

The table shows the number of taxa recorded in each phylum. Of a total of 70 taxa, 36 were identified to species level (see footnote).

Sponges

Although sponges were only recorded to Phylum level, the following may be *Raspailia hispida* (from Site 1).



Anemones, corals, hydroids and jellyfish

The most common species in this group was the burrowing anemone *Cerianthus lloydii*, found throughout the maerl in the North Channel Entrance. Fullarton rock had the greatest richness of cnidarians with hydroids (see centre spread), *Alcyonium digitatum*, *Metridium senile* and *Caryophyllia smithii* recorded.



Scallops and other molluscs

Scallops were seen at all but 3 sites, including exceptional numbers of juveniles in the middle of the north channel, Fullarton rock and, after 'years of absence', Deacon Rock. A site near the fish-farm, 'previously abundant in scallops a decade ago' was noteworthy for their absence. Only 5 other molluscs were recognised, including an octopus at Fullarton Rock.

Phylum/Division	Common Name	Number of Taxa	Common Species		
Porifera	Sponges	1			
	Cnidaria	9	Burrowing anemone <i>Cerianthus lloydii</i> Cloak anemone <i>Adamsia carciniopadus</i> Plumose anemone <i>Metridium senile</i> Football jersey worm <i>Tubulanus</i> sp. Tube worm Sabellida		
Platyhelminthes	Flatworms	1			
Annelida	Segmented worms	4			
Crustacea	Crabs, lobsters, barnacles	9	Edible crab <i>Cancer pagarus</i> Squat Lobsters indet Galatheidae Swimming crabs indet Polybiinae Hermit crabs indet Paguridae Scallops indet Pectinidae Razor shell <i>Ensis</i> sp		
	Mollusca	6	Shells, sea slugs, cuttlefish		
Bryozoa	Sea mats	1			
Echinodermata	Starfish, sea urchins, sea cucumbers	9	Common Starfish <i>Asterias rubens</i>		
Tunicata	Sea squirts	3	Sea-squirts indet Ascidiacea		
Pisces	Fishes	20	Leopard spot goby <i>Thorogobius ephippiatus</i> 2 spotted goby <i>Gobiusculus flavescens</i> Pollock <i>Pollachius pollachius</i> Flat fish indet Pleuronectiformes Rock cook <i>Centrolabrus exoletus</i> Balan wrasse <i>Labrus bergylla</i> Conger eel <i>Conger conger</i> Dulse <i>Palmaria palmata</i> Bladderwrack <i>Fucus vesiculosus</i> Sea whip Chordaceae Sugar kelp <i>Laminaria saccharina</i> Kelp indet Laminariales Eel grass <i>Zostera</i> sp		
		Angiosperma	Flowering Plants	1	
		Total Species		70	

Crabs and lobsters

Hermit crabs were found at most sites in the north of Lamlash Bay. Lobsters, squat lobsters, spider crabs, edible crabs and swimming crabs were at 5 or more sites.

Echinoderms

Five species of starfish were recorded, the sand star (*Astropecten irregularis*) most often (although never as 'common'). Brittlestars were at 5 sites and urchins and featherstars at 2.

Fishes

Of 70 taxa recorded, 19 were fish, reflecting the recorder's greater confidence in identifying them. Species included Ballan wrasse and flatfish (most common), dogfish, conger eel, leopard-spotted goby, pipefish, gurnard, dragonet and plaice. Large numbers of fish fry were seen at Gurnard Bay.

Maerl and other algae

Kelp was recorded at all but 6 sites. Maerl (*Phymatolithon* sp), albeit somewhat degraded, was recorded from sites throughout the north channel entrance to Lamlash Bay. This is unsurprising since these sites were chosen coinciding with a known deep maerl bed. No maerl was recorded on the seabed from sites to the south of the bay.



Kelp forest and shoal

Flowering plants

Eel grass (*Zostera* sp), like maerl a Biodiversity Action Plan (BAP) species, was recorded at the Oakbank site.

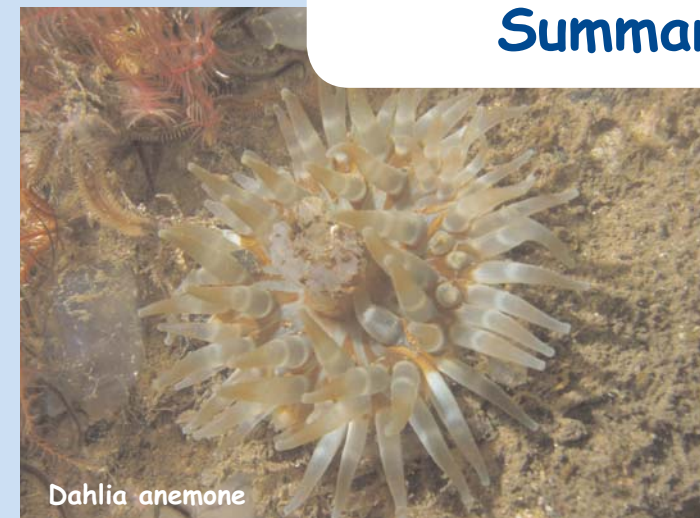


Edible Crab



Painted Goby

Arran Lamlash Bay Survey Summer 2003 Summary Report



Dahlia anemone



Sea Mouse



Maerl



Dead Men's Fingers

This Seasearch survey was organised by the Community of Arran Seabed Trust (COAST) following Seasearch Observer training from the Marine Conservation Society Scotland. Seasearch surveyors were:

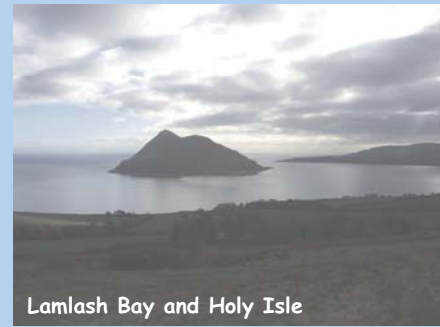
Seasearch is a volunteer underwater survey project for recreational divers to contribute to the conservation of the marine environment. Financial support for the project during 2003 and for the production of this summary report has been given by:

John Ferris, Don MacNeish and Howard Wood (organisers), Karl Amos, Sean Ferris, Frank Law, Angus Robson and Martin Wood.

All photographs are by Howard Wood. This report by Calum Duncan (MCS).



Lamlash Bay, Isle of Arran, Firth of Clyde



Lamlash Bay and Holy Isle



Deacon Rock (Site 6)

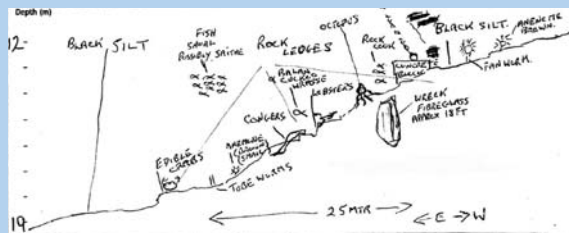
Deacon rock is a submerged reef rising from 17m to the west up a steep slope of sea-squirt covered boulders to a sugar kelp crowned apex at 10m. The gradient to the east of the reef top is not so steep descending to 14m over a horizontal distance of 100-120m with occasional boulders. Sugar kelp (*Laminaria saccharina*), mixed red seaweeds, squat lobsters, swimming crabs and hermit crabs were all recorded as common at this site. A lost lobster pot and sail batten were also reported.

Fish Farm Cages (Sites 18, 19 and 21)



The only fish farm in North Ayrshire is found in south Lamlash Bay. It is worth noting that during Seasearch the site was deemed to be "full of junk, not one scallop unlike 10 years ago" by the surveyors.

A series of bedrock ledges descends from 12m to 19m from west to east. The whole survey area was covered in black silt with almost no marine flora, although marine fauna included edible crabs, tubeworms, anemones, conger eels, lobsters and numerous wrasse, particularly rock cook. On the seabed were also a concrete mooring block with attached chain, fibreglass wreck (6m long), old tyre, old rope and old canvass bags.



Fullarton Rock (Site 20)

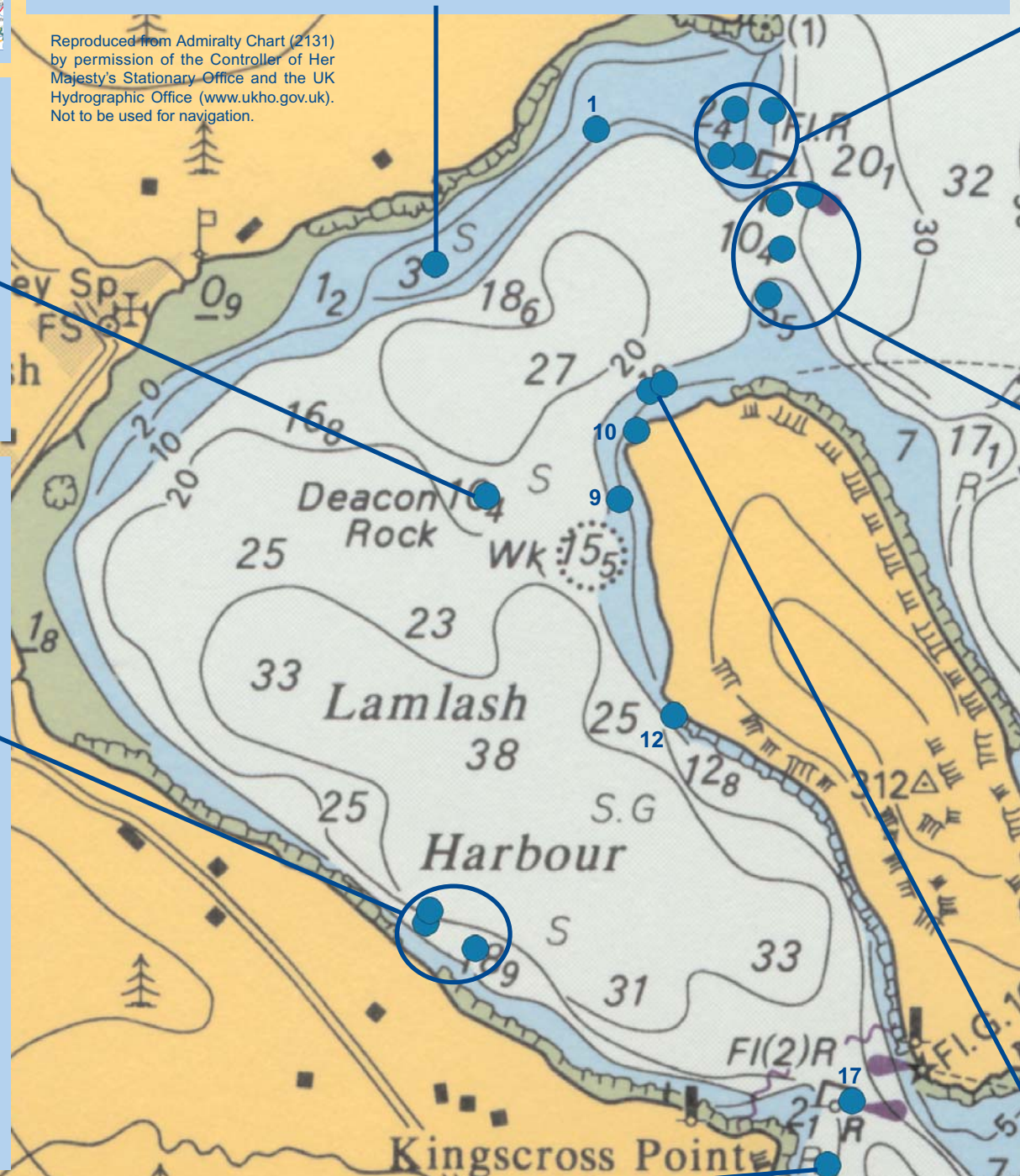
A horizontal rocky reef with kelp forest descends vertically down to flat sandy mud at 20m. The rock wall is rich in plumose anemones, sea squirts, hydroids (see picture left) and dead mens fingers. Hundreds of tiny scallops were recorded among fine seaweeds (see picture right). Plumose anemones (*Metridium senile*), urchins (*Echinus esculenta*), sea squirts, Pollack (*Pollachius pollachius*), Saithe (*Pollachius virens*), two-spot and leopard-spot gobies were all recorded as common.



Oakbank (Site 2)

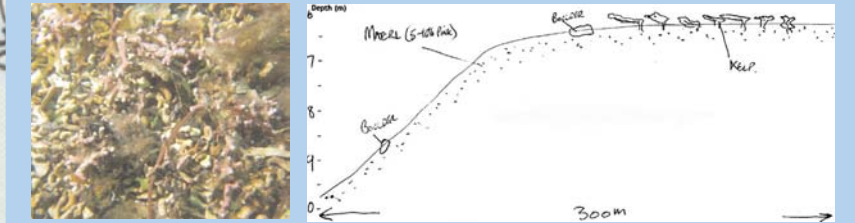
A gentle slope of mixed sand and mud, with occasional maerl, descends over a horizontal distance of 350m from a depth of 4m to the start of a drop-off at 8m. Kelp park, wrack and mixed seaweeds were recorded at 4m and, of particular interest, a patch of eel grass recorded at 8m. Some short animal turf in the form of hydroids was also recorded. Razor shells (*Ensis* sp), *Cerianthus lloydi*, *Pagurus* sp and *Adamsia carciniopados* were all recorded as common.

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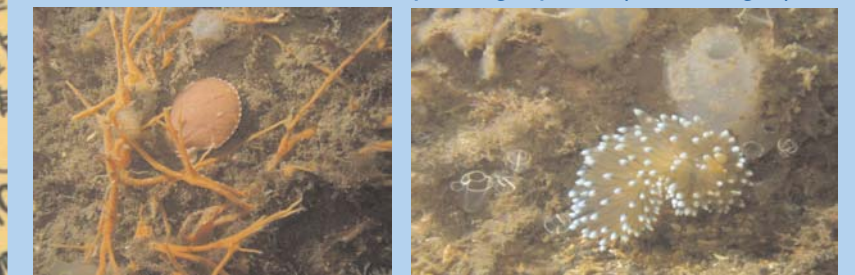
Clauchlands maerl bed (Sites 3, 5, 7 and 13)

This cluster of 4 dives was carried out on the denuded maerl ridge to the north of the North Channel Entrance to Lamlash Bay. A slope of 5-10% live maerl (see below) descends from 6m to 10m with occasional boulders, over a horizontal distance of 100m. Sugar kelp park was common on the flat seabed at the top of the slope. Maerl (*Phymatolithon*) was recorded at all 4 sites and *Cerianthus lloydii*, swimming crabs, scallops, two-spot goby (*Gobiusculus flavescens*), and leopard-spotted goby (*Thorogobius ephippiatus*) were all recorded as common on at least one of the Clauchlands sites.



Maerl Bank North of Holy Isle (Sites 4, 8, 11 & 16)

To the south of the North Channel Entrance to the bay, a sedimentary ridge consisting of a denuded maerl bed (5-10% living) rises from 16m to 10m and descends again to 15m over a total horizontal distance of 350m. Boulders with hydroids attached were scattered across the top of the ridge. A range of sizes of scallops were present on the maerl (see below) with very young specimens also found attached to the hydroids on the boulders. Maerl (*Phymatolithon*); spider crabs, swimming crabs, scallops and *Asciadiella aspersa* were all recorded as common. *Janolus cristatus* was also photographed (below right).



Gurnard Bay (Sites 14 and 15)

At this site, kelp park covers boulders laying flat at 2m at the top of a boulder slope. The boulders then drop off steeply to the north (at a bearing of 330 degrees) from 2m to 4m. Sea-whip covers the boulders on the slope. An exceptional amount of young fish fry were recorded amongst the strands of seawhip. A sandy seabed slopes gradually from 4m to 15m with hermit crabs, starfish, scallops and flatfish. Kelp, lobster (*Homarus gammarus*), *Asterias rubens* and Ballan Wrasse (*Labrus bergylta*) were all recorded as common.