



# **Dorset Seasearch - Summary 2007**

**Dives-** despite the unfavourable weather that we had last year all of the four Dorset Wildlife Trust Seasearch weekends went ahead and we enjoyed great conditions. Our first weekend was the Seasearch Dive In on the 9/10<sup>th</sup> June from Poole Quay. Areas mainly surveyed were Swanage and Poole Bay. Several of the dives attempted to survey points selected from a map of remotely sensed data in order to assist in the interpretation of these maps of the seabed. This work was continued in the following three weekends, two from Poole again (7/8th July and 4/5th August) and one from Weymouth (15/16<sup>th</sup> September). Turn out was excellent for the Poole dives. Dive boats were chartered by DWT leaving the cost per person fixed regardless of unfilled places.

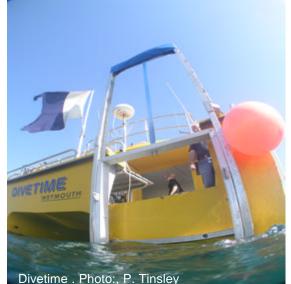
**Courses**- We had one Observer course which was run by Nick Reed in April at Kimmeridge Reserve. Ten divers completed the course and subsequently many forms have been returned to Dorset by some of those divers, including Jayne and Peter Szekely and Wendy Rooke.

**Recording-** For 2007, 110 forms in total were sent in. Of these forms 70 were Observer records and 40 were Surveyor. For some dive sites, the records were compiled when divers were surveying small areas adjacent to each other using a shot line. After this compilation there was a total of 76 survey events for



Dorset. Overall this is a huge increase from last year so many thanks to the dozens of Seasearchers who contributed to this number. Our thanks to skippers Mike Markey and Paul Pike and to Lin Baldock for organising the Seasearch Dive In weekend in June

DWT Seasearch weekends- The three weekends in July, August and September saw several new locations being dived that had been selected from the maps of the seabed produced though side scan maging. The aim was to continue the Trust's efforts to ground truth the sites in order to assist the interpretation of the remotely sensed images. Many of the dives were a great success in terms of interesting habitats for the divers to observe and photograph. A few were not so exciting in terms of scenery but none the less provided valuable data on the sites. Another success was the use of the Trusts new compact underwater digital cameras by volunteers. The cameras are very user friendly and some fantastic results were produced (see below). The photos assist in species ID and provide an excellent snapshot of the biotopes present. In September we had fewer divers present so we took advantage of the space to use the Trust's remote video camera. Using the

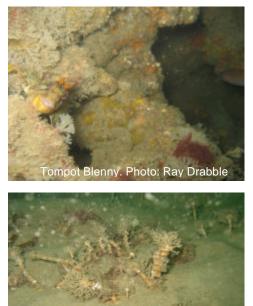


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cameras over habitats that were difficult to interpret from the side scan maps gave us additional spot check data without having to diving them, as well as making extra use of the time between dives.

**Area summaries-** The Seasearch recording for Dorset is divided up into five areas spanning from Lyme Bay to Poole Bay. Throughout the whole area, 96 habitats and 325 species and groups were recorded. As



Sand Mason worms. Photo: Darren Murray

stated, we had 76 separate survey events for the whole area, with the highest number coming from Swanage Bay (35). The popularity of this area was due in part to its use by the Trust for the organised Seasearch weekends.

The table bellow provides a summary of the biodiversity recorded in Dorset in 2007, followed by a map delivering a short summary for each of the areas.

Phylum	Common Name of phylum/groups	Number of species seen within Phylum
Algae	Seaweeds- red, green ad brown	50
Annelida	Segmented Worms	15
Bryozoa	Sea mats	16
Cnidaria	Corals, Hydroids, Jellyfish, Anemones	42
Crustacea	Crabs, lobsters, barnacles	27
Echinodermata	Starfish, sea cucumbers, brittlestars	10
Mammalia	Mammals	1
Mollusca	Snails, limpets, sea slugs, bivalves, cuttlefish, squid	41
Phoronida	Horseshoe worms	1
Pisces	Fish- bony and cartilaginous	47
Platyhelminthes	Flat worms	2
Porifera	Sponges	39
Tunicata	Sea squirts	34
Total		325

#### Summary of biodiversity from Dorset Seasearch records

## Surveys between: 50° 33.9"N 2° 3.53"W - 50° 36.684"N 2° 12.76"W

There were sixteen records from the area with 131 species and groups in total recorded. Several of these records were from Kimmeridge Bay due to its ideal location for Observer training. Subsequently a detailed picture of the Brittle Star beds was built up along with the mixed seaweed habitats of the ledges in the bay. The wreck of the Black Hawk also remains popular. Gravel Sea Cucumber (*Neopentadactyla mixta*) were found in abundance near the wreck of the Patricia II.

Some of the other more common species in the area included Striped/white anemone (*Actinothoe sphyrodeta*), Snakelocks Anemone (*Anemonia viridis*), Cuckoo Wrasse (Labrus mixtus), Dead man's fingers (*Alcyonium digitatum*) and Potato Crisp Bryozoan (*Pentapora foliacea*). Rarer species included red sea squirt (*Ascidia mentula*), Black Tar sponge (*Dercitus bucklandi*) and a Violet Seaslug (*Flabellina pedata*)

#### Lyme Bay (Portland Bill to Lyme Bay) Surveys between: 50° 34.65"N 2° 28.53"W - 50° 33.48"N 2° 26.854"W

Six records were submitted for the area off Chesil Beach, producing a list of 90 different species and groups.

The area is a popular shore diving site with several habitats recorded within a short distance of the beach, including sediment with life apparent and frequent short animal turf on the boulders occurring there. Greater pipefish and cuttlefish were recorded near to the beach. Sites dived further to the West included the Wreck of the Royal Adelaide, where one pipefish was seen.

Some of the most frequently seen species in the area were the Tompot (Parablennius blenny gattorugine), Double crowned fan worm (Bispira volutacornis), Velvet swimming crab (Necora puber), Star seasquirt (Botryllus schlosseri). Snakelocks anemone (Anemonia viridis) and Pollack (Pollachius pollachius). All were seen on four of these six dives, ranging in abundance from rare to occasional, and rare to common for the Snakelocks Anemone and the Pollack.



Portland Bill to Mupe Rocks Surveys between: 50° 34.025"N 2° 25.588"W - 50° 35.78"N 2° 14.13"W

Within this area 117 species and groups from 14 dives were recorded. Of these records six were from four dives organised by DWT with Paul Pike on the 15/16<sup>th</sup> September. From maps produced through remote sensing of the sea bed, we chose several locations to dive on where the habitat was difficult to determine. The aim was to use the Seasearch data to ground truth the maps and to dive areas that usually would not be chosen for surveys. Our thanks to Paul Pike for his help and skill in locating our sites which were located off Grove Point and Weymouth Bay and off Osmington and Grove Point on the second day.

Additionally, a few records surveyed sections of the harbour wall near Balaclava Bay. Lots of litter was observed as well as abundant fish life, short animal turf and large oysters (Ostrea edulis) encrusted to the wall.

## Surveys between: 50° 40.068"N 1° 53.592"W - 50° 39.416"N 1° 50.46"W

Five records were submitted for the area, with four of these from DWT Seasearch weekends with Mike Markey. Most of these were again to ground truth some points selected from remotely sensed data but we also took the opportunity in July to survey a fishing ground where there had been reports of seahorses. The conditions were only suitable for a drift dive, which unfortunately did not allow for thorough searching and so our seahorse hunt did not return any sightings.

Dead man's fingers (Alcyonium digitatum) were recorded on four of the five dives, ranging from rare to occasional. Other frequently seen species included Antenna Hydroid (Nemertesia antennina), barnacles (Cirripedia) and Hornwrack (Flustra foliacea). Rarer species included Elephants Ear Sponge (Pachymatisma johnstonia), Bloody Henry Starfish (Henricia oculata) and Dark tentacled sediment cucumber (Thyone fusus).

Durlston Marine Research Area (from St Aldhelms Head to Old Harry's Rocks) Surveys between: 50° 35.207"N 2° 1.199"W - 50° 30.294"N 1° 50.187"W There was a total of 35 records

for the area with 251 species and groups .observed.

Three of the organised DWT Seasearch dives surveyed in this area, diving sites just off from Swanage. These weekends included the Seasearch Dive In on the  $9/10^{th}$  June. Again we were aiming to ground truth some locations that were difficult to assign by eye from the maps. The turn out for both the Dive In and the other two weekends was high and 21 of the records from this area were from these DWT events. Our thanks to Lin who organised the Dive In, and also to Mike Markey our skipper.

On 22<sup>nd</sup> September, a very rare sighting was made in this area by Matthew Doggett and Polly Whyte at Swanage Pier- a *Periclimenes sagittifer*, the Partner or Snakelocks Anemone Shrimp. The species, which lives in symbiosis with the Snakelocks Anemone, is more common in the Channel Islands and the Mediterranean and this is believed to be the first confirmed UK sighting (see below for photo).

Those species occurring on the highest number of records included Double crowned fan worm (*Bispira volutacornis*) in 27 records with an abundance ranging from rare to abundant. Hornwrack (*Flustra foliacea*) was seen on 25 records, ranging from rare to abundant. Elephant's ear sponge was also frequently seen (24 records) ranging, also ranging from rare to abundant. Other species recorded on a high number of dives included Orange Crater Sponge (*Hemimycale columella*), Striped/white or Sandalled anemone (*Actinothoe sphyrodeta*) and Painted top shell (*Calliostoma zizyphinum*)

Map courtesy of Google Earth, 2008

Interesting sightings- The nationally scarce and protected species, the Pink Sea Fan (Eunicella verrucosa) was recorded on four separate occasions, ranging from rare to common in abundance. Interestingly, its most easterly recording was Mark's Reef in Poole Bay, noted during a DWT weekend. Other nationally rare species to be recorded were Carpet Coral (Hoplangia durotrix) and Southern Cup Coral (Caryophyllia *inornata*), both with one sighting. The nationally scarce species Trumpet Anemone (Aiptasia mutabilis) (7 recordings, rare to common in abundance) was seen as were Yellow Prong sponge (Adreus fascicularis) and White star or Cluster Anemone (Parazoanthus anguicomus) (also an indicator of climate change) both recorded once in Dorset.

One of the most interesting sightings was the Partner or Snakelocks Anemone Shrimp, *Periclimenes sagittifer*, at Swanage Pier in September. Show here is the photo taken by Matthew Doggett of the shrimp in an anemone.



Periclimenes sagittifer. Photo: Matt Doggett

**Google Earth-** All of the locations for the records from previous years Seasearches can now be downloaded to view on Google Earth. Also available to view on this programme are photos of species and habitats from some of the 2007 records.

http://dorsetwildlife.co.uk/cms/content/view/246/9/

The information available on Google Earth will be updated throughout the next season. It can be a very useful tool in planning future Seasearch dives for local divers and those from further a field wanting to know more about the area.

Many divers took part in the 2007 surveys- our thanks to all of them as well as the skippers. the photographers who submitted their photos for the database and the dive club members who promoted Seasearch within their organisations. Seasearch is a volunteers' underwater survey project for recreational divers to actively contribute to the conservation of the marine environment. It is coordinated nationally by a Steering Group led by the Marine Conservation Society For details of Seasearch visit www.seasearch.org.uk Seasearch in Dorset is coordinated by Dorset Wildlife Trust. The programme is supported by the JNCC, the Environment Agency and Natural England and we gratefully acknowledge their funding. For more details on Dorset Wildlife Trust's Seasearch programme please visit www.dorsetwildlife.co.uk

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