

RECORDING LOCATIONS WITHIN BIRDTRACK

Initially BirdTrack adopted a flexible but not very rigorous approach to recording locations. Sites have generally been recorded as a 1 km square grid reference but users have been permitted to use such sites for records from a wider area (nominally up to a 10 km square). This approach was adopted because most national analyses are unlikely to require a greater resolution than 10 km squares. However, the need to feed site-specific records back to County Recorders and the desirability of providing on-line lists for large numbers of sites means that we need more specific information about how records are assigned to specific sites. For Atlas purposes we also need to know whether a site corresponds to a particular grid square. To support both of these activities we will need to facilitate more rigorous location recording within BirdTrack. This paper outlines these problems and suggests some possible solutions.

Records for specific sites

We have identified the need to get observers to record more meaningful site names. The site registration form now checks for names with words such as home or garden and issues an appropriate warning. We have also provided drop-down menus of the names of the most frequently visited sites within club recording areas, as well as for RSPB reserves and Irish birding sites (the latter two of which are still only at the 10 km square level). We currently have a limit of about 50 sites per county but this could be increased because we found that it was necessary to use a pop up window rather than a simple drop-down for selecting one of these sites.

We now need to develop a system for matching sites that are already registered to the named sites. Two approaches are possible. One would simply involve replacing an existing set of site details with one from the list, given that they are effectively the same. However, we may also wish to allow a user to indicate that their site is part of a standard site or even that it overlaps with a standard site. Otherwise we may lose the capability to use some information that could potentially be available for site-specific analyses.

We may also want to have some information that indicates whether the records from a users site are all within a specified site boundary. At some time in the future we should aim to have digital maps of site boundaries that can be viewed on-line. This could probably be done relatively easily for reserves or statutory sites, as most of the information already exists in digital form. However, a lot of work would be needed to produce such information for all major bird watching sites. Despite these problems most sites probably have generally accepted boundaries even if these are not rigorously defined.

Matching of user sites to the boundaries of recognised sites might be coded as follows:

- 0 not recorded
- 1 the users site boundary is inside the recognised site boundary
- 2 the users site boundary is the same as the recognized site boundary (the default)
- 3 the users site boundary extends outside the recognised site boundary by up to 1 km (we could adopt some other cut off) in any direction

- 4 the users site boundary extends outside the recognised site boundary by more than 1 km.

The main problem is how to add this type of information without making the application unduly complex. It may be best to restrict this approach to main sites as opposed to locations used for casual records only.

Records for specific grid squares

The forthcoming national atlas and the need to support local atlases gives rise to an increased need to assign records to particular grid squares. We need to know whether all of the records for a particular site are from a specific 1 km or 10 km square. It would also be desirable to include the ability to record by tetrads as these are used in many atlas projects. Usually it would be sufficient to assign a site to a particular tetrad rather than to a 1 km square.

We therefore need to add an accuracy code that will specify whether a site can be taken to be *entirely within* a specified square. We would need to allow this code to be entered on site registration and to have a facility for adding it to existing sites. We might also want to have a pop-up that would prompt for accuracy to be added when a user entered further data for a site without one. Once an accuracy was assigned to a site it could not normally be changed. An alternative to assigning the accuracy codes to sites would be to assign them to visit or observation data. However, this would be likely to make the system unnecessarily complex for most users.

Accuracy codes might be:

- 0 not recorded
- 1 accurate to the 1 km square given
- 2 accurate to the tetrad within which the grid-reference is located
- 3 accurate to the 10 km square within which the grid-reference is located (the default)
- 4 cannot be assigned to a particular 10 km square

We need to decide whether staff and/or bird recorders should assign such accuracy codes to the sites that are available from the drop down menus, or whether we wish to allow users any flexibility in this respect.

An additional possibility would be to allow data to be entered directly against a square reference rather than against a site. In other words we would have a special sort of site that corresponded exactly to a grid square. In this case the site name could just be the square reference. The main problem would be how to validate the selection of this sort of site.

Six figure grid references

If a record is assigned to a six-figure grid reference then we can determine whether it is within any site boundary or square at a later date. The problem is that while this is suitable for some very specific information such as nest locations or the positions where rare birds are sighted, it is generally too specific to be of use for more general recording. If we provided such a facility it is unlikely that it would ever be used for more than a small minority of records. However, if we did wish to introduce such a facility it would be appropriate to do it

at the same time as making other changes in site recording. The working group is asked to advise on whether there is a case for this.

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