledges was consolidated by an unusual turf of the orange sea quirt *Stolonica socialis*. The second dive was an exciting drift with Charlotte's Clay the target. This unusual feature runs approximately northwest / southeast about 2km south of Abbotsbury, the clay outcrop, identified as Oxford Clay, qualifies as another habitat FOCI and the reef above supports well developed individual Pink Seafans as well as many juveniles up to about 8cm high. Data obtained from this series of dives which included detailed dive tracks logged on towed GPS units, have been passed on to Natural England and the Southern Inshore Fisheries Committee (SIFCA) in the hope that the MCZ can be extended about 300m all along its southwest boundary in order to include this feature. It is hoped that this qualifies as a "minor tweak" in the review process.



Left: Pink Seafan on Stennis Ledges

Right: Ledge formed by eroding Oxford Clay Charlotte's Clay



• **Portland** with Scimitar: a weekend of diving out of Portland Marina in Weymouth Bay. Saturday saw us doing a fast drift dive along a ledge south of Bat's Head west of Durdle Door with the second target The Ledge on the east side of Portland Bill a site which requires very careful planning if the divers are to benefit from the maximum available slack water time of about 40 minutes. Sunday's targets were a low rocky reef south west of Ringstead and then another brief slack water dive on sand scoured bedrock with an interesting community of sponges including the nationally scarce *Adreus fascicularis* which seems to be a Dorset speciality.









**Above**: colourful animal turf on Bat's Head Reef (left) and Great Ledge (centre & right).

Left & Right: Evidence for bedrock reef beneath mobile sand. Railway Line Wreck Reef



• Swanage with Viper and Mary Jo. Saturday's first dive was a site at the south end of Christchurch Ledge on Dorset's extreme eastern boundary, wonderful underwater visibility and a good site for seaweeds. Second dive was a fast drift beneath Ballard Cliff which turned up a bewildering variety of habitats over a distance of nearly 1km, there were some especially spectacular sea squirt displays. Sunday required an early start for slack water on a site known as CEFAS G about 6.5km south southeast of Swanage the target being a widely repeated seabed pattern shown up by the multibeam plot for the area. On another day with excellent underwater visibility we found ourselves on huge boulders and bedrock outcrops surrounded by very mobile sand. The most prominent inhabitants at this site were numerous very large colonies of Elephant Ear sponge (*Pachymatisma johnstonia*) draped over the rock surfaces. *Adreus fascicularis* was there again too.



Elephant Hide Sponge (Pachymatisma johnstonia) in contrasting habitats

**Left:** "CEFAS-G" & coral worm at 28m.

**Right**: Durlston Bay overhang at 8m



Lyme Regis with Blue Turtle was the final designated Seasearch weekend of the year at the beginning of October. Fine, calm weather and dramatic underwater visibility made for a thoroughly enjoyable weekend. The first dives each day were to deep, rocky reefs towards the southern edge of the Lyme Bay SI – Bib City, so called for the spectacular shoals of bib (*Trisopterus luscus*) which frequented the site and a rather more isolated reef called the Silvers, more serried ranks of Pink Seafans – adults and juveniles. The second dives

were shallower sites south of Charmouth on rough stony reef habitats. Again sea squirts featured prominently in the picture, particularly at the site called "South of Charmouth" where there were literally hundreds of juvenile *Phallusia mammillata* both on mixed ground and on the reef.



Left: The Silvers Shoal of Pout over a mixed population of adult and juvenile Pink Seafans.

**Right**: South of Charmouth Juvenile *Phallusia mammillata* 

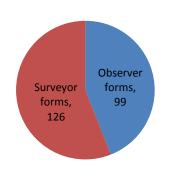


#### Some Statistics

The dives detailed above and unsolicited Seasearch forms, both Observer and Surveyor, resulted in a total of 225 forms for the Dorset region, an excellent return; once reviewed and combined into single "*events*" where appropriate these produced 139 survey events in Marine Recorder, the database system used to collate all Seasearch records prior to them being uploaded to the National Biodiversity Network (NBN). This data set comprises over 6,000 individual records of species, species groups or categories such as "sponge crusts" in more than 180 "samples" (essentially habitats) all from contributions from 54 divers.

The first and last records were provided by Mike Markey: DT16/001 on 12<sup>th</sup> March was a record for a Lumpsucker (*Cyclopterus lumpus*) under Swanage Pier. There are few records of this fish in the Dorset Seasearch database so I would like to encourage people to send in unusual/interesting sightings such as this (e.g. rare animals and plants, interesting behaviour) using an Observation form with at least the minimum of information on it: what, where, when, who. Mike squeezed in the final form DT16/188 on 31<sup>st</sup> December, a dive on the Mulberries in Portland Harbour recording a number of non-native sea squirts and a bryozoan as well as Couch's Goby (*Gobius couchi*) another species for which Dorset appears to be a stronghold.

The Community Seagrass Initiative (CSI) run by Jess Mead, the Weymouth project officer, contributed their data to the Dorset Seasearch database totalling 18 forms collating observations made by the CSI surveyors on their dedicated seagrass monitoring dives.

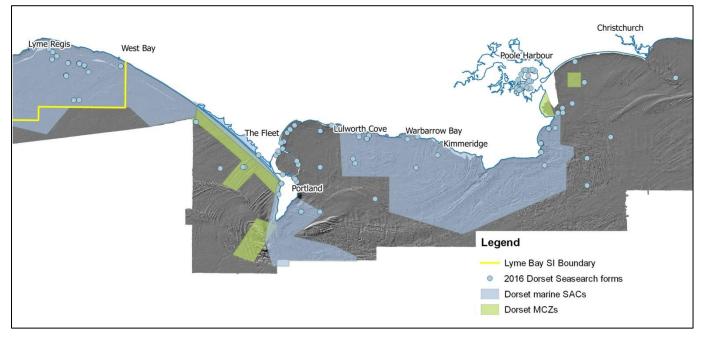








**Interesting species**: please consider sending in an Observation form with your interesting/unusual records: clockwise: Lumpsucker, a marine worm *Oxydromus flexuosus*, Anemone shrimp *Periclimenes sagittifer* 



Location of 2016 Dorset Seasearch records available in the Marine Recorder database.

Appendix 1 below lists the 29 species of conservation interest recorded by Dorset Seasearch in 2016 together with the number of records for each one and the conservation category which applies in each case.

## Outputs Dorset Seasearch 2016

Marine Recorder Snapshot for up load to the NBN - 135 events, >6,000 individual taxon records

Poole Harbour Subtidal Survey - 2016 report to Natural England.

Report to SIFCA/NE "Evidence for bedrock reef – Lulworth Gap & Railway Line Wreck, Weymouth Bay Dorset"

Report to SIFCA/NE "Chesil Beach & Stennis Ledges MCZ proposed extension"

### Acknowledgements

The divers: if you had not submitted your forms Dorset Seasearch would have nothing to talk about – thank you! Alice Hall, Alison Bessell, Angus Berry, Anya Keatley, Barbara King, Cath Quick, Charlotte Bolton, Charlotte Griffiths, Chris Wood, Christopher Bainbridge, David Sellers, Dawn Watson, Desmond Curran, Emma Barton, Emma Collins, Fiona Bowles, Fiona Ravenscroft, Holger Schuhmann, Hugh Waite, Jean Luc Solandt, Jenny Mallinson, Jess Mead, Jessica Menzies, Joanne Southgate, Jon Chamberlain, Josie Pegg, Kathryn Dawson, Laurence Breeze, Lee Hall, Mark Harrison, Martin Openshaw, Mary Breeze, Matt Doggett, Matthew Ferguson, Michelle Price, Mike Markey, Nick Owen, Nigel Topham, Polly White, Richard White, Richard Yorke, Rick Allbrook, Rik Girdler, Ron Lee, Ross Bullimore, Sarah Kernoghan, Sheilah Openshaw, Simon Loveday, Sue Rosser, Tim Clements, Tim Watson, Tony Reed, Vicki Billings.

Thank you to the **skippers and crew** of the charter boats who were patient in searching for our selected dive locations: Bryan Jones (Mary Jo); Martin Jones (Viper); Neil Birdsall & Keith Ferris (Ruby J); Nick Bentall & Lucy Collins (Scimitar); Rob King (Blue Turtle).

#### Poole Harbour Sabella Survey: Phase 1: Brownsea

We were lucky to have the support of small boats and the coxes to ferry divers to and from the sites: John Humphreys with Sea Rush, Rik Girdler and Charlotte Bolton with Dr Squidgy and Nick Owen with Bird Bath.

The National Trust supported the project by transferring our mountain of luggage to and from the jetty at Sandbanks, thank you to Angela Cott for arranging this.

Accommodation was in the Victorian villa owned by the Dorset Wildlife Trust on the island and Chris Thain, DWT warden, provided transport for our mountains of gear to and from the jetty, showing endless patience with our constantly changing plans and timings.

#### Poole Harbour Sabella Survey: Phase 2

Coxes and crew: Martin Openshaw, Sheilah Openshaw (Starship), Rik Girdler and Charlotte Bolton (Dr Squidgy)



Report compiled by Lin Baldock, Dorset Seasearch Coordinator

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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

Dorset Wildlife Trust would like to acknowledge the support and funding received for Dorset Seasearch from the Marine Conservation Society.



## Appendix 1 Species of Conservation Interest Recorded by Dorset Seasearch - 2016

Species	Classification	Number of records	Conservation Category
Adreus fascicularis	Sponge	6	Nationally Scarce
Dysidea pallescens	Sponge	3	Nationally Rare
Suberites massa	Sponge	3	Nationally Rare
Tethyspira spinosa	Sponge	1	Nationally Scarce
Scolanthus callimorphus	Cnidaria - Anemone	1	Nationally Rare
Caryophyllia (Caryophyllia) inornata	Cnidaria - Hard coral	12	Nationally Rare
Hoplangia durotrix	Cnidaria - Hard coral	3	Nationally Rare
Aglaophenia kirchenpaueri	Cnidaria - Hydroid	2	Nationally Scarce
Laomedea angulata	Cnidaria - hydroid	8	Nationally Scarce
Eunicella verrucosa	Cnidaria - Octocoral	47	Nationally Scarce BAP-2007 England_NERC_S.41 WACA Sch 5, Sect 9.1, 9.2, 9.5a
Haliclystus auricula	Cnidaria - Stalked jellyfish	1	BAP-2007 England_NERC_S.41
Lucernariopsis cruxmelitensis	Cnidaria - Stalked jellyfish	1	BAP-2007 England_NERC_S.41
Atrina fragilis	Mollusc - Bivalve	1	BAP-2007 England_NERC_S.41 WACA Sch 5, Sect 9.1, 9.2, 9.5a
Ostrea edulis	Mollusc - Bivalve	20	OSPAR BAP-2007 England_NERC_S.41
Aeolidiella sanguinea	Mollusc - Nudibranch	1	Nationally Rare
Okenia elegans	Mollusc - Nudibranch	1	Nationally Rare
Trapania maculata	Mollusc - Nudibranch	3	Nationally Rare
Trapania pallida	Mollusc - Nudibranch	6	Nationally Scarce
Tritonia nilsodhneri	Mollusc - Nudibranch	12	Nationally Scarce
Phallusia mammillata	Sea Squirt	48	Nationally Scarce
Pycnoclavella aurilucens	Sea Squirt	10	Nationally Scarce
Pleuronectes platessa	Bony Fish	7	BAP-2007 England_NERC_S.41
Solea solea	Bony Fish	2	BAP-2007 England_NERC_S.41
Raja clavata	Cartilagenous fish	8	OSPAR
Raja montagui	Cartilagenous fish	1	OSPAR
Anguilla anguilla	Bony fish	1	OSPAR BAP-2007 England_NERC_S.41
Gobius couchi	Bony fish	4	WACA_Sch 5, Sect 9.1, 9.2, 9.4a, 9.4b, 9.5a, 9.4c
Hippocampus guttulatus	Bony fish	1	Bern-A2 OSPAR ECCITES-B BAP-2007 England_NERC_S.41 WACA-Sch5
Padina pavonica	Alga - Brown seaweed	2	Nationally Scarce BAP-2007 England_NERC_S.41

Nationally Scarce <sup>(1)</sup>	Recorded from 9-55 10kmx10km grid squares but not included in other categories		
Nationally Rare <sup>(1)</sup>	Recorded from fewer than eight 10kmx10km grid squares but not included in other categories		
BAP 2007	Biodiversity Action Plan Priority Species		
England_NERC_S.41	Species "of principal importance for the purpose of conserving biodiversity" covered under section 41 (England) of The Natural Environment and Rural Communities Act (2006)		

<sup>(1)</sup> These definitions are out of date, but highlight that the species has a restricted distribution OR is under recorded.