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Research Article

# The value of Scotland's ecosystem services and natural capital<sup>†</sup>

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Article first published online: 31 MAR 2003

DOI: 10.1002/eet.314

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Issue



## European Environment


Volume 13, Issue 2, (/doi/10.1002/eet.v13:2/issuetoc) pages 67–78, March/April 2003

Additional Information

### How to Cite

Williams, E., Firn, J. R., Kind, V., Roberts, M. and McGlashan, D. (2003), The value of Scotland's ecosystem services and natural capital. *Eur. Env.*, 13: 67–78. doi: 10.1002/eet.314

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The views expressed in this paper are those of the authors and do not reflect the policy or views of the Scottish Environment Protection Agency.

## Publication History

1. Issue published online: 31 MAR 2003
2. Article first published online: 31 MAR 2003

## Funded by

- SEPA. Grant Number: 230/4124
- Abstract
- [References \(/doi/10.1002/eet.314/references\)](https://doi.org/10.1002/eet.314/references)
- [Cited By \(/doi/10.1002/eet.314/citedby\)](https://doi.org/10.1002/eet.314/citedby)

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## Abstract

Life on earth depends on the ability of the environment to provide essential services. During the 1990s, attempts were made to quantify in monetary terms the benefits that the earth's ecosystem services provide. Costanza *et al.* (1997a) devised a methodology to assimilate the work of over 100 valuation studies to generate estimates of the monetary value of 17 ecosystem functions for 16 habitat (or biome) types. This work estimated the annual flow of global ecosystem services to be  $\$33 \times 10^{12}$ . In this paper we apply the same methodology to Scotland to derive a current annual ecosystem service value of approximately £17 thousand million ( $\$24 \times 10^9$ ). This is an initial estimate based on the available values. Some modifications to the model are suggested that could produce a more reliable value of Scotland's ecosystem services.

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