

DemOn testing – Rollout C

The notes that follow below are not intended as a complete guide to the application but are meant to get you started and point you in the right direction. Part of the testing will be to get feedback on how intuitive testers find the application. That said, everyone is advised to read through relevant sections before launching into testing.

Note that currently some screen dumps come from the development/test version of the application and so may differ slightly in layout from the equivalent on the live application. Also there may be minor ‘cosmetic’ changes made to some forms in the live application since they were documented here.

IMPORTANT: Please report all testing issues using the email address apps.demon@bto.org by using this address your communications will be audited through to resolution using OTRS (Open Ticket Request System) to ensure it does not get lost and does not go unresolved. You should receive an automated reply on receipt. Reported issues will be reviewed every few days at which time you will receive feedback which may point you in the direction if your apparent issue turns out to be user ‘error’, may offer a temporary work around or may be just to let you know whether issue had been fed into the system as a bug or will be treated as a future feature request.

Please endeavour to make a separate report for each issue. An email with multiple reported issues makes it difficult to track each issue to completion as they may progress at different rates.

Our gratitude for your help with developing DemOn

Extract from the report to the Ringing Committee in October 2016:

“Unlike most software development where testers generally get to play with a “beta-test version” and explore what is essentially the finished product albeit with a few bugs in, with DemOn we have involved users (ringers and nest recorders alike) at a very early stage of development giving them the opportunity to help steer development of the application towards something that ringers and nest recorders alike have the right to expect and produce a worthy successor to the high standard set by IPMR. The cost to them? Using an application that is incomplete, changes with each release insofar as what they can and can’t do, the need to use work-around solutions while awaiting further functionality or bug fixes, complying with restrictions we have to enforce to safeguard data integrity and security until certain features have been completed, and having their routine data entry and submission regime disrupted. So we ask the Ringing Committee (and indeed all ringers and nest recorders) to applaud the efforts of their peers.”

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WARNING Rollout-C testers be aware

IT IS IMPORTANT TO REMEMBER THAT THE DATA YOU ENTER THROUGH THE DemOn APPLICATION YOU ARE USING ARE BEING SUBMITTED DIRECTLY TO THE NATIONAL DEMOGRAPHY DATABASE (we have already taken the testing of the features available to you as far as we can whilst using our test database). THEREFORE ONLY GENUINE DATA MUST BE ENTERED.

YOU MUST NOT SUBMIT ANY DATA YOU ENTER DIRECTLY INTO DemOn AS PART OF A SUBSEQUENT IPMR SUBMISSION. WHILST IT WOULD NOT DO ANY DAMAGE (OTHER THAT TO BRIDGET'S SANITY), RECORDS WOULD BE REJECTED BECAUSE THEY WOULD ALREADY EXIST IN THE NATIONAL RINGING AND NEST RECORDING DATABASE AND DEALING WITH THIS WOULD WASTE STAFF TIME.

Testing plan

During testing, features will be made available as and when they are ready for testing. Until ready for testing, some features may be hidden completely (e.g. nest recording), some visible but greyed-out (e.g. ring administration), and some may have limited functionality at present because their full functionality will not be realised until other elements have been built (e.g. data search and editing) and some have yet to be built (e.g. moult pop-up, colour ringing pop-up, CES and RAS visit summary/effort recording etc). In part, some of the yet to be built features may depend on feedback from the ongoing testing.

During testing, we will review feedback and bug reports on a regular basic. Periodically we will be fixing bugs and, expand the functionality we will be asking you to test. We will be bringing more and more users on board as we get nearer to the first universal release.

Earlier during the testing phase we had a small group of spearhead testers one step ahead of the majority because we needed to limit the impact of any fundamental problems that might have arisen. Now we have build confidence in the system, for the . The bulk of testers will be following one stage behind i.e. using a version of the application that is ostensibly stable for the functionality they are being asked to test.

We hope that you will be using DemOn exclusively for your data here on in. The only short term exceptions need be outstanding CES and RAS and Nest Record data for 2016.

We would also like to encourage ringing group secretary or trainer with C ringers to bring additional ringers they are responsible for on board. You may want to bring some on before others while you find your own DemOn feet, and continue to submit through IPMR for some. To add new members of your team just let Bridget Griffin know their permit number and we can grant access to their BTO online user_id.

Rollout C testing

Available since Rollout A:

- **Creation and editing of Ringing Site Geometry and details.** Please read the notes before launching in as there are a few cautions.
- **Data entry.** Ringing data entry through standard data entry form. Please read “Notes regarding data entry” which as well as describing the basics of DemOn data entry highlight a few differences

between DemOn codes and code you will have been used to in the past, fields that become compulsory under DemOn, and tips for organising data entry forms

- **Data search view and edit functionality.** This is continually evolving towards full functionality and its full potential will not be realised until all other aspects of DemOn have been built.

Available since Rollout-B

- **Group Management.** Adding users from your ‘Operating Group’, an Operating Group being a formal Ringing Group, formal Ringing Partnership, an Independent Trainer with dependent C’s and T’s, or an Independent A ringer with no associated C’s or T’s.
- **Operating as.** After login as yourself, unless you are an independent A-permit holder working entirely alone you will generally be operating as a member of an Operating Group to which you belong.
- **Data review and submission.** This is functionality accessed through the Custom Search. Data entered is subject to review by data controllers – typically Trainers – before being released from the pre-load table into the main database tables in the National Ringing and Nest Recording Database.

New to Rollout-C (available now)

- A number of existing forms have had a facelift since Rollout-B and these guidance notes have been tweaked accordingly. The focus of any screenshots should be current even if a few non-focal element still show the superseded version.
- All biometric validation is now in place
- **Non-standard captures.** A new drop-down has been added to the record type field to guide users towards correct completion of condition, finding conditions, finding circumstance and metal mark info when entering data for non-standard New or Subsequent encounters through auto-fill of or restricting options for those other fields
- **Bulk editing.** Allows multiple records to be edited e.g. to revise a repeated data entry error (e.g. wrong date or location) or overlooked fields first time around.

Coming soon

The next major deployment of DemOn is scheduled for early April 2017. Our aim is that this will include all the functionality that will be in the first universal rollout of DemOn across the Ringing and Nest Recording schemes sometime in May or June. Aside from various cosmetic changes some of the more important features will include:

- **Nest Records,** with complete integration of ringing and nest recording
- **Colour-mark validation.** Pop-up graphic aid allowing users to self-validate colour-mark information entered through the standard ringing data entry form.
- **Export of data returned by the search/filter facility.**
- **Confidential locations supporting within group and third-party confidentiality.**
- **Within group ring allocation**
- **Within group user list, initials etc**
- **Upload of IPMR set-up file to populate the last two**

- **Auditing of changes to locations. This will allow location boundaries or net positions to change over time without compromising historic data**
- **CES and RAS visit and annual effort recording**

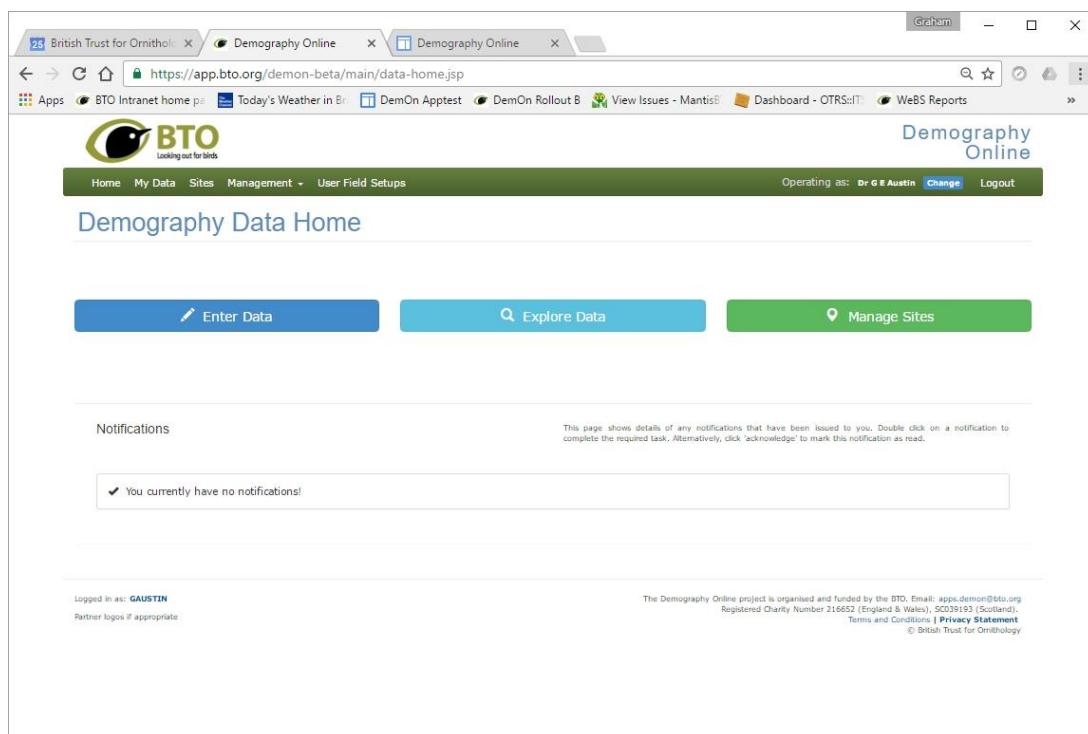
Thereafter DemOn will continue to be developed and improved with incremental releases of new features.

Data home screen

Having logged on to DemOn, this is the application landing page. You can get back to here at any time by clicking on ‘home’ on the green navigation bar. This is the screen on which in due course you will receive notifications (e.g. data to validate, requests for ringing details, recoveries etc).

From here there are direct links into ‘Enter data’, ‘Explore data’ and ‘Manage Sites’.

On the green navigation bar there are more detailed menus (some not yet fully populated) – ‘My data’ will take you to data entry and custom search; ‘Sites’ will take you to site setup, editing and management; ‘Management’ will take you to Operating Group administration and ring allocation (*the latter not yet available*).



‘Operating Groups’ and ‘Operating As’

The Operating Group

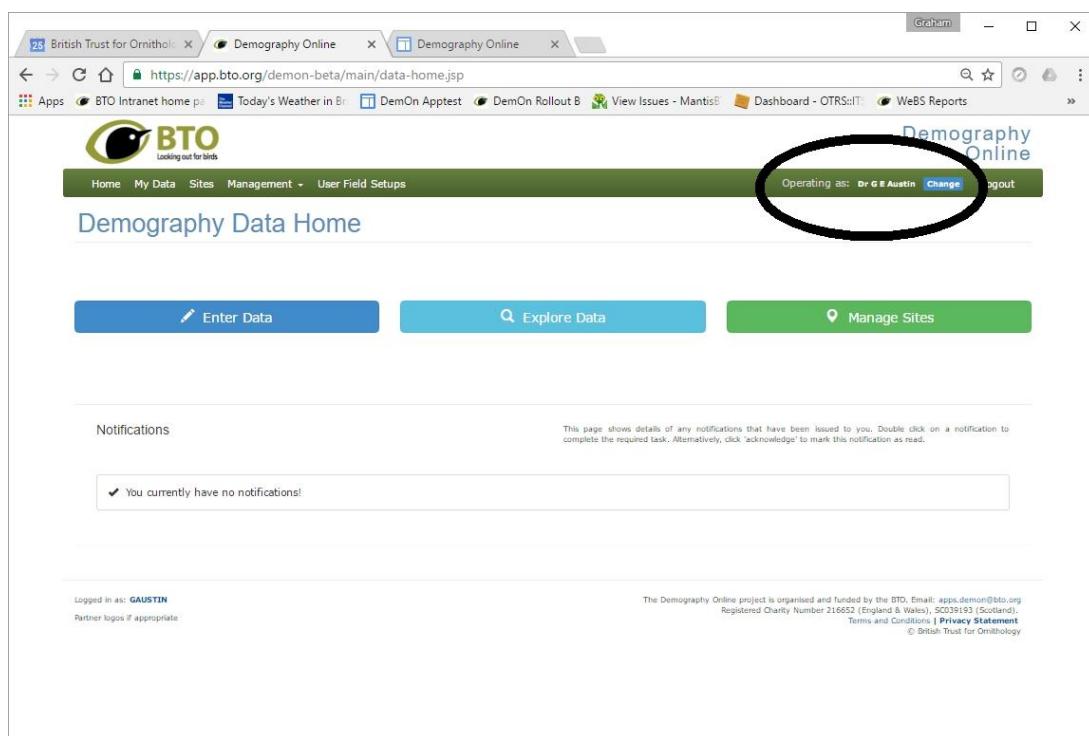
In DemOn, an ‘Operating Group’ is a group or team in its widest sense be it a formal Ringing Group, a formal Ringing Partnership, an Independent A-permit holder operating with their own personal ring issue with dependent C-permit and T-permit holders or simply an independent A ringer with no dependents. This will

be extended to include Nest Recording Groups or individual nest recorders where nest recording is not being undertaken under the auspices of an independent A-permit holder, Ringing Partnerships or Ringing Group.

Operating As

For ringers, 'Operating as' refers to the individual A permit holder, formal ringing partnership or formal ringing group to whom the rings are issued and therefore who is ultimately responsible for those rings i.e. the Operating Group owner who is the person ultimately accountable for information concerning those rings reaching the National Ringing and Nest Recording Database. Typically this will be an independent A ringer (with or without associated C's and T's), the senior partner in a Ringing Partnership or the Secretary of a Ringing Group all synonymous with the operating group 'Owner'. Individual users may "operate as" more than one operating group e.g. use group rings in some circumstances but their own personal rings in others. When operating within a given operating group the extent of their permissions (e.g. view data, enter data, approve data for submission to BTO, act as deputy to owner etc) will depend on membership level conferred on them by the owner through Group Permissions (see later).

Upon log in you will be initially "operating as" yourself and you will see your name against 'Operating as:' towards the left of the green navigation bar. If you are a A-permit holder who always uses rings issued against your own permit number you are good to go. However, if you are a C-permit holder, or use partnership or ringing group rings, before you go any further you will first need to change who you are operating as to be your trainer, or appropriate partnership or ringing group you will be operating as.

A screenshot of a web browser window titled 'DemOn Beta' showing the 'DemOn Data Home' page. The top navigation bar includes links for 'Home', 'My Data', 'Sites', 'Management', 'User Field Setups', and 'Logout'. A green bar at the top displays the text 'Operating as: Dr G E Austin' with a 'Change' button next to it. This 'Change' button is circled in black. Below the navigation, there are three main buttons: 'Enter Data' (blue), 'Explore Data' (light blue), and 'Manage Sites' (green). The main content area is titled 'Notifications' and contains a message: 'You currently have no notifications!' with a checkmark icon. At the bottom of the page, there is a footer with small text: 'Logged in as: GAUSTIN', 'Partner logos if appropriate', 'The DemOn project is organised and funded by the BTO. Email: apps.demon@bto.org', 'Registered Charity Number 216652 (England & Wales), SC039193 (Scotland)', 'Terms and Conditions | Privacy Statement', and '© British Trust for Ornithology'.

Within a DemOn session, users can switch who they are operating as by clicking 'change' next to their name, after which they will see a table listing operating groups that they have permission to operate as (themselves if an A-permit holder plus any other operating group where the owner has added them to their team/group and the extent of their permissions which may differ depending on who they are operating as. The operating group they are currently operating as is highlighted as the

green row.

The screenshot shows a web browser window for 'Demography Online'. At the top, there's a navigation bar with links for Home, My Data, Sites, Management, User Field Setups, and a dropdown for 'Operating as'. Below this, it says 'Operating as: Dr G E Austin' with a 'Change' button and a 'Logout' link. The main content area is titled 'Switch User' and displays the message 'Currently Operating As: Dr G E Austin'. A table lists three users: Dr G E Austin (highlighted in green), Miss B. M. Griffin, and Thetford Forest Ringing Group. The table columns represent permissions: View All, Input, Update Own, Update All, Record Controller, Deputy, and Owner. For Dr G E Austin, all permissions are granted (indicated by green checkmarks). For Miss B. M. Griffin and the Thetford Forest Ringing Group, some permissions are denied (indicated by red X's). There are blue 'Operate' buttons next to each row. At the bottom left, it says 'Logged in as: GAUSTIN' and 'Partner logos if appropriate'. At the bottom right, there's a note about the project being organised by the BTO, its charity numbers, and links to Terms and Conditions and Privacy Statement.

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m

here a user can click on the blue 'operate' button to switch to operate as a member of different operating group. When you do so, the green highlight will change accordingly and the Operating as name in the green navigation bar will confirm the operating group you are now operating as.

What you are able to do when operating as an owner other than yourself will depend on the level of permissions the owner has granted you (see above).

Please note that during Rollout-C certain functionality is unavailable to users other than the operating group owner.

Current restrictions include:

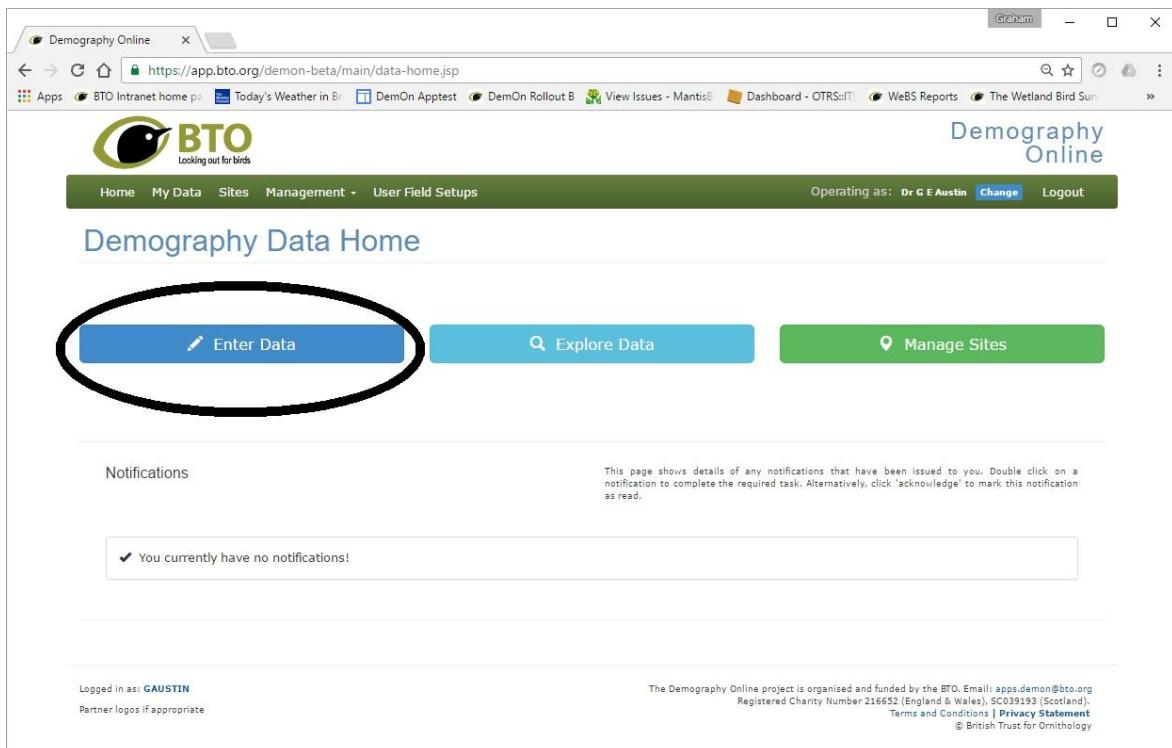
- You will only be able to view records that you yourself have entered through Demon. This constraint will be removed once within-group confidentiality has been implemented. However, for the time being it is the safest way for us to ensure confidential records cannot be seen by other than the owner (and any deputies). Essentially this is no more restrictive than using a satellite IPMR database rather than the master copy unless you had imported 'others' data.
- Although you will be able to create new sites and add site components (sub-areas, nets/net-lines, traps, nests) yourself on behalf of your operating group, once saved, edits to site boundaries and stored site attributes such as habitat and capture method defaults can only be made if you are the Operating Group owner.

Data Entry

To access the data entry form use the direct link ‘Enter Data’ on the home screen

Enter data – home screen link

If you click on Enter Data direct from the home screen you get the unrestricted ringing data entry form on which you can enter data for any location on any date.



The screenshot shows the Demography Online home page. At the top, there is a navigation bar with links for Home, My Data, Sites, Management, User Field Setups, and Logout. On the right side of the header, it says 'Operating as: Dr G E Austin | Change'. Below the header, there is a main menu with three buttons: 'Enter Data' (highlighted with a black oval), 'Explore Data', and 'Manage Sites'. The 'Enter Data' button is blue with white text. The 'Explore Data' and 'Manage Sites' buttons are light blue with white text. Below the main menu, there is a section titled 'Notifications' with a message stating 'You currently have no notifications!'. At the bottom of the page, there is a footer with the text 'Logged in as: GAUSTIN' and 'The Demography Online project is organised and funded by the BTO. Email: apps.demon@bto.org Registered Charity Number 216632 (England & Wales), SC039198 (Scotland). Terms and Conditions | Privacy Statement © British Trust for Ornithology'.

The first time you click on Enter Data this will open up the data entry form with the default field set-up. The default field set-up contains fields based on recommended fields. All fields in the field set-up will be displayed within the limits of your screen and wrapped as necessary.

You cannot edit the default data entry field set-up but you can clone it and then rename and edit the clone to add or remove fields. You can have as many customised field setups as you like – see below for ‘User Field Setup’. Certain fields, such as location and capture date, are compulsory in all field setups. Other fields, including some of those initially in the default setup are optional.

Once you have created your own custom field set-ups, on opening the data entry form you will be presented with the field set-up you were using during your previous data entry inputting session.



Tester's Guide

Demography Online

Home My Data Sites Management User Field Setups

Operating as: Dr G E Austin Change Logout

You are currently entering data to be submitted under Dr G E Austin [Change](#)

Settings

No Location Set - Data Entry (Default Setup)

Record Type	Ring No	Scheme	Species Name	Age	Sex	Sexing Method	Breeding Condition	Visit Date Add Accuracy	Capture Time	Location	Habitat 1			
N		---		0	U	U	-	dd/mm/yyyy	hh:mm		--			
Habitat 2	Status Code 1	Status Code 2	Wing Length	Weight	Date Measured	Time Measured	Condition	Moult Code	Alula	Old Greater Coverts	Primary Moult	Capture Method	Metal Mark Info	Ringer Initials
--	U	U			dd/mm/yyyy	hh:mm	N	-	-			-	N	
Ringer Check Initials	Processor Initials	Extractor Initials	Wing Initials											
Abandon current record and exit Save														

Logged in as: GAUSTIN
Partner logos if appropriateThe Demography Online project is organised and funded by the BTO. Email: apps.demon@bto.org
Registered Charity Number 216652 (England & Wales), SC039193 (Scotland),
[Terms and Conditions](#) | [Privacy Statement](#)
© British Trust for Ornithology

Using the key combination Ctrl – or Ctrl + will allow you to zoom the contents of the browser window and the display change accordingly. E.g. ‘Ctrl –’ results in the above being displayed as below

Record Type	Ring No	Scheme	Species Name	Age	Sex	Sexing Method	Breeding Condition	Visit Date Add Accuracy	Capture Time	Location	Habitat 1	Habitat 2	Status Code 1	Status Code 2	Wing Length	Weight	Date Measured	Time Measured	Condition	Moult Code	Alula	Old Greater Coverts	Primary Moult	Capture Method	Metal Mark Info
N		---		0	U	U	-	dd/mm/yyyy	hh:mm		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ringer Initials	Ringer Check Initials	Processor Initials	Extractor Initials	Wing Initials																					
Abandon current record and exit Save																									

DATA VALIDATION

As you enter data some validation will happen on the fly at the cell level and if there is an immediate problem such as an invalid date, you will get an immediate error message. However, many validations involve interdependencies between fields and so cannot be tackled until certain other fields have also been populated and we do not want to enforce field order on users. Other field validations may have interdependencies with previous records and because we want to avoid field by field data exchange with the National Ringing and Nest Recording Database server those validations cannot be tackled until all fields have been entered and you attempt to save the record (by clicking on save or tabbing onto save). You will then be presented with any errors and warnings trapped by the validations.

These fall into three categories:

- **Errors (which prevent the record being saved)**
- **Warnings that require a comment before the record will be saved**
- **Warnings that are sense checks and do not require a comment**

Errors – these must be corrected before the record can be saved. For example, an invalid date.

The screenshot shows a 'Record Type' dropdown set to 'S', a 'Ring No' field containing 'Z521804', a 'Scheme' dropdown set to 'GBT', a 'Species Name' field containing 'Sedge Warbler', an 'Age' dropdown set to '4', a 'Sex' dropdown set to 'U', a 'Sexing Method' dropdown set to 'U', a 'Breeding Condition' dropdown set to 'N', and a 'Visit Date' field circled in black containing '234/10/2116'. Above the form, an 'Errors:' panel displays two messages: 'Please enter a valid Visit Date in the format dd/mm/yyyy' and 'Please enter a visit date that is no later than today's date.'

Warnings that require a comment before the record will be saved – if the warning highlights a real problem then cancel and correct value, if warning was un-warranted then enter a comment to continue to next record. For example, when a biometric measurement is outside of its expected range. The same validation warning will be triggered during automated upload to the main database tables and the record held back until ringing unit staff have reviewed your comment.

The screenshot shows a 'Validation Warnings' dialog box with the message 'Expecting a wing length between 60 and 71'. Below the message is a text input field with placeholder text 'Enter comment...'. At the bottom right of the dialog are 'Cancel' and 'Continue' buttons. The background shows the record entry form with a 'Wing Length' field circled in black containing '72'. The record details include 'Capture Time' (2:00), 'Location' (BST (Brongest)), 'Habitat 1' (A1), 'Habitat 2' (F3), 'Status Code 1' (U), 'Status Code 2' (U), and 'Weight' (72).

If the warning relates to an input error and you need to return to the record to correct values you have entered click on 'Cancel' (or from keyboard Shift+Tab to highlight 'Cancel' and press the Enter/Return key).

If warning is 'unwarranted', click in box to enter comment and then click on 'Continue' to move to next record (or Shift+Tab to back-tab to comment box, enter comment then Tab forward to highlight 'Continue' and then press Enter/Return to save and move to next record. (Note Enter key may respond differently under your local browser settings – which we have no control over).

Warnings that are sense checks and do not require a comment – these are intended to draw attention to unusual circumstances which may well be due to a typo during data entry or from cavalier use of auto-repeat on a field or otherwise entering a field code that although feasible is unlikely. For example a juvenile bird recorded at an unexpected time of year, or a code indicating complete moult recorded against summer visitors that typically moult in Africa, or a breeding condition code entered outside of the typical breeding season.

- Investigating inconsistencies** – Sometimes you will get an error or a warning about something you may be able to resolve there and then by checking back through existing records. For example you may get a warning to inform you that the age, sex or even species is inconsistent with X out of Y previous encounters. When you enter the data for a subsequent encounter be it of one of your own birds or one ringed elsewhere, so long as the ringing details have already been submitted to the BTO, basic details recorded for the first ringing event – date, age, sex, species and ring number – will appear to the top right corner of the inputting form. If the bird in question has been re-ringed the ring number displayed will be that of the original ring. Furthermore, if the bird has been recaptured on multiple occasions you can click on ‘Show full history’ to expand the list to show these same details from all previous encounters or click ‘Hide full history’ to collapse the list. For birds that have been re-ringed it will be the ring that the bird was released with that will be shown against the relevant capture.

1) Original capture shown at the top right of the Data Entry form

2) Or having clicked ‘Show full History’ (below original details)

If you need to dig deeper, because you are running DemOn in a web browser it is perfectly safe to open a second browser window, go into DemOn and using the search / filter feature (described later in this document) and recall all previous records for review without the need to abandon your current inputting session. Currently, group owners will be able to see all records entered for their Operating Group whilst other users will only be able to view records they have personally entered. However, once ringing site confidentiality is in place and we can ensure no sensitive information is shared inappropriately, we will be unlocking the search/filter to return all records involved in a

capture history for a given bird direct from the National Ringing and Nest Recording Database and so you will be able to see details from first ringing and subsequent encounters involving the bird in question regardless of whether they are for a bird ringed by your Operating Group or not.

As records are saved they are accumulated ‘row style’ beneath the new active record.

You are currently entering data to be submitted under Dr G E Austin | Change

No Location Set - Data Entry

Field Setup: Garden Ringing 10s | Show Other Fields

Location	Lure Code 1	Visit Date	Capture Time	Processor Initials	Ring No	Scheme	Record Type	Species Name	Age	Sex	
	Add Accuracy	dd/mm/yyyy	hh:mm				N		0	U	
Provisional Sex	Wing Length	Weight	Time Measured	Fat	Pectoral Muscle	Moult Code	Old Greater Covers	Alula	Capture Method	Date Measured	Habitat 1
U			hh:mm	-	-	-	-	-	-	dd/mm/yyyy	--

Abandon current record and exit | Save

Show Today's Records

Today's Records (showing 1 to 4 of 4 records)

Show 10 Records

Location	Lure Code 1	Visit Date	Capture Time	Processor Initials	Ring No	Scheme	Record Type	Species Name	Age	Sex	Provisional Sex	Wing Length	Weight	Time	
BST (Brongest)	-	10/10/2016	12:00	-	Z521804	GBT	S	Sedge Warbler	4	U	U	75			<button>Edit</button>
BRA (Brandon)	-	25/10/2016	12:00	-	Z521303	GBT	N	Blue Tit	4	U	U				<button>Edit</button>
BRA (Brandon)	-	25/10/2016	12:00	-	Z521302	GBT	N	Blue Tit	4	U	U				<button>Edit</button>
BRA (Brandon)	-	25/10/2016	12:00	-	Z521301	GBT	N	Blue Tit	4	U	U				<button>Edit</button>

Previous | Next

Although, as described later in this document, you are able to create multiple custom field setups to use during data entry and switch between different custom setups as required, there may be occasions when you need to enter data for a field that you only record very occasionally. Rather than including them in a custom field setup to be used once in a blue moon you are able to extra fields on the fly during data entry by clicking on the ‘Show Other Fields’ button which can be accessed via the Settings Button to the top right corner of the data entry form. Extra fields added in this way will remain available until you exit the inputting form or refresh the form by re-selecting the same or switching to another field set-up.

You are currently entering data to be submitted under Dr G E Austin | Change

Brandon (BRA) - Data Entry (Data Entry - Summer Wide Sheet)

Field Setup: Data Entry - Summer Wide Sheet | Show All

Location Group: Show All | + Show Other Fields

Show Today's Records

Record Type	Scheme	Metal Mark Info	Habitat 1	Status Code 1	Lure Code 1	Habitat 2	Condition	Finding Condition	Finding Circumstances	Age	Sex	Sexing Method	Breeding Condition	Wing Length	Weight
S	GBT	-	F2	U	-	A1	N	B	20	4	U	S	-	52	10.2
Visit Date	Capture Time	Processor Initials	Ringer Check	Ring No	Species Name										
11/02/2017	16:00	GEA		AAA996	Wren					4	U	S	-	52	10.2
Date Measured	Time Measured	Fat	Pectoral Muscle	Moult Code	Old Greater Covers	Alula	Primary Molt	Secondary Molt Scores	Tail Molt Scores						
11/02/2017	16:11	-	-	O											

Abandon current record and exit | Save

1) Click Settings, then click ‘Show Other Fields’

Show Other Fields

Select fields from the list below that you want to show on the data entry form:

Scheme2
Head Bill Length
Head Moul

Ringed on 20/10/2004 as age 4

2) In the pop-up that appears click in box and click to select from dropdown or start typing in box to narrow down choices.

Show Other Fields

Select fields from the list below that you want to show on the data entry form:

 Head Bill Length

Note: Any dependent fields will also be added.

Show Fields

3) You can make multiple field selections if you need to add more than one field. Once you have selected your extra fields click on 'Show Fields'

You are currently entering data to be submitted under Dr G E Austin | Change

Brandon (BRA) - Data Entry (Data Entry - Summer Wide Sheet)

Ringed on 20/10/2004 as age 4 sex U species Wren (AAA996)

Record Type	Scheme	Metal Mark Info	Habitat 1	Status Code 1	Lure Code 1	Habitat 2	Condition	Finding Condition	Finding Circumstances	Capture Method	Location
S	GBT	-	F2	U	-	A1	N	B	Y	20	M BRA (Brandon)

Visit Date Add Accuracy	Capture Time	Processor Initials	Ringer Check Initials	Ring No	Species Name	Age	Sex	Sexing Method	Breeding Condition	Wing Length	Weight
11/02/2017	16:00	GEA		AAA996	Wren	4	U	S	-	52	10.2

Date Measured	Time Measured	Fat	Pectoral Muscle	Moul Code	Old Greater Coverts	Alula	Primary Moul	Secondary Moul Scores	Tail Moul Scores	Head + Bill Length
11/02/2017	16:11	-	-	O						32.5

Abandon current record and exit **Save**

4) The extra field(s) will be temporarily tagged onto the end of your current field set-up (but will not be added permanently)

AUTO-REPEAT/AUTO-INCREMENT

You can toggle fields to auto-repeat or auto increment during data entry by clicking on the field header. The background colour of the cell will indicate the current mode of the field:

- white** – no repeat
- blue** – repeat
- yellow** – increment (ring number only): cell is yellow.

Measurement fields cannot be auto-repeated. Code fields may or may not be repeatable. For example fields such as sexing method or breeding condition where it is generally down to chance whether the same code would apply to consecutive birds cannot be auto-repeated whereas fields such as lure method and capture method where consecutive birds may be expected to have the same code can be.

SAVE

You do not need to click on 'Save' with the mouse cursor at the end of each record. When you tab to the 'Save' button this triggers record validation and, if no errors or warnings are issued to be dealt with first, saves the record and initiates the next record positioning the cursor in the ring number field or first field not being auto-repeated – whichever comes first in your field set-up.

SHOW TODAY'S RECORDS

The "Show Today's Records" tick-box can be used to recall all the records you have already entered. You will find this useful if for example you have had reason to exit the data entry form and do something else in DemOn but then return to data entry or perhaps after your session has timed out.

This screenshot shows the 'No Location Set - Data Entry' form. At the top right, there is a 'Settings' button with a circled 'X'. Below it, a dropdown menu is open, also with a circled 'X'. Inside the menu, there is a checkbox labeled 'Show Today's Records' which is checked. The main data entry fields are visible below the menu.

1) The Show Today's Records tick-box is available from the 'Settings' button to the top left of the data entry form.

This screenshot shows the same 'No Location Set - Data Entry' form as above, but with a different view. The 'Settings' button is at the top right. Below it, the dropdown menu is open, and the 'Show Today's Records' checkbox is checked. The data entry fields are visible below the menu.

2) All records entered today will then be retrieved

This screenshot shows a table titled 'Today's Records (showing 5 records)'. The table has columns for Visit Date, Capture Time, Processor Initials, Ringer Check Initials, Ring No, Species Name, Age, Sex, Sexing Method, Breeding Condition, Wing Length, Weight, Date Measured, and Time Measured. There are five rows of data, each representing a recorded bird. A 'Bulk Edit' button is located at the bottom right of the table.

Notes new fields and changes to existing fields with regard to data entry:

For the most part, data entry should be reasonably intuitive. However, with DemOn, a small number of new fields have been introduced, as have a small number of new codes, and some fields are now required where previously they were optional.

In due course a complete inventory of fields and codes will be included. In the interim, the following notes regarding some of the more obvious features/differences to what users may be used to may be of help.

- 1) **RECORD TYPE AND ASSOCIATED FIELDS** (**condition, finding condition, finding circumstance and metal mark info**). The only true record types used by the National Ringing and Nest Recording Database are N – new bird and S – subsequent encounter. In DemOn, typing N or S in the record type field will populate this field accordingly but, equally important, will also populate defaults for **standard capture and release by a ringer** for the associated fields condition, finding condition, finding circumstance and metal mark info as appropriate. If however you are entering data for a **non-standard encounter** you may use the drop-down on the record type field to select an appropriate description for that non-standard encounter (or type in the shorthand code for the description if you come to remember it). The descriptive codes differ from those you may already be familiar with as those are no longer appropriate and not stored in the National Ringing and Nest Recording Database anyway. Although you may have selected one of these non-standard descriptions, on saving the record, the record type will nonetheless be stored in the National Ringing and Nest Recording Database as N or S as appropriate. However, choosing one of these non-standard descriptions will have filtered the list of codes available for each of the associated (and compulsory) fields - condition, finding condition, finding circumstance and metal mark info and if required prompted you for an appropriate supplementary comment.
- 2) **STATUS and LURE METHOD.** You may be familiar with the codes used by STATUS and LURE METHOD as those previously associated with ACT and ACT2 from pre-DemOn days. As part of increased alignment to EURING the umbrella field ACTivity has been dropped in favour of two natural sub-groups - status and lure method. You now have STATUS and STATUS2 (i.e. why the bird is where it is – e.g. moulting assemblage, breeding, passage etc.) and LURE_METHOD and LURE_METHOD2 (e.g. artificial food supply, water, audio lures).

Note there have been some changes to the codes you may be familiar with so if using the new fields please ensure the descriptions associated with the codes are those you intended. For example, note Status='T' is moulting and status='M' is moulting assemblage. And note a bird in a moulting assemblage need not be moulting itself, e.g. a fully flighted goose caught in a goose round-up).

- 3) **COLOUR MARKS.** Whilst colour-marks can be entered by adding appropriate fields to your field setup these are not validated by the system. However, there is a risk that an incorrectly entered colour mark could generate a bogus recovery. Consequently, DemOn provides (**coming soon**) a review graphic that you can use to confirm that the colour mark codes you have entered are a correct interpretation of the overall colour marks associated with the encounter in question. Note that because you are entering values for particular positions dictated by the field you should not include the position in the code e.g. lower right leg yellow ring over metal would be entered simply as 'Y,M' in the right-below field not as 'RBY,M';

In due course it is intended that DemOn will provide a user friendly interface for guiding occasional colour-mark recorders to correctly recorded colour-marks and at that time we will review the need for more sophisticated validation by the system. Unfortunately this interface is not expected to be included in the first universal release. However, we envisage that those frequently entering colour-marks will prefer to enter them directly in the appropriate fields (right-above, left-above, right below, left below, neck collar, right wing tag, left wing tag) having added them to a custom field set-

up – this will enable them to take advantage of auto-repeat (for example when colour rings used on a particular leg position remain constant for sequential birds).

- 4) **MOULT SCORES.** Please note that whilst “moult-card” data can be entered, by adding appropriate fields for feather tract moult to your field setup, DemOn does not yet provide a graphic interface for entering moult scores. All potential fields for scoring full moult details are available to be added to a custom field set-up. Those for the left wing are all prefixed ‘L_’ otherwise the label matching the equivalent for the right wing (which have no prefixes).

Note that for the major feather tracts moult scores are to be entered in the order of the typical moult sequence of adult [passerine] birds. Thus primary moult and primary covert moult scores are entered descending (centre of wing to outermost), secondary and greater covert scores are entered ascending (centre of wing to innermost), tail moult is entered descending (central to outer-most). You will get a validation warning if it appears that you may have entered scores in the wrong direction.

In due course it is intended that DemOn will provide a graphic interface for entering moult data that is aimed primarily at those least familiar with recording moult. However, we envisage that those frequently recording detailed moult will prefer to enter moult data directly, having included the relevant fields in a custom field setup.

- 5) **BREEDING CONDITION.** BREEDING_CONDITION, a field newly introduced with DemOn subsumes the field BROOD_PATCH with which you may be familiar from pre-DemOn days. In addition to incorporating the same brood-patch scoring system, additionally BREEDING CONDITION allows cloacal protuberance (CP) to be recorded for males and the absence of BP or CP for birds where you have checked for these but found nothing. In species where males may develop brood patches (e.g. *Sylvia warblers*) you should err towards recording the BP score in preference to recording the presence of a CP given that identification of a BP is generally less subjective than identification of CP (as evidenced by far too many “changes in sex” of ‘males’ retrapped as the breeding season progresses). You will still be able to record CP as the sexing method if that is the most reliable sexing character.
- 6) **MOULT_CODE.** One additional code has been introduced with DemOn. The new code ‘F’ is available for post-juvenile moult including partial replacement of flight feathers (primaries/secondaries other than tertials). This is to be used for eccentric or aberrant moult (the latter term being somewhat of a misnomer when applied to post-juvenile moult). This extensive post-juvenile moult, falls short of complete post-juvenile moult as typically recorded in starlings, sparrows, larks, Long-tailed Tit, Bearded Tit and pigeons for which moult code ‘M’ is still appropriate. It can be differentiated from arrested moult, moult score ‘A’ which follows the normal sequence of replacement of primaries (or secondaries) but suspends/arrests before completion, maybe due to insufficient resources in which case the moult may not be concluded, or maybe to be resumed at a later date. For example some species such as swallows and nightjars may begin moult in their summer quarters, limited to a few primaries, arrest/suspend moult before migration resuming following migration and 1st winter collard doves will often suspend moult during the mid-winter months. Eccentric moult in contrast and by definition begins eccentrically i.e. not at the “centre” of the wing with the innermost primary

or outermost secondary but rather part way through the feather tract. This is a reasonably frequent occurrence in some finches especially crossbills and Greenfinch in which the more exposed mid-range primaries are typically involved and some waders in which the more exposed outermost primaries are typically those involved. In some species, innermost secondaries may be replaced along with tertials during post juvenile moult.

- 7) **CAPTURE_METHOD.** This field is now compulsory if appropriate. Note two new capture methods have been introduced with DemOn. Those added are for drag net which would formerly have been coded as 'other', and whoosh net which would formerly have been coded as 'trap triggered by ringer'.
- 8) **LOST, MISSING and DESTROYED RINGS.** Unlike pre-DemOn days these will not be treated as ringing encounters (which by definition they are not) and will instead be dealt with directly and more logically through Ring Administration. So if you lose or destroy a ring you will not be able to enter *LOST, *MISS or *DEST as the 'species' for a new encounter record. Instead please make a note of the ring number so that it can be dealt with to test Ring Administration in due course. Note you can still enter species=*UNKN when field records are lost or there has been confusion as to which bird got which ring (not that it ever happens to any of us of course).
- 9) **RINGED PULLI DYING BEFORE FLEDGING.** Although we don't want ringers who routinely complete nest records to enter pulli ringing or adults caught at the nest until Nest Recording is available in DemOn, if you do not routinely complete nest records (shame on you) or do not do so for certain species (e.g. waders, gulls, terns where chicks cannot be associated with a given nest) then there is no reason why you should not enter encounters for pulli during testing. However, note that in DemOn you will deal with young dying before fledging as what they actually are – a subsequent encounter involving a dead bird. This gives us both a date when the live chick was ringed and the date on which it was found dead - just like any other recovery of a dead bird and something that can therefore be used when deriving age specific survival estimates.
- 10) **VISIT DATE & ACCURACY.** You can enter visit date either with or without '/' separator i.e. ddmm/yyyy or dd/mm/yyyy. But make sure you use leading zeros for day and month if appropriate.

If you are reporting a dead bird, find a ring or otherwise do not know the exact date of the encounter then you can use date accuracy to indicate the uncertainty.

<p>1)</p> <p>Click on Add Accuracy</p> <p>This will open a temporary field requiring the number of days +/- to add to the Visit Date (so treat visit date as your 'best guess')</p> 	<p>2)</p> <p>Enter value or value & d for number of days Enter value & w for number of weeks Enter number & m for number of months Enter number & y for number of years</p> <p>e.g. 2m for +/- two months</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Visit Date</th><th style="text-align: center;">Date Accuracy</th><th style="text-align: center;">Capture Time</th></tr> <tr> <td style="text-align: center;">02/12/2016</td><td style="text-align: center;">2m</td><td style="text-align: center;">05:00</td></tr> </table>	Visit Date	Date Accuracy	Capture Time	02/12/2016	2m	05:00	<p>3)</p> <p>This will automatically be converted to days (approx.) when you tab out of the field</p> <p>e.g. 2m becomes 60 days e.g. 2y becomes 730 days</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Visit Date</th><th style="text-align: center;">Date Accuracy</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">02/12/2016</td><td style="text-align: center;">60</td></tr> </tbody> </table>	Visit Date	Date Accuracy	02/12/2016	60
Visit Date	Date Accuracy	Capture Time										
02/12/2016	2m	05:00										
Visit Date	Date Accuracy											
02/12/2016	60											

11) **CAPTURE TIME.** With regard to capture time, DemOn will not allow you to use short-hand times for example you cannot type in 12 for mid-day or 101 for ten past ten. Why? This is to ensure no assumptions made either by the user or DemOn can lead to mis-recording. For example

does 12 mean 12:00 or 00:12?
does 101 mean 01:10 or 10:10?
does 11 mean 00:11, 01:10 or 11:00?

Therefore you will need to enter either hhmm or hh:mm using leading zeros as appropriate.

As time is a required field please use 00:00 if for some reason you have not recorded time as this will be consistent with what you will have submitted under previous systems (even although you may not have been aware that was happening).

Do not use Capture Time in lieu of weighing time.

12) **TIME MEASURED.** If you weigh a bird you must enter a value for Time Measured.

13) **CAPTURE TIME vs. WEIGHING TIME**

We are aware that in the past many ringers have treated Capture Time and Weighing Time as one and the same, cannon netters being a notable exception. Possibly this has come about because the previous system badged the Capture Time field simply as Time and auto completed Weighing Time even if it was not in your field set-up. However, moving forward we want to encourage all ringers to use these fields correctly. Capture time would be the time of a cannon net fire; the time your return from a net round; the time you empty a trap; etc. Time measured would be the time of processing of each individual bird.

By default, Time Measured will still auto-populate with Capture Time anyway so if you don't routinely record the time of processing individual birds you simple need to record Capture Time and let Time Weighed take care of itself.

However, it does not work the other way around and you should not use Capture Time in lieu of processing time. This will be critical for CES ringing where some ringers continue catching beyond the official end-time of the CES session. This is because we aim to separate CES and post-CES captures automatically based on Capture Time<=end of CES session and extract CES data automatically so that ringers will not need to flag CES/non-CES birds or explicitly create a CES submission.

14) CAPTURE DATE AND DATE MEASURED. Note if you weight a bird you must enter a value for Date Measured. By default, Date Measured will auto-populate with Capture Date which means for most ringing you can leave this to take care of itself. The exception will be for night ringing where birds captured before midnight are processed after midnight in which case you would need to set Date Measured to be the day after Capture Date (and set it to auto-repeat) in order to record weighing time – otherwise time elapsed will fail validation because you cannot weigh a bird before you catch it. Unless you specifically need to set Date Measured to be different to Capture Date you are advised not to set Date Measured to auto-repeat as this would override auto-populate for capture date.

15) RECORDING RACES. In the past you will have been used to recording races as a number (1,2,3,...) in a separate field to the species. However, in the National Ringing and Nest Recording Database it is the actual taxon that is stored rather than the species and race separately and so we wanted the taxa recording in DemOn to reflect this. Note races do not have their own two-character (BBS/Atlas/BirdTrack) or five-character (Ringer's) codes and so to find them although you could scroll through the entire drop-down list it is much easier to simply type part of the name. Taking Dunlin as an example:

Species Name	Age	Sex	Wing Length	Tarsus Length	Bill Length	Metho
dunl						
DN DUNLI Dunlin						
Dunlin (alpina)						
Dunlin (arctica)						
Dunlin (schinzii)						
Dunlin (schinzii/arctica)						

Abandon current record and exit

Show Today's Records

1) In the dropdown you will not only find the default species 'DN DUNLI Dunlin' but also the options for races 'Dunlin (alpina)', 'Dunlin (arctica)', 'Dunlin (schinzii)' & 'Dunlin (schinzii/arctica)' all available

2) Typing dunl will return the species and four alternatives for race whereas typing schinz would have returned a choice of two , 'Dunlin (schinzii)' & 'Dunlin (schinzii/arctica)'.

3) Once the list of returned species and races has been narrowed down sufficiently you can click on the one you want to select with the mouse or use the keyboard down arrow to highlight and then tab to move to next field

Currently, we are only allowing races to be recorded for the same shortlist of species for which races were allowed prior to DemOn. However, races for additional species may be allowed if new information is published to enable them to be separated UNEQUIVOCALLY in the hand.

16) YOUR EXISTING RINGING SITES. Based on data submitted previously and so held in the National Ringing and Nest Recording Database your existing ringing sites have been prepared for use in DemOn. All DemOn locations have associated spatial geometry. Initially this will be inherited as the one-km grid square corresponding to your former Place and any former Subsites belonging to a given Place will also inherit the same one-km grid. The DemOn 'Location Code' will be the former Place Code or combination of Subsite and Place Codes as appropriate, and so should be easy to recognise.

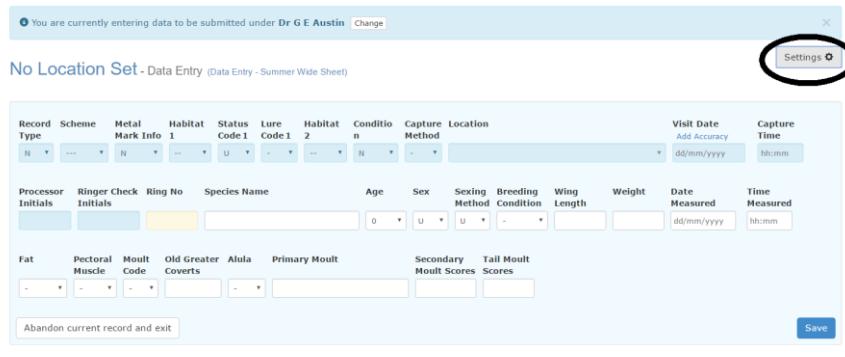
Note that the user-friendly Location Code is for your convenience only and in fact the National Ringing and Nest Recording Database works with a computer generated unique id. Thus if you wish it is safe to modify these pre-set Location without risk of undermining historic data. The only rule is the Location Code must be unique within your operating group (which is why we could not simply adopt existing Sub-site codes as standalone Location Codes (because for example you may have had several Sub-sites called Net1 or Box1 associated with different Places))

You should find all of your ringing locations available in DemOn. The exceptions will be if you have Places or Sub-sites for which you have never submitted an encounter. For example a yet to be used nestbox or a brand new site. In due course we will be adding a feature to allow the setup file from the master IPMR database (i.e. the one from which submissions to the BTO are created), to be uploaded and this will fill the gaps. This upload will also apply your existing site confidentiality to your Locations. We are also planning to have an upload feature to provide precise GPS coordinates for new/existing point locations (e.g. nest boxes). More detail on how DemOn handles ringing locations follows later.

Enter Data – Location groups and locations

Every encounter record is stored against a location. However you may have numerous locations and during a given data entry session you will often find it useful to temporarily restrict the number of locations available to both reduce the length of the drop-down list if searching for a location that way (because you can't remember the code) or to prevent errors from tying in the wrong code. You can do this at any time by restricting available locations to those in a given location group. There are various type of location group used by DemOn. The bounding polygon of a General site and any site components such as nets, trapping locations, nests or encounter areas (all formerly sub-sites) is a location group in itself. All locations belonging to a given CES or RAS are a location group and you can also create Custom/Reporting location groups to be used for e.g. restricting records to those for a particular report you may generate for a landowner. If you are part of a large ringing group you may want to create a custom group of all "your" ringing sites. A given location can be a member of multiple location groups.

To restrict available locations to a particular location group click on the Settings button to the top right of the Data Entry form



The screenshot shows the DemOn Data Entry interface. At the top, a message says "You are currently entering data to be submitted under Dr G E Austin". Below this is a "Settings" button, which is circled in red. The main form contains various data entry fields for a bird record, including Record Type, Scheme, Metal Mark Info, Habitat 1, Status Code 1, Lure Code 1, Habitat 2, Condition, Capture Method, Location, Visit Date, Capture Time, Processor Initials, Ringer Check, Ring No, Species Name, Age, Sex, Sexing Method, Breeding Condition, Wing Length, Weight, Date Measured, and Time Measured. At the bottom left is a "Save" button, and at the bottom right is a link to "Abandon current record and exit".

1) First click on 'Settings' button

The screenshot shows a data entry interface for a 'Summer Wide Sheet'. At the top, there's a message about the current user being Dr G E Austin. Below this is a header 'No Location Set - Data Entry (Data Entry - Summer Wide Sheet)'. The main area contains various data entry fields for records, including columns for Record Type, Scheme, Metal Mark Info, Habitat, Status, Lure, Habitat, Condition, Capture Method, Processor Initials, Ringer Check, Ring No, Species Name, Age, Sex, Sexing Method, Breeding Condition, wing length, wing width, Fat, Pectoral Muscle, Molt Code, Old Greater Coverts, Alula, Primary Molt, Secondary Molt Scores, and Tail Molt Scores. At the bottom right is a 'Save' button. On the left, there's a note about logging in as GAUSTIN and partner logos. At the bottom right, there's a footer with links to the DemOn project's charity registration and terms and conditions.

2) Then choose the location group you want from the drop-down selector

Your drop-down list of locations in the data entry form will then be restricted to just the components of the location group in question. This can be extremely useful if you have several ringing sites with similar codes for nets or boxes. So if for example you had two nest box schemes at sites, siteA and siteB with location codes for boxes like e.g. box1:siteA, box2:siteA, box3:siteA etc. and box1:siteB, box2:siteB, box3:siteB etc. where by restricting the site (location group) to either siteA or siteB you then only have to, in this case, enter the number as you have already restricted the boxes down to those belonging to the site in question.

You can therefore use this as a flexible way to limit the sites you see in the drop-down - essentially like an "on the fly" active/inactive flag.

User Field Setups

Clicking User Field Setups on the green navigation bar takes you to a form where you can add custom field setups which you can name, save and recall for future use. The DemOn default setup includes compulsory fields plus those recommended as those that ringers are encouraged to use. The default field setup cannot be edited; however, you can create your own custom field setups by first copying the default field setup by clicking on the 'Clone' button. This creates a new field setup called 'Default Setup Clone' and this you can edit by clicking on the edit button.

- You can change the name and description for your customised field setup to something meaningful.
- You can re-order fields using drag and drop.
- You can remove fields by dragging and dropping on the 'Drag Field Here to Remove' box.
- You can add fields by clicking on the 'Add field' box and choosing fields from the dropdown list that will appear. If you add a field with a dependent field the latter should also be added automatically (e.g. bill_method will be added automatically if you add bill_length or tarsus_length_method added automatically if you add tarsus_length).
- You can also set the default mode for the auto-repeat/auto increment behaviour of a given field by dragging that field onto the 'Drag here to toggle auto repeat' box. This simply sets the default preference for when you first open the field setup for data entry and you can still toggle the mode on the fly during data entry by clicking on the field heading in the data entry form. Fields set to default to auto-repeat will change to blue and if you attempt to drag a field that cannot be auto-repeated to the auto-repeat box, the box will turn red and inform you that you cannot auto-repeat that field.

- Recommended fields can be removed if it is something you do not record. Please think seriously about starting to record these data – they are recommended because at least in the case of the biometric fields they either improve the value or robustness of the rest of your data, and in the case of the initials fields they will allow others who ring with you to track their personal involvement which will be especially useful to those applying for permit upgrades or endorsements.
- Certain fields are compulsory under some circumstances. You can remove these fields from your custom field setups but they will be automatically re-added on the fly during data entry if required. So for example, if you have removed Date Measured and Time Measured and then enter a weight those two fields will automatically be added back in to your data entry form although not to the custom setup from which they were removed. This feature enables you to keep the number of fields in your custom setups low in the knowledge that required field dependencies will be added if necessary.
- You can create as many custom setups as you wish.
- You can switch between field setups at any time during data entry by using the drop-down selector accessed via the Setting button to the top right of the data entry form. Note when you do this the form is refreshed and so if you are part way through entering a record that record will not be saved, the fields will be blanked and you will have to re-start that record. DemOn will remember the last field setup you used and default to this upon your next data entry session.
- If you operate across multiple Operating Groups your personal custom setups will be available to you across all those groups.

The screenshot shows the 'User Field Setups' page. At the top, there's a green navigation bar with links like 'Home', 'Explore Data', 'Sites', 'Management', 'Effort', and 'User Field Setups'. Below this, a table lists field setups. The first row is 'Default Setup' with notes 'Default Field Setup for DemOn'. To the right of this row is a 'Clone' button, which is circled in black. The table has columns for 'Name', 'Notes', and 'Fields' (which displays a list of fields like 'Record Type', 'Ring No', etc.).

1) To access field set-ups click on 'User field setup' on green navigation bar. The first time you do this only the DemOn default field set-up will be shown. You cannot view or edit this but you can make a copy that you can view and edit by clicking the 'clone' button

The screenshot shows the 'Edit Setup' page for a cloned field setup. It has a header 'Edit Setup' and a 'Save changes' button. There are sections for 'Name' (containing 'Default Setup Clone') and 'Notes' (containing 'Default Field Setup for DemOn'). Below these is a table with columns for 'Record Type', 'Ring No', etc., and a 'Clone' button. To the right of the table is an 'Edit' button, which is circled in black. There are also 'Clone' and 'Delete' buttons.

2) This creates a copy of the DemOn default which you can now customise to add, remove and re-order fields. You can also set defaults for auto-repeat behaviour for individual fields

The screenshot shows the 'Edit Setup' page for a cloned field setup. It has a header 'Edit Setup' and a 'Save changes' button. There are sections for 'Name' (containing 'Default Setup Clone') and 'Notes' (containing 'Default Field Setup for DemOn'). Below these is a table with columns for 'Record Type', 'Ring No', etc., and a 'Clone' button. To the right of the table is an 'Edit' button, which is circled in black. There are also 'Clone' and 'Delete' buttons.

3) This opens the newly created copy of the DemOn default field setup. Here you can give the setup a more meaningful name, add some explanatory notes

The screenshot shows the 'Edit Field Order' page. At the top, there are buttons for '+ Add Field' and 'Drag Field Here to Remove'. Below this is a table with columns for 'Record Type', 'Ring No', 'Scheme', 'Species Name', 'Age', 'Pul Ringed', 'Pul Alive', 'Sex', 'Sexing Method', 'Breeding Condition', 'Visit Date', and 'Capture Time'. The 'Location' column is expanded to show 'Habitat 1', 'Habitat 2', 'Status Code 1', 'Status Code 2', 'Wing Length', 'Weight', 'Date Measured', 'Time Measured', 'Condition', 'Moult Code', and 'Alula'. At the bottom, there are buttons for 'Extractor Initials' and 'Wing Initials'.

Home Explore Data Sites Management Effort User Field Setups

Operating as: Thetford Forest Ring... Change Logout

[Cancel/Back to list](#)

Edit Setup

[Save changes](#)

Name
Default Setup Clone

Notes
Default Field Setup for DemOn

+ Add Field Drag Field Here to Remove Extractor Initials

Record Type	Species Name	Age	Pull Ringed	Pull Alive	Sex	Sexing Method	Breeding Condition	Visit Date			
Capture Time	Location	Habitat 1	Habitat 2	Status Code 1	Status Code 2	Wing Length	Weight	Date Measured	Time Measured	Condition	Moult Code
Alula	Old Greater Coverts	Primary Moult	Finding Condition	Finding Circumstances	Capture Method	Metal Mark Info	Ringer Initials	Ringer Check Initials	Processor Initials		
Wing Initials											

4) To remove an unwanted field, drag the field onto the 'Drag Field Here to Remove' box.

You will then get a pop-up box which will inform you about any field dependencies (which you would also need to removed) and asks you to confirm the removal

Home Explore Data Sites Management Effort User Field Setups

Operating as: Dr G E Austin Change Logout

[Cancel/Back to list](#)

Edit Setup

[Save changes](#)

Name
Data Entry - Summer Wide Sheet

Notes
Customised to summer general ringing sheet i.e. 25 records per side with full moult fields

+ Add Field Drag Field Here to Remove

Record Type	Scheme	Metal Mark Info	Habitat 1	Status Code 1	Lure Code 1	Habitat 2	Condition	Finding Condition	Finding Circumstances	Weight
Capture Method	Location	Visit Date	Capture Time	Processor Initials	Ringer Check Initials	Ring No	Species Name	Age	Sex	Sexing Method
Breeding Condition	Wing Length	Date Measured	Time Measured	Fat	Pectoral Muscle	Moult Code	Old Greater Coverts	Alula	Primary Moult	
Secondary Moult Scores	Tail Moult Scores									

5) To set the field default for auto-repeat to on or off, drag the field to the 'Drag Here to Toggle Auto Repeat' box.

If the box turns red it means that you are trying to set an inappropriate field to auto-repeat (e.g. that for a biometric such a weight)

Home Explore Data Sites Management Effort

Operating as: Dr G E Austin Change Logout

[Cancel/Back to list](#)

Name
Data Entry - Summer Wide Sheet

Notes
Customised to summer general ringing sheet i.e. 25 records per side with full moult fields

+ Add Field Drag Field Here to Remove

Field to add

pr

- I Primary Covert Moult Scores
- L Primary Moult Scores
- Primary Covert Moult Scores
- Primary Length
- Provisional Sex
- Sample Processed

[Close](#) [Add](#)

Drag here to toggle auto repeat

Record Type	Scheme	Metal Mark Info	Habitat 1	Status Code 1	Lure Code 1	Habitat 2	Condition	Finding Condition	Finding Circumstances	Weight
Capture Method	Location	Visit Date	Capture Time	Processor Initials	Ringer Check Initials	Ring No	Species Name	Age	Sex	Sexing Method
Breeding Condition	Wing Length	Date Measured	Time Measured	Fat	Pectoral Muscle	Moult Code	Old Greater Coverts	Alula	Primary Moult	
Secondary Moult Scores	Tail Moult Scores									

6) To add a field click on the 'Add field' box to bring up the 'Field to Add pop-up'.

Here you can either click in the box with the mouse and scroll down to select the field you want to add or else start typing if you have an idea of the field name and the drop-down selection will rapidly narrow down after which you can use the keyboard down arrow to select your field and press Enter. Return key to add the selected field to your custom set-up

Cancel/Back to list

Edit Setup

[Save changes](#)

Name
Data Entry - Wader Sheet

Notes
Wader sheet with fields for wader specific biometrics

7) This example has been customised for wader ringing. Once happy with the set-up, save it by clicking on save changes (top right) or otherwise cancel (top left)

+ Add Field Drag Field Here to Remove

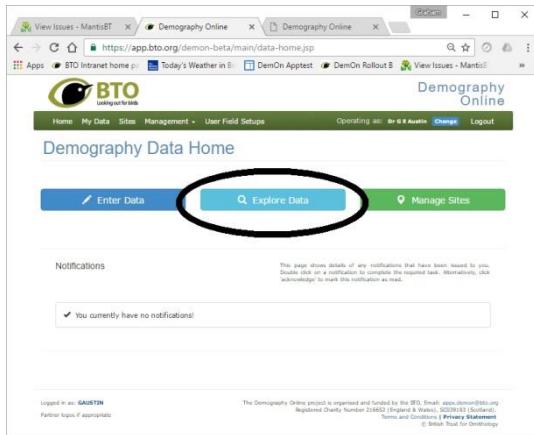
Record Type	Species Name	Age	Sex	Wing Length	Weight	Date Measured	Time Measured	Moult Code	Primary Moult	Secondary Moult Scores	
Tail Moult Scores	Metal Mark Info	Head Bill Length	Bill Length	Tarsus Length	Bill Length Method	Tarsus Length Method					

TIP: here fields that are being auto-repeated have been placed first because during data entry cursor jumps to the ring number or first non-repeated field with each new record. This means repeated fields are skipped saving keystrokes.

Custom Search / Data selection and processing

Data search/filter

Data selection and processing can be accessed directly from the ‘Explore Data’ link on the home page.

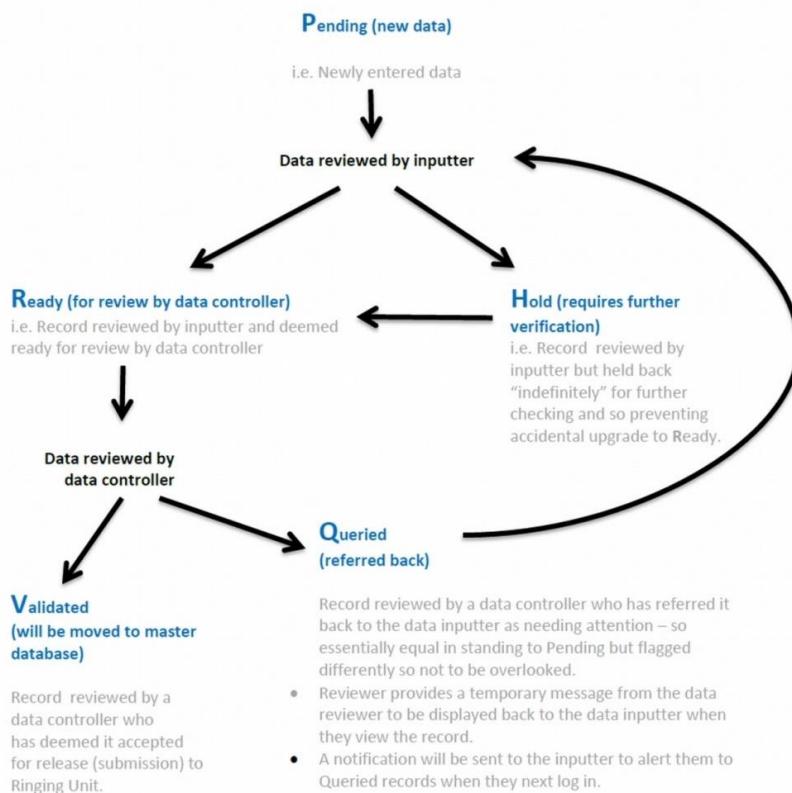


This takes you into a form from which you can filter for records for viewing or editing. This form should have access to the majority of your historic data. Only data for rings issued since the beginning of computerised ring issue will have been identified as belonging to your Operating Group at present but we are in the process of entering data from our old ring issue ledgers. In due course will put a system into place that will allow IPMR control files to be uploaded from which DemOn's ring allocation table can be populated to identify ring series allocated to individuals. Currently “your data” is restricted to those data submitted under your current Operating Group. In due course, once the security, confidentiality and data sharing has been fully implemented you will be able to view all your data simultaneously from across all Operating Groups for which you have been granted access by the Operating Group owner/deputy for all locations excluding those from any locations flagged as confidential and for which you have not been granted viewing rights by the Operating Group Owner.

The screenshot shows the Demography Online search interface. At the top, there are tabs for 'View Issues - MantisBT', 'Search', and 'Demography Online'. The 'Demography Online' tab is active, showing the URL https://app.bto.org/demon-beta/main/search_new/records.jsp. The page title is 'Demography Online'. A navigation bar includes links for 'Home', 'My Data', 'Sites', 'Management', 'User Field Setups', 'Operating as: Dr G E Austin [Change]', and 'Logout'. Below the navigation is a search/filter section with tabs for 'Search/Edit Filters' and 'Result'. The 'Result' tab is selected. It contains fields for 'Start Visit Date' (Earliest Date) and 'End Visit Date' (Latest Date). Under 'Ringing Encounters', there are checkboxes for 'Pending' (checked), 'Ready' (checked), 'Validating' (checked), and 'Finalised (bulk of the data)' (unchecked). There are also fields for 'Species' (Species), 'Locations' (Locations), and 'Rings' (Rings). A dropdown for 'User who entered' is set to 'All users with permission'. A 'Search' button is at the bottom right. At the bottom of the page, it says 'Logged in as: GAUSTIN' and 'Partner logos if appropriate'. The footer includes links for 'The Demography Online project is organised and funded by the BTO. Email: apps.demon@bto.org', 'Registered Charity Number 216652 (England & Wales), SC039193 (Scotland)', 'Terms and Conditions | Privacy Statement', and '© British Trust for Ornithology'.

Data Submissions – reviewing and validating

The journey of data from being entered, its passage through within-group review and on to final submission is all handled from within DemOn. The schematic below illustrates the within-group review process (at the time of writing, Queried and Hold are not fully implemented).



- Data can be entered by anyone the Operating Group owner has added to their team/group and given appropriate permission to. On entry, data acquires the submission status P (Pending) and data ownership is assigned to the user_id of the person entering it.
- Once the person who has entered the data is happy that their data is good to go they can set the submission status as R (Ready for review by data controller).
- Alternatively, if there are any questionable records that they prefer not to set to Ready until they have clarified whether there is an issue or not e.g. after referring back to field notebooks or whatever), then they can set the submission to H (Hold).
- At any time a Data Controller, typically your trainer if you are a C- or T-permit holder, may review records deemed Ready by the user who has input them and either set the submission status of those records to V (validated) or Q (queried)
- Queried records can be accompanied by a message from the data controller to inform the data inputter as to why the record has been queried.
- Once flagged as validated the data are released from a preliminary table in the Master Ringing database on the BTO database server and moved to the main tables undergoing further validity checks as they do, alerting ringing unit staff to any records that need further review by themselves in a similar manner to data submitted by any other means.

The functionality to update submission status is accessed through the Custom Search on the Data Entry, Selection and Processing tab.

The Search form defaults to Pending, Ready and Validating pre-selected and Finalised records unselected. Beware that if you choose to include Finalised records (which are not appropriate for data review anyway) this will increase the search time substantially as it will be retrieving your records with a search against the entire National Ringing and Nest Recording Database. You can change which subset of records you want to return by clicking the check box to the right of each. It will change to green if selected and red if unselected.

You can further filter the records you are interesting in to those entered by a particular user (default is all users with permission to enter data), a particular Species or list of species (default is all species), a particular location or list of locations (default is all locations), a particular date window (default is all dates), a particular ring part series or series (default is all rings) or choose between new or subsequent encounters (default is both).

P, R, H, Q and V records are all available from the pre-load table in the National Ringing and Nest Recording Database and so will display rapidly when you choose to view them. Finalised records (all your past data) have to be retrieved from the main tables in the National Ringing and Nest Recording Database. Consequently, viewing finalised records can take a long time to retrieve if no other filters (such as dates, species, locations or users) are in force – hence the default record selection.

For purposes of data review you are most likely to want to choose your own records with submission status pending, or in the case of trainers the records of your C-permit holders, with submission status Ready.

The screenshot shows the BTO Demography Online search interface. At the top, there are tabs for 'View Issues - MantisBT', 'Search', and 'Demography Online'. The main area has a header with the BTO logo and navigation links for 'Home', 'My Data', 'Sites', 'Management', 'User Field Setups', 'Operating as: Dr G E Austin', 'Change', and 'Logout'. Below this is a search/filter section with fields for 'Start Visit Date' (01/01/2016), 'End Visit Date' (Latest Date), 'Ringing Encounters' (checkboxes checked), 'Subsequent encounters' (checkboxes checked), 'Pending' (checkbox checked), 'Ready' (checkbox checked), 'Validating' (checkbox checked), 'Finalised (bulk of the data)' (checkbox checked), 'Species' (Species dropdown), 'Locations' (Locations dropdown), 'Rings' (Rings dropdown), and 'Entered by' (dropdown showing 'Mr P A Standifff'). A 'Search' button is at the bottom right. The footer includes a log-in message ('Logged in as: GAUSTIN'), a note about partner logos, and links for 'Terms and Conditions', 'Privacy Statement', and '© British Trust for Ornithology'.

You can choose from the list of your own field setups the one you wish to use for the viewing the data to be returned by the search regardless of the field setup used to enter those data in the first place. There is therefore little advantage in taking the draconian approach of insisting all members of your operating group to use a standard field setup so long as they are entering all the fields for which you require data.

This causes the records to be displayed at the bottom of the screen. You can order the records by clicking on the arrow symbols next to the column headings. To order on multiple fields hold down the shift key and click the arrows next to each column in turn. For example clicking the arrows next to visit_date and then capture_time will order the records in chronological order (if for some reason they weren't entered in that order. Or maybe if you record new and subsequent captures on separate field sheets you may find it more useful to hold down shift whilst you click the arrows against record_type, visit_date and capture_time. You can pan across records using the horizontal scroll bars, and the vertical scroll bars to skim through the records.



Search/Edit Filters Result (6 Records)

Show 10 entries

All on page None on page

Submission Status Visit Date Location Name Ring No Record Type Species Name Age Sex Sexing Method Breeding Condition Wing Length Weight Time W Fat

	All on page	Submission Status	Visit Date	Location Name	Ring No	Record Type	Species Name	Age	Sex	Sexing Method	Breeding Condition	Wing Length	Weight	Time W	Fat
Inputting order															
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326030	N	Blue Tit	3	M	P			64	11	12:24	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326031	N	Blue Tit	4	F	P			64	10.7	12:25	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326032	N	Blue Tit	3	F	P			64	10.6	12:27	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326033	N	Blue Tit	3	F	P			62	10.4	12:27	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326034	N	Coal Tit	3	U	U			59	8.5	13:17	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326035	N	Blue Tit	4	F	P			64	11	13:26	

Showing 1 to 6 of 6 entries

Previous Next

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All records selected by the search filter you specified will be returned by the query. The number of records displayed per screen defaults to 10 but you can set this to be 10, 25, 50 or 100 using the drop-down to the top left of the table and move forward and backwards through all returned records using the Previous/Next selector to the bottom right of the table.

Search/Edit Filters Result (6 Records)

Show 10 entries

All on page None on page

Submission Status Visit Date Location Name Ring No Record Type Species Name Age Sex Sexing Method Breeding Condition Wing Length Weight Time W Fat

	All on page	Submission Status	Visit Date	Location Name	Ring No	Record Type	Species Name	Age	Sex	Sexing Method	Breeding Condition	Wing Length	Weight	Time W	Fat
Inputting order															
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326030	N	Blue Tit	3	M	P			64	11	12:24	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326031	N	Blue Tit	4	F	P			64	10.7	12:25	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326032	N	Blue Tit	3	F	P			64	10.6	12:27	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326033	N	Blue Tit	3	F	P			62	10.4	12:27	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326034	N	Coal Tit	3	U	U			59	8.5	13:17	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326035	N	Blue Tit	4	F	P			64	11	13:26	

Showing 1 to 6 of 6 entries

Previous Next

Logged in as: GAUSTIN
Partner logos if appropriate

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From here you can mark records to have their submission status upgraded or you can mark records for editing. This is done by simply ticking the checkbox (far left) against records you wish to select. You have the option of 'all on page' or 'none on page'. As soon as you tick one or more records, two new buttons appear to the top left of the table immediately below the field set-up selector. 'Open in Data Entry Form' opens the chosen records in the data entry form to allow you to edit the records. If the chosen records are available to have their submission status upgraded you will see either 'Set ready for Review' or 'Set to BTO Processing' depending on your role within the operating group (see group administration).

Search/Edit Filters Result (6 Records)

Setup to use for columns: Data Review - Summer wide ...

2 records selected
2 ready

Show 10 entries

All on page	Submission Status	Visit Date	Location Name	Ring No	Record Type	Species Name	Age	Sex	Sexing Method	Breeding Condition	Wing Length	Weight	Time W	Fat
Inputting order														
<input checked="" type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326030	N	Blue Tit	3	M	P		64	11	12:24	
<input checked="" type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326031	N	Blue Tit	4	F	P		64	10.7	12:25	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326032	N	Blue Tit	3	F	P		64	10.6	12:27	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326033	N	Blue Tit	3	F	P		62	10.4	12:27	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326034	N	Coal Tit	3	U	U		59	8.5	13:17	
<input type="checkbox"/>	Ready for Review	26/11/2016	Back-fence - BRA (Brandon)	S326035	N	Blue Tit	4	F	P		64	11	13:26	

Showing 1 to 6 of 6 entries

Previous 1 Next

Forwarded in set: CAHCTIN

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The options available to you will depend on your group permissions (see Management –Group Administration). If you do not have Data Controller permission level you will simply have the option to ‘Set to Ready’. If you have Data Controller permission level you have the option to ‘Set Ready to BTO validating’ or ‘Set to Queried’ (**latter not yet available**)

Editing records

You can edit saved records either during a data entry session or having selected the record(s) you wish to edit from the Search/Filter. To use Data Entry Form from Search, first select the records you wish to edit and then click the Open in Data Entry Form button

Setup to use for columns: Data Review - Summer wide ...

3 records selected
3 ready

Show 10 entries

All on page	Submission Status	Visit Date	Location Name	Ring No	Record Type	Species Name	Age	Sex	Sexing Method	Breeding Condition	Wing Length	Weight	Time W	Ti W
Inputting order														
<input checked="" type="checkbox"/>	Ready for Review	26/08/2016	Back-fence - BRA (Brandon)	Z847363	N	Great Tit	3J	U	U		74	18.6	12	
<input checked="" type="checkbox"/>	Ready for Review	28/08/2016	Back-fence - BRA (Brandon)	Z847364	N	Great Tit	3J	U	U		77	21.5	12	
<input checked="" type="checkbox"/>	Ready for Review	28/08/2016	Back-fence - BRA (Brandon)	Z847365	N	Great Tit	3J	U	U		76	19.1	12	
<input type="checkbox"/>	Ready for Review	28/08/2016	Back-fence - BRA (Brandon)	Z847366	N	Robin	3J	U	U		76	19.7	12	
<input type="checkbox"/>	Ready for Review	28/08/2016	Back-fence - BRA (Brandon)	Z847367	N	Great Tit	3J	U	U		73	17.7	15	

This will open the selected records in the data entry form from where you can edit a single record by clicking on the orange edit button on the extreme right of the chosen record or initiate a bulk edit by selecting the red bulk edit button at the extreme right of the header row.

Visit Date	Location	Ring No	Record Type	Species Name	Age	Sex	Sexing Method	Breeding Condition
26/08/2016	Back-fence - BRA (Brandon)	Z847363	N	Great Tit	3J	U	U	
28/08/2016	Back-fence - BRA (Brandon)	Z847364	N	Great Tit	3J	U	U	
28/08/2016	Back-fence - BRA (Brandon)	Z847365	N	Great Tit	3J	U	U	

Clicking on the orange Edit button opens up the record in question for editing. The orange button is replaced by ‘update’ and ‘cancel’ buttons. Edit the field(s) and select ‘update’ to save the changes. As any edit has the potential to invalidate values in other fields, the record will pass through complete validation before being saved. Any previously supplied comments will be displayed during validation to allow you to modify or ‘save as is’.

Visit Date	Location	Ring No	Record Type	Species Name	Age
26/08/2016	Back-fence - BRA (Brandon)	Z847363	N	Great Tit	3J
28/08/2016	Back-fence - BRA (Brandon)	Z847364	N	Great Tit	3J
28/08/2016	Back-fence - BRA (Brandon)	Z847365	N	Great Tit	3J

Clicking the red bulk edit button opens up all records in current selection for simultaneous editing. In this case a head row is opened up for edit. Clicking on the blue '↓Edit' button open a field up for bulk edit. You can bulk edit multiple fields simultaneously. Click on the 'Bulk update' button to apply update to all records.

Visit Date	Location	Ring No	Record Type	Species Name	Age	Sex	Sexing Method
26/08/2016	Back-fence - BRA (Brandon)	Z847363	N	Great Tit	3J	U	U
28/08/2016	Back-fence - BRA (Brandon)	Z847364	N	Great Tit	3J	U	U
28/08/2016	Back-fence - BRA (Brandon)	Z847365	N	Great Tit	3J	U	U

As when editing a single record, all records in the bulk edit must be re-validated. Each record will be validated in turn and new or re-issued warning and errors will need to be dealt with before record is saved and the validation routine moves on to the next record. A large bulk update may therefore take some time to work through.

Bulk edit should be used with caution but will be useful if for example you have forgotten to enter a particular field, entered a run of records against the wrong date, or forgot to toggle off auto-repeat for a field where it became inappropriate to have repeated values.

Your ability to edit records is directly related to your permissions level. Data controllers and above will have the ability to edit others data whereas those with permissions below data controller will only be able to edit data they have entered themselves or records entered on their behalf by another group member who then conceded ownership to them (**latter not yet available**).

Currently, editing is restricted to records that have yet to have their status upgraded to BTO processing. As soon as confidentiality and permissions have been fully implemented you will also be able to edit accepted records (essentially a re-submission).

Reporting

Not yet available

The Custom Search / Data Selection and Processing will also be the springboard from which you will be able to generate custom and pre-canned queries of your data, generate capture histories, and export data. This functionality will be activated once all the foundations upon which it relies are in place, principally data security and confidentiality and the pre-canned reports constructed.

Management

Currently not all functionality accessed from the Management Tab on the green navigation bar is available for testing. Unavailable functionality is described in brief here to give you an idea of how it is intended to work alongside functionality that is available to give you more of an overall picture of how it will all link together.

The screenshot shows the Demography Online homepage. At the top, there's a navigation bar with links for Home, My Data, Sites, Management (with a dropdown arrow), User Field Setups, and Logout. The 'Management' link has a dropdown menu open, showing 'Group Administration', 'Observer List', 'Ring Administration', and 'Ring List'. Below the navigation bar is a main content area with tabs for 'Demography' (selected), 'Enter Data' (with a pencil icon), 'Explore Data' (with a magnifying glass icon), and 'Manage Sites' (with a location pin icon). A large black circle highlights the 'Group Administration' option in the dropdown menu.

As you will see, these include 'Group administration', 'Ring List' and 'Observer List'. Some of these features are built but awaiting other functionality that they need to interact with. Currently, only Group Administration is activated.

Management - Group administration

Group Administration is where owners (be that an independent ringer with associated C's, T's, helpers etc or a Ringing Group secretary) can add members and control permissions of their 'team'.

The screenshot shows the 'Group Administration' page. At the top, there's a navigation bar with links for Home, My Data, Sites, Management (selected), User Field Setups, and Logout. The 'Management' link has a dropdown menu open, showing 'Group Administration' (selected), 'Observer List', 'Ring Administration', and 'Ring List'. Below the navigation bar is a main content area titled 'Group Administration' with a sub-section 'Type' set to 'Users'. A table lists four users with assigned permissions:

Name	Type	View all	Input	Update own	Update all	Record Controller	Deputy	Owner	Action
Dr G E Austin	User	<input checked="" type="checkbox"/>	<button>Remove</button>						
Miss B. M. Griffin	User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<button>Remove</button>
Dr G.J. Conway	User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<button>Remove</button>					
Dr D Moss	User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<button>Remove</button>

At the bottom right of the table is a green 'Add user' button. At the very bottom of the page, there's a footer with small text about the project being run by the BTO and links for Terms and Conditions and Privacy Statement.

How this works should be reasonably self-explanatory, this is where you add, remove and set levels of permission for members of your group/team. You do this by ticking the appropriate check-boxes. The various permissions are hierarchical and the hierarchy is presented left to right i.e. ticking a check-box will tick all check-boxes to the left



WARNING Rollout-C testers be aware

UNTIL WE HAVE PUT IN PLACE THE INTRA-GROUP CONFIDENTIALITY ALL MEMBERS OF YOUR GROUP/TEAM WILL BE ABLE TO SEE ALL OF YOUR SITES REGARDLESS OF WHETHER THOSE SITE HAVE BEEN FLAGGED CONFIDENTIAL OR NOT. THEREFORE IF YOU HAVE CONFIDENTIAL SITES, FOR NOW YOU SHOULD ONLY ADD THOSE GROUP MEMBERS YOU FULLY TRUST WITH THAT INFORMATION.

HOWEVER, UNTIL THE INTRA-GROUP CONFIDENTIALITY IS IN PLACE, WE HAVE LOCKED DOWN SECURITY SO THAT USERS OTHER THAN THE OWNER WILL ONLY BE ABLE TO SEE DATA THEY HAVE THEMSELVES ENTERED UNDER THEIR OWN LOGIN USER_ID SO DETAILS OF CONFIDENTIAL RECORDS THEMSELVES WILL BE SAFE.

The authority that each level of permission brings with it are summarised in the table below. Some may be subject to revision once we tackle the issue of granular permissions (intra group confidentiality)

OWNER – HAS THE AUTHORITY TO ADD/REMOVE USERS AND SET/ALTER PERMISSIONS in addition to all permissions of “lower ranks”

- The owner is the permit number to whom rings are issued and so is ultimately responsible for those rings.
- If you ring on your own rings as an A-permit holder you will be the owner.
- If you ring on rings issued to a registered Ringing Group then the owner will be your group secretary.
- If you are a C-permit holder then the owner could be either your trainer (if using rings registered to them personally), the group secretary (if using rings registered to the Ringing Group “permit number” 9*** or the nominal lead of a partnership (if you use rings issued under a partnership “permit number 8***).
- Similar goes for a T-permit holder, or non-ringer.
- **NO RESTRICTIONS ON DATA THAT CAN BE VIEWED**

DEPUTY: HAS ALL THE AUTHORITY OF THE OWNER OTHER THAN THE ABILITY TO ALTER THE OWNERS PERMISSIONS in addition to all permissions of “lower ranks”

- The owner of a large ringing group may wish to deputise one or more members to lighten the burden of managing their group, allocating rings, reviewing data ready for submission etc.
- Typically, all members of a registered ringing partnership other than the nominal lead would have Deputy status.
- A trainer with dependent C's and T's may wish to promote one of their team to Deputy whilst they are away on vacation or even add a trusted fellow A-ringer to their team, give them Deputy status and have them keep an eye on things while they are away.
- A group, partnership or Independent A-permit holder may wish to allow a trusted fellow ringer or, God forbid, a BTO staff member to join the team temporarily by way of support.
- **NO RESTRICTIONS ON DATA THAT CAN BE VIEWED (otherwise they would not be able to act as a full deputy)**

RECORD CONTROLLER: HAS THE AUTHORITY TO REVIEW DATA in addition to all permissions of “lower ranks”

- A Data Controller has the authority to review data entered by others and either flag them as validated and so ready for final submission to the BTO or query them and refer them back to the user who first entered them.
- Typically this permission would be granted to all A-permit holders operating in a Ringing Group.
- Typically a Data Controller who is a Trainer operating within a Ringing Group would be expected to be the one validating data entered by their own C's and T's.
- A-permit holders without their own C's and T's may still have helpers who's data entry they need to review and clear for submission to the ringing unit.
- A Data Controller can also validate data entered by other than their own C's and T's. For example a trainer may ask another trainer to keep an eye on their C's and T's data entry whilst away on vacation.
- **SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF SITES/RECORDS**

UPDATE ALL: HAS THE AUTHORITY TO EDIT DATA ENTERED BY ANY GROUP MEMBER INCLUDING DATA ALREADY SUBMITTED in addition to all permissions of “lower ranks”

- This permission would be entrusted to an adept member of the team who nonetheless does not have the authority to review data for submission to the BTO (i.e. C's, T's & helpers)
- Typically this permission would be given to advanced C's who may be in a position to help others learning the system. **???? not sure how useful this permission will be in practise ????**
- For example this permission could be granted to a trusted member adept at data checking and cleaning
- Note all new data they enter will be subject to review by a Data Controller.
- Any old records already submitted to the BTO that are edited will be subject to review by a Data Controller before being re-submitted to the BTO.
- Any data already submitted to BTO will also require a comment to be provided for review by Ringing Unit staff before the revised record is accepted (at which time the former record will be flagged as archived rather than deleted – just in case).
- **SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF SITES/RECORDS**

UPDATE OWN: HAS THE AUTHORITY TO EDIT DATA ENTERED BY THEMSELVES ONLY, INCLUDING DATA ALREADY SUBMITTED in addition to all permissions of “lower ranks”

- Typically this permission would be entrusted to all C-permit holders and any “proven” T-permit holders and helpers entering data.
- Note all new data they enter will be subject to review by a Data Controller.
- Any old records already submitted to the BTO that are edited will be subject to review by a Data Controller before being re-submitted to the BTO.
- Any data already submitted to BTO will also require a comment to be provided for review by Ringing Unit staff before the revised record is accepted (at which time the former record will be flagged as archived rather than deleted – just in case).
- **SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF SITES/RECORD**

INPUT: HAS THE AUTHORITY TO INPUT DATA

This permission can be granted to anyone you trust to input data

- Typically this permission would be entrusted to T-permit holders who you may have entering data on your behalf but who are relatively new to data entry. **???? not sure how useful this permission will be in practise ????**
- Note all new data they enter are subject to review by a Data Controller.
- They will not be able to edit data once it has been reviewed and accepted by a data controller.
- **SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF SITES/RECORDS**

MEMBER: HAS THE AUTHORITY TO VIEW DATA

- **SUBJECT TO CONSTRAINTS IMPOSED BY CONFIDENTIALITY OF SITES/RECORDS**

Note: currently the editing of data that has already been submitted to BTO (essentially re-submissions) is disabled until the all supporting functionality has been built

Management - Observer list – (Not yet available – under development)

Still under development, details of your ‘group’ i.e. initials, permit number, etc . This will be activated once we have built the functionality for users to upload their IPMR set-up/control files to seed ring-allocation and member lists. If properly maintained by owners, once linked into our new membership database it will be possible to link records for individuals across the entire National Ringing and Nest Recording Database (regardless of whether they use the same initials under different groups) which will enable users to retrieve all their records, totals etc.

Management - Ring List maybe better termed Ring Allocation – (Unavailable for testing in Rollout-C)

Ring administration is largely built but not yet available. This will be activated once we have built the functionality for users to upload their IPMR control files to seed ring-allocation and member lists.

The screenshot shows the 'Demography Online' application interface. At the top, there's a navigation bar with links like 'Home', 'My Data', 'Sites', 'Management', 'User Field Setups', and 'Logout'. A dropdown menu indicates the user is operating as 'Dr G E Austin'. Below the navigation is a form for ring allocation, with fields for 'Start Ring' and 'End Ring' (both empty), and an 'Observer' dropdown set to 'Mr M Baxter'. A green 'Allocate Rings' button is visible. To the right, a summary box displays '31227 rings' and '92 series'. At the bottom, a table titled 'Allocations' lists two rows: '1190801 1190810 FOO - 10 rings' and '1199641 1199650 No Allocations'. The table includes columns for 'First Ring', 'Last Ring', 'Allocations', 'Used', and a percentage column (10.00% and 0.00%).

Not yet available for testing – has dependencies with functionality yet to be completed

EKE501	EKE999	NO Allocations	0/10	0.00%
EL76471	EL76480	FOO - 5 rings	0/10	0.00%

Locations

Ringing and Nest Recording Locations

While much of the data entry and management should be reasonably intuitive to users, DemOn brings with it a major leap forward in the handling of ringing sites. Prior to DemOn you had a Place defined as a one-km grid square. Associated with this you may have had an accuracy of +/- 1 or +/- 2 etc which approximated the Place to a 3x3 km, a 5x5 km square etc. If you had sub-sites associated with a Place whilst you would know what they mean on the ground, no additional spatial information was associated with them and so essentially in the National Ringing and Nest Recording Database they inherit the one-km grid (or worse) from the Place with which they are associated. Nest sub-sites were slightly better as at least you could record these to a 6-figure grid reference which located them to a 100m x 100m grid square.

In DemOn, we talk about locations.

- All locations will have their own spatial geometry which can be as precise as you want it to be.
- Encounters (handlings and field sightings) may be recorded against any location.
- Your ex-Places and ex-subsites will be available to you when you first login to DemOn. These have been derived from data held in the National Ringing and Nest Recording Database. **HOWEVER**, if you have Places or sub-sites setup in your existing database but for which you have never submitted an encounter these will be missing - in due course we will have the facility to upload your IPMR control file to plug such gaps.
- Ex-Places will be identifiable from their location-code which will be the same as their Place-code was. Ex-Subsites will be identifiable from their location-code which will be a concatenation of their old sub-site code and the Place-code to which they belonged. E.g. if you had a Place with code 'GARDEN' with three sub-sites with codes 'BACK', 'FRONT' and 'SIDE' you would find four locations in DemOn with location codes 'GARDEN', 'FRONT:GARDEN', 'BACK:GARDEN' & 'SIDE:GARDEN'.
- You may stick with the existing geometry for your locations, i.e. the one-km grids, in which case you need do nothing with your locations before you start using DemOn. However providing precise information about exactly where your site boundaries lie, precise locations of sub-areas , nets or traps or precise GPS derived locations of nests has the potential to greatly increase the value of your data to the scientists, conservation practitioners and not least your person interest.
- So we hope the majority of ringers and nest recorders will recognise the benefits of redefining the geometry of existing locations to better represent them for what they are – you can define polygons for ex-Places, and polygons, polylines or points for ex-subsites representing sub-areas, nets/net-lines or positions of traps, nestboxes etc. respectively. See later for more extensive notes on how to achieve this.
- In due course you are likely to want to create new locations. See later for more extensive notes on how to achieve this.

Assemblages / Location Groups

Users should not need to understand the ‘under the hood’ workings of how DemOn uses ‘assemblages’ to manage relationships between locations. However, a bit of background for those who are interested. Our front-end term currently is ‘location groups’ (open to suggestions).

There are a number of different types of assemblages in DemOn:

- **General Site:** the bounding polygon of a ringing site or nest study area and any ringing site components contained within including polygons for sub-areas, polylines for net-rides, or points for precise locations of trap, field observations or nests
- **CES Site:** as Ringing Site but only bounding polygon and net-rides allowed – note the creation of net-lines will become a requirement for CES sites in due course (to revive the CES mapping and habitat recording the paper version of which was abandoned some years ago).
- **RAS location group:** all locations used for a particular RAS.
- **Custom/Reporting assemblages:** currently labelled reporting assemblages – locations linked by a common property e.g. all locations on a given land-owners land; all locations in a particular village catchment; all locations linked to a ringer's own study – the sky's the limit. Typically these would be used to filter data for reports or queries or used to control locations available during a data entry session.

A given location can belong to multiple assemblages so for example you may have a net that is part of your main ringing site, part of a CES in one corner of your ringing site, contributes to your RAS study, contributes towards totals across multiple annual reports you might do for particular landowners and so on.

The intention is that the user need not understand how General Sites, CES and RAS assemblages are organised behind the scenes when setting up and using these for routine data entry and reporting. However, users will probably be best able to take full advantage of Custom/Reporting Assemblages if they do have some grasp of the concept.

Site Creation, Maintenance and Management

You can access the site management screen using either the direct Manage Sites' link on the home page or by choosing 'Sites' from the green navigation bar

The screenshot shows the Demography Online homepage. At the top, there is a green navigation bar with the BTO logo and the text "Demography Online". Below the navigation bar, there are several links: "Home", "My Data", "Sites" (which is highlighted with a black arrow), "Management", and "User Field Setups". To the right of these, it says "Operating as: Dr G E Austin Change Logout". Below the navigation bar, there are three main buttons: "Demography Data Home" (blue), "Enter Data" (blue), and "Explore Data" (light blue). To the right of these buttons is a green button labeled "Manage Sites" with a location pin icon, which is circled in black. Further down the page, there is a section titled "Notifications" with the message "You currently have no notifications!". At the bottom of the page, there is footer information including "Logged in as: GAUSTIN", "Partner logos if appropriate", and "The Demography Online project is organised and funded by the BTO. Email: apps.demon@bto.org Registered Charity Number 216652 (England & Wales), SC039193 (Scotland). Terms and Conditions | Privacy Statement © British Trust for Ornithology".

This will take you to 'Site Creation, Maintenance and Management' and default to the Map View and zoom in to display your sites. Two views are available, the Map View and the List View. You can switch between these at any time using the buttons in the Display Tools to the left of the map/list.

Using List View

Location Group Name	Type	Number Of Components
Ardnacagh	General Ringing	1 Locations
Attingham Park, Shrewsbury	General Ringing	1 Locations
Belvedere Wood (TL7689)	General Ringing	1 Locations
Brandon (BRA)	General Ringing	7 Locations
Brandon (PRIORS)	General Ringing	1 Locations
Brandon (TL7785)	General Ringing	1 Locations
Brandon (TL7987)	General Ringing	1 Locations
Brandon Park	General Ringing	1 Locations
Brongest (BST)	General Ringing	2 Locations
Coed Crafnant (CRAFN)	General Ringing	1 Locations

By Default, the list display shows location groups. You can choose to view by locations by selecting that option in the Display Tools but more likely you would want to search through the location groups i.e. your sites (note there is a search box to the top right of the listing to reduce your list accordingly) and then

expand a given site to view the site components by clicking the green arrow on the extreme right – e.g. Brandon (BRA) above

The screenshot shows a web-based application interface for managing bird sites. At the top left is the BTO logo with the tagline 'Looking out for birds'. To the right is the 'Demography Online' header with options to 'Change' and 'Logout'. Below the header is a navigation bar with links for 'Home', 'My Data', 'Sites', 'Management', and 'User Field Setups'. The main content area is titled 'Site Creation, Maintenance & Management'. On the left, there's a 'Display Tools' sidebar with 'Map View' and 'List View' buttons, and a 'View By' section where 'Location Groups' is selected. The main table lists seven locations under the group 'Brandon (BRA)'. The columns are 'Location Code', 'Site Name', 'Descriptive Name', 'Grid Ref', and 'Type'. The rows include: BRA (Brandon, Site), SACT-BRA (Brandon, Super-awesome cage, trap Field Road, Other Site), Back-fence - BRA (Brandon, Back-fence net, Field Road, Net-line), Beech - BRA (Brandon, Beech hedge boundary, Field Road, Net-line), PAMPAS BRA (Brandon, Pampas Grass net, Field Road, Net-line), Pond - BRA (Brandon, Pond net, Field Road, Net-line), and Vegpatch - BRA (Brandon, Veg patch / Outhouse, Field Road, Net-line). A search bar at the top right says 'Search for location:'. Below the table, it says 'Showing 1 to 7 of 7 locations'.

Location Code	Site Name	Descriptive Name	Grid Ref	Type
BRA	Brandon	Brandon	TL7686	Site
SACT-BRA	Brandon	Super-awesome cage, trap Field Road	TL7686	Other Site
Back-fence - BRA	Brandon	Back-fence net, Field Road	TL7686	Net-line
Beech - BRA	Brandon	Beech hedge boundary, Field Road	TL7686	Net-line
PAMPAS BRA	Brandon	Pampas Grass net, Field Road	TL7686	Net-line
Pond - BRA	Brandon	Pond net, Field Road	TL7686	Net-line
Vegpatch - BRA	Brandon	Veg patch / Outhouse, Field Road	TL7686	Net-line

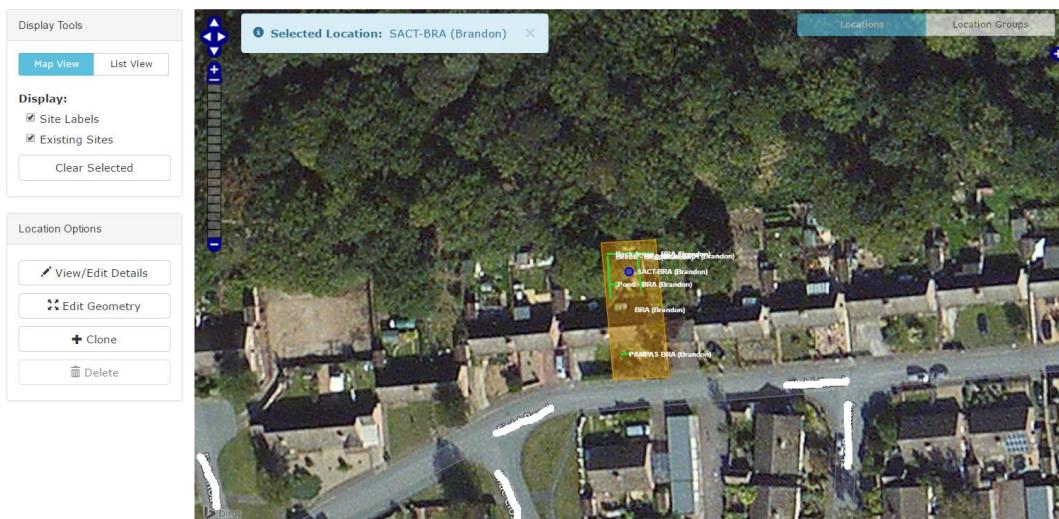
In either the expanded site or the overall list of sites, if you highlight a site or site component by clicking on the row in question the option to 'Show on Map' becomes available in the Display Tools.

This screenshot shows the same application interface as the previous one, but with a specific interaction highlighted. The 'Display Tools' sidebar now has a 'Show On Map' button circled in red. The main table shows the same seven locations under the group 'Brandon (BRA)'. The row for 'SACT-BRA' is also circled in red. The 'Show On Map' button is located in the 'Display Tools' sidebar, just below the 'View By' section. The rest of the interface is identical to the first screenshot.

Location Code	Site Name	Descriptive Name	Grid Ref	Type
BRA	Brandon	Brandon	TL7686	Site
SACT-BRA	Brandon	Super-awesome cage, trap Field Road	TL7686	Other Site
Back-fence - BRA	Brandon	Back-fence net, Field Road	TL7686	Net-line
Beech - BRA	Brandon	Beech hedge boundary, Field Road	TL7686	Net-line
PAMPAS BRA	Brandon	Pampas Grass net, Field Road	TL7686	Net-line
Pond - BRA	Brandon	Pond net, Field Road	TL7686	Net-line
Vegpatch - BRA	Brandon	Veg patch / Outhouse, Field Road	TL7686	Net-line

Clicking on the Show on Map switches to Map View and zooms in to display the site or site component in question and highlights and selects it on the map.

Site Creation, Maintenance & Management



With a location (site or site component) highlighted on the map Location Options will appear below the Display Tools. These are the same options that you get when creating a new location. You can choose to view and edit details of the location, edit the geometry (Map View only) or copy (clone) the attributes of the location in order that they can be applied to a new location.

Clicking on View/Edit Details will bring up the form of location attributes. This will be subject to a few modifications once nest recording is fully implemented in order to separate attributes required for ringing locations and attributes required by nest recording into different expandable tabs, displayed depending on whether you are using the location for ringing, nest recording or both.

Currently the following attributes can be stored against a location a subset of which are required fields.

- **Scheme** – ringing, nest recording or both (ringing should be ticked here). In due course this will determine the subset of location attributes you will need to supply.
- **Reporting Name** – maybe a better term would be **Official Name**. Required for locations where birds will be ringed. This is the name that will be used for all recovery reports, public ringing reports, etc i.e. what the rest of the world will see.. Typically a ringing site and all its components would share the same Reporting Name although this is not required (for components of a very large site alternative names may be appropriate for different parts of the site). This can be populated from dropdown gazetteer and the name edited if required. The gazetteer is derived from the OS OpenData, OSNI and a compilation of ROI place names. Note alternative spellings are real.
- **Location Code:** unique user-defined code for the location (equivalent to existing Place code or Subsite:Place code)
- **Descriptive Name** – maybe to be rebranded simply as Name. This can be anything you want (e.g. “second stand of reeds on the left from the white gate”). Only members of your group will see this so you can be as “colourful” as you like.
- **Capture Method** – available in order to set the default method for locations where birds will be ringed. If selected becomes the default capture method for any encounters at that location (but can

be edited during data entry on a record by record basis). Note capture method is now compulsory where appropriate so it is worth setting up a default.

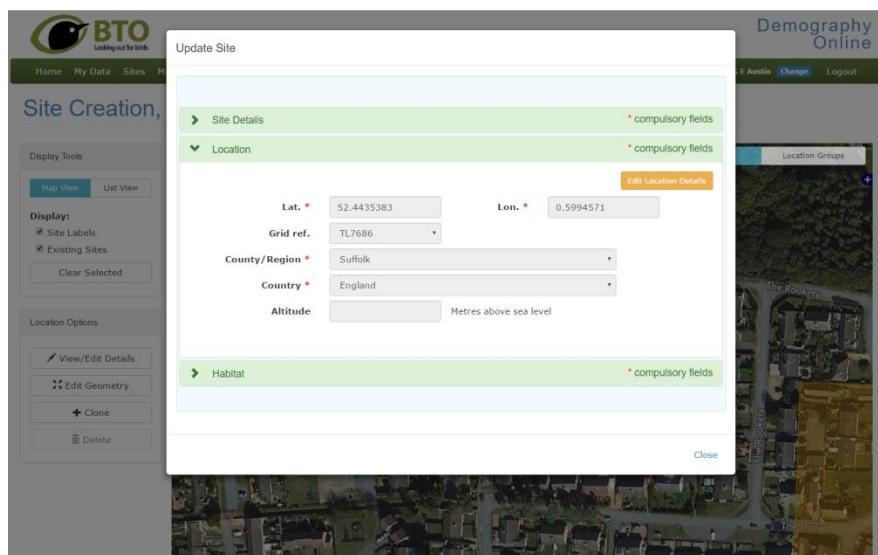
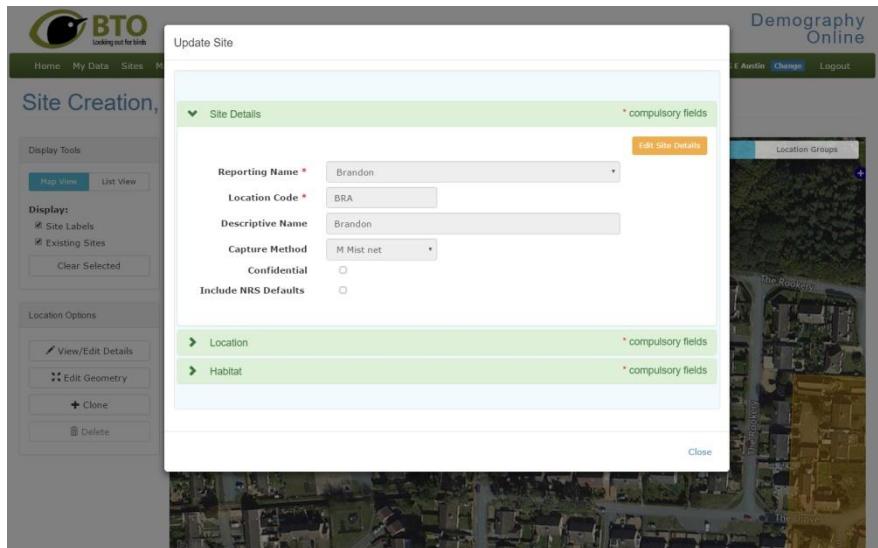
- **Net Length** – standard lengths or custom. If using for a net-line rather than a single net this can technically be any length. Note if you have digitised net lines these must be considered indicative rather than definitive as we are limited by licensing considerations of the mapping interface as to resolution and tool availability and so it is not possible to enforce standard net lengths on the displayed lines.
- **Confidential** – if ticked the Reporting Name will be replaced by “confidential site, county” for reports and recoveries. Also in due course this will default the location to be unseen by all other members of your group other than the owner until you give a particular member express permission to view it. So essentially, only yourself and the owner you are operating as (i.e. group secretary or your trainer) will even be aware your site exists unless you or the owner give other group members express and individual permission to view that location. They will likewise see encounters for those sites shown as site confidential.

WARNING Rollout-C, head hunchos be aware regarding confidential locations

UNTIL WE HAVE PUT IN PLACE THE INTRA-GROUP CONFIDENTIALITY ALL MEMBERS OF YOUR GROUP/TEAM WILL BE ABLE TO SEE ALL OF YOUR SITES REGARDLESS OF WHETHER THOSE SITE HAVE BEEN FLAGGED CONFIDENTIAL OR NOT. THEREFORE IF YOU HAVE CONFIDENTIAL SITES, FOR NOW YOU SHOULD ONLY ADD THOSE GROUP MEMBERS YOU FULLY TRUST WITH THAT INFORMATION.

Note also the expandable sub-heading for Location and Habitat. Location has fields for grid reference, lat long, nominal county and country (for cross-border sites) and altitude. Habitat allows for up to four habitat levels. At least the Primary habitat must be provided. Primary and ,if provided, secondary habitats will be used as the defaults for Habitat_1 and Habitat_2 for ringing encounters, nest records will also use tertiary and quaternary levels as defaults if they have been specified.

These expandable heading will be rejigged once nest recording is fully integrated. A new heading will appear for ringing defaults and Reporting Name, capture method and net-length will be moved to there. A new expandable heading will appear for nest recording defaults.



Existing values can be edited having first clicked the orange edit button. In due course edits will be date stamped with a “in force from” date specified by the user. When entering ringing data, the details in force for a given visit date will be those considered to apply (be it attribute data or spatial definition). This will mean that if your site expands or contracts over time you will be able to modify boundaries without compromising the spatial definitions associated with historic data.

However, the tracking of changes to location spatial geometry and attributes has not yet been activated and so any changes to locations made using this release will be essentially be back-dated to the year dot. It is therefore important to ensure if making any edits to spatial geometry that the redefined boundaries (regardless of whether they have been redefined on the map or through a change to grid-reference encompass the extent of all ringing encounters that have been recorded against the location in question. To minimise the risk of incorrect changes being made,, until the tracking of changes has been implemented we have locked down the editing so that all historic locations and all new locations created within DemOn once saved for the first time, can only be edited by the Operating Group Owner.



WARNING Rollout-C testers be aware

CURRENTLY THE TRACKING OF CHANGES TO LOCATION HAS NOT BEEN IMPLEMENTED AND SO ANY EDITS TO SPATIAL GEOMETRY SHOULD ENSURE THAT THE NEW EXTENT OF THE SITE ENCOMPASSES ALL PAST RINGING ENCOUNTERS

Creating new locations in List View

You do this using the Create Tools. The tools you get when using List View are more restrictive than those you have available from Map View but are more akin to what you will have been familiar with pre-DemOn.

The screenshot shows the BTO Demography Online interface. At the top, there's a navigation bar with links for Home, My Data, Sites, Management, User Field Setups, and a dropdown for 'Operating as'. On the right, it says 'Demography Online', 'Dr G E Austin', 'Logout', and a search bar for location groups. The main area is titled 'Site Creation, Maintenance & Management'. On the left, there's a sidebar with 'Display Tools' (Map View, List View), 'View By' (Locations, Location Groups), and the 'Create Tools' section which is circled in black. The 'Create Tools' section contains radio buttons for: General Site, CES Site, Site Sub Area, Other, Nest Polygon, and Location Group. To the right is a table titled 'Location Group Name' with columns for Type and Number Of Components. The table lists various locations like Mayday Farm, Thetford, and Thetford Forest, all categorized as 'General Ringing' with 1 Location each. Each row has a small edit icon to its right.

Location Group Name	Type	Number Of Components
Mayday Farm, Thetford (TL7882)	General Ringing	1 Locations
Thetford (THET75)	General Ringing	1 Locations
Thetford (TL8688)	General Ringing	1 Locations
Thetford Forest	General Ringing	1 Locations
Thetford Forest (TF7906)	General Ringing	1 Locations
Thetford Forest (TL7474)	General Ringing	1 Locations
Thetford Forest (TL7489)	General Ringing	1 Locations
Thetford Forest (TL7490)	General Ringing	1 Locations
Thetford Forest (TL7589)	General Ringing	1 Locations
Thetford Forest (TL7590)	General Ringing	1 Locations
Thetford Forest (TL7593)	General Ringing	1 Locations
Thetford Forest (TL7594)	General Ringing	1 Locations
Thetford Forest (TL7684)	General Ringing	1 Locations
Thetford Forest (TL7781)	General Ringing	1 Locations
Thetford Forest (TL7784)	General Ringing	1 Locations

You first create a general site as a grid square. In the dialogue that follows you will be able to type in a grid reference to create the general site. You can add two types of site component to this site i.e. a sub-area as a smaller grid square (by typing a more precise grid reference) or a point by typing a 10-digit grid ref (1x1 metre) or providing a Lat/Long (not yet implemented).



WARNING Rollout-C testers be aware

CURRENTLY THE ABILITY TO DELETE LOCATIONS HAS BEEN DISABLED UNTIL WE HAVE PUT IN PLACE SAFEGUARDS TO ENSURE THAT NO LOCATION AGAINST WHICH DATA HAS EVER BEEN RECORDED CAN BE DELETED.

THIS MEANS THAT ANY LOCATION YOU CREATE EXPERIMENTALLY AS THE OWNER OF THE GROUP YOU ARE OPERATING AS WILL BE STORED FOR REAL IN THE NATIONAL RINGING AND NEST RECORDING DATABASE. WE WOULD THEREFORE PREFER THAT YOU DO NOT SAVE LOCATIONS WHEN EXPERIMENTING WITH THE CREATION TOOLS OR IF YOU DO PLEASE KEEP THE NUMBER SENSIBLE AND IDEALLY CREATE THEM WITH A NAME THAT WILL BE EASY TO REMEMBER (e.g. 'Bogus site at ...') OR WELL AWAY FROM YOUR REAL SITES SO THAT YOU WILL BE ABLE TO IDENTIFY THEM EASILY ONCE THE DELETE TOOL IS AVAILABLE.

AND DEFINITELY DO NOT ENTER ANY DATA AGAINST ANY OTHER THAN

GENUINE RINGING SITES

Creating new locations in Map View

If creating and managing your sites in List View meets all your personal requirements then there is no reason why you should not stick to what you are familiar with – one-km grid squares. However, by defining the boundaries of your sites and their components you can increase the value of your data to the national ringing scheme as well hopefully for your own interest.

As in List View, in Map View you have the Create Tools available. However, there are additional options for location creation available. Creating locations through Map View does not require you to provide a grid reference. You simply digitise your new location using the mouse pointer to trace the boundaries or extent. Because you are no longer restricted to a square polygon determined from a grid reference you are able to trace precise boundaries for General Sites or sub-areas. You can also trace lines to represent nets and net lines and you can pinpoint the location of traps or nests.

The screenshot shows the BTO Demography Online interface. At the top, there's a logo for 'BTO Looking out for birds' and a 'Demography Online' header. Below that is a navigation bar with links for Home, My Data, Sites, Management, User Field Setups, and Logout. The main area is titled 'Site Creation, Maintenance & Management'. On the left, a 'Display Tools' sidebar includes 'Map View' (which is selected) and 'List View', along with 'Select' and 'Multi-Select' buttons. Under 'Display:', there are checkboxes for 'Site Labels' and 'Existing Sites'. The 'Create Tools' section is circled in black and contains buttons for 'General Site', 'CES Site', 'Site Sub Area', 'Net', 'Other', and 'Nest Point'. The main part of the screen is a map of the British Isles and surrounding areas, showing various locations with purple outlines and labels like Inverness, Aberdeen, Dundee, Glasgow, Edinburgh, Newcastle upon Tyne, Middlesbrough, Lancaster, Harrogate, Leeds, Sheffield, Manchester, Chester, Newcastle-under-Lyme, Maclesfield, Leicester, Nottingham, Ipswich, Colchester, Norwich, Plymouth, Bristol, Salisbury, Guildford, London, Cheltenham, Oxford, Stratford-upon-Avon, Chichester, and Cardiff. The map also shows the English Channel and the Irish Sea. A legend at the bottom left indicates 'Image courtesy of NASA © 2016 Intermap Earthstar Geographics SIO © 2016 Microsoft Corporation © 2016 HERE'.

Navigation of the map interface and digitising is governed by the ‘toolbox’ available from the mapping facility we are using.

- It is best to zoom in to the area and centre your map where you want to digitise your site before clicking on the Ringing Site box.
- Click on the Ringing Site button

- To digitise your bounding polygon click around the boundary with a double-click to close and complete the polygon
- You then need to populate the various boxes in the dialogue that will then pop up
- Save
- You can now add Ringing Site Components by clicking the buttons for sub-area, net or other. A sub-area is a polygon, a net is a polyline and other is a point (e.g. trap). Digitise sub-areas in the same way as the bounding polygon. Digitise a net or net line with one or more single clicks (one for each pole in a mist-net line for example) with a double-click at the end-point to terminate the line. A point location is digitised with a single click. Note you will not be able to digitise a net precisely and the line you draw will be an approximation of the true line (hence the need to fill in a net-length in the form dialogue that follows)
- Note Ringing Site Components must be completely enclosed within any Ringing site to which they are being added.
- Ringing site components can overlap. For example you might choose to have chopped your site up into sub-areas such as a reed bed, areas of scrub, forestry compartments or whatever for more general ringing but within some of these have more net lines used for CES ringing or smaller habitat patches used for particular personal project for which you want to record your capture locations more precisely.
- Ringing site components can belong to multiple overlapping assemblages (e.g. a CES site may be a subset of nets within a larger ringing site, or summer and winter ringing sites may overlap incompletely and a particular net-line is used throughout the year). When you digitise a component you will be offered a list of all Ringing Sites (assemblages) that it is contained in. Choose one. You can add the component to other assemblages later.

Modifying existing location geometry in Map View

For reasons mentioned earlier, under Rollout-C this functionality is only available if you are the Operating Group Owner.

- ROLLOUT-C TESTERS BE AWARE - ‘DELETE LOCATION’ FUNCTIONALITY HAS BEEN TURNED OFF DURING EARLY TESTING so if you create any bogus locations during testing you will have to wait for a future rollout before you will be able to delete them.
- ROLLOUT-C TESTERS BE AWARE the auditing of changes to locations and location details is not yet implemented, so until it is, be aware that the new geometry will be assumed to have always been valid. However, we have made backups of your existing locations so there is the possibility of restoring those if need be but is something we would rather avoid. This means that if you edit the boundaries of one of your existing one-km squares to represent the true site boundary the new geometry will be assumed back to the year dot. Consequently, if you have a ringing site that has changed in extent over the years you should refine the geometry to the maximum extent of that site.

The means by which you can edit the geometry of existing locations is through the Map View. Before editing the geometry of a location there are a number of things to consider.

- You will not be able to delete any existing location once one or more ringing encounters have been recorded against it.

- When a location geometry is edited you will in due course be prompted for a date from which the change represents the geometry on the ground. So if you extend an existing ringing site or if you lose part of a ringing site and edit the boundary accordingly DemOn will know what version of the boundary was in force for any particular encounter recorded against it.
- If you have a site that has always been yours and all associated encounters are on your rings then you will probably want to redefine the boundary to its true geometry.
- If you have inherited a site from a previous ringer and have access to their data because they were part of your ringing group then you need to consider whether they may have ringed within the same actual boundaries as are used now in which case you would want to backdate the change to the year dot or whether it is better to date the boundary change from the one-km square to the new geometry from when you started ringing there yourself.
- If you realise that an existing location is in the wrong place (I'm sure there will be a few cases where users realise this once they see their existing Places mapped in DemOn for the first time) you might tackle this in two ways. If the actual location is near the incorrect location, you are advised to use the edit tools to modify the geometry directly. However, if the location is a fair distance away from where it should be (100km error is a common mistake when sites are near 100km grid boundaries, and another common mistake is when people get the order of easting and northing back to front when supplying grid references) you may find it easier to create a new location in the correct place. In due course there will be the functionality to do a mass edit of all old records to change the location to the new one after which the old one can be deleted - note it will only ever be possible to delete locations that have no ringing encounters associated with them.

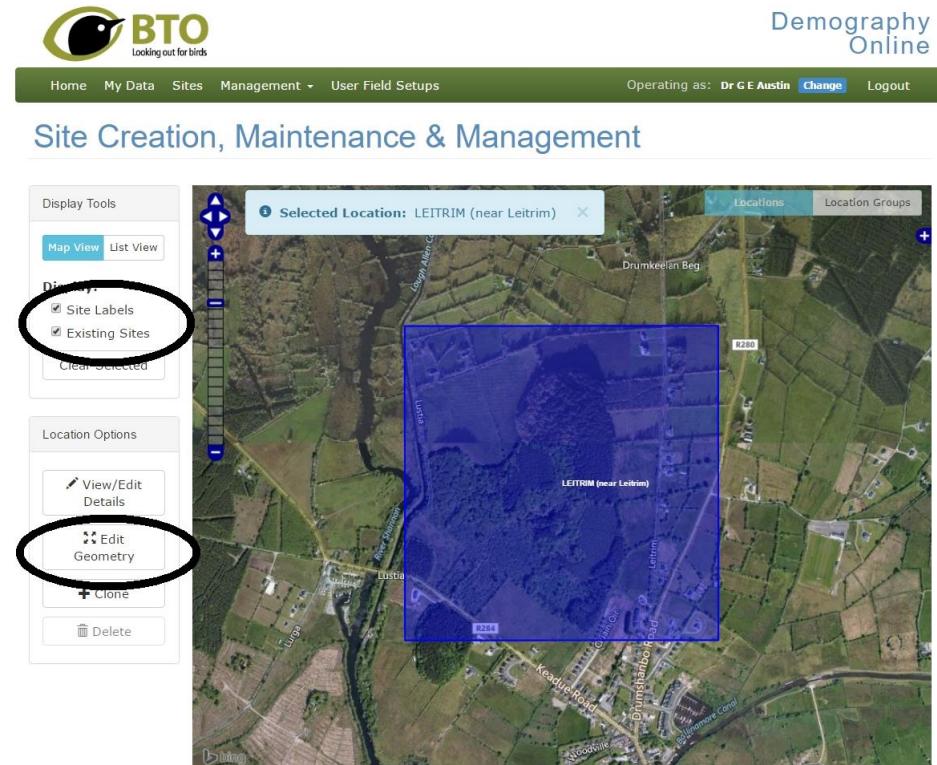
First choose the location to be edited. Either search for it directly using the Map View or find it through the List View as follows:

- Select List View
- Optionally use the search filter to narrow down the list
- Click on Show on Map

If you used Map View you need to click on the location to select it. Note the default Select button should be active (select button in Display Tools box will be green). If you used List View you will find it has been highlighted on the Map but you still need to click on it to select it.

If the location being edited is a top-level site you will see Location Group Options. All your former Places will have been created as Location Groups / top-level sites / overall site boundary (however you want to

think of it), even if they had no subsites. Here though we are concerned with modifying the geometry of the site. Click on the location to be modified. This will switch the Options menu box from ‘Location Group Options’ to ‘Location Options’ which includes ‘Edit Geometry’. Note if the part of the map you are working with is cluttered with neighbouring sites you can turn off display of site labels and other sites from the Display Tools menu box.



When you click on ‘Edit Geometry’ your location becomes available to edit.

Editing Basic geometry.

If your location is a polygon (e.g. General Site or sub-area) or a polyline (i.e. a net or net-ride) existing vertices will be identified by a bright orange circle, and the midpoint between existing vertices identified by a dull orange circle.

Site Creation, Maintenance & Management



Click and drag either a vertex or a mid-point to re-shape the polygon. Note that when you select and drag a mid-point it itself becomes a vertex and new mid-points will be generated either side of it. Once you are happy with the new geometry click update to save (or cancel to reject your change). It should go without saying that if your location is a point you will have a single point which you can move only – i.e. you can't add additional vertices. Once you have reshaped the geometry click on the Update button (or cancel if you want to abandon the edit)

Site Creation, Maintenance & Management


A few digitising tips

- When editing the geometry of a large site to make it smaller, e.g. when a site is a small area of land which crosses an OS grid line which was previously listed as a 1km square +1, you may find

it helpful to start by firstly cutting the size down to roughly to the required area, hitting update to save it then zooming in to re-edit it, before saving it again.

- When you have a General Site with sub-areas, nets or traps, it is probably best to edit the main site geometry first. That way it is easier to ensure that when you edit the geometry of your former subsites these are contained in the overall General Site's boundary. Sub-areas, nets and traps (your former subsites) must by definition be contained within the bounding General Site.
- If you want to move the position of the site this can also be done in a two stage process. Drag the corners of the polygon to cover the new area. Click update. Then reshape the polygon to the new site.

Multi-select Tool.

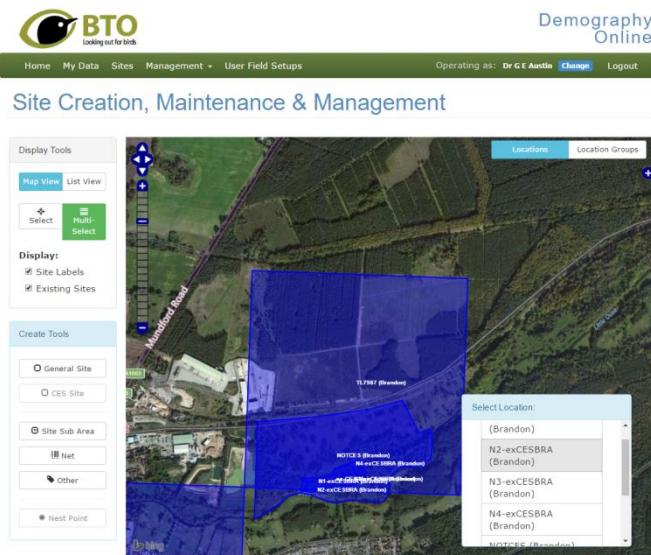
If you want to edit a particular location within a complex Ringing Site made up of many components it may well be difficult to select the one you actually want to edit. This will certainly be the case when you first attempt to refine the geometry for Ringing Sites pre-populated with your ex-PLACE and one or more ex-SUB-SITES because all will be represented by one-km squares stacked one on top of the other (which is all that can be deduced from your previously submitted data). So to select the target location for editing you would want to use the Multi-Select tool rather than the Select tool. To do so click on the Multi-Select button next to the select button – the former will then be highlighted green rather than the latter.

With the Multi-Select active instead of clicking on your target location use your mouse to drag a rectangle (click top left, hold down left mouse button, drag to bottom right) over the whole area.

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On releasing the mouse button, all location overlapping the rectangle (completely or partially) will appear in a pop-up list.



Simply click on the target location from the list to select it – in this case a previously refined net is highlighted in blue.

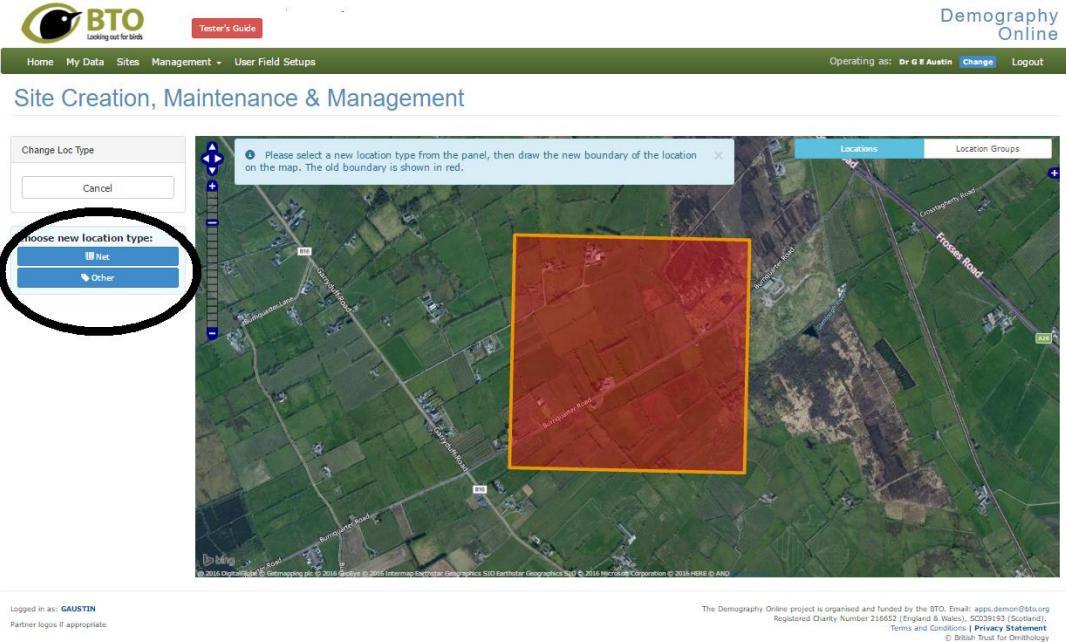
The screenshot shows the BTO Demography Online software interface. At the top, there's a logo for 'BTO Looking out for birds' and a navigation bar with links for Home, My Data, Sites, Management, User Field Setups, and Logout. The user is operating as Dr G E Austin. The main area is titled 'Site Creation, Maintenance & Management'. On the left, a sidebar has 'Display Tools' (Map View, List View), 'Display' checkboxes for Site Labels and Existing Sites, and 'Clear Selected'. Under 'Location Options', there are buttons for View/Edit Details, Edit Geometry, Clone, and Delete. A large map shows a field with a yellow polygon labeled 'N01C1.5 (Brandon) No 0x3 South (Brandon)' and 'TL7987 (Brandon)'. An arrow points to this polygon. The map also shows roads like 'Mundford Road' and 'Cressingham Road'.

Changing geometry type.

Although when you create a new site you would automatically create net and net-rides as polylines, nest-boxes, traps and other point locations as points, when you first want to redefine ex-sub-sites these will all be represented as one-km square polygons. To address this use 'Change Location Type' in Location Options. First select the polygon to be redefined (see multi-select tool for how to select one particular polygon from those close to or coincident with it). On the map, the selected polygon will turn red with a yellow border and all other locations will be hidden.

This screenshot shows the same BTO Demography Online interface as the previous one, but with a different selection. A purple polygon on the map is highlighted, and its details are shown in the sidebar: 'Selected Location: ART - NW (Artiferral)'. The 'Change Location Type' button in the sidebar is circled with a black oval. The rest of the interface is identical to the first screenshot, including the sidebar options and the map view.

You now need to select a new location type in the side panel. Polygons can become polylines to represent a net or net line (choose net) or a point to represent for example traps, nest boxes or the specific position of a field sightings etc (choose other).



Once you have chosen the new geometry type, you digitise the revised geometry exactly as you would when creating a new location of that type, however the associated details will be retained and you will not need to supply them afresh – although it may be appropriate to view the details and modify them. However note that, some components such as a net ride may require fields that were not previously required such as net length. The changes to the geometry together with any changes you make to the details will be timed stamped with a date from which you want them to be considered definitive (old details will continue to be associated with ringing encounters pre-dating that date).

Note that currently this feature is only available for changing the geometry type for your former sub-sites that came into DemOn as a polygon feature (a one-km square corresponding with the former Place to which the sub-site belonged) but in reality represents linear features (nets/netlines) or point features (where a trap is sited or precise position of a field resighting or other encounter). You are not currently able to redefine the geometry type for nets, traps, boxes etc that do not fall within the boundaries of the General Site of which they are a part. So for the time being, standalone locations previously defined as Places in its own right rather than sub-sites, will for the time being have to remain as polygons, for example a single Barn Owl box or isolated site of incidental or roving ringing outside your normal ringing sites. You can however still re-shape those polygons to better represent their true extent. In due course we will be facilitating changing the geometry type of General Sites without components to line or point locations.

Managing Locations: Operating groups with members still using IPMR.



WARNING Rollout-C testers be aware

So long as you have group members/Cs submitting data through IPMR, any new sites they will be using need to be created through IPMR first. Do not create them in DemOn as this will result in duplicate locations when IPMR data is submitted because the geometry will be recognised as being different.

Whenever you have submitted data in the past using IPMR any new PLACES or SUBSITES you may have created have been intercepted by the loading routine, checked by ringing unit staff and once accepted any encounters for the new site have been loaded. Accordingly, they are held in the master database as locations with their spatial geometry, derived from the one-km grid associated with them stored against these locations. DemOn will use these without issue. However, if you create a new location within DemOn, whilst you will be able to use this location for encounters when entering data in DemON, IPMR will not know about it. Importantly, even if you were to attempt to duplicate it in IPMR, IPMR is not capable of storing the full suite of information now held in the National Ringing and Nest Recording Database, most importantly the spatial geometry, attached to the new site will most likely differ. It is therefore essential that once starting to use DemOn you ensure that any remaining IPMR users submitting data for the first time for a new site must have created that site in IPMR. As soon as data submitted for the site through IPMR have been loaded that site will also be available to DemOn users. If you were to create this same location in DemOn, the loading routine will not be able to recognise the two versions as being the same location as there will be discrepancies in the information held against each. In due course we will add functionality to upload IPMR control files and this will mean that new sites will become available to DemOn straightaway. Until then, DemOn users will have to wait until an IPMR user has submitted encounters for a new site before it becomes available to them.

In reality, it doesn't matter to the National Ringing and Nest Recording Database or the DemOn application whether or not there are two ostensibly different locations that actually represent the same site. Consequently, no harm will come to the data from not following the rule above. However, you will undoubtedly find it annoying when you want to review or query your own data and need to pull back data from two different locations.

Early testing has highlighted the fact that we will need to provide a tool for merging data from multiple locations into one location. This duplication of sites results from data entering the master database through various routes – electronic submission/paper submission using grid references vs. paper submission using lat/long, recovery reports using other than the group/Trainers permit number, recoveries from members of the public and so on. Consequently, there will be a means by which you would be able to tidy this up after the fact. However, it is best to avoid the problem in the first place by following the rule.