

Francksen, R.M. et al. 2014.

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

<http://www.bou.org.uk/bouproc-net/uplands/poster-francksen-et-al.pdf>



Proceedings of the BOU's 2014 Annual Conference

**Ecology and conservation of birds in upland and alpine habitats**

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POSTER

**Common Buzzard *Buteo buteo* diet in relation to changes in vole abundance**

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Predators whose most important prey are Field Voles *Microtus agrestis* are often assumed to increase their predation on other prey groups when vole abundances decline. However, this assumption may not be valid for all prey groups when there are a variety of prey groups and habitats available to predators. In Britain, voles are an important prey item for Common Buzzards *Buteo buteo*, and often form a principal component of the diet throughout much of their geographical range. Langholm Moor in southwest Scotland is an area of upland moorland managed for Red Grouse *Lagopus lagopus scoticus*, in which vole indices typically cycle over a 3- to 4-year period. We studied vole abundance and Buzzard diet at Langholm Moor between 2011 and 2013, which encompassed a complete vole cycle. Breeding Buzzards on Langholm Moor have previously been shown to eat Red Grouse in small numbers alongside their preferred vole prey. Buzzard diet was monitored at 13–16 nests each year using motion-triggered cameras, analysis of prey remains and pellet content. An Index of Relative Importance was used to assess the importance of various prey groups to Buzzard diet and it was found that the proportion of voles in Buzzard diet decreased in line with vole indices. We hypothesized that when vole availability diminished, Buzzards would switch to increased predation of Red Grouse and their chicks. However, Grouse were less frequent in Buzzard diet when vole indices were low. Instead, Buzzards switched to eating more lagomorphs, moles, shrews and corvids, prey groups typically associated with moorland fringe and farmland habitats. This may suggest that when provisioning their chicks, Buzzards take Red Grouse only incidentally while hunting for voles within moorland habitats. When assessing diet and investigating predator impact on prey species, knowledge of all resources and habitats that are available to predators is important.