How to Record Breeding Birds in Greater Manchester

Why record breeding birds?

Before getting into the detail of how to record breeding birds we need to understand the reasons why it is important to do so. The first Atlas of Breeding Birds in Britain and Ireland covered the period 1968-72 and was followed by The New Atlas of Breeding Birds 1988-91, with the most recent publication Bird Atlas 2007-11 covering both breeding and wintering from three species. The maps the atlases can be viewed https://app.bto.org/mapstore/StoreServlet So, as you can see, there is a 15-20-year gap between each of the national breeding atlases during which time major changes have occurred in the abundance, distribution, and status of Greater Manchester's birds. The speed at which some species are declining makes it even more vital for local and national conservation organisations to have access to up-to-date information. The Birds of Conservation Concern 5 published in late 2021 brought this home to us, as in the space of just six years since the previous review BoCC 4 (2015), Greenfinch moved straight from the Green list to the Red list, and Chaffinch from Green to Amber (only avoiding the Red list by a feather). Territory mapping of Willow Tits on Chat Moss (and its constituent mosslands) indicates that numbers have crashed from 21 pairs in 2019 to just four pairs in 2021.

Sites of Biological Importance (SBIs) play a key role in maintaining biodiversity in Greater Manchester and are initially selected by the Greater Manchester Ecology Unit and then reviewed approximately every five years. Appendix 2 shows the breeding birds criteria used in the selection process which relies on breeding evidence being included with records. Each review takes into consideration records submitted over the previous five years.

Rare Breeding Birds Panel (RBBP) the Greater Manchester Bird Recording Group submits data annually to the RBBP covering species such as Little Ringed Plover, Long-eared Owl, Pochard, Shoveler and Willow Tit. For each site where a species occurs during the breeding season GMBRG assesses the numbers of Possible, Probable and Confirmed breeding pairs. So, breeding evidence is essential for us to calculate the Greater Manchester totals for each species. For example, in 2019 we reported a total of 115 pairs of Willow Tits which was the second highest county total in the UK for the species, exceeded only by Yorkshire with 138 pairs. RBBP's annual reports are published in British Birds magazine and can be downloaded from https://rbbp.org.uk/

Long-term recording of a site has great value because it allows us to monitor trends in the numbers of individual species and compare these with national and regional trends. It will also highlight the loss of certain species and the arrival of new ones. So, the records you submit will be used for the following purposes:

- 1. To compile a complete list of all the species breeding on the site
- 2. To identify the breeding status of individual species i.e. whether a Possible, Probable or Confirmed breeder (see below under Breeding Evidence Codes for an explanation of these categories).
- 3. To estimate the number of pairs, or territories of individual species

There are of course other uses for your data which might for example allow the number of fledged young per pair to be calculated which is known as productivity per pair.

How to record breeding birds

The long-established methodology for recording breeding birds, used in national and county atlases, relies on breeding evidence codes which cover the entire breeding cycle from a single bird observed in suitable nesting habitat (H) through to a nest with young which have been seen or heard (NY). The full list is shown in appendix 1 and is broken down into three categories: Possible breeder, Probable breeder and Confirmed breeder. The codes should only be applied to birds seen in potentially suitable nesting habitat and to species which are considered likely to breed in the area. So, for example, a Ring Ouzel seen in Wigan, or an Osprey in Rochdale should be recorded as migrants (M).

Note the difference between **confirmed breeder** which means that a bird laid eggs and **successful breeder** which means that young fledged from the nest. From a pure recording perspective, the birds don't have to fledge young to be classified as a confirmed breeder and as the codes below explain, you don't need to find a nest to confirm breeding.

Breeding evidence codes

At first glance the codes appear to be self-explanatory, and this is mainly the case. However, there are a few potential pitfalls, and the following notes are intended to help you avoid these and ensure your records reflect, as accurately as possible, the breeding status of the birds on your site.

Non-breeder

F – Flying overhead (not using the site)

Records with this code will not be used for reviewing Sites of Biological Importance (SBIs) nor for assessing the impacts of a planning application. It would be applied to a flock of Pinkfooted Geese which are moving through GM airspace, perhaps commuting from Lancashire to Norfolk, and to any birds seen on a visible migration watch which are overflying the site. However, it should not be applied to birds flying around a site which are just moving from one area to another, and as a rule, do not use this code for raptors and Ravens which are invariably seen in flight and often looking for prey.

Possible breeder

- H Observed in suitable nesting Habitat. Use this for single adult birds present in suitable nesting habitat between March and June, and not engaged in any of the activities where the codes below would apply. Avoid using the code between July and February when birds may have dispersed from breeding areas, be on migration, or wintering.
- **S S**inging male. Use this when one bird of a species is singing on its own, on a single date but see **T** Permanent **T**erritory under Probable breeder. It can be used all year round as some birds do sing in winter and it is interesting to build up a picture of how early in the year

individual species start to sing. The general trend is for resident birds to start singing earlier as they are nesting earlier, probably in response to climate change and some spring migrants are also arriving earlier. The difference between songs and call is not always obvious so here are a few tips for tricky species, courtesy of the BTO's Breeding Bird Survey (BBS) instructions.

"For the purpose of recording ..., a **song** is a sound normally made only by males, while a **call** is made by males and females. In general, sounds made by passerines (songbirds) are easily distinguished as songs or calls, while sounds made by non-passerines (including wildfowl, birds of prey and seabirds) are calls. However, there are many exceptions ..." The species below are the ones you are most likely to encounter.

Record as Singing male – the "crow" of a Pheasant, cooing or purring of pigeons or doves, the "cuckoo" of a male Cuckoo, the "hoot" of a Tawny Owl. The sounds made by displaying grouse and breeding waders during display flights, including Curlew, Lapwing, Dunlin, Redshank and Snipe, are classified as song but would be recorded as **D** – Courtship and **D**isplay.

Calls (**do not record as song**) – include in this category sounds made by corvids (crow family), Swifts screaming, Green Woodpecker "yaffles" and male ducks.

Probable breeder

- **P P**air in suitable nesting habitat. Do not use this code during the winter months, especially with wildfowl, many of which pair up before migrating back to their breeding areas e.g. Goldeneye, Goosander and Teal. It may seem obvious, but when recording a pair, or pairs, the abundance (count) should be input as two, or multiples of two. Pair relates to the breeding status and is not a recording unit.
- T Permanent Territory (defended over **at least one week**). Using this code allows you to upgrade birds in song, from Possible breeder to Probable breeder. So, if you are recording at a site on a regular basis most of the singing birds will be on territory and you will soon become familiar with their locations. An example might be a Song Thrush which you record as **S Singing** male on the first date you hear it, and then return a week later to find it still singing in the same area (territory sizes vary between species e.g. Cetti's Warblers and Chiffchaffs have large territories whereas Willow Tits and Willow Warblers occupy small territories). It is useful to input singing into comments to help clarify how you have determined that it is on territory. This code should also be applied to birds of the same species which are singing within earshot of each other on a single date, in which case it is useful to include a comment "singing against each other". You will probably be familiar with the first bird singing and then falling silent whilst the second bird answers and the process being repeated.
- ${f D}$ Courtship and ${f D}$ isplay. As mentioned under ${f S}$ ${f S}$ inging male, many waders display to advertise their territory to rival males and to attract a mate, so this code would apply. Grebes and wildfowl are two other groups which are often seen displaying but passerines such as Dunnocks will engage in wing flicking and screeching Swifts flying low over rooftops also qualify. Mating pairs of any species should also be recorded using this code.
- ${f N}$ Visiting probable ${f N}$ est. Examples of where you would use this code would be a Blue Tit seen entering a nest box, a House Martin or Swift flying up under the eaves of a house, or a passerine disappearing into vegetation. Apply this code if a bird is seen on one or two occasions behaving as if visiting a nest but exercise caution and judgement. If unsure it is

best not to use it.

A – **A**gitated behaviour. Alarm calling birds (heard or seen) is when this code would most often be applied. However, Lapwings dive-bombing corvids to protect their eggs, or chicks, would be another good example, but you also need to consider whether adults are reacting to a predator e.g. a Sparrowhawk, or a roosting Tawny Owl, just because they pose a general threat. Agitated behaviour by waders, circling and calling, is normally a good indication that they have chicks nearby and Lapwings have a particular call, which once learnt is very useful, and may allow you to locate the young. If your presence has triggered the agitated behaviour, always retire to a safe distance which allows the adults to settle and then observe carefully. Note that **DD** – **D**istraction-**D**isplay has its own code, see below under Confirmed Breeder.

B – Nest Building or excavating nest-hole. Use this code not only if you locate a nest under construction but also if birds are seen carrying nesting material which could range from sticks to vegetation (moss, dried grass) and feathers in the case of Long-tailed Tits and Swallows. The code should also be applied to species such as woodpeckers excavating nest holes, Nuthatches adding mud to a nest hole and House Martins and Swallows collecting mud from the ground.

Confirmed breeder

DD – Distraction-**D**isplay or injury feigning. Waders are most likely to be seen exhibiting this behaviour, especially Little Ringed Plover, extending one wing and dragging it close to the ground to feign injury and draw a predator away from chicks, or a nest containing eggs. However, ground nesting passerines such as Meadow Pipits will occasionally carry out distraction display.

UN – **U**sed **N**est or eggshells from this season. Use with caution, especially where nests are concerned. Eggs which have been taken from the nest by a predator may be reasonably intact to permit identification.

FL – Recently **Fl**edged young or downy young. This code can be applied to recently fledged passerines, but equally to recently hatched young ducklings and wader chicks through to fully grown juveniles accompanied by an adult. However, it should only be used where there is clear evidence of dependency on adults. For example, young heard hunger calling (e.g. Long-eared Owl, Sparrowhawk and Tawny Owl, young seen begging for food, or being fed by an adult. An unaccompanied juvenile should be recorded in sex/stage/status as Juvenile/Immature. Adult gulls with dependent juveniles may travel some distance from their breeding grounds and the code should not be used if they have not bred at the site, just indicate this in Comments.

ON – Adults entering or leaving nest-site in circumstances indicating **O**ccupied **N**est. Use this code for any bird seen sitting on a nest where the contents are not visible, for example Lapwings, or Little Ringed Plovers on a nest scrape, Moorhens or Great Crested Grebes on a nest. It should also be applied to hole nesting species such as tits, and woodpeckers; and to House Martins and Swifts seen flying up under the eaves of a building where the nest cannot be seen but the behaviour of the birds indicates they are visiting a nest. However, this code should not be used if young are heard calling (**NY**), or the adults are carrying food/a faecal sac (**FF**). See below for information on these two codes.

FF – Adult carrying Faecal sac or Food for young. Adult birds when feeding themselves will swallow their food instantly, however, when collecting food for young it will often be visible in their bills, the classic examples being a Blackbird holding worms, or Starlings probing the ground for leather jackets and flying off with them towards the buildings where they are nesting. Chiffchaffs and Willow Warblers will call continuously whilst collecting insects near the nest, so familiarising yourself with their anxiety calls is a good tip for confirming breeding of these species. Care should be taken with raptors which will often carry prey to a perch before feeding themselves but watching where they are taking it may help identify nest sites. After taking food to a nest, adults will often be seen carrying away white faecal sacs. It is useful to specify in comments whether food (indicate the type if possible) is being collected, or the bird is carrying a faecal sac. Most wader chicks feed for themselves almost as soon as they hatch, so this code won't be applicable; the exception being Oystercatchers who may be seen carrying worms to their chicks, especially if nesting on a roof top.

NE – **N**est containing **Eggs.** The contents of nests may sometimes be visible if an incubating bird has taken a break, or if accidentally flushed. If this is the case, then count the number of eggs (record the information in Comments) and move away from the area as soon as possible. Unattended nests are vulnerable to predators. Do not intentionally flush a bird from its nest but record it as **ON** (**Occupied Nest**).

NY – Nest with Young seen or heard. This is the highest level of breeding evidence and should be used not only when young are visible in a nest but also when heard hunger calling. The sound of Great Spotted Woodpecker chicks, especially when close to fledging, is a good way of detecting a nest even when the adults are away searching for food. If a bird is seen carrying food to a nest and the young then seen or heard, NY should be used. House Martin chicks may be silent when the adults are away but start hunger calling when they return to the nest with food, so a good way of confirming breeding even when the nests may be hidden from view under the eaves of a building.

The welfare of breeding birds should always be paramount and allowing them to breed successfully is far more important than collecting evidence. So always observe from a safe distance and avoid drawing attention to nests or disclosing their locations, other than for recording purposes. Schedule 1 Breeding Birds are afforded special protection under the Wildlife and Countryside Act 1981 and must not be disturbed. A Schedule 1 licence (issued by The British Trust for Ornithology) is required to visit the nest of these species or to photograph them at the nest. The full list can be viewed on the RSPB's website https://www.rspb.org.uk/birds-and-wildlife/advice/wildlife-and-the-law/wildlife-and-countryside-act/schedules/

Recording with Swift

Swift was developed by the Greater Manchester Local Record Centre and is the preferred method of record submission for both GMLRC and the Greater Manchester Bird Recording Group (GMBRG). The Getting Started with Swift guide can be downloaded from https://gmlrc.org/wildlife_recording/

Multiple codes – during a site visit you will almost certainly encounter birds of the same species which are engaged in more than one type of breeding activity. If this is the case, then input separate records for each breeding evidence code. For example, if you record two

Blackbirds singing against each other, a pair just present in suitable nesting habitat and a fifth bird carrying nesting material then you would input three separate records.

2 Blackbirds **T** – Permanent **T**erritory

2 Blackbirds **P** – **P**air in suitable nesting habitat

1 Blackbird **B** - Nest **B**uilding

This level of detail is essential to allow you, and GMEU/GMBRG, to analyse your records and estimate the numbers of territories/pairs of each species breeding at a site and their breeding status.

However, it is also essential to avoid duplication by ensuring that you do not record the same birds more than once on a single date, which could result in an overestimate of the numbers. The breeding evidence codes are hierarchical, so categories further down the list infer a higher level of breeding evidence. So, if you saw a pair (P) of Willow Tits carrying food (FF) and then entering a nest hole from which young were heard calling (NY), you would input this as Abundance 2, Sex/Stage/Status NY as this is the highest breeding evidence observed for this pair. It is recommended to try and upgrade the breeding status of species and individual pairs as the breeding season progresses. For example, you may see a pair of Long-tailed Tits nest building (B), then observe one of the pair going into/coming out of the nest during incubation (ON) and finally see the adults taking food into the nest or emerging with a faecal sac (FF). It is useful to know the outcome of the nest, so if the young fledge successfully do input a record with FL.

Sex/Stage/Status

Only one value can be selected from the Swift drop down list. During the breeding season the breeding evidence code should be prioritised over other information on the sex and age of the birds which can be added in Comments. However, the code used will nearly always indicate that the birds are adults, and in the case of **S** and **P** their sex.

Sensitive species - at the bottom of the recording form, there is an option to tick records of sensitive species to restrict access. In addition to Schedule 1 breeding birds, we would recommend marking as sensitive nest sites of the following:

All diurnal raptors and owls.

Species monitored by the Rare Breeding Birds Panel https://rbbp.org.uk/list-of-species-currently-reported-on-by-rbbp/ which includes Lesser Spotted Woodpecker and Willow Tit. Raven and Twite - the former may be subject to persecution and the latter are now on the verge of extinction as a breeding bird in the South Pennines.

Any Questions?

Should you have any questions on recording breeding birds please contact:

Steve Atkins – Assistant County Recorder, Greater Manchester Bird Recording Group Email – svatkins38@gmail.com

Appendices (separate pdfs)

Appendix 1 – List of breeding evidence codes

Appendix 2 - Sites of Biological Importance Selection Guidelines – Br Breeding Birds