



BROWN HARE ACTION PLAN

1. PROFILE

1.1 Common Name Brown Hare

1.2 Scientific Name *Lepus europaeus*

1.3 Photo



Brown hare. Clackmannanshire Council.

1.4 Protection

Limited protection under the Ground Game Act 1880 and the Hare Protection Act 1911. Hares cannot be offered for sale between 1 March and 31 July.

1.5 UK Biodiversity Status

Priority species

1.6 Associated Habitats and Species

Habitats:

- Arable farmland
- Lowland grassland
- Upland grassland
- Woodland

Species:

Common Name	Scientific Name	UK Biodiversity Status
barn owl	<i>Tyto alba</i>	Conservation concern
grey partridge	<i>Perdix perdix</i>	Priority
lapwing	<i>Vanellus vanellus</i>	Conservation concern
linnet	<i>Carduelis cannabina</i>	Priority
skylark	<i>Alauda arvensis</i>	Priority



2. CURRENT STATUS

The brown hare is widespread through Europe, Asia and Africa. It is believed to have been introduced into Britain in Roman times, and is now widespread throughout Great Britain with the exception of the north-west Highlands.

It is estimated that the British population was about 5 million in 1900, but had declined to somewhere between 0.8 million and 1.25 million by 2001. The population may have stabilised over the last ten years, but the evidence for this is not conclusive.

The brown hare is present throughout rural Clackmannanshire, and has even been seen around the bonded warehouses at Cambus. It is not restricted to lowland areas, often being seen in the Ochils, right up to the summit of Ben Cleuch. The size of Clackmannanshire's population is unknown.

3. ECOLOGY and NATURE CONSERVATION IMPORTANCE

The brown hare is most common in areas where arable crops are grown, especially cereals. They do especially well where there are a variety of crops and other habitats, providing shelter and food all year round. The hare is predominantly nocturnal and when not active lies up in a resting place known as a *crouch* or *form*.

Hares are grazers, eating young grasses, cereals and herbs. They also damage young trees when snow covers the ground. When present in good numbers they can be a serious pest. They are often shot, either for sport or pest control, and are also subject to poaching, using guns or dogs.

Hares occupy home ranges of between 20 and 40 ha, but there is no evidence of territorial behaviour so that population densities in good habitat in Britain are between 0.25 and 0.5 animals per ha. They are mainly solitary, but in late winter and early spring are seen in small courtship groups. This is when *boxing* takes place with hares performing break-dancing manoeuvres across the fields as unreceptive females beat off the unwanted attentions of males.

4. ASSOCIATED CULTURE and FOLKLORE

The brown hare is deeply rooted in European, African and Asian folklore. In Britain it has traditionally been a fertility symbol and was the sacred beast of Estre, the Saxon god of spring, from whose name Easter was taken. Indeed the hare is the source of the Easter bunny character and its association with Easter eggs. Lapwings lay their eggs in March, when hares are very noticeable in the fields, and do not start incubating until all the eggs are laid. Therefore lapwings' eggs, which were considered a great delicacy, were attributed to hares, and the eggs of the beast of Estre became known as Easter eggs. Other examples of the hare's place in our culture are the terms "mad March hare" and "hare-brained".



5. CURRENT FACTORS AFFECTING THE SPECIES

Clackmannanshire's hare populations have probably declined less drastically than those in many other counties, due to the survival of quite large areas where mixed farming predominates. However the following negative factors are putting pressure on the animal:

- Loss of mixed habitats: Farms are becoming less varied due to increasing specialisation. This means that a decreased variety of food is available to the hare and for a shorter period of the year.
- Move from winter-sown to spring-sown cereals: This has reduced the area of stubbles which are important wintering grounds, and decreased the length of time for which cereal fields are useful to the hare in the spring and early summer.
- Increase in silage cutting: Silage is cut earlier than hay and there are more cuts during the growing season, increasing the chances of animals being killed by mowers. Modern machinery also has a wide cut and moves very quickly.
- Herbicide use: This reduces weeds in crops and these form an important part of the hare's diet.
- Development: In some areas of the county built-up areas are fragmenting hare populations. For example the farmland between Alloa and Cambus, where hares are regularly seen, is cut off from the rest of the Clackmannanshire.

6. CURRENT PROJECTS and OPPORTUNITIES

- Agri-environment schemes: The Rural Stewardship Scheme (RSS) run by the Scottish Executive Environment and Rural Affairs Department (SEERAD) includes prescriptions for grass margins, beetle banks, conservation headlands and the introduction and retention of extensive cropping regimes, all of which benefit brown hares.
- Non-rotational set-aside: This can be particularly valuable for hares in areas where there is little grassland as it provides food during the period when cereal crops are too long for hares.
- Organic Aid Scheme: This is administered by SEERAD and encourages farmers to convert to organic production, which will often have distinct advantages for hares.
- On-farm advice: Various organisations are providing advice to farmers on measures that will benefit farm wildlife, including hares, without reducing the viability of the farm business. These include the Farming and Wildlife Advisory Group (FWAG), Game Conservancy Trust (GCT) and Scottish Agricultural College (SAC).



7. OBJECTIVES and TARGETS

The key to securing the future of the brown hare in Clackmannanshire is to retain and, if possible, expand the patchwork habitat provided by mixed farming.

Objective 1 Determine the status of the brown hare.

Target 1.1 Conduct a survey to determine the distribution and population levels.

Objective 2 Stabilise and, if possible, enhance local populations.

Target 2.1 Encourage appropriate landowners and managers to retain or introduce management practices that benefit hares.

Objective 3 Promote awareness of the brown hare.

Target 3.1 Encourage farmers to value hares through advisory visits and literature.

Target 3.2 Use press releases during the spring to highlight the hare's connection with Easter and publicising the animal in the county.



8. ACTIONS - BROWN HARE

ACTION	Deliverers		Year to be Completed or in Place					Meets Target	
	Lead	Partners	2004	2005	2006	2007	2008		
1. Policy and Legislation									
1.1 Ensure that agri-environment programme includes options for management beneficial to brown hares.	SEERAD	FGWG	*	*	*	*	*	2.1	
2. Species Safeguard and Management									
2.1 Promote the positive management of mixed farming areas through advice and agri-environment schemes.	FWAG SAC	farmers, landowners	*	*	*	*	*	2.1	
3. Advisory									
3.1 Provide advice to farmers and landowners on positive management for hares and grant-aid sources through informal visits and the arable HAP mailouts.	FWAG SAC		*	*	*	*	*	2.1	
4. Research and Monitoring									



4.1 Conduct a survey to determine the distribution and population level of the brown hare in Clackmannanshire by March 2005. Conduct a follow-up survey by March 2009.	FGWG		*				*	1.1	
5. Communications and Publicity									
5.1 Encourage farmers to value hares through informal visits and the arable HAP mailouts.	FWAG SAC	FGWG	*	*	*	*	*	3.1	
5.2 Raise the public profile of the hare in Clackmannanshire by press releases before Easter 2005 in connection with the survey.			*					3.1	1.1
6. Plan Monitoring and Review									
6.1 Ensure the effectiveness and relevance of this plan by monitoring annually.	CBP		*	*	*	*	*	All	
6.2 Monitor the completion of actions in detail and review the LBAP every 5 years.	CBP					*		All	



Acronyms

CBP	Clackmannanshire Biodiversity Partnership
FGWG	Farmland and Grassland Working Group
FWAG	Farming and Wildlife Advisory Group
SAC	Scottish Agricultural College
SEERAD	Scottish Executive Environment and Rural Affairs Department

9. KEY CONTACTS and ACKNOWLEDGEMENTS

Plan author: Dave Shepherd

10. REFERENCES

Tapper S.; & Hobson D. (2002) *Conserving the brown hare*. Game Conservancy Trust, Hampshire.