



# **Seasearch Scotland 2010 Diving Summary Report**



Newton-Stewart Sub-Aqua Club divers in Wigtown Bay (CD)

Report prepared by Calum Duncan, MCS Scotland Programme Manager / Seasearch Scotland Co-ordinator

Financial support for Seasearch in Scotland during 2010 has been given by



"...if it wasn't for the Seasearch course and SNH and SFP we would not be doing the type of diving we are now...(Seasearch) has really heightened our interest in local sea life...(we) are always looking for new sites and the sea life there."

Jim Gibson, Newton-Stewart Sub-Aqua Club, September 2010

### **CONTENTS**

Background to Seasearch in Scotland	Page 1
Summary of Seasearch in Scotland 2010	2
Figure 1 Map of Seasearch in Scotland records 2010	3
Priority Marine Features (PMFs) and other interesting records	4
Table 1 Scottish PMFs and other species records of interest	5
1 Co-ordinated Seasearch events in Scotland 2010	6
1.1 Scotland Co-ordinator Calum Duncan	6
1.2 Argyll and West Scotland Co-ordinator Owen Paisley	8
1.3 North and Northeast Scotland Co-ordinator Chris Rickard	10
2 Independently organised Seasearch activity	13
Luce and Wigtown Bays	13
Figure 2 Map of Seasearch sites near Burrow Head	15
North Rona and Sula Sgeir (and sites en route)	15
3 Other sources of Seasearch data	18
Isle of Arran	18
Loch Fyne	18
Loch Long	19
Sound of Mull and Loch Aline	19
Loch Sunart	20
Isle of Coll	20
Small Isles	20
Isle of Skye	21
North Uist	21
Isle of Harris	22
St Kilda	22
Orkney and Caithness coast	22
Shetland	23
St Abbs and Eyemouth	23
Miscellaneous	24
Acknowledgements	25

### **Background to Seasearch in Scotland**

Seasearch is a project for volunteer sports divers who have an interest in what they're seeing under water, want to learn more and want to help protect the marine environment around the coasts of Britain and Ireland. The main aim is to map out the various types of sea bed found in the near-shore zone around the whole of Britain and Ireland. In addition we are recording what lives in each area, establishing the richest sites for marine life, the sites where there are problems and the sites which need protection. MCS co-ordinates <a href="http://www.seasearch.org.uk/">http://www.seasearch.org.uk/</a> across the UK.

With support from Scottish Natural Heritage there are three Seasearch coordinators in Scotland, one national and two regional. Calum Duncan (MCS Scotland Programme Manager) continues to co-ordinate Seasearch and data entry for Scotland with Owen Paisley (Argyll and west Scotland) and Chris Rickard (north and northeast Scotland) co-ordinating Seasearch in their respective areas. Since September 2010, Georgia Connolly, St Abbs and Eyemouth Voluntary Marine Reserve Ranger has become qualified as a Seasearch Observer tutor. Dr Joanne Porter, a Seasearch Observer and Specialist tutor, is now based at Heriot-Watt University, Edinburgh.

### **Summary of Seasearch in Scotland 2010**

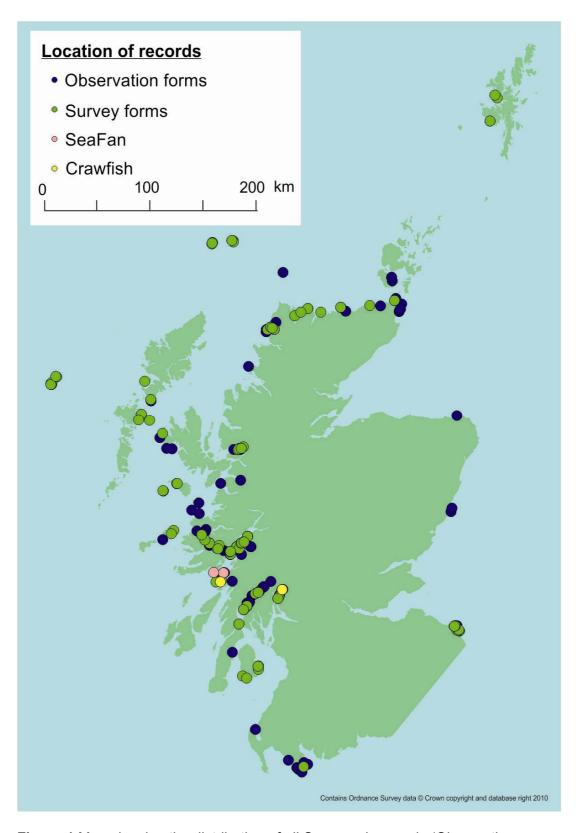
The Seasearch year started with a meeting in Edinburgh between Seasearch co-ordinators and SNH to plan ahead. There followed Seasearch Observer courses in South Queensferry (nine participants, 27 March), Carlisle (ScotSAC club who dive mostly in Scotland – 12 participants, 29 May) and Eyemouth (nine participants, 4 September) and a Surveyor course in Eyemouth for divers from Scotland and England (18 participants, 5-6 June) organised by Seasearch Northeast England co-ordinator Carrie Pillow. A Hydroids & Bryozoans identification course, also organised by Carrie, was also held in Eyemouth on 4-5 September with eight participants.

With 376 Seasearch forms submitted from St Abbs to Shetland, 233 Observer level, 136 Surveyor level (36% of all forms), five northern sea fan and two crayfish forms, 2010 was the busiest year on record for Seasearch in Scotland, comprising 17% of the UK & Ireland total. Thank you to all who submitted forms. Chris Harrison (14 Observation forms), Nicola Faulks (9 Observation and 5 Survey forms) and Chris Rickard (13 Observation forms) merit particular mention for the number of records that they submitted.

The sources of 2010 data were various, reflecting that 'any dive can be a Seasearch dive'. The three Scotland-based co-ordinators organised Seasearch diving events at Loch Fyne, Firth of Lorne, Loch Carron, Handa Island and Loch Laxford, John O'Groats and the Isle of Lismore and outer Loch Linnhe (section 1).

One local dive club, Newton-Stewart Sub-Aqua Club, having received funding from their local Scottish Natural Heritage office and training from MCS in Scotland as organised by the Solway Firth Partnership, returned Observation records from dives in Luce Bay and Wigtown Bay. Expeditions were organised by Seasearch divers from elsewhere in the UK, including to North Rona and Sula Sgeir (by Paul Holmes, **section 2**) and two to St Kilda (organised separately by Northern Ireland-based Seasearch tutor Claire Goodwin and Reading BS-AC), where other sites were recorded *en route* such as the north Scotland coast and inner and Outer Hebrides respectively (**section 3**). There were a large number of Surveyor course qualification forms from the Eyemouth area following a well-attended course and a range of forms, from Lamlash Bay to Shetland, submitted by individual divers and club members, whether local or visiting (**section 3**).

See **Figure 1** for a map showing the distribution of Seasearch records in Scotland for 2010 (following page).



**Figure 1** Map showing the distribution of all Seasearch records (Observation, Survey, Seafan and Crawfish) returned from Scotland in 2010. Note clusters of Seasearch activity around the Isle of Whithorn in the outer Solway Firth, Loch Long, Loch Fyne, Firth of Lorn, Isle of Lismore and outer Loch Linnhe, Loch Carron, Loch Laxford and the north coast, Shetland and St Abbs & Eyemouth as well as offshore records from St Kilda, North Rona and Sula Sgeir.

### Priority Marine Features (PMFs) and other interesting records

A range of Priority Marine Features (PMFs) will inform marine conservation measures across the 'three-pillared approach' to nature conservation set out in Marine Scotland's Strategy for Marine Nature Conservation in Scotland's Seas<sup>1</sup>. Some PMFs and other interesting species records identified by Seasearch in Scotland during 2010 are set out in **Table 1** (following page).

The most widespread of the PMFs recorded, all the way up the west coast of Scotland from the Firth of Lorn to the Isle of North Uist to Loch Laxford, was the northern seafan (Swiftia pallida). The nationally scarce white cluster anemone (Parazoanthus anguicomus) was recorded at Calve Island. Loch Sunart, Bo Fascadale, the Sanday/Canna wall and St Kilda. Pink sea fingers (Alcyonium hibernicum), for which Scotland is thought to be of global importance, were



Northern seafan (Swiftia pallida) in Loch Laxford (CR).

recorded at a site in the Garvellachs and on Calve Island near Tobermory, Isle of Mull.

The nationally scarce crawfish, crayfish or spiny lobster (*Palinurus elephas*) was recorded in Loch Long, an unusual sighting, two sites in the Firth of Lorn, where they are often recorded, and Lochaline wall. The lack of crawfish at North Rona and Sula Sgeir was noted as disappointing, particularly given the

number and size of other large crustaceans such as crabs and lobsters recorded there given the lack of pressure from creel fishing.

In Loch Aline and Loch Fyne the fireworks anemone (*Pachycerianthus multiplacatus*), subject of recent study by Seasearch Argyll and West Scotland coordinator Owen Paisley and for which Scottish populations are of possible global importance, was recorded.



Fireworks anemone (*Pachycerianthus multiplacatus*) amid *Beggiatoa* mats, upper Loch Fyne (OP).

4

<sup>&</sup>lt;sup>1</sup> http://www.scotland.gov.uk/Topics/marine/marine-environment/Conservationstrategy

**Table 1** Scottish Priority Marine Features (PMFs) and some other interesting species sightings and where they were recorded during Seasearch in Scotland 2010

Priority Marine Feature	Locations recorded in 2010
White cluster anemone (Parazoanthus	Calve Island, Loch Sunart, Bo Fascadale,
anguicomus)	Sanday/Canna wall and St Kilda
Fireworks anemone (Pachycerianthus	Loch Fyne and Loch Aline
multiplacatus)	·
Tall sea pen (Funiculina quadrangularis)	Isle of Lismore, Loch Aline and Loch Carron
Pink sea fingers (Alcyonium hibernicum)	A'Chuli (Garvellachs) and Calve Island (Sound of Mull)
Northern seafan (Swiftia pallida)	Southwest Lismore, Bernara, Firth of Lorn (Insh Island, 'Craw wall' and A'Chuli), The Shuna (Sound of Mull), Rubha An' Croisean (Isle of Muck), The Doris (Isle of Skye), Eilean Ard (Loch Laxford), Loch nam Madadh (Weaver's Point and Madadh Beag) and outer Obain Loch Euphoirt.
Serpulid reefs (Serpula vermicularis)	Loch Creran
Crawfish/crayfish (Palinurus elephas)	Loch Long, Firth of Lorn (Eilean Dubh Mor and 'Craw Wall') and Lochaline wall (Sound of Mull)
Blue mussel beds (Mytilus edulis)	Loch Long (Finnart)
Flameshell (Limaria hians)	Loch Fyne (Furnace, empty shells), Loch Linnhe (Port Appin narrows) and Loch Carron (Strome narrows)
Celtic featherstar (Leptometra celtica)	Southwest Isle of Lismore and SS Thesis (Sound of Mull)
Heart urchins (Brissopsis lyrifera)	Loch Fyne (Otter spit, dead shells)
Common dolphin (Delphinus delphis)	Loch Carron
Bottlenose dolphin ( <i>Tursiops truncatus</i> )	Isle of Eigg
Maerl bed	Lamlash Bay (Isle of Arran), Bloody Bay (Isle of Mull) and Loch Hourn (Cadasmor)
Seagrass bed (Zostera marina)	Ardnamurchan (Mingary) and Doune Bay (Loch Nevis)
Some other interesting species records	,
Solitary hydroid (Corymorpha nutans)	SS Hispania (Sound of Mull)
Warted corklet anemone ( <i>Phellia</i> gausapata)	Isle of Stroma and Sula Sgeir
Deeplet anemone (Bolocera tuediae)	Eyemouth (Folds Buss)
Yellow cluster anemone (Parazoanthus axinellae)	St Kilda (West Borerary)
Stalked jellyfish (Lucernariopsis	Eilean Dubh (Loch Linnhe) and Doune Bay (Loch
campanulata)	Nevis)
Gastropod snail Simnia patula	Oigh Sgeir
Tusk shell (Antalis entalis)	Loch Fyne (Stallion rock – uncertain)
The rare nudibranch Okenia elegans	Firth of Lorn (Dun Chonnuill Gulley, Garvellachs) and southwest Isle of Lismore
The nudibranch Lomanotus genei	Loch nam Madadh (Weaver's Point)
Potato-crisp bryozoan (Pentapora foliacea)	Oigh Sgeir
The sea cucumber Thyonidium drummondi	Loch Carron (Strome narrows)
John Dory (Zeus faber)	Loch Laxford
Tadpole fish (Raniceps raninus)	St Abbs

### 1 Co-ordinated Seasearch events in Scotland 2010

The three Seasearch co-ordinators organised a number of dedicated Seasearch diving events throughout Scotland in 2010. In the report, more detail has been provided where the co-ordinator organised or attended a diving event.

### 1.1 Scotland Co-ordinator Calum Duncan

*Lismore and Loch Linnhe, Argyll* 20<sup>th</sup>-23<sup>rd</sup> August 12 divers 16 Survey and 27 Observation forms

The Island of Lismore at the lower end of Loch Linnhe is one of Scotland's largest coastal exposures of limestone. Crossing from southeast to northwest are natural basalt dykes, sometimes extending down under the water, one in particular projecting from a cliff-face 20m high. An artificial reef was constructed to the east of Lismore by the Scottish Association of Marine Science (SAMS) in 2001 using processed granite waste. The reef is used by SAMS for scientific monitoring and research. Atlantic salmon (*Salmo salar*) and both Pacific and native oysters are farmed in locations around Lismore.

This unusual limestone island had not been surveyed since 1989, except a single site in May 1995. Divers from as far afield as Devon, Inverness, Aberdeenshire, North Wales and Edinburgh therefore joined with local divers in Oban for four day's Seasearch diving on the hard-boat MV Brendan, to survey new sites around the island and further up Loch Linnhe, depending on the weather. Most divers stayed at Oban Backpackers and boarded the Brendan at Dunstaffnage marina, except for the final day where boarding and later unloading took place at Port Appin pier.

With a non-prevailing southeasterly wind on the first day, the opportunity was taken to dive an unsurveyed stretch on the northwest coast of Lismore, spreading out buddy pairs northeast along the coast from Castle Coeffen. For those who encountered the walls, there was a profuse covering of kelp and red and brown seaweeds in the shallows and progressively more soft corals (*Alcyonium digitatum*),



Angular or mudrunner crab (*Goneplax rhomboides*) near Castle Coeffin, northwest Isle of Lismore (RR)

tunicates (including Ascidia mentula, Ciona intestinalis and Diazona violacea) and peacock worms (Sabella pavonina) deeper down. Where the wall was shallower and met sediments, these were dominated by typical sea loch species such as Cerianthus Iloydi and sometimes dense stands of slender sea pens (Virgularia mirabilis). As the wind turned, shelter was sought in the Lynn of Lorne where a new site was recorded on northeast Eilean Dubh. Here, silted, stepped limestone with sediment covered slopes descended to a mixed sediment slope of mud and shell gravel with occasional boulders sheltering long-clawed squat lobsters (Munida rugosa). There was a typical

sea loch fauna of brachiopods and tunicates recorded on the rock surface as well as less frequently recorded species such as sandy creeplets (*Epizoanthus couchii*). The stalked jellyfish *Lucernariopsis campanulata* and a possible sighting of the sea anemone *Sagartiogeton undatus* were also recorded at this site.



Celtic featherstars (*Leptometra celtica*) at Tom na Faire, southwest Isle of Lismore (CD)

Changeable weather on the second day led to recording at Eilean Balnagowan, an unsurveyed island further up outer Loch Linnhe. It was another typical sea loch site with silted bedrock steps, mixed sediment slopes, sugar kelp (*Laminaria saccharina*) in the shallows, sea loch anemones (*Protanthea simplex*) and brachiopods on circalittoral rock, squat lobsters beneath small boulders and sea pens (*V.mirabilis*) and *C.lloydii* anemones in sediments. A little

cuttlefish (*Sepiola atlantica*) was recorded by one diver here. Eilean Gainimh and Eilean Glas, unsurveyed islands to the north of Lismore, revealed more typical sea loch habitat later that day: mixed kelp on reef and boulder descending to silted bedrock and mixed sediment strewn with small boulders and cobbles. A juvenile red gurnard (*Aspitrigla cuculus*) was recorded at Eilean Glas.



The rare nudibranch *Okenia elegans* feeding on a tunicate near Tom Na Faire, southwest Isle of Lismore (RR).

Favourable winds allowed diving at the exposed and unsurveyed southwesterly sites of Tom na Faire and west Bernara on the third day. Typical species and habitats of the semi-exposed gently tide-swept deeper reefs encountered included fields of Celtic featherstar (Leptometra celtica) and northern seafan (Swiftia pallida) habitat north of Tom na Faire (although unusually also a solitary cliff-anchored tall sea pen, Funiculina quadrangularis) and sponge (e.g. Pachymatisma johnstonia) and tunicate (e.g. *Ascidia mentula*) dominated reef descending to a typical habitat of Swiftia pallida,

Devonshire cup corals (*Caryophyllia smithii*), bryozoans, hydroids and sponges at Bernara. The rare sea slug *Okenia elegans* was also recorded north off Tom na Faire, southwest Lismore, feeding on a tunicate. Although

recorded as usually feeding on *Polycarpa rustica* it was not possible to positively identify the tunicate on which the *Okenia* was feeding. Due to the distinctive red and white striping inside the test, some tunicates at this site were thought to be *Pyura microcosmus*.

On the final day, a dive in search of flameshells (*Limaria hians*) in Shuna narrows revealed only sediment with sugar kelp (*Laminaria saccharina*), occasional boulders and horsemussels (*Modiolous modiolus*) and commonplace mobile fauna, including crabs, hermit crabs, starfish and scallops. Surface correspondence with Dr Colin Moore, formerly of Heriot-Watt University, led to a final survey at a much richer site in the narrows near



Flameshell (*Limaria hians*) at Port Appin narrows. Note unidentified green scaleworm below flameshell (CD).

Port Appin, where a tide-swept bed of cobbles and small-boulders supported growth of sugar kelp, lush red seaweed (e.g. *Plocamium cartilagineum*) and occasional *L.hians* nests. As flameshells are very delicate they were handled at a minimum and with great care. An unidentified green scaleworm was photographed within the flameshell nests.

The survey divers had a range of experience from Observer to Surveyor level and experienced underwater photographers were also on the trip.

### 1.2 Argyll and West Scotland Co-ordinator Owen Paisley

**Loch Fyne, Argyll,** 24<sup>th</sup> January and 22<sup>nd</sup> April, 11 divers in total Two Survey and Five Observation forms

Otter Ferry and a site known as 'three reefs' in upper Loch Fyne were recorded during this January survey weekend which principally comprised training dives for Glasgow course participants and checking a record of *Swiftia pallida*, which it transpired was the hydroid *Nemertesia ramosa*. A superabundance of hermit crabs (*Pagarus* spp) was recorded in the upper 3m at Otter spit and large numbers of the brittlestar *Ophiura albida*, many with disk raised above the seabed, at the same site. The April date also comprised a training dive carrying out a photographic survey at entrance to Tarbert. A plankton bloom limited visibility.

Conger Reef, Firth of Lorn, Argyll, 10-11<sup>th</sup> April, 5 divers
Organised by Seasearch Observer diver Trevor Davies. A transect line was laid at this site in 2009, and the purpose of this weekend was to fit new marker tags and photograph the transect. The intention is to see how life along the transect varies over time particularly following introduction of a Statutory Instrument under the Inshore Fishing (Scotland) Act 1984 to temporarily exclude scallop dredging from Firth of Lorn marine Special Area of Conservation (SAC). No Seasearch recording took place on this weekend.

*Insh Island, Firth of Lorn, Argyll,* 25<sup>th</sup> April, 8 divers One Survey, Two Observation and four northern seafan forms

This trip organised by Owen Paisley was to survey northern sea fans (*Swiftia pallida*) on the west side of Insh island, continuing work started in 2005 by Calum Duncan to survey *Swiftia* adapting the methodology hitherto only used on pink seafans (*Eunicella verrucosa*) in southwest England and Wales. At Insh Island, the northern sea fans were recorded as being 'scattered' (Occasional) other than at a dense 2m x 2m patch in a concavity on the rock face. A summary report of the 2010 northern seafan surveys and subsequent survey work in April 2011 is in preparation.

### Garvellachs, Firth of Lorn, 14th August and 6th June

Much of the Seasearch activity co-ordinated in Argyll involves a core group of divers from the local Dalriada Sub-Aqua Club using a Rigid-hulled Inflatable Boat (RIB) coxed by Seasearch Observer diver Trevor Davies. Subsequent diving included Dun Chonnuill Gulley, Garvellachs on 14<sup>th</sup> August where *Okenia elegans* and two burrowing bivalves, not often noted by divers, the pale Venus (*Circomphalus casina*) and rayed Artemis (*Dosinia exoleta*) were recorded.

Seasearch Survey forms independently submitted by former Seasearch northeast Scotland co-ordinator Marion Harrald on 6<sup>th</sup> June recorded dense *Swiftia pallida* from 25-30m+ and a dead crawfish (*Palinurus elephas*) at 'Craw Wall' and red sea fingers (*Alcyonium glomeratum*), pink sea fingers (*Alcyonium hibernicum*) and *Swiftia pallida* off the island of A'Chuli, both sites in the Garvellachs. Marion confirmed that other divers had seen live crawfish at 'Craw Wall'.

There were also dedicated records of crawfish (*Palinurus elephas*) from Eilean Dubh Mor (two specimens),

### Grogport, east Kintyre, 19th Sept

An Observation level dive at Grogport, east Kintyre on 19 Sept, a poorly surveyed area of coast, revealed a sloping rock then boulder reef rich in algae.

### 1.3 North and Northeast Scotland Co-ordinator Chris Rickard

**Loch Carron** 20th -21<sup>st</sup> March, seven divers Eight Survey and 12 Observation forms

Seasearch in Loch Carron has previously been focused around Strome narrows, well-known for rich beds of horsemussel, maerl and flameshells and further west 'Conservation bay', both of which can be shore dived. The purpose of this event was therefore to carry out Seasearch recording at inaccessible sites on both north and south shores within and in the mouth of Loch Carron, as far west as Loch Raraig, using the Rigid-hulled Inflatable Boat (RIB) 'Chloe' skippered by Dave Black.

The first site dived was beneath the avalanche shelter on the south shore, a sloping wall of man-made boulders thinning out to a slope of mixed sediment, mud, sand and gravel. Tall sea pens (*Funiculina quadrangularis*) were found from 25m down together with associated species such as the angular crab (*Goneplax rhomboides*) and Thornback Rays (*Raja clavata*). The highlight of the dive was a brief encounter with the loch's resident Common dolphin (*Delphinus delphis*) sisters. Several more dives recorded a similar sea loch slope of boulders and muddy mixed sediment.

Sunday morning saw a trip west to Eilean Na Beinne, a small island in the outer loch. A muddy slope led down to many phosphorescent sea pens (Pennatula phosphorea), which occurred only below 32 m and quite probably deeper too. On swimming directly south into the loch from a small unobtrusive spit of land just east of the rusting skeleton of the old car ferry close to the North Strome slip, the variety of species apparent was very impressive. A huge number of the pink-spotted cucumber Psolus phantapus



The sea cucumbers *Psolus phantapus* and *Thyonidium drummondi* off North Strome, Loch Carron (CR).

dotted the seabed, interspersed with burgundy branches of another sea cucumber, *Thyonidium drummondi*. Thornback rays, lesser spotted dogfish (*Scyliorhinus canicula*), football sea squirts (*Diazona violacea*) and a pair of the highland dancer sea slug (*Pleurobranchus membranaceus*), apparently mating, were amongst the many species seen. The well-known extensive flameshell (*Limaria hians*) bed south of Strome slipway was also recorded.

# *Handa Island, Loch Laxford and Loch Inchard*, July-August Four Survey and 33 Observation forms submitted

Based in Scourie, Sutherland, dive-boat skipper James Forsyth is a mere ten minute motor out to Handa Island. The area is magnificent, jagged grey rocks, desolate moors and fields of emerald green bracken make a spectacular backdrop for a weekend's diving. Unfortunately, a southeast wind made a large swell all the way round Handa. A single dive on the northeast coast of Handa was managed, over kelp with many species of sponge covering all available rock surfaces, and a profusion of small life around. Upon exiting, the swell had increased to over a metre, so the swell round the point was braved to gain shelter in nearby Loch Laxford.



Many compass jellyfish (Chrysaora hysoscella) were seen in Loch Laxford in July 2010 (CR).

Like most west coast Scottish sea lochs. Laxford is flat calm in all but the most ferocious of storms, and the divers were able to descend a steep wall at Fionndalach Bige, a small island in the inner loch. Once under the surface, they were greeted by one of the most eerie and graceful of sights – a swarm of jellies, in this case the scarcely seen in Scotland compass jellyfish (Chrysaora hysoscella). Hundreds of specimens pulsated peacefully throughout the water column creating a photographers delight. A steep wall gave way to a muddy sea floor with sedentary life such as the slender sea pen

(*Virgularia mirabilis*) interspersed with more mobile life like the swimming crab (*Liocarcinus depurator*). Of note were two large examples of the 'sea orange' (*Suberites ficus*), the larger of which (approximately 24cm across) turned out to be attached to a tiny hermit crab.

An even larger swell limited Sunday's diving to Loch Laxford. Both dives were on walls, one inside the loch and the other on the mainland at the entrance to the loch. Of particular note at the first dive, a wall on the northeast of Eilean Ard, were sightings of John Dory (*Zeus faber*) and the northern sea fan (*Swiftia pallida*), which appeared at 30m and extended down into the gloom in

large numbers. The second site, west of Sgeir Ruadh on the southern side of the mouth of the loch, was full of life, with a wall rich in species, including many sponges and the dazzling jewel anemone (*Corynactis viridis*).

In early August, Chris Rickard's team returned for two dives on Handa Island over dense kelp forest, one shallow and the other deeper to 25m; two dives on steep bedrock in Loch Laxford, with some mud floor and sand. and a dive in Loch Inchard on silty sloping seabed. Interesting species recorded included the echiuran worm Bonellia viridis in Loch Inchard and crystal jellyfish (Aeguorea victoria) in Loch Inchard and at Handa Island. A 'lack of fish' was noted on



A John Dory (*Zeus faber*) at Eilean Ard, Loch Laxford (CR).

several of the records from Handa and Loch Inchard although juvenile fish and compass jellyfish (*Chrysaora hysoscella*) were noted as abundant in Loch Laxford.

### **John O'Groats** 24-26 September One Survey and four Observation forms

The survey comprised two days boat diving based out of John O'Groats. Unfortunately, due to rough seas only two new sites were able to be surveyed, the west side of Stroma Island (Castle Mestag) and Skirza Head Geo (rock gully). Two other geo's, Duncansby and Wife, were revisited.

The geos comprised long cave systems burrowing approximately 100m or more into the cliff, most of which had access to the surface, with the cave roof closing above the water line. Not much life was seen inside the deep geos, apart from Dahlia (*Urticina felina*) and Horseman (*U.eques*) anemones and squat lobsters, but the entrance and surrounds were full of high energy short turf. The baked-bean seasquirt (*Dendrodoa grossularia*) was very common on most vertical surfaces with good current. The vertical geo at Castle Mestag on Stroma was particularly full of life, being a current swept gully which was open to the sea at both ends, including sponges, tunicates and jewel anemones (*Corynactis viridis*). *Dendrodoa grossularia* were common, warted corklet anemones (*Phellia gausapata*) typical of very exposed rock, were seen in small clumps and the long spined scorpionfish (*Taurulus bubalis*) were superabundant along a fissure inside the geo. Another interesting sighting was a curled octopus (*Eledone cirrhosa*) at Skirza Head Geo.

### 2 Independently organised Seasearch activity

This section focuses on rarely surveyed locations in the far southwest and northwest of Scotland where Seasearch diving was organised by Newton-Stewart Sub-Aqua Club and Paul Holmes respectively and reported on below by Chris Harrison and Chris Wood.

**Luce and Wigtown Bays**, Galloway May-October 2010 One Survey and 21 Observation forms



Bib (*Trisopterus luscus*) abound on the SS Riverside (CH).

Following Seasearch training from Calum Duncan in May 2009 and Seasearch training dives and survey activity in June 2009, Newton-Stewart Sub-Aqua club received a grant from the local Scottish Natural Heritage office for an underwater camera and torches to support completion of 25 Seasearch records from Luce Bay in 2010. The data collected is of interest to SNH and the Solway Firth Partnership to inform management of the Luce

Bay Special Area of Conservation (SAC). Calum again joined NSSAC divers for Seasearch during the Solway Firth Partnership's World Ocean Week 2010. Although Luce Bay was the target, due to the wind direction, sheltered diving was sought in outer Wigtown bay instead. However, with Seasearch and the new equipment providing an incentive for the club to try new dive sites, as well as to Seasearch at existing favourites such as the many wrecks off the Isle of Whithorn, other sites were visited throughout the rest of the year. Particularly active were Branch Diving Officer Chris Harrison and Chairman Jim Gibson.

### From Burrow Head to Port Castle Bay by Chris Harrison

Following MCS training in 2009, in 2010 Newton Stewart Sub-aqua Club, sponsored by the Solway Firth Partnership and SNH with support and advice from MCS, conducted a programme of Seasearch observations in Luce Bay and Wigtown Bay, Wigtownshire. Whilst isolated sites in Luce Bay and offshore wrecks have been dived and recorded, the main focus was on the stretch of coast from Burrow Head in the south to Port Castle Bay in the north. Here, where the craggy cliffs meet the sea, they form finger like ridges of rock which stretch out in a SW direction down to a depth of 18 metres. At this depth the mixed ground seabed shelves away to 30 metres where it hits an

offshore reef, rising to 10 metres in depth and running parallel to the coast. On the seaward side of this reef barren, tide driven, sand bars have built up. This outer reef provides protection for the coast and the channel in between is subject to strong tidal streams.

All these factors create a region of clear waters, which shows wide biodiversity. The finger like ridges are covered with a variety of short and long animal turf including elephant's ear (Pachymatisma johnstonia), hedgehog (Polymastia boletiformis), golf ball (Tethya citrina) and encrusting sponges, dead man's fingers (Alcyonium digitatum), plumose anemones (Metridium senile), dahlia anemones (Urticina felina). hydroids and sea squirts. Candy striped flat worms (Prostheceraeus vittatus) and small bluish northern star fish (Leptasterias muelleri) are in abundance as are burrowing anemones in the sandy troughs between the ridges. Cuckoo (Labrus mixtus), Ballan (Labrus bergylta) and Goldsinny (Ctenolabrus rupestris) wrasse are common as are pollack (Pollachius pollachius) and lesser-spotted dogfish (Scyliorhinus canicula). The area is also a haven for lobsters and crabs.

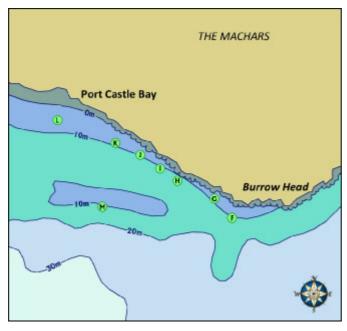
The club has used large scale O.S. maps of the coast to identify promising dive sites with names such as Rock of Providence. Carghidown, Dykefoot, Stank, Slockenglass and Tailor's Gat which are approximately 300 metres apart (see Figure 2 below). In general the same topography is found at each site, but there are minor variations which are also reflected in the sea life present. For example, one site may have many more anemones whilst another is notable for the profusion of candy-striped flat worms.







Colourful sponge life on Providence Rock, northwest of Burrow Head, Galloway. Top to bottom: golf ball sponge (*Tethya citrina*), elephant's hide sponge (*Pachymatisma johnstonia*) and hedgehog sponge (*Polymastia boletiformis*) with chocolate finger sponge (*Raspailia ramosa*) (all CH).



**Figure 2** Scenic dive sites discovered during Seasearch northwest of Burrow Head: F – Ducker rock; G – Slockenglass; H – Rock of Providence; I – Dykefoot; J – Blockan Hole; K – Carghidown; L – SS Craignair/Chile and M – Sand bar reef (from <a href="www.nsdivers.co.uk">www.nsdivers.co.uk</a>).

However, the clear water and biodiversity of the whole area make this an exceptionally good area for scenic diving and underwater photography and the club is delighted to have discovered this previously unexplored site on its doorstep.

Further details of many of these dive sites, including Seasearch reports, can be found on the Newton-Stewart Sub-Aqua Club website:

www.nsdivers.co.uk > Dive Sites > Scenic sites.

### **North Rona and Sula Sgeir (and sites en route)** by Chris Wood 24<sup>th</sup>-30<sup>th</sup> July, 12 divers 15 Survey and 11 Observation forms



The MV Halton picks up a group of Seasearch divers (CW).

Organised by Seasearch tutor Paul Holmes with assistance from UK Seasearch Coordinator Chris Wood. The main purpose of the survey was to visit Rona and Sula Sgeir, neither of which had had any Seasearch records before. Four days were spent around the two islands. surveying 10 sites, all at Survey level. In addition the isolated Nun Bank was surveyed and sites on the north Sutherland coast. (25 forms submitted).

North Rona and Sula Sgeir are two of the most isolated of Scotland's many islands. Located 40 nautical miles north-west of Cape Wrath and 34 nautical miles north of The Butt of Lewis, they are rarely visited and there were no previous Seasearch records. Our Seasearch survey aboard the MV Halton started in Scrabster and travelled along the north coast, stopping to dive at

Strathy Point and Withen Head at the mouth of Loch Eriboll *en route*, before crossing the open sea to North Rona.

We were blessed with relatively benign sea conditions and spent four days diving around the two islands. Even so there was a long deep swell on the western sides and we only managed one dive on the exposed side of North Rona at Ton Braighe. Even here there was an uncomfortable swell as deep as 20 metres. We dived two sites on the sheltered side of North Rona and one off the rocky outcrop of Gealldruigh Mhor to the south. The sites on the east side of Sula Sgeir were more dramatic and five sites were dived here and one at Gralisgeir to the south. Features of the underwater landscape were a deep cave, open at both ends at Thamna Sgeir, shallow caves right through the island at Bealach an t-suidhe and a series of deep interconnected canyons at Gralisgeir.

In shallow water, above the main kelp forest there was a band of dabberlocks (Alaria esculenta) at most sites. This is typical of exposed areas. There was kelp forest down to 30m where the rock was sloping but the vertical surfaces were dominated by a sponge and anthozoan turf in which jewel anemones (Corynactis viridis), dead men's fingers (Alcyonium digitatum) and cup-corals (Caryophyllia smithii) were dominant.



Turf of anthozoans and the tunicate *Polyclinum aurantium* (CW).

Kelp blades were infested with blue-rayed limpets (*Helcion pellucidum*) and sea mats, with large numbers of the sea slug *Polycera quadrilineata* feeding on the bryozoans. Beneath the kelp at some sites sea squirts formed a thick cushion. Many were in reproductive mode making identification difficult, but *Polyclinum aurantium* was often dominant.



The warted corklet (*Phellia gausapata*), a sea anemone typical of exposed offshore locations (CW).

On shaded and slightly less exposed rock surfaces there was a wider range of sessile animals. At a number of sites the rarely-recorded anemone *Phellia gausapata* or warted corklet, was present (see photo). Again this is a typical species in offshore exposed locations.

Little fishing takes place around the islands, although there is some potting in the summer months. The number and size of crabs and lobsters reflects the

lack of pressure on crustacean stocks, though we were surprised and disappointed not to see any crawfish (*Palinurus elephas*). Most fish eating around the islands is carried out by the huge numbers of gannets which, together with fulmars, puffins and many other seabirds make the islands their home. Waiting on the surface for pick up by the boat was an amazing experience as the gannets wheeled overhead.



Gannets (*Sula bassana*) wheeling above at Sula Sgeir (CW).

All of the sites visited were new to Seasearch and there was very little known about the waters around the islands except for the report of a BSAC expedition many years ago. Whilst we did not find anything really unexpected, these islands are excellent examples of unpolluted and unexploited exposed rocky habitats.

As an additional bonus the weather was calm enough as we returned towards Cape Wrath for the skipper to jump

overboard and have a look at Nun Rock. This is an extensive area of rock which does not break surface and consists of rocky pinnacles with sheer walls creating gullies in between.

Thanks to Paul Holmes for organising the survey, to John Fellows, Melanie Harding, Rachel Hope, Michael Moore, Richard Shucksmith and Chris Wood for completing forms from the two islands and to Bob Anderson and crew of the MV Halton for looking after us above the water.

### 3 Other sources of Seasearch data

Seasearch Observation and Survey forms were submitted by divers from throughout the UK from sites all round Scotland, particularly the west coast sea lochs and inner and outer Hebrides, but also Orkney, Shetland and the Aberdeenshire and Berwickshire coast. There were two liveaboard trips to St Kilda, one organised by Seasearch tutor Claire Goodwin on The Salutay from Northern Ireland and the other by Reading Sub-Aqua Club assisted by UK Seasearch Co-ordinator Chris Wood who was also on their expedition. The former travelled to St Kilda via the Sound of Mull, Small Isles, North Uist and Isle of Harris and the latter via the Small Isles, Isle of Skye and Isle of Harris. The reporting on these expeditions below has been split across locations to avoid duplication.

*Isle of Arran*, July-August, four divers Five Survey forms

Following Surveyor training at the course on 5-6 June in Eyemouth, Community of Arran Seabed Trust (COAST) volunteer Claire Youdale completed three Survey forms in Lamlash Bay, two in the no-take zone and one by the fish-farm. Live and dead maerl, king scallops (*Pecten maximus*) and other mobile species were recorded in the former. A seabed of burrowing anemones (*Cerianthus lloydii*), both *Nemertesia* species (*N.antennina* and *N.ramosa*) and abundant hermit crabs (*Pagarus bernhardus*) was recorded east of the fish-farm. In August, COAST Chairman and Seasearch Surveyor Howard Wood surveyed to the south of Arran off the shore at Cleats and the Iron Rock ledges. The basalt dyke at the former provided an interesting habitat for a range of species, including a profusion of fish and seaweed life. The Iron Rock Ledges comprised a boulder slope with kelp forest and both an abundance and diversity of fish, 12 species including five wrasse and three gadoid.

**Loch Fyne**, Jan-September 2010 Four Survey and 24 Observation forms

At 70km long with a maximum depth of 185m, Loch Fyne is the longest and deepest of the Scottish sealochs. With several areas that enable shore access and its proximity to the Scottish central belt and, by motorway, the north of England, it is also a popular shore-diving destination. In addition to the co-ordinator organised activity reported on above, six Observation forms were submitted for training dives with Calum Duncan at reefs south of St Catherine's, following an Observation course in Carlisle on 29<sup>th</sup> May. The remaining 18 Observation and four Survey forms from Loch Fyne were submitted independent of any organised activity and included three Observation and three Survey forms from Nicola Faulks.



Horsemussel (*Modiolus modiolus*) with mantle exposed at St Catherine's reef, Loch Fyne (PB).

Other than typical sealoch records, interesting observations included large numbers of spiny starfish (*Marthasterias glacialis*) as well as evidence of fly-tipping at Kenmore point, west shore Loch Fyne; many empty flame shells (*Limaria hians*) at 'the tea rooms', Furnace; lots of fishing line amongst the rocks off Furnace quarry; possible tusk shell (*Antalis entalis*) at Stallion rock; many (>100) fireworks anemones

(Pachycerianthus multiplacatus) off 'layby near Ardgenavan Cottage'; a profusion of Cadlina laevis sea slugs at Gortien Point; large numbers of Onchidoris spp at Ardcastle Quay; many dead heart urchins (Brissopsis lyrifera) at Otter spit and a solitary fireworks anemone sighting and an unusual horsemussel (Modiolus modiolus) with mantle exposed at St Catherine's reef.

# **Loch Long, March-October 2010**Three Survey and six Observation forms

Loch Long stretches northwards from the Clyde for 27km and, like Loch Fyne, due to its proximity to central Scotland, is popular for shore diving. An abundance of life is often recorded on the various natural and artificial reefs, but so too often is litter, ranging from bottles and cans to fishing litter and even old shoes. Sea loch anemones (*Protanthea simplex*), tunicates (*Ascidia mentula* and *Ciona intestinalis*) and dead man's fingers (*Alcyonium digitatum*) were all recorded as superabundant at Conger alley, where the pink-spotted sea cucumber *Psolus phantapus* was also present. Horsemussels (*Modiolus modiolus*) and a blue mussel bed (*Mytilus edulis*) were recorded at Finnart, a popular site for dive training on the east shore, and *M.modiolus* at Conger reef, on the northwest shore. Unusually, a record of crawfish (*Palinurus elephas*) was also received for Loch Long on a dedicated crawfish form.

# **Sound of Mull and Loch Aline**, April to August 2010 Seven Survey and 11 Observation forms

These forms were submitted from a variety of sources including a trip with Seasearch surveyors organised by Claire Goodwin in April/May and another by Reading Sub-Aqua club in early June. Each of these trips also generated forms for other survey areas such as Small Isles, Isle of Harris and St Kilda. Of note were the crawfish (*Palinurus elephas*) and significant numbers of lions mane jellyfish (*Cyanea capillata*) at Lochaline wall; *Corymorpha nutans* in sand beneath the wreck of the SS Hispania; patches of maerl in Bloody Bay; Celtic featherstars (*Leptometra celtica*) on the SS Thesis; northern sea fan (*Swiftia pallida*) on top the wreck of The Shuna; the globally important pink sea fingers (*Alcyonium hibernicum*) and extensive sheets of the nationally

scarce white cluster anemone (*Parazoanthus anguicomus*) on overhanging surfaces on Calve Island and all three sea pen species (*Pennatula phosphorea, Virgularia mirabilis* and *Funiculina quadrangularis*) and fireworks anemones (*Pachycerianthus multiplacatus*) in Loch Aline.

# **Loch Sunart,** 15-17<sup>th</sup> August Three Observation forms

Three individual Seasearch Observer forms submitted by Naomi Davies from Loch Sunart on a trip that also took in Isle of Coll (wreck of the *Tapti*). Red sea fingers (*Alcyonium glomeratum*) were recorded at Auliston Point, a range of life at Sligneach Mor, including snakelocks anemones (*Anemonia viridis*), red sea fingers, white-cluster anemones (*Parazoanthus anguicomus*), sponges, tunicates and mobile life, and eelgrass (*Zostera marina*) recorded as common throughout a dive at Mingary, Ardnamurchan peninsula.

### **Isle of Coll,** May-August Two Survey and one Observation form

The two Survey forms were submitted from divers on a liveaboard trip to St Kilda organised by Seasearch tutor Claire Goodwin. A seabed of coarse sand, shell gravel and large boulders supporting a thick covering of hydroids and up to 10 nudibranch species was recorded at the 'yellow brick road' site, 4.5km north of the ferry terminal on the east coast of Coll and a hydroid-dominated bedrock and boulder reef rich in sponges, cnidarians, bryozoans and tunicates at Meal Eatharna at the entrance to Loch Eatharna. A Seasearch expedition to Isle of Coll in June 2003 also recorded this species richness. The Observation form was submitted individually by Naomi Davies who recorded a cotton-spinner (*Holothuria forskali*) on the wreck of the 'Tapti', among common reef and wreck species.

# **Small Isles**, May-September 2010 Five Survey and Eight Observation forms

These forms were submitted from a range of sources in 2010 including a Reading Sub-Aqua club trip in early June that also took in Skye, Harris and St Kilda. Seasearch Observer and Surveyor forms were submitted from Canna/Sanday, Oigh Sgeir, Eigg and Muck. Some interesting observations included: northern seafans (*Swiftia pallida*) and 'exceptionally dense aggregations' of Devonshire cup coral (*Caryophyllia smithii*) at Rubha An' Croisean, Muck; many cryptic sea cucumbers (*Pawsonia saxicola*) almost completely out of their crevices at the great wall of Eigg; the nationally scarce white cluster anemone (*Parazoanthus anguicomus*) at depth on the speciesrich Sanday/Canna wall; the egg cowrie (*Simnia patula*), under-recorded on Scottish coasts, on *Alcyonium digitatum* at Oigh Sgeir and a northerly colony of potato-crisp bryozoan (*Pentapora foliacea*) also at Oigh Sgeir. A very large pod of bottlenose dolphins (*Tursiops truncatus*) was also seen by divers at Eigg.

# *Isle of Skye,* May-August, nine divers One Survey and Five Observation forms

The Observation forms were from Seasearch divers on a Reading Sub-Aqua liveaboard trip in late May/early June on which UK Seasearch Co-ordinator Chris Wood was present that also visited Isle of Harris, Small Isles and St Kilda (see relevant sections elsewhere in report). A further form was submitted by Seasearch Surveyor trainee Thomas Kerr, whom had attended Seasearch training in Eyemouth in 2010. The forms were from MacLeod's Maidens, An Dubh Sgeir, the wreck of the 'Doris' and Meanish reef in Loch Pooltiel, all off the northwest coast of Skye. Nothing unexpected or unusual was recorded, although *Swiftia pallida* were recorded as present on the 'Doris'.

**North Uist**, May-June, eight divers Four Survey forms





Two colour variants of the rarely recorded nudibranch *Lomanotus genei* photographed at Weaver's Point, Loch nam Madadh (RS).

Three forms were submitted from divers on Seasearch tutor Claire Goodwin's St Kilda trip from outer Loch nam Madadh and the other from Seasearch Observer and Specialist tutor Dr Jo Porter from Obain Loch Euphoirt. At Weaver's Point. Loch nam Madadh the sporadically recorded seasing Lomanotus genei was present. The northern sea fan Swiftia pallida was recorded at Weaver's Point and Madadh Beag, Loch nam Madadh and the outer north wall at Obain Loch Euphoirt, where juveniles less than 5cm in height were also present. An impressive 94 species were recorded by Dr Porter at the latter site. The hydroid Lytocarpia myriophyllum was also recorded on sandscoured boulders at Madadh Beag.

*Isle of Harris*, May-June, 10 divers Two Survey forms and five Observation forms

These forms were submitted by one diver from the wreck of The Stassa in Loch Roghadail on The Salutay St Kilda trip and the remainder from Renish Point and elsewhere in Loch Roghadail on the Reading Sub-Aqua Club trip. The Stassa contained shoaling fish and squid eggs whilst the slender sea pen (*Virgularia mirabilis*) was recorded on the seabed. The reef at Renish Point was noted for having an abundant turf of anemones covering all surfaces in some places and, below 25m, a typical *Swfitia pallida* habitat with prawn cracker sponge (*Axinella infundibuliformis*).

**St Kilda**, May-June 2010 Six Survey forms and 12 Observation forms

The Survey forms were completed on a trip on the liveaboard vessel 'The Salutay' organised by Claire Goodwin in early May. Six sites were surveyed at St Kilda whilst other locations were visited *en route* (see elsewhere in this section). Normally one form was completed between the group for each site and species records were compilations of those recorded by various group members. Noted, beyond the usual species-richness of St Kilda diving, were the house-sized boulders and associated high numbers of cuckoo wrasse (*Labrus mixtus*) at the Saw Cut, Dun; cuvie kelp (*Laminaria hyperborea*) to a depth of 33m on Dun and a patch of the southerly yellow cluster anemone (*Parazoanthus axinellae*) at a dive on west Borerary.

The Observation forms came from a separate trip in early June organised by Reading Sub-Aqua Club that also took in the Sound of Mull, Small Isles, Skye and Harris. Due to high winds, diving was limited to the caves and shores of Village Bay, Dun. The profusion of tunicates, sponges and anemones (including *Urticina felina*, *Sagartia elegans*, *Corynactis viridis* and *Parazoanthus anguicomus*) was noted at the caves site.

# *Orkney and Caithness coast,* May-October, eight divers 10 Observation forms

Three individual forms submitted by Paul Slater and Glenn King (two) from separate trips to Orkney. Abundant fish life and the hydroid medusa *Aequorea forskaleal* were recorded on the wreck of the V83 and abundant feather stars (*Antedon bifida*) and large shoals of saithe (*Pollachius virens*) and poor cod (*Trisopterus minutus*) on the 'Mara', both in Scapa Flow. At 'Bottle Run', Gutler Sound, near Lyness, Isle of Hoy, breeding sea hares (*Aplysia punctata*), a large population of crabs (*Carcinus maenas* and *Inachus* spp) and litter and tipped coal were recorded 'everywhere'.

Seven Observation forms were submitted by local diver Fiona Watson between May and October from the far northeast Caithness coast, including the Gloup on Stroma, Buchillie Castle, Port Skerra and Staxigoe. Interesting sightings were many sea lemons (*Archidoris pseudoargus*) at Port Skerra and 'thousands' of sea hares (*Aplysia punctata*) at Staxigoe.

# **Shetland**, May and December, two divers Four Survey forms

Shetland diver Rachel Hope submitted Survey forms from Egilsay North, Muckle Roe and Garda Stack (two dives) in May and December. Interesting records included a mauve stinger jellyfish (*Pelagia noctiluca*) at Egilsay north and possible *Doto eireana* at Muckle Roe, yet to be confirmed. This would be a very northerly record for this nudibranch species.

# **St Abbs and Eyemouth,** March – October 42 Survey and 18 Observer forms

This stretch of coast in southeast Scotland was the focus of cross-border Seasearch collaboration. Northeast England Seasearch co-ordinator Carrie Pillow organised a Seasearch Surveyor course in Eyemouth for divers from northeast England, Scotland and even as far afield as Devon on 5-6 June 2010. The course was run by Calum Duncan with assistance from Paula Lightfoot. The Survey forms from 5-6 June were qualifying forms for the course and were brigaded into the popular dive sites where the qualifying dives took place: Black Carr rocks, Greenends Gully, east of Weasel loch and Leager Buss, Eyemouth, recording the usual range of flora and fauna in the area.



Free-swimming tadpole fish (*Raniceps raninus*) st St Abbs (PB).

Most submissions were from divers from Seasearch Northeast England on qualifying dives, indicating the benefits of cross-border collaboration. Tyres, scrap metal, bottles, cans, lobster creels, fishing line and weights and even a golf ball were also variously noted at the sites in Eyemouth, unsurprising given their proximity to a busy harbour and popular angling marks. There were other sundry records from Seasearch diving in the area, including

a group form with an extensive list of 14 bryozoan species from Thrummie Carr, west of St Abbs Head, following a Hydroids and Bryozoans identification course run in Eyemouth by Dr Joanne Porter. St Abbs Voluntary Marine Reserve Ranger Georgia Connolly also submitted Survey forms, including a record of many deeplet anemones (*Bolocera tuediae*) at Folds Buss, north of Eyemouth. Seasearch Observer Peter Bardsley also photographed a rarely seen free-swimming tadpole fish (*Raniceps raninus*) off St Abbs.

# *Miscellaneous individual Seasearch records,* January - October Three Survey and 13 Observation forms

A range of individual Seasearch Observation and Survey forms were submitted that were not in sufficient number to merit compiling by area. Individual forms were received for Loch Ryan, Loch Melfort, Loch Creran (two), wreck of The Breda in Tralee Bay (bow and stern). Bo Fascadale. Doune Bay in Knoydart, Loch Hourn, west Aird Mhanais in north Harris, Reiff Bay near Ullapool and Rosehearty and Catterline in Aberdeenshire.



Long-spined scorpionfish (*Taurulus bubalis*) on kelp, Reiff Bay near Ullapool (JL).

Of note were white cluster anemones (*Parazoanthus anguicomus*) at Bo Fascadale; a possible record of the sponge *Leucosolenia variabilis* on the bow of The Breda; a stalked jellyfish (*Lucernariopsis campanulata*) and seagrass (*Zostera marina*) in Doune Bay, Knoydart; a patchy maerl bed at Cadasmor, Loch Hourn; horsemussels (*Modiolus modiolus*) and the 'very poor state' of reef-anchored serpulid reefs (*Serpula vermicularis*) in upper Loch Creran; parchment worm (*Chaetopterus variopedatus*) 'reefs', abundant sea loch anemones (*Protanthea simplex*) and two-spot gobies (*Gobiusculus flavescens*) with heavy sea lice infestation in Loch Melfort; rich life in the tidal channel at the lighthouse, Catterline and the rich, luxuriant animal turf of sponges, cnidarians, bryozoans and tunicates at west Aird Mhanais, north Harris where, coincidentally, 94 species were again recorded on a group Survey form completed by Seasearch specialist Dr. Joanne Porter and marine biologists.

### **Acknowledgements**

Many thanks to all the Seasearch divers and boat skippers that have taken part and supported Seasearch in Scotland during the 2010 season. Where possible these are listed below.

Seasearch divers: Bob Anderson, Brigid Armstead, Lin Baldock, Peter Bardsley, Steve Barnard, Joanne Beaton, Alan Bellerby, Barbara Bellerby, Pete Bichend, Gordon Bird, Marco Bottacini, Michael Bramham, George Brown, Mark Carter, Georgia Conolly, Spencer Cook, Gareth Corfield, Iain Crampton, Naomi Davies, Trevor Davies, Yvonne Davies, Calum Duncan, Sarah Duncan, Stuart Duncan, Nicola Faulks, John Fellows, Paul Fiander, Marilyn Franks, James Gibson, Allison Gleadhill, Claire Goodwin, Dave Goodwin, Fiona Grant, Deirdre Greer, Paul Grosvenor, Jonie Guest, Richard Guest, Mark Hammond, Melanie Harding, Marion Harrald, Emma Harris, Jane Harris, Chris Harrison, Bridget Haughan, Lizzie Heaver, Simon Higginbotham, Paul Holmes, Rachel Hope, Vivienne Jones, Jenni Kakkonen, Thomas Kerr, Glenn King, Fraser Kirkpatrick, Greg Knapton, Bill Larnach, James Lucey, Christine Maddison, Ronnie MacKenzie, Neil MacInnes, Alexander MacLennan, Colin Matthews, David Maskell, Alison McAllister, Jonathan McCrossan, Thomas McGuire, Deborah McNeil, Graeme McQueen, Ian Millar, Sue Mitchell, Andrew Mogg, Colin Mooney, Michael Moore, Liz Morris, Chris Newton, Wendy Northway, Nick Owen, Owen Paisley, Philip Payne, Carrie Pillow, Alan Pollock, Joanne Porter, Kim Pratt, Franca Pugnaghi, John Rees, Mary Restell, Roy Restell, Judy Revell, Chris Rickard, Angus Robson, Kat Sanders, Michelle Simpson, Doug Scott, Tracy Scott, Ruth Sharratt, Richard Shucksmith, Paul Slater, Dominic Smith, Mel Smith, Rob Spray, Chris Thompson, Emily Venables, Fiona Watson, Hazel White, Sara Wilson, Chris Wood, Howard Wood and Claire Youdale.

Boat skippers (where known): Bob Anderson (MV Halton), Dave Black (Five Bells Diving), Trevor Davies (Dalriada SAC), Jim and Iain Easingwood (Marine Quest, Eyemouth), David Ferguson (MV Brendan, Lochaline Boat Charters), James Forsyth (Scourie RIB Charters) and the skipper of The Salutay.

Financial support for the project in Scotland during 2010 has been given by Scottish Natural Heritage, match-funded by the generous time of the above volunteer Seasearch divers.

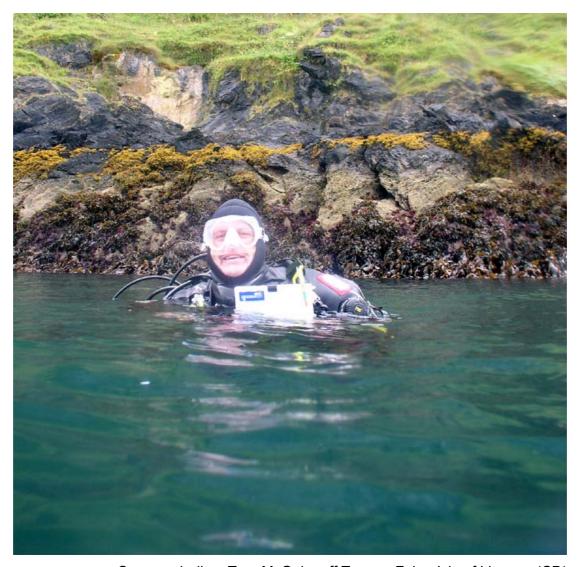
Text by: Calum Duncan, Chris Harrison, Chris Rickard and Chris Wood

Photo credits: Peter Bardsley (PB), Calum Duncan (CD), Chris Harrison (CH), James Lucey (JL), Chris Rickard (CR), Roy Restell (RR), Owen Paisley (OP), Rob Spray (RS) and Chris Wood (CW)

Seasearch is a volunteer underwater survey project for recreational divers who wish to contribute to conserving the marine environment.		
Seasearch is co-ordinated by the Marine Conservation Society on behalf of the Seasearch Steering Group which comprises the Marine Conservation Society, The 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, Irish Underwater Council and independent marine life experts		







Seasearch diver Tom McGuire off Tom na Faire, Isle of Lismore (CD)

dive into conservation