

# Scotland's Rural Development Programme 2014-2020 – the use of biodiversity data in spatial targeting –

*Summary: Measures that seek to enhance biodiversity through SRDP-funded agri-environment options vary geographically (spatial targeting) for best effect.*

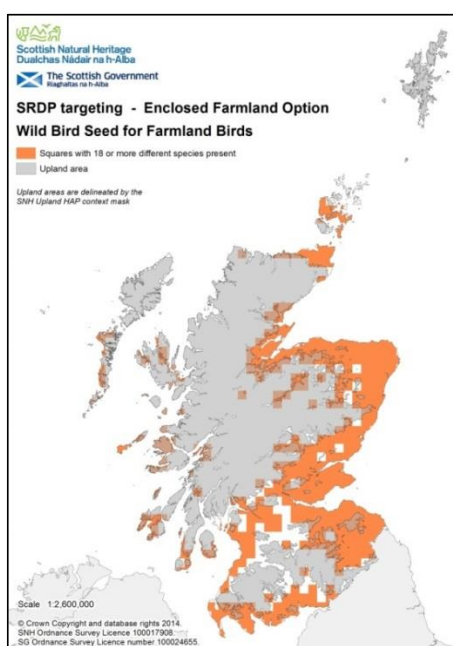
## Introduction

Scotland's Rural Development Programme (SRDP 2007-2013 and 2014-2020) delivers funding support to improve the environment and the countryside. Habitat and species distributions are used to optimise the geographical targeting of 38 SRDP agri-environment management options in 2014-2020 to benefit biodiversity, climate change, water quality and flood management.

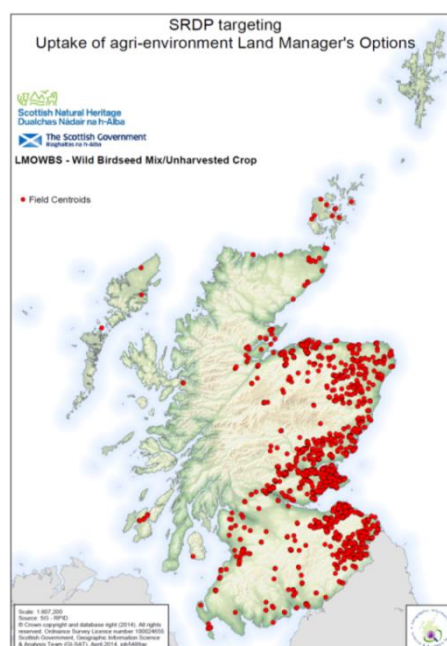
## Species

Around 115 species were selected from the Scottish Biodiversity List on the basis of: their presence on the Annexes of the Birds and Habitats Directives or the UK BAP list; or that they have declined in Scotland by more than 25%; and that they are sufficiently widespread to benefit from SRDP management options. Some options are available for individual species of restricted-range but spatial targeting is based mainly on groups of more widespread species. Species distribution records from 1950 onwards were sourced primarily through the National Biodiversity Network<sup>1</sup>. The overlapping species distributions for each option are then represented spatially as 'heat maps' of species richness on a 10km grid. Species distribution and heat maps can be used individually, amalgamated, combined with other relevant information, or confined to the lowlands or uplands by means of an ecological mask. In this way, maps that guide the spatial targeting of management options are supported by explicit reasoning and evidence.

**Fig 1a**  
**Potential spatial targeting of a 2014-2020 management option based on a species richness threshold**



**Fig 1b**  
**Comparison with LMO uptake of the 2007-13 near-equivalent RDC-LMO<sup>2</sup> option**



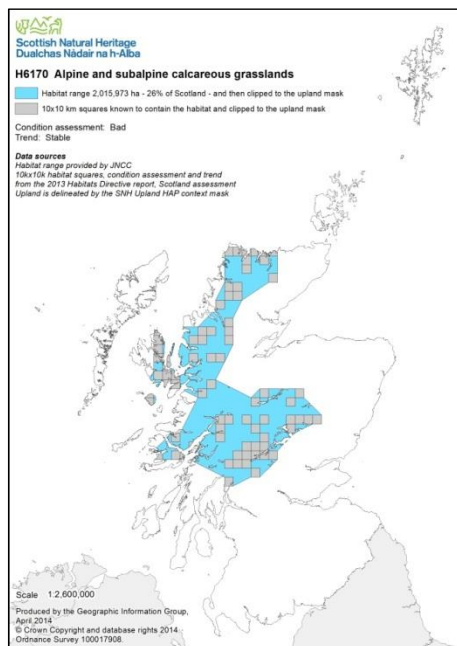
<sup>1</sup> More than 7 million species records, mostly from the Botanical Society of Britain & Ireland, were accessed from 22 organisations through the NBN (plus from BTO directly).

<sup>2</sup> Rural Development Contracts – Land Management Options

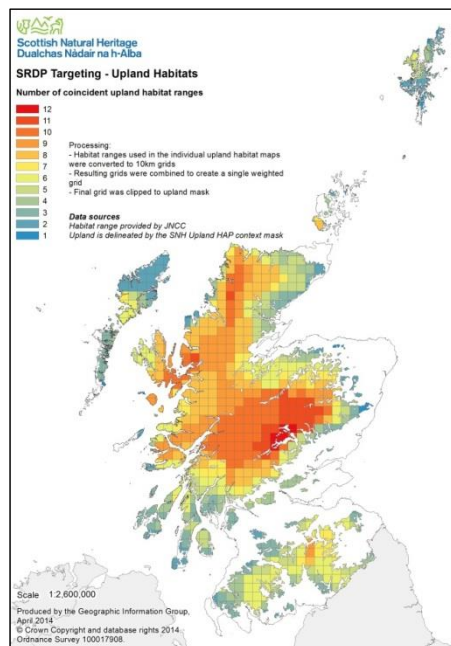
## Habitats

Habitats, including machair and hedgerows, also are targeted for SRDP support. For example, in the uplands 12 habitats of European importance were mapped from 10km grid maps of extent and range in the Habitats Directive 2013 report. A conclusion here and in Scotland's Biodiversity Strategy<sup>3</sup> is that a standardised habitat map that can satisfy an array of policy, operational, statutory and educational needs is required<sup>4</sup>.

**Fig 2a**  
The extent and range of an upland habitat from the 2013 Habitats Directive report



**Fig 2b**  
A combined habitat heat map for the upland habitats of European importance



## Spatial targeting

The mapping approach isn't a blunt instrument. It helps applicants to focus in on options that are locally relevant, and it provides supporting evidence in the assessment of applications. Importantly, it puts wildlife at the forefront of policy delivery.

**Photo**  
**Corncrake: a migratory species of restricted-range in Scotland supported by SRDP**  
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<sup>3</sup> [2020 Challenge for Scotland's Biodiversity](#) - A Strategy for the conservation and enhancement of biodiversity in Scotland

<sup>4</sup> SNH is leading the development of a new map based on the pan-European EUNIS-Annex I classification.