

Gillings, S. 2014.

BOU Proceedings – Ecology and conservation of birds in upland and alpine habitats

<http://www.bou.org.uk/bouproc-net/uplands/gillings.pdf>



Proceedings of the BOU's 2014 Annual Conference

Ecology and conservation of birds in upland and alpine habitats

View other papers from these proceedings at www.BOUPROC.net.

Forty years of distribution change in the uplands: insights from atlases

SIMON GILLINGS*

BTO, The Nunnery, Thetford, Norfolk IP24 2PU, UK

* Email: simon.gillings@bto.org

From the first breeding bird atlas in 1968–72 to the recently completed *Bird Atlas 2007–11* project, atlases offer the potential to examine pattern and change in distributions and, more recently, to investigate how spatial patterns of abundance may be changing. When analysing data for upland birds one must decide what constitutes an “upland birds”. Stillman and Brown (1988) used contingency tables summarising occupancy of 10-km squares in 1988–91 according to Institute of Terrestrial Ecology land classifications. We repeated their analysis using 2008–11 data, finding that three species could no longer be classed as upland species and 13 that now can. The latter included several widespread species undergoing marked declines in the lowlands. Over all breeding species, 50% were increasingly concentrated in the uplands and 37% were spreading in to the lowlands. Similar trends were apparent in abundance patterns with, for example, the estimated percentage of Cuckoos breeding in the uplands having increased from 28% in 1988–91 to 49% in 2008–11. These distribution and abundance changes were associated with apparent shifts in the elevations at which species occurred, but further analysis is needed. We concluded that upland bird communities are changing in unexpected ways and that there is a need to understand processes affecting widespread generalist species as well as those affecting montane specialists..

Reference

Stillman R.A. & Brown A.F. 1998. Pattern in the distribution of Britain's upland breeding birds.

Journal of Biogeography: 25, 73–82