

Lundy's Marine Nature Reserve – a short history

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Introduction

When placed in the context of marine conservation worldwide, Britain may seem to have been relatively slow off the mark in establishing protected areas off its coasts. The fact that the waters which bathe much of our coastline are rather turbid and uninviting, especially when compared to the crystal clear waters of tropical coral reefs, could well have something to do with this. A paucity of the sort of imagery which enthuses film-makers and a strong terrestrial bias by the founding fathers of nature conservation, has resulted in a lack of awareness of the wealth of marine life that can be found in British waters, and hence any need to conserve it.

It was not until the advent of SCUBA diving that a full appreciation of our underwater wildlife started to be pieced together. The popularity of diving as a sport gradually grew during the 1960s when many of what are now recognised as being this country's best dive sites were visited for the first time. Lundy was one such place, and in the mid-1960s, sports divers visited the island for the first time. However, it was more for the clear waters, spectacular underwater scenery,

wrecks and the edible or souvenir wildlife that the island was at first attractive.

The impressive array of marine wildlife at Lundy, however, would soon be liable to threat from several quarters. Spearfishing using aqualungs was popular with many of those early underwater explorers, leading to near-shore fish populations, particularly of territorial species which tend to remain in the one area, losing their largest individuals. This activity would also lead to many fish becoming wary of divers such that the fish would keep their distance when divers were in the water. Souvenir hunting for shells, urchins and sea fans also became popular, doubtless leading to a significant reduction in certain populations. It was soon realised by those who appreciated the need for conservation that measures to safeguard Lundy's underwater wealth were urgently needed.

In the late 1960s, there was a worldwide movement to establish marine parks and reserves. Lundy was an obvious candidate. Fortunately, through the hard work and persistence of a small number of individuals, Lundy became Britain's first voluntary marine nature reserve, and later had the distinction of also becoming the first statutory reserve. Indeed, it has remained England's sole Marine Nature Reserve (MNR) for ten years now, and it looks likely to remain so for some time to come, given the existing difficulties in the legislation and the process used to establish its status.

This paper summarises the background to how both the voluntary marine nature reserve and the

statutory one around Lundy were established, and how the current MNR is being managed by English Nature (the Government's advisor on nature conservation in England), with the help of the Landmark Trust and the Devon Sea Fisheries Committee, in order to safeguard its interest for future generations to enjoy.

The early days: pre-1973

Diving around the island began in earnest in the mid-1960s when Don and Jeanie Shiers, founders of the Aquatic Club, established a diving centre, with the main aim of diver training and a commercial interest in marine salvage. Many of the wrecks around Lundy still remain in the ownership of Mr Shiers' company, Bristol Channel Divers. Bristol Channel Divers had negotiated the concession to run diving from the island with the Harman family and, with a well-equipped shore base, they were able to exert some control over the diving around the island. In an effort to supplement income, various marine 'souvenirs' were collected, including sea fans and sea urchins. Shellfish, particularly crawfish, were also greatly prized for their commercial value and as delicious meals. However, as the importance of Lundy's marine wildlife became apparent in the early 1970s, Bristol Channel Divers became collaborators in survey projects and in helping to protect the vulnerable wildlife.

The remoteness of Lundy was one of the main reasons for suggesting that it would be an excellent site at

which to establish the first underwater nature reserve in Britain. Articles promoting the idea were published in the Journal of the Devon Trust for Nature Conservation by John Lamerton, Assistant Regional Officer for the Nature Conservancy (Lamerton 1969); and Heather Machin, working for the Devon Trust for Nature Conservation (Machin 1969). However, a number of questions immediately presented themselves. Should such an area be termed a 'marine nature reserve', a 'marine conservation area', a 'marine sanctuary' or even a 'marine park'? What was the legal position regarding ownership and/or leasing of the sea bed from the Crown Estate? Should all collecting by divers be banned within a reserve, or just collecting on a commercial scale? And should commercial fishing still be allowed?

In the same year that these articles were published, some of Lundy's underwater treasures began to be revealed, when Keith Hiscock and some student friends dived the island for the first time. He discovered a population of the rare cup coral *Leptopsammia pruvoti* (though it took him a year to put a name to it) – the first time it had been recorded in British waters. With ownership of the island passing to the National Trust, and the commitment of the Landmark Trust to manage and improve the island, both organisations dedicated to conservation, the proposal gained additional justification.

In March 1971, a group of conservationists and marine biologists, led by Keith Hiscock (at that time

1. The richness of the marine life and the variety of habitats and environmental conditions within a limited area isolated from local sources of pollution are outstanding.
2. The clear waters around the island and the spectacular underwater scenery are attractive to the diving public, the more discerning members of which require unspoilt scenery and interesting marine life.
3. Diving conditions are good and it is possible to dive somewhere around the island in most weather conditions.
4. The island's size, isolation and limited development has resulted in there having been little exploitation or collecting in the past.
5. Lundy is therefore an ideal locality for the study of marine ecology and for monitoring changes in the structure of marine communities.
6. Unless protected, the valuable asset of Lundy's marine life is threatened by the collecting activities of divers for souvenirs, for the curio market, and in the course of research.
7. Policing to protect the area is feasible as a result of the island's isolation and small size. Visitors either have to stay on the island or have substantial boat facilities to remain independent of shore based facilities. Visitors are easily seen, approached and informed of the status of the island's shore and sea bed.
8. Laboratory and reference facilities are or can be made available for the scientist. Interpretative and educational literature is available for the amateur diver on Lundy: e.g. a diving field guide.
9. Lundy is owned and managed by organisations wishing to conserve the best parts of man's environment. A marine reserve policy to control activities on the shore and sea bed complements and is compatible with the terrestrial management programme.

Table 1 Reasons presented for the establishment of a (voluntary) marine nature reserve at Lundy (taken from Hiscock *et al.*, 1972).

undertaking postgraduate research at the marine laboratories in Menai Bridge), put forward the proposal that a marine nature reserve be established around Lundy (Hiscock 1971a). The foreshore and sea bed up to 1 km around the island should be managed for the purposes of research, education and recreation. Details of the proposals were published in several journals, including *Nature*, *Triton* (the journal of the British Sub-Aqua Club) (Hiscock 1971b), the *Underwater Association Newsletter* and the *Journal of the Devon Trust for Nature Conservation*. From opinions expressed and correspondence received, it was apparent that there was a great deal of interest in these proposals. At the same time, the Natural Environment Research Council was also considering the practical and legal problems involved in setting up marine reserves in Britain, so they followed the Lundy project with interest.

In 1972, an Advisory Committee was formed which included representatives of the Landmark Trust, the Nature Conservancy, Lundy Field Society, Bristol Channel Divers Ltd. and marine biologists. Although it was originally envisaged that this committee would meet occasionally, it met only once to discuss the establishment of a voluntary reserve: most matters thereafter did not require decisions to be taken by a full committee. A Management Policy was drawn up which included a Code of Conduct (see Table 2), incorporated into a leaflet distributed to all divers visiting the island.

The voluntary marine nature reserve: 1973 – 1981

The voluntary marine nature reserve was formally identified in 1973, after the publication of the management policy (Hiscock *et al.* 1972). It covered the foreshore and sea bed around the island, from high water mark to 1 km offshore (Fig. 1). Its extent was determined by the following factors:

1. Inclusion of habitats, communities and species of high scientific interest. These are predominantly on rock substrata which extend to about 1 km offshore on the west and south coasts; and on/in sediments, rarely encountered on the open coast, which extend to about 1 km off the east coast.
2. Inclusion of an area which is reasonably small from the point of view of control.
3. Exclusion of fishing banks and areas of substrata which occur commonly in the Bristol Channel and its approaches.

During the mid-1970s, a major programme of research was embarked upon, aimed at describing the littoral and sublittoral ecology of the island and listing the marine fauna and flora (see also the paper by Keith Hiscock elsewhere in this volume). Additionally, two courses were run from the island, one in sublittoral ecology and the other in methods for studying underwater habitats using diving. There were also plans for the proposed island museum to feature a major

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marine display, but as we know, plans for a museum have never reached fruition.

As a pilot project, aimed mainly to assess the work of a warden, a marine warden (Nigel Thomas), was appointed on a six-month contract during the summer of 1978. The post was jointly funded by the Nature Conservancy Council, the World Wildlife Fund, the Lundy Field Society, the Browne Fund of the Royal Society, the Natural Environment Research Council and individual workers. As part of his brief he was asked to:

1. ensure the Code of Conduct was abided by; provide guidance and information to visiting divers;
3. assist field workers in carrying out their studies;
4. assist in organising and running field courses in sublittoral ecology; and to prepare illustrated guides for the reserve.

At the end of the six months, the project was deemed to have been a success, with all the above requirements being met (Thomas & Hiscock 1979). However, a further eight years had to pass before the next marine warden was appointed.

While the day-to-day management of the voluntary reserve required minimal interference, there was concern over two matters in particular: the commercial collection of sea urchins *Echinus esculentus*; and dredging/trawling over the area of sea bed occupied by

the red band fish *Cepola rubescens* and other species of nature conservation interest off the east coast. In order to resolve these problems, a meeting was held with the Devon Sea Fisheries Committee (DSFC) in March 1979 (Hiscock 1983). While it was felt that the collection of sea urchins could not be considered under the jurisdiction of the DSFC, a "gentleman's" agreement was reached that no dredging/trawling should take place west of a line between the Knoll Pins and Surf Point, the area inhabited by red band fish and where one of the richest, most scientifically interesting sediment habitats was present.

Proposals to establish a statutory MNR, 1982 - 1986

The introduction of the Wildlife and Countryside Act in November 1981 allowed, for the first time, for statutory Marine Nature Reserves (MNRs) to be set up in UK territorial waters. The Nature Conservancy Council (NCC), who were given the task of selecting proposed sites, drew up an initial list of 26 sites of known outstanding scientific interest, with 7 being put forward in the first tranche. These were Lundy and the Isles of Scilly (in England); Skomer, Bardsey and the Menai Strait (in Wales); and Loch Sween and St Abbs (in Scotland).

The reasons for changing the voluntary status of the reserve around Lundy are set out in Table 3. One of the main stipulations of the Act was that all parties concerned were obliged to be fully consulted by the

Lundy (Voluntary) Marine Nature Reserve: Code Of Conduct

The variety of marine habitats, communities and species around Lundy is of outstanding conservation importance. Respect of this Code of Conduct will help to ensure that these special features remain as undisturbed as possible, thereby helping to maintain the present interest for all to enjoy.

Species other than fish or shellfish

1. Many vulnerable species and communities occur within the Reserve and to ensure their protection no destructive sampling of marine wildlife should be undertaken unless a permit allowing such sampling has been issued following consultation and agreement with the Nature Conservancy Council.
2. To minimise the impact of collecting, only single specimens of marine wildlife should be collected for the purpose of identification. Any other collection may only take place after issue of a permit following consultation with the Nature Conservancy Council. Permission may be withheld for some species of coral, soft coral and sea fans in particular.
3. When looking for examples of marine wildlife, you are requested to replace boulders in their original positions if they have been overturned for examination. Please limit this activity as every time a boulder is disturbed the associated communities are damaged.
4. There are large numbers of rare or unusual species growing on the Knoll Pins many of which are delicate and particularly vulnerable to damage from certain activities. To minimise the risk of such damage to the communities found here, there should be no anchoring within 100m of these pinnacles, nor should fishing gear be deployed within this area.

Fish and shellfish

5. The towing of trawls and dredges over the seabed can cause considerable damage to soft sediment habitats and communities, many of which are of high scientific interest. For this reason, trawling and dredging within the Reserve boundary is prohibited.
6. Tangle and gill nets can break free from their set positions and may ensnare divers, seals, diving seabirds and other marine wildlife. To minimise the risk of this happening, such nets should only be deployed within the Reserve after agreement with the Devon Sea Fisheries Committee.
7. There should be no collection of shellfish by any means within 100 m of the Knoll Pins.

8. To protect populations of nearshore territorial fish (many of which are long-lived and remain or return to the same area over many years), anglers are asked to return to the sea any wrasse caught.
 9. The use of spearguns within the Reserve is prohibited.
- Seals
10. Intertidal caves and inaccessible boulder beaches are used by grey seals for pupping during September and October. To minimise disturbance to seals at this time, do not approach nearer than 100 m by sea or land to these areas between 1 September and 1 November, except by agreement with the Nature Conservancy Council.
- Seabirds
11. Boats operated close to sea bird colonies, especially at speed, may disturb breeding birds. Please therefore proceed slowly (max. 8 knots) and quietly when within 100 m of such areas, between 1 April and 1 August.
- Rubbish
12. To avoid littering the beach or seabed with unsightly rubbish, boat operators and others visiting Lundy should not deposit rubbish within the Reserve.
- Wrecks and Archaeology
13. Owners of wrecks or anyone else planning salvage operations using explosives within the Reserve should consult the Nature Conservancy Council, so that adverse effects on wildlife can be minimised.
 14. Persons intending to use underwater excavation equipment for archaeological or other purposes should likewise consult the Nature Conservancy Council before such equipment is used.
- Divers
15. When under water, divers are asked to disturb as little as possible. Thoughtless finning close to delicate species, such as sea fans and Ross coral, can easily cause damage. It can also stir up sediment, adversely affecting sediment communities in very sheltered areas and hindering other divers (especially photographers) from seeing what you've just seen. Also remember your bubbles can lodge in caves and can kill marine life there. When diving on the wreck of the *MV Robert* off the east coast (which is of considerable scientific interest), divers are requested not to disturb the marine life growing on the wreck.

Table 2 The voluntary marine nature reserve's Code of Conduct (from Hiscock 1983)

NCC and that a submission to the Secretary of State for the Environment (for proposed MNRs in England) could only take place once the agreement of all had been reached. This presented the NCC with quite a challenge as initially there was a considerable amount of opposition to the proposals by local fishermen and also scepticism from the DSFC. The NCC stressed that the *status quo* for activities within the waters around the island would be maintained, with the exception of certain vulnerable areas which would acquire additional protection (in the form of byelaws). For their part, the DSFC were reluctant to introduce any byelaw which would be seen to discriminate against any one type of fishing. Even spearfishing was included within this proviso. Eventually, however, they were persuaded to introduce a limited number of fisheries byelaws designed to protect the sea bed and open water communities within the proposed MNR.

In order to try to allay some of the fears which had arisen, largely through insufficient explanation or misunderstanding, a meeting was held at Braunton Community College in February 1982, open to all interested parties. The meeting was organised by Dr Keith Hiscock (at that time co-ordinating the drafting of the marine reserve management plan for Lundy) and Heather Booker (North Devon Secretary of the Devon Trust for Nature Conservation). About 70 people attended the meeting and it proved a good opportunity to explain the procedures involved in establishing an MNR, whilst at the same time inviting comments on

the proposals.

It soon became evident to the NCC that the establishment of the statutory MNR was by no means a foregone conclusion. There was much opposition amongst the fishing community (the phrase 'this is just the thin edge of the wedge' was heard on several occasions) and even some divers did not take kindly to being informed that their activities would be restricted to some extent. In an effort to explain the situation better, as well as to assess local opinion on the proposals, the NCC appointed a Marine Liaison Officer (Robert Irving) to Lundy in June 1983. He spent the summers of 1983 and 1984 on the island, talking about the proposals to visiting divers, fishermen and the islanders themselves (Irving 1984).

In August 1984, an 'informal meeting' was held in Bideford, organised by the NCC for all interested parties. These included representatives of the DSFC, the Landmark Trust, the Lundy Field Society, the Marine Conservation Society, scientific research interests, Aquaserve Diving Ltd. (who had taken over the diving concession from BCD Ltd. in 1983), British Sub-Aqua Club, South-West Federation of Diving Clubs, and the Royal Yachting Association. This group was to form the core of the Lundy Marine Consultation Group, which held its first meeting in February 1985. At that meeting, the aims of the Consultation Group were agreed (Irving 1991).

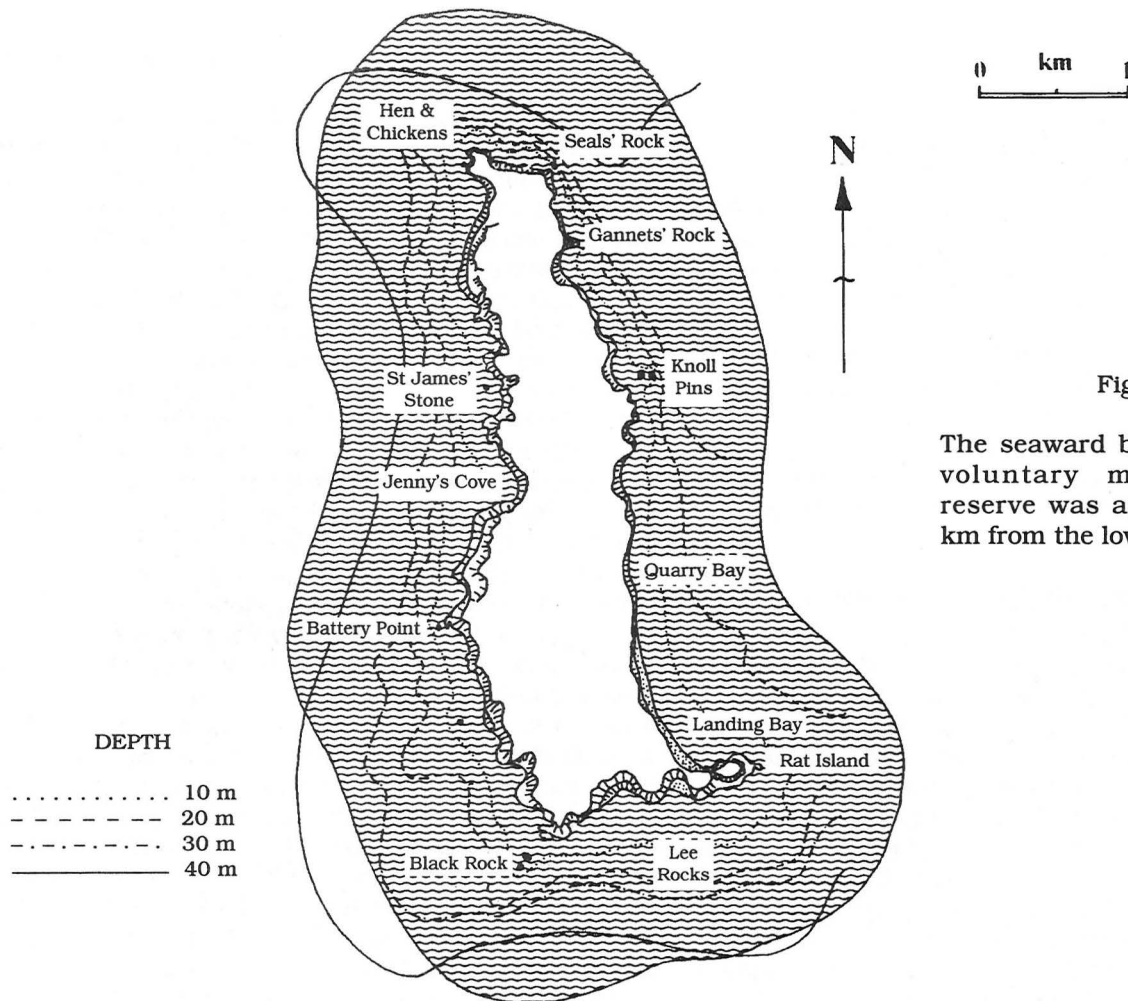


Fig. 1.

The seaward boundary of the voluntary marine nature reserve was approximately 1 km from the low water mark.

These were:

1. to provide a nucleus of expertise on the marine habitats and waters surrounding Lundy;
2. to provide a forum for exchanging views on present and proposed activities around Lundy; and
3. to safeguard the interests of all those who use the waters around Lundy and its natural resources.

After several further meetings between the NCC and the DSFC during a period of formal consultation, the proposal to establish a statutory MNR around Lundy was put before the Secretary of State in early 1986. After a three month period of public notification, it was then declared Britain's first MNR on 21 November 1986.

The Statutory Marine Nature Reserve: 1986 onwards

One of the most important benefits that designation as a statutory MNR brought with it was the provision of an on-site warden, who would have responsibility for the day-to-day management of the MNR, as well as spending some time looking after the island's Site of Special Scientific Interest. In February 1986, Neil Willcox was the first such marine warden in the country to be appointed. Two years later Andrew Gibson took over and had to face many challenges which confronted the MNR during his six years in post (Parkes this volume). Emma Parkes then took on the position of warden in early 1995, leaving at the end of 1996. At

the time of going to press, Liza Cole has just been appointed to the post. It should also be noted here that the Wardens have been helped in their work by a variety of volunteers over the years, especially in the guise of working parties from the Lundy Field Society and the Marine Conservation Society.

Initially, much of the NCC's financial commitment to the MNR was directed towards a monitoring programme (begun in 1984), which they were obliged to undertake as part of the active management of the site (since 1991 this duty continues with English Nature). In particular, the study of certain marine communities and species of high nature conservation interest, but about which relatively little was known, was seen as a priority. If the MNR was to be managed effectively to ensure the protection of these, there was a need for a better understanding of the ecology and life history of each species: for example, how long do they live; what is their potential for recruitment; and are they particularly sensitive to changes or impacts? To tackle these questions, a regular (in most cases annual) photographic monitoring programme was established covering a variety of subjects including changes in: rock-pools; the main shore cover organisms; sublittoral rock communities; and some Mediterranean-Atlantic species such as sea fans and solitary cup corals at sites both on the shore (e.g. Devil's Kitchen) and in the sublittoral (e.g. the Knoll Pins). This work continued from 1984 to 1991 (Fowler & Pilley 1992).

Much of the monitoring work ceased in 1991 for

Reasons for a change to statutory status	Reasons against
<p>1 Increased (national) recognition of the importance of the marine wildlife and habitats around Lundy.</p> <p>2 Greater protection of marine life and habitats through introduction of byelaws limiting or prohibiting certain destructive activities from taking place. Codes of Conduct give no protection against 'cowboys' who can quite legally clean out a resource which has been carefully preserved by the self-restraint of everyone else.</p> <p>3 Provision of a warden to ensure compliance with the regulations, oversee management of the MNR and to act as a source of information.</p> <p>4 Provision of educational materials, in the form of display panels and leaflets, promoting interest in the reserve and respect for its marine life.</p> <p>5 Greater 'say' in limiting activities outside the reserve's boundary (such as gravel extraction or sewage dumping), which may affect marine life and/or habitats within the reserve.</p>	<p>1 By creating a reserve, more divers will be attracted to the area, thereby increasing the chances of damaging the very species that the reserve should be protecting.</p> <p>2 Introduction of controls on commercial fishing activities around the island, which would be unpopular with fishermen. [A]</p> <p>3 Access to island expensive and reliant on reasonable weather conditions, thereby limiting the numbers who may wish to visit the reserve. No threat to marine life due largely to isolation of island.</p> <p>4 More officialdom restricting an individual's rights to do what he/she wants. [B]</p>
<p>Responses</p> <p>A Any new byelaws affecting fishing practices which are thought necessary can only be introduced through the DSFC.</p> <p>B The creation of an MNR may not remove the rights of commercial fishermen or restrict them in any way. The byelaws may not interfere with the right of passage by a vessel other than a pleasure boat; or of a pleasure boat except with respect to specific parts of the MNR and/or during specific periods.</p>	

Table 3. Reasons for and against Lundy becoming a statutory Marine Nature Reserve.

two reasons (although some work has continued every year, such as fixed viewpoint photography of the shores). Firstly, some of the main questions originally posed had been answered, i.e. some of the species are extremely slow growing, reproduce infrequently and are particularly sensitive to disturbance. Secondly, it was felt that there were other aspects of the MNR which merited greater consideration, bearing in mind that the monitoring programme was very demanding on resources.

More recently, monitoring within the MNR has again come to the fore. In 1995, English Nature re-investigated the sublittoral sites and assessed future monitoring prospects (Munro 1995); in addition, a group of Marine Conservation Society volunteer divers, part-funded by English Nature, tackled a number of projects within the reserve (Irving *et al.* 1995); and in 1996, the entire sea bed of the MNR was mapped using RoxAnn remote echo sounding equipment. Consideration is now being given to putting all the monitoring of the MNR on a more strategic basis, to include a range of topics from physical parameters (particularly of water temperature) to the uses of the reserve, and the ways in which these might be studied.

The change in emphasis to considering other aspects of the MNR (besides monitoring) partly reflected the changes in the organisation of the country's statutory nature conservation body, when in April 1991, the NCC split into country agencies including English Nature. Whilst continuing the work of the for-

mer organisation, English Nature placed an increasing emphasis on aspects other than science, including promotion and interpretation as well as management. After the restructure had settled down, the marine section within English Nature set out their marine strategy (English Nature 1993). This placed Lundy clearly at the centre of their work as a 'flagship' and recognised the need to consider the profile of, and work at, Lundy and its benefit to marine conservation as a whole. Two major developments flowed from this and from other changes, such as the increased interest in all aspects of managing coastal areas.

The first of these developments was to look more critically at the management set up for the MNR. English Nature had continued the funding begun by the NCC for a Warden employed by the Landmark Trust and, together with the DSFC, these bodies met from time to time to discuss management issues. However, there was obviously a need to put the management on a more strategic basis particularly as the management plan drafted in 1983 had 'remained on the shelf'. This was given impetus by negotiations over the contract for employing the Warden and the need to agree a properly set out work programme. As a result of these deliberations a new Management Plan was drafted in 1993 covering all aspects of the MNR and SSSI, including a register of projects from which the Warden's work programme is derived. Following a wide consultation, the Management Plan was published in May 1994 (English Nature 1994) and signed up to by

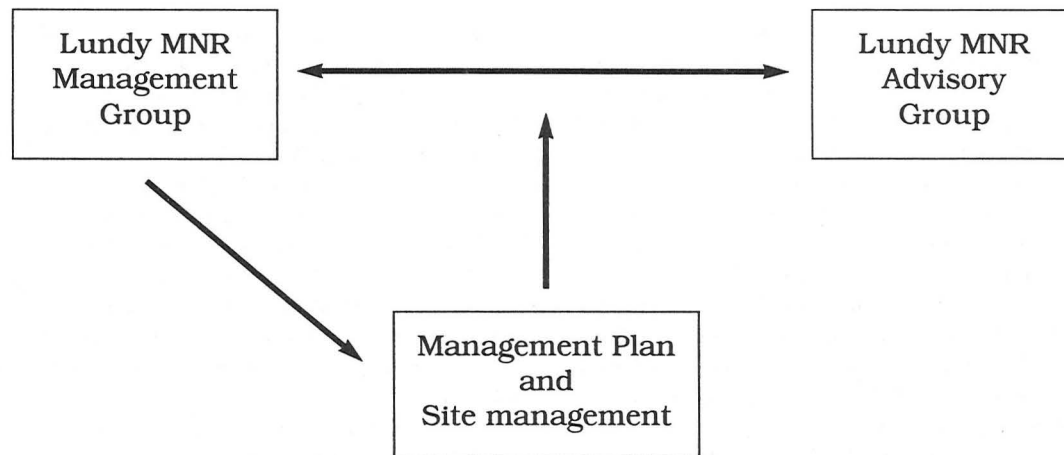


Fig. 2. Administrative structure for the management of the MNR.
Both groups currently meet twice a year.

the relevant statutory and management bodies (English Nature, Devon Sea Fisheries Committee, the Landmark Trust and the National Trust). This is a 5-year plan although the project register is reviewed annually. The Plan includes agreed objectives which inform the decisions and work that go into the running of the reserve.

The Plan has led to new ways of working and to new areas of work. One of the objectives was to establish an effective structure for overseeing the management of the reserve. This led to the Consultation Group taking on a more formal role as an Advisory Group whilst the statutory bodies formed a Management Group. The former discuss relevant issues and provide advice or raise concerns to the latter, who in turn are responsible for taking decisions about the reserve (Fig. 3).

The plan brought a number of new initiatives with it, for example in forming links with maritime archaeology. It was recognised that there was a need to integrate nature conservation and archaeological interests, as, in 1990, two of the wrecks around the island (*Iona II* and the Gull Rock wreck) had also acquired statutory protection under the Protection of Wrecks Act 1973. This led to English Nature holding meetings with a variety of maritime archaeological bodies in order to investigate the nature conservation importance of the wrecks (Heyes 1995); and to the inclusion of the Warden in the licensing system for visits to the protected wrecks. This trend is set to continue and is another good example of Lundy being at the forefront

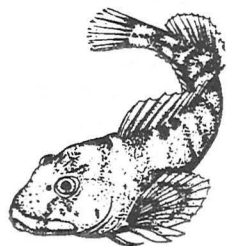
of developments in managing marine areas.

Other initiatives on the MNR are also leading the way. In conjunction with the Management Plan, it was decided to consult on a new idea, that of a zoning scheme for the reserve. This is a useful 'tool' pioneered in marine reserves abroad for summarising byelaws and other regulations, thereby presenting a wealth of sometimes confusing management information in an easy to understand way. This information is interpreted as an overlay on a navigation chart making effective use of colour to indicate differing levels of protection or regulation. The scheme for Lundy, which contained no new regulation but simply summarised existing information, was put out to public consultation in 1993 and generated a lot of interest nationally as well as locally. A revised scheme, incorporating many comments, was launched in early 1995 (Plates 38 & 39). This will be revised every couple of years to take account of changes and further comments starting in 1997.

The second major development referred to above was to take a considered look at the interpretation and promotion of the MNR. To this end, English Nature carried out an Interpretative Review to assess the effectiveness of existing facilities, using some market research on day visitors to the Island (Fowler 1993). Some interpretative material already existed, including various leaflets produced by the Lundy Field Society, a colour booklet about the MNR produced in 1988, and information boards on the quays at Bideford and

Lundy Marine Nature Reserve

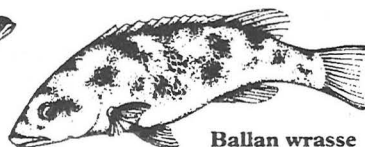
Animals and plants of the snorkel trail



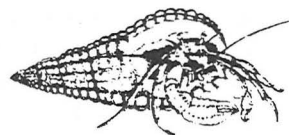
Shanny
dark brown/ green,
up to 16cm, single
dorsal fin.



Pollack
silver green, up to
40cm.



Ballan wrasse
brown to red, 30-40cm,
single dorsal fin, thick
lips.



**Common hermit
crab** usually found
in whelk shells, up
to 10cm.



Cushion star
grey green,
3cm.



**Spiny
spider crab**
pink body up to 15cm,
well camouflaged.



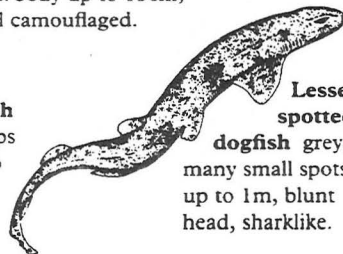
**Beadlet
anemone**
red, brown,
orange or
green, 2cm,
common.



Grey mullet
striped grey body, 30-50cm,
thick upper lip.



Spiny starfish
grey/purple tips
to arms, up to
20cm.



**Lesser
spotted
dogfish** grey,
many small spots,
up to 1m, blunt
head, sharklike.

Fig. 3. Part of the guide produced for use on the snorkel trail.
It is waterproof and can be attached to the snorkeller's wrist.

Ilfracombe, each with a map and a list of the byelaws. However, it was apparent from the review that much more could be done. As a consequence a number of projects were instigated all aimed at improving the appreciation of the MNR by the 20,000 or so casual visitors per year to Lundy (Table 4).

Now visitors travelling to the island aboard the MS *Oldenburg* start their journey at the quayside with a colourful vision of why Lundy is a special marine site. On board they can learn about the reserve and its inhabitants (without getting wet!) from a 14 minute video made by English Nature; and various leaflets are available on the ship (as well as on the shore and in the island's shop) which can help visitors to get more out of their trip to the MNR. For those staying on the island there are opportunities to get even closer to the MNR's wildlife through guided walks on the shore provided by the Warden and taking to the snorkel trail. The latter was set up by the then Warden Andrew Gibson in 1993, with funding from a variety of bodies to provide appropriate equipment. The trail has proved very successful – particularly on a hot summer's day – and provides a wonderful opportunity for non-divers to come face to face with the MNR and its underwater inhabitants.

The MNR in a wider context

The Lundy MNR continues to be a 'flagship' in English Nature's marine conservation work and as such is discussed and promoted at a national level. It has now

been provisionally recognised at a European level as a candidate Special Area of Conservation (a recent conservation designation) for certain of its marine habitats. As an important marine site, Lundy is also on the world map with the video being widely circulated in the marine conservation community and Lundy also being discussed at relevant conferences at the forefront of the field. This role is likely to continue.

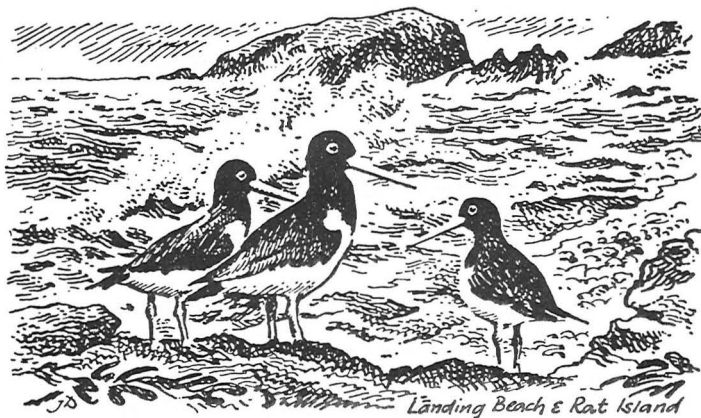
The experience gained in the long history of the MNR and the other MNRs in the UK are of great value in considering the future progress of marine protected areas. Progress has been slow for a number of reasons including perhaps the requirement to secure unanimous agreement for designation, under the terms of the 1981 Wildlife and Countryside Act. However, it should be noted that the designation of marine reserves in other countries can also be very slow: in New Zealand for instance, regarded as being very 'progressive' on this front, only two reserves had been declared 10 years after the relevant legislation came into being. The UK legislation requires that many of the protection measures at Lundy have to be arrived at through discussion and voluntary agreement with other bodies. Both of these issues, however, point up the lessons of needing to consult effectively, ensuring full involvement of local groups and individuals, and communicating information clearly and positively. English Nature will continue to put these lessons into practice at Lundy to the benefit of the MNR and marine protected areas elsewhere.

Summer 1993	Interpretative Review (Fowler 1993).
Autumn 1993	New all-weather promotional panels for the MNR at Bideford and Ilfracombe.
Spring 1994	Series of leaflets published aimed at day visitors including ones on the MNR, Shore Walk at Devil's Kitchen, seals and seabirds.
Summer 1994	Underwater guide to the plants and animals of the snorkel trail.
Autumn 1994	Video: <i>Lundy Marine Reserve – a special place.</i>
1995	New information centre on the MS <i>Oldenburg</i> .
Spring 1995	Portable information and leaflet board on Lundy.
Summer 1995	Repeat of visitor questionnaire.
Spring 1996	New information board for display in the Church.
Winter 1996	New information panel on board MS <i>Oldenburg</i> .

Table 4. Recent developments in interpretation and promotion.

Acknowledgement

Many people have been involved in promoting the conservation of Lundy's marine habitats and species over the years. However, one person, more than anyone else, was instrumental in setting up the voluntary marine nature reserve around Lundy, and still remains deeply committed to the well-being of the MNR. He is Dr Keith Hiscock of the Joint Nature Conservation Committee. His dogged persistence and enthusiasm have helped to ensure that the marine life which makes Lundy so special has been duly recognised and protected, and he is to be warmly applauded for so doing.



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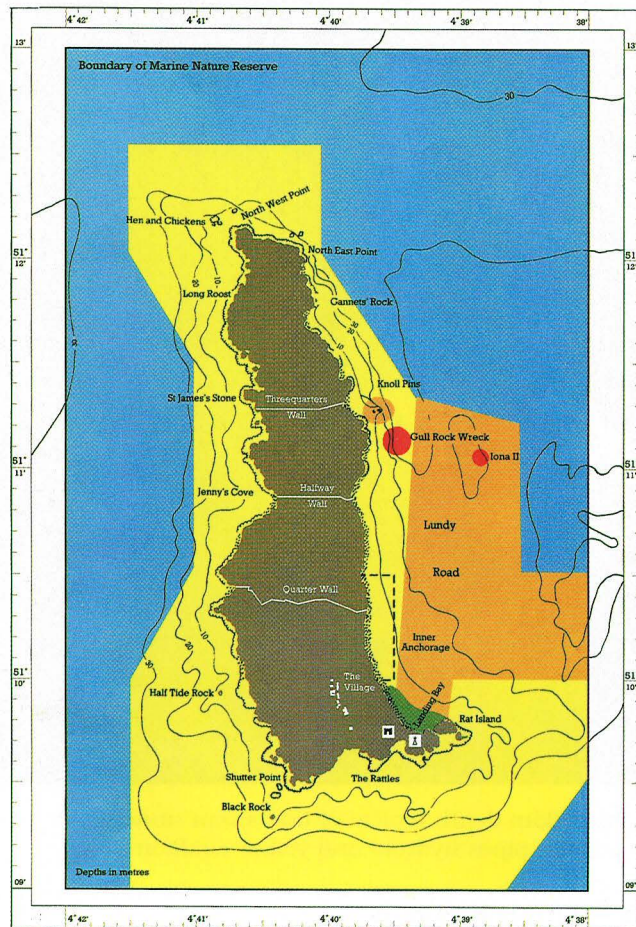


Plate 38

The Zoning Scheme (revised version 1995)

MARINE NATURE RESERVE
ROBERT IRVING AND PAUL GILLILAND

This map is illustrative not definitive

Scale in kilometres



Scale in nautical miles



South Lighthouse



Castle

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Activity						
		General Use Zone	Recreational Zone	Refuge Zone	Sanctuary Zone	Archaeology Protection Zone
Recreational	Diving	Yes	Yes	Yes	Yes	No
	Snorkelling ¹	No	Yes	No	No	No
	Swimming ¹	No	Yes	No	No	No
	Spearfishing	No	No	No	No	No
Commercial	Trawling	Yes	No	No	No	No
	Dredging	Yes	No	No	No	No
	Potting	Yes	Yes	Yes ²	Limited ³	No
	Tangle nets	Yes	No	Limited ⁴	No	No
	Fixed nets	Yes	No	Limited ⁴	No	No
Collecting	Group educational excursions	Permit	Permit	Permit	Permit	No
	Scientific research	Permit	Permit	Permit	Permit	Permit

Plate 39

Key to Zoning Scheme

MARINE NATURE RESERVE — ROBERT IRVING AND PAUL GILLILAND