The feral mammal stock was heavily culled in 2012 as counts carried out by Peter Hamlin and his team suggested that the populations of goats, Sika deer and Soay sheep were all high. Post-cull the numbers of each species were estimated at 156 Soays, 59 Sikas and 20 goats.

The rhododendron eradication programme made good progress with 15,000 seedlings pulled and 1,800 treated on the sidelands, and a further 1,600 seedlings treated on the plateau.

Steve Compton and Roger and Rosie Key counted 7,400 Lundy cabbage plants in flower at the end of May – an increase over the previous year. However, the number of seedlings had fallen.

Seabird monitoring again took place throughout the season, with Puffins having their best season for many a year. A peak count of 171 birds on 20 June was almost three times that of the previous season. Ringing of Manx shearwater chicks took place in late August and early September, with 251 chicks ringed.

BECCY MACDONALD April 2013

REPORT OF THE LUNDY MARINE CONSERVATION ZONE ADVISORY GROUP

The Lundy Marine Conservation Zone Advisory Group (LMCZAG) 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), Natural England, the Devon & Severn Inshore Fisheries & Conservation Authority, the Lundy Field Society, the Marine Biological Association, English Heritage, Devon Wildlife Trust, Torridge District Council, commercial fishing interests, dive charter boat skippers and local dive clubs. The Group meets twice a year: in 2012 it met on 24 April on board the *MS Oldenburg* alongside Bideford Quay, and on 30 October at the Ilfracombe and North Devon Sub-Aqua Club, Ilfracombe. The LFS provides the secretariat for the I MCZAG

A variety of issues were brought to the attention of the Group and discussed during the two meetings held in 2012. These are summarised below:

Atlantic Array windfarm proposal

The proposals for a windfarm north and north-east of Lundy were discussed at both meetings. Whilst the Advisory Group had been taking a close interest in the proposal's progress, most members of the Group were already represented by their own organisations with regard to submitting formal comments to the developers. Consequently, there was not an official Advisory Group position on the development.

Marine Conservation Zone (MCZ)

It was reported that although Lundy automatically became a MCZ when the Marine & Coastal Access Act came into force, it was still a part of the consultation to be launched by Defra late in 2012. The boundary and the conservation objectives for the Lundy MCZ will be included within the consultation document. There was a contract being undertaken by the consultants APBMer in association with the Marine Biological Association to ensure that all existing data have been included in the assessment exercise.

Wardens

Reports from the Lundy wardens were given at both meetings. They were, however, unable to attend the spring meeting and both had left the island by the time of the autumn meeting.

Survey of subtidal sediments and infauna

During the summer, Natural England in conjunction with the Environment Agency undertook a grab survey of seabed sediments within the MCZ. 'Sandbanks which are slightly covered by sea water all the time' are an Annex 1 qualifying feature for the Special Area of Conservation (SAC) and are required to be monitored (at least once every six years) to assess their condition. This particular survey had two aims: (i) to investigate levels of toxicity within the sediments; and (ii) to assess the diversity and abundance of infaunal species. Whilst the results of the infaunal assessment were still awaited, the toxicity tests revealed high levels of chromium, copper, lead and nickel, which are thought to accumulate at Lundy after being flushed down the Severn Estuary.

Studies of Lundy's cetaceans and seals

The University of Plymouth had embarked upon a long-term association with the MCZ, with MSc students in particular being encouraged to undertake fieldwork on the island. In 2012, Natalie Squires and Katy Hodgsen-Ball studied the behaviour of dolphins and porpoises around the island (using direct surface observations and also in-water soundings recorded on a C-POD) and behaviour of seals. Some scat of grey seals (obtained from their haul-out sites) was collected to determine their diet, the presence of plastics and of stress-related hormones. Additionally, regular cetacean and seabird surveys were undertaken during the summer months aboard the MS Oldenberg by members of the charity MARINElife (www.marine-life.org.uk); and sightings of cetaceans were regularly being made by charter boat skippers.

No Take Zone (NTZ) monitoring

After a gap of five years, Natural England were planning to commission a re-survey of the NTZ in 2013. The Devon and Severn Inshore Fisheries and Conservation Authority (D&SIFCA), the World Wide Fund For Nature (WWF) and the Devon Wildlife Trust (DWT) had expressed their interest in collaborating and contributing resources to the project. A revised methodology was being drawn up.

SAC reporting cycle

Once a Marine Nature Reserve and now a Marine Conservation Zone, the waters around Lundy still remain a Special Area of Conservation (SAC), as recognised under the EC Habitats Directive. One of the requirements of this Directive is to report on the condition of the SAC every six years. This was done for the first time in 2006. The 2012 report indicated that most of the intertidal and subtidal conservation features were in favourable condition with the exception of the sunset cup coral Leptopsammia pruvoti (see below) and the pink seafan Eunicella verrucosa. Natural England, the agency responsible for the reports, concluded that the island's seacaves need more research to confirm their status.

Analysis of cup coral images

Robert Irving of Sea-Scope Marine Environmental Consultants analysed images of L. pruvoti sunset cup corals taken in July at the Knoll Pins by Dr Keith Hiscock. It was noted that whilst the total number of adult cup corals continued to decline, there was an increase in the number of juveniles. However, there was an overall declining trend in total numbers. Keith also reported an increase in the number of Weymouth carpet corals Hoplangia durotrix (a nationally scarce species) seen in the same vicinity.

Input of Lundy's marine data onto database

Lundy's marine data are now being entered onto the Marine Recorder database by Liz Bailey of Natural England to ensure a solid information source on species abundance data for the MCZ. It may also be possible to add data from visitor logbooks after being verified. There was a suggestion of preparing an LFS leaflet to urge people to report sightings as well as 'wanted' posters featuring certain species. Other suggestions included a members area of the website to upload sightings data to ease the process of digitising the information. It was agreed that organisations need to improve the coordination of recording data and events, ideally electronically.

Studies of commercial crustacean species

Sarah Clark (Environmental Fisheries Officer with the Devon and Severn IFCA) initiated a lobster tagging programme around Lundy in June 2008 in order to assess migration patterns in and out of the NTZ. In May to July 2012, a further 500 tags were attached to lobsters using improved streamer tags. September tagging was not carried out due to bad weather. Re-capture inside the NTZ was good, though not many recaptures were reported by fishermen outside the NTZ. The IFCA had increased the reward for recovered tags to £2.50 in an effort to improve the reporting rate. New tags will help longer term identification.

Staff and students from Swansea University had been undertaking an analysis of the 'shell disease' status of crab and lobster populations, both within and outside the NTZ, under a project known as SUSFISH. (The work is part of a collaborative project between Welsh and Irish Universities investigating the impacts of climate change on commercial shellfish productivity within the Irish Sea). Shell disease was not found to be present at Lundy and the only lesions reported had resulted from territorial battle scars. The team had also been looking for the presence of lobster louse (a gill parasite) and gaffkaemia (a bacterial disease of lobsters). These are not pathogenic but likely to be stressors on the population.

NTZ infringements

At the Group's autumn meeting, scallop dredging was reported to have taken place within the MCZ (and even within the NTZ). The Warden, as an honorary Fisheries Officer for the Devon & Severn IFCA, reported the incident to her colleagues in Brixham, who agreed to investigate the matter further. It was likely that the infringement took place at night. The IFCA were looking at better ways to apply byelaws and to improve conservation measures by reviewing byelaws. They are involved in the review of fisheries within marine SACs. One way of monitoring fishing vessels is by means of a Vessel Monitoring System, where the location of a fishing vessel is registered every two minutes. At the time, a trial of this system was taking place in Lyme Bay and would provide valuable lessons for Lundy.

Book launch

At the end of July 2012, Protecting Lundy's Marine Life: 40 years of science and conservation by Keith Hiscock and Robert Irving was published, with copies available through the Lundy Field Society's website (www.lundv.org.uk/publications/40vears.html). Those who had contributed content were thanked, together with the sponsors, the designer and the printers, all of whom had done an excellent job.

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

> ROBERT IRVING Honorary Secretary Lundy Marine Conservation Zone Advisory Group May 2013