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## Highland Council

# HIGHLAND BIODIVERSITY ACTION PLAN REVIEW: Species and habitat review

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Project manager      Dr Peter Cosgrove

Project researcher      Steve Jackson

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**EnviroCentre**  
Craighall Business Park  
Eagle Street  
Glasgow, G4 9XA

t 0141 341 5040

f 0141 341 5045

w [www.envirocentre.co.uk](http://www.envirocentre.co.uk)

e [info@envirocentre.co.uk](mailto:info@envirocentre.co.uk)

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# 1. SPECIES AND HABITAT REVIEW

This review of Highland species and habitats has been prepared using species and habitat lists available through the seven Local Biodiversity Action Plans currently in existence:

- Inverness and Nairn (The Inverness and Nairn Biodiversity Action Plan);
- Lochaber (Living Lochaber: The Lochaber Biodiversity Action Plan);
- Skye and Lochalsh (The Skye and Lochalsh Biodiversity Action Plan);
- Ross and Cromarty (East) (The Ross and Cromarty East Biodiversity Action Plan);
- Wester Ross (The Wester Ross Biodiversity Action Plan);
- Sutherland (The Sutherland Biodiversity Action Plan); and
- Caithness (The Caithness Biodiversity Action Plan).

Further data has been gained through the National Biodiversity Network (NBN) ([www.nbn.org.uk](http://www.nbn.org.uk)) and the Highland Biological Recording Group (HBRG) whose data sets are available through the NBN. Additional data regarding UK BAP priority species and habitats has been gathered from the UK BAP website ([www.ukbap.org.uk](http://www.ukbap.org.uk)).

The Highland LBAP species review is by alphabetical taxonomic group order, in accordance with the UK BAP website. The species listings are not definitive lists of every species in Highland due to a lack of published information on several taxonomic groups, but a subjective list of local species considered important in area BAPs (Sheet 1 of the database). Where a species has been highlighted by an LBAP as of local importance, the cell contains a coloured **X** and a patterned background. Where a species is known to occur in an LBAP area, but has not been identified as of local importance, the cell contains an **X** and a plain white background. Some groups are relatively well recorded (e.g. birds and butterflies), others are not (e.g. fungi) and some are well recorded, but the data is not recorded in an easily utilisable Highland area form (e.g. vascular plants or deepwater fish species).

The Highland species database is considered accurate and objective as regards known occurrence of UK BAP priority species of all taxa (Sheet 2 of the database). Of the UK's 382 UK BAP Priority species, 166 (44%) are present in Highland. There are no other LBAP areas in the UK with comparable proportions of UK BAP priority species. Therefore, Highland can legitimately lay claim to hold 4 out of 10 of the UK's most threatened, localised and declining species - making it the most important region in the UK for rare species. As more survey work is carried out in Highland, new records of rare species will likely come to light and can only serve to consolidate this national importance.

A ranking system for UK BAP Priority species has been devised which highlights the importance of the Highland population in a UK context, where this is known or can be ascertained from published data sources. For example, Skylark and Linnet occur in all 7 Highland LBAP areas, but they are also widespread throughout other parts of the UK, so their relative UK importance is probably small. The Skye bog moss and freshwater pearl mussel have most of their remaining populations within Highland region, making Highland the most important place in the UK for these species. This

categorisation refers to the distribution of each Priority species within the UK. For each species, a rank has been assigned based on its range in the UK and the extent to which it is confined to the Highland region. Note that the classification of Highland importance for habitats refers not to the UK, but to Scotland alone. This difference is due to a lack of published data on national distributions of several BAP priority habitats.

The ranking system for UK BAP Priority species has been devised as below:

- ? Uncertain, dubious records or occasional vagrant;
- \* Small percentage of the UK population i.e. <25% (based on 10km squares on NBN);
- \*\* Moderate % of the UK population i.e. 25-49%
- \*\*\* High % of UK population i.e. 50-74%
- \*\*\*\* Most or all of UK population i.e. >75%

A similar ranking system has been used for habitats; however the ranking pays regard to Scottish distribution rather than UK distribution. This assessment has been based on distribution maps presented in a SNH commissioned report<sup>1</sup>. Highland holds large proportions of several habitats including 35 out of 45 of the UK BAPs priority habitats, which is also reflected in the high number of threatened and rare species associated with these habitats.

Those species and habitats which will gain most from Highland conservation effort thus are indicated through their \*\*\*\* ranking.

More 50 species have over 50% of their UK distribution/population in Highland. Across different taxonomic groups Highland holds important UK populations of ants, bees, beetles, birds, butterflies, fish, flies, fungi, lower plants (mosses, lichens & liverworts), mammals (especially cetaceans), molluscs, moths and vascular plants. Many of these groups are not well-known and local awareness raising initiatives and training events e.g. on moths, would serve to raise awareness of important national priorities.

Many of the local area projects (discussed elsewhere) match up to these national priorities, but there is tremendous scope to make more happen, particularly through relatively charismatic groups, such as birds, butterflies and moths. Highland holds very important populations of lower plants and vascular plants and awareness raising projects, targeting particular species could yield many new records, provide targeted advice for land managers and help to raise the profile of botanical biodiversity in the Highlands.

The most important aspect of these findings will be to take the message that Highland Region is the most important place in the UK for rare/threatened species and get this across to local residents, businesses, tourists and politicians. Action for many of the species highlighted in the database must happen locally in Highland, as this is their main stronghold. The future strategic direction of the Highland LBAP should have these Priority species at its core.

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<sup>1</sup> SNH Commissioned Report No. 044. A preliminary review of the distribution and extent of BAP priority habitats across Scotland (ROAME No. F00NA02). SNH Battleby. 2004.

This database should be updated regularly to keep it useful and accurate. It might be possible to get volunteer help to use existing UK atlas info (e.g. vascular plants) and convert the data into a form that can be added to the Highland LBAP database.

SNH have produced Local Biodiversity profiles for UK BAP species in each of the (SNH defined) Highland areas (Table 1). Unfortunately, the profiles are only broken up according to SNH areas, so there are three area divisions:

- East Highland = Inverness and Nairn, Badenoch and Strathspey and Easter Ross;
- North Highland = Caithness, Sutherland and northern part of Wester Ross; and
- West Highland = Lochaber, Skye and Lochalsh and southern part of Wester Ross.

The profiles give an assessment for each species of those areas of the country where local action is thought by the relevant experts to be most beneficial. The SNH list contains only 31 of the 166 UK BAP species present in Highland and does not indicate why local based action is not considered a priority for the remaining 135 UK BAP species, more than 50 of which have most or all of their UK populations within Highland.

**TABLE 1. SNH HIGHLAND PRIORITIES FROM LOCAL BIODIVERSITY PROFILES**

Species	East Highland	North Highland	West Highland
<b>High priority</b>			
Great crested newt	Yes	No	No
Corn bunting	Yes	No	No
Great yellow bumblebee	No	Yes	No
Pearl-bordered fritillary	Yes	Yes	Yes
<i>Hypocrepopsis rhododendri</i>	No	No	Yes
Tooth fungi	Yes	No	No
Pink meadow cap	Yes	Yes	Yes
Red squirrel	Yes	Yes	Yes
Common scoter	No	Yes	No
Juniper	No	Yes	Yes
Oblong woodsia	Yes	No	No
<b>Medium priority</b>			
Corncrake	No	Yes	Yes
Chequered skipper	No	No	Yes
Marsh fritillary	No	No	Yes
<i>Spiriverpa lunulata</i> (fly)	Yes	No	Yes
Earth-tongue	No	No	Yes
<i>Pseudocyphellaria norvegica</i> (lichen)	No	Yes	Yes
Wilson's pouchwort	No	Yes	Yes
Water vole	No	No	Yes
Freshwater pearl mussel	Yes	Yes	Yes
Cornflower	Yes	No	Yes
Scottish crossbill	Yes	No	No
Grey partridge	Yes	No	No
Capercaillie	Yes	No	No

<i>Alectoria ochroleuca</i> (lichen)	Yes	No	No
<i>Cladonia botrytes</i> (lichen)	Yes	No	No
Vertigo geyeri (Whorl snail)	Yes	No	No
Juniper	Yes	No	No
White-stalk puffball	No	Yes	No
Pillwort	No	Yes	No

# **HABITATS**

**See accompanying Excel spreadsheet**

# **SPECIES**

**See accompanying Excel spreadsheet**