Viridans FIS-VFD Tutorial 5 - USB

Task:

Enter data for local species list.

- You may use data which has been created on a recording sheet (see Tutorial 12) and enter that data into the FIS or you may enter the species names directly. The former is significantly more rapid if you have large amounts of data.

Botanical Data Entry:

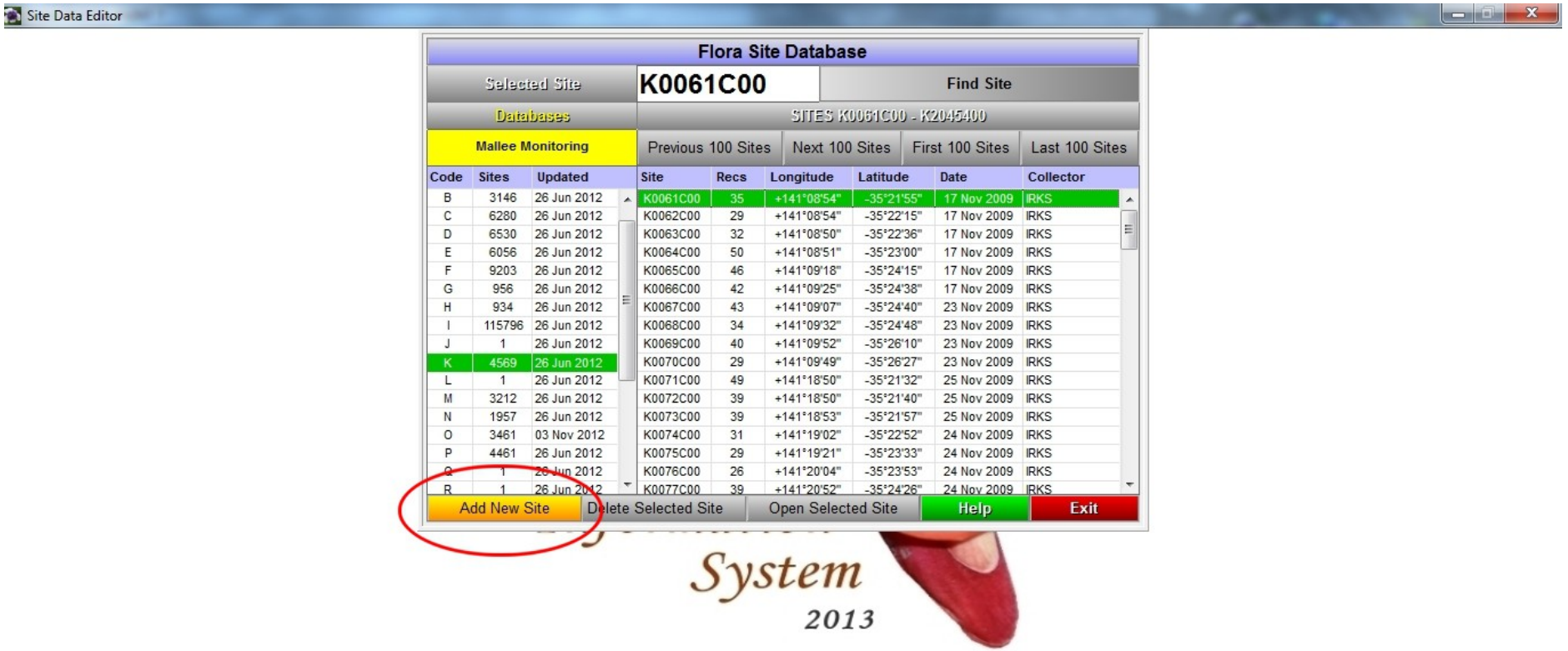
Tutorial 12 outlined the method for generating a recording sheet that can be used for botanical data collection. The advantage of this sheet is that it can hold many plant names (each with a unique 9-character abbreviation) and their 4-digit codes. This means that the user does not need to write down plant names on the sheet (so data recording is more accurate and rapid) and that subsequent data entry can use the 4-digit codes rather than names, which is also faster.

The following tutorial will take the user through a typical data entry task.

FIS 2013

Site Data Multi-maps Land Use (1:1,000,000-1:100,000)
Site Data Multi-maps Land Use (1:1,000,000-1:100,000 Low Contrast)
Site Data 1:100,000 Land Use
Site Data 1:250,000 Land Use
Site Data 1:100,000 Melbourne EVCs
Site Data 1:1,000,000 Map Themes
Edit Site Data
Site Data Printouts
Subset Data from a List of Sites
Incorporate Site Data
Data Validation
Repair Database Files
Sites on Species Attributes
Header Search
Climate Profiles
Similarity Analysis
Nearest Neighbour Analysis
Two-way Table Sorting
Character Species
Data Export
Help
Close

Expires: January 2015


Site Data Editor
Flora Site Database
Selected Site
K0061C00
Find Site
Databases
SITES K0061C00 - K2045400
Mallee Monitoring
Previous 100 Sites
Next 100 Sites
First 100 Sites
Last 100 Sites
Code Sites Updated
B 3146 26 Jun 2012
C 6280 26 Jun 2012
D 6530 26 Jun 2012
E 6056 26 Jun 2012
F 9203 26 Jun 2012
G 956 26 Jun 2012
H 934 26 Jun 2012
I 115796 26 Jun 2012
J 1 26 Jun 2012
K 4569 26 Jun 2012
L 1 26 Jun 2012
M 3212 26 Jun 2012
N 1957 26 Jun 2012
O 3461 03 Nov 2012
P 4461 26 Jun 2012
Site Recs Longitude Latitude Date Collector
K0061C00 35 +141°08'54" -35°21'55" 17 Nov 2009 IRKS
K0062C00 29 +141°08'54" -35°22'15" 17 Nov 2009 IRKS
K0063C00 32 +141°08'50" -35°22'36" 17 Nov 2009 IRKS
K0064C00 50 +141°08'51" -35°23'00" 17 Nov 2009 IRKS
K0065C00 46 +141°09'18" -35°24'15" 17 Nov 2009 IRKS
K0066C00 42 +141°09'25" -35°24'38" 17 Nov 2009 IRKS
K0067C00 43 +141°09'07" -35°24'40" 23 Nov 2009 IRKS
K0068C00 34 +141°09'32" -35°24'48" 23 Nov 2009 IRKS
K0069C00 40 +141°09'52" -35°26'10" 23 Nov 2009 IRKS
K0070C00 29 +141°09'49" -35°26'27" 23 Nov 2009 IRKS
K0071C00 49 +141°18'50" -35°21'32" 25 Nov 2009 IRKS
K0072C00 39 +141°18'50" -35°21'40" 25 Nov 2009 IRKS
K0073C00 39 +141°18'53" -35°21'57" 25 Nov 2009 IRKS
K0074C00 31 +141°19'02" -35°22'52" 24 Nov 2009 IRKS
K0075C00 29 +141°19'21" -35°23'33" 24 Nov 2009 IRKS
K0076C00 26 +141°20'04" -35°23'53" 24 Nov 2009 IRKS
K0077C00 39 +141°20'52" -35°24'26" 24 Nov 2009 IRKS
Add New Site
Delete Selected Site
Open Selected Site
Help
Exit
System
2013

The first screen of the data entry program shows a two-part table. The panel on the left is a list of each of the lettered databases along with the number of sites in each and the most recent date for additions or corrections. The panel on the right shows the first hundred sites in the highlighted database along with the number of species in each, the date of collection and the collector's code.

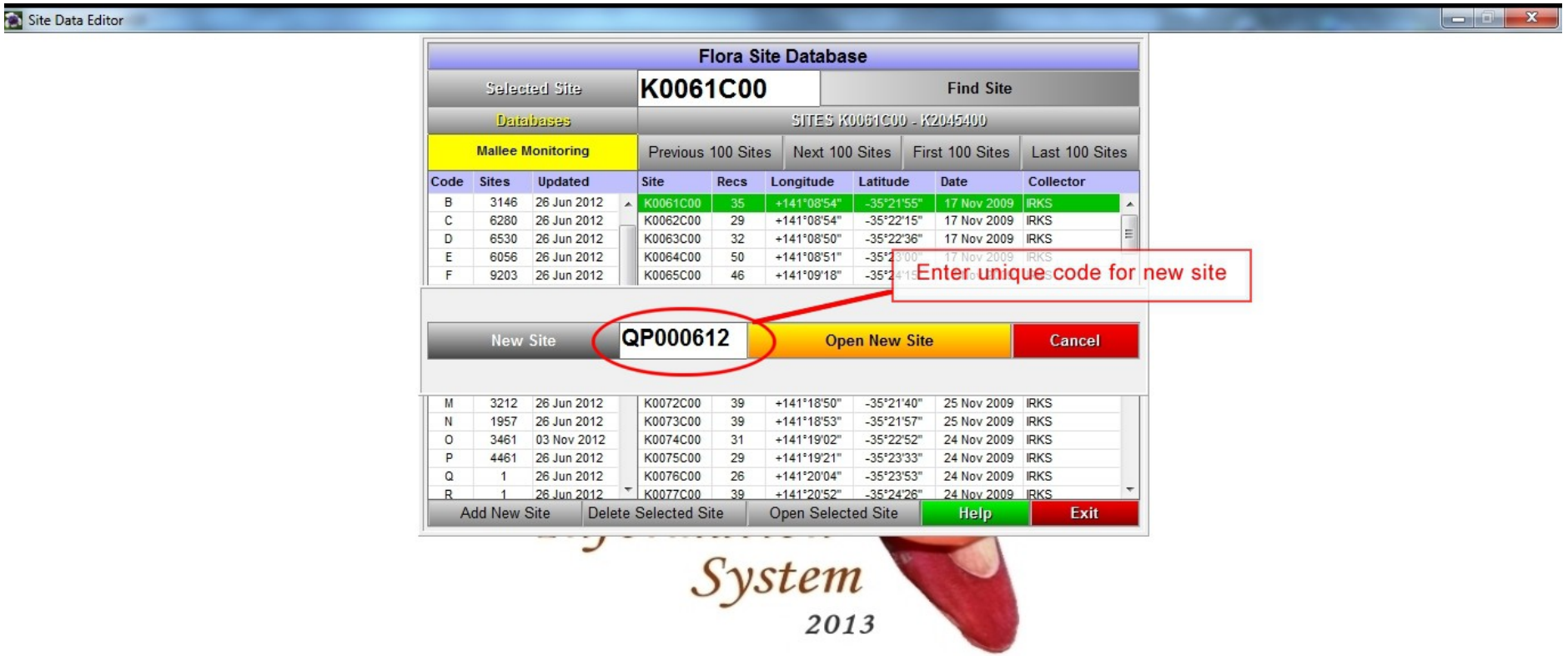
The ID for each species list or survey quadrat is always an 8-character code beginning with a letter. The individual letters refer to types of data and the DSE botanical survey groups should assign codes for users so that incoming data are unique. The available letter codes for users outside of DSE are M, N and O for quadrat survey data (from western Victoria, Melbourne Bays, and eastern Victoria), S, T and U for definable area lists , and I for incidental records.

Quadrats are standard, measured areas (often circles or squares with sides of 10 m or so) for data collection from which all species are identified and given a cover value. They are normally collected as part of a vegetation survey.

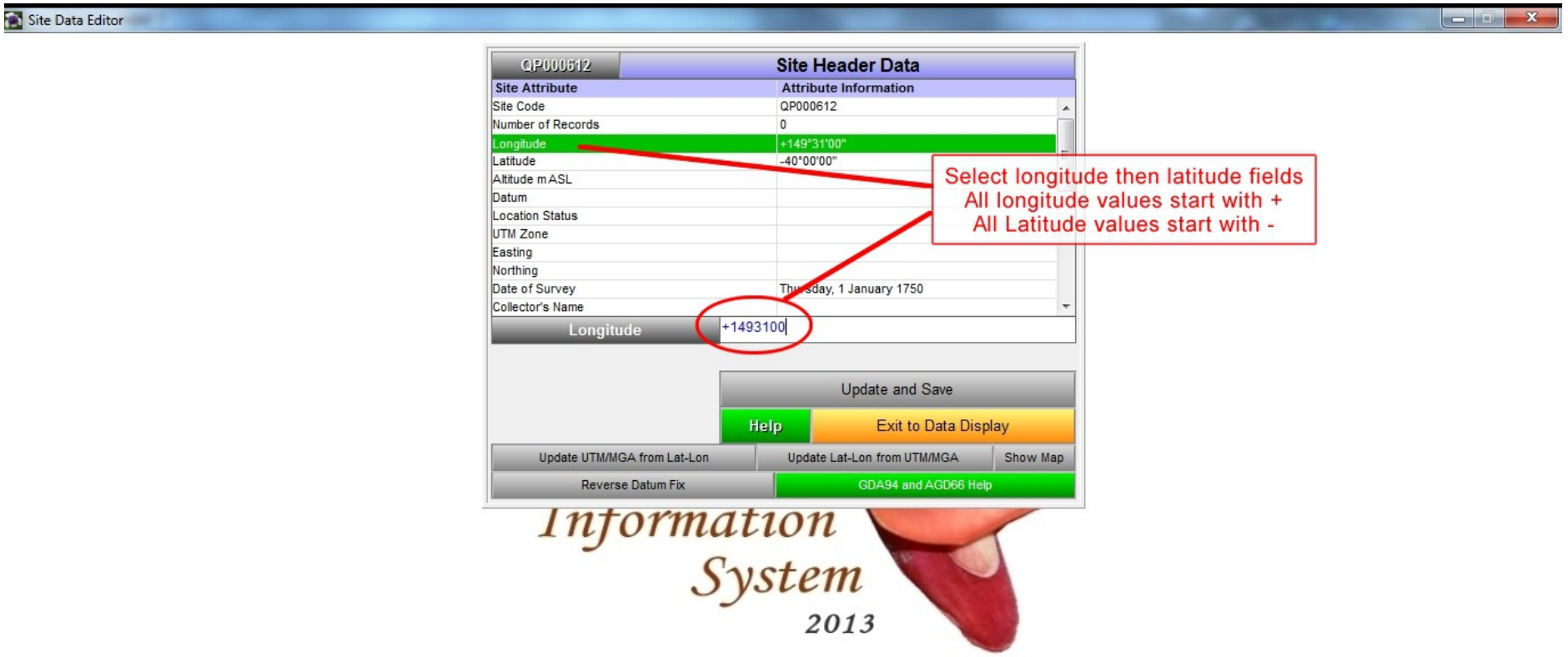
Definable Area Lists are lists of plants from any area which can be defined on a map (a small reserve, a paddock, a roadside verge). The lists are not necessarily complete, the area is not necessarily measured to any degree of accuracy, and cover values are usually not assigned.

Incidental Records may consist of a location for a single species or a small number of species. Typical data are locations for trees on roadsides, specific weeds in paddocks, rare species anywhere. Cover values are seldom assigned and a full list of associated species is not included.

The process for adding a new site to the FIS starts with clicking the **Add New Site** button. (*If you wish to alter a site already in the database you click the **Open Selected Site** button, or if you wish to remove an entire site click the **Delete Selected Site** button*).



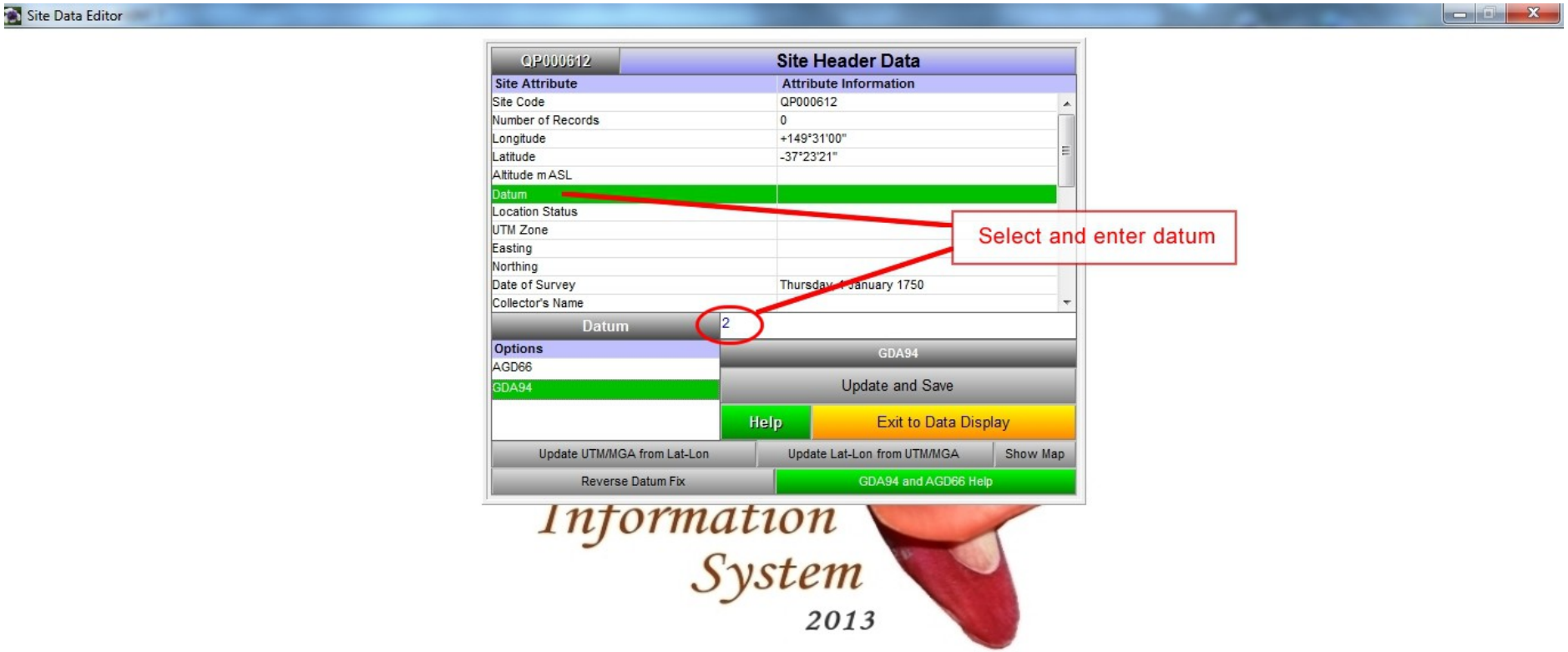
If the site is already in the database you will be prompted to enter another code.


Site Data Editor
QP000612
Site Header Data
Site Attribute
Attribute Information
Site Code
QP000612
Number of Records
0
Longitude
+149°31'00"
Latitude
-40°00'00"
Altitude m ASL
Datum
Location Status
UTM Zone
Easting
Northing
Date of Survey
Thursday, 1 January 1750
Collector's Name
Longitude
+1493100
Select longitude then latitude fields
All longitude values start with +
All Latitude values start with -
Update and Save
Help
Exit to Data Display
Update UTM/MGA from Lat-Lon
Update Lat-Lon from UTM/MGA
Show Map
Reverse Datum Fix
GDA94 and AGD66 Help
Information
System
2013

An empty site file will be created with the ID code just entered and a default location (the south-western corner of the mapped region for the database) and a default date (January 1st, 19750). You may not change the site ID at this stage (although you may exit the program and delete the site later on) but you must change the location data, the date and add the datum, the location accuracy and a collectors code.

The default location is in longitude and latitude, both represented as degrees, minutes and seconds - without breaks- and with longitude preceded by a + and latitude with -. Each longitude must include seven digits and latitude must include six. That is, even if the minutes or seconds are single digits you must add preceding zero. For example, **145º 1' 2"** and **37º10'** must be written as **+1450102** and **-371000**.

You may also enter the location as an MGA (Map Grid of Australia) value but this should include a complete six-digit easting, seven-digit northing and the zone. After this location has been entered you must also click the **Update Lat-Lon from UTM/MGA** button so that the Latitude and Longitude fields are filled.


Site Data Editor
QP000612
Site Header Data
Site Attribute
Attribute Information
Site Code
QP000612
Number of Records
0
Longitude
+149°31'00"
Latitude
-37°23'21"
Altitude m ASL
Datum
Location Status
UTM Zone
Easting
Northing
Date of Survey
Thursday, 1 January 1750
Collector's Name
Select and enter datum
Datum
2
Options
AGD66
GDA94
GDA94
Update and Save
Help
Exit to Data Display
Update UTM/MGA from Lat-Lon
Update Lat-Lon from UTM/MGA
Show Map
Reverse Datum Fix
GDA94 and AGD66 Help
Information
System
2013

AGD66 and GDA94 - Australian Mapping Datum

Most printed maps in Australia use as their datum a standard established in 1966 called **AGD66** (Australian Geodetic Datum 1966). This works well for navigation within Australia and provides useful and accurate location data for both Latitude-Longitude readings and Transverse Mercator coordinates (AMG - Australian Map Grid). **(Note: This is a mandatory field).**

Not a World Standard

This datum does not, however, conform precisely to international systems and differs from UTM coordinates *(Universal Transverse Mercator - based on the World Geodetic System 1984 or **WGS84**)* used by air and sea navigational equipment and most Global Positioning Systems (*GPS*) by about 200 m.

How it Affects Mapping

This means that if you use a GPS set to WGS84 (*which is the default for most GPSs)* for determining your geographic location and then plot that point on one of the older, printed topographic maps, the point will be placed about 120 m to the ***east*** and 170 m to the ***north*** of where it should be. Conversely if you use a printed map to determine the geographic location and plot that point on a map using the WGS84 datum it will be placed about 120 m to the ***west*** and 170 m to the ***south*** of where it should be.

The GDA94 Solution

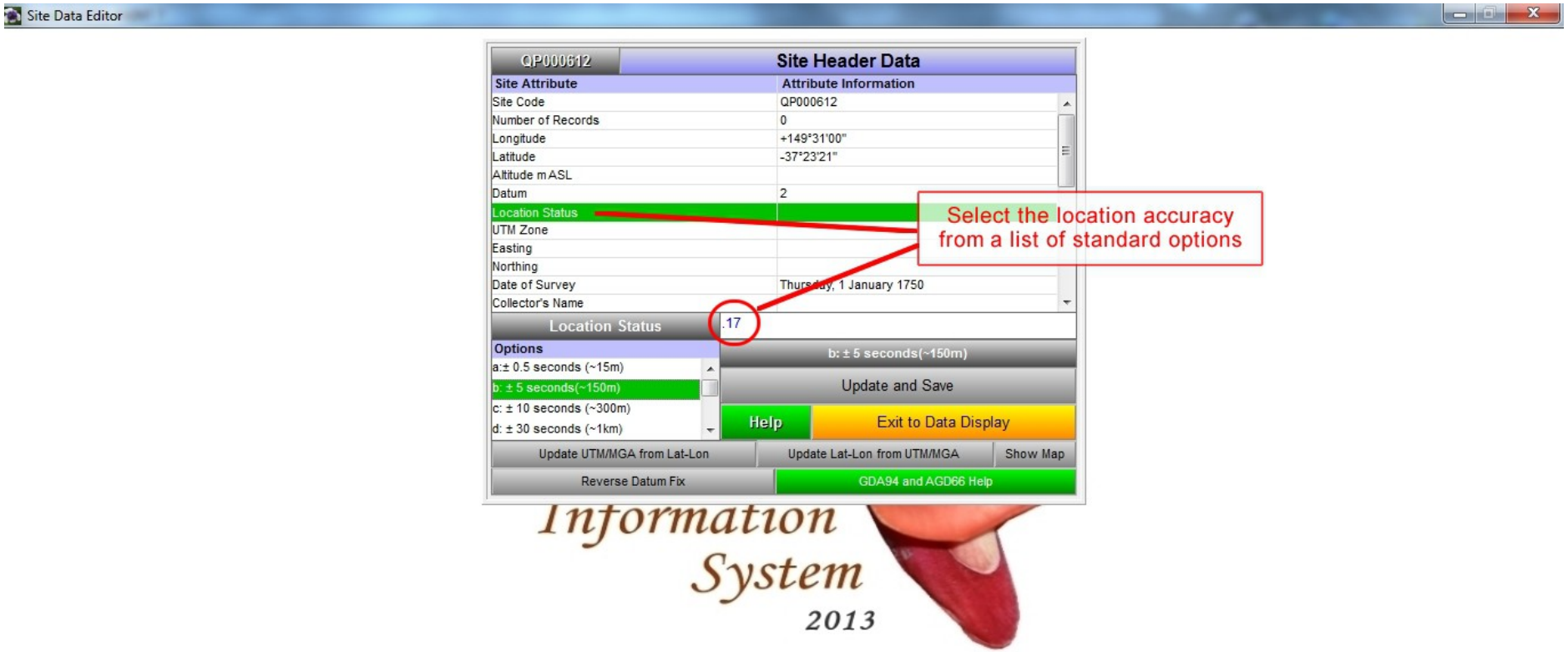
The Geocentric Datum of Australia 1994 (**GDA94**) was established to correct this discrepancy and it conforms almost completely to the WGS84 datum. Viridans software is now using GDA94 as the basis for its maps and site locations so it is necessary for all users who are entering or editing site data to know which datum was used for any site location.

Conversion from AGD66 to GDA94

If your location data is based on AGD66 *(e.g. you determined it from an older topographic map)* then you should select that option in the **Datum** field. When the site data is saved the software will convert the location data from AGD66 to GDA94 and change the **Datum** field to GDA94.

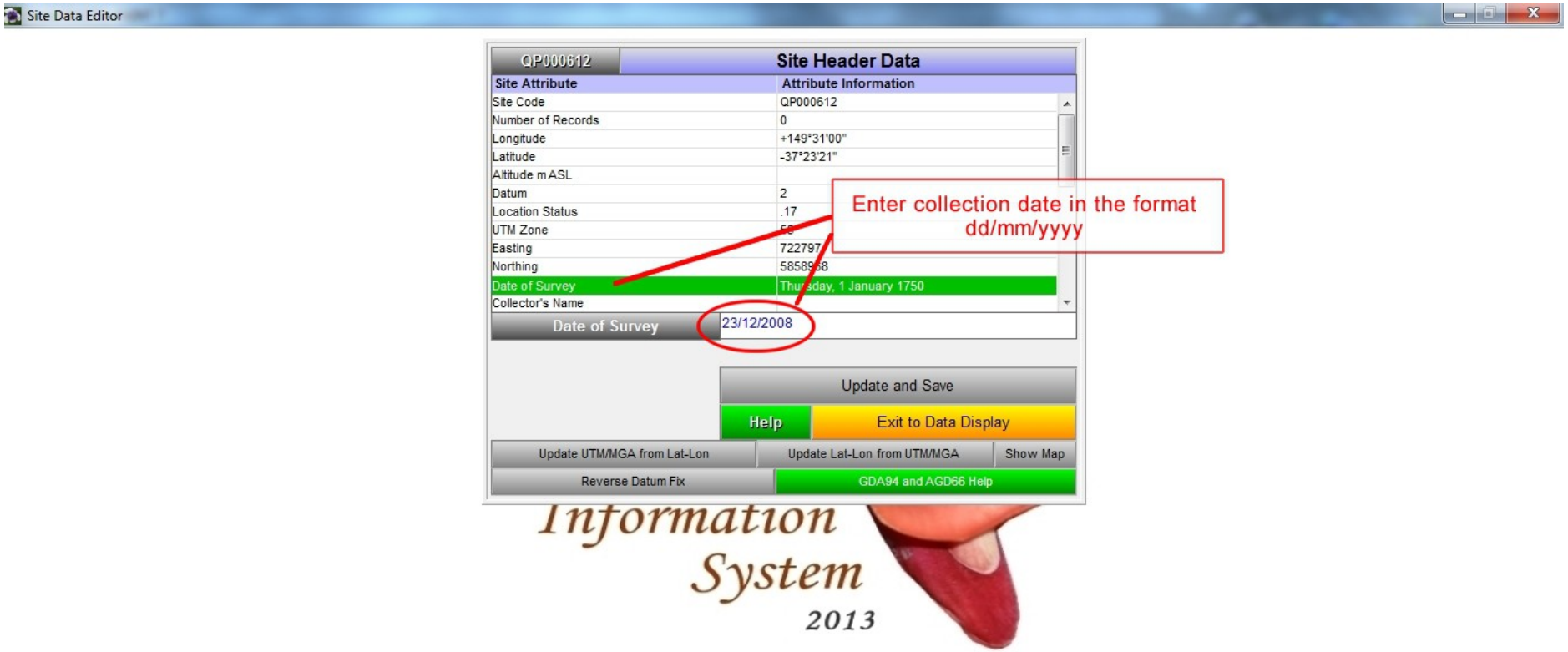
Correcting Mistakes

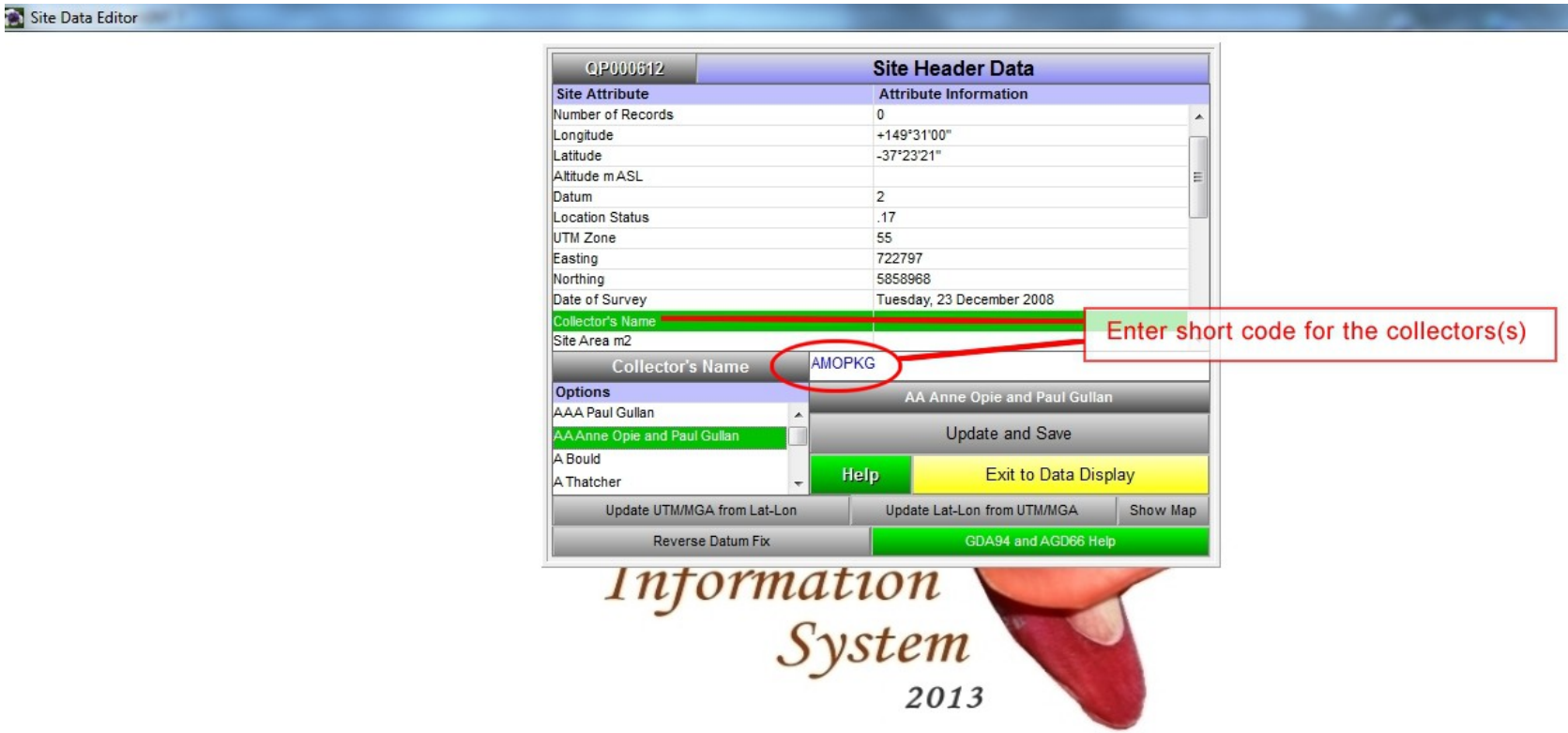
If you, or someone else, has made a mistake with a data entry and have registered a site as an AGD66 location when in fact it was located using GDA94, the site will be plotted on maps about 200 m to the north-east of where it should be. You may reverse the process by clicking the **Reverse Datum Fix** button and the location will be corrected.

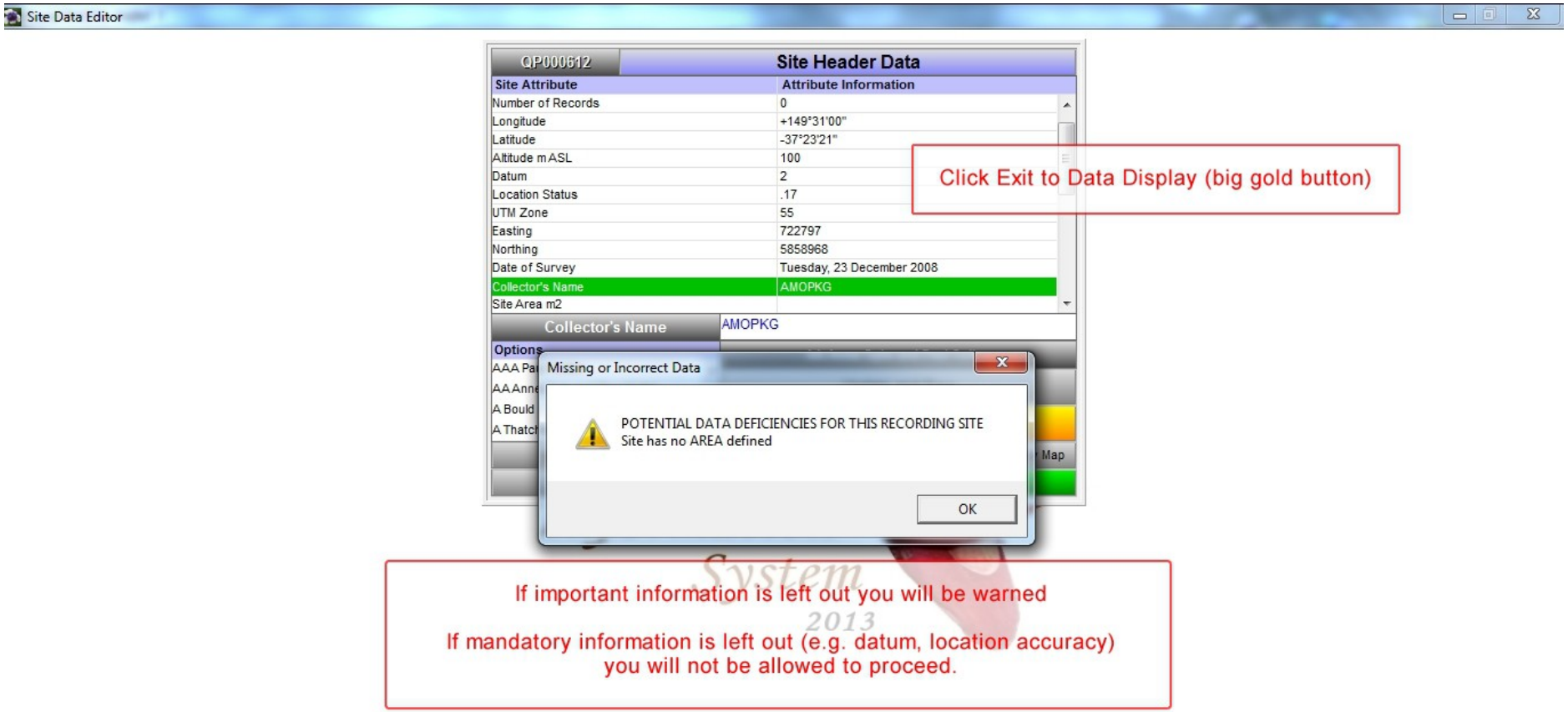


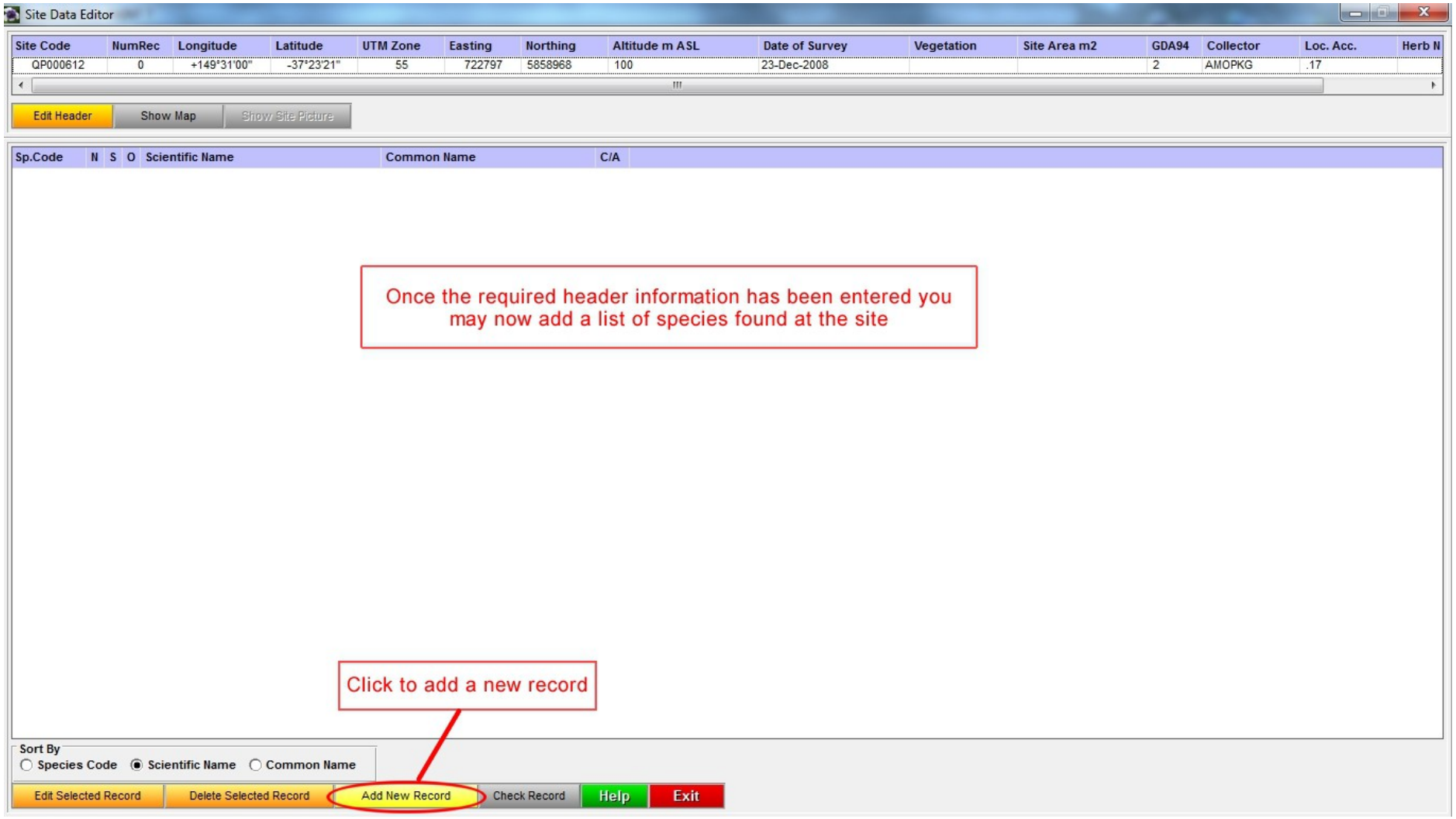
Each site must recorded with regard to the accuracy of its location and the size of the collecting area. If the area where a species list is made is, for example 4 hectares in area, the accuracy of the location must take that into account and a location accuracy value of **'b'** (5 seconds [~150 m]) should be used. If the method of locating the site was one which used a low-resolution map (e.g. 1:250,000 scale) then that would mean a lower accuracy. If the site was located using a modern GPS or a 1:25,000 scale

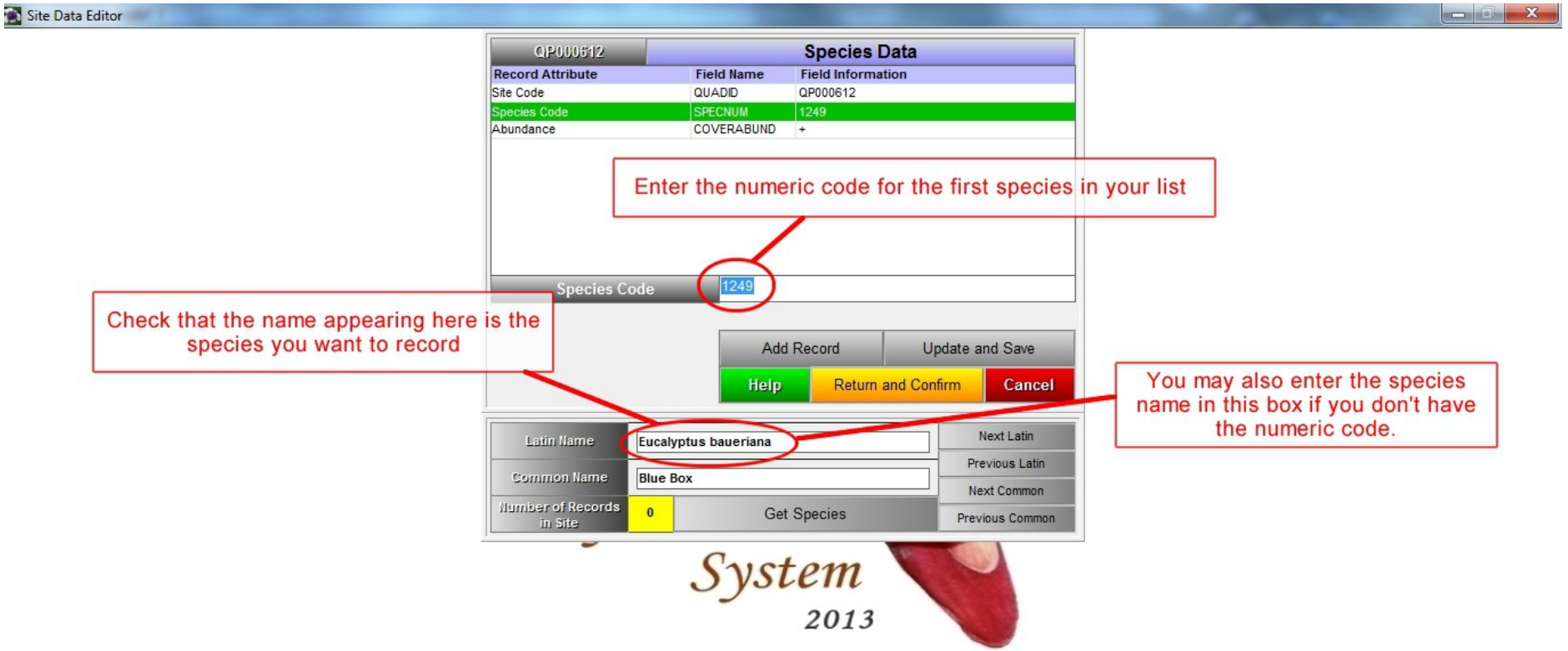
topographic map, and the collecting area was small (e.g. less than 0.5 ha), then the best site accuracy **'a'** (0.5 seconds [~15m]) is appropriate. **(Note: This is a mandatory field).**

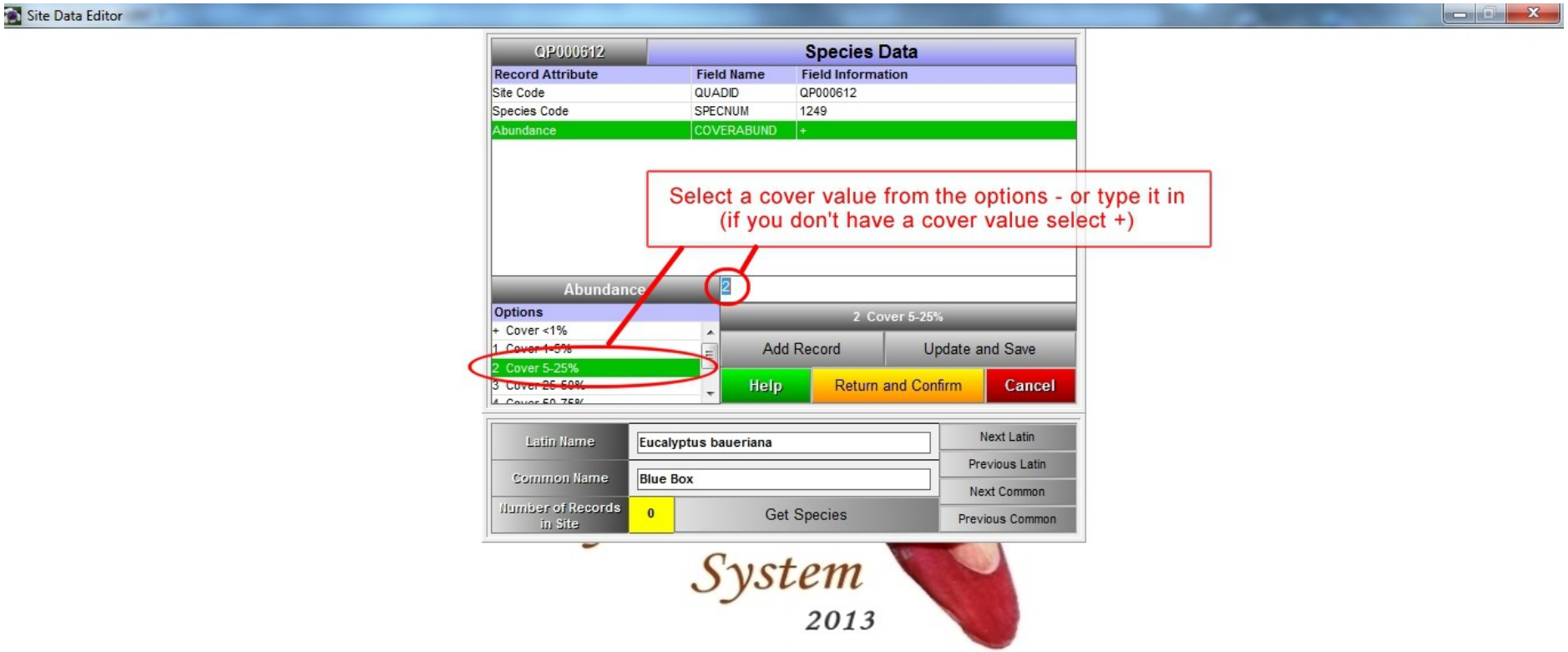


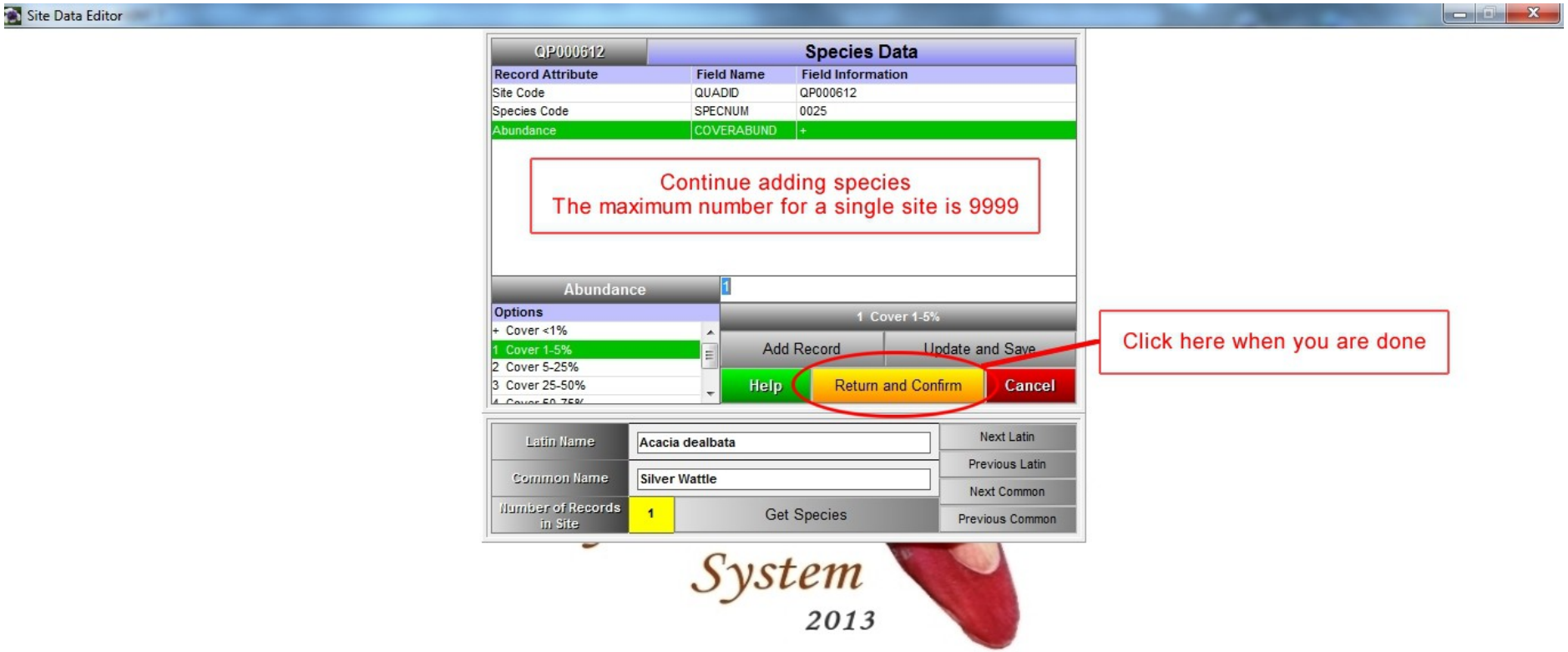

Site Data Editor
QP000612
Site Header Data
Site Attribute
Attribute Information
Number of Records
0
Longitude
+149°31'00"
Latitude
-37°23'21"
Altitude m ASL
Datum
2
Location Status
.17
UTM Zone
55
Easting
722797
Northing
5858968
Date of Survey
Tuesday, 23 December 2008
Collector's Name
Site Area m2
Collector's Name
AMOPKG
Enter short code for the collectors(s)
Options
AAA Paul Gullan
AA Anne Opie and Paul Gullan
A Bould
A Thatcher
AA Anne Opie and Paul Gullan
Update and Save
Help
Exit to Data Display
Update UTM/MGA from Lat-Lon
Update Lat-Lon from UTM/MGA
Show Map
Reverse Datum Fix
GDA94 and AGD66 Help
Information
System
2013

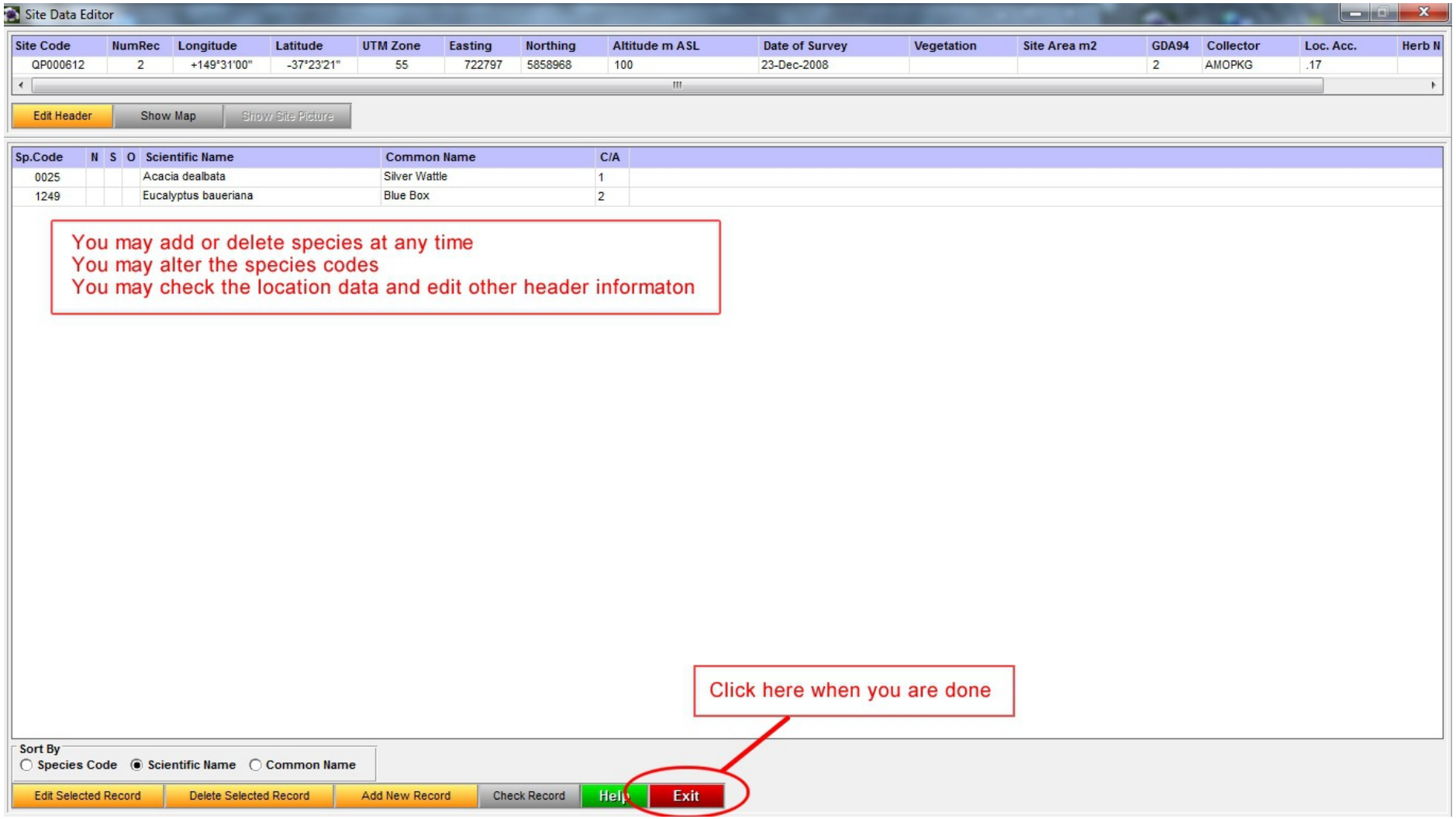

Site Data Editor
QP000612
Site Header Data
Site Attribute
Attribute Information
Number of Records
0
Longitude
+149°31'00"
Latitude
-37°23'21"
Altitude m ASL
100
Datum
2
Location Status
.17
UTM Zone
55
Easting
722797
Northing
5858968
Date of Survey
Tuesday, 23 December 2008
Collector's Name
AMOPKG
Site Area m2
Collector's Name
AMOPKG
Options
Missing or Incorrect Data
POTENTIAL DATA DEFICIENCIES FOR THIS RECORDING SITE
Site has no AREA defined
OK
Map
Click Exit to Data Display (big gold button)
If important information is left out you will be warned
If mandatory information is left out (e.g. datum, location accuracy)
you will not be allowed to proceed.


Site Data Editor
Site Code
NumRec
Longitude
Latitude
UTM Zone
Easting
Northing
Altitude m ASL
Date of Survey
Vegetation
Site Area m2
GDA94
Collector
Loc. Acc.
Herb N
QP000612
0
+149°31'00"
-37°23'21"
55
722797
5858968
100
23-Dec-2008
2
AMOPKG
.17
Edit Header
Show Map
Show Site Picture
Sp.Code
N
S
O
Scientific Name
Common Name
C/A
Once the required header information has been entered you may now add a list of species found at the site
Click to add a new record
Sort By
Species Code
Scientific Name
Common Name
Edit Selected Record
Delete Selected Record
Add New Record
Check Record
Help
Exit

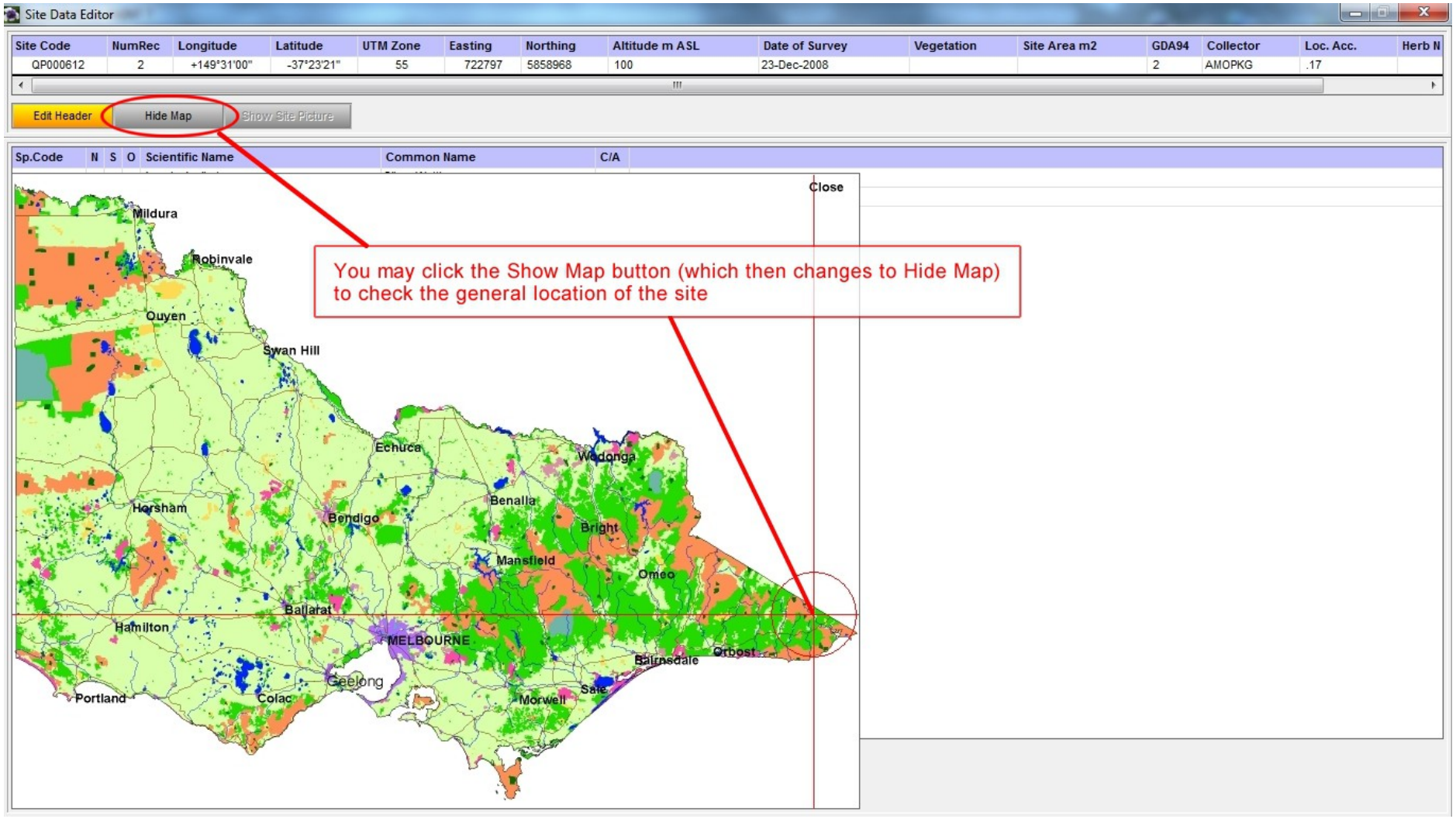

Site Data Editor
QP000612
Species Data
Record Attribute
Field Name
Field Information
Site Code
QUADID
QP000612
Species Code
SPECNUM
1249
Abundance
COVERABUND
+
Enter the numeric code for the first species in your list
Species Code
1249
Check that the name appearing here is the species you want to record
Add Record
Update and Save
Help
Return and Confirm
Cancel
You may also enter the species name in this box if you don't have the numeric code.
Latin Name
Eucalyptus baueriana
Next Latin
Previous Latin
Common Name
Blue Box
Next Common
Number of Records in Site
0
Get Species
Previous Common
System
2013


Site Data Editor
QP000612
Species Data
Record Attribute
Field Name
Field Information
Site Code
QUADID
QP000612
Species Code
SPECNUM
1249
Abundance
COVERABUND
+
Select a cover value from the options - or type it in
(if you don't have a cover value select +)
Abundance
2
Options
+ Cover <1%
2 Cover 5-25%
2 Cover 5-25%
Add Record
Update and Save
Help
Return and Confirm
Cancel
Latin Name
Eucalyptus baueriana
Common Name
Blue Box
Number of Records in Site
0
Get Species
Next Latin
Previous Latin
Next Common
Previous Common
System
2013


Site Data Editor
QP000612
Species Data
Record Attribute
Field Name
Field Information
Site Code
QUADID
QP000612
Species Code
SPECNUM
0025
Abundance
COVERABUND
+
Continue adding species
The maximum number for a single site is 9999
Abundance
1
Options
+ Cover <1%
1 Cover 1-5%
2 Cover 5-25%
3 Cover 25-50%
1 Cover 1-5%
Add Record
Update and Save
Help
Return and Confirm
Cancel
Click here when you are done
Latin Name
Acacia dealbata
Common Name
Silver Wattle
Number of Records in Site
1
Get Species
Next Latin
Previous Latin
Next Common
Previous Common
System
2013


Site Data Editor
Site Code NumRec Longitude Latitude UTM Zone Easting Northing Altitude m ASL Date of Survey Vegetation Site Area m2 GDA94 Collector Loc. Acc. Herb N
QP000612 2 +149°31'00" -37°23'21" 55 722797 5858968 100 23-Dec-2008 2 AMOPKG .17
Edit Header
Show Map
Show Site Picture
Sp.Code N S O Scientific Name Common Name C/A
0025 Acacia dealbata Silver Wattle 1
1249 Eucalyptus baueriana Blue Box 2
You may add or delete species at any time
You may alter the species codes
You may check the location data and edit other header informaton
Click here when you are done
Sort By
Species Code
Scientific Name
Common Name
Edit Selected Record
Delete Selected Record
Add New Record
Check Record
Help
Exit

At any point in the data entry process the user may check the data that has been entered and alter it if necessary. For example, for the data display screen you may click on the **Show Map** button which will display a low-resolution map with the current site plotted. This should be enough to determine whether the location is at least in the correct part of the state (a common location error comes from miscoding a degree value, e.g. entering 142º instead of 145º will cause an error of nearly 300 km).



The alterations can be made at any time and the user can exit from the program and return to it later for alterations, additions or deletions.