River Macrophytes Database

User Guide

This document and the corresponding database is available for download from:
http://jncc.defra.gov.uk/page-5815

River Macrophytes Database User Guide

Version 2.0.0

July 2011

Produced by Conwy Valley Consultants Ltd, December 2004
Updated by Joint Nature Conservation Committee, July 2011

Contents

Contents 3
1 Introduction 4
2 System requirements 4
3 Installation 4
4 Getting help 4
5 General information 5
5.1 Dictionaried fields/Combo boxes 5
5.2 Numeric fields 5
5.3 Date fields 6
5.4 ID Number fields 6
5.5 National Grid Reference (NGR) fields 6
5.6 Originally A or B fields 6
5.7 Tabbed pages 6
5.8 Undoing mistakes 6
5.9 Using the input dialog box to choose file names 6
5.10 Reports 6
5.11 Displaying the database window 7
6 The Main menu form 7
6.1 Status boxes 8
6.2 Buttons 8
7 Viewing data 9
7.1 Viewing records 9
7.2 Scrolling through records 10
7.3 Site data 10
7.4 Survey data 10
7.4.1 Macrophyte surveys 10
7.4.2 Invertebrate surveys 14
7.4.3 Fish surveys 15
8 Building and running queries 16
8.1 River queries 16
8.1.1 Rivers surveyed between certain dates 17
8.1.2 Rivers that have sites of a specified type 18
8.2 Site queries 18
8.3 Survey queries 19
8.4 Sites by macrophyte queries 20
8.5 Macrophytes by river queries 21
9 Reclassify all 22
10 Glossary 22
Appendix 1 Convention for Naming River Macrophyte Survey Sites 26

1 Introduction

This is the User Guide to help run the program on a day-to-day basis. It documents how to start the program and how to find information within the program.

Two other documents accompany this one. The Technical Manual contains detailed technical information relating to the system architecture and data tables. The Data Capture Spreadsheet Manual provides instructions relating to the use of the custom built data import spreadsheet which accompanies the database. This import spreadsheet should be used to collect and submit any new macrophyte data to the source database, maintained by the Joint Nature Conservation Committee.

2 System requirements

Processor	Pentium P400 or better
Memory	128MB
Disk space	200 MB to install the database (version 1.0.0). An additional 160 MB is required if you are also installing MS Access runtime and its support files.
Operating system	Windows NT4 (SP6), 2000 (SP4), or XP (SP1)
Screen resolution	Min of 1024 x 768 Optimised for 1280 x 1024

Microsoft data access components (MDAC) 2.8 or later (supplied)

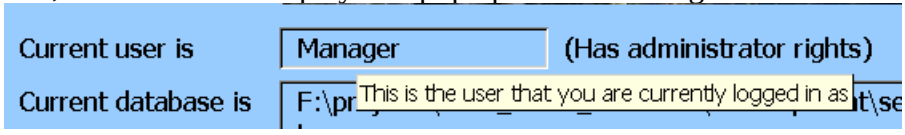
3 Installation

The database is available for download from the JNCC website. For the purpose of this documentation it is assumed that you are going to install the system into the default directory C:\River_macrophytes. If this is not the case you will need to modify the commands that you use accordingly. The database consists of two MS Access .mdb files: macrophytes_data.mdb contains the macrophyte survey data, macrophytes_code.mdb contains a set of forms to facilitate access to the data. The code .mdb file contains links to the data .mdb file, therefore the database can either be viewed directly through the data .mdb, or through the forms within the code .mdb. These two .mdb files must be kept within the same folder on your local system.
Note: the majority of the User Guide relates to use of the forms within the code .mdb, however it may also be useful for understanding the data structure and content.

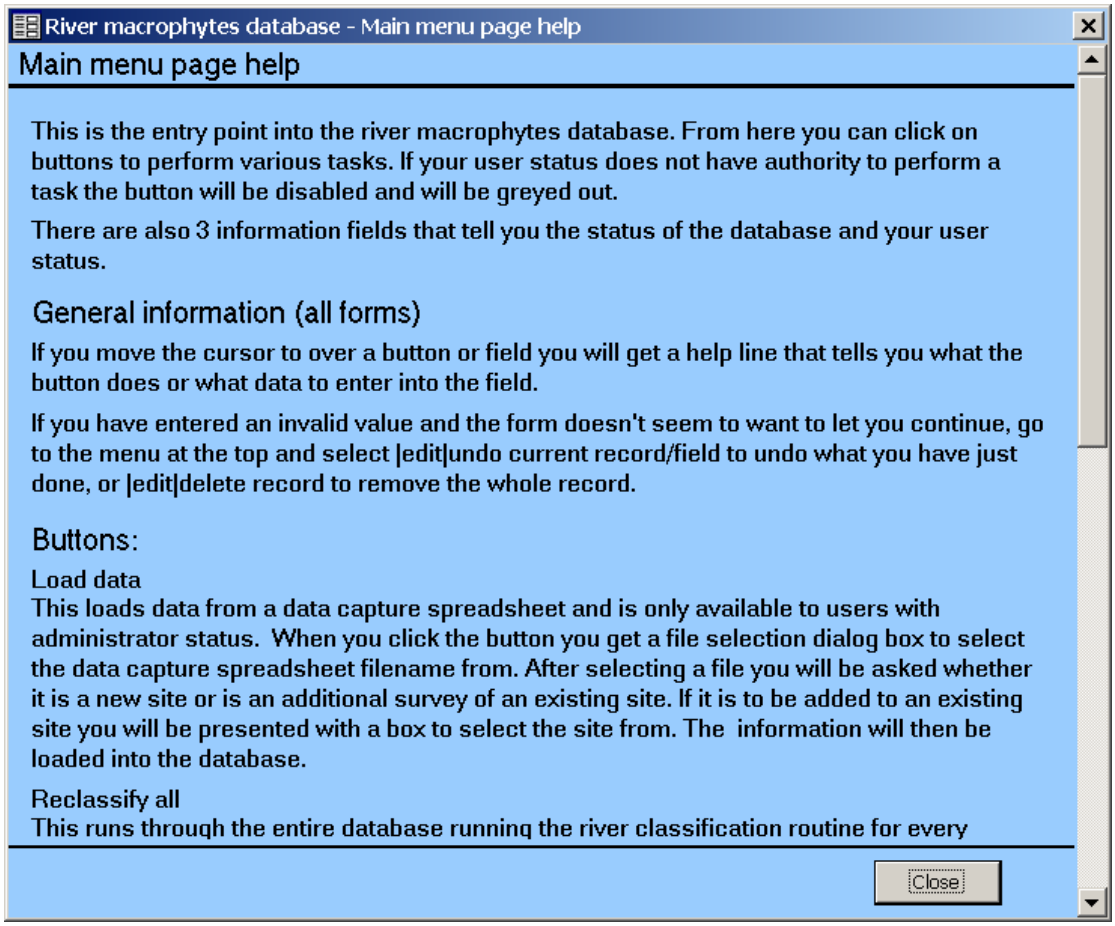
4 Getting help

When viewing and querying the database through the code .mdb, there are 2 main sources of help.

If you move the cursor over a data field, button etc. and leave it there for a second or two, a hint line will display as a pop up line describing what that field or button is for.



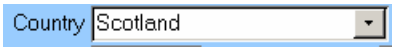
If you need more detailed help, each form has a help button on it that brings up a second form. This describes the fields and buttons on the form, and how to use the features on the form to perform the required task.



5 General information

This information primarily relates to data entry but may be useful for navigating the database.

5.1 Dictionaried fields/Combo boxes



Various fields only contain controlled values. This means that valid values are held in a dictionary table in the database, so if you enter any other value you will get an error message. These fields have a combo box, which enables you to click on the down arrow on the right of the field to display the valid values and select one of them into the field.

If you click on the arrow of a combo box to display the list of valid values, you can start typing the value that you want and the choice will ‘zoom in’ on the correct value as you type more of it. This saves having to find the value in a long list such as Rivers. A combo box also enables the form to display a meaningful description whereas the underlying field actually contains an ID code.

5.2 Numeric fields

Some of the fields are for numeric values e.g. overall vegetation cover %. If you enter anything other than a numeric value you will get an error message.

5.3 Date fields

Date fields will be displayed in the format dd/mm/yyyy. If you enter the date in a roughly similar format i.e. dd-mm-yy or dd,mon,yy Excel will generally accept it and reformat it. NB If you use . or : as separators Excel will try to reformat it as a time i.e. 12:03:04 (hh:mm:ss).

5.4 ID Number fields

The numeric ID fields are automatically allocated by the database and are not editable.

5.5 National Grid Reference (NGR) fields

The NGR fields are checked for format at input. They are checked that they are in the Ordnance survey AB123456 or the Irish A123456 format. They are not checked for a valid value, only for format.

5.6 Originally A or B fields

These were determined during migration of the data from the old system and are not editable. They indicate whether the site was originally an upstream (A) or a downstream (B) section of a site prior to splitting the site into 2 during the migration of existing data. These fields will only occur in sites that have been migrated from the old database.

5.7 Tabbed pages

To be able to display several survey types for a single site on one page, the survey information has been set up in overlapping tabbed sub pages. Clicking in the appropriate tab at the top of the sub page will bring the sub page for that survey type to the front. The same is true for the various sets of data for each macrophyte survey.

5.8 Undoing mistakes

If you have entered an invalid value and the form doesn't seem to want to let you continue, go to the menu bar at the top and select Edit | Undo | Current Record/Field to undo what you have just done or | Edit | Delete Record to remove the whole record.

5.9 Using the input dialog box to choose file names

When entering a file name to select a file or to provide a name to save a file to, you need to enter the full pathname to the file, e.g.
C:\River_macrophytes\macrophytes_data.mdb.
You also need to specify the appropriate file extension, e.g. filename.xls if you are exporting to a MS Excel file.
Hint. If you type in a long pathname, select the whole pathname and use the right button copy facility to copy it to the clipboard before clicking on the OK button. That way if you have mistyped the path and get an error message, you can paste it back and edit it rather than having to retype it all.

5.10 Reports

There are buttons on each of the survey data sub pages to enable you to generate a report for that survey. These have a fairly standard layout with a header on every page giving basic site/survey information and then a page for the full site information

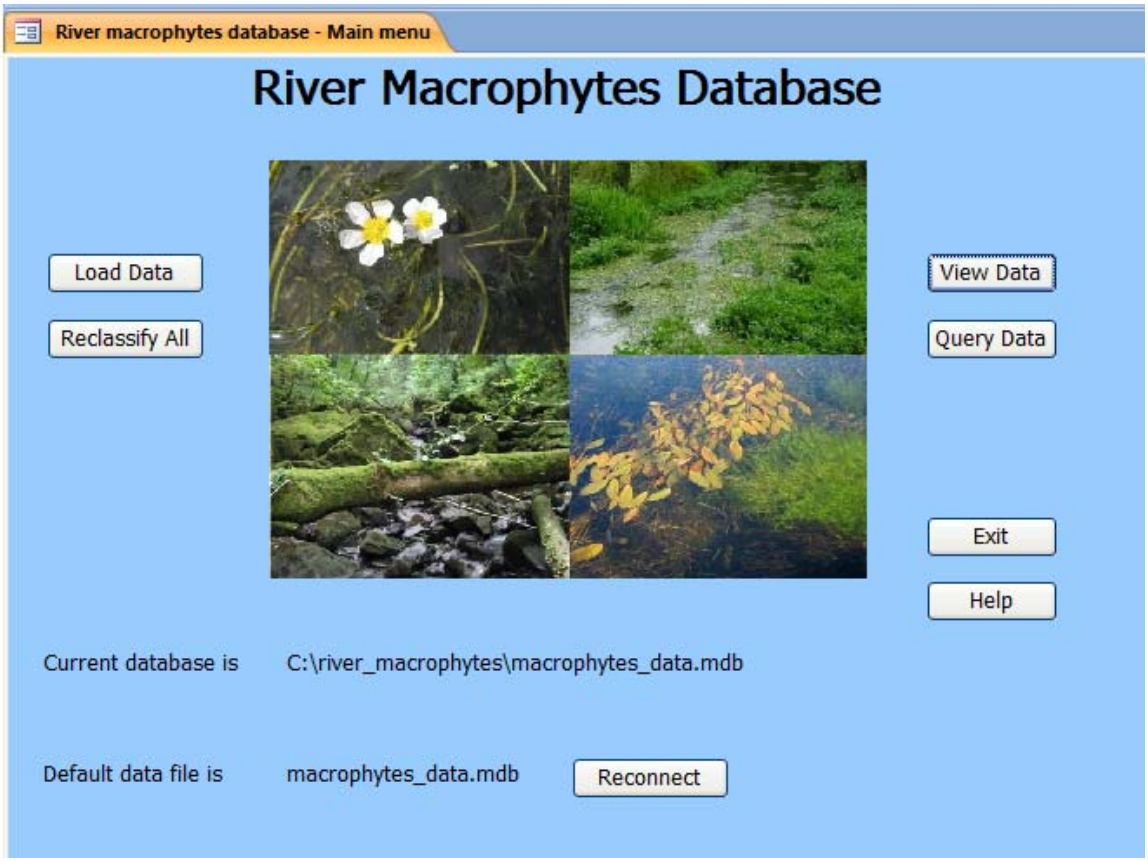
followed by pages for the full survey information. The macrophyte survey reports also have pages for the physical data.

There are a few data fields that do not have a field on any of the forms. These are legacy data fields such as the original site ID, original survey ID, etc, and are no longer in use. These values can be obtained by viewing the report for the appropriate site or survey where they are on the report. The original macrophyte cover values prior to migration, 5 point cover values, etc. are not on the reports. To view these you will need to view the tables directly from within the data .mdb.

5.11 Displaying the database window

When opening the code .mdb, the main menu is displayed and the database window (the window that displays the list of tables, queries, modules etc.) is hidden. If you want to view the database window, go to the menu at the top of the screen and choose Window | Unhide | macrophytes_code - database. This is not available if you only have the runtime version of Access on your computer.

6 The Main menu form



This is the main form that is displayed when you open the code .mdb. This form remains displayed at all times until you press the Exit button and is the starting point for all tasks. It has 7 buttons to allow you to perform various tasks and 3 display boxes showing the status of the database and user.

6.1 Status boxes

Current user

- This shows which user is logged on and whether they have administrator rights

Current database

- This shows which database file the program is currently connected to.

Default data file

- This shows the name of the default data file distributed with the system.

6.2 Buttons

View Data

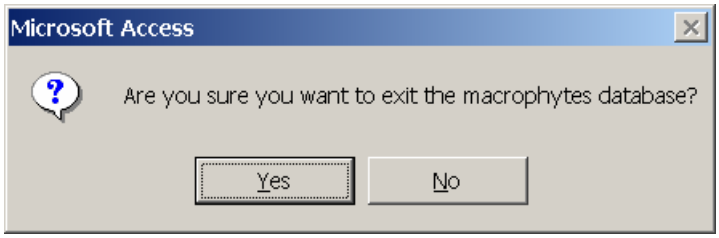
- Pressing this button brings up the view data form. If you have read only rights the form is bought up in read only mode. (See 'Viewing data' below.)

Query Data

- Pressing this button brings up the query data form (See 'Building and running queries' below.)

Exit

- Pressing this button brings up a confirmation box.



- Pressing 'Yes' closes the database and returns you to the windows operating system, pressing 'No' returns you to the main menu form.

Load Data

- This button is disabled unless you have administrator rights. Pressing this button allows you to load information from data capture spreadsheets into the database (see 'Loading data from data capture spreadsheets' below).

Reconnect

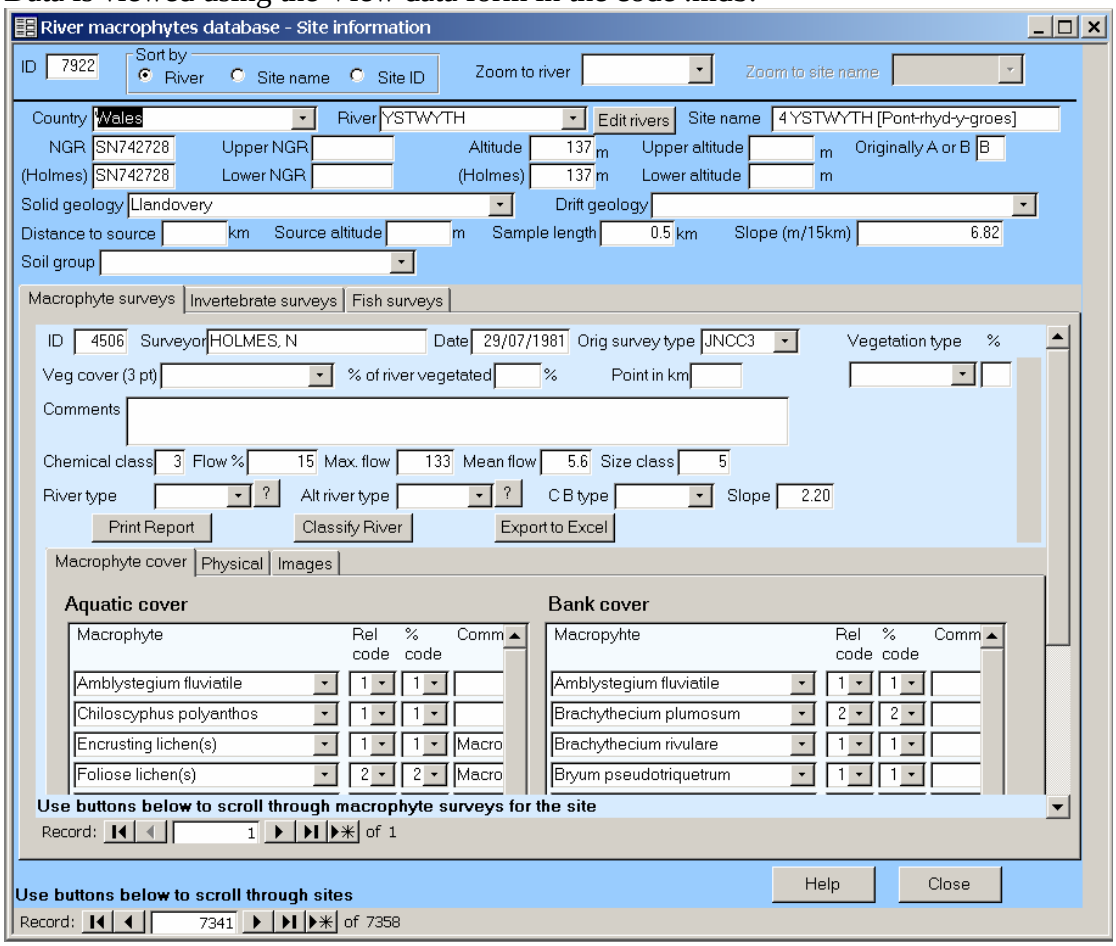
- This button is disabled unless you have administrator rights. Pressing this button allows you to connect to a different data file (see 'Connecting to another data file' below).

Reclassify All

- This button is disabled unless you have administrator rights. Pressing this button allows you to run the river classification routine for all surveys (see 'Reclassify all' below).

7 Viewing data

Data is viewed using the View data form in the code .mdb.



The form has a hierarchical design reflecting the fact that each site can have several surveys associated with it and that each of those surveys can have many macrophyte cover measurements or physical data measurements etc. As you scroll through records at one level, all the records at lower levels are automatically updated.

7.1 Viewing records

The top section of the form consists of a block of radio buttons and fields that allow you to choose how the sites are ordered in the form. The form is normally ordered by river name, and by selecting a river and site from the ‘zoom to river’ drop down box you can go directly to the record for that site. This saves having to scroll all the way through the records. The sort order is unaffected by using this zoom to option, you simply go to the appropriate record within the sorted records. By clicking on the sort by site name button the records are resorted by site name and the zoom to site name field replaces the zoom to river name field as the enabled field. You can select a site name from the drop down list and go directly to that site record in the same way as for zoom to river. By clicking the sort by site ID radio button the records are resorted by the numeric site ID.

If you have the full version of MS Access on your computer rather than the runtime version, you can also use the Access built in sort utility to sort by any field you want. Click the cursor in the field that you want to sort by, then either use the Record | Sort | Sort ascending (or descending) from the menu, or the sort buttons on the toolbar to

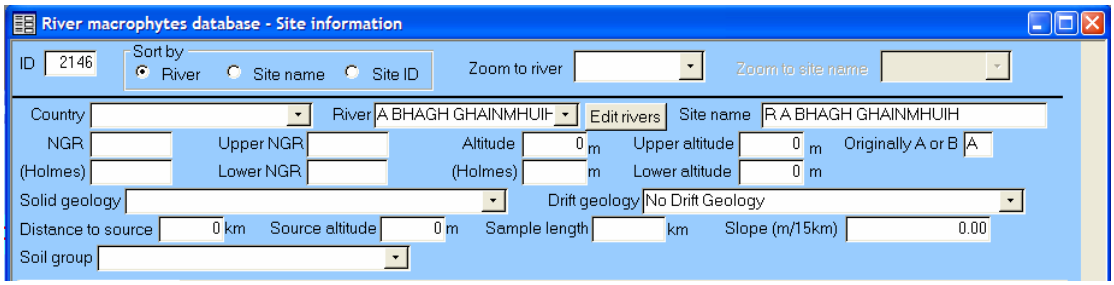
sort the data. This can be done for any field at any level of the site, survey, cover hierarchy.

7.2 Scrolling through records

At the bottom left of each 'hierarchical block' the form is a standard MS Access record selector bar. This can be used to scroll through the records (< or >), go to the first or last record (|< or >|) or go to the new record position (>*) to add a record.

7.3 Site data

The top block of data with the darkest blue background represents the site data such as country, river, geology etc. Within this there is a block of 3 tabbed pages representing the survey data for the site. As you scroll to a new site, the underlying survey data automatically scrolls to the surveys for the new site.



7.4 Survey data

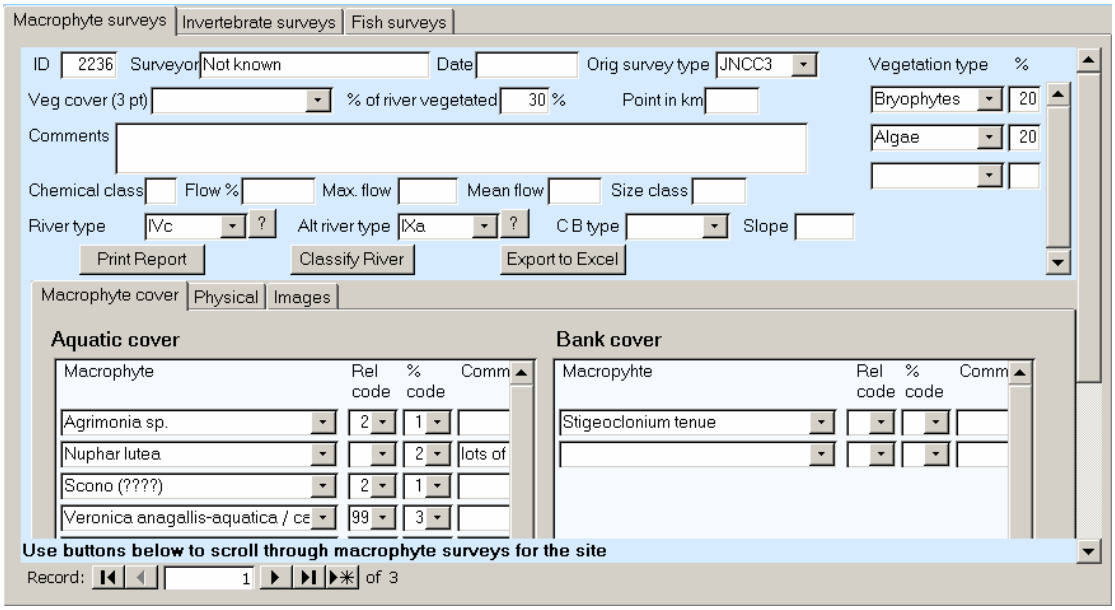
The next block of data with the mid blue background represents the survey data. There are 3 possible survey types for a site

- Macrophyte surveys,
- Invertebrate surveys
- Fish surveys.

A site may or may not have any number or combination of these surveys. To display the appropriate survey type, simply click on the tab at the top of the block.

7.4.1 Macrophyte surveys

Clicking on the Macrophyte surveys tab displays the macrophyte surveys page as a sub form. There is a standard bar at the bottom left of the sub form that shows how many macrophyte surveys there are for the site and allows you to scroll through them, e.g. 1 of 3. As you scroll to a new macrophyte survey, the underlying cover data, physical data etc. automatically scroll to the values for the new survey. On the right hand edge of the sub form is a vertical scroll bar that allows you to move the sub form contents up and down to enable you to view all the fields.

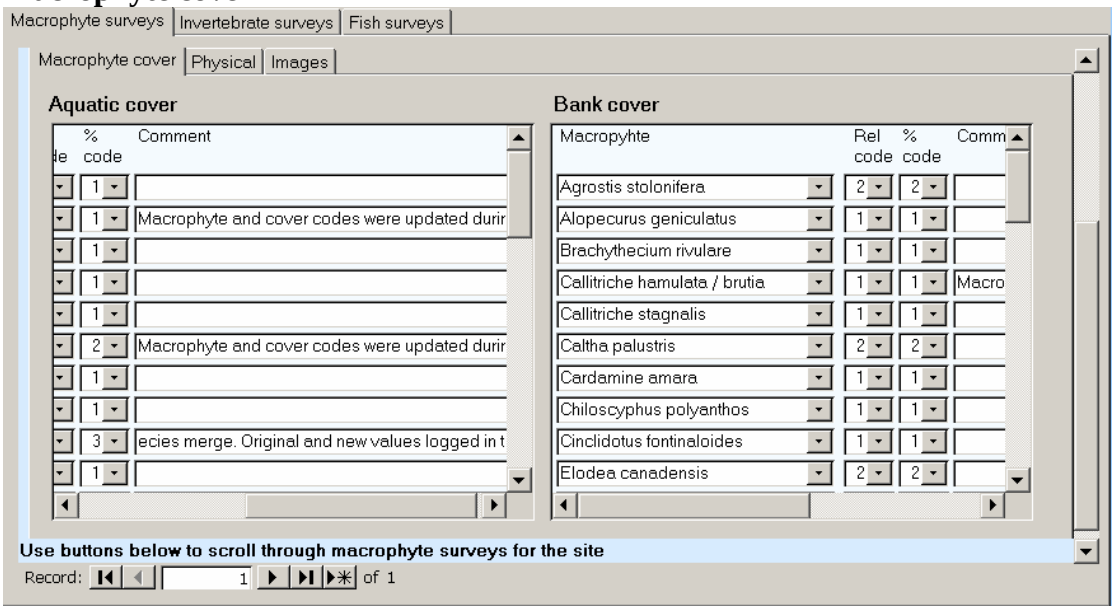


The fields in this block represent macrophyte survey data such as survey date, survey type etc. Some are dictionaried and the valid values can be selected from the drop down list. The block on the right of the form represents general vegetation type percentages and expands as more types are added.

The macrophyte survey data was legacy data, and when the system was written there were certain fields that it was not possible to determine exactly what they represented. These were Point in km, Chemical class, Flow %, Max flow, Mean flow, and Size class. Consequently there is no hover help for these fields.

The Macrophyte surveys page has 3 tabbed sub pages for the macrophyte cover values, Physical data, and stored images for the survey. These sub pages have a pale blue background.

Macrophyte cover

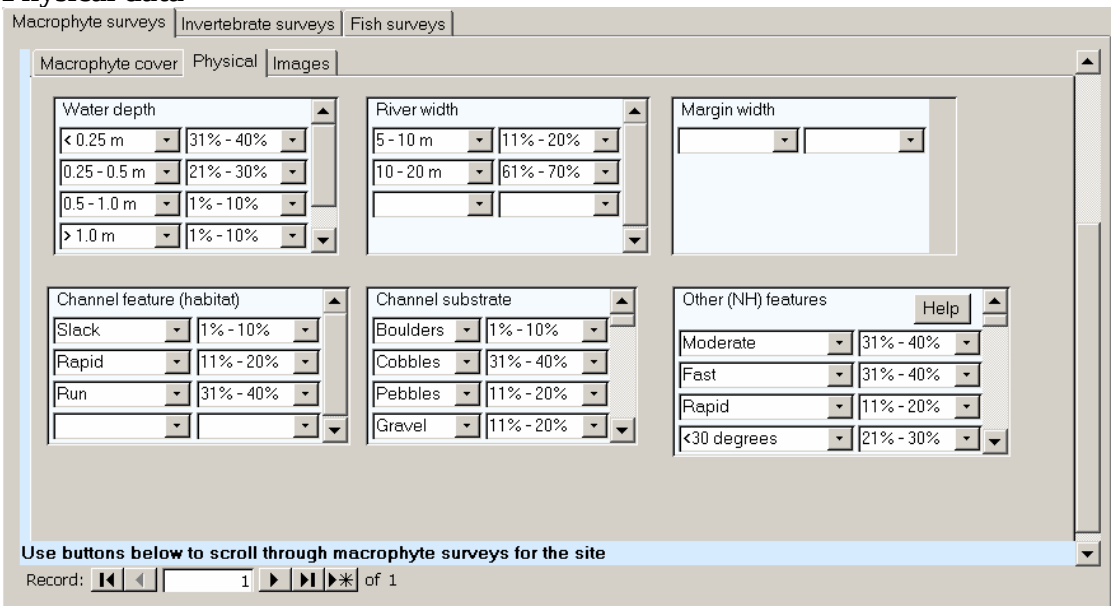


The fields in this sub page represent the macrophyte cover data for the survey. They are divided into 2 blocks; one for aquatic cover (plants in the river) and one for bank cover (plants on the bank). Each column has 3 dictionaried fields that have to be filled in from the drop down list and a free format comments field. There is a vertical scroll bar on the right of each block and clicking on the bar in this displays how many species are in the list and allows you to scroll through the list. There is also a horizontal scroll bar at the bottom of each block to enable you to see all the fields in full.

Sorting of cover values

These blocks have a sort utility to allow you to re sort the block. If you double click on the title text at the top of the column i.e. 'Macrophyte' the block will sort by macrophyte name. Double clicking again will reverse the sort. This feature is available for the Macrophyte, Rel code, and % code column headers.

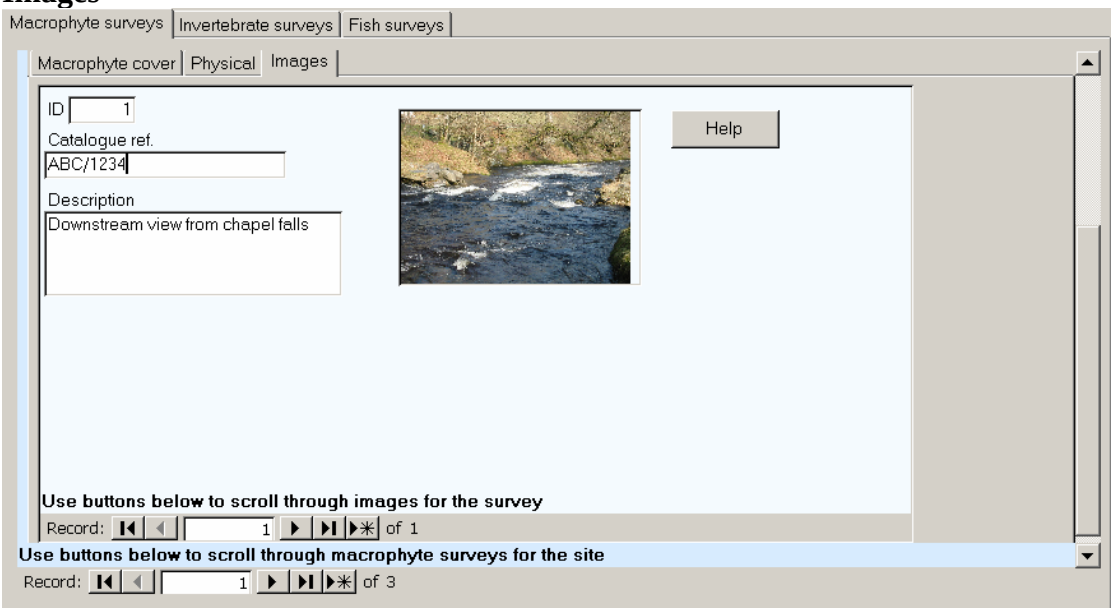
Physical data



The fields in this sub page represent the physical data for the survey. They are in groups and consist of pairs of drop down boxes, one for the description of the physical feature and one for the % of the site that is represented by that feature. They are all self explanatory except for the 'Other (NH) features' which has a 'Help' button to bring up a help window to describe the possible entries.

NB in the old system channel features such as Slack, Rapid etc. were referred to as Habitat.

Images



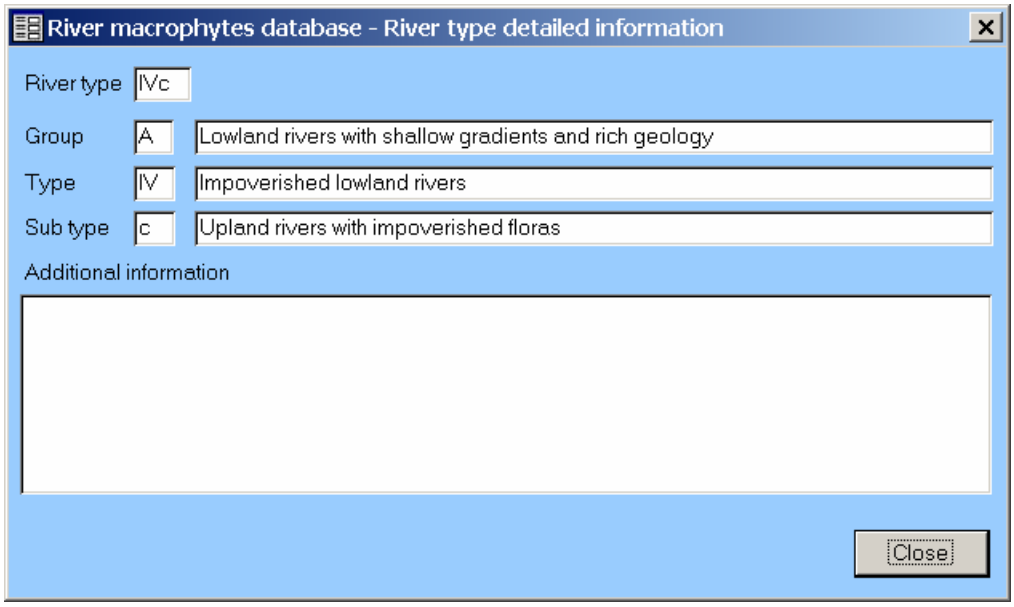
Access allows you to store images in the database and this sub page is where they are displayed. There are some descriptive fields and a thumbnail of the image itself. To display a full size image you must right click on the image and choose | Bitmap Image Object | Open from the menu.

Because it will greatly increase the size of the database, it is not recommended that large numbers of images are stored. Images should be stored in a relatively compressed format such as JPEG. For detailed information about storing images in MS Access, refer to the MS Access help.

NB the image is opened in an editor and is not write-protected in this editor even for read only users. When you leave the image record and the system tries to save the edited record you will get a warning and will have to answer ‘don’t save changes’. There is a standard MS Access record selector bar at the bottom left of the sub page that shows how many Images there are for the survey and allows you to scroll through them.

7.4.1.1 Classify river button

The river type fields are the river type and alternative river type that has been calculated for that survey based on the macrophyte assemblage found. If you have administrator rights you can recalculate the river type by pressing the ‘Classify river’ button, otherwise the button will be disabled. Pressing the ‘?’ button next to the field brings up a ‘description of the river type’ form.



7.4.1.2 Export to Excel button

Pressing the 'Export to Excel' button brings up a standard windows input box to enable you to enter a .xls Excel file name to save the macrophyte cover data to. When you save the file, the aquatic and bank macrophyte cover data is written to an Excel format spreadsheet. The first line is a title line, and the rest of the lines contain the cover data in the order that it is currently in on the form. This data can then be processed in any other program that accepts an Excel file as input.

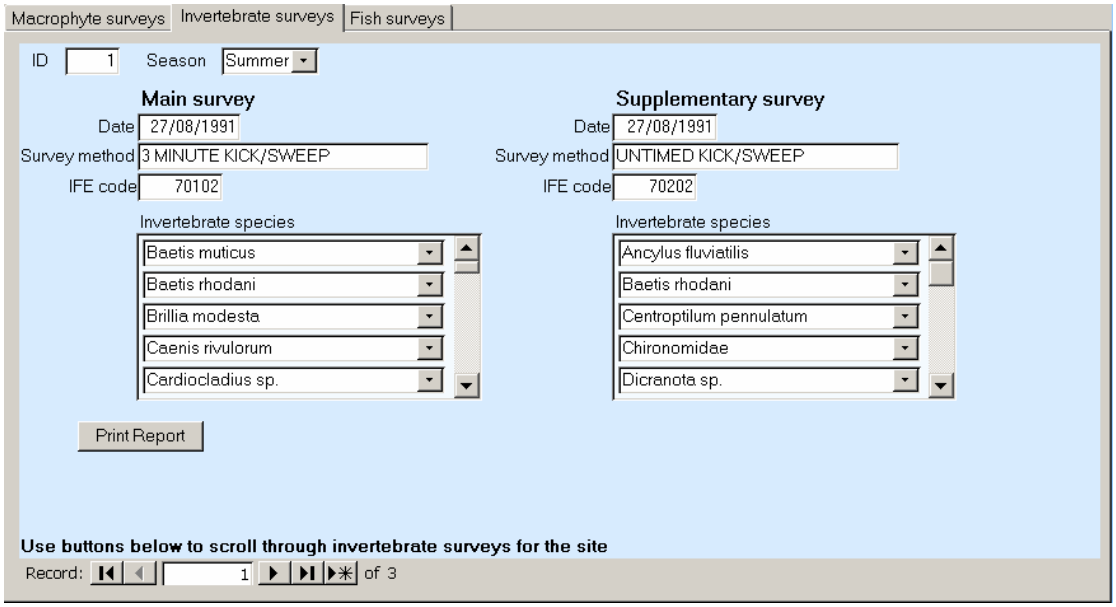
NB: You need to have Microsoft Excel 2000 installed on you computer to use this feature.

7.4.1.3 Print report button

Pressing the 'Print report' button brings up the standard MS Access report preview window allowing you to view the report for that macrophyte survey and print it if required.

7.4.2 Invertebrate surveys

Clicking on the Invertebrate surveys tab displays the Invertebrate surveys page as a sub form. There is a standard bar at the bottom left of the sub form that shows how many Invertebrate surveys there are for the site and allows you to scroll through them, e.g. 1 of 3. As you scroll to a new invertebrate survey, the underlying species lists automatically scroll to the values for the new survey.



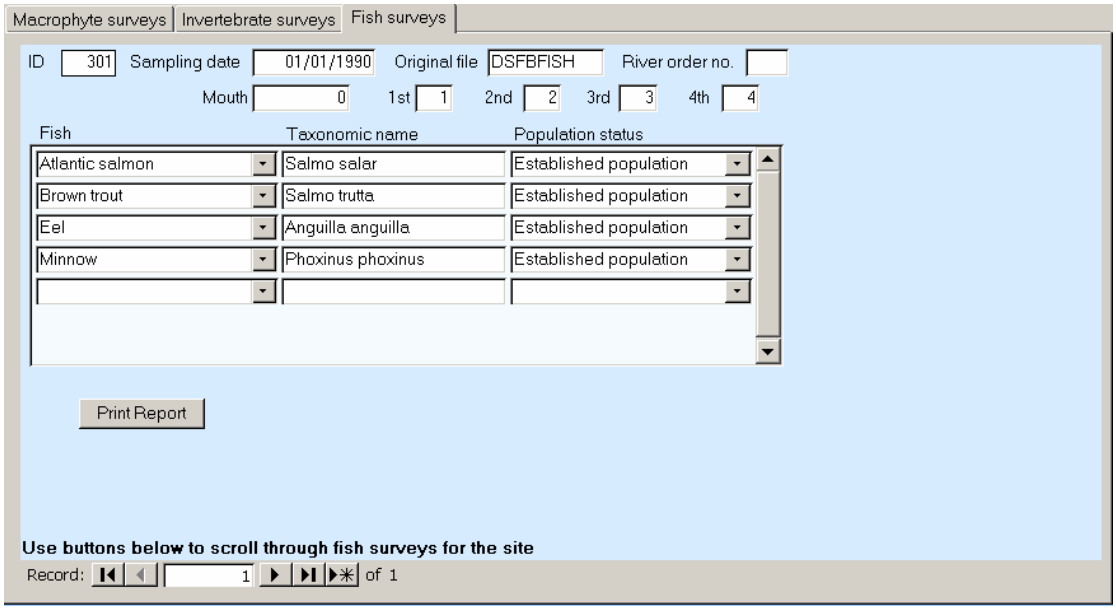
The fields in this block represent invertebrate survey data such as survey date, survey method etc. Some are dictionaried and the valid values can be selected from the drop down list. There are 2 columns, one for the main survey and one for the supplementary survey. Each of these has a sub block with a pale blue background containing a list of the species found. There is a vertical scroll bar on the right of each species block and clicking on the bar in this displays how many species are in the list and allows you to scroll through the list.

7.4.2.1 Print report button

Pressing the 'Print report' button brings up the standard MS Access report preview window allowing you to view the report for that invertebrate survey and print it if required.

7.4.3 Fish surveys

Clicking on the Fish surveys tab displays the Fish surveys page as a sub form. There is a standard bar at the bottom left of the sub form that shows how many Fish surveys there are for the site and allows you to scroll through them, e.g. 1 of 3. As you scroll to a new fish survey, the underlying fish list automatically scrolls to the values for the new survey.



The fields in this block represent fish survey data such as survey date, original file, etc. There is sub block with a pale blue background containing a list of the species found and what their population status is. There is a vertical scroll bar on the right of this block and clicking on the bar in this displays how many species are in the list and allows you to scroll through the list.
The fish data was legacy data and when the system was written there were certain fields that it was not possible to determine what they represented. These were River order no., Mouth, 1st, 2nd, 3rd, and 4th. Consequently there is no hover help for these fields.

7.4.2.1 Print report button

Pressing the 'Print report' button brings up the standard MS Access report preview window allowing you to view the report for that fish survey and print it if required.

8 Building and running queries

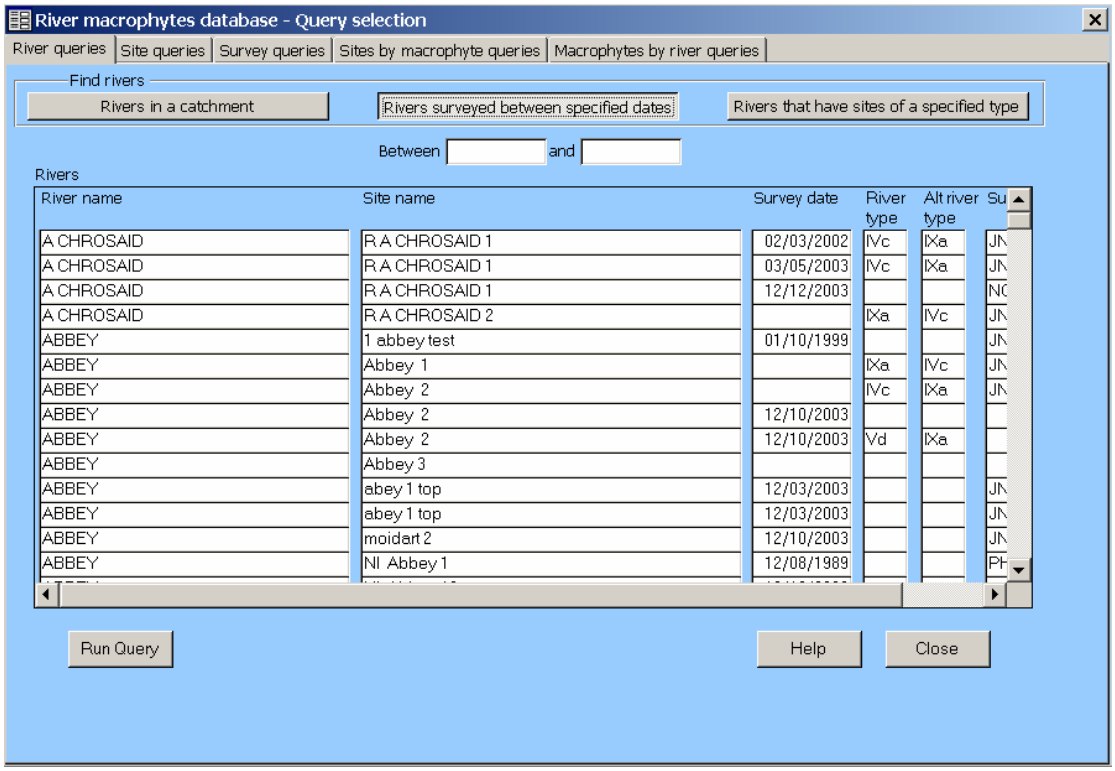
To bring up the query form in the code .mdb, press the 'Query Data' button on the main menu form. This displays the query selection form, which consists of 5 tabbed pages, each of which builds up and executes a particular query type. When building up queries you are adding constraints to narrow down the number of records returned. If you don't fill in any constraint fields all records are returned.

Each page has a 'Run query' button that runs the query using the constraints entered.

8.1 River queries

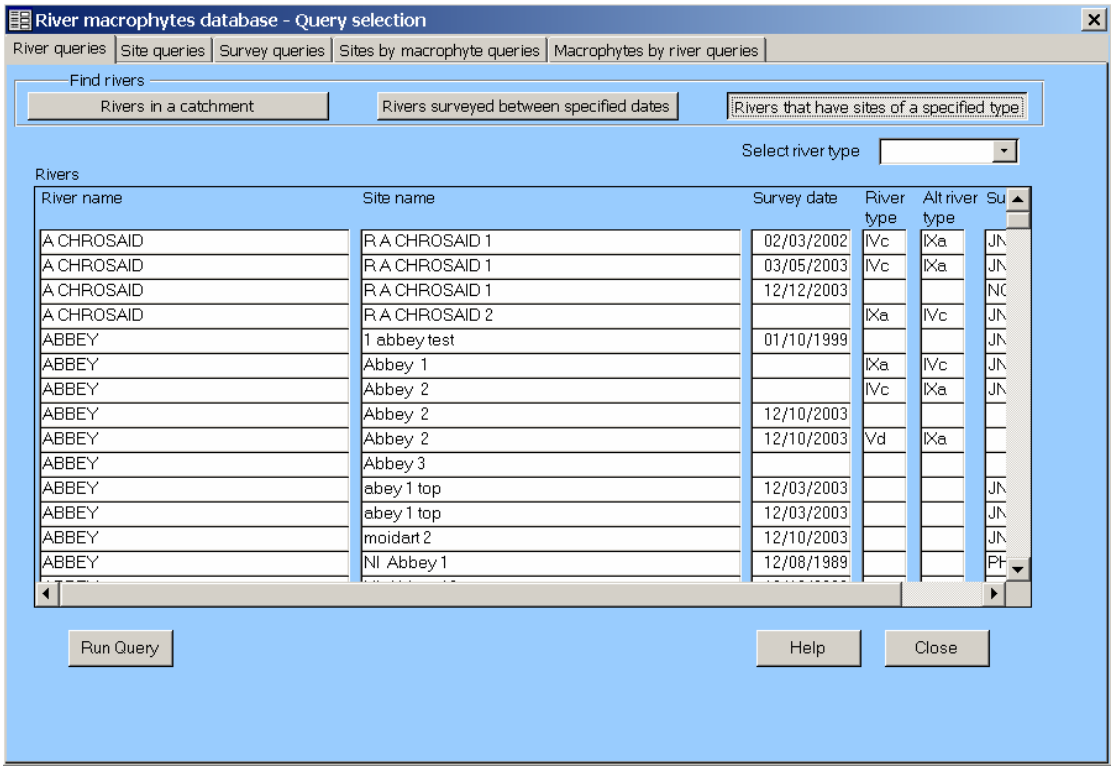
This page differs slightly from the other pages in that there are 3 sub pages to select rivers in different formats.

8.1.1 Rivers surveyed between certain dates



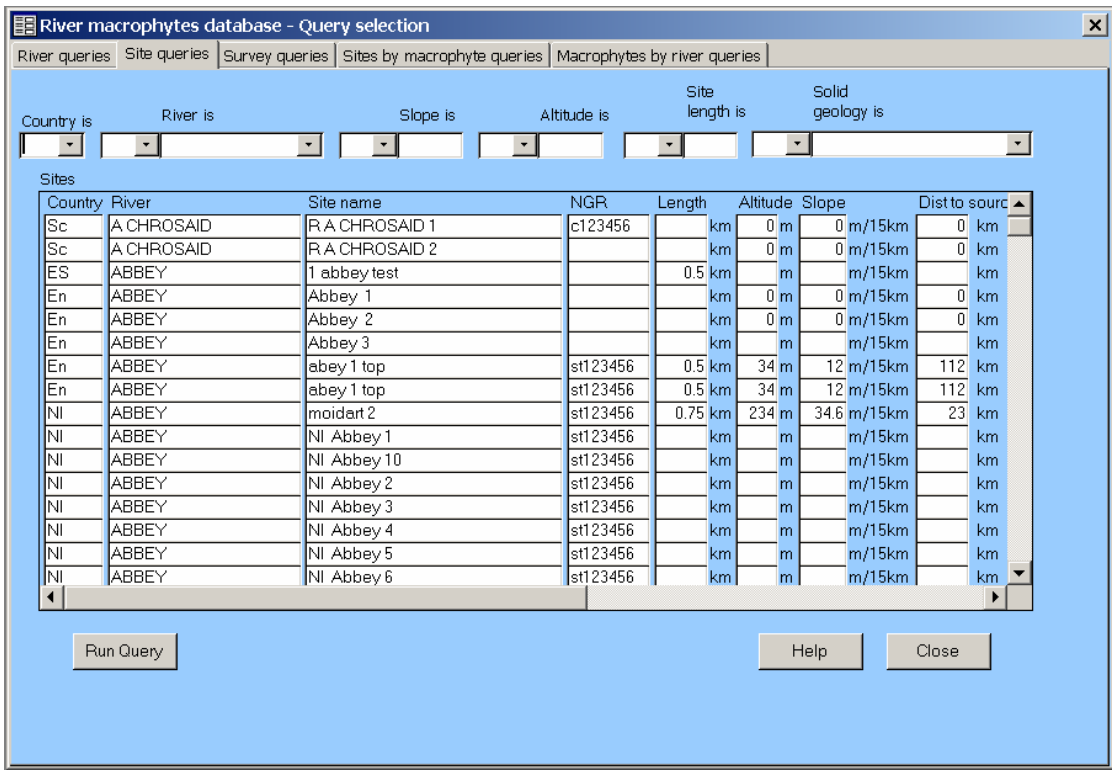
Enter the ‘from’ date and ‘to’ date and all rivers surveyed between (and including) the dates are returned. If only the ‘to’ date is entered, all surveys before and including that date are returned. If only the ‘from’ date is entered, all surveys after and including that date are returned. The dates should be entered as a valid date format (dd/mm/yy, dd-mm-yyyy etc.) and will be automatically reformatted to dd/mm/yyyy.

8.1.2 Rivers that have sites of a specified type



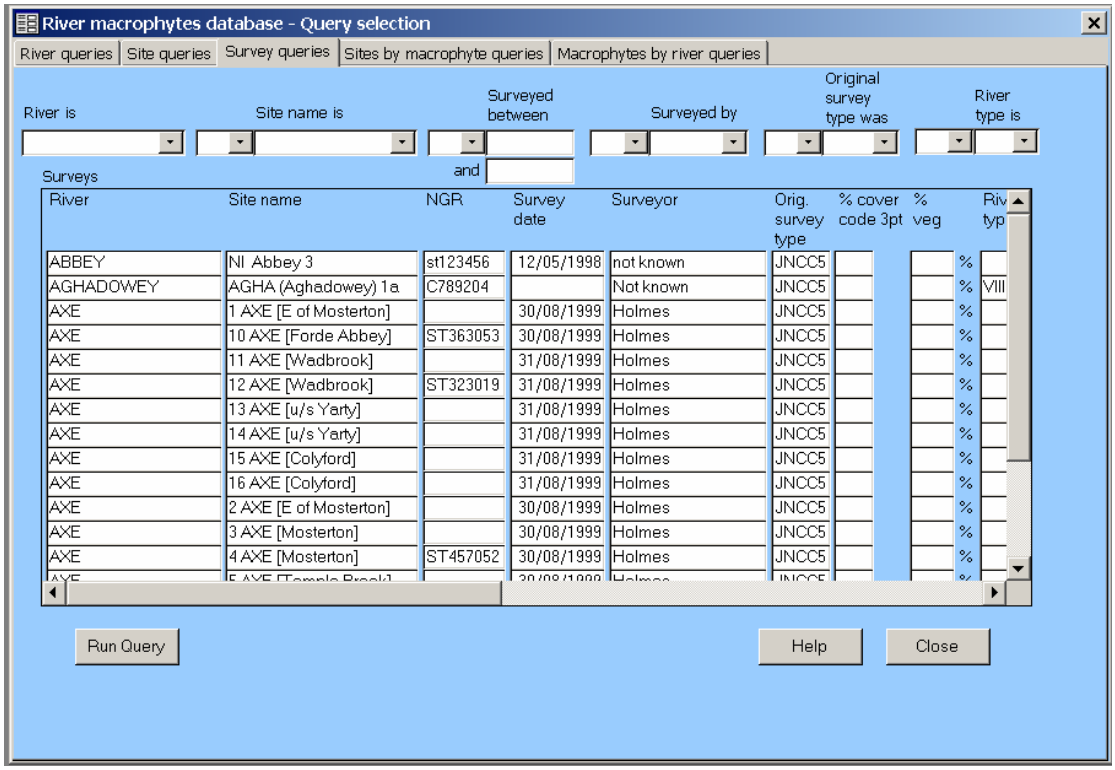
Select the river type from the drop down list. All surveys that have that river type are returned.

8.2 Site queries



The site queries page has a series of drop down list boxes and data input boxes along the top to enable you to build up a query. These are separated by drop down list boxes to enable you to combine the criteria boxes with AND or OR. When building up a query, you must select the Country, River name or Solid geology from the drop down list. The Slope, Altitude and Site length should be entered into the box. These 3 should be numeric values but they can also be entered as =n, >n, >=n, <n, <=n, or <>n, in which case the constraint entered will be used to build the query.
Pressing the 'Run query' button returns all the sites that fit the constraints entered.

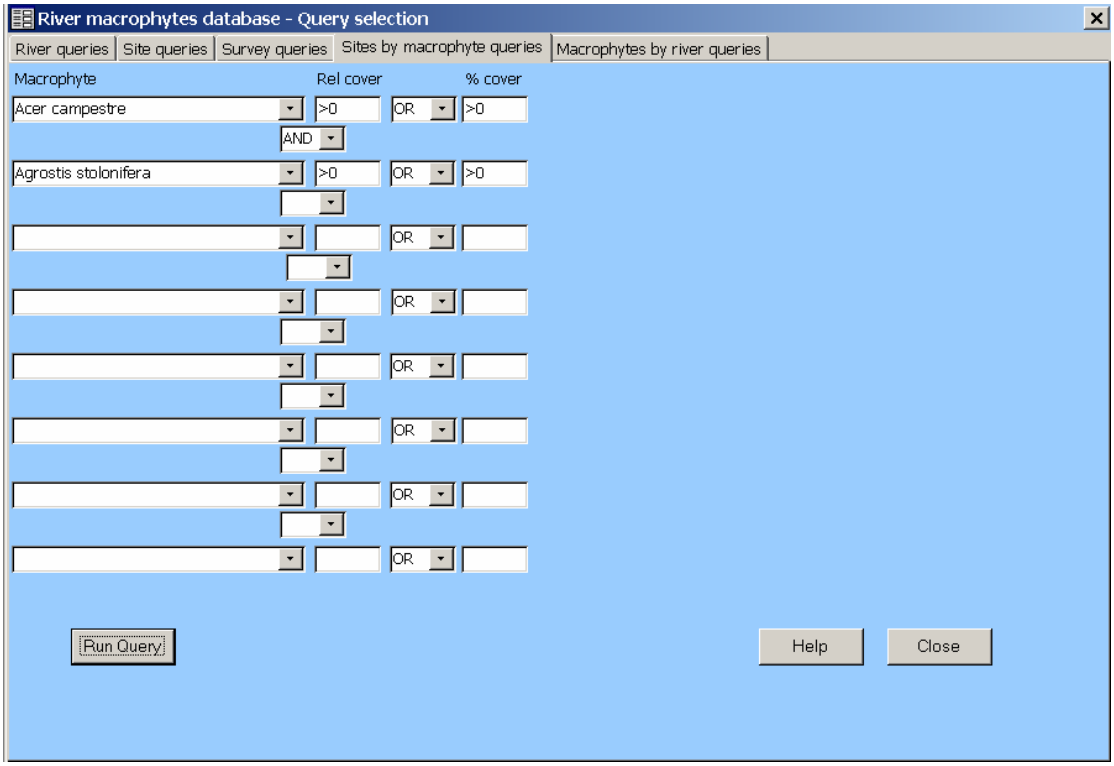
8.3 Survey queries



The survey queries page has a series of drop down list boxes and data input boxes along the top to enable you to build up a query. These are separated by drop down list boxes to enable you to combine the criteria boxes with AND or OR. When building up a query, you must select the River name, Site name, Surveyor, Original survey type or River type from the drop down list. The dates should be entered as a valid date format (dd/mm/yy, dd-mm-yyyy etc.) and will get reformatted to dd/mm/yyyy. All surveys that were done between (and including) the dates entered will be returned. If you leave the from date blank, all rivers surveyed on and before the to date will be included. If you leave the to date blank, all rivers surveyed on and after the from date will be included.

Pressing the 'Run query' button returns all the surveys that fit the constraints entered.

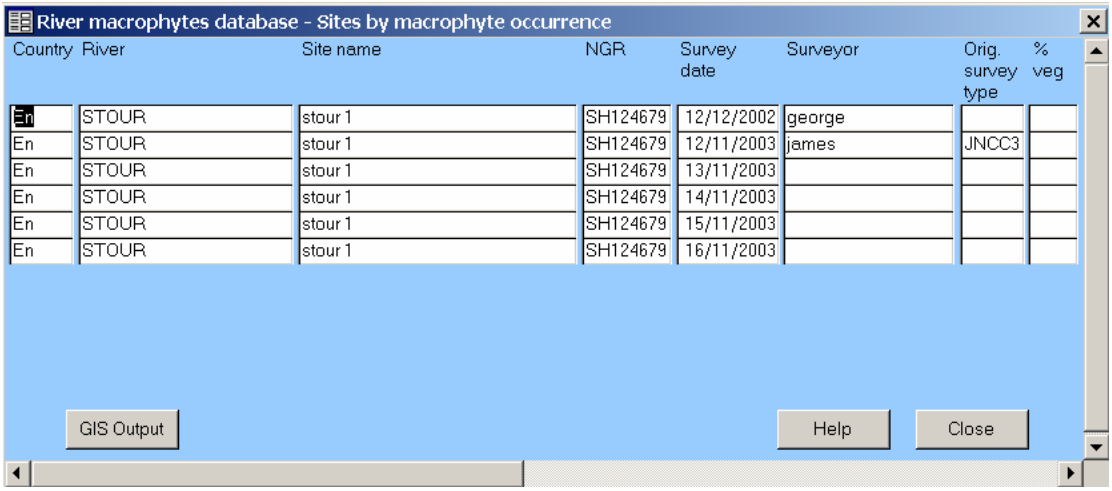
8.4 Sites by macrophyte queries



This is the most complex query page. The Sites by macrophytes queries page has 8 lines of drop down list boxes and data input boxes that can be combined together with AND/ORs to enable you to build up a complex query. Because of this the queries can be very complex and consequently can take a considerable time to execute, especially if the query will return a lot of records.

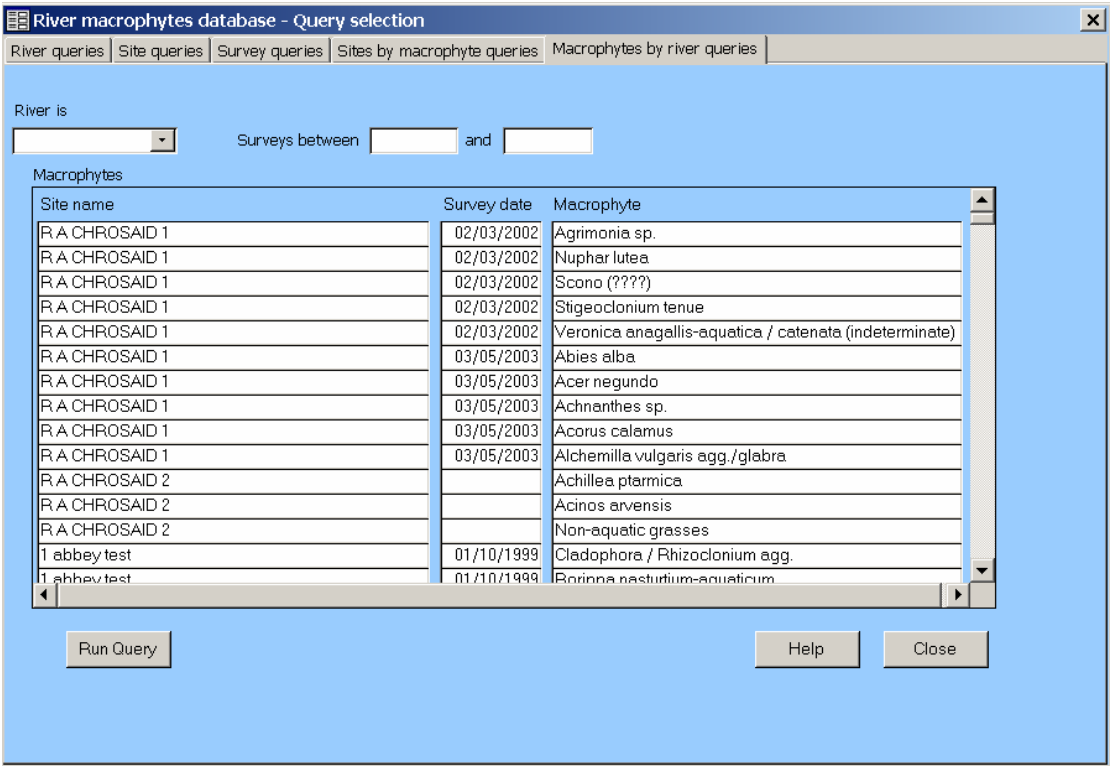
When building up a query, you select the Macrophyte from the drop down list. The relative and percentage covers should be entered into the box. These should be numeric values but they can also be entered as =n, >n, >=n, <n, <=n, or <>n, in which case the constraint entered will be used to build the query.

HINT. - If you just want to see if a macrophyte is present, set the criteria to >0. When you click on the Run query button, the query is built up and run and the results are returned in the Sites by macrophyte results form that opens automatically if it is not already open. The results are sorted by river name then site name.



There is a 'GIS output' button on the Sites by macrophyte results form. Pressing this brings up a standard windows input box to enable you to enter a file name to save as a .txt text file. This saved file is a comma delimited ASCII text file that can be imported into a GIS program such as ArcView or MapInfo. However, you will need a grid reference converter tool to convert NGRs into GIS cooordinates.

8.5 Macrophytes by river queries



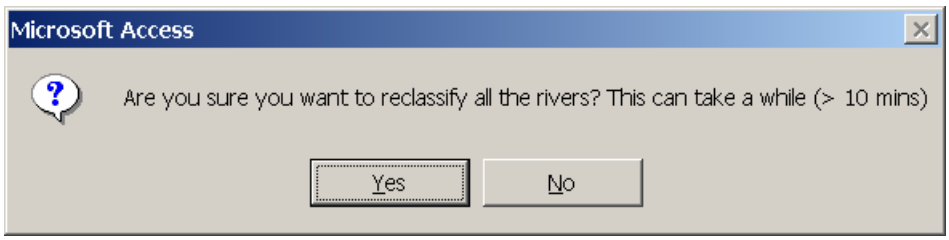
Along the top of the 'Macrophytes by river queries' page, there is a drop down list box to select the river, and data input boxes to set the survey dates which enable you to build up a query. When building up a query, you select the River name from the drop down list. The dates should be entered as a valid date format (dd/mm/yy, dd-mm-yyyy etc.) and will get reformatted to dd/mm/yyyy. All surveys that were done between (and including) the dates entered will be included in the query. If you leave the from date blank, all surveys done on and before the 'to' date will be included. If

you leave the ‘to’ date blank, all surveys done on and after the ‘from’ date will be included.

Pressing the ‘Run query’ button returns a list of all the macrophytes for the surveys that fit the constraints entered. These are ordered by river, then survey, then an alphabetical list of macrophytes for the survey.

9 Reclassify all

To run the classify river routine for every survey in the database press the ‘Reclassify All’ button on the main menu form. This displays a message warning you that it takes a while to do and asking you to confirm that you want to.



If you press Yes, the system then runs the classify river routine for every survey in the database. The only time this is likely to be done is if there have been changes made to the classification methodology and you want to update the entire database to reflect this. Individual surveys can be reclassified from the View Data form.

10 Glossary

Button

A labelled grey rectangle with a 3 dimensional effect. Clicking on it causes the program to perform a certain task. If the label has a dotted rectangle around it, that button is the default button and pressing the ‘Return’ or ‘Enter’ key will have the same effect as clicking the button.

Child record

A record that has a foreign key linking back to a primary key in another table.

Column

A vertical row of fields in a data table. Being in the same column, they will all be the same data type.
This name is often used interchangeably with field.

Combo box or Drop down combo box

A drop down combo box is a data field with a drop down arrow at the right hand edge. Clicking on the arrow enables the user to select a value from a list of possibilities. Combo boxes can display a value that is different from the value in the underlying field. They are often used to display the dictionary description while the underlying field contains the associated dictionary code.

Cursor

The little arrow indicating where the mouse is pointing to on the screen. It may change to other things such as an hourglass to indicate that the program is currently doing something.

Data field
A field on a form for the user to view, enter or update the data.

Database
A collection of information stored in a set of related tables.
In the context of the river macrophytes system this is a Microsoft Access .mdb file.

Date field
A special type of data field that will validate the entry to ensure that it is a date.

Dialog box
A small window that pops up, either to allow the user to enter information such as a file name to load, or simply for the user to confirm that they want to continue.
They are often referred to simply as a box i.e. a file entry box.

Dictionary or Dictionary table
A table containing data that does not get changed. They are often used to hold data used to validate entries entered into other tables. e.g. solid geology.

Field
A single item of information in a record.
This name is often used interchangeably with column.
Field is also often used to refer to a data field on a form.

File
A permanent record of a program or data stored on the hard disk. They have a file extension which defines what data they contain. In the context of the river macrophytes system the relevant types of file are:

.xls	A Microsoft Excel spreadsheet file.
.mdb	A Microsoft Access database file.
.mdw	A Microsoft Access security file.
.txt	An ASCII text file.

Foreign key
A column or combination of columns whose value must match a primary key in another table. Foreign keys need not be unique for each record.

Form
An on screen window that displays the information in the database in an easy to read way. A form may have data fields, radio buttons. buttons , sub forms, etc. on it

Hover help line
A line containing help information that appears when you hold the cursor to over a field, button, etc. for a few seconds. It then goes away when you move the cursor.

NULL
A computing term for empty or unknown.
NB it is not the same as 0, " " (space), or "" (empty string).

Numeric ID
In the river macrophytes database each record has a unique numeric id to distinguish it from other records. These are allocated automatically by the system and cannot be updated. They are the record's Primary key.

Numeric field
A special type of data field that will validate the entry to ensure that it is a number.

Parent record
A record that has one or more related records in another table with a foreign key linking back to it.

Primary key
A column or combination of columns whose value uniquely identifies a row in a table. Primary keys must be unique for each record and cannot be null.

Query
A set of instructions in SQL (structured query language) that when sent to the database will return a set of records.
It is also often used to represent the set of records resulting from a query.

Radio button
A group of labelled white dots that allow the user to choose one of a set of options. When you click on a radio button it gets a black centre and the previously selected one reverts back to a white dot.

Record
A horizontal set of related fields in a data table. The fields can be different data types. This name is often used interchangeably with row.

Record selector bar
A small toolbar containing buttons and text to allow you to move through a list of records, see which record you are at, and see the total number of records.

Report
An output from the database based on a preset query. Reports are designed to be printed, so the format is based on output to A4 paper.
In the river macrophytes system all reports are output to a print preview window giving the user the option pf reading them on screen or printing them.

Row
A horizontal set of related columns in a data table. They can be different data types, and represent a single record in the table.

This name is often used interchangeably with record.

Scroll bar
A grey bar at the bottom or side of a form or sub form that allows the form to be scrolled up or down within the window to see parts that were hidden.

Spreadsheet
An Excel .xls file containing one or more worksheets.

Sub form
Similar to a form except that it is embedded in another form. Sub forms are often linked to their parent form so that when the record in the parent form is changed, the sub form changes to display the data related to the new parent record.

Tab
A small title bar that sticks up above the visible page and allows the user to select the underlying page. Similar to the tabs on a card in a card index.

Tabbed page
A way of having sub forms overlaying each other with only the titled tab showing for the underlying pages. This enables the user to choose which page is visible by clicking on the appropriate tab.

Table
A group of records divided into columns that contain data or null values. Each record represents a distinct occurrence of a particular type of item, e.g. a site. A table holds all the information for a particular type of item, organised in columns and rows

Validation
When an entry is made into a validated data field, the entry is compared with a list of values or a certain format etc. If it does not match the list or format etc. the validation fails and the field refuses to accept the value entered.

Appendix 1 Convention for Naming River Macrophyte Survey Sites

The site name field should be a unique record displaying basic information about the survey site. Ideally, it needs to convey in a concise manner which catchment it is in, how far from the source it is, and the name of the nearest landmark. Generic site names such as 'section 1' or 'site 5' are of little practical use, as they do not identify survey sites in a unique manner.

All sites must have a site name.

In order to ensure consistency across the database, the following convention will be adopted for naming macrophyte survey sites:-

1. If the site is a new site, the name should take the following format:-
   <Number> <River Name> <Site Name>
   where <Number> is the relative position of the site along the watercourse, with the site furthest upstream being number 1. New sites inserted between existing sites should be numbered according to their nearest initial survey site with the suffix 'u' to indicate upstream and 'd' to indicate downstream, followed by another number to give a unique identification. The second number need not be indicative of position.

   The <River Name> part of the field is used to identify which catchment it is in. If the river has never been surveyed, a new name must be allocated. Normally this will simply be the name of the river. However, there are often several rivers in the UK with the same name. If the river has already been surveyed, the <River Name> part of the site name must exactly match the name in the rivers lookup table in the database. Although each record also contains a linked field indicating the river name, it is useful to be able to identify each site purely from the site name.

   <Site Name> may include any text that is appropriate to identify the site. Useful landmarks include the nearest settlement, bridges etc. The site name should be in square brackets. An example of a valid name might be 3 TEIFI [Cors Caron]

   If we wanted to include two new survey sites upstream and downstream of this site, appropriate names might be
   3u1 TEIFI [Observation Tower] and 3d1 TEIFI [Nant yr Efail confluence]

   Other valid names include
   9 DEE (CLWYD) [Corwen] not 9 DEE [Corwen]
   because there is a River Dee in Scotland as well as in Wales.

2. If the site has previously been surveyed and been named according to the convention, use the existing name.

3. If the site has previously been surveyed but has a name that does not conform to these specifications, notify the JNCC database manager and supply a modified name.