

Riddles of the Deep

words & pictures
CALUM DUNCAN

Seasearch Scotland Coordinator

Updates from around the country on the Seasearch Project start with Calum Duncan's report from Fife ...

PLANNING PAST the sun-baked terracotta roofs of Fife's East Neuk, a pod of bottlenose dolphins gently arcing through the millpond flat Forth 50m away, the scene was set for our late July destination, the Bell Rock. However, once past Crail, a wall of mist soon engulfed Niall White's RIB *Suilven* muffling echos and reducing visibility to a mere 20 metres or so ... bye bye Bell Rock.

However, this proved to be a blessing in disguise. Later that day, the wind had whipped the sea up into white horses so that the RIB surfed into Anstruther, only for our small Seasearch party to be told by the coastguard to wait in the squall and swell until the Gala Day lifeboat display had finished. We probably wouldn't have been quite so amiable following a 30km trip back from the Bell!

Puzzling Pipefish

Despite Plan A now overboard, the back-up offered ample compensation: Carr rocks near Fife Ness had never been surveyed, so we were more than happy to oblige. Morning dives on Saturday and Sunday revealed an extensive area of reef and boulder from 14 to 20m, a comfortable depth over which to drift in the ebbing tide.

Upper surfaces in the shallower areas were covered in a lush lawn of delicate red seaweeds, making way for the densest growths of hornwrack, *Flustra foliacea* and *Securiflustra securifrons* we had ever seen whilst deeper rock abounded with common starfish *Asterias rubens*. Yet peaking out from seaweed and seamoss alike, snake pipefish *Entelurus aequoreus* were everywhere.

From St Abbs to Loch Laxford, Seasearchers throughout the summer have been recording an abundance of this elegantly striped pipefish. One possible explanation is, you guessed it, climate change. Plankton records over the last few years, particularly in 2004, have shown huge numbers of the larval and juvenile stages of this most

oceanic of our pipefish out in the Atlantic. Over the long-term, sea surface temperatures have risen in winter, spring and summer, when the males, much like their seahorse cousins, brood the eggs. Warmer seas result in quicker brooding time, more breeding activity and faster-growing young, result ... lots of adults inshore.

There is, however, a sad twist.

Twist in the Tale

A combination of delayed seabird breeding and increasing temperatures have resulted in sandeels being buried in the sand at the very time birds need them swimming free to prey on. In their absence, adults are instead bringing back pipefish, a stiffer, bonier fish often lodging in the throats of young chicks.

Some nests with dead chicks have even been reported littered with uneaten pipefish. Guillemot on the Isle of May and west coast sites and kittiwakes on St Kilda and Mingulay have been particularly affected.

Despite this wider picture, coupled with two great afternoon dives at the Isle of May, with wrasse, ling, saithe, pollock, cod and monkfish on the wreck of the *Anlaby*, the Fife Ness weekend was a great success, at what was the sixth attempt.

Further south, St Abbs Voluntary Marine Reserve ranger Liza Cole organised a Seasearch Coral and Anemone identification weekend, run by UK Co-ordinator Chris Wood in August, and Liza will also be running an Observer course on October 21.

To the north, Marion Perutz organised Seasearch weekends at Fowlsheugh, unfortunate site of yet more guillemot breeding failures, and Helmsdale, the latter notable for its dramatic sandstone strata sloping into the sea. Although shallow and wave-pummelled beneath the spectacular cliffs and needles, the offshore diving yielded a wealth of wrasse, gobies, lobsters and squatties. Over the page Marion reports on another exciting trip in Scotland's northeast.



Niall White's RIB 'Suilven' and Seasearchers at the Isle of May



Pipefish at Fife Ness (1)



Pipefish at Fife Ness (2)



Pipefish at Fife Ness (3)



Monkfish near the wreck of the *Anlaby*
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Coral Mystery of the Moray Firth

WHEN A local diver, Neil Masson, and buddies from the Deeside SAC and Grampian branch of ScotSAC in Aberdeen reported coral off a wreck at only 60 metres in the Moray Firth, the Seasearch community became very excited. It is extremely rare to find cold-water coral *Lophelia pertusa* at such a shallow depth in British waters.

Normally it is reported at depths of over 500 metres on the continental shelf, although it occurs as shallow as 110m off Mingulay and at only 40m in Trondheimsfjord, Norway. Two weeks later and after much planning, six divers and two boat handlers, myself included, set off back to the wreck for further investigation.

The divers did not have an easy task. Equipped with rebreathers and extra tanks attached to every spare D-ring, there was little room for Seasearch slates and cameras. Deteriorating conditions on the surface made me increasingly apprehensive waiting from the safety of the boat, but luckily it bore no resemblance to the conditions below.

Although very dark the divers experienced stunning 20 metre visibility, allowing spectacular viewing of the wreck below. Pollock, conger, ling, cuckoo wrasse, huge schools of herring and saithe, to name but a few, were

observed on the wreck and the divers quickly located the 'coral'.

They returned to the boat with reports of dazzlingly white coral in small colonies growing on the wreck. However, examination of the samples revealed not coral polyps but a fine brittle, worm cast: the colonies were made by coral-worms (probably *Salmacina dysteri*) not real coral. This kind of worm colony is not locally rare but it is unusual to see them so well developed. Close examination found it inhabited by a myriad species not normally observed by divers, such as the tiny pea crab under 2cm in length, scale worms, shrimps and amphipods.

Wrecks such as this one represent important refuges for many species, being largely undisturbed by trawling. It was a rare opportunity for Seasearch to obtain such records, being out of the depth range of most recreational divers, and begs the question, what more discoveries are out there, waiting to be uncovered, on such wrecks?

Marion Perutz
Seasearch NorthEast Scotland
Co-ordinator

Marion will be running a Seasearch Observer course on November 11 in Macduff.

Japweed And Fireworks

FUNDING APPLICATIONS to the Argyll and Bute Biodiversity Officer, Scottish Natural Heritage and the Sealgair Trust have borne fruit in the form of a laptop, digital projector and a series of identification guides. These will be used over the winter to run training courses, give talks about Seasearch and help improve the identification skills of Argyll Seasearch volunteers.

An Observer course was held in Tarbert in September and was followed by a training dive in Loch Craignish. Further diving is planned for October to survey the full extent of fireworks anemone in Loch Shira, whilst in November plans are afoot to map out a maerl bed in secluded Loch Sween.

The distinctive 'washing line' of the non-native invasive Japweed or

Wireweed *Sargassum muticum* was found in Loch Fyne, the furthest north ever recorded in the UK, a story of concern that even made the Scottish daily papers. Elsewhere in the Clyde, Howard Wood and members of the Community of Arran Seabed Trust have again been busy Seasearching, including the rich, anemone-covered reefs off Pladda and the maerl beds of Lamlash Bay, where Calum Duncan was lucky enough to join them filming with underwater cameraman Doug Anderson. From pipefish to coral worms, Japweed to maerl, Seasearch is helping shed light on both the wonders and worries in our seas.

Owen Paisley
Seasearch West Coast Co-ordinator

For general Seasearch enquiries and training contact Calum Duncan on 0131 226 6360, email scotland@mcsuk.org or visit www.seasearch.org.uk. To get involved in west Scotland events and training contact Owen Paisley on 01546 600209, or seasearch.west@btinternet.com. For Seasearch northeast Scotland, contact Marion Perutz on 07745 656978 or seasearch_nescotland@yahoo.co.uk. St Abbs Voluntary Marine Nature Reserve Ranger and Seasearch tutor Liza Cole can be contacted on LCOLE@nts.org.uk or 01890 771 443.



Coral worm - Moray Firth (Alejandro Gallego)



Redfish on real Lophelia reef, Trondheimfjord, Norway (Chris Wood)



Coral worm & soft corals on Moray wreck (Gawaine Appleby)



The distinctive 'washing line' of invasive non-native japweed (Owen Paisley)



Dahlia anemone gardens at Roirome reef off Pladda (Howard Wood/COAST)