

Curlew: the results of the breeding survey 2017 Severn and Avon Vales, Gloucestershire and Worcestershire.

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The results of the breeding survey in 2017 in the Severn and Avon Vales in Gloucestershire and Worcestershire were rather disappointing. Some 31-32 pairs occupied territories (roughly the same number as in previous years), but only three young birds fledged, one each from three broods, all of them along the Avon (against six broods with fledged young last year on both Avon and Severn). Practically all the occupied territories were at well-known, traditional sites in the Vales; it was very pleasing to confirm that at least one pair is still attempting to nest on higher ground in the Forest of Dean. The figure of 31-32 pairs does not include Curlews nesting in somewhat different habitats on higher ground between the Vales in central Worcestershire, where a number of pairs do indeed survive, if only in small numbers; these birds will be a focus of attention in future. The present note is a provisional account; a more detailed report will be produced in due course, as in 2015 and 2016.

Coverage was better than in 2016, so that practically all the potential sites in the Vales were covered. Many thanks to all those observers who contributed data, and in particular to Mervyn Greening, Andy Jayne and Rob Prudden who took part in both 2016 and 2017; to Mike Liley, Ian Duncan and John Dickinson who provided extra records from Worcestershire in 2017; and to Juliet Bailey who has been recording the botany (and the birds) of the Vales for many years with the Gloucestershire Naturalists' Society; her input in 2017 provided valuable new insights into the Curlews' habitat preferences.

In general, no special effort was made to find nests in the Vales, as many are located in large hay meadows, where there is a danger of damaging mowing grass and, more important, of opening up the way to predators like foxes, badgers and crows. Five nests were found, four with eggs, one with chicks; one was found by watching the adult back to the nest, the others by pure chance and good luck. It would be good to hold discussions in the Curlew Forum about whether greater efforts should in future be made to find nests, to improve monitoring by use of temperature loggers (which would give precise information about when a nest is abandoned), or in order to take conservation measures at the nest (notably by erecting electric fencing).

Of the 31-32 pairs which occupied territories at traditional sites early in the season, at least six disappeared at an early stage and may not actually have made a nest or laid eggs; so, a more accurate figure for actual nesting attempts might be 26-27 pairs. It would be good to clarify the definition of what actually qualifies as a nesting attempt: does appearance on a territory early in the season qualify as a breeding attempt? A long-lived bird like Curlew might well appear at a traditional site early in the season, but not carry on with nesting (perhaps because it had returned from the wintering grounds in sub-optimal condition, or because the conditions on the breeding field were not perfect); does this constitute attempted breeding? Perhaps not, but it is undoubtedly worth recording. BTO, for completion of Nest Record Cards, does not consider a nesting attempt to have taken place unless at least one egg is laid; so, without more direct evidence such as eggs, young, faecal pellets (or being certain that display is distraction display) a definite breeding attempt cannot be claimed. Incidentally, in view of the decline in Curlew numbers, the Forum should encourage details of every nest found to be recorded on a Nest Record Card.

The four nests found with eggs were all predated; to judge from the behaviour of the birds (extreme alarm immediately after the presumed loss, less regular attendance in the nesting area) many more pairs lost their eggs or young in late April and more especially in May, probably to predators, but perhaps to poor environmental

conditions or disease. Another indication of nesting failure was the presence in late May and early June, around several nesting meadows, of small flocks of ten or fifteen adult Curlews, where there had previously only been territorial paired birds; these flocks are likely to be the birds noted in previous years and again this year at communal roosts near water; they were clearly made up of failed breeders.

At least three pairs are known to have lost their eggs or young during hay making activities, generally during the warm period in mid-June. It has been suggested by Curlew conservationists that hay might be cut from the centre of a meadow outwards (as happens for Corncrakes in Scotland), in order to allow the chicks to escape the mowing machines; farmers generally reply that this would be complicated and expensive. One farmer who knew he had nesting Curlew on his fields purposely left this field uncut until the young had fledged, cutting only round the edges (the "headlands") of the field and leaving a large uncut area as a refuge in the middle. 2017 was an early season (probably because of the very dry conditions in March and April), with a full clutch on 19 April and the first young in the very last days of May.

In general, there are few records of replacement clutches in Curlew: unless they re-lay very early in the season, the long incubation and fledging periods mean that they don't have time to complete the nesting process; but proof of one definite replacement clutch was obtained at a traditional site, where a nest with tiny newly-hatched chicks was present on the late date of 1 July (but this nest too fell a prey to predators). The first flying young were seen on 1 July (as against 9 July last year), all fledged birds had left by 14 July (23 July last year).

Very interestingly – and indeed, as in previous years – at least one bird of the year was found on migration through the Severn Vale in August. A juvenile was noted from 7 to at least 10 August (and perhaps longer) at a traditional breeding site; it could not have been locally bred since no adults had been seen there since the end of June; it fed on its own (when not being buzzed by the local resident Kestrel; would a Kestrel have buzzed an adult Curlew?); this suggests that migrating birds of the year, en route to wintering areas on the coast, must recognise suitable feeding sites in familiar habitat.

Greater attention was paid this year to the habitat in which the birds were nesting, and in particular to the botany of the nesting fields. Contrary to what has been said before, Curlews in the Severn and Avon Vales do not necessarily nest in the most botanically-rich hay fields, where the mature vegetation may be too thick for the chicks; this is a subject which clearly deserves further attention in future. Their preferred nesting habitat seems to be in the lower lying areas of big open fields where the sward is relatively thin and the vegetation short (at least early in the season), apparently not nesting in fields with livestock, though the adult birds may feed or stand on guard there. Then, later in the season, adults and young use areas of short vegetation (sometimes cut strips in Lammas meadows), with taller uncut grass where chicks can take refuge nearby.



01. Curlew nesting habitat along the Avon, July 2017. Juliet Bailey.

The photograph 01 shows a 15-hectare field along the Avon where one young Curlew was successfully raised in summer 2017 (and in 2016). The foreground shows a swathe of annual plants such as the mayweed daisies *Tripleurospermum inodorum* and *Matricaria recutita* in the part of the field where water lies longest in spring. This leaves patches of bare mud at the start of the nesting season that can easily be seen on satellite imagery on the internet. The rest of the field is semi-improved grassland, with abundant tussock grass *Deschampsia cespitosa* and other perennial wild grasses, but few forbs (flowers).

Close cooperation with Natural England and the Environment Agency has continued. Natural England has already called a meeting to discuss the results of this year's survey, and to identify fields where the system of government grants could be used to encourage farmers to conserve Curlews. The Environment Agency has continued to support monitoring of disturbance (both from weir refurbishment activities and by dog walkers) at the Severn Ham, Tewkesbury.

Many local farmers have expressed great interest in the survey, have allowed the team access to private land, and in some cases, have delayed hay-making to allow the chicks to fledge. We are most grateful to all of them.