

BREEDING WADERS ON BREEDING BIRD SURVEY SQUARES INSTRUCTIONS



We are asking BBS volunteers who record breeding waders on their first or second visits to consider completing an additional third Breeding Wader (BW) visit to their relevant square/s. During this additional visit, volunteers will collect valuable information about the number and behaviour of the waders they encounter. To take part, you need to sign-up using the online form link to on the BW visit webpage: www.bto.org/bbs-waders

BACKGROUND

Please follow the **same methodology** as your core Early and Late visits during Breeding Wader (BW) visits, as closely as possible (e.g. transect routes, time of day), with **two key differences**:

1. **Only record waders** – please record any wader you encounter.
2. **Record whether adults observed are exhibiting behaviours consistent with having dependent young or are directly seen with dependent young.**

We are primarily asking for BW visits to sites to collect data on **Curlew, Golden Plover, Lapwing** and **Oystercatcher**, but please record all wader species you observe during BW visits. If your BBS site has breeding waders, but none of the four target species, please consider recording evidence of breeding success using BirdTrack (www.bto.org/birdtrack), although these data will not be used in this specific study.

Please familiarise yourself with the symbology and specific behaviours detailed in the recording waders section below and using the specific examples of display and alarm calls indicating the presence of chicks in the **Wader Survey Behaviour Guide**: www.bto.org/wader-survey-behaviour-guide – understanding these are crucial to BW visits. Please use the guidance in **when to visit** section below and your own knowledge of your site to guide your visit date.

WHEN TO VISIT

- Please complete your BW visit at the same time of day as your core Early and Late BBS visits (generally between 6am and 9am).
- The productivity indices we generate from these visits are dependent on the date you complete your BW visit. Wader young can be present on breeding grounds from late April to July, but you should aim to visit in the period during the peak period older (at least half adult sized) chicks will be on your site.
- The date of your BW visit depends upon the species you aim to provide productivity data for. We have provided means from a central point in the UK (in the north of England) in **Table 1**, below, but these dates will vary greatly by latitude, altitude, habitat and year.
- Ultimately, we ask you to visit when you feel is most appropriate. For Lapwing and other earlier breeding species, this may even be before your Late visit, however **it is essential that you do not let BW visits affect the timing of your core Early and Late visits** – the comparability of core BBS data year on year are crucial for the bird monitoring trends upon which we base our conservation decision making.

Estimates of mean nest start, nest hatch and brood fledge dates. These were derived using ringing and Nest Record Scheme data from upland sites in the north of England, but will vary a lot by habitat, altitude, region and year.

Table 1: Mean visit dates for collecting wader productivity data.

Species	Est. mean nest start	Est. mean hatch	Est. mean fledge	Mean suggested visit period*
Oystercatcher	16 April	12 May	16 June	Early June
Lapwing	21 April	18 May	16 June	Early June
Golden Plover	01 May	01 June	06 July	Late June
Curlew	14 May	04 June	01 July	Late June

*Please use these suggested dates with caution, they are extremely variable by year, latitude, altitude, habitat.

A webpage has been developed by David Jarrett to help advise when productivity visits are best undertaken: <https://wadessim.shinyapps.io/WaderSim/>. If you know certain parameters about your site, it can generate estimates of best timing of survey visits, although is not essential in order to take part in BW visits on BBS squares.

Box 1: Further additional visits

The core ask of participants in this survey is for a third visit to BBS squares where waders were found in earlier visits. However, if you are willing and able to commit more time, information from additional BW visits (fourth, fifth etc.) would be very useful and will be gratefully received, especially for sites where both Curlew and Lapwing are present, two different visits at different periods of peak chick-rearing will be extremely useful. If you carry out more than one extra visit, please try to leave a week or more between these.

WEATHER

Please do not survey in heavy rain, very poor visibility or strong wind. Please record weather using the codes shown below. If the conditions change during your visit select the single category that best represents the overall conditions. These data will be entered into the Time & Wind tab of the BW Data Spreadsheet.

Cloud cover		Rain		Wind		Visibility	
0 – 33%	- 1	None	- 1	Calm	- 1	Good	- 1
33 – 66%	- 2	Drizzle	- 2	Light	- 2	Moderate	- 2
66 – 100%	- 3	Showers	- 3	Breezy	- 3	Poor	- 3

DISTANCE BANDS

Please record waders in one of the following distance bands, according to where they are first noted. For waders in display flight, record in the relevant distance band, *i.e.* the mid-point of their display. Unless they are seen to land (or are displaying), waders flying through a square should be recording as F: flying.

1.	Within 25 metres either side of the transect line.
2.	Between 25 and 100 metres either side of the line.
3.	More than 100 metres either side of the line, including birds outside the 1-km square boundary.
F.	Birds in flight only, at any distance. Record by marking the species code with an arrow, e.g. GP →

RECORDING WADERS

Please use the BW Field Recording Form to complete your BW visit, available on the BBS [Download forms & instructions](#) webpage. This is very similar to standard BBS Field Recording Form you will be familiar with. Please follow the same methodology (i.e. transect route, time of day) as your core Early and Late visits during your BW visits. For each species, please note keep a note of how many birds you observe displaying, showing behaviours consistent with having dependent young and seen with at least one dependent young. It is easiest to do so using standard symbology for recording bird behaviour in **Box 2**. For each species on each visit, we will ask you to summarise:

1. Total adult count

2. Count of adults displaying

3. Count of adult birds exhibiting behaviour consistent with having dependent young

- Intense and persistent alarm-calling
- Reluctance to leave the area
- Flying towards or circling the observer
- Short flushing distances or distraction display

4. Count of adults with dependent young

- If the count of birds with dependent young is greater than zero, please note how many of the young you observed were half adult-sized or larger

5. Count of any fledged, independent young

For species-specific examples of important wader behaviours, please visit the Wader Survey Behaviour Guide at www.bto.org/wader-survey-behaviour-guide. It is important to note these behaviours do not mean waders definitely have dependent young, they can be recorded at other times of the year (especially in the period close to hatching), however, they are much more common and intense when parents are caring for chicks. **Please just focus on recording what you observe.**

Recording young is an important difference to the core BBS methodology. Please ensure that recording young and adult behaviour doesn't greatly increase the time required to carry out BW visits. Please familiarise yourself with the symbology in **Box 2**, the descriptions of behaviours consistent with having young above, and the species-specific examples on the Wader Survey Behaviour Guide available online and linked above.

Transect sectors consisting entirely or mostly of habitats that are unsuitable for waders (e.g. woodland) do not need to be included in BW visits. We will ask you to note which transect sections you completed on the online BBS BW Data Entry Form.

Box 2: Common wader species two-letter codes and key behaviour symbology for use on recording forms and maps.

Common wader codes: **L.** – Lapwing; **CU** – Curlew; **OC** – Oystercatcher; **RK** – Redshank; **CS** – Common Sandpiper; **DN** – Dunlin; **GP** – Golden Plover; **RP** – Ringed Plover; **SN** – Snipe

Behaviour symbols: CU (Curlew) used as examples but symbols apply to all species above.

CU	Curlew recorded not displaying or showing behaviour consistent with having dependent young	(CU)	Displaying/'singing' Curlew
<u>CU</u>	Curlew showing behaviour consistent with having dependent young (intense, persistent alarm-calling, reluctance to leave the area, flying towards/ circling the observer, short flushing distances or distraction display)	CU + 3juv(S)	Adult with three small, less than half adult-sized, chicks (juveniles)
		CU +3juv(L)	Adult with three half adult-sized, or larger, chicks (juveniles)

Please make ample notes as well as using these symbols, they will help you to provide the required summaries in the BBS Breeding Wader Data Entry Form.

RETURN OF DATA AND PRIVACY POLICY

Please use the online BBS Breeding Wader Visit Data Entry Form linked from the webpage www.bto.org/bbs-waders to submit your data. If you experience any technical issues, please contact waders@bto.org. Please scan your raw data (e.g. BBS Recording Forms, survey maps or notepad). You can do this using a smartphone with a PDF scanning app (e.g. Adobe™ Scan). Check your symbols/notes are clear in the photo/scan. Please upload the photo/scan of your raw data at the relevant field on the online BBS Breeding Wader Data Entry Form.

If you cannot or prefer not to use the online form but would still like to submit your BW data to this project, you may email your recording forms to waders@bto.org or post your completed field recording sheets and species summaries to BTO Scotland, Beta Centre (Unit 15), Stirling University Innovation Park, Stirling, FK9 4NF, Scotland.

If you are providing name, address and other personal details, BTO will store and use your personal details in line with our published Privacy Policy. You can specify your preferences surrounding the way we contact you at any time. For further details, see www.bto.org, or email info@bto.org, or phone 01842 750050.

Finally, thank you for taking part.