

Research information note

English Nature Research Report 562

Linking Geology and Biodiversity

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Introduction

England contains a wide diversity of both geology and wildlife. In some respects the connections between the two are obvious, for example when considering chalk grassland. But are there other links, perhaps ones that we would not normally think of? And how extensive are the links between the two? Can they be used for nature conservation?

What was done

English Nature commissioned Royal Haskoning to investigate the links between geology and biodiversity, with the following aims:

- To develop an overview of the links between geology and biodiversity, particularly with regard to the UKBAP priority habitats and species
- To make a detailed examination of the links between the principle rock types and biodiversity of England.
- To produce a report, drawing together these links and illustrating them with examples, in order to raise awareness of the opportunities and issues which arise.

Results and conclusions

The report outlines the links between geology and biodiversity, giving a range of case studies and providing a useful literature review, including examples from other countries. It highlights the factors which are important, for example substrate, but also highlights areas where the links are not as clear as might be expected. It gives an overview of the factors influencing ecosystems, of which geology is one, and looks at the main rock types in England and their habitat and species associations.

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English Nature's viewpoint

This report provides a useful analysis of the links between geology and biodiversity, and the factors which affect ecosystems. It highlights the importance of soils and substrate in determining ecosystems, but also acts as a useful reminder that things are not as straight forward or clear cut as they may at first seem. The findings have been summarised in a leaflet "Geology and Biodiversity - making the links", combined with the results of two other research reports "Learning from he Past to influence the Future" (ENRR 502) and an earlier study "Geological conservation benefits for biodiversity" (ENRR 561).

Selected references

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TANSLEY, A.G. 1949. *The British Isles and their vegetation* (2 volumes). Cambridge: Cambridge University Press.

Further information

For the full report or other publications on this subject, please contact the Enquiry Service on 01733 455100/101/102 or email enquiries@english-nature.org.uk

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