

Response to 'The Nature of Scotland', a consultation document produced by the Scottish Executive.

The following comments have been drawn from The Royal Society's statement 'The Future of Sites of Special Scientific Interest (SSSIs)' published in February 2001 and have here been related to the Scottish Executives consultation document 'The Nature of Scotland' published in March 2001.

The freshwater environment (*Nature of Scotland* Chapter 2)

- There is a general consensus that greater resources are needed to increase our science base knowledge of these ecosystems by monitoring and scientific research
- Freshwater sites and their catchments need to be considered together, rather than as separate entities. This would be most effectively done under the 'ecosystem approach' adopted by the Convention on Biological Diversity (see section 6.1 of the enclosed report 'The Future of Sites of Special Scientific Interest (SSSIs)').

The marine environment (*Nature of Scotland* Chapter 3)

- We had been concerned that in recent reviews of this kind scientific bodies had not been consulted. We therefore recommended that for any further reviews, expert individual scientists and representatives of scientific bodies such as the NERC, the Royal Society, and relevant specialist societies (the Challenger Society for Marine Science, the Marine Biological Association, the Scottish Association for Marine Science, the Society for Underwater Technology, etc), should be invited to participate. We welcome the fact that some of these organisations have been approached for this consultation.
- We recognise, however, that there is a serious, long-standing difficulty that has to be overcome, namely the probable need to restrict fishing effort within marine protected areas such as SAC's. Close consultation with fishermen's organisations will be necessary to avoid the potential conflict with fishermen whose traditional and hitherto legal activities are likely to be curtailed.
- It would be helpful if a synergy can be established between current interest in the use of closed areas ('no-take zones') for fisheries management, and the requirements for conservation of marine resources, habitats, and biota other than fish.
- Finally, we note that an ecosystem approach is likely to be needed in the identification of marine 'sites' or areas requiring protection (see section 6.1 in the enclosed report 'The Future of Sites of Special Scientific Interest (SSSIs)').

Special Places: SSSIs (*Nature of Scotland* Chapter 4 and Annex A)

The Royal Society recognises the importance of the system of Sites of Special Scientific Interest (SSSIs) as a series of the best examples of our wildlife habitats and their geological features and landforms, and their crucial role in conservation. We also recognise the enormous potential resource they can provide for scientific research.

Selection of sites (*Nature of Scotland* A1.2)

- It is crucial that the Government provides adequate resources to the conservation agencies to enable them to identify and monitor sites.
- The majority of biological SSSIs are designated on the basis of relatively large and well-known organisms, such as birds, plants and larger invertebrates such as molluscs and large insects. There are far fewer cases of designations for less well-known groups such as fungi, soil micro-organisms and smaller invertebrates, although these groups may have a profound role in the ecosystem. We recommend that the conservation agencies seek strong input from universities, research institutions, museums and relevant learned societies so that the necessary scientific and taxonomic expertise can be brought to bear on these less well understood groups and species at a representative series of sites.

Informing and consulting stakeholders (*Nature of Scotland* A1.3 and A1.7)

- At present SSSIs are used extensively by the academic community for research, which often involves long-term monitoring. They could therefore be considered as key stakeholders in this process.
- There are no formal linkages between researchers and the conservation agencies, and we recommend that the conservation agencies, including SNH, establish such links to ensure a scientific contribution and facilitate information exchange.

Stakeholder management forum (*Nature of Scotland* A2.4)

- Management plans will need to be developed in conjunction with expert bodies. The amount of scientific input needed will depend on the nature of the site, and it will be up to the designating agencies (in this case SNH) to decide and organise this, possibly by involving local Wildlife Trusts etc, who usually have good links to the academic community in the area.
- Management plans will also require specialist input of a non-scientific nature; science should underpin the advice of specialists rather than be applied to the plans directly, since many research programmes undertake long-term study of SSSIs as part of their research.

Damage to SSSIs (*Nature of Scotland* A3.1 to A3.4)

We would like to draw attention to the Royal Society's recommendations for the monitoring and reporting of damage to SSSIs since this issue is not covered in Annex A of *The Nature of Scotland*.

- SNH should list damage continuing from previous years (as CCW currently do) as well as new cases of damage in future to give a clearer picture of damage overall. All the agencies should identify the causes of damage where possible.
- We recommend that all three agencies (in this case SNH) have sufficient resources to be able to report new and continuing damage occurring on their sites each year.
- More use could be made of academics in monitoring the condition of sites; scientists who visit a site could report back semi-formally on the condition of the site. The nature conservation agencies could invite appropriate fieldwork officers from relevant university departments and research institutes (as appropriate to the types of sites) to provide annually a list of SSSIs visited during field programmes with comments on any changes in the condition of the sites.

Promotion of public awareness of SSSIs (*Nature of Scotland* A6.2)

- We recommend that the relevant government departments, conservation agencies (in this case SNH) and private landowners work together to promote access to sites and increased public awareness of the SSSI system.
- Easily accessible information sources listing all SSSIs and providing certain key pieces of information about each one should be readily available, except where there is a clear need to protect fragile sites, for

example from mineral, fossil and plant collectors. Access to information about the SSSI network is also vitally important, for scientific research as well as for general interest purposes.

- We recommend that DETR and the conservation bodies work together to produce an easily accessible central access point which explains the SSSI system and provides details of designated sites. Such a site should be provided by the designated authorities so that there is an official source of web-based information that is free from misinformation and sensitive to landowner concerns. Key pieces of information that ought to be easily available on each site include (i) concise but more informative guides as to why the site is of scientific significance, (ii) site notification dates, (iii) when the site was last assessed, and (iv) a statement, agreed with the landowner, about access rights to the site, and what is deemed to be reasonable activity or behaviour there (including contact information).
- Increased promotion of the public understanding of sites should be encouraged, and an important factor in so doing will often be public access to SSSIs (or parts of them). In particular involvement of local interest groups, or schools and colleges, could play an important part in raising awareness of the SSSI system
- What constitutes a reasonable level of access is a matter that can best be agreed between the statutory nature conservation bodies, who can advise on the impact of access to these sites with regard to their nature conservation value, and landowners, as a formal part of the Site Management Statement.