# Annual Report 2007



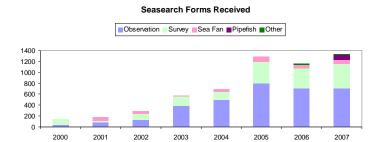
www.seasearch.org.uk

This report summarises Seasearch activities in 2007. It includes a summary of the main surveys undertaken and reports produced (or being produced) and a summary of the data collected. This includes a summary of records of Biodiversity Action Plan habitats and species records and nationally scarce and rare species. It also includes information on how the data is managed and made available and a summary of the training courses run for volunteer divers.

All of the reports referred to may be downloaded from the Seasearch website and the species data may be accessed through the National Biodiversity Network website.

#### A record year for Seasearch recording

More Seasearch records were made by volunteer divers in 2007 than ever before, with 1,332 forms received, a 4% increase on the previous highest number in 2005. See page 7 for further information on the make up of the data and where it can be seen and used.



The Observation and Survey form data (1,163 forms) has been entered into the Marine Recorder database and is available to use and download from the National Biodiversity Network website. It has been gathered into 73 area based surveys from Orkney in the north to Alderney in the south and Kerry in the west to Norfolk in the east. The number of surveys in each area is:

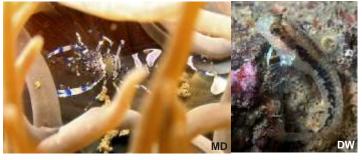
Scotland	23
Northern Ireland	5
Republic of Ireland	2
Wales	10
Northern & eastern England	3
South-east England	3
South-west England	26
Channel Islands	1

In addition to these 73 surveys there are separate datasets for pipefish (94) and sea fan (67) survey forms.

A summary of the main surveys carried out in each area is shown on pages 2&3. Summary or full reports for many of these surveys are available to download in PDF format from the Seasearch website. The surveys for which a report is available are marked ®

#### New southerly species moving in?

Whether it is a result of sea temperature rises (and 2006-7 was a very warm winter in sea temperature terms), or better recording, two species not previously recorded from the UK appeared on the south coast of England in 2007. These were the anemone prawn, *Periclimenes sagittifer* (left) recorded in Dorset and the striped blenny, *Parablennius rouxi* (right) recorded in South Devon. Coupled with continued sightings of the red blenny, *Parablennius ruber* in the Isles of Scilly and first records of crawfish, *Palinurus elephas* in the Farne Islands, a tompot blenny in Norfolk and our work on snake pipefish, there is clear evidence of distribution changes in these mobile species. A species list is on pages 4 and 5 and a report on the pipefish survey on page 6.



#### Lyme Bay sea fans still under threat

As part of continuing pink sea fan surveys, we studied a number of sites in Lyme Bay, both inside and outside the voluntary closed areas. The best site found lies outside the closed areas and is unprotected, whilst some sites within closed areas remain highly degraded and unlikely to recover for many years. A survey report can be downloaded from the Seasearch website.















Seasearch is co-ordinated by the Marine Conservation Society on behalf of the Seasearch Steering Group which comprises the Marine Conservation Society, Wildlife Trusts, Joint Nature Conservation Committee, Natural England, Countryside Council for Wales, Scottish Natural Heritage, Environment and Heritage Service Northern Ireland, Environment Agency, Marine Biological Association, Nautical Archaeological Society, British Sub Aqua Club, Sub Aqua Association, Professional Association of Diving Instructors, Scottish Sub Aqua Club and independent marine life experts. Financial support in 2007 at a national level has been given by the partners whose logos are shown above.

# Surveys undertaken in 2007

These pages summarise the main surveys undertaken in 2007. These were all arranged by Seasearch Coordinators and in many cases Summary Reports ® can be downloaded from the Seasearch website.

In addition to the surveys outlined here there were many other dives both organised by Seasearch coordinators and undertaken by individual divers.

There are also area based summary reports for Northern Ireland, Cornwall, Devon, Dorset, Hants/IOW and Kent on the Seasearch website.

The map shows the sites from which records were received.

- **4 Rathlin Island:** survey limited by poor weather to areas of Church Bay. Several Northern Ireland conservation priority species were recorded including sand star and slender sea pen. ®
- **5 Antrim Coast survey and fan shell hunt:** dives targeting habitats suitable for the fan mussel *Atrina fragilis* (BAP species). Sites surveyed included the Tuns Bank at the Mouth of the Foyle. Ulster Museum found one individual on Rathlin island (right) which Seasearch was able to go and monitor later in the summer to check it had not been disturbed. New sites around the Giant's Causeway and Carrick-a-reede rope bridge were also surveyed. ®

- **1 Loch Sunart and North Mull:** included surveys of new sites on North Mull (Bloody Bay) and outer Loch Sunart (Big Stirk) and updated records for existing biodiverse sites such as the flameshell reefs in the Laudale Narrows, the wall at Auliston Point, Risga pinnacle and Slignach Mhor.
- 2 Insh Island sea fans: survey targeting northern sea fans and sea fan anemones (both BAP species) in the Firth of Lorn. ®
- 3 Inchmarnock Island: survey of a newly reported maerl bed (BAP habitat) which may be one of the last surviving in the Clyde and also a rare flame shell reef (BAP habitat). ®



- **6 Strangford Lough:** continued monitoring of horse mussel beds (BAP habitat). Surveys were undertaken in two small areas which are to be closed to all disturbance to allow the beds to recover. These were to examine the current extent and condition of the beds. As well as horse mussels, NI conservation priority species, including the red sea cucumber and slender sea pen, were recorded.
- **7 Northern Ireland wrecks:** the wrecks of the Drake and the Templemore were surveyed as part of other surveys. In addition, several records from other wrecks were collected by independent dives. Some interesting species were recorded including the nationally scarce nudibranch *Okenia elegans* from the Alastor wreck, the first time it has been recorded in Strangford Lough.
- 8 Anglesey: surveys of wrecks, rocky reefs and pinnacles targeting previously unrecorded areas.
- **9 North Llyn:** previously un-surveyed sites in the Pen y Llyn a'r Sarnau SAC chosen for their proximity to potentially sensitive habitats such as seagrass, *Musculus discors* beds and potential ray nursery grounds, Two new *Musculus discors* beds recorded, and areas where the unusual solitary hydroid *Corymorpha nutans* was abundant. ®
- **10 South Llyn:** surveys focussed on the little surveyed seagrass bed (BAP habitat) at Criccieth, in the Pen y Llyn a'r Sarnau SAC. Patchy seagrass beds recorded, with an abundance of *Labidoplax digitata*, greater pipefish and the much rarer deep-snouted pipefish. Mantis shrimp *Rissoides desmaresti* recorded in their burrows off Llanbedrog. ®
- **11 North Wales skates & rays:** surveys supported by The Shark Trust to record suspected skate and ray breeding and nursery grounds. Photographs of the eggcases were taken *in situ*, and the habitat recorded.
- **12 Cardigan Bay:** survey targeting sites and providing seabed habitat and species information in areas where dolphin foraging is observed (BAP species) project co-ordinated with Friends of Cardigan Bay and Newquay Marine Wildlife Centre.
- **13 North Pembrokeshire coast:** continued collection of habitat and species data between Abercastle and Strumble Head and targeting sites for the northern limits of pink sea fans in Wales (BAP species).
- 14 South of St Brides Bay: Hen and Chicks and Stack Rock: surveys providing data for a habitat and species divers guide of these sites. ®
- **15 Skomer urchin surveys:** providing habitat and species information to complement the Skomer MNR volunteer urchin surveys.
- **16** Dau Cleddau and entrances to Milford Haven: oyster bed (BAP habitat) surveys from a number of sites in the Dau Cleddau and surveys of new rocky reef sites identified by multibeam surveying to identify habitats and species present. ®

**21 Lossiemouth:** dives targeting unsurveyed sites offshore of Queens Street Reef, the wrecks of the Pheron and Fylla off Spey Bay, George's Reef, reefs south of Tarbert Ness and under the cliffs east of Hopeman.

**22 Berwickshire:** surveys of lesser dived sites such as Ross Carrs off Burnmouth and beneath Fast Castle beyond the north end of the St Abbs Voluntary Marine Reserve.



**17 Lundy:** a mixture of old and new sites surveyed on both sides of the island. Pink sea fans and sunset cupcoral (BAP species) were a focus for recording.

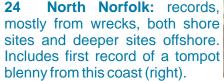
**18 Cornwall sea fan surveys**; targeting sites on both the north and south coasts of Cornwall. ®

**19 Isles of Scilly:** survey recording new sites and rerecording others. Notable for new record of sunset cupcoral (BAP species) photo below. ®

20 Manacles: survey targeting sea fans (BAP species)& locating a new sea fan forest south of the Manacles.



23 Farne Islands: surveys of new sites, including discovery of an interesting rock pinnacle with no urchin grazing. Record and photograph of a crawfish, believed to be the first for this part of the North Sea.





**25 Kent:** continuation of surveys on Kent's chalk and mixed sediment seabeds, focussed around Dover, and now also venturing to the North Kent coast. Highlights included the first confirmed record of potato crisp bryozoan, *Pentapora foliacea*, this far east.

**26 Lyme Bay:** surveys principally concentrating on the impact of bottom trawling activities on pink sea fans and other species. Also looking for marine litter associated with the MSC Napoli wreck. ®



27 Torbay: surveys of coastal sites. Particular records of interest were short snouted seahorses (photo left) and native oysters (both BAP species) at Babbacombe and an extensive patch of the nationally scarce pink fingers in a shallow cave at Oddicombe.

Seasearch divers also assisted Torbay Coast & Countryside Trust with their surveys of the eelgrass beds (BAP habitat) around Torbay.

**28 Salcombe:** surveys of sites around Gammon Head & Prawle Point which had not been previously recorded.

**29 Bigbury Bay:** surveys of the wreck of the Oregon for pink sea fans (which were abundant) and a variety of other sites. Sea fan anemones (BAP species) were found on the wreck of the Persier after an apparent absence of some years.

**30 Plymouth Drop Off:** part of an on-going survey providing more records of BAP and rare species such as sunset cup-coral, Weymouth carpet coral, southern cupcoral and the rare pink fingers *Alcyonium hibernicum*, plus a single record of crawfish and sightings of the rarely recorded lace bryozoan *Reteporella sp.* The large numbers of pink sea fans were generally healthy although at one site they had heavy tunicate fouling.

**31 Alderney:** the first baseline survey of sublittoral habitats and species around the island. Contributing to the scant marine biological records available to the new records centre on the island and to the assessment of proposals for tidal power generation. ®

#### Species recorded in 2007

The following table provides a summary of the species records made in 2007.

Biodiversity Action Plan species and habitats continue to be a particular focus for our surveys and are highlighted in the table as are occurrences of nationally scarce and rare species as defined by the JNCC. The records also include some nationally scarce and rare fishes which are not in the JNCC list.

During 2007 the list of BAP species and habitats has been revised. The new species which have been added include a number on which we have already been working, such as the fireworks anemone and northern sea fan. Records of these species are also included below and we will actively promote recording of those that we can be sure of identifying in situ, during 2008.

#### Commonly recorded species

(number of records in brackets)

#### BAP, Scarce (S) and rare (R) species

#### Porifera, Sponges (67 species)

Cliona celata, boring sponge (324)

Pachymatisma johnstonia, elephant hide sponge (172) Hemimycale columella, crater sponge (168)

Dysidea fragilis, goosebump sponge (151)

Axinella dissimilis, yellow staghorn sponge (148)

Amphilectus fucorum, shredded carrot sponge (112)

Raspailia ramosa, chocolate finger sponge (103) Tethya citrina, golf ball sponge (82)

Suberites ficus, sea orange (66)

Polymastia boletiformis, hedgehog sponge (62)

Adreus fasicularis (R) 8 records from Poole Bay, Bigbury Bay & Alderney Axinella damicornis (S) 41 records from Small Isles, Rathlin, N Llyn, N Pembs, Milford Haven, Lundy, Isles of Scilly, S Devon, Lyme Bay, Alderney CI

Lundy, South Devon, Dorset

Phakellia ventilabrum (S) 1 record from Loch Sunart Tethyspira spinuosa (S) 4 records from N Llyn

## Cnidaria, Jellyfish, hydroids, siphonophores, anemones and corals (100 species)

Jellyfish 6 species

#### Siponophores probably 1 species Hydroids 39 species

Nemertesia antennina, antenna hydroid (256)

Obelia geniculata, kelp fir (125)

Nemertesia ramosa, branched antenna hydroid (89)

Tubularia indivisa, oaten pipes hydroid (75)

### Anemones and corals (47 species)

Alcyonium digitatum, dead men's fingers (484)

Caryophyllia smithii, Devonshire cup-coral (389)

Urticina felina, dahlia anemone (225)

Anemonia viridis, snakelocks anemone (210)

Actinothoe sphyrodeta, white striped anemone (182)

Corynactis viridis, jewel anemone (176)

Metridium senile, plumose anemone (162) Eunicella verrucosa, pink sea fan (160)

Sagartia elegans, elegant anemone (136)

Cereus pedunculatus, daisy anemone (99)

Thymosia guernei, mashed potato sponge (S), 17 records from Donegal,



stalked jellyfish (new BAP) 9 records from Harris, Kerry, Pembrokeshire, Lands End, Isle of Wight & Alderney CI

Diphasia alata (S) 2 records from Rathlin Island

Alcvonium hibernicum, pink fingers (S) 2 records from S Uist & L. Sunart Swiftia pallida, northern sea fan (newBAP) 10 records from Harris, S Uist, Small Isles, Loch Sunart, Firth of Lorn and 3 sites in Cork and Kerry

Eunicella verrucosa, pink sea fan (BAP) 160 records + dedicated survey records. Few records from Donegal, Kerry, N Pembrokeshire & Alderney CI, most from Devon & Cornwall

Funiculina quadrangularis, tall sea pen (BAP) 2 records from Lochs Nevis & Duich

Pachycerianthus multiplicatus, fireworks anemone (S, newBAP) 3 records from Loch Duich & Kerry

Parazoanthus anguicomus, white cluster anemone (S) 9 records from Small Isles, Loch Sunart (photo left), Firth of Lorn and S Devon

Parazoanthus axinellae, yellow cluster anemone (S) 29 records from

Lewis, N Pembs, Lundy, Isles of Scilly, S Cornwall, S Devon, Alderney Aiptasia mutabilis, trumpet anemone (S) 23 records form S Pembs, Kerry, Lundy, S Cornwall, S Devon, Dorset and Alderney CI

Amphianthus dohrnii, sea fan anemone (R, BAP) 6 records from Isles of Scilly, Lizard, S Devon

Mesacmaea mitchelli, policeman anemone (S) 4 records from Lundy, Whitsand Bay & Lyme Bay

Caryophyllia inornata, southern cup-coral (R) 19 records from Kerry, Lundy, Isles of Scilly & Dorset

Hoplangia durotrix, Weymouth carpet coral (R) 4 records from Whitsand

Bay, Lyme Bay & Poole Bay Balanophyllia regia, scarlet and gold star coral (S) 7 records from Norh Cornwall, Isles of Scilly, Lands End, Plymouth and Alderney CI

Leptopsammia pruvoti, sunset cup-coral (R, BAP) 12 records from Lundy, a new site in Isles of Scilly, Plymouth & Lyme Bay

Ctenophora, Comb Jellies (3 species)

Platyheminthes, Flat worms (2 species) Nemertea, Ribbon worms (2 species) Echiura, Spoon worms (1 species) Annelida, Segmented worms (23 species)

Pomatoceros triqueter/lamarckii, keelworm (212) Lanice conchilega, sand mason worm (168) Bispira volutacornis, double spiral worm (165)

Amalosoma eddystonense, (S) 1 record from Loch Nevis

Sabellaria spinulosa, ross worm (BAP Habitat - reefs) 21 records from Anglesey, N Llyn, Gower, Lyme Bay, Isle of Wight and Kent

#### Pycnogonida, Sea spiders (9 records, most not identified to species)

#### Crustacea, Barnacles, amphipods, isopods, crabs, lobsters and prawns (60 species)

Necora puber, velvet swimming crab (482) Cancer pagurus, edible crab (431) Maja squinado, spiny spider crab (206) Homarus gammarus, lobster (196)

Pagurus bernhardus, common hermit crab (185)

Rissoides desmaresti, northern mantis shrimp (S) 1 record from S Llyn Periclimenes sagittifer, anemone prawn, first record for UK - Swanage Alpheus macrocheles, snapping prawn, few previous records, all offshore, 1 record from Lyme Bay

Palinurus elephas, crawfish (newBAP) 8 records from Kerry, N Pembs. Lundy and Farne Islands - first record for Eastern England

#### **Commonly recorded species**

(number of records in brackets)

#### Mollusca, shells, seasings, bivalves and cephalopods (157 species)

Calliostoma zizyphinum, painted topshell (287) Pecten maximus, great or king scallop (124) Gibbula cineraria, grey topshell (118)

Hinia reticulata, netted dogwhelk (80)

Crepidula fornicata, slipper limpet (74)

A non-native species. Records from Milford Haven and most of the English Channel coast



Haliotis tuberculata, ormer (does not occur in UK) Records from Alderney Caloria elegans, a sea slug (R) 1 record from N Llyn

Doris sticta, sponge sea slug (S) 1 record from Isles of Scilly

BAP, Scarce (S) and rare (R) species

Thecacera pennigera, orange specked sea slug (S) 4 records, Milford Hav Trapania pallida, a sea slug (S) 1 record from Milford Haven

Tritonia nilsodhneri, sea fan sea slug (S) 16 records from Devon, Cornwall and Alderney CI

Okenia elegans, a sea slug (S) 4 records from Strangford Lough, Pembs and Lands End

Modiolus modiolus, horse mussel (reefs are BAP habitat) 16 records from western Scotland, Northern Ireland, Cornwall and N Kent

Atrina fragils, fan mussel (S, BAP) Records from Rathlin and Salcombe Limaria hians, flame shell (newBAP habitat) photo left. 1 record from Inchmarnock, Sound of Bute

Ostrea edulis, european oyster (BAP) 33 records from Strangford Lough, Milford Haven, S Devon, Dorset, Isle of Wight, Sussex and Kent Arctica islandica, Icelandic cyprine (BAP) 11 records from Loch Nevis, Loch Fyne, Rathlin, Strangford Lough, S Llyn, Milford Haven & Poole Bay

#### Brachipoda, lamp shells (1 species)

#### Bryozoa, sea mats and sea mosses (59 species)

Pentapora foliacea, potato crisp bryozoan (192) photo right Membranipora membranacea, sea mat (186)

Flustra foliacea, hornwrack (166)

Alcyonidium diaphanum, finger bryozoan (150)

Electra pilosa, frosty sea mat (97)

#### Phoronida, horseshoe worms (1 species)

#### Echinodermata, starfish, sea urchins and sea cucumbers

Asterias rubens, common starfish (403)

Echinus esculentus, common sea urchin (392)

Marthasterias glacialis, spiny starfish (331)

Henricia oculata/sanguinolenta, bloody Henry (275)

Holothuria forskali, cottonspinner (194)

#### Tunicata, sea squirts

Clavelina lepadiformis, light bulb sea squirt (203)

Botryllus schlosseri, star sea squirt (175)

Ascidia mentula, red sea squirt (113)

Aplidium punctum, club head sea squirt (97)



Phallusia mammillata, giant sea squirt (S) 8 records from Lyme Bay, Portland and Purbeck

#### Pisces, fishes (93 species)

(fish are not included in the JNCC rare and scarce species lists. Rarity below is based on records in the NBN)

Labrus bergylta, ballan wrasse (370)

Ctenolabrus rupestris, goldsinny (310)

Pollachius pollachius, pollack (273)

Labrus mixtus, cuckoo wrasse (262)

Gobiosculus flavescens, two-spot goby (186)

Parablennius gattorugine, tompot blenny (180)

Trisopterus luscus, bib (169)

Callionymus lyra, dragonet (151)

Centrolabrus exoletus, rock cook (138)

Thorogobius ephippiatus, leopard spotted goby (133)

Myxine glutinosa, hagfish (few records but inshore records all close to Tynemouth) 1 record from Tynemouth

Lophius piscatorius, angler fish (new BAP) 3 records from Cornwall & Devon Molva molva, ling (BAP) 21 records Orkney, E Scotland, E England,

Northern Ireland, Lundy, S Devon & Cornwall

Trachurus trachurus, horse mackerel (BAP) 2 records at Manacles, Cornwall Tripterygion deleasi, black faced blenny (R) 12 records from Plymouth,

Purbeck & Alderney - all within the known range

Buenia jeffreysii, Jeffrey's goby (S - most records offshore) 1 record L. Nevis Balistes carolinensis, grey triggerfish (S - southerly species) 6 records from Plymouth, Lyme Bay, Portland and Purbeck

Parablennius ruber, red blenny (R - recent addition to UK species lists) 2 records from Isles of Scilly

Parablennius rouxi, striped blenny (Portugal/ N Mediterranean species not recorded from UK waters. I record from S Devon

#### Mammalia, mammals (5 species of otter, seals, dolphin and porpoise)

#### Algae, seaweeds (127 species)

Delessaria sanguinolenta, sea beech (234) Laminaria hyperborea, cuvie or forest kelp (221)

Laminaria saccharina, sugar kelp (120)

Dilsea carnosa, red rags (100) Calliblepharis ciliata, red fringe weed (96) Padina pavonica, peacock's tail (S) 1 record from Alderney CI Carpomitra costata (S) 4 records from Northern Ireland, Lundy and Alderney CI

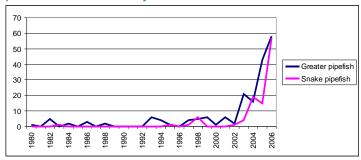
Sargassum muticum, japweed (non-native species) 35 records from, Donegal, S Devon & Cornwall, Purbeck, Isle of Wight, Kent and Alderney CI

#### Angiospermae, flowering plants (1 species)

Zostera marina, eelgrass (BAP habitat) 24 records from Donegal, N Wales, Isles of Scilly, S Devon and Cornwall, Alderney CI

# Pipefish Surveys in 2007

Pipefish were rarely recorded in Seasearch surveys until 2003 when records of firstly greater pipefish and then snake pipefish began to increase. By 2006 numbers of records had increased dramatically and pipefish therefore were made a particular focus of surveys in 2007.



A dedicated pipefish recording form was designed and made available on line and the pipefish survey was promoted through the diving press. As a result Seasearch received 94 completed pipefish recording forms and also an additional 90 records as a part of general Seasearch recording. The locations of the data are shown in the map alongside.

Snake pipefish, *Entelurus aequeorus*, occurred in large numbers in shallow water at a number of locations along the east coast of Scotland and England from the Moray Firth to North Norfolk. They were less common on southern and western coasts but reports of large numbers were received from Dorset, south Cornwall, Donegal and north-west Scotland. The photo shows a snake pipefish in an eelgrass bed in Donegal, one of the few abundant west coast sightings.

Greater pipefish, *Syngnathus acus*, does not seem to have experienced the same population explosion as snake pipefish. There were a similar number of records (as in 2006), mostly from southern and western coasts, but they were always in small numbers. Other pipefish were rarely recorded and short nosed seahorses, *Hippocampus hippocampus*, were seen at Selsey in Sussex, Babbacombe in Devon and Port Isaac in North Cornwall.

A full report on the pipefish surveys is in preparation.



# Sea fan recording in 2007

Seasearch has targeted pink sea fans, *Eunicella verrucosa*, in recording since 2001 with a dedicated recording form which, in addition to location and abundance, provides information on the dimensions and condition of each sea fan recorded. A number of reports have been produced, including a second major report in 2007 which covers the records received in 2004-2006.

As a part of that report a number of areas are recommended to receive special protection because of the national importance of their sea-fan populations. These include The Manacles in Cornwall (photo below left), the Plymouth Drop Off in Devon and Lyme Bay, all of which have large sea fan populations and lie outside any existing conservation designations.

During 2007 surveys were carried out in Cornwall, Bigbury Bay and Lyme Bay ®. In Bigbury Bay populations on the wrecks are important and at the Oregon dredge marks can be seen all around the wreck but fishermen avoid the wreckage and thus the abundant sea fan population on it has survived. The Persier also has important populations. In Lyme Bay the sea fans occur on low lying, relatively soft rocks and have not received the same protection. There remain many dead and damaged sea fans on the sea bed and the remaining populations are much reduced.



The northern sea fan, *Swiftia pallida*, is one of the new BAP species. In addition to a dedicated survey at Insh Island in the Firth of Lorn, there were also records from the Outer Hebrides, the Small Isles and the mouth of Loch Sunart (photo right).

Swiftia were frequent in the Kenmare Bay in SW Ireland and at one site here both species were recorded. This is believed to be the only place where both species occur together.



# Data management and availability

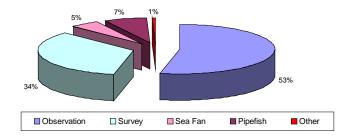
At the time this report was prepared, in April 2008, we had received 1,332 forms from dives in 2007, with more continuing to trickle in. The diagram to the right shows that just over half were Observation forms. However the number of Survey forms, which provide the most detailed information, was the highest ever recorded at 453 forms making 34% of the total. This is a positive development and shows that the recording skills of the volunteer divers are increasing as time goes by.



On receipt of a Seasearch form, summary information is recorded in a spreadsheet and this has been available to view online for the first time in 2007 using Google Earth. The location of each record is mapped and clicking on the record displays the date, type of record, the recorder and any significant findings. We hope to develop this approach further in 2008. This also acts as the first stage in the validation process for the data which is carried out by the local coordinator, national coordinator or local tutor.

All of the data is entered into the Marine Recorder database by a variety of organisations. They are responsible for the second stage of verification of the data. It is retained locally and also passed on and merged with all the other data to produce a single Seasearch dataset for the year. At this stage the third validation check is carried out by the National Seasearch Coordinator and any errors identified are returned to the data entry point for checking and amendment as appropriate. The combined dataset is available to all Seasearch partners in Marine Recorder format or as a snapshot of the data in Microsoft Access. The dataset is also passed to the National Biodiversity Network and is made available on the NBN Gateway website for all to use.

The 2007 data received up to April 2008 has been passed to the JNCC for inclusion in the NBN. The dataset comprises 73 surveys, including 913 'survey events' and contains 26,215 individual species records covering 782 different species.



#### **Biotope allocation**

During 2007 work was undertaken to see if Seasearch data is suitable for the assignment of JNCC biotopes. This proved to be a difficult task due partly to the form of the data and partly due to the way JNCC biotopes have been developed. A key to biotopes was produced and tested but it was not possible to achieve sufficiently consistent results to be confident of allocating JNCC biotopes to Seasearch Survey form data.

Amendments have been made to the Seasearch Survey Form and Surveyor training programme for 2008 to provide further information that can be used to assist biotope assignation in the future.

#### Sea fan and pipefish data

The data from the separate sea fan and pipefish surveys have not yet been entered into Marine Recorder and do not yet appear on the NBN. This work is to be undertaken during 2008.

#### **Seasearch Coordination and Promotion**

Seasearch is organised on behalf of a Steering Group which meets twice a year and on which all of the Seasearch partners are represented. The Steering Group sets the priorities and general direction for Seasearch.

The day to day activities are organised by the National In addition to the Coordinators there is a network of Seasearch Coordinator and a team of local coordinators throughout the UK. Tutors. At the end of 2007 there were 29 active recognised buring 2007 the team has been as follows:

National Coordinator Chris Wood Scotland Calum Duncan MCS
North East Scotland Marion Perutz MCS
West Scotland Owen Paisley MCS
Northern Ireland Claire Goodwin MCS

North Wales Paul Turkentine/Liz Morris MCS

West Wales Kate Lock MCS
South Wales Vicki Howe MCS

North East England Cora Cloughley/vacant MCS
East Anglia Dawn Watson MCS

North Norfolk Helen Nott

Essex Gen Broad Essex Wildlife Trust
Kent Bryony Chapman Kent Wildlife Trust
Sussex Kate Cole E Sussex CC
Hants/Isle of Wight Vicky Swales Hants Wildlife Trust
Dorset Peter Tinsley Dorset Wildlife Trust

Devon Sally Sharrock MCS

Cornwall Joana Doyle Cornwall Wildlife Trust

The National Coordinator is responsible for publicity and promotion at a national level, managing the training programme, budgetary control and development of Seasearch activities in new locations. For 2008 this will include new coordinators in North East England and the Isle of Man and expansion of activities to the Republic of Ireland.

The Local Coordinators are responsible for Seasearch activities within their own areas. This includes promotion to local dive clubs and other organisations, communication with local volunteers, training courses, surveys and representing Seasearch on local organisations such as Biodiversity Action Planning groups.

In addition to the Coordinators there is a network of Seasearch Tutors. At the end of 2007 there were 29 active recognised tutors and 4 others going through the training and accreditation programme. The tutors are responsible for delivering Observer and Surveyor training courses. In addition to the tutors, a number of experts provide specialist training courses. In 2007 these included Dr Frances Dipper (fish), Bernard Picton (nudibranchs) and Paul Naylor (photography).



Promoting Seasearch at one of the Dive Shows

# **Seasearch Training in 2007**

The Seasearch training programme provides courses and survey skills at three levels, Observer, Surveyor and Specialist.

The **Observer** level training consists of a one-day course for divers without previous survey experience. This covers an introduction to Seasearch, the identification of marine habitats and species and a series for practical skills from position fixing to recording from filmed surveys. The aim is to equip participants to complete the Seasearch Observation Form. Dives are arranged where participants can undertake survey dives with the benefit of a tutor present to assist with form completion and identifications.

There were 28 Observer courses in 2007 from Edinburgh in the north to Looe in the south. New locations for courses included Staffordshire, Babbacombe (Devon), Mevagissey (Cornwall) and Alderney (Channel Islands). There was a particular focus in Eastern England with 5 courses held in Suffolk and Essex.

245 divers took part in the Observer courses, all of whom were new to the project.

The **Surveyor** level training is aimed at surveyors with some existing experience of marine recording, whether as a Seasearch Observer or elsewhere, and aims to equip them to successfully complete the Seasearch Survey Form. It involves a weekend course and completion of 6 survey dives.

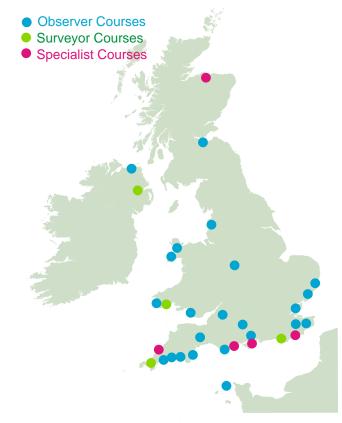
Four Surveyor courses were held in 2007 in Cornwall, Sussex, Pembrokeshire and Northern Ireland, involving 42 participants.

Seasearch **Specialist** courses are aimed at either teaching new survey skills or improving knowledge and identification of marine life. 11 courses were held in 2007 covering seagrass survey techniques (Hampshire), underwater photography (Swanage), fish ID (Hastings and Newquay), nudibranch ID (Banff) and general marine life ID and marine ecology (Swanage).

Seasearch qualifications are given to those completing the Seasearch Observer (course and 5 acceptable observation forms), or Surveyor (course and 6 acceptable survey forms) programmes. In 2007 42 volunteers achieved the Observer qualification and 17 volunteers the Surveyor qualification.



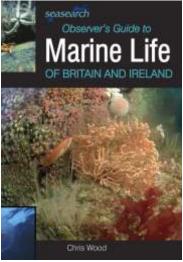




# Seasearch Identification Guides and survey materials

As a part of the aim to improve the identification skills of volunteer surveyors, in 2007 Seasearch produced a guide to marine life aimed specifically at Seasearch Observer level recorders. The Guide has been well received and 700 copies were sold during the year.

The guide includes over 200 species commonly recorded on Seasearch forms and, in addition to an underwater photograph, provides information on size, habitat, distribution,



depth range and other species with which it could be confused.

The earlier Seasearch Guide to Anemones and Corals continues to be popular and a third guide to Hydroids and Bryozoans is due for publication in 2008.

In addition to the guides, Seasearch supplies underwater writing slates in two sizes and recycled plastic pencils to aid the recording of information.

Thanks to all the Seasearch Tutors and coordinators for their enthusiasm, organising and teaching skills during 2007 and to all of the volunteer divers who have participated in Seasearch training, recording and promotion.

This report has been produced on behalf of Seasearch by the Marine Conservation Society, Unit 3 Wolf Business Park, Alton Road, Ross-on-Wye, Herefordshire, HR9 5NB.

www.seasearch.org.uk email: info@seasearch.org.uk phone: 07776 142096 Text by Chris Wood, images by Chris Wood, Claire Goodwin, Dawn Watson, Matt Doggett, Mike Lawton, Rob Spray, Sally Sharrock and Steve Trewhella.

