

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

EBCC standard breeding categories	Specific interpretation for Long-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>Long-eared Owls breed in a wide range of woodland and scrub habitats, including isolated trees and shelter belts. Conifers are preferred and small patches of woodland within open, often damp, habitats are preferred.</p>	<ul style="list-style-type: none"> ● Long-eared Owls are largely resident but some sites at higher altitudes are vacated in the winter and re-occupied from March or April onwards. ● Because Long-eared Owls are elusive birds, it is acceptable to include single date records of from a site during the breeding season (March to July). Records outside this period may relate to dispersing birds or migrants. ● Long-eared Owls moult in mid-summer so the presence of moulted flight feathers can help identify occupied home ranges and therefore sites of Possible breeding.
2. Singing male(s) present (or breeding calls heard) in breeding season.		<ul style="list-style-type: none"> ● The male's song is a quiet hoo-hoo-hoo-hoo call which is audible at up to c150m in calm conditions. Hooting is inhibited by heavy rain and high winds (though it is unlikely fieldworkers would be listening in these conditions!). ● The main period of calling by territorial males is from February to May but calls are generally only heard after dusk. ● Any instance of hooting from a potential breeding site should be logged as Possible breeding. Prolonged calling by a male implies he does not have a mate, although Possible breeding should still be noted.
Probable breeding		
3. Pair observed in suitable nesting habitat in breeding season.		<ul style="list-style-type: none"> ● Includes pair <i>heard</i> in suitable habitat in breeding season (e.g. female responding to male calling).
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).	Singing males from February – May inclusive.	<ul style="list-style-type: none"> ● Adjacent territories identified by two males singing against each other can also indicate the presence of permanent territories. ● Note that Long-eared Owls can hunt across extensive areas, of over 2.5km from the nest, so care is required in separating adjacent pairs.
5. Courtship and display.		<ul style="list-style-type: none"> ● Males make wing-clapping flight displays, especially as a prelude to joining a female and during the period of nest-site selection.
6. Visiting probable nest site.		
7. Agitated behaviour or anxiety calls from adults.		
8. Brood patch on adult examined in the hand.		

EBCC standard breeding categories	Specific interpretation for Long-eared Owl	Notes/rationale
9. Nest building or excavating nest-hole.	Not applicable.	<ul style="list-style-type: none"> Long-eared Owls use old stick nests of corvids, pigeons and Sparrowhawks in trees, although they will occasionally nest on the ground if these are not available.
Confirmed breeding		
10. Distraction-display or injury-feigning.	Not applicable.	
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 sit in trees close to the nest and utter hunger calls when adults are near. This category is the most frequent one used for determining confirmed breeding of this species, as large young in the nest or recently fledged from it have a loud, far-carrying begging call, likened to the sound of a squeaky gate.
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.	Nests are typically located in trees and often not easily accessible, so contents are unlikely to be visible, but care must be taken to ensure that a nest site is actually in use to qualify for Confirmed breeding.	<ul style="list-style-type: none"> If a nest is occupied and in use by Long-eared Owls there will be droppings and pellets beneath it. Be careful not to "dismiss" ground nesting owls as Short-eared as Long-eared nests have been found in deep heather within open but forested areas (e.g. re-stocked forestry).
14. Adult carrying faecal sac or food for young.		
15. Nest containing eggs.		
16. Nest with young seen or heard.		

Notes.

- In Northern Ireland and the Isle of Man, Long-eared Owl is afforded special protection under Schedule 1 of the Wildlife (Northern Ireland) Order 1985 and the Wildlife Act 1990 respectively.
- Long-eared Owls are particularly sensitive when laying or near hatching and great care must be taken not to disturb nesting pairs. Any intensive searches for nests should be delayed until after chicks will have hatched (if this can be determined). Because the timing of breeding is very variable, caution should be employed in all visits before late June.
- In some areas, Long-eared Owls may respond to surveys using call play-back techniques but care must be taken to limit this, especially in areas regularly visited by birdwatchers, to minimise disturbance. Such surveys in areas with a number of territories can be used to gauge the number of Possible breeding pairs or Probable breeding pairs (if the sites are close enough for the birds to be calling against each other). Typically the number of Confirmed pairs will relate to records of fledged young, although of course these only reflect the number of successful pairs.
- 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 217-222. 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 Long-eared Owls is recommended to read this book.