Roadside Survey Database
Quick Manual

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October 2009

Background

The Roadside Survey Database is a product of national standardisation of the roadside survey methods. This manual is intended to be a quick reference on how to operate and some of the main features of the roadside survey database when in the field. It assumes that the administrator has set all the required parameters, and 'checked out' those transects that will be monitored

Database installation

Install all the database components within the same folder, on your computer. These are

Frontend

RoadsideSurvey.mdb

Is used for data entry and reporting

Backend

RoadsideSurvey_dat.mdb *(standard name)*

Is used for data storage and will be uploaded to the master once the data has been collected. Only transects that have been checked out can be uploaded to the master. The Backend may have a different name. Check with the administrator as to which Backend database is to be used.

Excel Template

Hazard.xlt

Is a template that is used to produce reports.

Documents

Field Manual (RoadsideSurveyFieldManual.pdf - this document)
Database Manual (RoadsideSurveyUserManual.pdf)
IT Manual (RoadsideSurveyITManual.pdf)
Survey manual (RoadsideErosionSurveyManual.pdf)

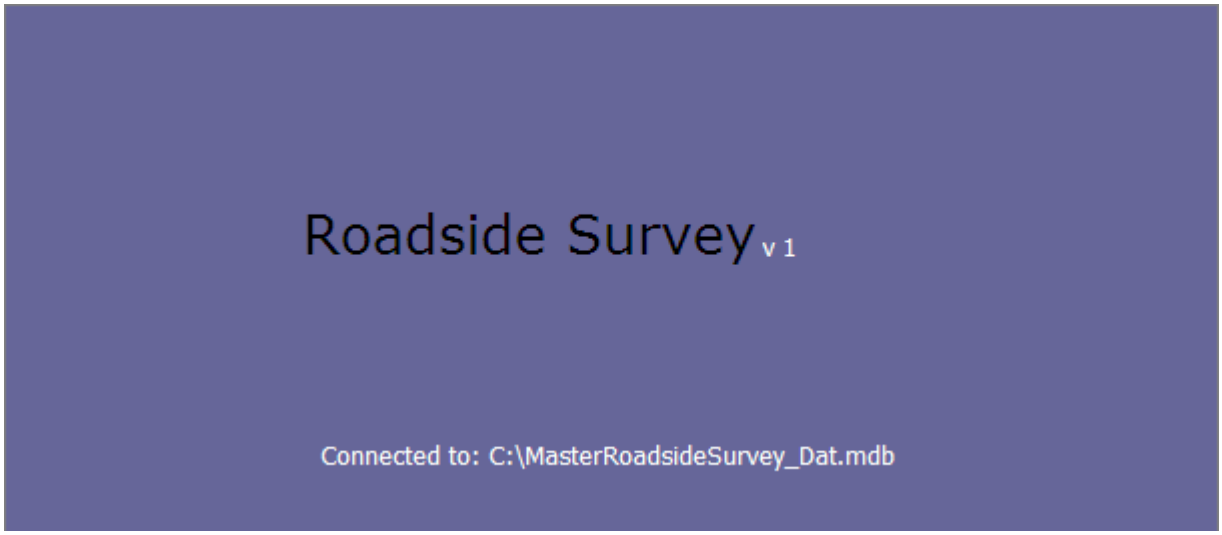
Start

Open the database by selecting the Frontend

RoadsideSurvey.mdb

Opening screen

The opening screen will indicate which Backend the Frontend has connected to. If it can not find the Backend it will ask the user to designate a Backend. If the Backend has connected to the wrong Backend go to the *Change the Backend* section.

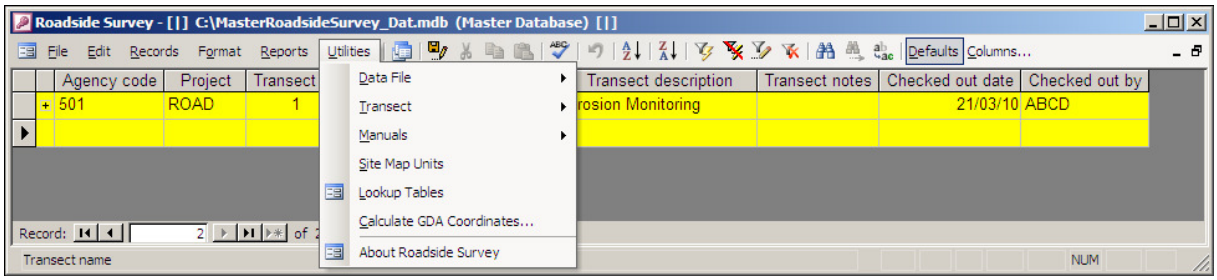


Main screen

The data entry form is the main screen. It is used for data entry, viewing previous data and has links to other functions and processes.

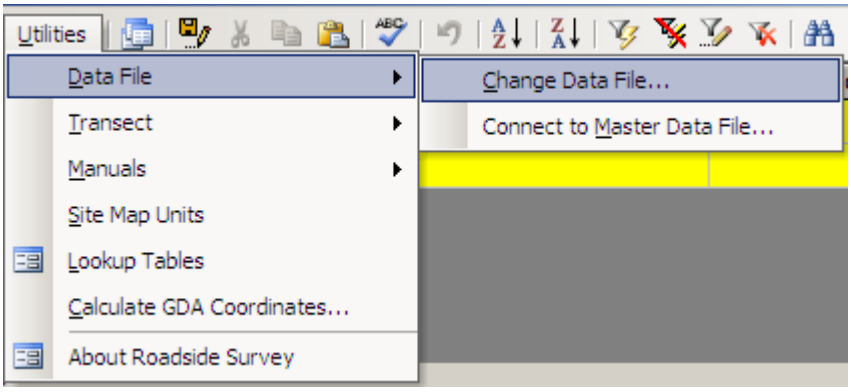
The Title bar (top of screen) informs the user as to which Backend the Frontend is attached.

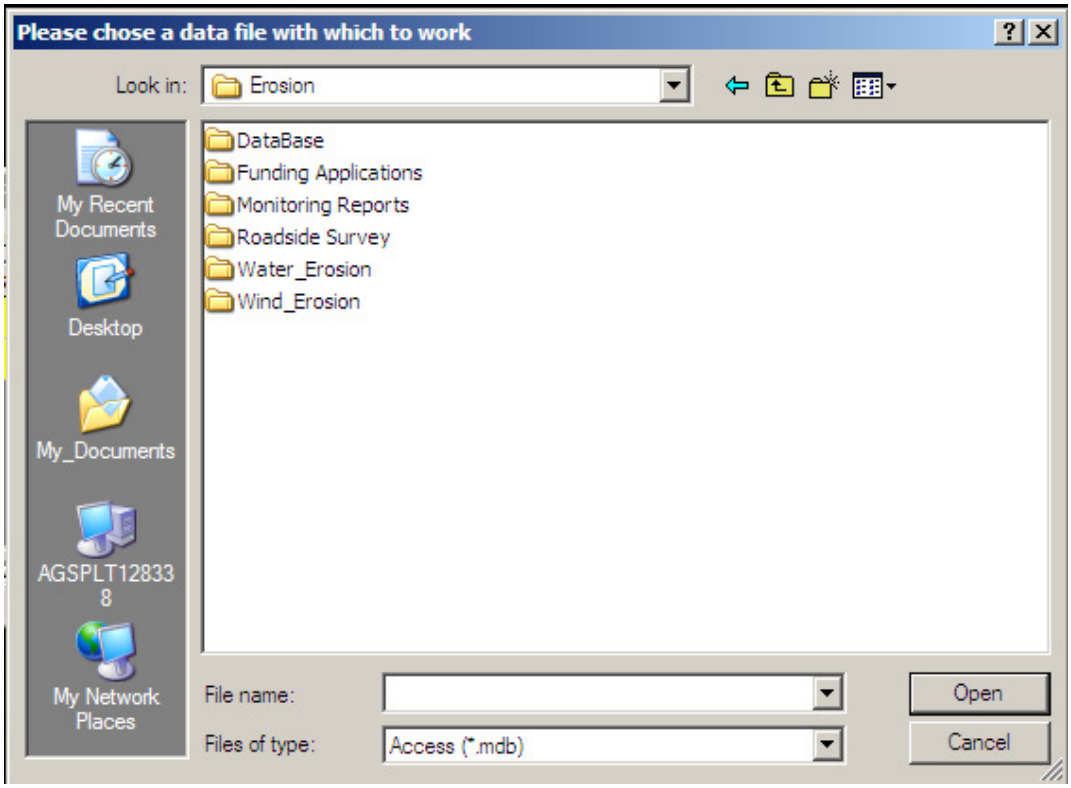
The Menu bar has a selection of menus with dropdown menu items as well as several tool bar buttons. A list of the buttons and their use can be found in the *Menu Items* section.



Change the Backend

Select *Change Data File* tab in the menu items (Utilities | Data File | Change DataFile…). Use the following screen to search for and open the desired Backend.





Navigating the database

The data entry form is designed to be operated almost totally with the keyboard instead of the mouse. There are many "hot keys" that perform required functions. (To get more information press **F1** (to get Access help), then under Answer Wizard type "keyboard shortcuts".)

To open database window or bring it to front, press **F11**
The X button will close the whole program…

The following are major activities for which speed keys will help.

Toolbars

The cursor can be located on the tool bar by pressing **F10** or **Alt**. To return, press these keys again.
If there is more than one Toolbar, press **Ctrl** + **Tab** to cycle between.
Once on the toolbar, press **Tab** to move to desired menu item or button. Press **Enter** to open. If the Menu item has a underscored letter e.g. Utilities, press **U** to open it.

Navigating in Data Entry Form

The data entry form is in datasheet and subdatasheets formats.

Within a datasheet

Move to:	Press:
right	**Tab** or **Enter** or →
left	**Shift** + **Tab**
end of row	**End**
beginning of row	**Home**
first row, first column	**Ctrl** + **Home**
last row, last column	**Ctrl** + **End**
first row, current column	**Ctrl** + ↑
last row, current column	**Ctrl** + ↓
specific row	**F5** , type row number then **Enter**

To select:	Press:
current row other way around Current Collumn	**Ctrl** + **Space Bar**
current column other way around Current Row	**Shift** + **Space Bar**
whole sheet	**Ctrl** + **A**
To filter:	Press:
filter by **whole** cell value	**F10** then **Tab** until then **Enter**
filter by **part** cell value	select part then **F10** then **Tab** until then **Enter**
remove filter	**F10** then **Tab** until then **Enter**
To sort:	Press:
ascending in current field	**F10** then **Tab** until then **Enter**
descending in current field	**F10** then **Tab** until then **Enter**

Within a cell

(At least some of the letters must not be highlighted for these to work.)

Move to:	Press:
right	→
left	←
end of cell	**End**
beginning of cell	**Home**
beginning of next word	**Ctrl** + →
end of previous word	**Ctrl** + ←

To select:	Press:
current word	Ctrl + ← then Ctrl + Shift + →
whole cell	F2
part of word or cell	Shift + repeating → until all selected
forward of cursor to end	Ctrl + Shift + ↓
backward of cursor to beginning	Ctrl + Shift + ↑
Unhighlight, If automatically highlighted	Ctrl + Shift + → or + ←
To open:	Press:
Combo box	F4 followed by ↓ and Enter to select value

Between datasheets

To:	Press:
expand subdatasheet	Ctrl + Shift + ↓
collapse subdatasheet	Ctrl + Shift + ↑
enter the subdatasheet from the **last** column of the **previous** record in the datasheet	Tab (goes to **first** row, **first** column)
enter the subdatasheet **from** the **first** column of the **following** record in the datasheet	Shift + Tab (goes to **last** row, **last** column) Backwards
exit the subdatasheet from anywhere and move to the **first** field of the **following** record in the datasheet	Ctrl + Tab

To:	Press:
exit the subdatasheet from anywhere and move to the **last** field of the **previous** record in the datasheet	**Ctrl** + **Shift** +**Tab**
enter the **first** field in the datasheet from the **last** field in the **last** record in subdatasheet	**Tab**
move to the **next** record in the datasheet **bypassing** the subdatasheet	↓
move to the **previous** record in the datasheet **bypassing** the subdatasheet	↑

Entering new observation records in Data Entry Form

A specialized function has been developed to facilitate recording monitoring. When a new observation is completed, the cursor moves to the beginning of a new record on the next site. This is triggered when **Tab** or **Enter** are pressed when at last column, or ↓ when anywhere. This move coincides with a **beep** informing the user that record has been saved and has moved to the next dataform.

Returning to last entered record

At times, moving to a new record might be premature. The steps to return follow are
Ctrl + Home, ←, Home, ←

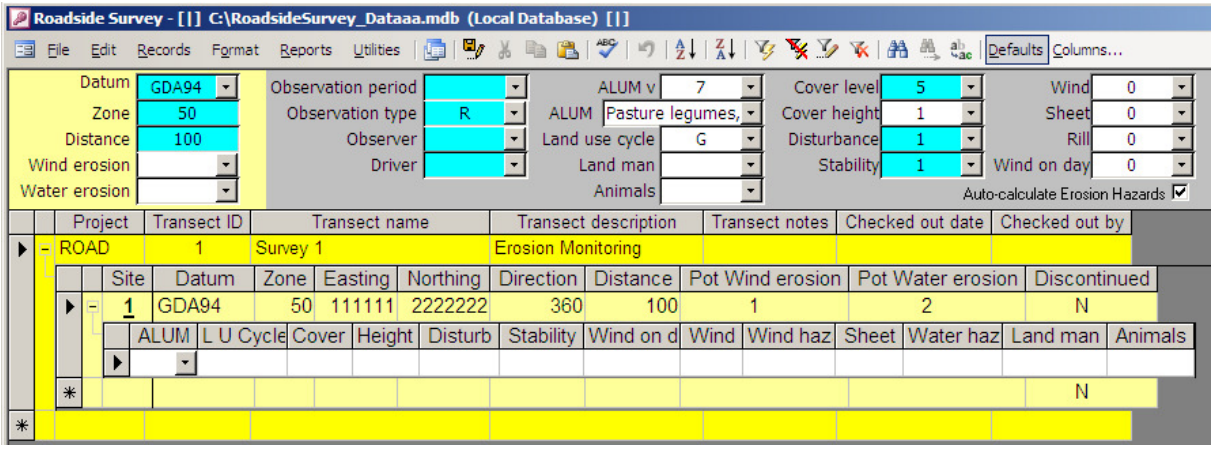
Set defaults

The defaults are used to automatically populate selected fields in the tables instead of typing them each time. The default toolbar can be shown or hidden by clicking the Defaults button located on the menu bar.

The defaults are colour coded according to the table they populate. The pale yellow defaults on the left populate the *site* data, while the remaining grey defaults populate the *observation* data. The defaults can be selected by typing directly into the cell or selecting from the drop down menu.

The required fields (those that need to be populated before a new observation can be saved) are highlighted in blue. They do not need to be populated in the default menu, but do need to be populated in the data entry form.

If the required field is not available (and it is not possible to type it in manually) it will need to be added to the Lookup table (Utilities | Lookup Tables). The default values will only appear in the new *site* and *observation* cells when a character has been entered manually into one of the other cells. Descriptions of each of the fields can be found in the Field manual or below.

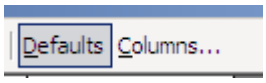


NOTE: Occasionally after entering the defaults, an error will appear informing the user that a duplicate is not allowed. If this occurs, restart the program.

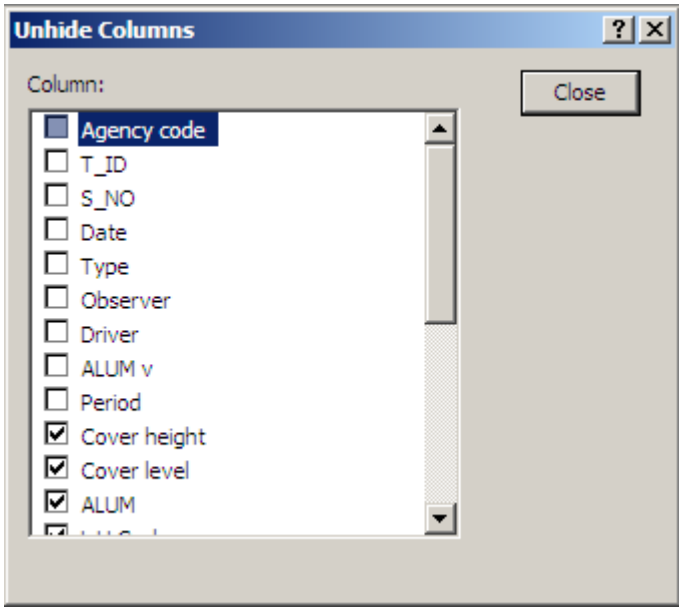
Appearance

Columns

Columns can be added and removed from view by selecting the ***Column*** button on the Menu bar. It will open a window indicating the columns within the 'selected' dataform (transect, site or observation). By selecting/unselecting the tick boxes, the number of columns shown on the dataform can be altered. In many cases the columns are automatically populated through the database form design or defaults menu, hence they are not required in the current view, i.e. Agency Code in the *Site* and *Observation* dataforms.



→



Form layout

The database forms have been designed to be flexible. The row and column heights can be adjusted in nearly every situation. The row height and column width can be adjusted through the use of the menu items, (Format | Row Height/ Column Width), or by clicking and dragging the row / column height/ widths to the desired size.

Start monitoring

Click the + symbol on the left of the data to open the sub forms/ site and observation data.

Select transect

- The transect form can be limited to show only the chosen transect by clicking on the desired transect name and then press the ***Filter By Selection*** button.
- To remove the filter select the button
- Hide unwanted columns by using the columns button. Columns... and deselecting unwanted columns.

Transect in reverse

- To conduct a transect in reverse, place the cursor in the Site Number field and select the button to sort the sites in descending order. Select to sort in ascending order

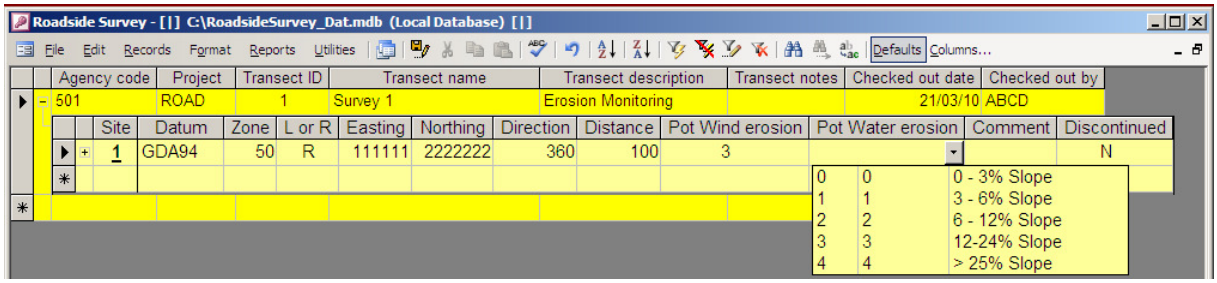
Enter Data

Enter data by typing into the cell or selecting from the drop down menus (**F4**). If a default value has been selected in the default menu, it will appear once a character has been entered into another cell.

To save the data and move to the next site and observation press the down arrow**↓.**

Below is a list of the fields in the site and observation data forms. More detailed descriptions of each of the fields can be found in Roadside Survey Manual (Utilities | Manuals | Survey manual or User manual)

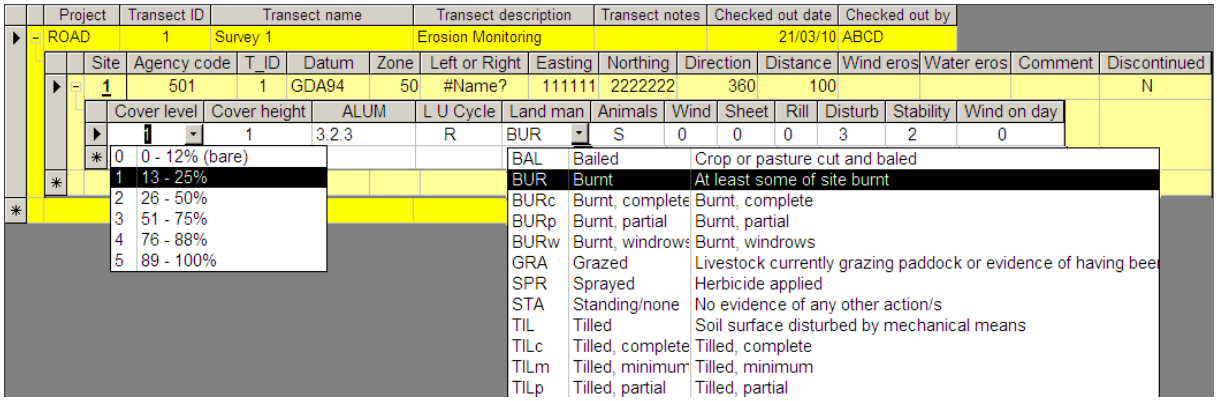
Site Data



Observation Field	Description	Value/ example
Site	Site number is automatically filled in numerical sequence, or manually populated	Decimal number i.e. 1, 2, 3… Or 1, 2, 2.5, 2.55, 3…
Datum	Datum of the site	GDA 94
Zone	Required	50 (West, WA) 51 (East, WA)
Easting	Required (enter 111111 if coordinates captured initially as waypoints)	Six figure number
Northing	Required (enter 1111111 if coordinates captured initially as waypoints)	Seven figure number
Direction	Direction to the centre of the field site from the vehicle as a bearing.	0° – 360°
Distance	Distance to centre of site in field. Must be greater than 50m as site is 100m wide	90
Left or Right	Direction of the site from the vehicle, according to the intended direction of travel	L or R
Wind Eros	Wind erosion potential rating based on soil type and position in landscape	5 categories 0 – 4 0 = low erosion potential 4 = high erosion potential
Water Eros	Water erosion potential rating based on slope	
Comments	Other comments	
Discontinued	Discontinue site observations	Y = Yes = Discontinue (Will highlight cell in red)

NOTE: The remaining fields are automatically populated.

Observation Data

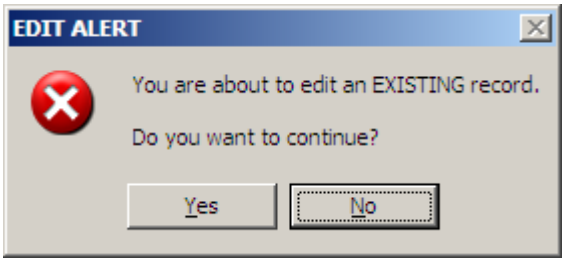


Observation Field	Description	Value/ Example
Observer	The individual writing down the observations. Individual must be registered to the same agency as the current agency.	SMIJ = John Smith GREM = Mary Green
Driver	The individual driving the vehicle. Individual must be registered to the same agency as the current agency.	SMIJ = John Smith GREM = Mary Green
ALUM v	The ALUM version	7
ALUM	The Alum Code. (The number of ALUM codes displayed in the dropdown Menu can be adjusted in the ALUM lookup table. Utilities | Lookup Tables))	Cropping Wheat Pasture legume……
Period	Observation period	Max 09, Min 10 etc
Cover Height	The height of the vegetation in the paddock	0 – 3 (0= bare, 3 = 40cm+)
Cover Level	The cover class of the vegetation is providing	0 – 5 (0= bare, 5 = 100% cover)
L U Cycle	Land use cycle	G= Growing, M= Mature, R= Residue
Land Man	Land management phase	burn, till, grazing, spraying etc.
Animals	Type of livestock present in the field	S = sheep, C = cattle
Wind	Evidence of wind erosion	0 – 5 0 = No erosion 5 = Severe Eros
Sheet	Evidence of sheet erosion	0 – 3 0 = None
Rill	Evidence of sheet erosion	0 – 3 0 = None
Disturb	Disturbance of the topsoil	1 – 3 1 = Insignificant
Stability	Is the soil stable regardless of other factors?	0 = stable 1 = unstable
Wind on day	Wind erosion occurring on the day of observation	none, minor severe
Comments	Other comments	
Wind Hazard	The wind erosion hazard rating, automatic or manual selection	Auto populated
Water Hazard	The water erosion hazard rating, automatic or manual selection	Auto populated

NOTE: The remaining fields are automatically populated

Edit existing sites

Saved data can be edited at any time. Select the desired piece of data that needs to be edited and change to the appropriate value. A warning message will appear to inform the user that they are about to edit an existing record. This will ensure that the user has deliberately changed the value and has not accidentally selected the wrong cell.



New sites

New or extend transect

New sites can be added to the end of an existing transect by going to the last record / new record of the site dataform and creating a new site record. The site number will be automatically generated.

Use the scroll bar, arrow key or button located at the bottom of the screen to move to the next new record.

Insert sites in-between current sites

So that sites are retained in a sequence within a transect, the database has been designed to allow for the identification of sites by decimal numbers. For example, if a site is to be added between 5 and 6, then 5.5 can be used. After closing and reopening the database, site 5.5 will appear in-between sites 5 and 6.

To insert a new site move to the next new record in the site dataform and **manually** type the chosen site number. Enter the remaining site and observation data as normal.

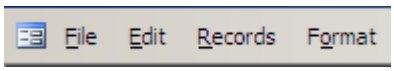
Use the scroll bar, arrow key or button located at the bottom of the screen to move to the next new record.

Removing sites

Occasionally a site will be discontinued from a monitoring program. This may be because of rationalisation of program or changes in land use to for example a tree farm. Sites are never removed from the database, but marked as discontinued in the site data form. This is a flag to inform the observer.

Menu Items

Standard Access Menu Items



File	To save and close file
Edit	Copy, cut, past, delete etc.
Records	Filter and sort the data
Format	Edit table sizes

Custom Menu Items

Reports		Charts - Produce Charts on the data Transect Statistics – counts of sites and observations t
Utilities		
	Data File	select a Backend located in a different file
	Transect	Export GPS coordinates, Upload Data, Delete Transect
	Roadside Survey Docs	• Database manuals (Quick, Full and IT versions) • Field manual
	Site Map units	View site map units for specific site
	Lookup Tables	Holds values for main tables (refer to 4.5)
	Calculate GDA Coordinates	Recalculate GPS coordinates for sites
	About Roadside Survey	Database Version Number
DataBase		Opens Database main Menu
Access Tool Buttons		Quick buttons
Defaults		Toggle the default menu on and off
Columns		Select which columns you would like to view