REPORT OF THE LUNDY MARINE PROTECTED AREA ADVISORY GROUP

The Lundy Marine Protected Area Advisory Group (LMPAAG) provides a forum for the discussion of all matters relating to the island's waters and shores. The Group includes representatives from the island (the Lundy Company/Landmark Trust), Natural England, the Devon & Severn Inshore Fisheries & Conservation Authority (D&SIFCA), Historic England, the Marine Management Organisation, the Lundy Field Society, the Marine Biological Association, MARINElife, local nature conservation groups, commercial fishing interests, dive charter boat skippers and local dive clubs.

The Group meets twice a year: in 2016 it met on 27 April on board the MS *Oldenburg* alongside Bideford Quay, and on 11 October at the Ilfracombe and North Devon Sub-Aqua Club, Ilfracombe. The Lundy Field Society provides the secretariat for the LMPAAG. Through the Secretary, the Group brings matters of importance to the island's Management Forum (which also meets twice a year, usually immediately after the Advisory Group meetings), the decisionmaking body which manages both terrestrial and marine aspects of Lundy.

During the two meetings held in 2016, a variety of issues were brought to the attention of the Group and discussed. These are summarised below:

MPA funding

Natural England (NE) had undergone cutbacks in their overall funding from Defra in recent years (due to government austerity) and Lundy was no exception. Consequently, those responsibilities concerning the MPA which had been NE's had now been moved to other organisations such as the Marine Management Organisation and D&SIFCA. For the past couple of years, NE had not funded the Warden's post (now taken on by LT/Lundy Company with additional input from D&SIFCA) and certain tasks undertaken by the Warden have had to be suspended.

Results of the SAC's monitoring of the sublittoral rock communities

We welcomed the PML Applications Ltd team leader, Dr Tom Vance, to our first meeting of the year to present the results of their studies (outlined in last year's LFS Annual Report). These are summarised below:

- Kelp forest communities found to be in overall favourable condition, although at Rat Island an increase in the proportion of golden kelp *Laminaria ochroleuca* (a southern species) was noted compared to that of cuvie *L. hyperborea* (a northern species). As *L. hyperborea* has many more epiphytic species associated with it (as compared to *L. ochroleuca*), this alteration in constituent proportions may have an impact on associated infralittoral communities in the longer term.
- Vertical and overhanging circalittoral rock many of the species associated with this subfeature are known to be long-lived and all species which were expected to be present were found to be present, although not necessarily in similar abundances to previous assessments undertaken in 2004 and 2010. Populations of sunset cup corals were found to have continued their decline by an alarming 57% at the Knoll Pins, compared to numbers in 2010. No corals were found at either Gannets' Rock Pinnacle or at Anchor Lump, where small numbers had been found previously. This part of the sub-feature was therefore regarded as being in unfavourable condition.

- Subtidal bedrock and stable boulder communities the epifaunal species found in these communities were very similar to what had been recorded before, with only minor changes in abundances (some positive, some negative). Comparisons were made with data collected during the monitoring of the No Take Zone (NTZ) in 2003/04. This sub-feature was therefore regarded as being in favourable condition.
- Density and condition of sea fans there was a wide variation in the density of sea fans at various sites, with a notable decrease in abundance at some and a definite increase at others. Their overall distribution was described as patchy. However, the overall condition of the sea fans was considered to have improved since the last monitoring assessment, so the subfeature was regarded as being in favourable condition.
- Maximum depth of foliose algae two sites were revisited: Dead Cow Point off the west coast, and the Knoll Pins off the east coast. The deepest depths at which red algae (20.7 m below chart datum (bcd)), brown algae (20.2 m bcd) and kelp plants (11.2 m bcd) were found were measured using diving depth computers. These depths were found to be within acceptable shallower/deeper limits when compared to those recorded in 2010. The point of this exercise is to assess the overall clarity of the water affecting the island the clearer the water, the deeper the algae would be expected to grow.
- Changes in sessile epifaunal communities inside and outside the No Take Zone the abundance of 15 species was assessed within (and outside) the NTZ, which has been in existence since 2003. The results showed that there was very little difference between the community structure found in 2004 and that present in 2014, both inside and outside the NTZ. These results confirm the long-lived and stable nature of these communities.

A new Marine Management Plan for the MPA

The MPA has not had a Management Plan for some time. The last such Plan was produced in 2001 by English Nature (prior to even the designation of the No Take Zone in 2003 and the Marine Conservation Zone (MCZ) in 2013) and so has been out-of-date for quite a few years. The production of a new Plan had been discussed for some time but Natural England were reluctant to produce a new one until their 'packages' for the Special Area of Conservation (SAC, a Site Improvement Plan and Advice on Operations) and for the MCZ (Supplementary Advice on conserving and restoring site features) had been published, the final versions of which appeared in March 2016.

Consequently, over the winter of 2015/16, Beccy MacDonald worked on drawing up a new Marine Management Plan, with funding from Natural England. By the summer, she had produced a first draft which was presented to all members of the Lundy Management Forum (including Keith Hiscock and Robert Irving) for comment. Initial reaction to it was that the updated format was welcomed but that the content still needed some work doing to it. A second (final) draft was subsequently submitted to the Management Forum and was uploaded onto the MPA pages of the Lundy Island website. However, it was noted that more work was still needed to include important information and to correct errors.

Proposed re-survey of sunset cup corals

Although Natural England had had to curtail their funding for the Warden's post and for monitoring projects within the MPA a couple of years ago, a small amount was allocated for a re-survey of the population of sunset cup corals *Leptopsammia pruvoti* at the Knoll Pins. This population was known to have been in decline since first investigated in the early 1970s. Unfortunately, despite

several attempts over the summer, poor weather conditions coincided with neap tides and an available dive boat, resulting in the survey having to be cancelled. Instead, Natural England reallocated the funding to provide a revision of the Marine Management Plan in early 2017.

Spiny lobster or crawfish Palinurus elephas

Spiny lobster is the one feature for which the Marine Conservation Zone has been designated. Whilst this species was quite abundant at Lundy during the 1970s and 1980s, numbers have since declined, although there now seems to be a recovery underway. However, there are no data on the size of the current population. At the Group's meeting in April, D&SIFCA told us of their plan to address this lack of data by using the help of pot fishermen and divers to record where and how many spiny lobsters are seen, together with their size. For those caught in pots, the intention would be to attach small tags to them before being released, to help with assessments of growth rates. Consequently, a D&SIFCA officer went out to Lundy with a local fisherman and the Ilfracombe Diving Club early in the summer, but to no avail – no spiny lobsters were brought up in pots and the divers had had no luck in finding any either. However, during the rest of the summer, several crawfish of varying sizes were caught in lobster pots, some of which were tagged.

Acquisition of sea temperature data from automatic loggers

At the Group's October meeting, attention was drawn to the importance of maintaining the two seawater temperature loggers: one in deeper water on the wreck of the MV *Robert* and the other in shallower water at the end of the jetty in the Landing Bay. These loggers obtain accurate temperature readings up to three times a day and will last for 14-18 months before they need to be downloaded. The long-term data sets which they generate provide a continuous record of environmental information assisting our overall understanding of the health of Lundy's marine life.

Linked to this recording of physical aspects, each year visitors to the MPA, particularly divers, are encouraged to record their observations of marine species and events in the LFS logbook held in the Tavern. For 2017, it was suggested that a new page could be created on Facebook, allowing for photographs and comments on new or unusual sightings to be uploaded immediately.

The wreck of HMS Montagu

At the October meeting of the Group, a question was raised with Alison James, Historic England's representative, as to whether the historical importance of the wreck of HMS *Montagu* was worthy of it being declared a protected wreck site. The wreck lies just to the north of Shutter Rock at the south-west corner of the island in about 8-12 m depth. Once the pride of the Navy, the ship ran aground in 1906 and was stripped of all that could be removed before being left to the elements. Little remains of the vessel now, being a jumbled mass of seven-inch thick rusted steel plates covered by kelp forest, though it still makes for an enjoyable shallow dive. We were told that Historic England would look into the matter.

Updating of the MPA website

The announcement that the Lundy Marine Nature Reserve would become the first Marine Conservation Zone in 2010 was accompanied by the appearance of a new stand-alone website (**www.lundymcz.org.uk**), launched in September 2011. With the recent introduction of the overarching term of Marine Protected Area (MPA) for all of Lundy's various marine conservation designations, it was agreed by the Group that it would be an appropriate time for the website to be updated too. This is likely to take place over the next 12 months, with the site becoming part of the island's website (**www.landmarktrust.org.uk/lundyisland**).

New SAC to incorporate Lundy

A proposal to designate a large swathe of the outer Bristol Channel as a new Special Area of Conservation (SAC) was at an advanced stage and awaited approval by EU ministers. The area will be known as the Bristol Channel Approaches SAC and is being designated specifically to protect harbour porpoises *Phocoena phocoena* which frequent the area. The SAC will extend from the north coast of Cornwall and Devon, across the outer Bristol Channel to Carmarthen Bay on the south coast of Wales, covering an area of 5,850 km². The whole of the Lundy MPA will be included within this area. The area has been shown to support over 2,000 individual porpoises for at least part of the year (particularly during winter months).

If there are any matters which LFS members would wish to have addressed at the Advisory Group meetings, I would be happy to raise them on your behalf.

ROBERT IRVING Honorary Secretary Lundy Marine Protected Area Advisory Group April 2016