

Loch Shira
Second Survey
April 2006
Summary Report





Horse Mussels, Transect 1



Hermit crabs were common on all transects



Queen scallops were occasionally seen



Greater pipefish were seen on transects 1 and 4



Pleurobranchus membranaceus the Highland Dancer on Transect 1

In April 2006 a small team organised by the West of Scotland Seasearch Co-ordinator returned to Loch Shira in an attempt to discover more about the Loch Shira population of *Pachycerianthus multiplicatus* anemones.

During the previous dives most *Pachycerianthus* were seen at depths of 15-20 metres so it was decided to swim a series of transects at these depths with divers counting the numbers of anemones seen.

Transect 1

This was on the western side of Loch Shira covering a distance of approximately 150 metres. Only one *Pachycerianthus* was seen during this 38 minute dive. Horse mussels, *Modiolus modiolus* were common in the shallower depths, usually covered in hydroids and other short animal turf. Other species found at this site included a colourful Highland Dancer, a large sea hare and a greater pipefish.

Transect 2

The remaining transects were on the eastern side of the Loch where the previous survey had found numerous anemones. Transect 2 ran between Sites 1 and 7 of the original survey. Thirty anemones were found during a 30 minute dive covering approximately 350 metres.

Transect 3

This ran from Site 1 of the previous survey northwards. During the 38 minute dive covering approximately 100 metres, 49 anemones were counted with the shallowest at 16 metres and the deepest at 21 metres. Horse mussels were also found along this transect though in fewer numbers than along Transect 1. A few of the burrowing anemone *Cerianthus lloydii* were also present and *Nephrops* burrows were also noted.

Transect 4

This transect ran northwards from the end of Transect 3 towards the outlet from the Dubh Loch, covering approximately 150 metres. Fifty six *Pachycerianthus* were counted during a 26 minute dive between 15 and 20 metres. Towards the end of this transect a number of *Nephrops* burrows were seen with a couple of quite large individuals moving about.



Cerianthus anemone alongside the larger *Pachycerianthus*.

Results

This survey confirmed the impression gained during the earlier Seasearch survey that the populations of *Pachycerianthus* are quite localised in their distribution. The dense population of anemones found at Site 5 did not seem to continue to the south whereas the dense population at Site 1 continued to the north with the largest population found to date occurring in the area between Site 1 and the outlet from Dubh Loch. It may be a coincidence but it seems that the densest populations occur in areas which are afforded some protection from trawling. A power-cable runs along the east side of Loch Shira at a depth of around 25 metres which may afford some protection from prawn trawls. Site 5 on the west side may also be afforded some protection by the bottom topography in this area as well as the moorings associated with salmon draught cottage. In the last week of June two prawn trawlers were observed working in Loch Shira over several days. It is not known what impact this will have had on the *Pachycerianthus* population.

Appendix 1: Location of Transects 2006

Earlier survey sites are also shown on the chart. The original MNCR 1988 Survey Sites are marked with black flags while the 2005 Seasearch survey sites are marked with red flags and numbered 1 to 7.

| Transect | Start | End | Distance |
|----------|----------------------------|---------------------------|------------|
| T1 | 56° 14.437 N, 05° 03.495 W | 56° 14.357N, 05° 03.584 W | 175 metres |
| T2 | 56° 14.320 N, 05° 02.858 W | 56° 14.133 N 05° 02.862 W | 345 metres |
| T3 | 56° 14.409 N, 05° 02.887 W | 56° 14.450 N 05° 02.870 W | 100 metres |
| T4 | 56° 14.456 N, 05° 02.888 W | 56° 14.527 N 05° 02.884 W | 150 metres |

The transect start and end points were recorded using a boat mounted GPS. Position fixes were taken once divers had descended to the sea-bed and after they had been recovered which inevitably resulted in a certain degree of error but positions should be accurate to within 10 metres. Distances were measured on a chart after the dives which again will lead to some inaccuracy as the divers route along the sea-bed was not necessarily a straight line between start and finish points. Rather than follow a straight line the divers stayed within the 15-20 metre depth range where most anemones were recorded.

This seasearch survey was organised by Owen Paisley, Seasearch Co-ordinator for West Scotland.

The Seasearch Surveyors were: Trevor Davies, Yvonne Davies, Dave Hughes and Owen Paisley.

Special thanks to Trevor and Yvonne for the use of their RHIB during the survey.

Text by Owen Paisley.
Photographs by John Rees and Yvonne Davies.



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