

**E. Cutting and Pasting Using the Mouse Buttons**

Your windowing system cut and paste does not work in SMASCH. To copy, highlight the information you want to copy using the left mouse button. The highlighted information is saved to a clipboard. To paste the information in another field, activate the field by clicking in it with the left mouse button. The background color will change to a pale green and the ^ cursor will appear. To paste, press the middle mouse button and text will be pasted from the clipboard into the field. You can use this feature to store the accession id once you have read it into the first field of the Accession Object/Etc. screen and paste it into the other data entry screens. You can also copy and paste from other windows the same way. For example, if you have a series of notes that you use repeatedly, you can type them into a command tool window using a text editor or into a desktop publishing application, highlight them by clicking on the left mouse button to highlight a word or a whole line, then paste into SMASCH using the middle mouse button.

**Important note. The screen does not refresh when information is saved.**

Defaults are not displayed, partial text strings entered with a % are not completed, etc. To verify your entry, **Find** the information by moving the arrow to the **Find** button and clicking with the left mouse button or by pressing the F1 function key. The record as it is stored in the database will be displayed.

**3. Update** changes the information to a record in the database. To update, **Find** the record, make changes, then **Update** by moving the arrow pointer to the **Update** button and clicking on the left mouse button or pressing the F5 function key. When the **Update** button is activated, the data is tested to make sure it meets any rules associated with the columns of the underlying table. If any data violates a rule, you will see an error message that will explain which column is affected. Read the documentation to find the rule. If inserts to the table underlying this screen affects data in other tables, those changes will be made. If all the conditions for a valid update are met, the information will be changed in the database and you will see an “Update complete” message at the top of the screen.

**4. Delete** removes a record from the database. To delete, **Find** the record and activate the **Delete** button by moving the arrow cursor to the **Delete** button and pressing the left mouse button or by pressing the F7 function key. A dialog box will come up asking you to confirm the delete. Make sure you want to remove the record, not just update it and move the arrow cursor to **Confirm** and press the mouse button. If you do not want to complete the delete, press **Cancel**. When the **Delete** button is activated, referential integrity checks make sure that this delete will not corrupt other information in the database. If for any reason the delete is disallowed you will see an error message explaining why the record was not deleted. Sometimes you need to update or delete other records before the delete is allowed; sometimes the delete will be prohibited in all cases. If all the conditions for a valid delete are met, the row will be deleted from the underlying database table and you will see a “Delete complete” message.

**5. Clear** clears the screen. You can clear the screen and **Find** on a single field to update or delete. To **Clear** move the arrow cursor to the **Clear** button and depress the left mouse button or press the F9 function key.

**TABLE 1. Function Keys**

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F1	Find
F3	Save
F5	Update
F7	Delete
F9	Clear

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## I. Starting SMASCH

Collector, the database will match not only L. Constance and Lincoln Constance, but all collection committees of which he is the first member (38 in our database). As you become more familiar with your data you will find the % an invaluable resource. For instance, if you type the fewest possible number of characters of a taxonomic name that will give you an unambiguous result, you will be rewarded with a saved record without having to type very much of the taxonomic name or choose from a pop-up menu. If your entry is ambiguous (i.e. there is more than one entry for L%Constance), a pop-up window will offer you choices and you can accept the one you want.

Avoid using a % by itself or at the left side of a text string as this will cause a scan of the entire table. While this might be efficient for small lookup tables it can be very time-consuming for large tables with a lot of entries (accession, voucher, folder name, etc.).

3. *Cursor control.* You can move the cursor (^) using the Control key on your keyboard in combination with other keys. Hold down the Control key and at the same time press another key. Control-f moves the cursor forward, Control-b moves it backward.

## D. Function Keys and Mouse Buttons

The buttons at the top of each screen - **Find**, **Save**, **Update**, **Delete**, **Clear**, and **Done** - act on the database. They are activated by moving the mouse pointer to them and clicking on the left mouse button. In every case but **Done** you can also activate the buttons using a function key.

1. **Find** queries the database for record(s) that match what is in the fields. For instance, if you type a single accession number in the Accession Object/Institution/Collecting Event and **Find**, you will retrieve a single record. If you enter a collector and **Find**, you will find all the records we have entered for that collector. If you enter a place name and **Find**, you will find all records that match that place name. (The % is a helpful tool for efficient Finding.) You may also **Find** by pressing the F1 key.

2. **Save** saves the information entered in the fields as a new record in the database. When the **Save** button is activated, the data is tested to make sure it meets any rules associated with the columns of the underlying table. If any data violates a rule, you will see an error message that will explain which column is affected. Read the documentation to find the rule. If the fields are left blank and there are default entries for blank fields, they will be inserted. If inserts to the table underlying this screen affects data in other tables, those changes will be made. If all the conditions for a valid insert are met, the information will be added to the database and you will see an "Append complete" message at the top of the screen.

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## I. Starting SMASCH

SMASCH Treatments

SMASCH Synonyms

### B. Menu Buttons and the Done Button

You can access the submenus using either the left or right mouse button. Move the mouse pointer inside the button; a dark outline will show that the button is active. Click on it to display the submenu. Holding down the mouse button, move down the menu to the name of the screen you want to select. As you move through the list, each selection is highlighted, taking on a 3-D appearance. To select a menu item, release the mouse button. The selected screen will open. You can also access the submenus using the middle mouse button. This submenu comes up in the upper left corner of your monitor. It persists until you choose Done. The welcome screen and each window contain a Done button. Clicking on this button with your left mouse button leaves the screen and returns you to the next higher level. The Done button on the welcome screen leaves SMASCH.

### C. Screen and Keyboard Characteristics

The mouse pointer is an arrow when you open menus and when you are outside fields that accept data. It changes to an I-beam when it is inside a data entry field. To activate a field, position the mouse pointer inside that field and click the left mouse button. The cursor becomes a caret (^) and the background color of the field changes from white to a very pale green. When you open a screen a field (usually the first) is highlighted by color and contains an active cursor (^). You can move from one field to another by using the tab key or the enter key or by moving the mouse pointer and clicking in the field with the left mouse button. To go backwards use the Shift key and Tab key together or use the mouse pointer. To delete a field entry character by character use the back space key. To delete the entire entry use the Delete key.

### D. Special Keys

1. *The apostrophe (') in text strings.* Because sybase uses a ' as a single quotation mark, it will misunderstand text strings containing apostrophes. If you cannot avoid an apostrophe, enter it twice (''); the result will be a single apostrophe (') entered correctly into the text string.
2. *The % as a wild card character.* The % is a valuable short cut to data entry into text strings. The % in a text string or at its end translates as 'like the text string to the left of the % plus anything that follows it.' For instance, if you type L%Constance as a Collector, the database will match any collection committee that starts with L and ends with Constance. (In our database, this query returns L. Constance and Lincoln Constance.) You can use the % more than once in a single string. To continue the example, if you type L%Constance% as a

***4. Geographic Information***

Jepson Place Name Index

Location Table

Location Kinds

USGS Quadrats

USGS CA Quadrats

USGS Feature Types

USGS CA Features

Base Maps

***4. Annotations Information***

Annotations

Folder Name

Annotation History

Annotation Labels (w/Reference)

Annotation Labels (no Reference)

Folder Labels

***5. Nomenclatural Information***

Biological Name Elements

Common Names

Verified Taxonomic Names

Unverified Taxonomic Names

Basionyms

Taxonomic Ranks

Type Kinds

***6. Taxonomic Treatments***

SMASCH Common Names

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## I. Starting SMASCH

Accession Vouchers

Voucher Kinds

Object Kinds

Collections

Collection Locality

Collection Label Printing

Specimen

Accessions that are Types

### ***2. People, Publications, and Institutions***

Personal Names

Committees

Committee Membership

Institutions

Publications

### ***3. Herbarium Management***

Loans

Loan Transfer History

Loan Return History

Borrows

Borrow Transfer History

Borrow Return History

Exchange and Gift (Out)

Exchange Balances

Lot Processing

Sublots

Sublot Accession Numbers

## Introduction to the SMASCH User Interface

by Mickey Ellinger

SMASCH was written to take advantage of the powerful combination of mouse and keyboard features available to a graphic user interface. This introduction describes the ways that this interface functions in the SMASCH application. It may be a little different from how you have set up your windowing system on your workstation.

**Note: Running SMASCH on a Mac or Windows machine.** SMASCH was written to run on a unix workstation with a 3-button mouse. You can also run SMASCH on a Mac or Windows machine with a 1- or 2-button mouse using purchased X software (such as eXodus, Hummingbird or XVision). (MacX does not appear to be adequate to run SMASCH.) Read your documentation about how to emulate a 3-button mouse. Once you have customized the software you should be able to follow the instructions in this introduction. The function keys will function as described in this document. Cut and paste operations inside of SMASCH will behave as described here, which may be different from your Mac or Windows interface.

### I. Starting SMASCH

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Call the application, either by selecting it from a programs menu if it has been set up that way or by issuing the command

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smasch
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at the unix prompt.

You will see the SMASCH welcome screen. Access may be password protected (depending on how SMASCH is set up at your site). Your system administrator may have put this information in your .Xdefaults file so that the welcome screen comes up directly. If the password dialog box pops up, check the user name; the application has inserted the user name of the unix account that has called the application. However, SMASCH wants the sybase user name and password under which you access the database. Enter the sybase user name and password and click on confirm using the menu (left) button of your mouse or hit the enter key. Each button on the welcome screen represents a module of SMASCH.

#### A. Modules

##### *1. Accessions, Specimens, and Collections*

Accession Object/Institution/Collecting Event