

New Forest Curlew study 2016

Introduction and aims

The Curlew is undergoing rapid national decline, and as a consequence has become one of the highest conservation priority bird species in the UK. The valley mires and wet heathlands of the New Forest still hold a regionally important Curlew population (at the southeast edge of the current national distribution), but there may be evidence that this population is also declining; both recreational disturbance and predation are thought to be factors in any decline. Based on published data, the current NF population is thought likely to be in the region of 100-130 pairs, possibly lower.

This study, undertaken from 2016 onwards, has three main aims:

- To search for, and assess numbers of, breeding Curlews in core areas of the New Forest, to enable comparison with previous years
- To monitor discovered nests as frequently as possible through the breeding season to assess productivity and, where possible, the cause of any breeding failure
- To ring adults ~~and pulli**~~ (with colour rings) to investigate site fidelity and movements during the incubation and inter-breeding periods. ***At the time of writing (16/5/2016) agreement to ring young birds (pulli) has not yet been reached.*

Survey methods

Surveyors will be allocated core areas, which are known 'hotspots' for breeding Curlews based on previous surveys and casual records provided to HOS (see Appendix A).

Surveyors should attempt to search as much of their core area as possible once a month in the period from March to July, i.e. a minimum of five visits. This covers the period from arrival on territory through to chick fledging. Further visits are encouraged (if time allows), to improve the chance of locating nests and assessing productivity. Visits should ideally be undertaken within three hours of dawn, but the evening period within two hours of dusk can also be productive. Surveys should be undertaken in clement weather conditions, avoiding periods of cold, wet and/or windy weather.

All Curlew records should have a six-figure grid reference, and time, habitat and behaviour noted, e.g. displaying/feeding/incubating bird. Curlew nests can be hard to locate, so surveyors should ideally look to track birds from a distance, preferably from an elevated but unobtrusive viewpoint with a telescope. Close approach to the nest is to be discouraged at all times ~~(except when ringing pulli)~~, as this can negatively impact the birds and may also attract predators such as corvids and foxes to the nest location. Other ground-nesting waders, including Lapwing, Snipe and Redshank, should be recorded (especially in the vicinity of Curlew territories) to assess their population and productivity compared to Curlew.

It would also be useful to gain data on pressures (e.g. disturbance and predation), to aid mitigation in the future such as targeted car park closures. To ensure pressure data are effort-corrected, and therefore of value to the relevant authorities (e.g. New Forest National Park Authority), observers are requested to undertake timed one-hour observations of pressures at intervals during the season. These timed counts should start once nesting has begun, with the nest site or core of the territory clearly identified. The timed one-hour counts should then see any recreational activity or predators (e.g. corvids, foxes) recorded that are within ~500 m of the nest site. This will result in an effort-based pressures database, collected from similar-size areas centred on Curlew nests at a range of sites across the New Forest. Even if each

observer can only commit to doing one or two of these counts per month, this will still yield a valuable dataset that can be added to in subsequent years.

Survey tips

Although male Curlews have much shorter bills than females, this can be hard to assess if both birds are not together. They can sometimes be told apart by behaviour, especially in the courtship phase: males will chase females, with a strange throttled cry, often with their wings held above their heads, with wingtips quivering. It seems that both males and females incubate (and possibly undertake display flights), so don't assume that sitting birds are females; if you can make observations of changeovers, this would be very interesting. At some stage after the chicks have hatched, the female will depart from the nesting area, leaving the male to guard the chicks until they fledge.

It is very important to record exactly what call is being used: is it just the normal "cour-lee" flight or contact call? Or are they using the bubbling display call? If they are using the bubbling display call, is it part of the elaborate display flight, with the "stalling" flight. If they are using alarm calls, is it just the general alarm, or is it the extreme barking call, which is a good sign that there are chicks in the near vicinity.

It is often very difficult to pin down exactly where Curlews are nesting, as the birds may embark on very long flights covering the whole of their territory, which may cover much of a valley system. They may do this throughout the breeding season, but tend to do so more often earlier in the season, when establishing territories. Actual courtship involves the two birds running about together (often in parallel to one another) somewhere near the nest site, usually in March. This may be a good time to pin down the nest site.

Adult Curlews often gather to roost in the evening around water areas. This behaviour is as yet poorly understood, so any further observations would be most welcome. Groups of birds may assemble in the evening, arriving only just before dusk and stay all night, leaving about an hour after first light. It would be interesting to know if these are breeding birds coming in from some distance away, and whether both members of the pair exhibit this behaviour.

Ringling activities

Ringling of Curlews will be undertaken where birds are identified on survey and resources are available for ringling. Mist nets and tape lures will be used to capture adults prior to breeding, and hand capture for larger pulli. Ringling activities will be led by three experienced, BTO-licensed 'A' ringlers, supported by trainees as appropriate. Approximately 50 colour ring combinations are available, with slightly shorter rings allocated for pulli. A BTO metal ring and combinations of four colour rings will be used.

Permissions and data

All survey and ringling activities will be undertaken with permission of the Forestry Commission and Natural England. Ringling activities will be conducted under a BTO license, and the survey will contribute to national survey work being conducted by BTO. Survey data will be provided to FC, NE, HOS and BTO.

Contacts

Survey co-ordinators:
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Appendix A: Core areas and surveyors

Key squares are those previously holding records of confirmed/possible breeding birds, but suitable habitat adjacent to these squares should also be searched where possible. Grid refs in bold represent 31 randomly selected squares covered during previous surveys.

1. Setley/Widden/Blackhamsley

Key squares = SU2801; SU2800; SZ2899; SZ2999

2. Hinchleslea/Holmhill

Key squares = SU2503; SU2502; SU2602; SU2601; SU2702; **SU2701**; **SU2700**

3. Holmsley/Clayhill/Redrise

Key squares = SU2001; SU2101; SU2201; **SU2301**; SU2303

4. Bisterne/Kingston/Strodgemoor

Key squares = SU1801; **SU1802**; SU1902; **SU1803**; **SU1903**

5. Backley/Bratley

Key squares = **SU2106**; **SU2207**; **SU2208**; **SU2308**

6. Bratley/Milkham/Broomy/Ocknell

Key squares = SU2108; SU2109; SU2110; SU2211; SU2311

7. Latchmoor/Sloden/Fritham

Key squares = SU1811; SU1812; **SU1912**; **SU1913**; SU2012; **SU2112**; **SU2212**; SU2213

8. Godshill/Cockley/Black Gutter

Key squares = SU1816; SU1916; SU1915; **SU2015**; SU2016

9. Howen/Pipers Wait

Key squares = SU2315; SU2416

10. Beaulieu Heath West

Key squares = **SZ3499**; **SZ3599**; SZ3699; SU3400; SU3500; SU3600; SU3401; SU3501; SU3601; SU3602

11. Beaulieu Heath East

Key squares = **SU4102**; **SU4003**; SU4103; **SU4004**; SU4104; **SU3905**; SU3906; **SU3805**; **SU3806**

12. Bishops Dyke/Yew Tree/Matley

Key squares = **SU3504**; SU3405; **SU3505**; **SU3605**; **SU3705**; SU3406; SU3506; **SU3606**; SU3706; SU3407; **SU3507**; **SU3607**

13. Longwater/White Moor

Key squares = SU3108; SU3208; **SU3209**