

LOCAL NATURE RESERVES
A Time for Reflection: a time for new action

**A review and recommendations by the Urban Forum of the
UK Man and the Biosphere Committee**

January 1998



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The Urban Forum of the UK Man and the Biosphere Committee

In the early 1970s an international programme was initiated by UNESCO to examine human inter-relationships with and impacts on the biosphere. The programme was divided into 14 Project areas whose objectives were defined by agreement at international level and whose activities were carried out both at international and at local levels. National Man and the Biosphere Committees co-ordinated the national programmes and linked with UNESCO. Of the Projects, Number 11 was concerned with urban systems.

The mid-1980s saw not only rapid development in thinking, research and practical programmes of environmental conservation in urban areas but also the withdrawal in 1985 of the UK from UNESCO. The UK-MAB Committee, which worked largely on a 'care and maintenance' basis from 1985 until 1 July 1997 when the UK re-joined UNESCO, set up a Working Group to look at how the UK could tap into and contribute to Project Number 11 from outside UNESCO. Following the Working Group's report, the UK-MAB Committee established an Urban Forum in 1987.

The Forum is multi-disciplinary. It acts as a think-tank and concept-developer using the wide range of knowledge, experience and skills of members to think laterally, to give fresh lustre to establish concepts and to identify where new research or review is needed. The Forum is composed of people actively involved in applying the ideas generated and in working in a variety of ways in environmental sciences, planning and conservation.

The Forum has no policy-making or operational role. It is for others to look at any recommendations the Forum makes and to use them to develop policy. It is for others to translate these policies into action.

(Forum members are listed on the inside back cover)

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Foreword

Local authorities in Great Britain have had the powers to acquire, declare and manage Local Nature Reserves since 1949. These have now assumed added significance since local authorities have been developing programmes related to Local Agenda 21 and since the Biodiversity Convention gave rise to the UK Biodiversity Action Plan with its contributory Local Biodiversity Action Plans. Local Nature Reserves can have important roles in all of this. Further, the Government's emphasis on education reinforces the value the Reserves can hold for local schools.

English Nature asked the Urban Forum of the UK Man and the Biosphere Committee to consider the present situation with regard to Local Nature Reserves. It was intended to use the Forum's input in reviewing English Nature's work connected with these Reserves. In developing thinking it became clear that a considerable number of actions were needed from a range of organisations if Local Nature Reserves were to fulfill their potential values to the community and in supporting the conservation of nature. There were also some different problems, opportunities and procedures in Scotland and Wales which needed addressing. In Northern Ireland, the much more recent acquisition by the district councils of powers to provide nature reserves and the rarity with which these powers have been used, have led to the situation there being looked at as a separate part of this document.

With the agreement of English Nature, the Forum has produced and is widely disseminating this review with recommendations directed at those with key roles in selecting, declaring and managing Local Nature Reserves.

The Forum hopes that this review: will add impetus and purpose to programmes involving Local Nature Reserves; will draw attention to the need to give them higher priority in spite of all the other demands on resources; and will add emphasis to their potential not only in nature conservation and environmental education but also in community development.

Comments on this document will be welcomed by the Forum's Secretary, Chris Gordon, The Wildlife Trusts, The Green, Witham Park, Waterside South, Lincoln LN5 7JR.

Abstract of the Urban Forum's recommendations

1. Introduction

- 1.1 We urge local authorities to treat LNRs as important components of a wider environmental strategy and to link them to local, national and international environmental programmes.
- 1.2 The Urban Forum of the UK Man and the Biosphere Committee should consider all LNRs as potential candidates for its accreditation scheme covering examples of best practice in relation to urban and urban fringe systems.
- 1.3 We hope that Scottish Natural Heritage can promote LNRs more actively now than in the past.
- 1.4 We suggest that English Nature develops an active dialogue with local authorities which do not include policies for LNRs in Development Plans and ones which seem reluctant to declare LNRs.
- 1.5 We recommend that the Countryside Council for Wales monitors progress carefully in the wake of issuing guidelines in 1996.

2. The actors

- 2.1 We strongly suggest that local authorities should seek constructive input from the Education Department where LNRs are used for education or where such use is proposed.
- 2.2 We feel it would be very useful for the local authority associations, Association of Local Government Ecologists and the Nature Conservation Agencies (Countryside Council for Wales, English Nature, Scottish Natural Heritage) to meet to discuss and decide about:
 - provision, access to, and maintenance of an authoritative data-base of LNRs which will provide local authorities with helpful information and provide a simple means of monitoring the national picture. (See also 10.2)
 - policy and strategy development in relation to LNRs
 - bye-laws and the ways in which the model set of bye-laws can be kept updated in response to need. To approach appropriate Government Offices with agreed proposals. (See also 8.1)
 - standards of management planning to be recommended to local authorities
 - need for and provision of technical advice.

- 2.3 We think it important that the Nature Conservation Agencies make their position plainer than it is. Are they simply statutory consultees, or do they see themselves as partners and, if so, where does the balance in the partnership lie?
- 2.4 We see it as important for the Nature Conservation Agencies to ensure a consistent approach and standards of advice across their local offices and to monitor the situation annually to ensure this. (See also 5.2).
- 2.5 We urge the Nature Conservation Agencies to review the value grants may have as a tool and a means of steering activities into useful and productive areas. (See also 9.1).
- 2.6 We feel that the extent to which local communities and/or users are involved needs to be improved. Mechanisms need devising and putting in place to ensure this, including those needed to take input from such sources to wherever action and policy is decided.

3. Site selection

- 3.1 We would remind local authorities in their assessment and Nature Conservation Agencies in responding to consultation to check carefully that the meanings given in the 1949 Act are respected. (See also 5.3, 62).
- 3.2 We recommend that separate evaluations be carried out on
- fauna, flora and habitats
 - geology and geomorphology
 - use (actual and potential) for school-based education
 - use (actual and potential) for community education
 - use (actual and potential) for research
 - value to local communities
- 3.3 We ask local authorities to note that large sites are able to support a variety of uses while small sites usually cannot. It is our opinion that sites of less than 2 hectares are rarely suitable for multiple use unless a considerable investment of resources is made.
- 3.4 We feel it would be helpful for Nature Conservation Agencies to debate whether LNRs should warrant buffer zones and to do so in the context of current ideas about green networks in which high quality sites are set.

4. Strategic framework

- 4.1 We are clear in our view that local Development Plans should refer to LNRs and proposed LNRs and include policies for them.
- 4.2 We suggest that it would be constructive if any Development Plan, Natural Heritage Strategy, Countryside Strategy, Nature Conservation Strategy, Environmental Strategy or similar statutory or non-statutory planning document which includes the area under consideration, identifies LNRs as part of a green network and relates their functions and uses to the context of any wider green network.
- 4.3 We are convinced that LNRs should play a part in Local Biodiversity Action Plans and that this should be linked to Local Agenda 21 processes. (See also 11.1).
- 4.4 We suggest that LNRs can be used as a focus for some Local Agenda 21 projects and programmes and may be used as part of local environmental monitoring in the context of Local Agenda 21. (See also 11.1, 11.2).

5. Consultation

- 5.1 We feel it important that consultation (formal and informal) with the Nature Conservation Agencies is made as simple and speedy as possible.
- 5.2 We suggest that the country-wide standards expected by the Nature Conservation Agencies of their staff in responding to consultation, and the justification of these standards be published, reviewed periodically and maintained across the board by them. (See also 2.3).
- 5.2 We believe it important that the Nature Conservation Agencies should intervene in any instances where they have reason to think that the requirements of the National Parks and Access to the Countryside Act, 1949 are not being met. (See also 3.1, 6.2).
- 5.4 See 6.3.

6. Management Plans

- 6.1 We advise local authorities to address the following four elements separately and not attempt to combine them in a single document:
- short policy statement
 - three year costed work plans rolled forward annually
 - site monitoring programme with feed-back loops
 - site data-base.

- 6.2 We emphasise the need to ensure that the requirements of the 1949 Act are met in setting out proposals for enhancing and managing LNRs and that no work is proposed which does not match the purposes of nature reserves defined in the Act. (See also 3.1, 5.3).
- 6.3 We recommend the Nature Conservation Agencies to encourage submission of an outline, at the least, of the policy statement, initial three-year work plan, and site monitoring programme when the formal consultation takes place.
- 6.4 We feel that it would be of benefit if the actors discussed and agreed upon minimum acceptable standards in terms of site quality and management.

7. Management Advisory Groups

- 7.1 We take the view that management advisory groups are so useful that they should be set up unless there are strong reasons against this. Local authorities will find it helpful to tap local expertise from universities, specialist societies, and local communities.
- 7.2 We also believe that user groups can be useful. We recommend local authorities to consider setting them up and ensuring that their views are taken into account. If this is not possible, we suggest that regular (annual or biennial) surveys of users' views be made. Junior user groups (Junior Management Boards) seem potentially valuable on sites used frequently by schools and the Education Department has potentially a valuable role in relation to them. User groups could also give direct links to Local Agenda 21 programmes.
- 7.3 We believe that it would be an advantage if Nature Conservation Agencies and local authorities, in conjunction where appropriate with non-governmental environmental organisations, carried out locally annual reviews of LNRs perhaps as part of a review of broader strategies.

8. Bye-laws

- 8.1 We suggest it is important for the Nature Conservation Agencies and local authority associations to put in place with the relevant Government Departments a means of keeping model bye-laws up-to-date. (See also 2.2).
- 8.2 We urge the Government Departments to put in place systems which will ensure rapid response to applications for approval of bye-laws where model bye-laws are used.
- 8.3 We suggest that the local authorities and Nature Conservation Agencies should find a way of keeping each other informed about new problems arising on nature reserves which the model bye-laws do not cover adequately.

9. Funding

- 9.1 We urge the Nature Conservation Agencies to bring forward plans for new grants directed to LNRs and aimed at steering action and encouraging high standards. (See also 2.4).
- 9.2 We urge local authorities to give high priority to LNRs in strategies and Plans, linking them where possible to Agenda 21 targets, Local Agenda 21, Local Biodiversity Action Plans and environmental monitoring so as to attract funding from outside the authorities as well as from within.
- 9.3 We suggest that the Nature Conservation Agencies and local authorities make a joint bid for European and/or Lottery funding for a major programme of LNR development.
- 9.4 We underline the point that the issues relating to funding full-time staff dedicated to LNRs need exploring by all involved in LNRs and especially by local authorities and Government Departments. Such staff are needed if LNRs are to realise their potential value to nature conservation and to local communities.

10. Inter-Reserve networking and public access to information

- 10.1 We recommend the local government associations and the Association of Local Government Ecologists to develop a means of networking between LNR managers.
- 10.2 We believe it essential that an authoritative and accessible data-base is developed which gives basic factual, administrative and nature conservation information about all LNRs. The local government associations might take a lead but the Association of Local Government Ecologists and the Nature Conservation Agencies have potentially valuable roles. Funding and maintaining the data-base are important issues and might be linked to recommendation 9.3. (See also 2.2).
- 10.3 We suggest that the Nature Conservation Agencies should explore facilitating annual conferences or regional meetings/workshops to bring together LNR managers, advisers and site staff.
- 10.4 We think that it would be helpful if local authorities circulated schools annually with basic information about LNRs in their vicinity. Such information should also be available to the public in local libraries, community centres, etc. and, in Scotland, be sent to the Community Education Service.

11. The Reserves and other programmes

- 11.1 We feel it to be very important that clear linkages be drawn out between LNRs and work coming out of the Biodiversity Convention and Agenda 21 (in particular Local Agenda 21). This should be done not only by those working on Biodiversity and sustainability issues but also by those involved in managing and using LNRs or in developing policies relating to them. (See also 4.3, 4.4).

- 11.2 We strongly recommend local authorities, Government Departments, non-governmental organisations and the Nature Conservation Agencies to include LNRs in the targets and monitors for Agenda 21. (See also 4.4).
- 11.3 We urge the Nature Conservation Agencies to explore in greater depth the values LNRs have for society. This is especially needed in England where the number of LNRs is comparatively large and is rising quickly. The links between nature conservation, improved quality of life and other societal values are particularly important to establish at this time.
- 11.4 We believe that Government should revisit the 1949 Act and its precursor documents and, if necessary, amend legislation affecting LNRs so that these places meet more closely current thinking and needs.

12. Northern Ireland

- 12.1 We hope that district councils will make positive use of the powers given to them to provide LNRs, particularly to support Local Biodiversity Action Plans.
- 12.2 We emphasise the potential that LNRs in or near to settlements have to improve quality of life and to give a focus for community development.
- 12.3 We urge relevant central Government Departments and district councils to form links with those in Great Britain concerned with LNRs and to contribute in developing a UK network of sites and a UK data-base for LNRs.
- 12.4 We recommend the district councils to consider the possibilities of creating new habitats in the course of urban regeneration and derelict land reclamation and developing LNRs which will not only help conserve target species but also give a resource for education and an amenity for local communities to enjoy.
- 12.5 We suggest that those empowered to provide and manage LNRs in Northern Ireland will find food for thought in the foregoing sections of this review.

1. Introduction

- 1.1 LNRs are declared and managed by local authorities under powers given by Section 21 of the National Parks and Access to the Countryside Act, 1949, on land in their area of jurisdiction and owned or leased by them or subject to appropriate management arrangements with the owners and occupiers of the land concerned. In England a District, Borough or County Council and in Wales a County Borough Council, may delegate its powers, with the full agreement of the Parish Council in England or Community Council in Wales, to a Parish Council or Community Council, although there is no known instance of this. In Scotland only the local planning authority declares LNRs and cannot delegate to Community Councils. In exercising their powers under Section 21, the local authority must consult in England with English Nature and in Scotland and Wales with Scottish Natural Heritage and the Countryside Council for Wales respectively.

The 1949 Act says that LNRs must give special opportunities for studying and carrying out research on wildlife or natural features, or be managed so as to preserve wildlife or natural features of special interest in the area, or both. This has allowed considerable variety in the kinds of places declared as LNRs. It is also the case that the underlying motivation for declaring a site a LNR varies considerably too. Be that as it may, the majority of LNRs declared up until the late-1980s were either of high intrinsic value for wildlife or natural features and/or used by schools for field-studies.

A change came in the late 1980s when the Advisory Committee for England of the Nature Conservancy Council gave its opinion as statutory consultee that the wildlife or natural features of a site were of 'special interest' if the public found them so for the quiet enjoyment and appreciation of nature. This view was more formally published in 1991 [English Nature, 1991/1995]. Staff also became more proactive in suggesting LNR designations [English Nature, 1992; Larwood, 1997] - a considerable change from the reactive-only policy of the 1950s and 1960s.

Although there are differences in approach in England, Scotland and Wales, the value local communities place on the wildlife and natural features of sites is seen in England and Wales as an important and legitimate factor in commenting on proposals for new LNRs, and is being considered in the review currently going on in Scotland.

When this was coupled with work showing the physical and psychological benefits of access on a regular basis to natural greenspaces [Rohde and Kendle, 1994], the societal element became important in encouraging urban local authorities to make much more positive use of their powers under Section 21 than had been the case previously [Box, 1991(a); 1991(b)]. Encouragement to do so is also given in documents tying LNRs into minimum standards of provision for accessible natural greenspace which suggest not less than one hectare of LNR per thousand population [Box and Harrison, 1993; Harrison *et al*, 1995; English Nature, 1996]. This figure may be hard to achieve in the short term in heavily populated areas but is a realistic target, as Table 4 suggests. From 127 LNRs in 1985, the total rose

to 549 in 1995, with most of the new Reserves in urban or urban fringe locations. (See Table 1 and Figure 1).

The rise of LNRs coincides with the production, starting in the mid-1980s, of strategies for nature conservation, in which urban local authorities were the most active. Most strategies refer to LNRs and many suggest areas for declaration. Promotion and guidance literature gave impetus to the trend. The aftermath of the 1992 Earth Summit, and notably the Biodiversity Convention, the Local Biodiversity Action Plans linked to it, and Local Agenda 21, together with heightened public and political awareness have, no doubt, accelerated the upward trend. The agencies all suggest now that selecting LNRs should be part of a broad environmental strategy covering landscape, nature conservation, environmental education and socio-economic issues.

The success of the LNRs programme has attracted international attention [Barker, 1995]. The concepts have been adopted in some other countries where similar arrangements did not exist already. The Urban Forum of the UK-MAB Committee has begun an accreditation scheme focussed primarily, but not exclusively, on urban LNRs and analogous sites. This aims to piece together a network of good examples which will give the basis for study tours and bring the managers of examples of best practice together. The network will be a UK contribution to the UNESCO MAB Project No.11 on urban systems. Within an international framework, much of the UK is regarded as being directly affected by urbanisation pressures, unlike areas of comparable size in northern Europe for example. Since many rural LNRs, Country Parks and similar sites are generally accessible and/or are used heavily for education, so performing important functions which benefit the community, the Forum should find it possible to consider all as potential sites for accreditation in the context of Project No. 11.

Success has brought with it some problems. The average size has decreased (see Table 2 and Table 3), site quality and standards of management are variable, and budgets are not increased in line with increased numbers of Reserves in some local authorities. Success is also patchy, with some local authorities very enthusiastic but others not. For a variety of reasons LNRs have been promoted most actively and successfully in England. The clear guidance issued in 1996 in Wales [Countryside Council for Wales, 1996] coupled with a more proactive approach by agency staff is likely to carry things forward here too. In Scotland work is currently in progress to develop Scottish Natural Heritage's work in the field.

1.2 Recommendations

- 1.2.1 We urge local authorities to treat LNRs as important components of a wider environmental strategy and to link them to local, national and international environmental programmes.**
- 1.2.2 The Urban Forum of the UK Man and the Biosphere Committee should consider all LNRs as potential candidates for its accreditation scheme covering examples of best practice in relation to urban and urban fringe systems.**

1.2.3 We hope that Scottish Natural Heritage can promote LNRs more actively now than in the past.

1.2.4 We suggest that English Nature develops an active dialogue with local authorities which do not include policies for LNRs in Development Plans and ones which seem reluctant to declare LNRs.

1.2.5 We recommend that the Countryside Council for Wales monitors progress carefully in the wake of issuing guidelines in 1996.

2. The actors

- 2.1** At site level, individual local authorities are the key actors. LNRs are declared and managed under powers which are their sole province. If a local authority wants to use its powers it does so. If it does not, no LNRs are declared. The lead department varies from local authority to local authority. Since land-use is affected, Planning is often the key department. However, with LNRs being extensively used by schools, the Education Department has a potentially valuable role not realised as often as it should be. Problems can arise when the department pressing for the declaration of the site is not responsible to the land-holding committee for the site within the local authority.

The local government associations have potentially a very important role: giving strategic guidance; ensuring reliable data are gathered; encouraging high standards; ensuring sensible and useful model bye-laws; encouraging networking among practitioners and so on.

The Association of Local Government Ecologists has potentially an important part in encouraging high standards in site selection, management, recording and monitoring. The Association's individual members are the key contacts locally for other organisations and are in a position to influence the policies and actions of these in relation to LNRs.

The country nature conservation agencies can, and do, exert a considerable influence in their role as statutory consultees. They have been major sources of strategic guidance, overall data, and site selection criteria and have, and will continue to have, an important role in advising on site management and management planning. Except in Wales, where grants are linked to approved Countryside Strategies, they can give discretionary grants, usually for capital projects. However, it is not very clear whether they see themselves together with the key actors, as champions of LNRs. This ambivalence should be clarified.

The voluntary nature conservation organisations and natural history societies often help with site recording and monitoring and frequently give advice on site management and educational material. On several LNRs they manage the Reserve on behalf of the local authority. They often give strong encouragement to the local authority to acquire, where necessary, and to manage important sites as LNRs. In England and Wales the British Trust for Conservation Volunteers has

traditionally played a strong part in site management usually, but not necessarily, as a contractor to the site manager in carrying out estate management tasks.

Local communities are rarely involved to the extent they could be. However, in many cases local residents - as opposed to local conservation organisations - have been prime movers and are intimately involved in site management and use. In developing Local Agenda 21 programmes, LNRs can offer good opportunities for people to improve their local environment and get involved in ways which will help community development.

Business, industry, charitable Trusts and similar bodies are seen usually as sources of help in kind or of help in the form of grants or gifts of money. They may, however, be involved in other ways too, eg as landowners. South East Water, for example, actively sought declaration of two of its reservoirs as LNRs and contributes resources towards their management as nature reserves. In Cramlington, Forbo-CP has supported declaration of 7 hectares of woodland and grassland which they own as a LNR.

Central Government Departments and agencies other than the nature conservation agencies are rarely involved directly. In England, the Countryside Commission is sometimes involved indirectly where sites which it has helped fund are subsequently declared as LNRs. The DETR, Welsh Office and Scottish Office deal with bye-laws. In other respects local authorities are largely left to their own devices, with Government intervening only when proposals or existing Reserves are seen to compromise Government policies.

2.2 Recommendations

2.2.1 We strongly suggest that local authorities should seek constructive input from the Education Department where LNRs are used for education or where such use is proposed.

2.2.2 We feel it would be very useful for the local authority associations, Association of Local Government Ecologists and the Nature Conservation Agencies (Countryside Council for Wales, English Nature, Scottish Natural Heritage) to meet to discuss and decide about:

- provision, access to, and maintenance of an authoritative data-base of LNRs which will provide local authorities with helpful information and provide a simple means of monitoring the national picture. (See also 10.2.2)
- policy and strategy development in relation to LNRs
- bye-laws and the ways in which the model set of bye-laws can be kept updated in response to need. To approach appropriate Government Offices with agreed proposals. (See also 8.2.1)

- standards of management planning to be recommended to local authorities
- need for and provision of technical advice.

2.2.3 We think it important that the Nature Conservation Agencies make their position plainer than it is. Are they simply statutory consultees or do they see themselves as partners and, if so, where does the balance in the partnership lie?

2.2.4 We see it as important for the Nature Conservation Agencies to ensure a consistent approach and standards of advice across their local offices and to monitor the situation annually to ensure this. (See also 5.2.2).

2.2.5 We urge the Nature Conservation Agencies to review the value grants may have as a tool and a means of steering activities into useful and productive areas. (See also 9.2.1).

2.2.6 We feel that the extent to which local communities and/or users are involved needs to be improved. Mechanisms need devising and putting in place to ensure this, including those needed to take input from such sources to wherever action and policy is decided.

3. Site selection

3.1 LNRs must be good quality sites. There is no escaping the demands of the 1949 Act that they must provide special opportunities for study and research and/or preserve wildlife or natural features of special interest in the area.

Opportunities for study and research may or may not be being taken prior to declaration. In fact declaration as a LNR often allows opportunities to be realised. Therefore the site's potential for study and/or research can, and should, be considered.

When considering a site's natural interest, potential interest is not involved. Sites are judged on what is there at the time. Where habitat and/or species protection or protection of geological features is the primary reason for wanting to declare LNRs, sites need selecting on the basis of systematic survey of the area and review of the natural resources. For wildlife sites, this can be done as part of the Local Biodiversity Action Plan.

The main foci for evaluation are: fauna, flora and habitats; geology and geomorphology; education at all levels; research opportunities; and the value placed on the natural elements by local people and how accessible these in fact are to them.

In making an evaluation there seems little merit in trying to devise a system which seeks to weigh these different aspects against one another. Each needs separate

study. The Act does not make demands of all, but requires special qualities in at least one. It is likely that some weighting will be given in selecting sites which reflects current local or national thinking, for example the priority suggested in Wales for sites near to where people live and which are able to become foci for community involvement and learning [Countryside Council for Wales, 1996] will affect site selection.

The requirements of the 1949 Act remain, whatever differences there are in local emphasis. For this reason English Nature's guidance is that LNRs should be:

1. of high natural interest in the local context (SSSI or near equivalent);
- or
2. of some reasonable natural interest and of high value in the District/Borough/County context for formal education or research;
- or
3. of some reasonable natural interest and of high value in the District/Borough/County context for the informal enjoyment of nature by the public;
- or
4. any combination of 1-3;
- and
5. capable of being managed with the conservation of nature and/or the maintenance of special opportunities for study, research or enjoyment of nature as the priority concern. [English Nature, 1991/1995].

This is broadly reflected in comparable guidance from the Countryside Council for Wales [Countryside Council for Wales, 1996]. Scottish Natural Heritage is currently considering the issue.

Local variation should be within the parameters set here.

While the agencies all recognise the need to keep within the constraints imposed by the 1949 Act they are clearly anxious to see the values which potential LNRs have to local communities fully recognised. In particular accessibility, site interpretation for the benefit of all users, the focus which LNRs can give for local community involvement and development and the enjoyment which users obtain are being signalled as important.

Large sites are usually more cost-effective to staff and manage than small ones. They are much more likely to be able to accept multiple use without damage and without different activities intruding upon one another. The bigger a Reserve is

the better able it is to demonstrate the functions of an ecosystem. In urban areas in particular, the bigger the better if local people are to use and enjoy it and if the site is to act as, or contain, a demonstration project. The most successful of the highly used urban LNRs are generally the big ones.

Anecdotal evidence suggests sites of less than 2 hectares are rarely suitable for multiple use. They also present management problems inherent in their small size, such as small and unstable populations of species and edge-effects which permeate the site. The current debate in Scotland about whether LNRs should have buffer zones is particularly relevant to small sites. The issue of buffer zones is one which would benefit from wider debate, perhaps in the context of networks of greenspace which meet multiple needs.

3.2 Recommendations

3.2.1 We would remind local authorities in their assessment and Nature Conservation Agencies in responding to consultation to check carefully that the meanings given in the 1949 Act are respected. (See also 5.2.3, 6.2.2).

3.2.2 We recommend that separate evaluations be carried out of:

- fauna, flora and habitats
- geology and geomorphology
- use (actual and potential) for school-based education
- use (actual and potential) for community education
- use (actual and potential) for research
- value to local communities

3.2.3 We ask local authorities to note that large sites are able to support a variety of uses while small sites usually cannot. It is our opinion that sites of less than 2 hectares are rarely suitable for multiple use unless a considerable investment of resources is made.

3.2.4 We feel it would be helpful for Nature Conservation Agencies to debate whether LNRs warrant buffer zones and to do so in the context of current ideas about green networks in which high quality sites are set.

4. Strategic framework

- 4.1** While it is quite possible to declare and manage LNRs even if they are not mentioned in Development Plans or other local authority formal documents, it makes sense for them to be set in a clear strategic framework. This can be done in a Nature Conservation Strategy, Countryside Strategy, Natural Heritage Strategy, a Local Biodiversity Action Plan or the statutory Development Plan. By referring in the Development Plan to specific LNRs, or to specific proposed LNRs, a positive land use is given. This has important practical benefits, where the land is already in local authority ownership, by signalling to all the authority's departments that there is no potential here for other uses. Perhaps as importantly, it gives purpose to land which people may have looked upon as redundant space waiting for something to happen to it. A degree of political stability is introduced which brings social and, often, economic benefits. It also helps a little to move away from the impression given, particularly in urban areas, that you only get worthwhile nature on left-over bits no-one wants. Policies for site protection can be set out in the Development Plan against which planning applications can be determined.

LNRs are best seen as nodes in multi-functional green networks. This not only sets them in a landscape context and sees them as part of an area-wide environmental resource, but also draws attention to their importance for nature conservation and to their excellence (Barker, 1997).

Box and Harrison (1993), in commenting on the rapid increase in LNR declarations since 1990, say: "This rapid increase is due to the need to safeguard sites which are important to local communities. They are a response by local authorities to public pressure for accessible open space which contain interesting wildlife habitat." Going on to address the question of minimum targets for natural landscapes they suggest one hectare of LNR per thousand population in urban areas. With this in mind LNRs can contribute to attainment of targets for providing accessible natural open spaces which can be used as sustainability monitors [Harrison *et al.*, 1995]. Table 4 illustrates the possibilities. They may also be important in the context of local and national Biodiversity Action Plans. In many cases they can provide a focus for Local Agenda 21 projects.

4.2 Recommendations

- 4.2.1** We are clear in our view that local Development Plans should refer to LNRs and proposed LNRs and include policies for them.
- 4.2.2** We suggest that it would be constructive if any Development Plan, Natural Heritage Strategy, Countryside Strategy, Environmental Strategy or similar statutory or non-statutory planning document which includes the area under consideration, identifies LNRs as part of a green network and relates their functions and uses to the context of any wider green network.

- 4.2.3** We are convinced that LNRs should play a part in Local Biodiversity Action Plans and that this should be linked to Local Agenda 21 processes. (See also 11.2.1).

- 4.2.4** We suggest that LNRs can be used as a focus for some Local Agenda 21 projects and programmes and may be used as part of local environmental monitoring in the context of Local Agenda 21. (See also 11.2.1, 11.2.2).

5. Consultation

- 5.1** Section 21 of the 1949 Act in para 6 says: "A local authority shall exercise their functions under this Part of the Act in consultation with the Nature Conservancy."

This normally has been taken to mean only consultation prior to declaration. Formal consultation is with the conservation agency's Council. In Wales the Council itself looks at all proposals, thereby ensuring consistency across the Principality. In Scotland, the consultation issue is currently being reviewed but at present consultation is with 'the body corporate'. In England, Council delegated its functions here to senior officers initially, but currently delegation is to Local Teams. This brings with it the risk of local variation in approach, in standards and in the priority given to LNRs in spite of published guidelines setting out corporate views and standards. Local variation is to be expected and indeed welcomed in some respects. What is not acceptable is variation which departs from the 1949 Act definitions or which compromises the standards either of site excellence or of corporate response to consultations.

It could be argued that everything a local authority does which affects a LNR, its management, its use, its resources and so on is exercising its "...functions under this Part of the Act..." and should therefore involve consultation with the statutory agency. While this is in general impractical and undesirable given the large number of LNRs and the small number of agency local staff, it gives agencies the locus to intervene where they have any reason to believe that things are going badly or where standards are slipping.

5.2 Recommendations

- 5.2.1** We feel it important that consultation (formal and informal) with the Nature Conservation Agencies is made as simple and speedy as possible.
- 5.2.2** We suggest that the country-wide standards expected by the Nature Conservation Agencies of the staff in responding to consultation and the justification of these standards be published, reviewed periodically and maintained across the board by them. (See also 2.2.3).
- 5.2.3** We believe it important that the Nature Conservation Agencies should intervene in any instances where they have reason to think

that the requirements of the National Parks and Access to the Countryside Act, 1949 are not being met. (See also 3.2.1, 6.2.2).

5.2.4 See 6.2.3.

6. Management Plans

6.1 There are four distinct elements:

- Policy statement (which includes objectives and prescriptions)
- Costed 3-year workplan
- Site monitoring programme
- Site database

A Management Plan becomes unwieldy if these separate activities become entangled and is usually ignored then because of its size and complexity [English Nature, 1994].

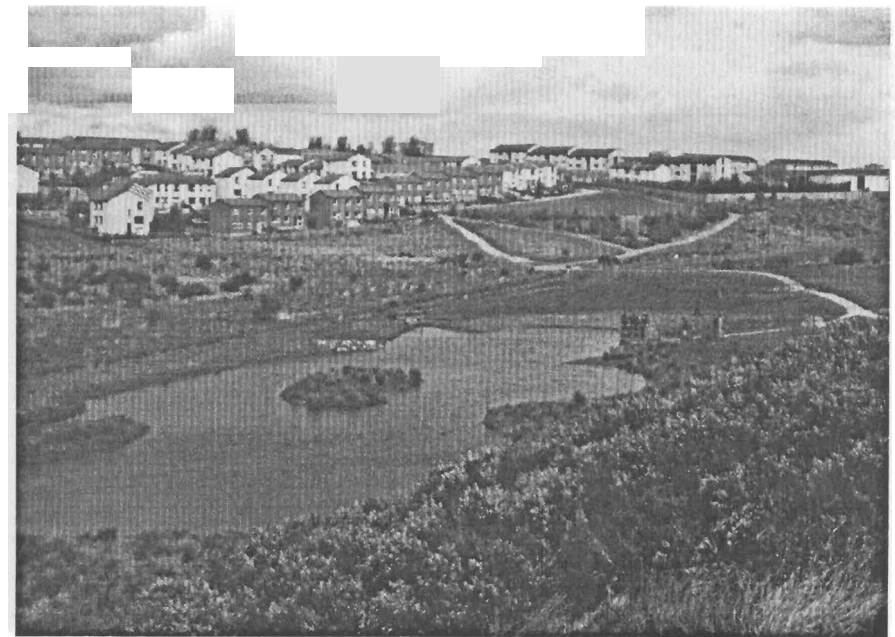
There should be a **short policy statement** or statements which set down why the LNR is being declared, its **purpose**, its local significance, what the main targets are, how these are to be attained and, in general terms, who will do what. This will be the basis for any LNR summary plan used in bidding for resources. It is very important that clear objectives for the LNR are set and prescriptions for achieving them given here.

There should be a **costed three year work plan** giving the first year in detail, the second and third years in outline, and which is rolled forward annually as part of the local authority's planning round.

There should be a **site monitoring programme** which looks at whether management is achieving the main targets and what is needed to ensure that targets are achieved or are adjusted in line with new information. The programme must set out clearly how and by whom the results of monitoring will be fed back into the work plan and, if necessary, used to adjust the policy statement.

There should be a **site data-base** containing species records, results of research, interpretative information, environmental data, site user surveys and other social science surveys, records of educational visits etc. As the data contained here build up they will be used to adjust the policy statement and work plan. However these data should not be part of either document but kept distinct from them.

The agencies should encourage local authorities to prepare draft policy statements and work plans at the outset and, ideally, include them with other documents when carrying out formal consultation. Without them it is difficult: to be constructive in consultation; for local people to know what is intended; for management to be consistent; or for committees to see how local authority



A new pond on Den of Maidencraig LNR, Aberdeen. Photo: George Barker



Horse grazing on Bowthorpe Marshes LNR, Norwich. Photo: Jeremy Burgess



A family walk on Castle Eden Walkway LNR near Peterlee. LNRs give important opportunities for quiet recreation. Photo: Cleveland C. C.



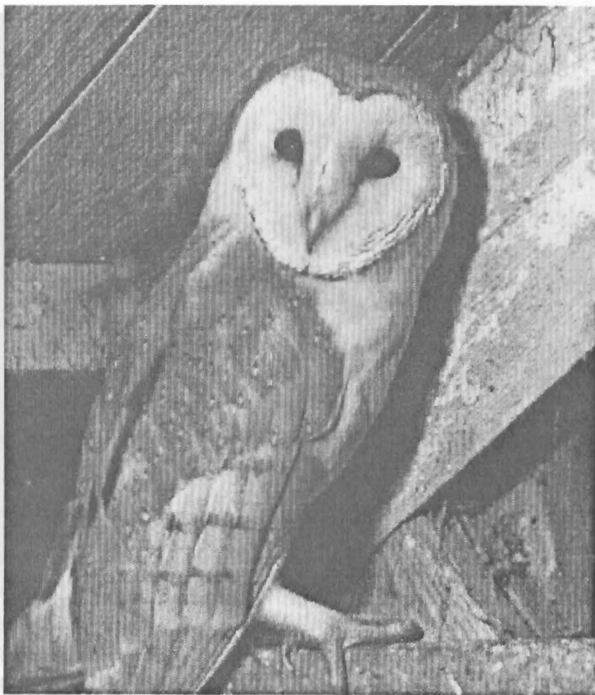
Reserve Warden with Primary School children. Education is often central to LNR management and use. Photo: Cleveland C. C.



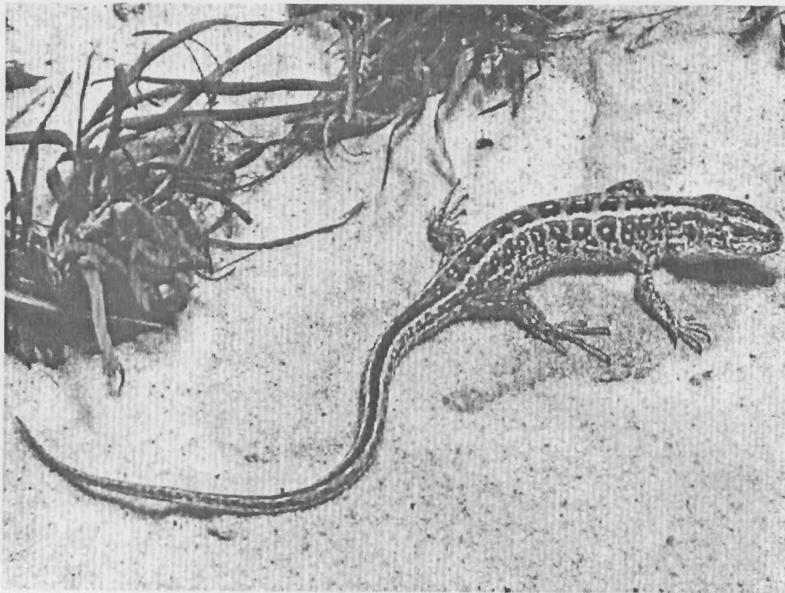
Children are often main users of LNRs. Growing up can be pleasant and interesting with LNRs nearby. Photo: George Barker



LNRs can link to Local Agenda 21 programmes. The whole community can join in work. Photo: L.B. of Lambeth



LNRs support endangered species such as barn owls. Photo: John Markham Collection/NCC



Rare species such as sand lizards live on some LNRs. Photo: John Markham Collection/NCC

resources are being used, the reasons for giving continued support and the likely scale of that support.

It is vital in management planning to remember that the 1949 Act sets out the basic needs quite clearly. If account is not taken of these then the local authority is breaching the spirit and probably the provisions of the Act. In Section 15 "...the expression "nature reserve" means land **managed for the purpose** -

- a. **of providing, under suitable conditions and control** special opportunities for the study of...
- b. **of preserving** flora, fauna or geological or physiographical features of special interest in the area.

or for both those purposes."

These are fundamental to LNR management. They do, however, beg the question who decides the standards. Who says what are 'suitable conditions and control'? Who judges that management will indeed preserve the natural features of special interest? Who indeed decides when opportunities for study and research or natural features are 'special'? Is it the agencies in their role as statutory consultees? Is it the local authorities as site managers? Is it the actual or potential users? Some agreed standards would be useful in any event.

6.2 Recommendations

6.2.1 We advise local authorities to address the following four elements separately and not attempt to combine them in a single document:

- short policy statement
- three year costed work plans rolled forward annually
- site monitoring programme with feed-back loops
- site data-base.

6.2.2 We emphasise the need to ensure that the requirements of the 1949 Act are met in setting out proposals for enhancing and managing LNRs and that no work is proposed which does not match the purposes of nature reserves defined in the Act. (See also 3.2.1, 5.2.3).

6.2.3 We recommend the Nature Conservation Agencies to encourage submission of an outline, at the least, of the policy statement, initial three-year work plan, and site monitoring programme when the formal consultation takes place.

- 6.2.4 We feel it would be of benefit if the actors discussed and agreed upon minimum acceptable standards in terms of site quality and management.**

7. Management Advisory Groups

7.1 Individual sites vary greatly. The usefulness and composition of Management Advisory Groups will vary correspondingly. They are often of two kinds. Groups are frequently involved in the pre-declaration stages, steering the proposal through any public consultation and committee stages. These may metamorphose into groups which are a means of bringing experts in a variety of disciplines and the views of a range of organisations to bear on management planning, management activities and monitoring [Box, 1991(a)]. With so many urban and urban fringe LNRs, the need for informed advice is great. Many hold patches at least of what may be called truly urban habitats. Others hold rural remnants being modified by urban pressures. As Barker (1995) says: "The philosophy behind their management has to address questions raised by the presence of recently established species, of new plant and animal associations and of modifications to recognised communities. The accepted wisdom of nature conservation in rural areas does not always fit the urban situation comfortably".

Management Advisory Groups should also be a conduit for information and opinions between interested organisations, site users, local residents and the local authority and a valuable element in Local Agenda 21 work. This is made more effective and meaningful if local communities and interest groups are adequately represented on the group. Setting them up and running them can be hard work. They may be troublesome things so far as local authorities are concerned, arguing against official policies, putting local interests before district, regional or national interests, and generally going against the traditional style of centralised control. However, they have a positive side too, even in terms of the traditional approaches, and are in line with current trends towards local empowerment and ownership. They should be encouraged, but should be guided by agreed parameters which take into account the aspirations and restrictions of the 1949 Act.

Agency staff are sometimes invited to sit on Management Advisory Groups. This is an advantage if the LNR is also a Site of Special Scientific Interest. In other cases where there are a large number of LNRs it is more realistic than joining Management Advisory Groups for local staff to seek an annual meeting with, for example, the local authority ecologist to review all the authority's LNRs either as a discrete exercise or as part of an annual review of the Countryside Strategy or Nature Conservation Strategy. Local non-governmental nature conservation organisations might also join such discussions.

Additional to Management Advisory Groups are ones such as Friends of LNR, voluntary warden teams, and people interested in recording the occurrence and distribution of species or involving themselves in other facets of the site. On at least one Reserve a Junior Management Board has been set up, drawn from local primary and secondary schools which use the site. In view of the use made

of many LNRs by schools this example is worth repeating. The Education Department might be the appropriate part of the local government machine to lead in developing the concept.

Other users might be encouraged to come together formally to pass comments and advice to site managers. At the least, users' views should be canvassed from time to time - annually or biennially would seem reasonable intervals.

7.2 Recommendations

7.2.1 We take the view that management advisory groups are so useful that they should be set up unless there are strong reasons against this. Local authorities will find it helpful to tap local expertise from universities, specialist societies, and local communities.

7.2.2 We also believe that user groups can be useful. We recommend local authorities to consider setting them up and ensuring that their views are taken into account. If this is not possible, we suggest that regular (annual or biennial) surveys of users views be made. Junior user groups (Junior Management Boards) seem potentially valuable on sites used frequently by schools and the Education Department has potentially a valuable role in relation to them. User groups could also give direct links to Local Agenda 21 programmes.

7.2.3 We believe that it would be an advantage if Nature Conservation Agencies and local authorities, in conjunction where appropriate with non-governmental environmental organisations, carried out locally annual reviews of LNRs perhaps as part of a review of broader strategies.

8. Bye-laws

8.1 Model bye-laws have been agreed with DETR for National Nature Reserves [English Nature, 1991/1995]. Similarly, model bye-laws have been agreed with the Welsh and Scottish Offices. The same model bye-laws can be used for LNRs. It is unwise for a local authority to alter the wording or to add new clauses when submitting draft bye-laws for approval. It will mean long delays if they do. Anecdotal evidence suggests that long delays occur even when the model bye-laws are submitted for approval and if this is so then the relevant Departments need to look to the improvements needed to speed things up.

Where bye-laws exist they do not have to be enforced. They are there as a last resort to deal quickly and easily through the courts with persistent offenders who do not respond reasonably to warnings. On well-used LNRs it is wise to have bye-laws in place so that they can be used if the need suddenly arises.

Problems may be met if it is not clear on the ground where a LNR begins and ends. This especially so where a Reserve joins Public Open Space. Difficulties and delays may also be met in applying for nature reserve bye-laws if a LNR is

declared on land subject to existing bye-laws made for a different purpose and through different Government channels.

In Scotland, as an alternative to, or in addition to, bye-laws, local authorities can also exercise some control of the public through management rules. These are made under S.112 of the Civic Government (Scotland) Act 1982 and enable local authorities to regulate the 'use of' and 'conduct of persons while in or on' land owned, occupied, managed or controlled by them to which the public have access. However, they cannot apply to the foreshore below high water mark of ordinary spring tides.

The procedures for making management rules are similar to those for making bye-laws but they do not have to be confirmed by the Secretary of State. Unless revoked, they remain in force for 10 years.

Unlike bye-laws, fines cannot be levied for contravening management rules but a person can be expelled from the land for contravening them and fined if they refuse to leave. They can also be used pre-emptively to exclude someone where there are reasonable grounds for believing that they are about to contravene the rules and a fine levied if they enter or attempt to enter.

8.2 Recommendations

8.2.1 We suggest it important for the Nature Conservation Agencies and local authority associations to put in place with the relevant Government Departments a means of keeping model bye-laws up-to-date. (See also 2.2.2).

8.2.2 We urge the Government Departments concerned to put in place systems which will ensure rapid response to applications for approval of bye-laws where model bye-laws are used.

8.2.3 We suggest that the local authorities and Nature Conservation Agencies should find a way of keeping each other informed about new problems arising on nature reserves which the model bye-laws do not cover adequately.

9. Funding

9.1 Most LNRs depend entirely on local authority money, though not necessarily from any one department alone [Smyth, 1990]. The nature conservation agencies have no national grants schemes dedicated to LNRs although schemes aimed at elements of initial management planning would be a very effective way of promoting LNRs and seeing them managed effectively. Where local initiatives have been taken in England, good results have been achieved. There are in England and Scotland discretionary grants for capital projects but it is with revenue funding that local authorities usually have most difficulty. These difficulties reflect the relatively low priority given to environmental projects and the fact that exercise of their powers under Section 21 of the 1949 Act is optional.

In Wales, if local authorities give LNRs a high priority in their Countryside Strategy, they may get grant aid for site management as part of the support given to the Strategy by the Countryside Council for Wales.

In some instances, provision and management of land in the public interest can be a legitimate requirement in granting planning permission. Several LNRs have come into being through thoughtful use of these powers and money has been invested as part of the agreement in some cases to finance site management. Where these powers are used, it is sensible to make sure that revenue funding for ongoing management is covered.

In some instances other organisations own and manage LNRs, including companies such as South East Water and Forbo-CP. Also, LNRs owned by local authorities may be managed by other organisations with or without local authority resources. Sponsorship from industry and business can be helpful but is usually confined to one-off projects and may be in the form of help in kind. Clear benefits to the sponsor will need to be shown if long-term support is to be given.

There are several sources of funding available for LNR development and European grants and National Lottery grants could be used to fund major national programmes of LNR development. All the nature conservation agencies and local authorities in the UK ought to come in as partners to try to attract this large-scale funding which might, amongst other things set up and maintain adequate databases, inter-Reserve networking and links to the Internet as well as putting site management and interpretation on a better footing. Landfill Tax money could be a significant source of revenue funding for any LNR near a landfill site.

The key factor in the success of most urban and urban fringe LNRs is good site-based staff. Staff are, unfortunately, quite expensive and need revenue funds. The 1947 Report of the Wild Life Conservation Special Committee remarks that while site acquisition will not often call for heavy capital expenditure "... staffing and maintenance will entail recurrent charges, which might easily discourage effective action for fear of too heavy a charge falling on local resources. We therefore recommend that an appropriate system of grant-aid should be instituted." [The Wild Life Conservation Special Committee, 1947]. This recommendation was not approved, but should now be revisited if LNRs are to be major players in national programmes of nature conservation.

However, it is also fair to say that local authorities should be giving higher priority to LNRs than most have done in the past. These 'natural parks' are usually lean on resources, helpful in education, enjoyed and supported by local people and protect locally valuable natural assets. The benefits of LNRs usually outweigh the costs and, particularly if partnership funding is achieved, local authorities get a very good bargain [Smyth, 1990]. Recent calls for better funding for Biodiversity Action Plans and for Local Agenda 21 and for improvements in environmental education [CPRE and Green Alliance, 1997] reinforce the need to adjust priorities and present opportunities for LNRs to play a more prominent role in reaching their goals.

9.2 Recommendations

9.2.1 We urge the Nature Conservation Agencies to bring forward plans for new grants directed to LNRs and aimed at steering action and encouraging high standards. (See also 2.2.4).

9.2.2 We urge local authorities to give high priority to LNRs in strategies and Plans, linking them where possible to Agenda 21 targets, Local Agenda 21, Local Biodiversity Action Plans and environmental monitoring so as to attract funding from outside the authorities as well as from within.

9.2.3 We suggest that the Nature Conservation Agencies and local authorities make a joint bid for European and/or Lottery funding for a major programme of LNR development.

9.2.4 We underline the point that the issues relating to funding full-time staff dedicated to LNRs need exploring by all involved in LNRs and especially by local authorities and Government Departments. Such staff are needed if LNRs are to realise their potential value to nature conservation and to local communities.

10. Inter-Reserve networking and public access to information

10.1 Clearly there are benefits in site managers being in contact with one another. To set up systems which allow this day-to-day using modern information technology would not be too hard, although quite expensive. Within local authorities there may already be networks which could be modified to allow this. This is one area which the local government associations and Association of Local Government Ecologists might explore. There would be merit too in encouraging links between LNR managers and National Nature Reserve managers. Regional workshops might be a practical way of going about doing this with participants visiting sites and discussing issues affecting them.

Sporadic contact could be made perhaps by organising an annual national conference. Facilitating such a meeting might be something the nature conservation agencies could do as a contribution to promoting LNRs and seeing them well managed and well used.

As part of the UK-MAB accreditation scheme which includes good LNRs, the Urban Forum is looking at how the Internet can be used to let people have ready access to a large amount of data about individual sites, including species lists, site maps, pictures of key species and habitats, and management information.

In addition to big projects like this, all LNRs should have good on-site interpretation and a minimum, at least, of more traditional leaflets aimed to interest and inform the public about them and to help schools to use them constructively.

These leaflets should go to all local schools annually and be available in local libraries, museums, reserve/park centres and so on.

Currently the agencies hold data-bases of LNRs for their areas which are fairly simple. English Nature developed a more elaborate system designed to answer the questions posed by local authorities, but this system was abandoned during restructuring the work of the agency. The lack of readily accessible and useful data-sets is a problem, especially in England where there are about 600 LNRs and where the total is still rising fast. The local government associations, the Association of Local Government Ecologists and the agencies need to get together quickly to produce a readily accessible and useful system. The longer this is delayed, the more difficult and costly the task will become.

10.2 Recommendations

10.2.1 We recommend the local government associations and the Association of Local Government Ecologists to develop a means of networking between LNR managers.

10.2.2 We believe it to be essential that an authoritative and accessible database is developed which gives basic factual, administrative and nature conservation information about all LNRs. The local government associations might take a lead but the Association of Local Government Ecologists and the Nature Conservation Agencies have potentially valuable roles. Funding and maintaining the database are important issues and might be linked to recommendations 9.2.3. (See also 2.2.2).

10.2.3 We suggest that the Nature Conservation Agencies explore facilitating annual conferences or regional meetings/workshops to bring together LNR managers, advisers and site staff.

10.2.4 We think that it would be helpful if local authorities circulated schools annually with basic information about LNRs in their vicinity. Such information should also be available to the public in local libraries, community centres, etc. and, in Scotland, be sent to the Community Education Service.

11. The Reserves and other programmes

11.1 The link made with the UNESCO-MAB Programme has already been mentioned. The Earth Summit has led to other international projects to which LNRs can contribute. The Biodiversity Convention and associated national projects such as the Biodiversity Action Plan and the Species Recovery Programme stand out clearly. LNRs will feature in all Local Biodiversity Action Plans and in England should be seen too as part of the district's Environmental Capital when and if the concept is fully agreed. They also sit comfortably with English Nature's Natural Areas approach. More broadly, LNRs, as nodes on a multi-functional green network, have a part to play in giving a pleasant environment in which people can

live and work. In so doing they are helping to reach targets for accessible natural greenspaces, which targets can be used as monitors of sustainability (see Table 4).

The potential LNRs have to contribute towards Local Agenda 21 is substantial. Not only can local people express their views about how LNRs may best contribute to improving their quality of life but also they can get involved directly in projects which make clear contributions to global programmes of environmental conservation and biodiversity maintenance. Direct involvement will lead to better understanding of the LNRs and of global issues and, it is to be hoped, to increased support for nature conservation. A major value of LNRs is in showing people that nature conservation is relevant to them day-to-day and that it is worth doing because it benefits them [Barker 1995]. This needs to be drawn out very clearly in training staff of the statutory nature conservation agencies. The 'people' part of the LNR equation remains understated.

It is evident that LNRs can, and often will, be used to help deliver targets derived from the Biodiversity Convention and from Local Agenda 21. They are also mentioned explicitly in the targets for provision of accessible natural greenspace. Although the original purposes suggested in Command 7122 [The Wild Life Conservation Special Committee, 1947] and those defined in the 1949 Act with their focus on education, research and preservation of natural features can be fitted into the new framework, there may be additional aspects which could be addressed. Their value in community development is an example. The time is right now to revisit the 1949 Act legislation in the light of the thinking in the documents which preceded it and in the context of Earth Summit deliberations and the agreements and conventions flowing from it.

LNRs are only part of the equation. Local authorities, national agencies, Government Departments, non-governmental organisations and local communities own, fund and manage a wide range of sites for nature conservation, heritage conservation, public access, amenity and so on. Integration is usually attempted in local Countryside Strategies and local Development Plans. There is no nationally agreed integrated approach and although, for example, the agencies which are statutory consultees for LNRs may have given advice which could be used to help achieve this goal, individual local authorities may still approach matters in wide varying ways. The observation that one local authority has a lot of LNRs and its neighbour has none may disguise the fact that its neighbour is managing more nature reserves but for local reasons has not formally declared them. It is also the case that there may be little to choose between a country park and a LNR in terms of how it is managed and used. The picture is, in other words, not so clear as it might be assumed to be and the division is blurred between conserving nature for people to enjoy and learn about and managing a site for recreation in which nature plays a significant part.

11.2 Recommendations

11.2.1 We feel it to be very important that clear linkages be drawn out between LNRs and work coming out of the Biodiversity Convention and Agenda 21 (in particular Local Agenda 21). This should be done not only by those working on biodiversity and sustainability issues but also by those involved in managing and using LNRs or in developing policies relating to them. (See also 4.2.3, 4.2.4).

11.2.2 We strongly recommend local authorities, Government Departments, non-governmental organisations and the Nature Conservation Agencies to include LNRs in the targets and monitors for Agenda 21. (See also 4.2.4).

11.2.3 We urge the Nature Conservation Agencies to explore in greater depth the values LNRs have for society. This is especially needed in England where the number of LNRs is comparatively large and is rising quickly. The links between nature conservation, improved quality of life and other societal values are particularly important to establish at this time.

11.2.4 We believe that Government should revisit the 1949 Act and its precursor documents and, if necessary, amend legislation affecting LNRs so that these places meet more closely current thinking and needs.

12. Northern Ireland

12.1 Although a good deal of what has been discussed applies to Northern Ireland, there are significant differences between the situation there and that in Great Britain. It was not until 1985, under Section 22 of the Nature Conservation and Amenity Lands (NI) Order, that district councils were given powers to provide nature reserves. Since that time only three LNRs have been declared with two more in advanced stage of preparation. Even though Northern Ireland is relatively small and has problems which are not reflected in Great Britain, having only three LNRs in the whole Country shows little enthusiasm so far for this statutory power.

The Amenity Lands Act, 1965 defines a nature reserve. Together with the 1985 Order, this Act gives powers and definitions very similar to those applying in Great Britain. An interesting variation is inclusion of the words 'in the public interest' when defining what are the purposes of a nature reserve's management. This makes it even less explicable why the powers given in 1985 have not been used more in and around the built-up areas and, in particular, the main city, Belfast - which does in fact run two of the country's three LNRs. However, Milton (1990) remarks: "Conservation plays a part in the management, by district councils, of many parks and recreation areas throughout the Province, but it is not seen as fundamental to these activities. It would appear that most councils either have not regarded nature conservation as their responsibility, or have not had the expertise or the resources to put it into practice."

It is true that the district councils and central government, either separately or in combination, manage, for countryside recreation, education and nature conservation, sites not declared as LNRs. Even so, most people involved would agree that a great deal more should be done and could be done. In the Northern Ireland Environment Link report *Environmental strategy for Northern Ireland* [Christie 1996], LNRs are mentioned, almost in passing, as one way to give protection to sites which fall below the standards for national designation. They are not referred to as potential resources in environmental education or in connection with urban open space, tourism, recreation or leisure. They are, basically, ignored in this report.

With the Biodiversity Convention to reckon with, it may be that LNRs will be seen more relevant now. Thinking may swing too in Northern Ireland, as it did, especially in England, towards seeing urban and post-industrial habitats as legitimate candidates for declaration, including ones created deliberately in the course of urban regeneration or derelict land reclamation.

More immediately important is the potential countryside and nature conservation has in Northern Ireland to get divided communities working together reasonably well. If the political situation stabilises, LNRs could become significant in community development. Were this to prove so, then there would be additional resources which could be used to promote them.

The Environment Committee (1990) said: "Northern Ireland is a small place and is already many years behind Great Britain in nature conservation." It also found nature conservation under-resourced. So far as LNRs are concerned, both of the Committee's views are still true. Even switching the focus of available resources may be inadequate to meet the need. As with Great Britain, new sources of money need to be found. It should, however, be possible to tap the experience in Great Britain to reinforce that in Northern Ireland. In doing so it must be ensured that local solutions are found and local needs served.

12.2 Recommendations

12.2.1 We hope that district councils will make positive use of the powers given to them to provide LNRs, particularly to support Local Biodiversity Action Plans.

12.2.2 We emphasise the potential that LNRs in or near to settlements have to improve quality of life and to give a focus for community development.

12.2.3 We urge relevant central Government Departments and district councils to form links with those in Great Britain concerned with LNRs and to contribute in developing a UK network of sites and a UK data-base for LNRs.

12.2.4 We recommend the district councils to consider the possibilities of creating new habitats in the course of urban regeneration and derelict land reclamation and developing LNRs which will not only help conserve target species but also give a resource for education and an amenity for local communities to enjoy.

12.2.5 We suggest that those empowered to provide and manage LNRs in Northern Ireland will find food for thought in the foregoing sections of this review.

Figure 1. The number of LNRs. This shows the definition of urban, as

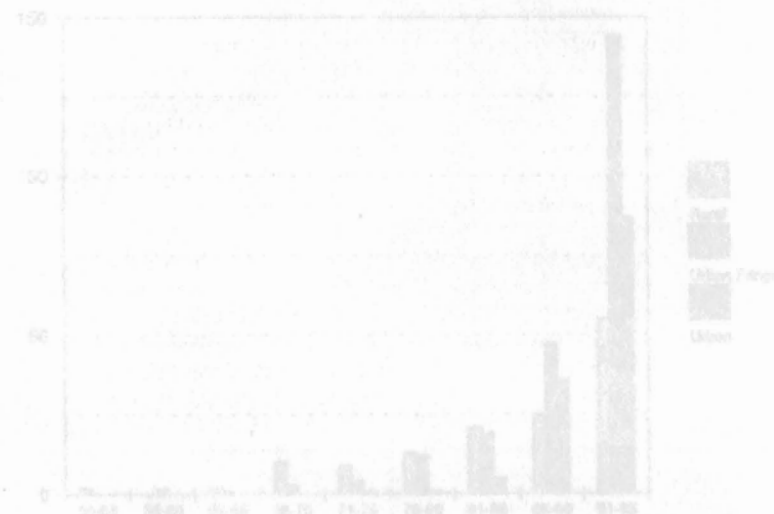




Table 1. Numbers of LNRs declared in urban, urban fringe and rural areas 1950-1995

A town or city covering more than 1km² is classed as an urban area. A LNR appearing from the map to be surrounded by an urban area is classed as urban. A LNR within 1km of an urban area is classed as urban fringe. LNRs falling into neither of these categories are classed rural. Where a coastal LNR is flanked on the landward side by an urban area it is normally classed as urban fringe. [Based on Eggo, N. 1990. *SSSIs in urban areas in England*. Peterborough, England Headquarters, Nature Conservancy Council. Typescript report.]

		1950-1955	1956-1960	1961-1965	1966-1970	1971-1975	1976-1980	1981-1985	1986-1990	1991-1995
Urban	England	0	0	0	0	1	2	7	43	131
	Scotland	0	0	0	0	0	0	0	0	2
	Wales	0	0	0	0	0	0	2	2	4
Urban fringe	England	0	2	3	6	10	22	42	89	232
	Scotland	0	0	0	0	0	0	1	1	9
	Wales	0	0	0	1	2	3	6	7	14
Rural	England	2	2	4	14	23	36	56	81	136
	Scotland	1	1	2	2	2	5	5	5	8
	Wales	0	0	0	1	2	8	8	8	13
All LNRs		3	5	9	24	40	76	127	236	549

Table 2. Average area of Local Nature Reserves in England

Year declared	Number declared	Total area (ha)	Average area (ha)
1951-1960	4	1671	417.7
1961-1970	16	2391	149.4
1971-1980	39	1770	43.4
1981-1985	45	1765	39.2
1986-1990	105	2805	26.7
1991-1995	284	7845	27.6

A few linear LNRs have no area given. They have a length given. They are not included in these figures.

Table 3. Size of Local Nature Reserves in England

1950-1990 (30.3.90) From Box (1991a)			1990-1996 (from 1.1.90 to 31.12.96)	
Area (ha)	Number of LNRs	Percentage	Number of LNRs	Percentage
0-9	51	29	169	44
10-19	38	22	76	20
20-29	15	9	46	12
30-39	11	6	26	7
40-49	12	7	15	4
50-99	22	13	36	9
100-199	12	7	7	2
200-299	6	3	4	1
300-399	3	2	0	0
400-499	3	2	0	0
500+	2	1	3	1

Up to 1990 51% of LNRs in England were less than 20ha.
Of those declared between 1990 and 1996 64% were less than 20ha.

Year declared	Number declared	Total area (ha)	Average area (ha)
1950-1959	4	1591	397.5
1960-1969	16	3281	205.1
1970-1979	38	3350	88.2
1980-1989	42	1783	42.5
1990-1999	105	2802	26.7
1990-1999	284	284	1.0

Table 4. Sample of English urban local authority areas showing the range of provision of LNRs in terms of area and population. A comparison between the position in 1993 [Box and Harrison, 1993] and in 1997. (1993 figures in brackets)

People per hectare of LNR		Population ¹	Area of LNR in hectares ²	Population per hectare of LNR
Less than 1000				
1.	Wakefield (2)	317300 (306300)	421 (313)	754 (979)
2.	Canterbury (1)	133900 (127100)	168 (143)	797 (889)
3.	Norwich (7)	127800 (120700)	158 (52.5)	809 (2299)
4.	Gloucester (17)	104700 (91800)	110 (4.3)	952 (21349)
Between 1000 and 5000				
5.	Dudley (5)	312200 (304000)	234 (181.7)	1334 (1653)
6.	Portsmouth (3)	189300 (174700)	119 (119)	1590 (1468)
7.	Leeds (4)	724400 (674400)	436 (416)	1661 (1621)
8.	Hereford (13)	50500 (49800)	29 (6.1)	1741 (8164)
9.	Plymouth (6)	255800 (238800)	105 (105)	2436 (2274)
10.	Peterborough (8)	158700 (148800)	63 (51.4)	2519 (2895)
11.	Sandwell (14)	293400 (282000)	112 (30.3)	2622 (9307)
12.	Stoke-on-Trent (9)	245200 (244800)	82 (82)	2990 (2985)
13.	Barnet (22)	308200 (283000)	101 (4.9)	3051 (57755)
14.	Leicester (24)	293400 (270600)	91 (2)	3224 (135300)
15.	Haringey (10)	212300 (187300)	49* (36.2)	4333 (5174)
Between 5000 and 10000				
16.	Coventry (11)	302500 (292500)	48 (48)	6302 (6094)
17.	Southwark (12)	228800 (196500)	30 (29.9)	7627 (6572)
18.	Islington (23)	175200 (155200)	20* (2.5)	8760 (62080)
Between 10000 and 50000				
19.	Oxford (21)	132800 (109000)	13 (2.2)	10215 (49545)
20.	Southampton (15)	211700 (194400)	14 (14)	15121 (13886)
21.	Liverpool (16)	474000 (448300)	21 (21)	22571 (21348)
22.	Derby (18)	230500 (214000)	9 (9.3)	25611 (23011)
23.	Birmingham (19)	1008400 (934900)	39 (39.5)	25856 (23668)
24.	Newcastle upon Tyne (20)	283600 (263000)	8 (8)	35450 (32875)
Between 50000 and 100000				
25.	Camden (25)	182500 (170500)	2* (1)	91250 (170500)

Sources: ¹ OPCS Monitor PPI 96/1, 29 February 1996 (quoted in Whitakers Almanak 1997)

² English Nature Conservation Services Team, 31 March 1997

* One 16ha site is shared between Haringey and Islington and the 16ha are included in both sets of figures
+ There has been no actual increase in LNRs in Camden. The apparent increase reflects a minor change in the way records are rounded.

Table 5

Although the changes in position in Table 4 are interesting, the significant difference is the improvement in the figures in the last column. This is best summarised by comparing the number of places in the different categories shown by Box and Harrison (1993) with current data

People per hectare of LNR	Box and Harrison (1993)	Current figures
Less than 1000	2	4
Between 1000 and 5000	7	11
Between 5000 and 10000	5	3
Between 10000 and 50000	7	6
Between 50000 and 100000	2	1
Greater than 100000	2	0

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