

Survey Instructions

Background

The purpose of this survey is to assess the importance of both existing and new wet lowland grassland and also other lowland breeding wader habitats (as provided by agri-environment schemes - AES) for declining breeding waders including Curlew, Lapwing, Redshank and Snipe, in England and Wales. The survey will re-visit sites covered during previous surveys in 1982, 2002 and 2009–10 to determine change in breeding wader numbers and associated species. In addition to the previous surveys, arable farmland sites containing 'Lapwing plots' will be included to examine the use of these features.

Survey design

All sites occupied in the 2002 and subsequent surveys (c. 1,200 sites) have been identified for priority coverage, to permit the best assessment of population change. In addition, new sites have been included where agri-environment scheme (AES) and other conservation management has been undertaken to provide breeding wader habitat in lowland farmland, including creation of wet meadow grassland, as well as Lapwing plots in arable farmland (c. 2,000 sites).

What to do

First, visit the survey homepage www.bto.org/bwmm to view the available survey sites in an area you wish to survey. Make sure you have logged-in, or register if you have not previously taken part in a BTO online survey, so that you can request the site(s) you will survey. The BTO Regional Organiser will allocate the site(s) to you and they will be displayed when you next login to the survey page. Download and print a detailed map of each site. The map will show all fields within the site boundary, each of which will be uniquely coded. If your site has a very large number of small fields, you may prefer a larger-scale field map, so there is an option to print separate maps for each part of the site as required.

Second, from the Resources webpage (www.bto.org/bwmm-resources), print off **the Key instructions and forms**, with sufficient copies of the recording forms (Habitat and Bird Recording) to cover all the fields within the site.

Habitat change and site suitability

It is likely that some sites will no longer provide suitable wader breeding habitat, which is most likely for wet grassland sites that haven't been revisited since the 2002 survey. Where an entire area is now unsuitable, for example due to housing development, planting of arable crops, etc., then please complete the **Site Change Form**, indicating the types of change that have occurred and the percentage of the site they affect.

Timing of visits

Please carry out three visits between mid-April and late June, with at least one week between visits. Within the following periods:

Visit (1=a): 14th April – 30th April.

Visit (2=b): 1st May – 21st May.

Visit (3=c): 22nd May – 24th June.

Visit(4=e): 1st May – 31st May (Optional evening visit for Snipe, if suspected on site: see guidance document at www.bto.org/bwmm-resources)

Timing of visits (continued)

It is important to make the first visit in April as this is the optimal time for surveying Lapwing. May is better for locating other waders, such as Snipe, Curlew and Redshank.

Please ensure that you cover the same fields on each visit. Survey visits should start at least 30 minutes after sunrise and aim to be finished before midday. Surveys should be undertaken in fine conditions wherever possible, with good visibility and wind below Force 4 (13–18mph).

We strongly recommended a recce visit prior to the first survey visit. We ask you, where required, to make contact with the landowner to ask for permission for access and to check if it is necessary to contact other land managers (e.g. gamekeepers) – for sites under agri-environment management (AES) away from nature reserves (with field codes starting 'L_..' = Lapwing plot or 'B_..' = habitat creation/management) please contact the **Survey Organisers** (Email: breedingwaderswm2@bto.org) who will attempt to help provide landowner contact details for sites. A **letter of introduction** can be downloaded from the Resources page (www.bto.org/bwwwm-resources) and can be shown to landowners to explain the purpose of the survey and why access to the fields is required. However, where it has not been possible to contact the landowner, check to see whether the fields can be viewed from public rights of way, or adequately surveyed from a vantage point using a telescope.

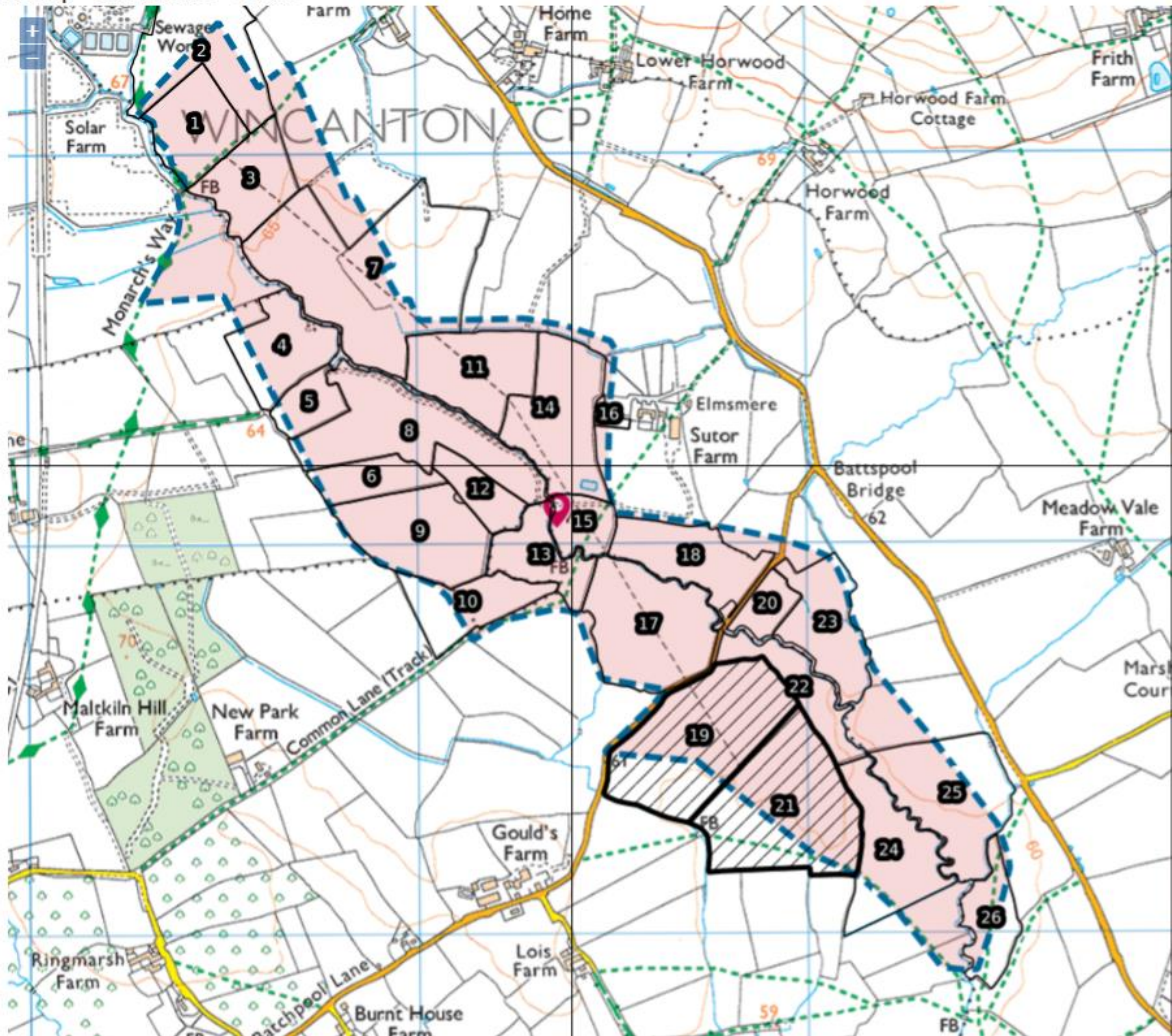
Area to cover

The site map (example below) shows the entire site and displays all the fields to be covered, which are numbered, with fields associated with Lapwing plots shown with a bold black boundary and hatching. Please aim to cover all of these on each visit, access and visibility permitting.

For large sites, you can zoom into the map and print sections separately. The map provided will show the entire site allocated to you and the field(s) to cover within it. If you are unable to cover the entire site then please indicate the fields not covered on the **Habitat Recording Form**.

All sites will have a unique site code, and those previously surveyed sites will have site names (as in the map below) based on the location. However, Lapwing plots will have site names beginning "**Lapwing Plots L_...**" and breeding wader habitat, provided by agri-environment schemes (AES), will have site names beginning "**AES Fields B_....**".

Site map - CALE VALLEY - CALNE



Sites that are **Lapwing plots** (example below), will mainly be single fields but others will be within larger survey site boundaries; these will require consultation with the farmer, as the location of the plots and the fields containing them (bold outline with hatching) are likely to move between years. If the actual field containing the Lapwing plot falls outside the field marked on the map (e.g. Lapwing plot indicated by the blue square on the map below), please continue to use the same field number (i.e. Field 1) to record the count data and on the Habitat Form, record the central grid reference of the new field containing the Lapwing Plot.

NOTE Stone-curlew may also be using some Lapwing plots; they are a Schedule I species and must not be disturbed during the breeding season. Most of the Lapwing plots likely to hold Stone-curlew will be covered by licenced surveyors. If you are unsure where Stone-curlew might be present, please ask the farmer. If you do happened to unexpectedly discover Stone-curlew on a plot and you do not hold a Schedule I licence, please retreat immediately but still record and report any birds observed.



Please note that to thoroughly survey for waders in fields with tussocky or long vegetation you may need to walk within about 100m of every point in the field. But there is no need to enter the field if there is good visibility over it and you can confirm absence or count the birds present with confidence from the boundary. Note that prolonged disturbance of breeding birds must be avoided, but a short survey visit is unlikely to pose any significant problem. However, if you find yourself in an area with a number of active nests, please retreat carefully, retracing your footsteps, to minimize the potential risk of trampling nests and chicks. It is important to ensure that the survey has minimal impact and this will help to maintain good public relations with landowners.

Field boundary changes

If during the recce or first survey visit you find that field boundaries have changed such that a boundary has been removed please still record the two areas as separate fields. However, if there have been more substantial changes, so that the boundaries no longer resemble those on the map, please mark the boundary changes on a printed copy of the map and label the 'new' field by re-allocating the original field numbers, or adding new numbers if needed. Then send the amended maps to the Survey Organiser at BTO HQ as soon as possible, so the field boundaries can be changed online before you make more survey visits and before you come to enter survey data.

Field coverage and habitat recording

Please see page 2 of the **Habitat Recording Form**, which provides a summary and definitions of the habitat details to be recorded.

Field coverage and habitat recording (continued)

On the first visit, please record visit details, habitat and land-use details on the **Habitat Recording Form** for all the labelled fields (unless they could not be viewed even from a distance). There is no need to repeat habitat recording on subsequent visits, unless there have been obvious changes (such as, mowing, flooding, etc.).

It is very important that we know which fields you have been able to survey, so if you cannot access, or survey, all parts of a field, please use your judgement to record an estimate of the percentage of the field you have covered on the form. For all fields within the site boundary, please record coverage types as: **Complete** or **Partial** (record the percentage of field surveyed) and for **Not covered**, indicate whether this was because of Access denied or Not viewed or Other Habitat - Unsuitable.

The field features are also critical for assessing their suitability for breeding waders, so we need you to record all of these for each field. Columns shaded dark grey require a percentage value from 0–100%, to the nearest 10%, whereas the white columns just require a tick if they contain that item/feature, on the **Habitat Recording Form**.

Field boundaries, particularly tall features (>1.5m) can influence occupation. Please indicate the percentage (0% or nearest 10%) of the field boundary that is made up of Tall boundary features (>1.5m tall, including Woodland, treelines, buildings, walls etc.)

Enter ticks in the appropriate columns to indicate features of the grassland and other habitats. If the field contains unsuitable wader breeding habitat (e.g. woodland, scrub, urban, etc.), please record it as 'Other Habitat - Unsuitable'.

Bird recording

Record all wader species encountered (see list).

Record the locations and numbers of all waders on the map using standard BTO species codes provided, as you check each field. Please indicate the number BEFORE the relevant species code. Use the notation 'a', 'b', 'c' or 'e' FOLLOWING the species code to indicate the visit number e.g. **1La** means one Lapwing on visit 'a', **3CUB** means 3 Curlew on visit 'b'. If there is insufficient space to record all your registrations, use arrows to link fields to the relevant registrations on a clear section of the map. During the survey visit, please also transfer the counts to the **Bird Recording Form**.

Additional evening Snipe visit

If you suspect your site supports breeding Snipe or may contain suitable habitat (see the Resources page www.bto.org/bwwm-resources, for the details of the recent breeding distribution, an illustrated guide to Snipe habitat suitability and Snipe display/call sound clips) then an additional **evening** visit during May is requested to specifically record this species. The twilight period around dusk is an optimal time to observe their distinctive 'drumming' display flight or to hear 'chipping' calls during the month of May. Snipe survey visits should start no earlier than 90 minutes before dusk (up until sunset).

Key Species & Codes

L	Lapwing
AV	Avocet
OC	Oystercatcher
RK	Redshank
SN	Snipe
CU	Curlew
CS	Common Sandpiper
BW	Black-tailed Godwit
RU	Ruff
RP	Ringed Plover
LP	Little Ringed Plover
TN	Stone-curlew

Recording other species

Please take the opportunity to record all species of **ducks** (except Mallard) during your visits (ducks and other species should not be mapped). The only Passerines to record are **Yellow Wagtail** and **Meadow Pipit**; estimate the number of breeding territories/pairs present on each visit.

Please count and record the following for each field covered and enter on the **Bird Recording Form**:

- **Total adults** - all adults seen or heard (displaying/singing) *excluding mobile birds already counted in other fields*.
- **Total young** - all chicks or juveniles seen (waders only).
- **Young present (suspected, not seen)** = indicated by adult behaviour and activity (e.g. threat display, agitated calling, etc.) (waders only).
- **Estimated pairs** - best field estimate of the number of pairs, *excluding mobile birds already counted in other fields* and **feeding flocks**, based on the number of: **i)** adults apparently holding territory (1 or 2 adults= 1 pair), **ii)** displaying/singing males (male=1 pair) or **iii)** active nests (nest = 1 pair).

Counts of adults and young should also include birds that are not nesting in the field, such as feeding flocks, or in flight above the field (excluding high flying commuting individuals), including song/display flight. So, for example, a single Curlew seen displaying over several fields should only be recorded in the first field encountered.

When making the estimate of pairs, **DO NOT INCLUDE** birds that are known, or strongly suspected, to have moved between fields and have been counted already. *Estimated pairs* should add up to the total number of pairs present within the portion of the site that you surveyed.

Entering your Data

After each visit, login to the survey page: www.bto.org/bwvm; under the **View/Enter Visit Data** tab you will be presented with a list of the Site(s) allocated to you. Then select the Visit number which will take you to the data entry section. After entering the visit date, time and other details, you will be able to select each field separately and enter the habitat and bird data, or if the site is no longer suitable, you will be able to state the reasons why. If you do not have internet access, please contact the Survey Organiser to discuss the best option for entering your data.

For more information, please visit the Resources page (www.bto.org/bwvm-resources), which contains, recording forms and other useful information, that can be viewed and downloaded, or contact the **Survey Organisers**:

David Norfolk & Greg Conway

Tel.: 01842 750050 Email: breedingwaderswm2@bto.org

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 emails info@bto.org, or phone 01842 750050.