Marsh warbler *Acrocephalus palustris*

Status

Red listed: BD, BR
SPEC 4 (S)
Schedule 1 of WCA 1981

National monitoring

Rare Breeding Birds Panel.

Population and distribution

The marsh warbler has never been a common UK breeding bird, but has bred at various times in Gloucestershire, Worcestershire, Somerset, Sussex and Kent (*Red Data Birds*). The core European population in Germany, Russia and Romania remained stable from 1970 to 1990 whereas the UK population declined quite dramatically over the same period (*Birds in Europe*). The reason for the UK decline is unclear, but is most likely to be a combination of factors including habitat loss, weather and the isolation of the UK population (Kelsey et al 1989). An estimated 11–34 pairs of marsh warbler breed in the UK each year (*Population Estimates*) and there are signs that the population is increasing once again, albeit at new localities.

Ecology

Marsh warblers prefer habitat which combines tall, dense herbaceous vegetation, scattered shrubs or trees, fertile land with a history of disturbance, and the presence of plant species such as common nettle, meadowsweet and willowherb. Nesting has been recorded in small (a few square feet) patches of vegetation and arable crops. Nests are characteristically built around the stems of herbaceous plants or shrubs. There is a single brood, and the clutch of 3–5 eggs is laid in June or early July (*Red Data Birds*).

Breeding season survey – population

This survey method is adapted from Kelsey (1987).

Information required

- estimate of the number of males present for at least a week (ie territorial males)
- map showing registrations and the area covered.

Number and timing of visits

Weekly, to locate singing males, and at three-day intervals thereafter until territory occupancy has been confirmed. From last week in May to early July.

Time of day

Early morning, eg 0500–1000 BST.

Weather constraints

Avoid cold, wet and windy conditions.

Sites/areas to visit

Areas that have been occupied by breeding marsh warblers in the past and which still have suitable habitat.

Equipment

- 1:10,000 OS map (several copies, one for each visit)
- Schedule 1 licence.

Safety reminders

No specific advice. See the *Introduction* for general guidelines.

Disturbance

Do not disturb breeding birds and nest-sites. Never approach a nest and keep all marsh warbler sites strictly confidential.

Methods

This method involves mapping territories of singing males. However, marsh warblers only sing for a short period, their territories are relatively small (0.1 ha) and they do not always settle where they are first heard singing. Therefore some additions to the standard CBC method are required.

Mark the survey area on a map. If it is large, split it into more manageable sections (about 20 ha) and treat each as a separate survey area. Plan your route in advance and walk it systematically. Walk at a slow pace and get to within 50 m of each point within the survey area. Alternate the direction in which you walk the survey route through each area on each visit.

When marsh warblers are not singing, they are easily confused with reed warblers *Acrocephalus scirpaceus*. Ensure that you are confident with your identification. Reed warblers produce a fairly stereotypic monotonous song, interspersed with occasional mimicry; whereas marsh warbler song is delivered in a much more exuberant manner and is extremely varied. Marsh warblers frequently sing from bushes and trees or from the tall dead stems of herbaceous vegetation, while reed warblers sing from less exposed positions.

On the first visit, map the position of every marsh warbler seen and heard and make a note of the behaviour using standard BTO codes (Appendix 1). Wherever singing males are seen, revisit the location of each three days later and then again three days after that. Marsh warblers can be considered to be holding territory if they are present in the same area for at least a week. This rule of thumb avoids counting migrant birds – which might sing at a site for a few days and then move on – as territory-holders.

Beware of territory-holders moving to other areas in an attempt to attract new females, and mated males going quiet while the female builds the nest (which takes about four days). When returning to a site which has previously held a singing male, look for nesting activity. If there is evidence of this, the territory can be considered to be occupied, even if no male song is heard.

After your final visit, transfer all the information from the individual visit maps to a master map, annotating the records from each separate visit with a different letter (Visit 1 = A, Visit 2 = B, etc). Estimate the number of males which held territory for at least a week. At the end of the survey, report the number of occupied territories as the number of breeding pairs.

References

Kelsey, M G (1987) *The Ecology of Marsh Warblers.* D Phil Thesis, EGI, Oxford University.

Kelsey, M G, Green, G H, Garnett, M C and Hayman, P V (1989) Marsh warblers in Britain. *British Birds* 82: 239–255.