SRMS Online Guidance Manual

Last revised:
07 March 2024
Welcome

Thank you for your interest in using the Scottish Raptor Monitoring Scheme’s Online Recording System (SRMS Online). If you are new to the Scheme, please get in touch with the Scottish Raptor Monitoring Coordinator (SRMC) and complete and return a SRMS Registration Form, which can be accessed here. We would also encourage you to familiarise yourself with the Scheme’s Data Sharing & Use Policy and Privacy Statement in order for you to understand how the SRMS may use and share the data you provide and how we protect your personal information.

This detailed document is designed to help new users get to grips with SRMS Online. Please help us to keep these documents current by letting us know of any errors, omissions or any aspects which could be improved. You can email any feedback to the Scottish Raptor Monitoring Coordinator on srmc@bto.org.

If you take part in the SRMS’s Raptor Patch survey please take note of the messages in BLUE boxes throughout this guidance document.

If you are a Scottish Raptor Study Group (SRSG) member please take note of the messages in PURPLE boxes throughout this guidance document.

SRMS Online: https://app.bto.org/demography/srms/public/login.jsp
3.2.2.5  Show in Table ........................................................................................................ 49
3.2.2.6  Clone ..................................................................................................................... 49
3.2.2.7  Delete .................................................................................................................... 49
3.2.2.8  Define nest as a Point ......................................................................................... 50
3.2.3  Creating and managing Observation Sites ................................................................. 51
  3.2.3.1  Creating an Observation Site ............................................................................. 51
  3.2.3.2  Managing Observation Sites ............................................................................. 57
    3.2.3.2.1  View/ Edit Details ...................................................................................... 58
    3.2.3.2.2  Edit Positioning ......................................................................................... 59
    3.2.3.2.3  Change Location Type .............................................................................. 59
    3.2.3.2.4  Zoom to Location ....................................................................................... 59
    3.2.3.2.5  Show in Table ............................................................................................ 59
    3.2.3.2.6  Clone ........................................................................................................... 59
    3.2.3.2.7  Delete .......................................................................................................... 60
3.2.4  Creating and managing Study Areas ........................................................................... 60
  3.2.4.1  Creating a Study Area ...................................................................................... 60
  3.2.4.2  Editing/Adding monitoring details to Study Areas ........................................... 62
    3.2.4.2.1  Add Effort Recording ................................................................................. 63
    3.2.4.2.2  View/Edit Details ...................................................................................... 63
    3.2.4.2.3  Recording Species Monitored for a Study Area .......................................... 64
    3.2.4.2.4  ‘Edit Positioning’ ....................................................................................... 65
    3.2.4.2.5  Zoom to Location ....................................................................................... 65
    3.2.4.2.6  Show in Table ............................................................................................ 66
    3.2.4.2.7  Clone ........................................................................................................... 66
    3.2.4.2.8  Delete .......................................................................................................... 66
3.3  Table View .................................................................................................................... 67
  3.3.1  Tools accessible from the toolbar ............................................................................. 67
    3.3.1.1  Integration with Map View ............................................................................. 67
    3.3.1.2  Refreshing the locations ................................................................................. 68
    3.3.1.3  Viewing locations in two different ways ......................................................... 68
    3.3.1.4  Downloading list of locations to work with offline ....................................... 69
  3.3.2  Sorting and Filtering ............................................................................................... 70
  3.3.3  Creating and managing Nest Sites ......................................................................... 70
    3.3.3.1  Creating a Nest Site ....................................................................................... 70
    3.3.3.2  Managing Nest Sites ...................................................................................... 76
      3.3.3.2.1  View/Edit Details ..................................................................................... 77
      3.3.3.2.2  Change Location Type ............................................................................ 77
      3.3.3.2.3  Show on Map .......................................................................................... 78
      3.3.3.2.4  Delete ...................................................................................................... 78
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>Reports</td>
<td>112</td>
</tr>
<tr>
<td>6.2.1</td>
<td>SRMS Reporting Spreadsheet</td>
<td>112</td>
</tr>
<tr>
<td>6.2.2</td>
<td>Historic data for users</td>
<td>113</td>
</tr>
<tr>
<td>6.2.3</td>
<td>Historic data for SRMS sub-region</td>
<td>114</td>
</tr>
<tr>
<td>7</td>
<td>Annexe</td>
<td>116</td>
</tr>
<tr>
<td>7.1</td>
<td>SRMS Status Codes</td>
<td>116</td>
</tr>
</tbody>
</table>
1 Getting Started

SRMS Online is hosted by the British Trust for Ornithology’s (BTO) secure online servers at University of East Anglia. This means that you will need a BTO Surveys (MyBTO) username and password to log in to SRMS Online. Before you can use SRMS Online for the first time, you will need to do the following:

1. Please get in touch with the Scottish Raptor Monitoring Coordinator (SRMC) to indicate that you would like to start using SRMS Online. If you are already taking part in a BTO survey online, e.g. BirdTrack, you’ll already have your MyBTO log-in details, so make sure you provide these in your email. If you are new SRMS contributor, please also complete and return the SRMS Registration Form.

2. If you are new to the BTO survey online recording, you can register for a MyBTO account at https://www.bto.org/my-bto. We encourage you to register with the same email address that you want to use for communications with the SRMS and to choose a username which is easily recognisable, ideally in the format we already use in our databases (forename_surname), which is Joe_Bloggs, making cross referencing simpler.

3. Please wait until you hear back from the SRMC that your account is ready. This may take a little while, especially if you have already been contributing data towards the Scheme, as we aim to preload your locations into SRMS Online for your convenience, unless you have otherwise indicated in your SRMS Registration Form that you do not wish us to do this.

4. When you log in to SRMS Online for the first time, make sure you review any preloaded locations. It is possible that you will notice discrepancies in the location coding or between the plotted positions of Nest Sites and where you know them to actually be on the ground now you have the benefit of visualising them against the backdrop of a map/aerial photograph. You should therefore take the opportunity to adjust the position and other details of these Nest Sites prior to starting to record data against them (see 3.2.1.2).

5. Let us know if there may be any Group Accounts (see 1.3.2) you may require access to.
1.1 Logging in

You can access SRMS Online either via https://app.bto.org/demography/srms/public/login.jsp or clicking directly on the green ‘Login to SRMS Online’ button on the ‘Home’ page of the Scheme’s website, https://raptormonitoring.org/.

From the ‘Login to SRMS Online’ page, logging in is a simple two-step process:

1. Enter your MyBTO username (A) and password (B) and click the green ‘Login’ button (C);
2. Once logged in, check you are ‘Operating as’ the correct individual/group (see 2.1).
1.2 Finding your way around the ‘Home’ page

Having logged on to SRMS Online, you arrive on the SRMS Data ‘Home’ page. You can return here at any time from within the application by clicking on ‘Home’ at the left-hand end of the navigation bar (A).

In the bottom left-hand corner of the screen, you should see confirmation of who you are logged in as (B).

Towards the right-hand end of the navigation bar, you should see confirmation of the account you are accessing at any one time (i.e. who you are ‘Operating as’) (C). You may be operating as an individual or have been granted access to be able to access one or more ‘Operating group’ accounts to allow you to work effectively in collaboration with other raptor workers. You can switch between these different accounts using the blue ‘Change’ button (see 1.3.1).

In the middle of the ‘Home’ page, you will see quick access links (D) to let you get to core aspects of SRMS Online quickly (see over leaf). The navigation bar at the top also gives access to these same areas of SRMS Online plus a few additional, but less frequently used areas. The structure of the drop-down menus which can be accessed from the navigation bar is depicted below:

- **Home**
- **Map View**
- **Table View**
- **Explore Visit Data**
- **Effort Recording**
  - Study Area Effort Recording
  - Nest Sites Not Visited
- **My Contributors**
  - Manage Permissions
  - Observer List
- **Reports**
- **Help**
  - SRMS Online Guidance Manual
  - Tutorials
  - Latest Developments
  - FAQs
  - Contact Details
Towards the bottom right-hand side of the screen, you can access SRMS partner websites through clicking on the individual logos (E).
Getting Started - Finding your way around the ‘Home’ page

Understanding when to use the Quick Access Links on the SRMS Online ‘Home’ page.

If your preferred way of working is through using maps, then you can use this button to access Map View. In Map View you can manage details of locations (Study Areas, Home Ranges, Nest Sites & Observation Sites) such as location names and codes, spatial information, habitat and (in the case of Nest Sites) detailed information about the type and positioning of nests. You should check these details annually to ensure they are up to date. Via Map View you can also input visit data from your monitoring visits into a Visit Log.

If your preferred way of working is through using tables, then you can use this button to access Table View. In Table View you can manage details of locations (Study Areas, Home Ranges, Nest Sites & Observation Sites) such as location names and codes, spatial information, habitat and (in the case of Nest Sites) detailed information about the type and positioning of nests. You should check these details annually to ensure they are up to date. Via Table View you can also input visit data from your monitoring visits into a Visit Log.

In SRMS Online, data from your raptor monitoring visits are captured in Visit Logs – one per Home Range per year. You can use this button to retrieve Visit Logs based on filtering on details such as species, year and location.

It is really valuable for the SRMS to be able to understand your survey effort and how this changes from one year to the next. You should use this button to give the SRMS daily (preferred) or annual information on monitoring effort within any Study Areas that you monitor.

You can grant other individuals access to your account where you have ‘Principal’ or ‘Deputy’ status. If you are ‘operating as’ a group account, you will only see this link if you are a Principal or a Deputy.
1.3 Linking with other raptor workers

One of the most important aspects to getting started with SRMS Online is to understand how you may share records and link with other raptor workers within SRMS Online. We would highly encourage every individual and different type of raptor monitoring partnership to consider how they would like to interact with SRMS Online in relation to the people they work with prior to starting to use SRMS Online. This will help to ensure a consistent approach that minimises the risk of recording data on multiple accounts.

There are two ways that you can share records and link to others in SRMS Online, both of which can be found under the ‘My Contributors’ menu tab. You can either:

(i) allow/be given different levels of access to other Individual/Group Accounts in SRMS Online through ‘Manage Permissions’ (see 1.3.1) and then ‘Operate as’ them in order to manage records, or

(ii) use the ‘Observer List’ (see 1.3.4). This will allow you to create a list of observers whose initials can be recorded against any visit records under your individual account.

SRSG members

In order to best support existing ways of working within SRSG branches SRSG members are expected to input their data to SRSG-specific Operating Group accounts. Typically, a separate account has been created for each species within your branch area, and it is these group accounts that you should be interacting with to submit your data. You may wish to contact your branch Chair or relevant Species Coordinators to find out which Operating Group accounts may be relevant to you and to organise access.
### 1.3.1 Managing Permissions

You should always log in to SRMS Online using your MyBTO username and password. Thereafter, you may have a choice of SRMS Online accounts (i.e. **Operating Groups**), representing either an individual or a group, that you are able to access and ‘Operate as’.

Before beginning to input or view data, you should ensure that you are ‘Operating as’ the correct account by looking at the navigation bar (A). If you find you are not in the correct account, you can switch this by clicking the blue ‘Change’ (B) button. This will bring up a list of Operating Groups that you have been granted permission to ‘operate as’ – your individual account will be listed at the top, with any other accounts below listed in alphabetical order. Group accounts will only appear in your list once a Principal or a Deputy has added you and assigned you a group role (see **1.3.3** for more detail). The table clearly indicates the extent of your permissions (see **1.3.3** for definitions) within each Operating Group and the one you are currently operating as is shaded green in the list, with an quick link of a head next to it. You can choose/change the account you want to operate as by clicking the blue ‘Operate’ button (C) at the end of the row.

You can manage the list of Operating Groups and their associated permission levels via the ‘Manage Permissions’ quick link on the ‘Home’ page (see **1.2**), or via the ‘My Contributors’ (D) pathway on the navigation bar. This will bring you to the view below, where you can click the ‘+Add new user’ (E) button, in order to add accounts/groups and specify the level of access you want to give them to your account. Note that you will need to know an individual’s MyBTO username to do so. Once you have done this, your account will appear as an option they can ‘Operate as’. Consequently, if you require access to someone else’s account, they will need to add you onto their list of ‘Operating Groups’.

---

**SRSG members**
You should find that as part of your SRMS Online account set-up process you will automatically have been granted access to the SRSG Operating Group accounts relevant to you based on any previous data submissions to the SRMS. These should appear in your list of Operating Groups when you login.

If you do not appear to have been granted access to a group account for a particular species which you routinely monitor, contact your Species Coordinator in the first instance and they will be able to add you as a member of the relevant account. You will need to let them know your MyBTO username so that they can add you to the group. This will also apply if you are a relatively new SRSG member and have therefore not submitted data to the SRMS previously.

### 1.3.2 Group Accounts

If you want to create one or more Group Accounts (e.g. you might have an account with people you collaborate with) please get in touch with the SRMC and detail who should be the Principal and Deputy of the Group Account. By operating in a Group Account, you add your records in the group, and not under your individual account. Therefore, it is important to understand that while a Group Account in many ways may be the easiest way to coordinate monitoring regionally, this comes with certain assumptions. For example, while all locations on SRMS are set as confidential by default (i.e. not visible to other members of the group), when operating in a group, the Principal, the Deputies and the location creator (i.e. you) will always have access to each location and any data recorded against it. You can belong to more than one Group Account (e.g. if you are a member of a SRSG branch and monitor multiple species you will have been granted access to multiple SRSG group accounts).

When you are operating under a Group Account, the ‘Manage Permissions’ form can be found under the ‘My Contributors’ menu drop-down or through the quick link on the ‘Home’ page. Note, however, that only the Principal and Deputies of any Group Account have access to this form. Here, the Principal and Deputies can add or remove members from the group and assign roles to its members. To add a new group member, click the ‘Add new user’ (F) button. A dialogue will pop up in which you will need to enter the individuals MyBTO username (what they log in to SRMS Online with) and click the ‘Add’ (G) button to add them.

When first added, all members (other than the Principal and Deputies) are defaulted to the ‘Associate’ role. In order to alter the permission levels, under ‘Manage Permissions’, the Principal and Deputy can tick the appropriate checkbox...
on the member’s row in the table to assign the desired role within the group. Group roles are hierarchical i.e. ticking a checkbox will also auto-tick all checkboxes to the left. To remove a group member, click the ‘Bin’ (H) button.

**SRSG members**

- As a regular SRSG member you will have been given the role of ‘Record Controller’ on one or more group accounts created for your SRSG branch. As a Record Controller you can input records, edit both records you’ve inputted and those that have been shared with you, selectively make locations (e.g. Nest Sites, Observation Sites) you have created (and their associated visit data) visible to other recorders in the same account, and likewise view others’ locations and records that have been made visible to you.

- The relevant Species Coordinator within the branch has been given the role of ‘Deputy’ on the group accounts that you can access. A Deputy can readily view/edit the records and add/remove Group members and also control individual members’ access to each location.

- By default, a location and its associated records are only visible to an account owner (Typically your SRSG branch Chair), account deputies (Typically the relevant Species Coordinator) and the person who created the location e.g. a single recorder.

- A location can easily be made visible to multiple selected Group members, which will be essential when people are collaborating on monitoring at the same locations as different members will be able to contribute records to the same Visit Log for a given Home Range.

---

**Important note...**

Removing someone from a Group Account will deny them further access to operate as a member of that group. When a member leaves a group, this does not automatically remove any of the data that the member has contributed into the group. Therefore, if you ever leave a group, and would not like its members to retain access to the data you have contributed, please contact the SRMC, who can organise a transfer of this data to your personal account for you.

### 1.3.3 Permission levels

User roles within an operating group and the permissions that each brings with it are summarised below. Roles are hierarchical and therefore each listed role has all permissions of those below it in the list.

<table>
<thead>
<tr>
<th>Role</th>
<th>Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>• CAN ADD/REMOVE MEMBERS TO/FROM OPERATING GROUP AND SET/ALTER ALL ROLES&lt;br&gt;• NO RESTRICTIONS ON DATA THAT CAN BE VIEWED OR EDITED&lt;br&gt;  ○ Typically, in operating groups formed principally for nest monitoring, the Principal is nominated for their ability to motivate the team and be the first point of contact with the SRMC.</td>
</tr>
<tr>
<td>Deputy</td>
<td>• CAN ADD/REMOVE MEMBERS TO OPERATING GROUP AND SET/ALTER ALL ROLES BELOW PRINCIPAL&lt;br&gt;• NO RESTRICTIONS ON DATA THAT CAN BE VIEWED OR EDITED&lt;br&gt;  ○ The Principal of a large group may wish to deputise one or more members to lighten the burden of managing their group, controlling membership and member roles.&lt;br&gt;  ○ A group, partnership or independent recorder may wish to allow a trusted fellow raptor worker to join the team temporarily as a Deputy in order to provide peer-to-peer help with sorting out problems.</td>
</tr>
</tbody>
</table>
### Record Controller
- **VIEWING PRIVILEGES ARE SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF LOCATIONS**
- **HAS THE AUTHORITY TO REVIEW DATA ENTERED BY OTHER TEAM MEMBERS, EDIT THEM, OR QUERY THEM FOR RECONSIDERATION BY THE RECORDER**
  - Typically, this role would be appropriate to someone acting as a ‘trainer’ (e.g. someone who is shadowed by someone new to raptor monitoring), and would be an individual operating within a group or partnership and would be expected to be the person validating data entered by their own ‘trainees’.
  - A Record Controller can also validate data entered by other than their own trainees. For example, a trainer may ask another trainer to ‘keep an eye’ on their trainees’ data entry whilst away on vacation. Different solutions will of course be appropriate for different groups.

### Recorder
- **CAN ENTER DATA AND EDIT THOSE DATA, VIEWING PRIVILEGES SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF LOCATIONS**
  - Typically, this role would be granted to all data providers and helpers who may be assisting with or be learning data entry.

### Associate
- **CAN VIEW DATA**
- **VIEWING PRIVILEGES SUBJECT TO THOSE LOCATIONS ACCESS HAS BEEN GRANTED TO**
  - This is the default role, granted by the application when adding new members to an operating group.
  - Typically, this role would be granted to everyone you trust with access to see operating Group Account data.
1.3.4 Observer List and Initials

You should always acknowledge everyone who undertakes monitoring with you. There is a possibility that you may be working with someone who is not an SRMS Online user, or who you may not be linked with within SRMS Online, who should be given credit for having conducted monitoring with/for you. This can be achieved by having an up-to-date Observer List, which allows you to add their initials (see 2.2.5) against monitoring records that you input to your own account. Everyone will have access to their own ‘Observer List’, regardless of whether you are a member of a group or working completely independently. While each account has their unique list, everyone ‘operating as’ this account will have access to the same list. When it comes to Group Accounts, this should be managed by the Principal or the Deputy only.

Your ‘Observer List’ can be accessed via the ‘My Contributors’ menu drop-down (A). SRMS has uploaded a list of everyone who has ever contributed data towards the Scheme into a database, from which you can add people onto your list of observers. This has been done to easily identify individuals and to allow the ability to cross-check between datasets pre and post SRMS Online. Each data provider has been given a unique ‘SRMS Observer Code’ which is in the format of FIRSTNAME_LASTNAME. You can add a new observer to your own Observer List by filling in the SRMS Observer Code field (needs to be an exact match) in the SRMS Observer Code field and clicking the blue ‘+Add new observer’ (B) button. You should also fill in the initials and the full name of the observer, to appear in your data entry form, but these cannot be used to search for users. If SRMS Online cannot find the SRMS Observer Code you have inputted, please contact the SRMC. Also note that:

- Within an Operating Group, initials must be unique (can include numbers, letters or a mixture of both).
- The number of characters used for initials is limited to four.
- A given user can have different initials under different operating groups.
- Only initials available in the Observer List can be used against a visit in the Visit Log.

SRSG members

You should find that as part of your SRMS Online account set-up process the SRMS has pre-populated the Observer List on SRSG Operating Group accounts with the names of all those contributors that currently have access to the account. It is the Observer List that determines the initials that are made available in the Initials drop-down in the Visit Logs.

The initials that have been pre-loaded are typically four letters long, taking the first two letters from each of your
first name and surname. You may wish to check that you are happy with the Initials that have been entered in the Observer List for you in each group account you have access to and edit them as you wish. You can activate a row in the Observer List by clicking on the ‘Edit’ button towards the right-hand end of the row. As part of account maintenance Species Coordinators may wish to deactivate any listed observers that are no longer active provided that HAVE NOT yet been recorded against visits in SRMS Online by updating the entry in the ‘Active’ column.

In addition to named SRMS data contributors we have also created a SRMS Observer identity called “THIRD PARTY” (C) which will automatically feature on all Observation Lists. You might wish to use this if you wish to incorporate casual records into your Visit Logs where the individual concerned (for example a landowner or member of the public) are happy for their data to be used and shared by the SRMS but may not necessarily wish to formally register as a SRMS data contributor themselves. We would ask that you only include records that you are confident that the SRMS will be able to use and share in line with our SRMS Data Sharing & Use Policy.

**Important note...**
You should ensure that your Observer List is up to date and that each time someone contributes towards a record, their initials are recorded against it. **So long as the Observer List is maintained, and the initials field has been used during data entry, SRMS will be able to retrieve a complete history of any data providers’ involvement with SRMS. You should not delete initials from your list if they have been recorded against any visits within SRMS Online, as this removes the association of this individual with the unique record IDs their initials have been attached to. Furthermore, this allows you to create another identity with the same initials, which again would then link the earlier records to a wrong individual.**
2 Entering Visit Data

SRMS Online allows you to capture, store and manage records from your monitoring visits effectively through capturing records (both observations at and away from known Nest Sites) in Visit Logs. All monitoring data relating to the same Home Range should get captured in a single Visit Log for that breeding season – this means that visit data relating to alternate Nest Sites within a Home Range or for successive breeding attempts at one or more Nest Sites within a given Home Range are recorded in the same Visit Log.

While recording your monitoring on visit-by-visit basis is different to what you may have been used to if you have used the SRMS spreadsheet in the past, this allows us to account for information from each monitoring visit you undertake, and thus to better track the point in time events take place throughout the breeding season. This will greatly increase the value of the data submitted to the Scheme, particularly when comparing breeding outcomes between areas and years.

Visit Logs get initiated automatically at the beginning of the year for all existing Home Ranges and as new locations are created directly on SRMS Online.
2.1 Map View & Table View

SRMS Online provides both a **map-based** and **table-based** means of adding data from your monitoring visits.

If you prefer to work with maps, you can Add Visit Data through **Map View**. Map View can be accessed from the ‘Map View’ menu (A) on the navigation panel (available from anywhere in the application) or the ‘Map View’ (B) quick link (available on the ‘Home’ page).

If you prefer to work with tables, you can Add Visit Data through **Table View**. Table View can be accessed from the ‘Table View’ menu (C) on the navigation panel (available from anywhere in the application) or the ‘Table View’ (D) quick link (available on the ‘Home’ page).
Entering Visit Data - Map View & Table View

If the location(s) that you are wishing to add visit data for are displayed on your Map View you can select the location that you wish to add data for and then click on the ‘Add Visit Data’ button (E) in the floating panel which pops up.

If the location(s) that you are wishing to add visit data for are displayed on your Table View you can select the location that you wish to add data for and then click on the ‘Add Visit Data’ button (F) in the options column at the left-hand end of the table.
2.2 Completing a Visit Log

Having clicked on the ‘Add Visit Data’ button you will arrive at the Visit Log form. The Visit Log form itself is comprised of a number of parts.

There is the header panel (G), itself consisting of three tabs:
- Main
- Defaults
- Pair Code

More detail about the information required in each of these tabs is described in the sections below.

Below the header panel is the area (H) in which you record details of your observations during each visit to the Home Range – one row per visit to a particular location (Nest Site or Observation Site) within the chosen Home Range.

Tooltips (white ‘?’ in blue circles) are available throughout the Visit Log form to guide you towards recording the most appropriate information.

Having entered values in the various fields (more detail on each tab below) in these four tabs, you can save the Visit Log by clicking on the green ‘Save Visit Log’ (I) button.

2.2.1 Main Tab

The ‘Main’ tab comprises two fields which are described below.
• **Species:**
  Type or select from drop-down list of relevant species. If you choose the Home Range first, this field will be auto populated for your convenience.

• **Home Range:**
  The drop-down selector will offer you a list of Home Ranges that you have available to you. If you do not remember the Home Range code by heart, you can select ‘Find by Nest Site’ (J) which allows you to populate the field based on Nest Site details (location codes or names) you recognise. A ‘View on Map’ button (K) allows you to view the Home Range that has been selected on a map. The background defaults to the Ordnance Survey Map but can be readily changed to the Bing Aerial Map or Open Street Map depending on your preference.

### 2.2.2 Defaults Tab

Contains fields related to visit defaults. These are all optional fields for you to complete should you wish to do so.

![Defaults Tab](image)

• **Initials:**
  If you wish, you can enter the initials of the observer(s) who will be monitoring the Home Range in question – these initials will then be used as the default for records associated with the Home Range. You will be able to change these for any visit made by another observer. If you conduct monitoring collaboratively you should make sure the records are attributed to all individuals. How you do it depends on whether your collaborators have an SRMS Online profile or not (see 1.3 for more detail on this).

• **Observation Method:**
  If you wish, select a default observation method for visits to this Home Range – this method will be used as the default for any observations associated with the Home Range, for example if observations are always done from a distance where a nest site may be inaccessible. You will be able to change these for any visit where a different observation method is used.

### 2.2.3 Pair Code Tab

A means of linking and tracking Visit Logs relating to a particular bird or pair of birds that are individually identifiable, and the ability to create new bird pair codes.

![Pair Code Tab](image)

• **Pair code:** existing pair can be chosen using the list behind the drop-down selector or clicking on the ‘New pair code’ button will bring up the following:
18

**Pair Code**: your own unique and preferably memorable pair ID code.

**Species**: choose from list available from the drop-down selector.

**Bird A**: distinguishing marks of Bird A e.g. wing-tag or other colour marks.

**Bird B**: distinguishing marks of Bird B e.g. wing-tag or other colour marks.

**Notes**: optional free text.

### 2.2.4 Visit Details

Underneath the header panel, you can add the details of each of your visits to the Home Range being monitored. You can either add several visits to your log all at once or you can return to add visits at any future date. Each visit is recorded on a row of its own. Please ensure that you complete all available fields as fully as possible. More detail about the information required for each field is described under the relevant field header below.

Once you have inputted the relevant information you need to click on the green ‘Save Visit Log’ (L) button.

Saving may be blocked where an entry is missing or not in the appropriate format (e.g. a date entered in the incorrect format) and where this occurs a warning message will appear above the visit rows.

The system can also detect when potential mistakes have been made in data entry (e.g. where unexpected status codes being used based on the number of days from first hatching), so that these can be checked and, if necessary, corrected prior to saving.
Entering Visit Data - Completing a Visit Log

Date:

Either type the date in directly using a four-digit year format i.e. ‘ddmmyyyy’ or ‘dd/mm/yyyy’, or click on the calendar symbol next to the date field to bring up a date selector.

![Calendar Image]

Time:

Enter 24-hr time of visit as hhmm or hh:mm. Ensure you use leading zeros for hours and minutes between 0 and 9. This can be used to track when most monitoring takes place and how this may affect monitoring results.

Initials:

Please record each individual who contributed towards this record. If you cannot find people in your drop-down list, you can add people to your list of observers to appear here under ‘My Contributors’/’Observer List’ (see 1.3.4). By using this field consistently, SRMS will be able to retrieve a complete history of any data provider’s involvement with the Scheme.

In addition to named SRMS data contributors we have also created a SRMS Observer identity called ‘THIRD PARTY’ which will automatically feature on all Observation Lists. You might wish to call on this if you wish to incorporate casual records into your Visit Logs where the individual concerned (for example a landowner or member of the public) might be happy for their data to be used and shared by the SRMS but may not necessarily wish to formally register as a SRMS data contributor themselves. We would ask that you only include records that you are confident that the SRMS will be able to use and share in line with our SRMS Data Sharing & Use Policy.

Where an ‘Initials’ default has not been set in the ‘Defaults’ tab the entry in the ‘Initials’ field will default to the person entering the data. This can be overridden by the user if they are inputting data on behalf of others. This is important as it ensures that every record submitted to the SRMS is clearly attributable to at least one individual.

Observation method:

Select the observation method that you used.

- **Nest visit**: you visited the nest or its immediate vicinity in person to attempt to ascertain nest contents (i.e. whether eggs and/or young were present).

- **Observation from distance**: you made an observation from a vantage point or on a walk through known or potentially suitable breeding habitat.

- **Walkover survey**:

- **National survey visit**: you made a visit as part of a national survey (e.g. SCARABBS survey).

- **Camera**: you made remote observations via camera/video.

- **Casual**: you make a casual observation while passing through your study area, while not strictly on a monitoring visit. You may also use this observation method to incorporate information from third parties...
Entering Visit Data - Completing a Visit Log

(landowners, members of the public etc.) without these individuals needing to be formally registered as SRMS Data Contributors. In this scenario, remember to select ‘Third party’ from the Initials drop-down (see 4.1.5.7).

Remember that you can set ‘Observation Method’, in addition to ‘Initials’ under the ‘Defaults’ tab.

Location:

Here you should record the exact location within the Home Range, that your observations were made. You can either select an existing Nest Site or Observation Site or create a new one. Each of your visits within a Visit Log may have a different location within the same Home Range.

The entry in the ‘Locations’ field will default to the ‘location’ that may have been selected to ‘Add Visit Data’ to via Map View or Table View. You can override this if your intention had been to enter data for an alternative Nest Site or Observation Site within the same Home Range.

The ‘Location’ field offers three options:

1. You may select an existing location from those available in the Home Range in question (e.g. you may have multiple alternative Nest Sites within a given Home Range that are used ‘in rotation’ between years) (M).

2. You may create a new Nest Site, one not previously defined, ‘on the fly’ by selecting ‘+Add New Nest Site’.

   If you have visited a known Home Range but have found the birds nesting in a new Nest Site, you have the ability to add this new Location as part of your visit record. On the ‘Locations’ field, select the ‘+ Add New Nest Site’ option (N).

3. You may create a new Observation Site ‘on the fly’ by selecting ‘+Add New Observation Site’ (e.g. you may wish to record an observation away from the nest such as territorial behaviour or an observation of fledglings) (O).

If you select to create a new Nest Site or Observation Site you will find a map tile will display, zoomed in on the Home Range in question.
To create the new Nest Site (or Observation Site) do one of the following:

Click on the map at the position of the new Nest Site/Observation Site.
Entering Visit Data - Completing a Visit Log

- Enter a grid reference for the new Nest Site/Observation Site.
- Enter Latitude/Longitude coordinates for the new Nest Site/Observation Site.

Note that the new Visit Location has to fall within the boundaries of the given Home Range visible on the map. Do not attempt to use more than one method, as the results will inevitably conflict.

While the Bing Aerial Map is the default view, you also have the choice of using OpenStreetMap or Ordnance Survey as your base map and can switch between these at any time using the drop-down selector (P) in the right-hand corner of the map.

When you ‘drop’ the point by clicking on the map with the mouse pointer, or press enter/return key having entered a grid reference, the grid reference, point on the map and coordinates will synchronise. You can click and drag the point with the mouse pointer to make an adjustment. Once happy with the position of the new Nest Site click the blue ‘Continue’ (Q) button which will have appeared to the bottom right of the map tile (or Cancel to back out).

You will then be presented with a form into which you need to enter the attributes of the Nest Site/Observation Site (compulsory fields indicated by an asterisk). Click the blue ‘Add New Location’ (R) button to save the details and return to the Visit Log. The new Nest Site/Observation Site will have been selected for the current visit and will also appear in Map View and Table View.
Entering Visit Data - Completing a Visit Log

Occupancy:

Pick the relevant occupancy from the drop-down list.

Status Codes:

A series of two-letter status codes provide an easy way to describe the stage of development of the nest, eggs and young, as well as the observed activities of the parent birds and the eventual outcome of the nest.

You can enter multiple status codes (maximum 5 per visit) to describe what you have observed during your visit as appropriate e.g. a code for adult activity, a code for nesting stage and so on. If you know the codes you want to use you can simply type them into the boxes (for example AX: Adult alarming & AY: Audible young in nest).
You can also use the search to find relevant status codes more quickly. If, for example, you are trying to find relevant status codes relating to ‘display’ you can type in ‘display’ and it will narrow down the list to those status codes that include the word ‘display’ in their description.

Alternatively, you can choose codes from the list in the drop-down selector.

To help you locate an appropriate code, codes are grouped into the categories:

- TERRITORY
- NEST BUILDING STAGE
- PARENTS
- EGGS
- YOUNG
- OUTCOME: SUCCESS
- OUTCOME: FAILURE
- OUTCOME: UNKNOWN
- NO BREEDING
It is often the case with raptor monitoring that you might discover a successful breeding attempt (such as chicks that have successfully fledged) within a home range without ever actually pin-pointing the Nest Site. The system has been set up such that if the Home Range Log visit contains (a) contents counts, (b) status codes of stages 'YOUNG', 'EGGS', 'NEST', 'FAILURE', or (c) success-stage status codes 'EX' (Exploded from nest), 'NE' (Nest empty, undisturbed, feather scale, droppings), 'SL' (Young seen leaving), 'YC' (Young capable of leaving nest when last seen) or 'SY' (Some young fledged), saving the visit is disallowed unless visit location is also populated with a Nest Site. The best way to record a successful breeding attempt where you have not located the Nest Site itself is to input one of more of the outcome codes 'AC' (Adult carrying food near nest), 'NN' (Young near nest) or 'VA' (Adult visibly alarmed/agitated near nest) plus an auxiliary count of the number of chicks fledged without requiring that the 'location' field is also populated.

'No Breeding' is important for Schedule One reporting when you have visited a Home Range known from previous years but find no evidence of occupancy during the current year. Once you have clicked on the green 'Save visit' button you can add additional details later by clicking on the saved status code and selecting information from the pop-up box which is revealed (see 2.3 for more information).

You can also add extra details to records through a '+ Add more details' button under the 'Status Codes' field. You can now give us more information about any observed birds (count/age/sex) and tell us about any field signs of territory occupation such as plucks (sign/age). Importantly you can use this area to record reasons for failure of breeding attempts and any evidence to support your conclusion in a standardised way which will be important in our work to report temporal and spatial patterns in causes of failure. It is also apparent when extra detail has been added – the a ‘+ Add extra details’ button turns blue.

Nest Contents (Eggs and Young)

Complete the nest contents fields as fully as possible.

- Eggs
  - Live: Enter number of live eggs (assume egg is alive unless there is evidence to the contrary).
  - Dead: Enter number of infertile/dead eggs. Only use the Dead Eggs column if you are certain that eggs are infertile/addled, or to record broken eggs inside the nest, or eggs that have been thrown out of it.

- Young
  - Live: Enter number of live young.
Entering Visit Data - Completing a Visit Log

- **Dead**: Enter number of dead young.
- **Fledged**: Enter number of fledged young.

If no counts are entered in the nest contents, it is assumed that there were no contents. It is therefore important for you to complete these details where you know contents to be present even if you need to provide an approximate rather than accurate count.

You can enter ‘?’ where the contents cannot be counted with certainty or if the adult is sitting and you cannot see the contents.

You can include a ‘+’ after the number to indicate a minimum count. e.g. 6+ if there are six or more eggs or young.

**Nesting attempt:**

If you can confidently do so, you can record the number of the nesting attempt for species which may have several broods (e.g. Barn Owl) or have the capacity to relay following a failure early in the breeding season (e.g. Hen Harrier). If not completed SRMS Online will automatically record it as the first attempt.

**Time spent by nest (minutes):**

If you have conducted a visit to a nest, please record the time in minutes spent at or near the nest. This is a useful measure for the impact of observer disturbance at nests.

**Comments:**

You can also attach a comment for each visit to write down any noteworthy information that may, for example, assist you with coordinating your monitoring. The comments box turns blue when an entry has been made.
2.1 Recording when Nest Sites have not been monitored

It is helpful to record when you have not been able to check any Nest Sites that you would usually monitor in a given year. There are several ways that you are able to do this.

When you are in Map View you are able to select a Nest Site then simply click on the ‘Specify Nest Site not Visited’ button.

When you are in Table View you can select ‘Specify Nest Site not Visited’ from the drop-down ‘Options’ menu (B) in the first column of the table.
Entering Visit Data - Recording when Nest Sites have not been monitored

Whichever of the two above routes you pick the database will be updated, and you will be able to see this information recorded in the ‘Nest Sites Not Visited’ area (C) which can be accessed from the ‘Effort Recording’ menu tab on the navigation panel (available from anywhere in the application).

You can also access this same ‘Nest Sites not Visited’ area from within a Visit Log (D), for example, to record if there are particular Nest Sites within a Home Range that have not been visited in a given year.
Entering Visit Data - Recording when Nest Sites have not been monitored

Having accessed the ‘Nest Sites Not Visited’ area you are presented with a list of all the Nest Site locations that you have access to. You are able to select from the drop-down menu in the ‘Visited/Not Visited’ column (E) to let us know when you have not visited a particular Nest Site. You are able to switch between years by typing in the year and clicking on the ‘Switch Year’ button (F).

If there are quite a number of Nest Sites that you have been unable to check in a given year you may want to take advantage of the ‘Bulk Update Site(s) Not Visited’ button (G).

You can select multiple Nest Sites and assign a ‘Not Visited Reason’.
3 Managing Locations

SRMS Online provides both a map-based and table-based means of creating permanent ‘locations’ against which you will be able to record details of your monitoring visits. If you have been familiar with using the SRMS spreadsheet this new approach to capturing data may take a little bit of time to get used to, however, it will allow the SRMS to better handle data for species that may have multiple alternate Nest Sites and also allow us to better handle sightings data away from the immediate vicinity of Nest Sites. Fundamentally, you are able to create permanent locations, with associated information, which will then be available for you to manage, and to choose to record against, when entering visit data, meaning that the details of each will only need to be completed once.

If you prefer to work with maps you can manage locations through Map View. Map View can be accessed from the ‘Map View’ menu tab (A) on the navigation panel (available from anywhere in the application) or the ‘Map View’ (B) quick link (available on the ‘Home’ page).

If you prefer to work with tables you can manage locations through Table View. Table View can be accessed from the ‘Table View’ menu tab (C) on the navigation panel (available from anywhere in the application) or the ‘Table View’ (D) quick link (available on the ‘Home’ page).

You can toggle between ‘Map View’ and ‘Table View’ in the toolbar (E) above the map or table. Map View and Table View are fully integrated and you can switch from one to the other at any time.
3.1 Overview of Location Types

There are three main types of location which you are able to create and visualise both in Map View and Table View: Nest Sites, Observation Sites and Study Areas. In addition to these, SRMS has also introduced the concept of Home Ranges, which enables the grouping of related Nest Sites and Observation Sites, under SRMS Home Ranges (see 3.1.1), which you are able to view in Table View only. Please refer to more detail on each location type below.

3.1.1 SRMS Home Ranges

As described in Hardey, J. et al. (2013), surveys of birds of prey focus largely on determining whether Home Ranges are occupied and locating active Nest Sites within defined Study Areas to monitor breeding attempts. You will notice that in order to accommodate this, if you have any Nest Sites preloaded onto SRMS Online, where possible, we will have created Home Ranges, each assigned a unique SRMS Home Range Code, which we have grouped your Nest Sites under. You can view how we have grouped your existing sites in the ‘Table View’ under ‘SRMS Home Ranges’ (see 3.3.2).

SRMS Home Range codes have been introduced in order to standardise coding across all records in our database. All SRMS Home Ranges follow the format of Species|SRMSRegion|SRMSSub-region|Number, e.g. KT_TAY_P&K_0001 refers to Red Kite|Tayside|Perth & Kinross|0001.

We have tried to group alternate Nest Sites belonging to the same pair of birds under one single Home Range. Each Home Range is unique to one species only, and limited to one pair of birds at the time but can overlap each other. While we would expect these to reflect your understanding of these Home Ranges on the ground, please let us know if there are any obvious discrepancies. SRMS Home Range Codes can only edited by the SRMC.

3.1.2 Nest Sites and Observation Sites

Typically, we would expect you will want to create permanent Nest Site locations for species such as Osprey, Peregrine, Golden Eagle and Raven, which occupy traditional Home Ranges and Nest Sites. You can set up one, or multiple locations for species which can have several alternative Nest Sites, within a single Home Range. Note that one Nest Site can have several species identities, as different species may use the Nest Site between different years (see 3.2.1.2). Alternatively, you may choose the option of creating sites ‘on the fly’ under ‘Observation Sites’. This might be more appropriate for raptor species with more ephemeral Nest Sites such as Hen Harrier or Merlin.

Important note...

All your available breeding raptor locations known to the SRMS have been preloaded onto SRMS Online, unless you have indicated otherwise when you completed a SRMS Registration Form. The information that was used when preloading your locations, was based on the most recent records the SRMS had received, most likely from the year prior. When you log in to SRMS Online for the first time we highly encourage you to review the details (e.g. location name, code and grid ref) of the Nest Sites that you monitor and modify them to better reflect your local knowledge if you notice any errors or duplication (see 3.2.1.2 for more detail on how to edit Nest Sites).

3.1.3 Study Areas

A Study Area is another type of an independent spatial feature we highly encourage you to use. The SRMS defines a Study Area as a discreet geographical area that should receive complete monitoring coverage from one year to the next. Such monitoring is most valuable to the SRMS as it allows us to more readily keep track and report on the health of our raptor populations. A given Study Area has an associated geographic extent that represents the area you survey and will be used for recording fieldwork effort (see 4.1).

If you do not consider that your monitoring currently constitutes a study per se as described above, but rather, you have a less targeted approach to your monitoring, we would encourage you to consider consolidating your raptor
monitoring into a Study Area(s) and adopting an approach resembling that of the *Raptor Patch*. If this would be something you would consider doing and would appreciate assistance with establishing, please do not hesitate to get in touch with the SRMC.
3.2 Map View

When you first click ‘Map View’ on the navigation bar or choose the ‘Map View’ quick link on the ‘Home’ page, you will be brought to the Map View.

If you have locations saved within the account you are accessing, the map will automatically zoom to encompass these, if not, it will display the whole of the UK. Here you can manage, Study Areas, Nest Sites and Observation Sites.

All the tools that you will need to interact with are accessible either from the toolbar (A) above the map or the floating panel (B) which pops up having selected a location on the map by clicking on it.

If you have a wheel-mouse, you can zoom in or out using the wheel and pan around the map by clicking and holding down the left mouse button whilst dragging. Alternatively use the zoom-bar (C). The detail of the backdrop map will automatically adjust to the degree of zoom.

As you move the mouse cursor around the map the coordinates display in the bottom left-hand corner (D). This may be useful if you are trying to accurately pinpoint a location based on a known grid reference.

3.2.1 Tools accessible from the toolbar

3.2.1.1 Changing the background map

While the Bing Aerial Map is the default map layer style, you also have the choice of using OpenStreetMap or Ordnance Survey as your base map and can switch between these at any time using the drop-down selector (E) in the toolbar (A) above the map. The selection you make will be preserved for when you next log in to the same account.
3.2.1.2 Toggling features on/off

You are also able to toggle locations (e.g. Study Areas, Nest Sites and Observation Sites) and various map tools (e.g. Location Labels and Measurements) on/off via the ‘Toggle Features’ the drop-down selector (F) in the toolbar (A) above the map. The selections you make will be preserved for when you next log in to the same account.

3.2.1.3 Filtering locations by species

You can also filter your locations by species (G). You can select one species at the time, and SRMS Online will colour the sites by Home Range, i.e. all locations belonging to the same Home Range will be given the same colour. In any ‘operating group’ accounts relating to a single species this tool is called “Colour by Home Range” instead.

3.2.1.4 Selecting multiple locations for further action

It is also possible to use the ‘Multi-Select’ button (H) in the toolbar (A) above the map to select multiple locations to perform further actions, at the moment, limited to hiding particular locations from the map.
3.2.1.5 Zooming to a postcode or grid reference

It is possible to zoom in to the map based on a known postcode or grid reference using the ‘Zoom To’ button (I) in the toolbar (A) above the map.

This opens up a further window where you can input either a postcode or grid reference before clicking on the ‘Search’ button.

3.2.1.6 Printing maps

It is also possible to print your map using the multi-select button (K) in the toolbar (A) above the map.

This opens up a further window where you have the option to adjust the ‘Map Layer Style’ and ‘Print Orientation’ and zoom to adjust the printed area before clicking on the ‘Print’ (L) button.
3.2.2 Creating and managing Nest Sites

If you have submitted data to the SRMS prior to SRMS Online becoming established, you should find that Nest Sites that you have submitted records against previously have been preloaded and should be visible both in Map View and Table View via one or more of the ‘operating group’ accounts you have access to. Once you have permanent Locations in SRMS Online, you can add Visit Data (see 2) against these, documenting observations and details of a given breeding attempt within a particular Home Range.

**Important note...**

If when you log into SRMS Online for the first time you cannot see any/all of the locations that you monitor displayed or something looks awry, please liaise with the SRMC who can make appropriate investigations.

3.2.2.1 Creating a Nest Site

To accurately plot the position of a Nest Site, having zoomed and panned to the appropriate place on the base-map, click on the ‘Nest Site’ button (M) in the ‘Add Locations’ drop-down in the toolbar (A) above the map.
Then simply click on the map (N) to pinpoint the location of the Nest Site.

Upon clicking the screen, you will be prompted to select the Home Range (O) (see 3.3.2) you would like to add your Nest Site to and the precision (P) of the site you are creating.
If there are any Home Ranges already in the database, that cover this area, these will be listed in the drop-down menu (Q) and you will be able to select the appropriate one from the drop-down menu.

If you do not remember the Home Range code by heart, you can click on the ‘Find by Nest Site’ button (R).
In this fictional example I am trying to create a new Nest Site called ‘Logie Kirk’ within an existing Home Range where I already have a Nest Site called ‘Airthrey Castle’. I can find ‘Airthrey Castle’ in the drop-down list (S) and a search of the database will pull back the relevant Home Range code that you can ‘Copy to form’ (T).

<table>
<thead>
<tr>
<th>Site</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RN01 (Airthrey Castle) [NS8123096716]</td>
<td></td>
</tr>
<tr>
<td>RN02 (Airthry Golf Course) [NS8158896627]</td>
<td></td>
</tr>
<tr>
<td>RN03 (Andrew Stewart Hall) [NS8062196567]</td>
<td></td>
</tr>
<tr>
<td>TO1 (Battleby (North)) [NO0867629357]</td>
<td></td>
</tr>
<tr>
<td>TO2 (Battleby (West)) [NO0843429080]</td>
<td></td>
</tr>
<tr>
<td>TO3 (Battleby (South)) [NO0862029310]</td>
<td></td>
</tr>
</tbody>
</table>
Alternatively, you can add your Nest Site to a new Home Range by clicking ‘Create new Home Range’ within the drop-down menu.

Please confirm the Home Range of which this Nest Site is a part.

SRMS Online will automatically, ‘behind the scenes’ define the extent of a **Home Range** for each Nest Site, the size of which is species specific.

- **4 km x 4 km:**
  Marsh Harrier, Hen Harrier, Buzzard, Barn Owl, Tawny Owl, Little Owl, Long-eared Owl & Short-eared Owl.

- **10 km x 10 km:**
  Honey-buzzard, Sparrowhawk, Goshawk, Red Kite, Kestrel, Merlin, Hobby, Peregrine & Raven.

- **20 km x 20 km:**
  Osprey, Golden Eagle & White-tailed Eagle.

You can review the list of all Home Ranges and their associated Nest Site or Observation Sites in the **Table View**. Note that you can also create a Nest Site for an ‘Unknown Species’. This allows you to record likely raptor nests that you may have observed during your winter visits, and will want to return to check up on potential breeding activity in the spring.
Once you have set the Home Range you can set the precision of the location you are creating by selecting the appropriate option from the drop-down list (V). You have the choice of selection Point (the default), 10m, 100m and 1km. The 10m, 100m and 1km options will all create appropriately sized squares based on the Ordnance Survey grid.

A form with multiple tabs will appear to allow you to fill in the associated details for the new Nest Site. The ‘Main’ tab has a number of compulsory fields indicated with a red asterisk. The contents required by each field should be relatively intuitive but note for some an extended description is available if you hover your mouse cursor over blue ‘?’ symbol. Once you have completed the details click the ‘Save changes’ (X) button.
You can change these values at any time by selecting a location either in the Table View or Map View and choosing ‘View/Edit Details’ when existing Nest Sites are chosen (see 3.2.1.2.1 for more detail.)

More detail of the information required on each tab of the form is provided below.

**Nest Site name and code:**

Here you can assign a ‘Name’ and a ‘Location Code’ of your choosing.

Location Code is a compulsory field within the database. In case you are struggling to immediately identify the most suitable code to use, you will be presented with a suggested Location Code that can be over-written later by you or others with appropriate permissions operating in the same account.
Managing Locations - Map View

A ‘SRMS code’ will be assigned to every Nest Site by the Scheme, and this will not be editable by users. You have also an opportunity to add any additional comments (for example, about how to approach the location for monitoring purposes) and to record whether any monitoring may have taken place at the Nest Site previously. If you choose this, you will be given an option to fill in the code/name that the Nest Site may have been referred to in the past, which will help SRMS to make the link to any records that may exist in the database already for this Nest Site.

For species that may have alternative Nest Sites used by a pair in different years, you may add multiple Nest Sites into a particular Home Range. You may do this either for a species such as Golden Eagle where there may be small number of traditional sites within a pair’s Home Range or for a species that is less restricted to using precisely the same Nest Site every year but nonetheless will essentially occupy the same patch of moorland or forest each year such as Merlin or Sparrowhawk. Please remember to account for this in your coding. Alternate Nest Sites within one Home Range should ideally be indicated with a letter (e.g. WTE01a, WTE01b etc.) indicating that they belong to the same pair of birds.

SRSG members

It may be pertinent to liaise with the relevant Species Coordinator or your branch Chair over new location names or codes to provide some regional consistency in naming protocols.

Spatial Details:

When a location has been created directly via Map View these values will typically be auto-populated. Here you will see the precise location of the Nest Site, and a confirmation of the SRMS region under which this Nest Site falls (if the Nest Site crosses a SRMS sub-region border you can select the most appropriate one). The ‘Added to Home Range’ field specifies either the Home Range you have selected to add your Nest Site to or specify that it will be added into a new Home Range created by SRMS Online.
Here you can manage who the Nest Site is visible to in the Operating Group you are operating as (if applicable). See 3.4 for more detail.

**Habitat:**

Here you can record the habitat surrounding the Nest Site. ‘Primary Habitat’ refers to the predominant habitat in the immediate vicinity of the Nest Site, whereas ‘Secondary Habitat’ is the one attached to or surrounding this. You can also record any observed ‘Management Activities’.
Here you may record any additional information about the Nest Site, such as the type and height.

### 3.2.2.2 Managing Nest Sites

Once you have a Nest Site saved, you can manage it by selecting the Nest Site on the map using the mouse pointer. The location code and name, together with the overarching SRMS Home Range code of the selected location will display towards the top of the floating panel (Y).

You have seven options related to managing the location, which mostly appear as white buttons within the floating panel:

- View/Edit Details
- Edit Positioning
- Change Location Type
- Zoom to Location
- Show in Table
- Clone
- Delete (red button)
3.2.2.2.1 View/Edit Details

Selecting this option will bring you back to the ‘Nest Site’ form and should display and allow you to edit the details. If you want to edit the details in any of the tabs, you will first have to choose the blue ‘Edit details’ (Z) button.

Note that unlike in Table View, you cannot edit the positioning of a Nest Site under the ‘Spatial Details’ tab, as this is done under the ‘Edit Positioning’ (below).
3.2.2.2.2 Editing Positioning

This allows you to select and drag a Nest Site with the left mouse button to reposition it. Note that a Nest Site can only be moved within the boundaries of its given Home Range. If you need to move it elsewhere, please contact the SRMC. The system will alert you if this happens.

When you have repositioned the location and clicked the blue ‘update’ button (AA), SRMS Online will ask you to specify the reason behind the update (AB). If you choose ‘To refine the original geometry of the location’ this means that the location will be updated for all records ever made against this Nest Site. It’s most likely that this will happen when you first make edits to your preloaded sites. Alternatively, you can select ‘to capture a change to the location’s geometry from a specific date’, this will only update the location for any future records. The latter may be relevant, for example, if having to move the location of a nest box.

SRSG members

This might be the first time that you have seen your locations plotted up on a map based on the grid references that have been associated with your breeding records submitted to the SRMS. You may notice, with the benefit of the background OS map or Bing Aerial image that the locations are plotting up in unexpected locations. Please take the opportunity to refine these - any changes that you make to the positioning of locations will all be detected by the SRMS and will allow us to potentially further refine our Legacy dataset (i.e. the dataset that the SRMS uses and shares with SRMS partners in line with our SRMS Data Sharing & Use Policy) increasing its value to raptor conservation.

What Principals and Deputies should ultimately be aiming to have displaying/listed in Map View/Table View for each group account is a complete list of Nest Sites which reflect true positions of the Nest Sites that have been monitored in the past and continue to be monitored today. What the SRMS has attempted to do by pre-loading the
locations is to give SRSG Chairs & Species Coordinators a helpful basis to start from in organising their definitive collection of locations.

### 3.2.2.3 Change Location Type

You may have reason to change the Location Type from a Nest Site to an Observation Site, for example if a Nest Site was created in error. You can make this change by clicking on the blue ‘Observation Site’ button (AC).

### 3.2.2.4 Zoom to location

If you are zoomed out on the map you can use the ‘Zoom to location’ button to zoom you in to the Nest Site and the immediate surrounding area.

### 3.2.2.5 Show in Table

You can use the ‘Show in Table’ button to be taken through to Table View, where the relevant row containing the location will be briefly highlighted in blue.

### 3.2.2.6 Clone

This allows you to create additional Nest Sites within the same Home Range within the account that you are operating as. All the attribute data will be copied from the Nest Site you are cloning from to the new Nest Site you can create by clicking on the map. This will save you having to enter attributes that are shared by both Nest Sites (although you will need to edit the location code) and would be useful on occasions where an alternate Nest Site is discovered within a Home Range.

### 3.2.2.7 Delete

Unless duplicates have been generated as part of the preloading process, deleting Nest Sites should be avoided, as you will lose the attached information for the Nest Site which may become useful in the future. You can also only delete Nest Sites that have no monitoring data recorded against them. If you are no longer monitoring a Nest Site and
Managing Locations - Map View

would like to make your Map View and Table View less busy, please refer to 3.5.1 for details on how to archive locations.

3.2.2.8 Define nest as a Point

In addition to the seven options above, when you select a Nest Site that has been pre-loaded or created as a square (rather than a point) you have the additional option to ‘Define nest as a point’ (AD).

Click on the map (AE) to pinpoint the location of the Nest Site.
3.2.3 Creating and managing Observation Sites

An Observation Site is the position of the sighting (e.g. the place that you observe a pair of birds displaying) rather than where you are standing when you make the observation (i.e. a vantage point).

**Raptor Patch volunteers**

As you are getting to grips with you Raptor Patch, particularly in the first few years, you should be working towards establishing the number of occupied territories of your chosen species in your Raptor Patch. You will almost certainly not find all the occupied territories in your first year and it may be several seasons before you are able to pin down Nest Site locations. The functionality described below will be helpful to you as you are likely to want to collect up a series of observations on your map (each observation saved as a separate Observation Site location), which may ultimately help you pin down the specific locations of nesting attempts.

### 3.2.3.1 Creating an Observation Site

To accurately plot the position of an Observation Site, having zoomed and panned to the appropriate place on the base-map, click on the ‘Nest Site’ button (AF) in the ‘Add Locations’ drop-down in the toolbar (A) above the map. Before you do this, you will likely want to zoom in closely in order to define the location of the Nest Site with high accuracy.

Then simply click on the map (AG) to pinpoint the location of the Observation Site.
Upon clicking the screen, you will be prompted to select the Home Range (AH) (see 3.3.2) you would like to add your Observation Site, the Species (AI) the site related to and the precision (AJ) of the site you are creating.

If there are any Home Ranges already in the database, that cover this area, these will be listed in the drop-down menu (AK). If you do not remember the Home Range code by heart, you can click on the ‘Find by Nest Site’ button (AL).

Alternatively, you can add your Observation Site to a new Home Range by clicking ‘Create new Home Range’ (AK).
SRMS Online will automatically, ‘behind the scenes’ define the extent of a **Home Range** for each Observation Site, the size of which is species specific.

- **4 km x 4 km:** Marsh Harrier, Hen Harrier, Buzzard, Barn Owl, Tawny Owl, Little Owl, Long-eared Owl & Short-eared Owl.

- **10 km x 10 km:** Honey-buzzard, Sparrowhawk, Goshawk, Red Kite, Kestrel, Merlin, Hobby, Peregrine & Raven.

- **20 km x 20 km:** Osprey, Golden Eagle & White-tailed Eagle.

You can review the list of all Home Ranges and their associated Nest Site or Observation Sites in the [Table View](#).

Once you have set the Home Range you can set the precision of the location you are creating by selecting the appropriate option from the drop-down list (AM). You have the choice of selecting Point (the default), 10m, 100m and 1km. The 10m, 100m and 1km options will all create appropriately sized squares based on the ordnance survey grid.
Once you have selected the Home Range, Species and Precision you can click on the blue ‘Save’ button (W).

A form with multiple tabs will appear to allow you to fill in the associated details for the new Nest Site. The ‘Main’ tab has a number of compulsory fields indicated with a red asterisk. The contents required by each field should be relatively intuitive but note for some an extended description is available if you hover your mouse cursor over blue ‘?’ symbol. Once you have completed the details click the ‘Save changes’ (AO) button.
You can change these values at any time by selecting a location either in the Table View or Map View and choosing 'View/Edit Details' when existing Observation Sites are chosen (see 3.2.3.2 for more detail.)

More detail of the information required on each tab of the form is provided below.

**Observation Site name and code:**

This form will allow you to define a Name and a Location Code of your own format. A SRMS code will be assigned to every Observation Site by the Scheme, and this will not be editable by users.

We would recommend that you adopt a Location Code system based on the species, person making the observation and the date. e.g. BZ_SRMC_12Apr2021 (a Location Code for a Buzzard observation made by the Scottish Raptor Monitoring Coordinator on 12\textsuperscript{th} April 2021).
SRSG members

It may be pertinent to liaise with the relevant Species Coordinator or your branch Chair over new location names or codes to provide some regional consistency in naming protocols.

Spatial Details:

<table>
<thead>
<tr>
<th>Main</th>
<th>Observation Site name and code</th>
<th>Spatial Details</th>
<th>Share Location</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Grid Reference</strong>: NN9557</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Latitude</strong>: 56.6940917</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Longitude</strong>: -3.7089237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SRMS region/sub-region</strong>: Perth &amp; Kinross</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here you will see the precise location of the Observation Site, and a confirmation of the [SRMS region](#) under which this Observation Site falls (if the Observation Site crosses a SRMS sub-region border you can select the most appropriate one). The ‘Added to Home Range’ field specifies either the Home Range you have selected to add your Observation Site to or specify that it will be added into a new Home Range created by SRMS Online.

Share Location:

<table>
<thead>
<tr>
<th>Main</th>
<th>Observation Site name and code</th>
<th>Spatial Details</th>
<th>Share Location</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Group Permissions</strong>: Selected Group Members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Group Member Permissions</strong>: <a href="#">Demonstrator SRMC</a></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here you can manage who the Observation Site is visible to in the Operating Group you are operating as (if applicable). See [3.4](#) for more detail.
Habitat:

Here you can record the habitat surrounding the Observation Site. ‘Primary Habitat’ refers to the predominant habitat in the immediate vicinity of the Observation Site, whereas ‘Secondary Habitat’ is the one attached to or surrounding this. You can also record any observed ‘Management Activities’.

### 3.2.3.2 Managing Observation Sites

Once you have an Observation Site saved, you can manage it by selecting the Observation Site on the map using the mouse pointer. The location code and name, together with the overarching SRMS Home Range code of the selected location will display towards the top of the floating panel (AP).

You have six options related to managing the location, which mostly appear as white buttons within the floating panel:

- View/Edit Details
- Edit Positioning
- Change Location Type
- Zoom to Location
- Show in Table
- Clone
- Delete (red button)
### 3.2.3.2.1 View/ Edit Details

Selecting this option will bring you back to the ‘Observation Site’ form and should display and allow you to edit the details. If you want to edit the details in any of the tabs, you will first have to choose the blue ‘Edit details’ (AQ) button.

Note that unlike in Table View, you cannot edit the positioning of an Observation Site under the ‘Spatial Details’ tab, as this is done under the ‘Edit Positioning’ (below).
3.2.3.2.2  Edit Positioning

This allows you to select and drag an Observation Site with the left mouse button to reposition it. Note that an Observation Site can only be moved within the boundaries of its given Home Range. If you need to move it elsewhere, please contact the SRMC. The system will alert you if this happens.

When you select the new location, SRMS Online will ask you to specify the reason behind the update. If you choose ‘To refine the original geometry of the location’ this means that the location will be updated for all records ever made against this Nest Site. It’s most likely that this will happen when you first make edits to your preloaded sites. Alternatively, you can select ‘to capture a change to the location’s geometry from a specific date’, this will only update the location for any future records. The latter may be relevant, for example, if having to move the location of a nest box.

3.2.3.2.3  Change Location Type

You may have reason to change the Location Type from an Observation Site to a Nest Site, for example if an Observation Site was created in error. You can use this to make this change by click on the blue ‘Nest Site’ button.

3.2.3.2.4  Zoom to Location

If you are zoomed out on the map you can use the ‘Zoom to location’ button to zoom you in to the Observation Site and the immediate surrounding area.

3.2.3.2.5  Show in Table

You can use the ‘Show in Table’ button to be taken through to Table View, where the relevant row containing the location will be briefly highlighted in blue.

3.2.3.2.6  Clone

This allows you to create additional Observation Sites within the same Home Range within the account that you are operating as. All the attribute data will be copied from the Observation Site you are cloning from to the new
Observation Site you can create by clicking on the map. This will save you having to enter attributes that are shared by both Observation Sites (although you will need to edit the location code).

### 3.2.3.2.7 Delete

You can only delete Observations Sites that have no monitoring data recorded against them.

### 3.2.4 Creating and managing Study Areas

When you log into SRMS Online for the first time you should define the extent of your Study Area(s) using Map View. The SRMS defines a Study Area as a discreet geographical area that should receive complete coverage from one year to the next. Such monitoring is most valuable to the SRMS as it allows us to more readily keep track and report on the health of our raptor populations.

If you do not consider that your monitoring currently constitutes a study *per se* as described above, but rather, you have a less targeted approach to your monitoring, we would encourage you to consider consolidating your raptor monitoring into a Study Area(s) and adopting an approach resembling that of the Raptor Patch. If this would be something you would consider doing and would appreciate assistance with establishing, please do not hesitate to get in touch with the SRMC.

**Raptor Patch volunteers**

Your registered Raptor Patch boundary should be created and managed as a Study Area.

### 3.2.4.1 Creating a Study Area

A given Study Area has an associated geographic extent that represents the area you survey and will be used for recording fieldwork effort (see 4.1). When defining Study Areas:

- You should define multiple non-overlapping Study Areas, if your fieldwork covers two or more distinct geographic areas.
- You should define which species you are monitoring within your Study Area. This will allow us to record different extent of coverage and monitoring effort for different species.
- You should also define ‘Start Date’ (and ‘End Date’, if your study ends) when you have monitored this Study Area for the particular species.

To get started with creating a Study Area in Map View:

Having zoomed and panned to the appropriate place on the base-map, click on the ‘Study Area’ button (AR) in the ‘Add Locations’ drop-down in the toolbar (A) above the map. Before you do this you will likely want to zoom in closely in order to define the location of the Study Area with high accuracy.
This allows you to click on the map and start drawing your Study Area. Regular and irregular boundaries can be achieved by clicking the mouse wherever the boundary changes direction. Double-click to finish drawing the boundary. When you complete the boundary, the screen will change to display the extent of the Study Area in red.

A pop-up window will automatically appear. You will need to provide compulsory information (e.g. Name and Location Code) and then click ‘Save’ and exit.

Location Code is a compulsory field within the database. In case you are struggling to immediately identify the most suitable code to use, you will be presented with a suggested Location Code that can be over-written later by you or others with appropriate permissions operating in the same account.
We would recommend that you adopt a Location Code system based on the name of the person(s) leading on monitoring in the Study Area and the focal species being monitored. For example, for a single Study Area where a single species is being monitored by a single individual, you may wish to combine your initials with the BTO two letter code for the species, e.g. SRMC_BZ (for a Study Area, where the monitoring is undertaken by the Scottish Raptor Monitoring Coordinator and the focal species is Buzzard).

Your Study Area, labelled with the name and code you had given it, will now be visible in green in your Map View and found under ‘Locations’ (3.3.1) in your Table View.

3.2.4.2 Editing/Adding monitoring details to Study Areas

You may wish to edit the extent of an existing Study Area or any of its associated attributes. To do this, select the Study Area in Map View.
Managing Locations - Map View

You have 8 options related to managing the location, which mostly appear as white buttons within the floating panel (AS):

- Add Effort Recording (dark blue button)
- View/Edit Details
- Record Species Monitored (light blue button)
- Edit Positioning
- Zoom to Location
- Show in Table
- Clone
- Delete (red button)

3.2.4.2.1 Add Effort Recording

This will take you through to a form enabling you to complete a New Daily Summary every time you visit your Study Area to let us know the approximate number of hours you have spent searching for active territories or nests within your Study Area as well as the weather conditions. For more information, please see 4.2.2.

3.2.4.2.2 View/Edit Details

This will take you back into the same Study Area form that you filled in when first creating the Study Area, allowing you to make modifications once you have clicked on the blue “Edit Details” button in the bottom right-hand corner (AT).
Managing Locations - Map View

3.2.4.2.3 Recording Species Monitored for a Study Area

This will bring you to the following pop-up window. You can click ‘Add Row’ (AU) for each species, and the period that you have monitored them for. Note that if monitoring is ongoing you can leave the ‘End Date’ field empty. In case there are gaps in your monitoring, you should record these periods separately. Click ‘Update’ (AV) to save your edits. It’s worthwhile keeping this up to date on an annual basis.
3.2.4.2.4 ‘Edit Positioning’

This will allow you to alter the shape of your Study Area. Once you have selected this option, you can simply select a point along the boundary of your Study Area and drag this to a new position. Once you have completed, click the blue ‘Update’ button (AW) which appear in the light blue box to the top left of your map.

You will be prompted to specify the reason for the update. Please choose the appropriate response and select the blue ‘Continue’ button (AX). If you choose ‘To redefine the original geometry of the location’ this means that the shape will be updated to attributes against this Study Area from since it was created. Alternatively, you can select ‘to capture a change to the location’s geometry from a specific date’, SRMS Online will take a note of the date of the shape change. The latter should be most appropriate if you, for example, choose to increase or reduce the size of your Study Area.

3.2.4.2.5 Zoom to Location

If you are zoomed out on the map you can use the ‘Zoom to location’ button to zoom you in to the Study Area.
3.2.4.2.6 Show in Table

You can use the ‘Show in Table’ button to be taken through to Table View, where the relevant row containing the location will be briefly highlighted in blue.

3.2.4.2.7 Clone

Just like with Nest Sites, this allows you to create a new Study Area within the account you are operating as, where all the attribute data will be copied from the Study Area you are cloning to. This will save you having to enter attributes that are shared by both Study Areas (although you will need to edit the name and code), and would be useful, for example, if you expanded your monitoring coverage into an adjacent area.

3.2.4.2.8 Delete

This should really be avoided. Instead, it if you retire from monitoring of a specific Study Area completely, let’s say if you move away, we would prefer you to archive your Study Area, for potential future use. Please refer to 3.5.1 for details on how to archive Locations, including Study Areas. Ahead of archiving ensure that you record an End Date for your study (see 3.2.3.2.2).
Managing Locations - Table View

3.3 Table View

When you first click ‘Table View’ on the navigation bar or choose the ‘Table View quick link on the ‘Home’ page, you will be brought to the Table View. If you prefer to work with coordinates obtained from paper maps or a handheld GPS/Smartphone, Table View provides an alternative approach to the map interface. Here you can manage, Study Areas, Nest Sites and Observation Sites.

If you have locations saved within the account you are accessing, the table will list these. Here you can manage, Study Areas, Nest Sites and Observation Sites.

All the tools that you will need to interact with are accessible either from the toolbar (A) above the table or via selecting one of the options available in the drop-down in the new ‘Options’ column (B) which has been added as a first column of the table.

### 3.3.1 Tools accessible from the toolbar

#### 3.3.1.1 Integration with Map View

Map View and Table View are fully integrated, and you can switch from one to the other at any time by clicking on the appropriate button (C) in the tool bar above the table.
### 3.3.1.2 Refreshing the locations

Pressing on the ‘Reload’ button (D) will refresh the locations in the table if you have been working on them.

### 3.3.1.3 Viewing locations in two different ways

When you choose ‘Table View’ (C) in the tool bar above the table you are presented with the view below, where the default is set to view by ‘Locations’ (E). The table will show all locations (i.e. Nest Sites, Observation Sites and Study Areas) in one long list.

The ‘Home Range’ column allows you to quickly see which overarching Home Range a given Nest Site or Observation Site is associated with. You are able to readily see some of the most important habitat (Habitat 1 and Habitat 2) and nest information (Nest Type and Site Type) stored against each location at a glance allowing you to quickly identify where information is incomplete or needs updating. The ‘Visibility’ column allows you to see at a glance which other SRMS Online users have access to the same locations and to allow account Deputies within ‘operating group’ accounts to manage location access more straightforwardly.

When you choose ‘Table View’ (C) in the tool bar above the table you are able to select ‘SRMS Home Ranges’ (F). Here you see a list of locations that includes the details of a given Home Range and any Nest Sites or Observation Sites which are contained within it. While Home Ranges cannot be visualised on the map, Home Ranges are automatically generated ‘behind the scenes’ so that you can add associated Nest Sites and Observation Sites in the future. SRMS Online will automatically, ‘behind the scenes’ define the extent of a Home Range, the size of which is species specific.

- **4 km x 4 km:**
  - Marsh Harrier, Hen Harrier, Buzzard, Barn Owl, Tawny Owl, Little Owl, Long-eared Owl & Short-eared Owl.

- **10 km x 10 km:**

- **20 km x 20 km:**
  - Osprey, Golden Eagle & White-tailed Eagle.
You can access the list of locations grouped within a given Home Range by clicking on the ‘>List’ button (G). The ‘>List’ button expands the row to show all the locations within that Home Range including the Home Range location itself (see example below). It is from here that you can select a given location, be that the Home Range location itself or one of its components such as an individual Nest Site.

### 3.3.1.4 Downloading list of locations to work with offline

You are able to easily download the tables of locations as a csv file to work with offline. You can do this via a ‘Download Locations’ button (H) in the toolbar, from where you are able to select whether to download all or just a subset of the locations.
3.3.2 Sorting and Filtering

When searching for locations, you can speed up your search by using the sort and filter options available at the top of the list, both under the ‘Locations’ and ‘SRMS Home Ranges’ displays. You can sort a given field by clicking on the sort arrow (I) at the top of the relevant field. The sort arrow quick link will change to represent the order of the sort. A second click will reverse the sort order. You can also filter your list (e.g. by species) by typing an appropriate string in the filter box (J) immediately below the field header. The filter works on consecutive characters so can be any part of a name, code, grid reference or type.

Table View

<table>
<thead>
<tr>
<th>Options</th>
<th>Location Code</th>
<th>Name</th>
<th>Grid Ref</th>
<th>Home Range</th>
<th>Species</th>
<th>County</th>
<th>Type</th>
<th>Habitat 1</th>
<th>Habitat 2</th>
<th>Nest Type</th>
<th>Site Type</th>
<th>Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Visit Data</td>
<td>R901</td>
<td>Anthony Castle</td>
<td>N9812109571</td>
<td>Home range: LA_CE9_0033</td>
<td>Raven</td>
<td>Sitting</td>
<td>Nest Site</td>
<td>Other - Unknown</td>
<td>New self-built nest</td>
<td>Demonstrator</td>
<td>SRMS</td>
<td></td>
</tr>
<tr>
<td>Add Visit Data</td>
<td>R902</td>
<td>Amy's Golf Course</td>
<td>N8915869652</td>
<td>Home range: LA_CE9_0032</td>
<td>Raven</td>
<td>Sitting</td>
<td>Nest Site</td>
<td>Other - Unknown</td>
<td>New self-built nest</td>
<td>Demonstrator</td>
<td>SRMS</td>
<td></td>
</tr>
<tr>
<td>Add Visit Data</td>
<td>R903</td>
<td>Andrew Stewart Mall</td>
<td>N8985269053</td>
<td>Home range: LA_CE9_0035</td>
<td>Raven</td>
<td>Sitting</td>
<td>Nest Site</td>
<td>Other - Unknown</td>
<td>New self-built nest</td>
<td>Demonstrator</td>
<td>SRMS</td>
<td></td>
</tr>
</tbody>
</table>

3.3.3 Creating and managing Nest Sites

We would expect you will want to create permanent Nest Site locations for species such as Osprey, Peregrine, Golden Eagle and Raven, which occupy traditional Home Ranges and Nest Sites. You can set up one, or multiple locations for species which can have several alternatives Nest Sites, within a single Home Range. Once you have permanent Locations in SRMS Online, you can add Visit Data (see 2) against these, documenting observations and details of a given breeding attempt within a particular Home Range.

3.3.3.1 Creating a Nest Site

Click on the ‘Nest Site’ button (K) in the ‘Add Locations’ drop-down in the toolbar (A).

Table View

This will bring up a simple form in which you can enter either a grid reference or a Latitude/Longitude that pinpoints your Nest Site.

Enter one OR the other and then click the ‘Continue’ button (L). You may enter up to a 10-digit grid reference.
Upon clicking ‘Continue’ the location is captured and the application will search for any Home Ranges that may encompass the location of the new Nest Site.

If there are any Home Ranges already in the database, that cover this area, these will be listed in the drop-down menu (M). If you do not remember the Home Range code by heart, you can click on the ‘Find by Nest Site’ button (N).
Alternatively you can add your Nest Site to a new Home Range by clicking ‘Create new Home Range’ (O). SRMS Online will automatically, ‘behind the scenes’ define the extent of a **Home Range** for each Nest Site, the size of which is species specific.

- **4 km x 4 km:**  
  Marsh Harrier, Hen Harrier, Buzzard, Barn Owl, Tawny Owl, Little Owl, Long-eared Owl & Short-eared Owl.

- **10 km x 10 km:**  
  Honey-buzzard, Sparrowhawk, Goshawk, Red Kite, Kestrel, Merlin, Hobby, Peregrine & Raven.
  
  Osprey, Golden Eagle & White-tailed Eagle.

You can then click ‘Save’ (P).

Once you have selected the Home Range you want to add the Nest Site to, a form with multiple tabs will appear to allow you to fill in the associated details for the new Nest Site. The ‘Main’ tab has a number of compulsory fields indicated with a red asterisk. The contents required by each field should be relatively intuitive but note for some an extended description is available if you hover your mouse cursor over blue ‘?’ symbol. Once you have completed the details click the ‘Save changes’ (Q) button.

You can change these values at any time by selecting a location either in the Table View or Map View and choosing ‘View/Edit Details’ when existing Nest Sites are chosen (see 3.2.1.2.1 for more detail.)

More detail of the information required on each tab of the form is provided below.
**Nest Site name and code:**

<table>
<thead>
<tr>
<th>Main</th>
<th>Nest Site name and code</th>
<th>Spatial Details</th>
<th>Share location</th>
<th>Habitat</th>
<th>Nest Site Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name</td>
<td>Location Code</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SRMS Code</td>
<td>Home Range monitored previously</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here you can assign a ‘Name’ and a ‘Location Code’ of your choosing.

Location Code is a compulsory field within the database. In case you are struggling to immediately identify the most suitable code to use, you will be presented with a suggested Location Code that can be over-written later by you or others with appropriate permissions operating in the same account.

A ‘SRMS code’ will be assigned to every Nest Site by the Scheme, and this will not be editable by users. You have also an opportunity to add any additional comments (for example, about how to approach the location for monitoring purposes) and to record whether any monitoring may have taken place at the Nest Site previously. If you choose this, you will be given an option to fill in the code/name that the Nest Site may have been referred to in the past, which will help SRMS to make the link to any records that may exist in the database already for this Nest Site.

For species that may have alternative Nest Sites used by a pair in different years, you may add multiple Nest Sites into a particular Home Range. You may do this either for a species such as Golden Eagle where there may be small number of traditional sites within a pair’s Home Range or for a species that is less restricted to using precisely the same Nest Site every year but nonetheless will essentially occupy the same patch of moorland or forest each year such as Merlin or Sparrowhawk. Please remember to account for this in your coding. Alternate Nest Sites within one Home Range should ideally be indicated with a letter (e.g. WTE01a, WTE01b etc.) indicating that they belong to the same pair of birds.

**SRSG members**

It may be pertinent to liaise with the relevant Species Coordinator or your branch Chair over new location names or codes to provide some regional consistency in naming protocols.
Spatial Details:

When a location has been created directly via Map View these values will typically be auto-populated. Here you will see the precise location of the Nest Site, and a confirmation of the SRMS region under which this Nest Site falls (if the Nest Site crosses a SRMS sub-region border you can select the most appropriate one). The ‘Added to Home Range’ field specifies either the Home Range you have selected to add your Nest Site to or specify that it will be added into a new Home Range created by SRMS Online.

Share location:

Here you can manage who the Nest Site is visible to in the Operating Group you are operating as (if applicable). See 3.4 for more detail.
Habitat:

Here you can record the habitat surrounding the Nest Site. ‘Primary Habitat’ refers to the predominant habitat in the immediate vicinity of the Nest Site, whereas ‘Secondary Habitat’ is the one attached to or surrounding this. You can also record any observed ‘Management Activities’.

Nest Site Details:
Here you may record any additional information about the Nest Site, such as the type and height.

### 3.3.3.2 Managing Nest Sites

**Important note....**

Unless otherwise indicated as part of your SRMS Registration Form, for those who have contributed data towards SRMS in the past, Nest Sites that you have monitored previously should have been preloaded onto your account. **This is an excellent opportunity to check and update the attributes of each Nest Site to make sure these are appropriate allowing consistency when it comes to adding visit data against these locations going forward.**

Once you have a Nest Site saved, you can manage it through interacting with the drop-down ‘Options’ menu (R) in the first column of the table.

You have four options relating to managing the location:

- View/Edit Details
- Change Location Type
- Show on Map
- Delete
3.3.3.2.1 View/ Edit Details

Selecting this option will bring you back to the ‘Nest Site’ form and should display and allow you to edit the details. If you want to edit the details in any of the tabs, you will first have to choose the blue ‘Edit details’ (S) button.

3.3.3.2.2 Change Location Type

You may have reason to change the Location Type from a Nest Site to an Observation Site, for example if a Nest Site was created in error. You can make this change by click on the blue ‘Observation Site’ button.
Managing Locations - Table View

3.3.3.2.3 Show on Map

You can use the ‘Show on Map’ button to be taken through to Map View, where you will be zoomed in to the relevant location.

3.3.3.2.4 Delete

Unless duplicates have been generated as part of the preloading process, deleting Nest Sites should be avoided, as you will lose the attached information for the Nest Site which may become useful in the future. You can also only delete Nest Sites that have no monitoring data recorded against them. If you are no longer monitoring a Nest Site and would like to make your Map View and Table View less busy, please refer to 3.5.1 for details on how to archive locations.

3.3.4 Creating and managing Observation Sites

An Observation Site is the position of the sighting (e.g. the place that you observe a pair of birds displaying) rather than where you are standing when you make the observation (i.e. a vantage point).

Raptor Patch volunteers

As you are getting to grips with your Raptor Patch, particularly in the first few years, you should be working towards establishing the number of occupied territories of your chosen species in your Raptor Patch. You will almost certainly not find all the occupied territories in your first year and it may be several seasons before you are able to pin down Nest Site locations. The functionality described below will be helpful to you as you are likely to want to collect up a series of observations on your map (each observation saved as a separate Observation Site location), which may ultimately help you pin down the specific locations of nesting attempts.

3.3.4.1 Creating an ‘Observation Site’

Click on the ‘Observation Site’ button (T) in the ‘Add Locations’ drop-down in the toolbar (A)

This will bring up a simple form in which you can enter either a grid reference or a Latitude/Longitude that pinpoints your Observation Site.
Upon clicking continue (U), you will be prompted to select the Home Range (see 3.3.2) you would like to add your Observation Site to.

If there are any Home Ranges already in the database, that cover this area, these will be listed in the drop-down menu. If you do not remember the Home Range code by heart, you can click on the ‘Find by Nest Site’ button (V).

Alternatively, you can add your Observation Site to a new Home Range by clicking ‘Create new Home Range’ (W).

SRMS Online will automatically, ‘behind the scenes’ define the extent of a Home Range for each Observation Site, the size of which is species specific.

- **4 km x 4 km:**
  Marsh Harrier, Hen Harrier, Buzzard, Barn Owl, Tawny Owl, Little Owl, Long-eared Owl & Short-eared Owl.

- **10 km x 10 km:**
  Honey-buzzard, Sparrowhawk, Goshawk, Red Kite, Kestrel, Merlin, Hobby, Peregrine & Raven.

- **20 km x 20 km:**
  Osprey, Golden Eagle & White-tailed Eagle.

You can review the list of all Home Ranges and their associated Nest Site or Observation Sites in the Table View.
Once you have selected the Home Range you want to add the Observation Site to, a form with multiple tabs will appear to allow you to fill in the associated details for the new Observation Site. The ‘Main’ tab has a number of compulsory fields indicated with a red asterisk. The contents required by each field should be relatively intuitive but note for some an extended description is available if you hover your mouse cursor over blue ‘?’ symbol. Once you have completed the details click the ‘Save changes’ (X) button.

You can change these values at any time by selecting a location either in the Table View or Map View and choosing ‘View/Edit Details’ when existing Observation Sites are chosen (see 3.2.3.2 for more detail.)

More detail of the information required on each tab of the form is provided below.

**Observation Site name and code:**
This form will allow you to define a Name and a Location Code of your own format. A SRMS code will be assigned to every Observation Site by the Scheme, and this will not be editable by users.

We would recommend that you adopt a Location Code system based on the species, person making the observation and the date. e.g. BZ_SRMC_12Apr2021 (a Location Code for a Buzzard observation made by the Scottish Raptor Monitoring Coordinator on 12th April 2021).

SRSG members
It may be pertinent to liaise with the relevant Species Coordinator or your branch Chair over new location names or codes to provide some regional consistency in naming protocols.

Spatial Details:

Here you will see the precise location of the Observation Site, and a confirmation of the SRMS region under which this Observation Site falls (if the Observation Site crosses a SRMS sub-region border you can select the most appropriate
Managing Locations - Table View

one). The ‘Added to Home Range’ field specifies either the Home Range you have selected to add your Observation Site to or specify that it will be added into a new Home Range created by SRMS Online.

Share Location:

<table>
<thead>
<tr>
<th>Main *</th>
<th>Observation Site name and code</th>
<th>Spatial Details</th>
<th>Share location</th>
<th>Habitat</th>
</tr>
</thead>
</table>

This location is currently only visible to selected group members.

Group Permissions *

Selected Group Members

Group Member Permissions

The group members that have been granted view permission on this site are displayed below. Note that group Owners, Deputies and the site creator will always have access to this site.

Demonstrator SRMC

Here you can manage who the Observation Site is visible to in the Operating Group you are operating as (if applicable). See 3.4 for more detail.

Habitat:

<table>
<thead>
<tr>
<th>Map View</th>
</tr>
</thead>
</table>

Here you can record the habitat surrounding the Observation Site. ‘Primary Habitat’ refers to the predominant habitat in the immediate vicinity of the Observation Site, whereas ‘Secondary Habitat’ is the one attached to or surrounding this. You can also record any observed ‘Management Activities’.

3.3.4.2 Managing Observation Sites

Once you have an Observation Site saved, you can manage it through interacting with the drop-down ‘Options’ menu (Y) in the first column of the table.

You have four options relating to managing the location:
Managing Locations - Table View

- View/Edit Details
- Change Location Type
- Show on Map
- Delete

### 3.3.4.2.1 View/ Edit Details

Selecting this option will bring you back to the ‘Observation Site’ form and should display and allow you to edit the details. If you want to edit the details in any of the tabs, you will first have to choose the blue ‘Edit details’ (AE) button.

#### Update Observation Site

<table>
<thead>
<tr>
<th>Main</th>
<th>Observation Site name and code</th>
<th>Spatial Details</th>
<th>Share location</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name: Edradour Wood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location Code: BZ_198ep2023</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grid Reference: NN5557</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SRMS region/sub-region: Perth &amp; Kinross</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary Habitat: Other - Unknown</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AE

#### 3.3.4.2.2 Change Location Type

You may have reason to change the Location Type from an Observation Site to a Nest Site, for example if an Observation Site was created in error. You can make this change by click on the blue ‘Nest Site’ button.
3.3.5 Creating & Managing Study Areas

When you log in to SRMS Online for the first time you should define the extent of your Study Area(s) using Map View. The SRMS defines a Study Area as a discreet geographical area that should receive complete coverage from one year to the next. Such monitoring is most valuable to the SRMS as it allows us to more readily keep track and report on the health of our raptor populations.

If you do not consider that your monitoring currently constitutes a study per se as described above, but rather, you have a less targeted approach to your monitoring, we would encourage you to consider consolidating your raptor monitoring into a Study Area(s) and adopting an approach resembling that of the Raptor Patch. If this would be something you would consider doing and would appreciate assistance with establishing, please don’t hesitate to get in touch with the SRMC.

3.3.5.1 Creating a Study Area

A given Study Area has an associated geographic extent that represents the area you survey and will be used for recording fieldwork effort (in development). When defining Study Areas:

- You should define multiple non-overlapping Study Areas, if your fieldwork covers two or more distinct geographic areas.
- You should define what species you are monitoring within your Study Area. This will allow us to record different extent of coverage and monitoring effort for different species.
- You should also define ‘Start Date’ (and ‘End Date’, if your study ends) when you have monitored this area for the particular species. This can be done via the ‘Record Species Monitored’ quick link to the left of the map.

You can define Study Areas in the Table View, just like in Map View. Considering that you are trying to draw a polygon here, it’s likely that creating a Study Area this way is only relevant if your Study Area has been defined to follow grid lines, so creating a Study Area in the Table View, would allow you to for example define a four figure (i.e. 1 km) grid square as a Study Area as in the example below.

In Table View (both under ‘Locations’ and ‘SRMS Home Ranges’), click on the ‘Study Area’ button (U) in the ‘Add Locations’ drop-down in the toolbar (A) above the map will bring up a simple form, in which you can enter either a grid reference or a Latitude/Longitude.
Enter one OR the other and then click the ‘Continue’ button (V). You may enter up to a 10-digit grid reference.

Clicking continue will bring up the same form as when using Map View into which you will enter the details of your Study Area. You will need to provide compulsory information, indicated by the asterisk (e.g. Location Code), and then click ‘Save’ (W) and exit.
Your Study Area, labelled with the name and code you had given it, will now be visible in green in your Map View and found under ‘Locations’ (3.3.1) in your Table View.

### 3.3.5.2 Managing Study Areas

Once you have Study Area saved, you can manage it through interacting with the drop-down ‘Options’ menu (X) in the first column of the table.

You have five options relating to managing the location:

**Add Effort Recording**
- Add Effort Recording
- Record Species Monitored
- View/Edit Details
- Show on Map
- Delete
3.3.5.2.1 Add Effort Recording

This will take you through to a form enabling you to complete a New Daily Summary every time you visit your Study Area to let us know the approximate number of hours you have spent searching for active territories or nests within your Study Area as well as the weather conditions. For more information, please see 4.2.2.

3.3.5.2.2 Record Species Monitored

This will bring you to the following pop-up window. You can click ‘Add Row’ (Y) for each species, and the period that you have monitored for them. Note that if monitoring is ongoing you can leave the ‘End Date’ field empty. In case there are gaps in your monitoring, you should record these periods separately. Click ‘Update’ to save your edits. It’s worthwhile keeping this up to date on an annual basis.

![Study Area Species Monitoring](image)

3.3.5.2.3 View/Edit Details

This will take you back into the same Study Area form that you filled in when first creating the Study Area, allowing you to make modifications once you have clicked on the blue “Edit Details” button in the bottom right-hand corner (Z).
3.3.5.2.4 Deleting a Study Area

This should really be avoided. Instead, if you retire from monitoring of a specific Study Area completely, let’s say if you move away, we would prefer you to archive your Study Area, for potential future use. Please refer to 3.5.1 for details on how to archive Locations, including Study Areas. Ahead of archiving ensure that you record an End Date for your study (see 3.2.3.2.2).

3.3.5.2.5 Editing the Location of a Study Area

Unlike in Map View, there is no ‘Edit Positioning’ option, when you select/highlight a location in the Table View. Instead, this can be done under the ‘Spatial Details’ tab on the Update Study Area form. Click the blue ‘Edit Details’ (AA) button on the top right corner of the ‘Spatial Details’ tab then select the new Grid Reference to reposition the Study Area. Click ‘Save’ to save the updated location for the selected Study Area.

In reality, it’s quite unlikely that you would ever edit the spatial details of a Study Area in the Table View. The only relevant scenario really is, that when creating the Study Area in the Table View, you would have specified the wrong Grid Square, that you wanted to delineate as a Study Area.
3.3.6 Managing Home Ranges

While you should never edit the details of the Home Ranges, nor can you delete them, you may want to review their associated details, and view which locations fall under them, for your own use. These details should never be edited. When in the ‘SRMS Home Ranges’ view, select a Home Range and click ‘View/Edit details’ (AB) in the ‘Options’ menu in the first column of the table.

This will bring up the form listing the associated attributes for the Home Range/Location Group in question.
3.4 Sharing locations between users and accounts

SRMS Online provisions access to visit data via the location it is attached to, which is why, if you want to provide someone else the privilege to view or even edit your records, you will need to share your locations with them. All locations within SRMS Online are automatically flagged as sensitive and thus only visible to you, meaning that if you want to grant access to someone or to a group of people this needs to be set up. Remember, however, that if you monitor a location in collaboration with someone else, visits to this site should be recorded only under one account (whether individual or a group), as records you add for a location, will not automatically appear on other people’s accounts.

Important note....
Permissions on each individual location are managed separately. This means that if you are trying to share a Home Range location and each of the components (Nest Sites and Observation Sites) within it, then you will need to share every location in turn - any Nest Sites, Observation Sites and also the overarching Home Range. If the intention is for the person you are sharing the location (e.g. Nest Site) with to be able to enter visit data against the shared location, then it is of paramount importance that you ensure that you have shared the Home Range location with them too, so that they are able to enter data within the Visit Log.

3.4.1 Transferring locations into Group Accounts

When you get added into a Group Account by the Principal or the Deputy of a group, or get granted access to the account of an individual, this does not mean that your locations are automatically transferred over to the other account. To protect the sensitive nature of these locations they will need to be transferred separately. This will allow each SRMS Online user to make the decisions surrounding the sharing of the information on their survey locations and their associated data when it comes to working within Operating Groups. There are two ways of transferring your locations from your personal account into a Group Account (or any other account for that matter). This can either be done as a ‘bulk’ transfer by SRMS staff or location by location by you, by ‘cloning’ (see 3.5.4) your locations into a different account. If you would like assistance with a bulk transfer then please contact the SRMC.

SRSG members

Where you have returned a SRMS Registration form to us and indicated that you were happy for your locations to be preloaded and editable by the relevant Species Coordinator and Chair within your branch, your locations will have automatically been preloaded into the most appropriate SRSG Operating Group accounts from the outset based on your previous submissions to the SRMS.

If you have not yet returned a completed a SRMS Registration Form to the SRMS or set up a SRMS Online account with the SRMS none of your Locations will have been pre-loaded to SRMS Online (with the exception of locations shared with another SRMS Online user already). Your locations will be automatically preloaded into the most appropriate SRSG Operating Group accounts as part of your SRMS Online account setup.

If you are a new SRSG member but are an existing SRMS Online contributor, please get in touch so that we can ‘bulk’ transfer your locations from your individual account into the most appropriate SRSG Operating Group accounts.
Managing Locations - Sharing locations between users and accounts

Important note….
Once a location has been transferred into a Group Account it essentially becomes property of this account, meaning that the Principal and Deputy have the ability to provision access to a location and its associated data for anyone in the group (see 3.4.1.1) also, any edits made to the existing or the sites cloned into the Group Account will not be reflected in either direction from that point onwards, but are seen as two separate physical entities by SRMS Online, with the same details.

3.4.1.1 Location Sharing/Viewing Privileges within Group Accounts

Once you have transferred locations into a Group Account, while they are automatically visible to the Principal and the Deputy, you may also choose to share your locations with other members in the group, such as people you work with locally. Then, depending on the permission level that you agree to, these individuals may also be able to edit any data you input within the Group Account, or add data on your behalf within the group. You can do this by choosing a location either in the Table View or the Map View and selecting the ‘View/Edit Details’ button in the ‘Options’ menu in the first column of the table (from Table View) or via the floating panel (from Map View). On the ‘Share location’ tab you can select the blue ‘Edit details’ button (A).

Here, on the ‘Group Permissions’ drop-down, you will be able to either select ‘All Group Members’ or ‘Selected Group Members’. If you select the latter, clicking in the box (B) will bring up a list of everyone in the Group Account you can choose from to grant them access to the site. Click ‘Save changes’ (C) to save the new permission settings. Note that you can alter these settings at any time.
### Managing Locations - Sharing locations between users and accounts

#### Update Nest Site

<table>
<thead>
<tr>
<th>Main</th>
<th>Nest Site name and code</th>
<th>Spatial Details</th>
<th>Share location</th>
<th>Habitat</th>
<th>Nest Site Details</th>
</tr>
</thead>
</table>

This location is currently only visible to selected group members.

**Group Permissions**
- Selected Group Members

**Group Member Permissions**
- The group members that have been granted view permission on this site are displayed below. 

---

**Important note...**

If you select to share a location to ‘All Group Members’, note that this function is dynamic, and will thus include everyone that will be added into the Group Account in the future as well as those who currently have access.

---

### SRSG members

In relation to the SRSG Operating Group accounts, for locations that have been preloaded to SRMS Online, the SRMS ensured that each locations was visible to the relevant ‘Selected Group Members’ of each account based on data submissions to the SRMS from 2003 onwards.

Within each group account you have been given access to you will be able to view those locations (and other locations believed to be within the same home range) that you have been responsible for monitoring up to and including the most recent year for which data are available.

Within each group account you have been given access to you will be able to edit those locations (and other locations believed to be within the same home range) where you have been conferred ‘Site Creator’ status as part of the pre-loading process. You will have been assigned ‘Site Creator’ for any location where you have been a data contributor for that location based on records received at the SRMS up to the most recent year for which data are available.

As you create new locations within the group account, you will automatically assume ‘Site Creator’ status for them which means that you can edit the details, including sharing view access to the locations with other members of the Group account in the way described above.

### 3.4.2 Provisioning access to Individual Accounts

This works largely along the same pathway as with Group Accounts. When you have granted someone (i.e. their Operating Group) access to your account, this does not mean that your locations and their associated data are automatically visible to them, but to protect the sensitive nature of these locations, they will need to be shared separately. This will allow each SRMS Online user to make the decisions surrounding the sharing of the information on their survey locations and their associated data when it comes to working within Operating Groups.
Managing Locations - Sharing locations between users and accounts

There are two ways of transferring your locations from your personal account into a Group Account (or any other account for that matter). This can either be done as a ‘bulk’ transfer by SRMS staff or location by location by you, by ‘cloning’ (see 3.5.4) your locations into a different account. If you would like assistance with a bulk transfer then please contact the SRMC.

3.4.2.1 Sharing Locations for those Operating Groups who can ‘Operate as’ you

Once you have granted access to someone to your account, they can ‘Operate as’ you but need to have ability to view locations you have on your account. You can do this by choosing a location either in the Table View or the Map View and selecting the ‘View/Edit Details’ in the ‘Options’ menu in the first column of the table (from Table View) or via the floating panel (from Map View). On the ‘Share location’ tab you can select the blue ‘Edit details’ button (D).

Here, on the ‘Group Permissions’ drop-down, you will be able to either select ‘All Group Members’ or ‘Selected Group Members’. If you select the latter, clicking in the box (E) will bring up a list of everyone in the Group Account you can choose from to grant them access to the site. Click ‘Save changes’ (F) to save the new permission settings. Note that you can alter these settings at any time.
If you select to share a location to ‘All Group Members’, note that this function is dynamic, and will thus include everyone that will be added into the Group Account in the future as well as those who currently have access.
3.5 Advanced Tools

This area provides you with extra tools, which are unlikely to be used regularly. You can find the orange ‘Advanced Tools’ button available in the top right corner of both the Map View (A) and Table View (B).

Only one tool is currently available on SRMS Online, however, a number of other tools are also in development. To use any of these, select the ‘Use Tool’ button (C).
3.5.1 Archive locations

This tool allows you essentially to maintain a location that you have on your account, but to make it visible or invisible to your Map View and Table View. This could be an especially useful tool if you have a number of preloaded historic sites that you have not visited in a long time and/or when your Map View and Table View become cluttered. It’s still important, however, to keep a record of these locations, as they could be revisited either by you or someone else in the future.

You should have all your Nest Sites, Observation Sites and Study Areas listed here. You can either ‘Archive’ or ‘Activate’ (i.e. unarchive) them by choosing the appropriate options at the end of each row (D). There is no need to save these selections separately; instead, you can simply go back to Map View or Table View, by selecting the blue ‘Return’ button (E).
SRSG members

In the context of SRSG operating groups then it is likely to be most appropriate for the account Principal or Deputy to take the lead on coordinating any archiving activity – whoever archives the location will have archived it for all members of the account who were able to see it on the Map previously.

It is possible that archiving may have a place in refining the locations that have been pre-loaded on SRMS Online on behalf SRSG. What Principals and Deputies should ultimately be aiming to have displaying/listed in Map View/Table View for each group account is a complete list of Nest Sites which reflect true positions of the Nest Sites that have been monitored in the past and continue to be monitored today. What the SRMS has attempted to do by pre-loading the locations is to give SRSG Chairs & Species Coordinators a helpful basis to start from in organising their definitive collection of locations.

For raptor species that are more fluid in their Nest Site locations from one year to the next (for example, ground nesters) you will likely have very little (if any) refining to do as each location displayed/listed is more likely a true representation of the position of the nest in that year. For these species, you are more likely to be creating a new Nest Site location each year and in any given year we would be envisaging that you would just be reporting back on the current breeding seasons Nest Site location. For such species, you may wish to consider archiving some of the older Nest Site locations to make Map View less cluttered.

For raptor species that have more fixed Nest Site locations from one year to the next (for example, some of the crag and tree nesters, for example) then we would be envisaging that you would report back on every single displayed/listed Nest Site from one year to the next, so the list of Locations that you have displaying in Map View/listed in Table View will all be relevant to monitoring now and in the future. For such location archiving is likely to be inappropriate.

3.5.2 Remove duplicates

In development.

3.5.3 Concede edit rights of locations

In development.

3.5.4 Clone locations to another account

In development.

3.5.5 SRMS Home Range re-assignment

In development.
4 Effort Recording

One of the main areas of SRMS work is to produce trends in breeding numbers (e.g., proportion of home ranges occupied by pairs & number of breeding pairs) and productivity (e.g., proportion of breeding pairs successfully fledging at least one offspring & mean number of young fledged per successful pair) at a national, regional (SRMS Regions & NHZ’s) and local (Study Area) level. We can only produce robust trends, however, by taking into account any changes in survey effort or coverage that may have occurred through time. In order to be able to produce trends in numbers of breeding pairs in a particular geographical area, coverage needs to be as comprehensive as possible (most or all breeding pairs detected) and consistent across years.
4.2 Study Area Effort Recording

Please use this area of SRMS Online to record your Study Area(s) and document changes in your survey effort and coverage within them each year.

*Raptor Patch volunteers*

Your registered *Raptor Patch* boundary should be created and managed as a Study Area.

Your Study Area(s) should as far as reasonably possible represent areas that receive consistent and comprehensive coverage in most years. When we refer to comprehensive coverage we mean that if a pair was breeding within the Study Area you would detect it such that in each year you can say that you have confidently found the majority of breeding pairs within your Study Area. Large areas which are seldom visited, whether because you consider them unsuitable for your study species or for any other reason, should not be included within your Study Area boundary.

Here we provide you with the tools to tell us how the coverage and survey effort within your Study Area(s) varies from one year to the next. This information will allow the SRMS to more confidently use your data to inform local, regional and national trends.

‘Study Area Effort Recording’ can be accessed from the ‘Effort Recording’ (A) menu tab on the navigation panel (available from anywhere in the application) or the ‘Effort Recording’ (B) quick link (available on the ‘Home’ page), both of which will bring you to the Study Area Effort Recoding page.

![SRMS Data Home](image)

From the Study Area Effort Recording page, you can choose whether to complete a ‘New annual summary’ (C) or a ‘New daily summary’ (D). Once you have completed a summary it will be listed in the table (E).
Study Area Effort Recording

Please use this area of SRMS Online to record your Study Area(s) and document changes in your survey effort and coverage within them each year.

Below is your list of Study Areas. Please review your Study Area boundaries at the end of the breeding season and confirm that the area shown received consistent and compressive coverage. New Study Areas can be added through Location Management.

You are required to complete a New Annual Summary at the end of every breeding season to let us know the approximate number of hours you have spent searching for active territories or nests within your Study Area.

You may also wish to complete a New Daily Summary every time you visit your Study Area to let us know the approximate number of hours you have spent searching for active territories or nests within your Study Area as well as the weather conditions.

<table>
<thead>
<tr>
<th>Location</th>
<th>Record type</th>
<th>Start</th>
<th>End</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter...</td>
<td>Filter...</td>
<td>Filter...</td>
<td>Filter...</td>
<td>Filter...</td>
</tr>
</tbody>
</table>

No data available in table
4.2.1 New Annual summary

Please complete a New Annual Summary at the end of every breeding season to let us know the approximate number of hours you have spent searching for active territories or nests within your Study Area. If you click on the ‘New Annual summary’ button you will be brought to the following view. There are several compulsory fields (indicated with red asterisks) which must be completed in order to save the summary.

- Location – any Study Areas that you have created via Map View or Table View should be available for selection in the drop-down (A).
- Start date – the first date you visited your Study Area to undertake monitoring during the current breeding season (B).
- End date – the last date you visited your Study Area to undertake monitoring during the current breeding season (C).
- Species – select your focal study species (D).

Please let us know the approximate number of hours you have spent searching for active territories or nests (E). Use the coverage comments box (F) to let us know anything noteworthy about your monitoring coverage for the current season. You can use the Spatial coverage box to let us know your estimated percentage of suitable breeding habitat that you were able to monitor over the course of the season (G) and let us know your estimated number of pairs occupying your Study Area (H).

Once you have inputted all the relevant information you can click on the green ‘Save changes’ button (I) and the information that you have provided should appear in the table on the Study Area Effort Recording page.
4.2.2 New Daily summary

We would strongly encourage you to complete a New Daily Summary every time you visit your Study Area to let us know the approximate number of hours you have spent searching for active territories or nests within your Study Area as well as the weather conditions.

If you click on the ‘New Daily summary’ button you will be brought to the following view. There are several compulsory fields to complete (indicated with red asterisks) which must be completed in order to save the summary.

- Location – any Study Areas that you have created via Map View or Table View should be available for selection in the drop-down (A).
- Date – the date you visited your Study Area (B).
- Start time – the time you started your monitoring within your Study Area (C).
- End time – the time you finished your monitoring within your Study Area (D).
- Species – select your focal study species (E).

Please let us know the approximate number of hours you have spent searching for active territories or nests on this visit (F). Use the coverage comments box (G) to let us know anything noteworthy about your monitoring coverage on this visit. You can use let us know your estimated number of pairs occupying your Study Area on this visit (H) and let us know the weather conditions (I) during you visit and the extent to which you believe that they impacted your monitoring (J).

Once you have inputted all the relevant information you can click on the green ‘Save changes’ button (K) and the information that you have provided should appear in the table on the Study Area Effort Recording page.
5 Explore Visit Data

If you want to explore the records you have saved in SRMS Online, or to add a visit into an ‘ongoing’ Visit Log, there are several alternative, but similar, routes through which you will be able to explore, report and extract your data for your own use. They will bring you to the database of your records, which you can explore, where you can extract and eventually report on your data.

You can either use the ‘Explore Visit Data’ (A) link on the ‘Home’ page or select the ‘Explore Visit Data’ (B) menu tab.
5.1 Using the Search/Edit Filters

Clicking any of the two options above will bring you to the ‘Explore Visit Data’ form below. This provides you with ‘Search/Edit Filters’ where you can enter appropriate values into filter boxes to narrow down the list of Visit Logs that will be retrieved for viewing, adding visits or editing existing information. Be aware that the more filter boxes you populate the longer the search will take as the query sent to the secure SRMS database server will increase in complexity and a slight lag is always to be expected. Counter to this, the fewer visit records the filter returns the faster they will download from the database server.

The ‘Search/Edit Filters’ offers various options for filtering your data. Optionally, enter values in the various boxes to narrow down your search before clicking the blue ‘Search’ (A) button.

The time taken to retrieve data from the central database depends on a number of factors, and is not solely a result of your internet download speed. More importantly it is the current load on the servers that host the central SRMS database and quantity of your data, and local processor speed and ‘load’ on your own device at the time of download. As the data once retrieved is temporarily stored on your own device, unless you have thousands of records to filter, you may well find it more efficient to retrieve all your data in the first instance and then filter the results (see: ‘Filtering Results’).
5.2 The ‘Explore Visit Data’ display

Once you have conducted a search under the ‘Search/Edit Filters’ tab, your results will be displayed on the ‘Results’ (A) tab.

Here you can view all your data, change the number of entries (B) that are displayed on the screen at one time and travel between the different pages (C). Here you will see listed each Visit Log you have, which you can click open to view and add individual visits. Individual observations automatically are given ‘Obs’ as their Visit Log Code, in order to distinguish them from the rest of the logs. Each log or individual observation on the list is given a colour based on the outcome of the record(s), which is based on the status codes you have given in your visit records (D).

5.2.1 Filtering Visit Data

As mentioned above, regardless of whether you have already used the Search/Edit filter to narrow down the list of your visit records, once the list has been retrieved, you can narrow down and sort the resulting list using the filter and sort options available in the Results table. Using this approach has advantages over flipping back and forth to use the Search/Edit filter because the Search/Edit filter will send a new query to the servers and then you’ll have to wait for the data to be downloaded and displayed each time. Filtering on the Results table does not involve any interaction with the servers as all the data have already been downloaded into your device’s memory/storage so is just a case of refreshing the screen to show the subset. The means of filtering from the ‘Results’ tab uses the same method as described for filtering sites in Table View.

Typing any sequence of characters in the filter field (E) below the column header will restrict the list to those entries that contain a matching string of characters in that field. You can also filter on multiple fields to narrow down the list further.
**Visit Log Number:** a running number SRMS Online automatically assigns to new logs.

**Visit Log Code:** This is the voluntary code you may have given to the particular Visit Log. Here it may assist you with finding the particular log and its associated visit records. Observation records are identified as ‘Obs’ here automatically.

**Species:** The species the records refer to.

**Year:** Year the first visit of the Visit Log took place

**Location Code & Location Name:** This refers to the Home Range that the visits took place in.

**Grid Reference:** This refers to the Grid Square that the Home Range in questions falls under.

**Outcome:** Here you can see the status codes that defines the log for the breeding attempt under one of the outcome categories (Success/Failure/Not Occupied/Unknown), which determines the colour of the row.

**Visits:** The number of visits undertaken to this Home Range that comprise the Visit Log.

**Nest Sites:** A list of relevant Nest Sites based on user names.

**Nest Site grid refs:** A list of relevant Nest Site grid refs.

**Chicks fledged:**

**Observers:**

**SRMS Region:**

**SRMS Sub-Region**

**Reason for Failure**

**Evidence for Failure**

**Occupancy**

**Outcome**

**Last visited date**

### 5.2.1.1 SQL Filter

More advanced queries can also be constructed using the ‘Advanced SQL filter’ which can be turned on/off via the ‘Settings’ (F) button (top right of screen). Display of the ‘Advanced SQL filter’ can be turned on/off by ticking the check-box (G) (bottom left of ‘Settings’ box).

Click ‘Settings’ again to collapse the Settings box and reveal the ‘Advanced SQL filter’ now displayed in the ‘actions’ box.
If you are familiar with SQL you can type the query directly into the lower box. Otherwise you can use the drop-down selectors in the query builder to add (+) one clause at a time to build the query. Click ‘Search’ once the query is complete.

Some simple examples...
- `species_name='Golden Eagle'`
- `species_name like '%Eagle'`
- `year=2018 and species_name in ('Barn Owl','Tawny Owl','Short-eared Owl')`
- `outcome='Unfinished' and year<2018`

Note
- Values for a character field must be enclosed in single quotes.
- Values are case-sensitive.
- % is a wildcard.
- Any fields in the table of results can be used in the query.

The given example is deliberately simple and the same could be easily achieved using the column-head filter. However, it is possible to construct extremely complex queries using the Advanced SQL filter should you wish to do so.

5.2.2 Viewing records and adding visits to existing Visit Logs

Clicking on a given row with the mouse pointer will open that particular Visit Log in a pop-up edit window. If you want to explore several logs at once, you can use the tick-boxes (H) at the beginning of each row. The blue buttons at the top allow you to select or unselect all logs on the current page (I). Once you have selected Visit Logs, you will see that the view in ‘actions’ box (J) will change accordingly and give you the number of logs selected and the ability to either ‘View HR logs’ or ‘Delete HR logs’ in bulk.
Here you can see all the visits conducted to this Home Range and thus recorded under this particular Visit Log.

Under ‘Settings’ (K) to the top right, you can alter the order these are stacked on top of each other, the default is for the newest records to be at the top. You can add new visits or edit existing data as described previously under Data Entry (see 4.1.5). Note that to the top left (L) you can travel between the Visit Logs.

If you want to display all the information attached to the Home Range and Visit Log, click ‘Show full nest record data’ (M). If you need to edit the details associated with the Home Range, such as the habitat details, you can do this by selecting ‘Edit Visit Log’ (N), which can also be accessed in the previous view (O).
6 Data Export and Reporting

If you want to export any of your data out of SRMS Online, you can do this under ‘Explore Visit Data’. Here you can export a Comma Separated Values (CSV) text file containing a row for every visit for all the Visit Logs and Observations that you have in the currently filtered set of results. CSV files will automatically open in any spreadsheet application e.g. MS Excel, Apple iWorks Numbers, Google Sheets (free), OpenOffice Calc (free). Any statistical software package should also import data in CSV format.

To do so, click on the ‘Export all’ (A) button in the ‘actions’ box.

You will be prompted to provide a file name. Click ‘OK’ (B) to save, after which you will find the file in your ‘Downloads’ folder on your computer. It’s good practice to give the file a meaningful name which includes the date it was downloaded.
6.1 Cross Tabulations

It is also possible to obtain some simple cross-tabulation statistics within SRMS Online. This could, for example, be a breakdown of outcomes by species. This can also be found in the ‘actions’ box and is called ‘Crosstab Results’ (A).

Clicking the drop-down will reveal a number of options, offering you the choice of using:

- with visits.
- without visits.

Clicking one of the options will open a new browser window.

Clicking in either the ‘Row fields’ or the ‘Column fields’ will give you a drop-down list of available fields.

As you select fields, the results of the cross-tabulation will be displayed in a table below. You can include multiple fields as rows or columns by repeat use of the drop-down.

You can export the table as a CSV file (B) which can then be opened in any spreadsheet application or used to create a similar table in a word processor.
6.2 Reports

It is possible to export data in a range of standard formats. Reports can be accessed from the ‘Reports’ (A) menu tab on the navigation panel (available from anywhere in the application).

![SRMS Data Home](image)

One or more reports may be available to you depending on which account you are ‘operating as’ at any one time. To access any of these reports, click on the ‘Run’ button (B) at the end of the relevant row.

### 6.2.1 SRMS Reporting Spreadsheet

This report outputs SRMS Online data into an annual summary compatible with the previous SRMS spreadsheet.

This report is accessible to you no matter which account you are ‘operating as’.

You are able to filter the data by Start Year, End Year and Species (C) prior to export. You can then choose to ‘View Results Table’ (D) to view the extracted data in a new browser window or ‘Export to CSV’ (E) which will export the table as a CSV file which can then be opened in any spreadsheet application or used to create a similar table in a word processor. Having made your selections you can click on the ‘Run Report’ (F) button to proceed with the report generation.
6.2.2 Historic data for users

This report retrieves all your historic records held by the SRMS from the SRMS Legacy Data Portal (the portal through which SRMS data are currently shared with SRMS partners), based on your name appearing in submissions received at the Scheme from 2003 onwards.

This report is ONLY accessible to you when you are ‘operating as’ your individual account.

You are able to filter the data by Region, Start Year, End Year and Species (G) prior to export. You can then choose to ‘View Results Table’ (H) to view the extracted data in a new browser window or ‘Export to CSV’ (I) which will export the table as a CSV file which can then be opened in any spreadsheet application or used to create a similar table in a word processor. Having made your selections you can click on the ‘Run Report’ (J) button to proceed with the report generation.
6.2.3 Historic data for SRMS sub-region

This report retrieves the historic records held by the SRMS for the SRMS sub-region(s) and species which you oversee for your SRSG branch. These records are not limited to SRSG submissions and include all records that have been submitted to the SRMS which can ONLY be used by SRSG for the uses specified in the SRMS Data Sharing & Use Policy.

**SRSG members**

This report is ONLY accessible to you if you are a SRSG branch Chairs or Species Coordinators ‘operating as’ the ‘operating group’ account that you oversee.

You are able to filter the data by Years (K) prior to export. You can then choose to ‘View Results Table’ (L) to view the extracted data in a new browser window or ‘Export to CSV’ (M) which will export the table as a CSV file which can then be opened in any spreadsheet application or used to create a similar table in a word processor. Having made your selections you can click on the ‘Run Report’ (N) button to proceed with the report generation.
Historic data for SRMS sub-region

Use the options below to filter the data included in the report.

Years

Export Option

☐ View Results Table
☐ Export to CSV

Note: if your query is expected to return a very large number of rows or columns it is advised you select the 'Export to CSV' option and use Excel (or equivalent) to view your results, as you may find the 'View Results Table' option less performant (depending on your system).

Cancel  Run Report
7 Annexe

7.1 SRMS Status Codes

The following is a list of the two-letter status codes available in SRMS Online together with a definition and some notes on their use. N.B. Status codes with an asterisk (*) indicate codes where it is possible to attach supplementary information upon saving. Once a visit row with one of these asterisked codes has been saved you can double click on the code and add additional detail.

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Definition</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territory</td>
<td>OS*</td>
<td>Signs territory is occupied</td>
<td>Let us know the field signs you have observed (e.g. plucking point, pellets, droppings, moulted feathers, down) and their age (e.g. fresh, old, unknown).</td>
</tr>
<tr>
<td>Territory</td>
<td>BS</td>
<td>Birds on territory</td>
<td></td>
</tr>
<tr>
<td>Territory</td>
<td>NS</td>
<td>No signs, no birds</td>
<td></td>
</tr>
<tr>
<td>NEST BUILDING – X.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nest presence or building</td>
<td>OE</td>
<td>Empty nest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NU</td>
<td>Nest appears old and isn't being used</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NR</td>
<td>Old nest replenished with new material</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N0</td>
<td>Nest Site empty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N1</td>
<td>Nest 1/4 built</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N2</td>
<td>Nest 1/2 built</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N3</td>
<td>Nest 3/4 built</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N4</td>
<td>Complete, unlined</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NL</td>
<td>Complete, lined</td>
<td>Some species line their nest with softer material than the rest of the nest. Many raptors line their nests with green leafy material.</td>
</tr>
<tr>
<td>ADULT ACTIVITY –</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recording the activity of</td>
<td>AK</td>
<td>Adult territorial singing/calling</td>
<td></td>
</tr>
<tr>
<td>adult birds at or near</td>
<td>AO</td>
<td>Adult displaying</td>
<td></td>
</tr>
<tr>
<td>the nest can be useful</td>
<td>AX</td>
<td>Adult alarming</td>
<td></td>
</tr>
<tr>
<td>when determining the</td>
<td>AG</td>
<td>Adult aggression/agitation behaviour</td>
<td></td>
</tr>
<tr>
<td>stage of the nest,</td>
<td>AB</td>
<td>Adult building nest or carrying nest material</td>
<td></td>
</tr>
<tr>
<td>particularly when the</td>
<td>AV*</td>
<td>Adults in vicinity of nest</td>
<td>Let us know the count, age and sex of any birds you observe.</td>
</tr>
<tr>
<td>contents cannot be seen</td>
<td>AN*</td>
<td>Adult on/at nest</td>
<td>Let us know the count, age and sex of any birds you observe.</td>
</tr>
<tr>
<td>(as in the case of a</td>
<td>AF</td>
<td>Adult feeding young at nest</td>
<td></td>
</tr>
<tr>
<td>species nesting high in</td>
<td>AT</td>
<td>Adult trapped at/near nest</td>
<td></td>
</tr>
<tr>
<td>a tree). For example, an</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adult sitting tight on the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nest implies that it</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contains eggs and/or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>young; and adults</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>regularly going to and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from the nest with food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>implies that young are</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI</td>
<td>Adult identified by colour mark at nest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP</td>
<td>Adult perched</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH</td>
<td>Adult hunting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD</td>
<td>Adult dead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PK</td>
<td>Pair territorial singing/calling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO</td>
<td>Pair displaying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>Food pass between pair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>Copulation activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PX</td>
<td>Pair alarming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG</td>
<td>Pair aggression/agitation behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PB</td>
<td>Pair building nest or carrying nest material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV</td>
<td>Pair in vicinity of nest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PN</td>
<td>Pair on/at nest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>Pair feeding young at nest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>Pair trapped at/near nest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>Pair identified by colour mark at nest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>Pair perched</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH</td>
<td>Pair hunting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD</td>
<td>Pair dead</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pair activity**

**Live eggs** — The following status codes should ONLY be used while nest building is still in progress.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Cold If the eggs can be easily reached, very carefully feel them to see if they are cold or warm. This will then tell us whether or not incubation has begun.</td>
</tr>
<tr>
<td>WA</td>
<td>Warm</td>
</tr>
<tr>
<td>UN</td>
<td>Uncovered Some species cover their eggs with material while they are away from the nest. Only record UN or CV for those species that are known to normally cover their eggs.</td>
</tr>
<tr>
<td>CV</td>
<td>Covered</td>
</tr>
<tr>
<td>FR</td>
<td>Fresh Freshness of eggs or the presence of a developing embryo can be assessed using the Water Test or by candling.</td>
</tr>
<tr>
<td>DE</td>
<td>Developing embryo present</td>
</tr>
<tr>
<td>HA</td>
<td>Hatching</td>
</tr>
<tr>
<td>PE</td>
<td>Pipping/calling from egg Some chicks call from within the egg for one to two days before hatching. Before the chick has broken through the shell, ‘starring’ of the shell occurs where the chick has cracked the shell from within.</td>
</tr>
</tbody>
</table>

**Live young** — The broods of some species (e.g. owls) normally have young at various stages of growth. The following status codes should ONLY be used to describe the age of the oldest chick. Status codes to describe the growth of younger birds may be recorded in the comments section.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Naked The egg tooth is a horny bump on the upper side of the beak that is used by nestlings to break through the shell and out of the egg.</td>
</tr>
<tr>
<td>TO</td>
<td>Egg tooth present</td>
</tr>
<tr>
<td>DO</td>
<td>Downy</td>
</tr>
<tr>
<td>BL</td>
<td>Blind</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>EY</td>
<td>Eyes just open</td>
</tr>
<tr>
<td>IP</td>
<td>Primary feathers in pin</td>
</tr>
<tr>
<td>FS</td>
<td>Primary feathers short; less than 1/3 emerged</td>
</tr>
<tr>
<td>FM</td>
<td>Primary feathers medium; 1/3-2/3 emerged</td>
</tr>
<tr>
<td>FL</td>
<td>Primary feathers large; more than 2/3 emerged</td>
</tr>
<tr>
<td>RF</td>
<td>Ready to fledge</td>
</tr>
<tr>
<td>LB</td>
<td>Young left nest naturally before fledging</td>
</tr>
<tr>
<td>YR</td>
<td>Young ringed</td>
</tr>
<tr>
<td>SY</td>
<td>Some young fledged</td>
</tr>
<tr>
<td>SL</td>
<td>Young seen leaving</td>
</tr>
<tr>
<td>EX</td>
<td>Exploded from nest</td>
</tr>
<tr>
<td>NN</td>
<td>Young near nest</td>
</tr>
<tr>
<td>AC</td>
<td>Adult carrying food near nest</td>
</tr>
<tr>
<td>VA</td>
<td>Adult visibly alarmed/agitated near nest</td>
</tr>
<tr>
<td>YC</td>
<td>Young capable of leaving nest when last seen</td>
</tr>
<tr>
<td>NE</td>
<td>Nest empty, undisturbed, feather scale, droppings</td>
</tr>
<tr>
<td>EA*</td>
<td>Eggs not hatched (infertile, addled)</td>
</tr>
<tr>
<td>ED*</td>
<td>Eggs deserted</td>
</tr>
<tr>
<td>EF*</td>
<td>Flooded nest at egg stage</td>
</tr>
<tr>
<td>EI*</td>
<td>Eggs damaged by man intentionally</td>
</tr>
<tr>
<td>EL*</td>
<td>Eggs damaged by livestock</td>
</tr>
</tbody>
</table>

**OUTCOME SUCCESS CODES: The following codes are all Outcome codes and should be used on the final nest visit. If at least one chick fledges, the nesting attempt is considered successful and one or more ‘Outcome success’ codes should be entered, after which no further nest visits are necessary.**

<table>
<thead>
<tr>
<th>Outcome successful</th>
<th>SY</th>
<th>Some young fledged</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL</td>
<td>Young seen leaving</td>
<td></td>
</tr>
<tr>
<td>EX</td>
<td>Exploded from nest</td>
<td></td>
</tr>
<tr>
<td>NN</td>
<td>Young near nest</td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>Adult carrying food near nest</td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>Adult visibly alarmed/agitated near nest</td>
<td></td>
</tr>
<tr>
<td>YC</td>
<td>Young capable of leaving nest when last seen</td>
<td></td>
</tr>
<tr>
<td>NE</td>
<td>Nest empty, undisturbed, feather scale, droppings</td>
<td></td>
</tr>
</tbody>
</table>

**OUTCOME FAILURE CODES: The following codes are all Outcome codes and should be used on the final nest visit. If the nest fails to fledge any young, one or more ‘Outcome failure’ codes should be entered in the final nest visit. Failure codes can also be used on any visit to record partial failure, where some eggs/young have died but some live eggs/young remain, e.g. an unhatched egg (EA).**

<table>
<thead>
<tr>
<th>Loss/failure of eggs</th>
<th>EA*</th>
<th>Eggs not hatched (infertile, addled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED*</td>
<td>Eggs deserted</td>
<td></td>
</tr>
<tr>
<td>EF*</td>
<td>Flooded nest at egg stage</td>
<td></td>
</tr>
<tr>
<td>EI*</td>
<td>Eggs damaged by man intentionally</td>
<td></td>
</tr>
<tr>
<td>EL*</td>
<td>Eggs damaged by livestock</td>
<td></td>
</tr>
</tbody>
</table>

Let us know what you believe to be the cause of the failure you have observed together with any evidence that has led to the conclusion you have made.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM*</td>
<td>Eggs damaged by man unintentionally</td>
<td></td>
</tr>
<tr>
<td>EO*</td>
<td>Eggs damaged by other/unknown causes</td>
<td></td>
</tr>
<tr>
<td>EP*</td>
<td>Eggs prelated</td>
<td></td>
</tr>
<tr>
<td>ET*</td>
<td>Eggs thrown or fallen out</td>
<td></td>
</tr>
<tr>
<td>EU*</td>
<td>Eggs usurped from nest by another species</td>
<td></td>
</tr>
<tr>
<td>EW*</td>
<td>Eggs damaged by wind</td>
<td></td>
</tr>
<tr>
<td>JD*</td>
<td>Young deserted/starved/dead</td>
<td></td>
</tr>
<tr>
<td>JF*</td>
<td>Nest flooded at young stage</td>
<td></td>
</tr>
<tr>
<td>JI*</td>
<td>Young damaged intentionally by man</td>
<td></td>
</tr>
<tr>
<td>JL*</td>
<td>Young damaged by livestock</td>
<td></td>
</tr>
<tr>
<td>JM*</td>
<td>Young damaged by man unintentionally</td>
<td></td>
</tr>
<tr>
<td>JO*</td>
<td>Young damaged by other/unknown causes</td>
<td></td>
</tr>
<tr>
<td>JP*</td>
<td>Young predated</td>
<td></td>
</tr>
<tr>
<td>JT*</td>
<td>Young thrown/fallen out</td>
<td></td>
</tr>
<tr>
<td>JU*</td>
<td>Young usurped from nest by another species</td>
<td></td>
</tr>
<tr>
<td>JW*</td>
<td>Young damaged by wind</td>
<td></td>
</tr>
<tr>
<td>XD*</td>
<td>Deserted at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XF*</td>
<td>Flooded nest at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XI*</td>
<td>Intentional damage by man at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XL*</td>
<td>Livestock damage at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XM*</td>
<td>Unintentional damage by man at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XO*</td>
<td>Other/unknown damage at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XP*</td>
<td>Predation at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>XT*</td>
<td>Eggs/young thrown/fallen out</td>
<td></td>
</tr>
<tr>
<td>XU*</td>
<td>Usurped from nest</td>
<td></td>
</tr>
<tr>
<td>XW*</td>
<td>Wind damage at egg/young stage</td>
<td></td>
</tr>
<tr>
<td>OI</td>
<td>Observations inconclusive</td>
<td></td>
</tr>
<tr>
<td>OX</td>
<td>Site not visited</td>
<td></td>
</tr>
<tr>
<td>OU</td>
<td>Outcome unknown for other reason</td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td>Bird(s) present but no breeding</td>
<td></td>
</tr>
<tr>
<td>SR</td>
<td>Pair breeding at alternative site</td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>Site damaged</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>Site destroyed</td>
<td></td>
</tr>
</tbody>
</table>

**Outcome Unknown Codes:** The following codes are all Outcome codes and should be used on the final nest visit if the final outcome of the nest is not known or uncertain.

**No Breeding Codes:** X
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU</td>
<td>Other species preventing use</td>
</tr>
<tr>
<td>SO</td>
<td>Site unused for other reason</td>
</tr>
<tr>
<td>SZ</td>
<td>Site unused – no birds present</td>
</tr>
</tbody>
</table>