Introduction

The soils, vegetation, climate and hydrology in built-up areas have been greatly modified. Wild plant and animal communities are disadvantaged by habitat reduction, fragmentation, isolation and disturbance; while invasive non-native plants have become established from gardens and landscaped areas. Where semi-natural vegetation is allowed to develop undisturbed, a diversity of plants and animals can flourish. Roads and railways may pose a barrier to the movement of species, but verges can provide food plants for insects and refuges for mammals, reptiles and birds. Older relics of landscape features and wildlife habitats can survive within towns, as pre-industrial encapsulated rural landscapes, rivers and streams, fragments of ancient woods, moors and wetlands. Abandoned quarries can be of geological interest and often provide a refuge for animals and plants.

Key points

- Between 1947 and 1988 the area of built land increased by 46%
- Land used for road and rail increased by around 22%
- Most of the increases were at the expense of farmland

The environment of towns and cities is now where most people in Scotland live. Advances in transport and communications have made the remote parts of Scotland more accessible for development and recreation. The present day Scottish population of 5.1 million people lives predominantly in the Central Lowlands, although growth rates have become especially rapid in the hinterlands of Aberdeen and Inverness. According to the 1988 land cover census, 97 percent of Scotland’s land area is non-urban and about one tenth of the population lives in rural areas.
Main associated changes: 1940s – 1980s

<table>
<thead>
<tr>
<th>Change from 0</th>
<th>Managed grassland</th>
<th>Arable</th>
<th>Blanket mire</th>
<th>Heather moorland</th>
<th>Broadleaved woodland</th>
</tr>
</thead>
<tbody>
<tr>
<td>(km²)</td>
<td>0</td>
<td>50</td>
<td>100</td>
<td>150</td>
<td>200</td>
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</tbody>
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Trends

Over 41 years, between c.1947 and c.1988, the area of built land in Scotland was estimated to have increased by 46%: a mean annual rate of 10km².

Transport corridor (land-take for roads and railways) also increased in area by around 22%; a mean annual rate of 3.6km².

About three-quarters of the increase in built land and transport corridor was onto surrounding farmland. The remainder was largely on upland or woodland habitats.

The expansion of hard development occurred mainly in the most densely populated Central Belt, and other parts of southern and eastern Scotland. Expansion in the Northern Isles of Orkney and Shetland was mainly associated with road development.

Overall, built land is estimated to have increased in area from around 900km² in the 1940s to 1,300km² in the 1980s. Over that period, the area of transport corridor expanded from about 670km² to 820km².

Sources

Statistical estimates are from the ‘National Countryside Monitoring Scheme’, a sample survey which interpreted air-photography representing 7.5% of Scotland’s land area (Mackey et al., 1998). Although sampling is not optimal for this purpose, change in extent is mapped here according to the 21 areas defined for Natural Heritage Futures (http://www.snh.gov.uk/about-snh/what-we-do/nhf).

References


About Trend Notes

Trend Notes are factual summaries based on research data relating to trends and changes in our natural heritage, written in a simple, straightforward style. To propose a topic for a Trend Note, please email enquiries@snh.gov.uk.