

# Carbon Landscape Winter Farmland Birds

## Instructions for Surveyors



### Survey aims

To monitor the abundance and distribution of farmland bird species across the Carbon Landscape and to identify the importance of different agricultural habitats, or crop types, used in winter. The survey began in 2017-18 and after the initial three winters the aspiration is for volunteers to continue to collect data over the long term. With your help we aim to survey the same squares in each winter.

### When to visit

Visit your square three times per winter between November and February. The first visit, in November to record the habitats, number the fields (if required) and map any patches within fields, followed by two visits to record the birds. The first should be carried out in November / December, and the second in January / February, leaving a minimum of two weeks between the bird surveys.

### Landowners' permission

To accurately count birds on farmland in winter you need to walk around fields - the survey cannot always be done adequately by viewing fields from public rights of way. This means that you will need to speak to farmers on, or before, your first visit - most will be happy for you to walk around the edges of fields, many are keen to know what birds live on their farms and can be very helpful, especially when identifying crops. The Landowners' permission letter should be helpful when meeting farmers.

### Habitat survey

#### Field mapping

You will be provided with a map of your 1km square. If this falls on Barton Moss, Cadishead Moss, Chat Moss, Great Woolden Moss, Irlam Moss, or Little Woolden Moss the individual fields will already be numbered. On your first visit check and amend field boundaries as appropriate where these are different to the map. Include new boundaries and temporary fencing - divide and number such fields as separate patches even if the habitat is identical on either side since the two halves may change through the winter (e.g. different grazing). If there is more than one agricultural habitat within a field, divide it into patches and mark these on your map using the existing field number followed by a prefix letter e.g. 9a, 9b, 9c etc.

If you have been allocated a 1km square outside of the above-mentioned mosslands, apply your own sequential numbering system to the fields, starting with 1 and where necessary divide the land within individual fields into patches of agricultural habitats using a suffix letter e.g. 1A, 1B etc.

When dividing your square into fields (or patches of similar habitat within a field) please only include land containing the following habitat types found on farms and small-holdings:

**Arable fields** any stages of growth of crops, stubbles, bare tillage, flower / bulb fields but not tree nurseries

**Set-aside / fallow** typically grassy/weedy fields

**Permanent and temporary pasture** include downland and grazings for sheep, cattle and horses

**Farmyards** including the yard buildings, farm house and garden (but no other gardens)

**Field boundaries** include hedges, ditches etc.

**Orchards**

**Livestock fields** including open-air pig and poultry farms

**Woodland** including small farm woods - only survey the outer edge (2m wide) from the adjacent patch and treat as a boundary, i.e. like a hedge

When defining patches, uncropped strips (e.g. grass strips, wildflower strips) around fields that are narrower than 20m wide should be included as integral parts of the main field rather than patches in their own right. Narrow strips of game cover crops should be defined as separate patches.

#### Boundary surveying

For each field or patch please list, in decreasing order of importance, the boundary types present using the 8 types described on the habitat recording form (LH, TH, TL, B, D, F, V and X). For example, if a boundary consists mostly of tall hedges but with a short section of fence write "TH, F" in the boundary habitat column. If there are equal amounts of two types record with an equals sign (e.g. TH=V for a field with half its boundary as tall hedge and half vegetation only).

### Habitat codes

On your first visit select the field habitat codes that best describe the majority of the habitat for each field, or patch within the field, and enter these in the field habitat columns of the habitat form. See the habitat form for details about how to use the codes and for brief explanations of some of the codes see the habitat codes sheet for pointers to identifying crops. If you are still unsure do not guess - please ask the farmer, or assign a more general code.

### Important

Please take your completed habitat survey form and a blank copy with you when carrying out the bird surveys. After recording the birds in each field, check for any changes to the agricultural habitats / crop stage and enter these onto a new habitat form. Use a separate form for each visit. If the habitat changes within part of a patch on a later visit use the code for the majority of the field. If for some reason you cannot visit certain farmland patches, enter NS (i.e. not surveyed) in place of a patch habitat code. This will tell us whether the lack of birds is because the fields were not surveyed rather than being poor for birds.

## Bird survey

### Target species

The focus of this survey is 30 Priority Species of farmland birds (see the bird survey form and survey handbook for the list) many of which are declining farmland species of conservation concern (e.g. Tree Sparrow). In addition please record any sightings of Brown Hare as this is also a Priority species which we are keen to monitor and update the data collected during the North West Brown Hare Project which finished in 2012.

### Weather

Avoid surveying on days of heavy rain, strong winds and poor visibility (although lying snow is OK). Not only will it be difficult (and unpleasant) for you, the birds will be sheltering during poor weather and consequently be less detectable.

### Times and coverage

Avoid the first and last hour of daylight when birds can be moving to and from roosts and may be double-counted. On the early and late bird survey visits, walk around as many fields as possible within 2 to 4 hours, counting birds and recording their locations and record the remaining patches as uncovered by marking these NS (i.e. not surveyed) on your map. We do not expect you to survey the whole square. Fields which fall mainly outside your square can be left unsurveyed, as these will be covered by the person recording the adjacent square. On the subsequent visits cover at least the same fields, and if you have time, continue on into previously unvisited parts of the square.

### Recording birds within a field / patch

For each field / patch walk around the perimeter and allocate all birds seen to one of the following zones (see diagram, right of a simplified field and these zones): -

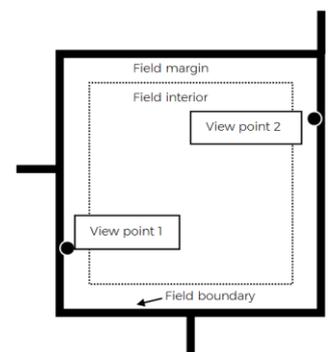
**Field boundary** features such as hedges or stone walls, plus any 'verge' vegetation between that and the crop or uncropped margin

**Field margin** the outer 20m of the crop

**Field interior** everything beyond 20m into the crop

When surveying fields, birds should be recorded in the zone in which they are first detected - if a bird is flushed from the margin into the hedge, it should be recorded in the margin. However, if a flock is continually moving between the margin and the hedge, record them in the margin category since this is likely to be where they are feeding. If a field is so narrow that the whole of it is taken up by the margin zone (i.e. less than 40m wide) record birds in either the boundary or the margin since there is no interior. If birds move between fields try to avoid counting them twice (sometimes a matter of judgement). Please also take care to scan field vegetation carefully for skulking birds, flocks etc. Do this at least once on each side of the field (e.g. at similar positions diagonally opposite to those indicated by the dots on the diagram).

Ideally you should walk around each field separately. Inevitably this means walking down both sides of some boundaries. Only where the boundary is open (e.g. fence line, low wall or ditch) can you survey both sides of the boundary from one field. If you see birds in an adjacent field record these sightings in the usual way, taking care to avoid counting the same birds twice.



Every time you encounter a bird or flock, enter the field or patch number (from your map) on the bird recording form followed by the species code, then enter the number of that species seen in each zone of the field (boundary, margin, interior).

### Recording boundary type & count

Allocate birds and flocks to the following different boundary types

Code	Description	Code	Description
B	Buildings	TH	Tall hedge (> 2m high) or wood edge
D	Ditch or other watercourse	TL	Tree line
F	Fence line or wall	V	No structure, just vegetation between crops
LH	Low hedge (< 2m high)	X	Other boundary type (describe separately)

Record these counts in the 'Boundary type & count' column of the Bird Recording Form using the codes above as suffixes after the number of birds in each boundary type (e.g. 10TH, 5LH means 10 birds in tall hedge and 5 in low hedge).

### Recording activity

The activity of the birds should be recorded as follows

Activity code	Description
AS	Assembling, sheltering or roosting in boundary trees / hedges
FT	Feeding in trees / hedges e.g. Redwing feeding on Hawthorn berries
FG	Feeding on the ground or on crops / plants e.g. Starlings probing the ground, Chaffinches feeding on seed or Canada Geese feeding on crops / grass
HU	Hunting e.g. Kestrel hovering or Barn Owl quartering
???	Flying over (but not using) the survey area (draw an arrow over the species code e.g. <del>CH</del> )
	On the ground but not feeding e.g. Pheasant (leave the activity column blank)

### Excluding birds in flight

Birds in flight should not be counted unless they are clearly associated with a patch or boundary. Birds that are about to land or just flushed should be included - as should raptors and owls hunting over patches, but not, for example, a flock of Fieldfares flying over. Any birds not conclusively identified (e.g. flushed partridges or distant finches) should be ignored.

### Orchards, farmyards and gardens

Record everything as being in the boundary or interior (no margin)

### Woodland

Do not survey except where it abuts a field and then only record birds in the outer 2m of the wood, i.e. as if it was a hedge and allocate birds to the boundary of the patch you are in using the suffix TH for 'tall hedge or wood edge'.

### Further exclusions

**Do not** count birds within woodland, fish farms, watercress beds, plant / shrub nurseries, allotments, rare-breeds / childrens' farms, animal sanctuaries, plantations, common land, grazed heathland, grazed airfields or grazed cemeteries.

### End of survey

Remember to record the end time on the first page of the Bird Recording Form.

### ***Submission of survey data***

Please submit your habitat and bird survey data as soon as possible after each visit using the Carbon Landscape Citizen Science data portal [https://gmwildlife.org.uk/carbon\\_landscape/](https://gmwildlife.org.uk/carbon_landscape/).

Check first whether your 1-km square has been previously surveyed via the recording compartments map [https://gmwildlife.org.uk/mapapp/?project=carbon\\_landscape\\_subsites&survey\\_date=dd-mm-yyy&grid\\_square=](https://gmwildlife.org.uk/mapapp/?project=carbon_landscape_subsites&survey_date=dd-mm-yyy&grid_square=) Adding your 1-km square to the end of the URL e.g. SJ7095 will zoom the map into the square.

If the field boundaries and numbers are not shown you will need to send us a copy of your field map before you can input your data. We will add your field boundaries and numbers to the database and inform you once they are available.

You should find the system intuitive and easy to use. However, guidance for creating the online forms and inputting your data will be provided upon request.

If you do not have access to a computer please post your forms to the Greater Manchester Ecology Unit, marked for the attention of **Citizen Science Project**.

Greater Manchester Ecology Unit  
Dukinfield Town Hall  
King Street  
Dukinfield  
SK16 4LA

**Important** – if posting please retain a copy as a backup and for your own records

### ***Winter 2019-20 and beyond***

Please start by surveying the same fields (patches) as before (number them the same too, so that surveys are comparable between years. If a field has been split up since last year into different crops, use a letter suffix e.g. Field 1 becomes 1A and 1B. If fields have been combined e.g. 1A and 1B is now one field use the next letter in the alphabet e.g. 1C or alternatively a new number.

If you run out of forms either download extra copies from [https://www.gmwildlife.org.uk/carbon\\_landscape/](https://www.gmwildlife.org.uk/carbon_landscape/) or contact The Greater Manchester Ecology Unit via [carbonlandscape@gmwildlife.org.uk](mailto:carbonlandscape@gmwildlife.org.uk) or 0161 342 4409.

**END OF INFORMATION**