

Criteria for categorising Short-eared Owl breeding evidence in the UK

EBCC standard breeding categories	Specific interpretation for Short-eared Owl	Notes/rationale
Possible breeding		
1. Species observed in breeding season in possible nesting habitats.	<p>One or more birds seen in possible nesting habitat within the same area.</p> <p>Short-eared Owls breed in extensive open habitats including heather moorland, rough grassland in both uplands and lowlands, young forestry plantations, bogs and sand dunes.</p>	<ul style="list-style-type: none"> ● Short-eared Owls are highly nomadic and even when breeding can range widely if food is short. ● Occupation of many sites is determined by the number of voles, and Short-eared Owls will often not breed in years of low vole numbers. ● Home range sizes in Scotland and Wales have been recorded as 18-875 ha. ● Pellets found below posts or prominent features indicate presence in an area even if adults are not seen. However, Short-eared Owl pellets are similar to those of Long-eared Owl and care must be taken to rule out that species. ● Single owls perched in the open for over 30 minutes during daylight hours can be taken as an indication of a Probable breeding pair (see 4 below).
2. Singing male(s) present (or breeding calls heard) in breeding season.		<ul style="list-style-type: none"> ● Hooting is rarely heard and therefore unlikely to be the main source of information on the presence of Short-eared Owls.
Probable breeding		
3. Pair observed in suitable nesting habitat in breeding season.		
4. Permanent territory presumed through registration of territorial behaviour (song <i>etc.</i> on at least two different days a week or more apart at the same place).		<ul style="list-style-type: none"> ● An owl perched for an extended period in March-May (not just pausing between hunting flights; i.e. more than 30 minutes) can relate to a male in close proximity to a female during egg-laying or early incubation and can be taken to indicate Probable breeding. ● Note that Short-eared Owls can hunt across extensive areas so care is required in separating adjacent pairs. A useful technique is to plot flightlines and indications of territorial or nesting behaviour on a map to determine numbers.
5. Courtship and display.		<ul style="list-style-type: none"> ● Males make wing-clapping flight displays, although such birds may not necessarily go on to breed. Two birds flying parallel with wing-clapping or other displays may indicate males from two separate territories.
6. Visiting probable nest site.		
7. Agitated behaviour or anxiety calls from adults.		<ul style="list-style-type: none"> ● See 10 below.

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8. Brood patch on adult examined in the hand.		
9. Nest building or excavating nest-hole.		<ul style="list-style-type: none"> ● Although Short-eared Owls do build a nest, it is only a shallow scrape lined with pieces of short vegetation.
Confirmed breeding		
10. Distraction-display or injury-feigning.		<ul style="list-style-type: none"> ● Short-eared Owls giving alarm calls or mobbing potential predators indicate the presence of a nest close by and can be used as indicators of Confirmed breeding. ● Owls may also hover over a fieldworker and "bark", indicating the proximity of a nest or fledged chicks.
11. Used nest or eggshells found (occupied or laid within period of survey).		
12. Recently fledged young (nidicolous species) or downy young (nidifugous species).	Recently fledged should be interpreted as full-sized young or juveniles which are still being fed by a parent.	<ul style="list-style-type: none"> ● Care should be taken to include only young which appear to have fledged from a nest in the close vicinity. Young birds will disperse into surrounding vegetation and exhibit a begging display to attract adults. Also, flying young owls are very similar to adults and care should be taken over aging of flying birds. ● Brood size can be difficult to determine because of asynchronous hatching and because the young leave the nest about ten days before fledging.
13. Adults entering or leaving nest-site in circumstances indicating occupied nest (including high nests or nest-holes, the contents of which can not be seen) or adult seen incubating.		<ul style="list-style-type: none"> ● Although nests are usually in long heather or similar vegetation, Short-eared Owls will also use burnt heather and such areas should not be discounted as potential nest sites.
14. Adult carrying faecal sac or food for young.		<ul style="list-style-type: none"> ● Males carrying food for females or young at a nest will fly directly, often high, to within 100-200m of the nest where he may settle before walking or flying to the nest. Although Short-eared Owls do build a nest, it is only a shallow scrape lined with pieces of short vegetation.
15. Nest containing eggs.		<ul style="list-style-type: none"> ● Nests are often only found by accidental flushing of an incubating female. Disturbance should be kept to a minimum and it is best to glance down to count eggs and keep walking on past the nest so that the female can return quickly.
16. Nest with young seen or heard.		

Notes.

- In Northern Ireland and the Isle of Man, Short-eared Owl is afforded special protection under Schedule 1 of the Wildlife (Northern Ireland) Order 1985 and the Wildlife Act 1990 respectively.
- Short-eared Owls are difficult to survey because of the large year-to-year variation in numbers of breeding pairs and because adults are often only visible for a small proportion of daylight hours. Care therefore needs to be taken in the interpretation of casual records. At least four visits to a site, spread across the period from early March to July, may be required to establish the presence of a territory.

- Short-eared Owls are sensitive to disturbance and there are suggestions that the presence of fieldworkers acts as a deterrent to nesting, so it is essential to maintain a distance from nesting areas and to be as unobtrusive as possible.
- Submissions to the Panel: numbers of pairs should be submitted according to the criteria detailed here. Details of all sites should be given unless there are more than ten pairs in the recording area, in which case county totals of the number of pairs breeding in the three categories is acceptable.
- Reference: Raptors: a field guide for surveys and monitoring pp 223-231. Hardey *et al.* 2009. The Stationery Office. This publication gives more specific data on the behaviour and breeding biology of the species. Anyone interested in studying or surveying Short-eared Owls is recommended to read this book.