

The Future for Birds on Exmoor

A Discussion Paper by the RSPB

Background and context

Exmoor is one of three main upland areas in southern England that are characterised by expanses of open moorland, dominated by a mix of heather, grassland and scrub. The moorlands are the largest areas of semi-natural habitat and some of the last remaining wilderness areas in southern England. Created over recent millennia by agricultural practices such as grazing, cutting and burning, today the maintenance of moorland still requires these techniques. Ensuring the right balance of management is a challenge within modern farming systems.

During the 20th century Exmoor's moorland was fragmented by agricultural improvements, which reclaimed areas for pasture. Statutory protection halted the loss of moorland and in the past decade or so, the Environmentally Sensitive Area (ESA) scheme has provided financial support to farmers for moorland management, to maintain or enhance the vegetation structure and composition.

Exmoor's moorland supports a diverse range of bird species, from upland specialists such as ring ouzel, red grouse and merlin, to lowland heathland species such as Dartford warbler. This paper looks at the population trends of moorland birds on Exmoor and sets out a vision for the future and the challenges that will need to be met in order for the vision to be achieved.

Bird populations, trends and status

The fortunes of moorland birds are largely dependent on the way the moors are managed. The traditional combination of grazing and burning is key to maintaining the intricate mix of habitats. By looking at bird populations and distribution trends over the past 25 years it is possible to determine how Exmoor's moorland is changing and responding to the management practices in place, and importantly, any response to the ESA scheme. With ESA operating over the past decade, bird populations provide an indication of the quality of the ESA scheme as a tool for managing Exmoor's moorland.

Table 1 below illustrates the population trends of a range of bird species from 1978 to 2002. It is clear that some species have undergone large increases while others have declined, in some cases to local extinction. Habitats on Exmoor favour the range of heathland passerines and increasingly, species associated with lowland heathland. The moor supports internationally important populations of stonechat, whinchat and regionally important populations of a range of species such as skylark, linnet, reed bunting and grasshopper warbler, all of which are species of high conservation concern, following major population declines across the UK (Geary, 2002). The species of most concern are the true upland species, ring ouzel and red grouse. Both have highly specialised habitat requirements and are on the edge of their breeding range on Exmoor.

Table 1. Exmoor moorland bird trends 1978 – 2002

(Davies and Charman, 1978, Chown and Robins 1994, Geary, 2002)

	Conservation status	1978 (pairs)	1992/3 (pairs)	2002 (pairs)
Ring ouzel	Red	20	13	4 - 5
Grasshopper warbler	Red	15	12	52
Reed bunting	Red		68	165
Linnet	Red	150	170	420
Skylark	Red		1696	1290
Meadow pipit	Amber		2143	2640
Red grouse	Amber	40	7	0
Whinchat	Green	450 – 600	448	292
Stonechat	Amber	150	253	468
Cuckoo	Amber	30	not surveyed	65
Tree pipit	Amber		170	129
Wheatear	Green	90-100	118	57
Snipe	Amber	20	8	8 - 9
Curlew	Amber	30 – 35	9	5
Lapwing	Amber	At 12 sites	3	0

Over the three survey periods, bird data was collected in a consistent way to allow a direct comparison between survey years. However, this must be interpreted with caution to account for observer differences. Nonetheless, where there are marked changes in population, this is likely to be a true indication of the trend for that species.

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Stonechat, whinchat, grasshopper warbler and reed bunting have increased significantly between surveys. Increases in stonechat and linnet, as well as the colonisation of Dartford warbler, indicate an increase in the quantity and possibly, the quality of gorse across the upland and lowland heathland. Increases in grasshopper warbler and reed bunting indicate an overall increase in the height of vegetation in valley mires and other wet habitats.

Wheatear, whinchat, linnet, Dartford warbler and grasshopper warbler have shown changes since 1992/3 survey, indicating that the ESA has affected the populations. Other species such as red grouse, ring ouzel and stonechat have longer term trends indicating management under the ESA may not be the driving factor behind the population changes.

Species relying on short vegetation, such as skylark and wheatear are showing declines, to be expected under reduced grazing, although the overall level of decline is insufficient to cause major concern at present.

¹ Red list: species with UK population declines of 50% or more over the last 25 years

Amber list: species with UK population declines of 25 to 50% over the last 25 years. (Gregory et al, 2002)

Habitat types and their importance for birds

Upland heath, dominating the main moorland blocks, supports the biggest range of bird species including waders, passerines and raptors. Within the upland heath the combes are a distinct and important feature, stretching from high on the open moor to the lower reaches where vegetation is predominantly lowland heath and scrub. A wide diversity of birds rely on the combes, from ring ouzel, merlin, stonechat, whinchat and wheatear, to cuckoo, meadow pipit, tree pipit, and dipper and grey wagtail along the rivers and streams. Where the combes are broader or shallow-bottomed, with taller vegetation, they support grasshopper warbler and reed bunting.

Upland heath also has the potential to support new breeding species. Hen harriers have been recorded summering in areas of mature heather and are a potential breeding species.

Lowland heathland is more limited than upland heath on Exmoor, but is an important habitat, especially along the coast. It supports important populations of cuckoo, tree pipit, stonechat, Dartford warbler, white throat, linnet and yellowhammer. Similarly, the moorland fringe/bracken/scrub that borders the improved farmland, often extending upwards along combes and grading with lowland heath is important for these passerines.

Bogs and mires are rare and generally small size on Exmoor because of geology, relief and both natural and human induced drainage patterns in moorland areas. The amount of available habitat for breeding waders is therefore limited. However, the habitat is important for snipe, meadow pipit and where vegetation is taller, whinchat, grasshopper warbler and reed bunting.

Exmoor also supports habitats of more limited value for birds. Much of the reclaimed moorland is now managed as improved grassland, particularly for silage production. Even where boundary hedges are managed sensitively, these grasslands cannot support breeding birds, owing to the uniformity of the sward, lack of invertebrates and frequency of cutting.

Forestry plantations have reduced and fragmented the area of lowland heathland. However, the forests, from clear fell up to approximately seven years provide important habitat for nesting and feeding nightjars.

Beyond the natural physical characteristics of the moorland and its management there are also large scale factors that will have an impact, such as conditions in the wintering areas of migrant species and climatic changes that may alter the breeding range of some species. This could be contributing to the demise of ring ouzel, red grouse and lapwing. To minimise the impacts of such factors it is vital that habitats are maintained in optimal condition and over sufficient areas.

Vision for 2020

Bird population changes and predictions for shifts in species' breeding ranges have been used to develop the following vision for Exmoor's moorland birds...

The Section 3 moorland will have thriving populations of breeding birds, including a range of heathland and farmland passerines: stonechat, whinchat, wheatear, grasshopper warbler, meadow pipit, skylark, tree pipit, cuckoo, yellowhammer and linnet.

Exmoor's moorland will be sustainably managed, primarily by grazing traditional breeds of cattle and Exmoor ponies. The grasslands that fragment the moorlands will be managed under a more "natural" system, with low inputs, increased species diversity and structure in the sward. Heathland and grassland habitats will be restored to link existing blocks of heathland and provide larger management units.

The extensification of this moorland landscape should provide suitable habitat conditions for black grouse, and further to detailed habitat assessments, efforts should be made to re-establish a population by 2025.

Exmoor will also be the most important site in SW England for raptors, with at least one established breeding pair of hen harrier, six pairs of merlin and stable numbers of breeding kestrel and buzzard. Off the moorland, Exmoor will remain of international importance for breeding peregrine and will support an expanding population of breeding red kites.

The moorland will continue to provide habitats for upland specialists and breeding waders, but given the current small, vulnerable populations, the future prospects for red grouse, ring ouzel, lapwing, curlew and snipe are uncertain.

Challenges

Concerns over CAP reform and the Single Farm Payment are leading to fears over the future of cattle grazing on the moor. The Single Farm Payment replaces headage payments for cattle, removing the incentive for farmers to keep cattle on the moor, particularly the hardier breeds. In order to sustainably manage moorland habitats, continuation of cattle grazing is essential. CAP is due for further review in 2007, an opportunity to ensure the correct systems are put in place to allow sustainable management of the moorland.

Agri-environment schemes are a vital mechanism for supporting management for nature conservation on the moor. The ESA scheme has concentrated on maintaining and enhancing heather moorland, particularly to increase the heather component of the sward by setting stocking levels and agreeing a management plan with land managers. Management of inbye grasslands has focused on maintaining a permanent grassland sward and the boundary features. To achieve the vision, emphasis needs to be placed on extensification and diversification of these fields.

The ESA scheme will soon be replaced with the Higher Level Scheme. The new scheme will focus on the achieving the desired habitat rather than operating under a prescriptive approach. This will allow farmers the flexibility to manage land in a way appropriate for them to achieve the desired habitat. Where management for specific species is required, this could be highly beneficial. Ensuring the correct advice is given will be key to the scheme's success.

To achieve the vision for raptors, species protection measures may be needed to ensure vulnerable species are safe from persecution and that sufficient breeding habitat is available.

The restoration of large areas of habitat may provide opportunities for species which no longer occur on the moor, e.g. black grouse, but any proposals for re-establishment need to be subject to detailed assessments, particularly of extent and quality of habitat.

References

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