



Barn owls *Tyto alba* utilise a variety of different habitats including rough grassland, corridors along watercourses, roadsides, arable field margins, woodland edge and occasionally wide woodland rides. Their main diet consists of small mammals such as field voles *Microtus agrestis*, common and pygmy shrews *Sorex araneus & minutus*, wood mouse *Apodemus sylvaticus* and brown rat *Rattus norvegicus*.

A pair of barn owls will normally require 30-50 hectares of rough-grassland, or 15-25 km of grassland margin for successful breeding. They nest in roof spaces, hollow trees, rock crevices, caves and buildings. Barn owl courtship takes place as early as January and is centered around the nest site. Due to global warming the egg laying date has moved from mid-May to mid-April. The average clutch size is 6 eggs and the average success is 50% of the clutch size. Juveniles are flying at 8 weeks and dispersal is normally around 14 weeks old.

Dispersal is extremely hazardous and many deaths occur at this stage, which include road casualties, starvation, drowning in water troughs, and getting trapped in buildings. Dispersal ends at the end of November because a barn owl needs to know its territory before the winter sets in.

Owing to its rapid decline between the 70s and 90s, it became necessary to give this bird special protection. Under Schedule 1 of the Wildlife & Countryside Act 1981, it is an offence to intentionally disturb these birds whilst they are building a nest, or in, on or near a nest containing eggs or young; or to disturb dependent young even if not in the nest.

The barn owl exists at low population density in most areas of the UK. Being nocturnal and non-vocal makes it difficult to locate and to survey. There are currently only three confirmed records of breeding barn owls in Herefordshire.

### Threats

- Agricultural intensification:
  - Intensive management of grassland
  - Increased use of pesticides and rodenticides
  - Loss of hedgerows and headlands
  - Reduction of habitat diversity due to increased specialisation
  - Improved food crop storage facilities
- Shift from spring-sown to autumn-sown crops
- Reduction in nesting and roosting sites due to development
- Isolated and fragmented populations
- Road kills

### Current Action

- Agri-Environment Scheme buffer strips against arable land and water courses (NE)
- 'Barn Owls on Site – a Guide for Developers and Planners', 2002 (BOT)
- Nest boxes provided (EA, HBOG, HWT)
- National ringing scheme and the national Nest Record Scheme (BTO, HBOG)

	Objective	Action
A	Locate and map existing populations	1,3
B	Maintain viable populations	2
C	Change farming practices to increase small mammal numbers and improve availability of prey	2
D	Enhance breeding success and ability to monitor by providing nest boxes	5
E	Protect known populations through targeting funding and protection through planning process	2,3,4
F	Reduce barn owl casualties from road traffic accidents	5

	Actions	Target
1	Locate populations through public surveys and collation of HOC records and map distribution of historical and current sites (HWT, HART)	Annual
2	Maintain existing populations and increase numbers through Agri-Environment Schemes, the planning process and by providing nest boxes near known populations	Annual
3	Increase public awareness of the rapid decline of farmland habitat quality and small mammal populations for barn owl	2020
4	Produce advice and increase awareness to members of the public and land owners	2020
5	Identify road traffic accident hotspots and gain funding for awareness, road traffic accident survey and nest box project	2020

Lead Partner	HBOG
Key Partners	HWT, HOC, PTES