

BIOBASE - A bibliographic database for Windows Copyright © 1993-1994 Stephen C. Burnett

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What is Biobase?

Biobase is a database designed to hold bibliographical information. The program allows you to enter data in a variety of formats and produce a bibliography from that data. The program has been made so that the user can customize the output as much as possible. I wrote BioBase because none of the similar programs that I could find for downloading did things exactly the way I wanted them to. The program has been written with scientific references primarily in mind, but that does not mean that it will not work correctly with other bibliographic styles. Because the format of a bibliography produced by BioBase can be changed so much by the user, it should be possible to make the program make a bibliography that conforms to the correct style for your work. For instructions on how to begin using BioBase see the <u>Getting Started</u> section.

Record Types

BioBase allows three different types of <u>Citations</u> to be stored in a database. There are certain parts of each that are identical, but each type of record has certain <u>Fields</u> that others do not. All records have fields for the <u>Author(s)</u>, <u>Year of Publication</u>, <u>Title</u>, <u>Keywords</u>, <u>Comments Abstract</u>, <u>Owner</u>, <u>Location</u>, and <u>Language</u>. For specifics about each record type, click on one of the choices below:

Journal Articles Books Articles in Books

Journal Articles

This record type is intended for articles from scientific journals. In addition to the standard information, this type allows the entering of the Month of Publication, Journal Title, Volume, Number and Page Numbers. A sample bibliographic listing of this type of citation might look like this:

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie 68: 89-114.

Books

These citations are for the standard information needed to make a bibliography for a book. Fields are included for the Publisher and City of Publication. A sample bibliography entry is listed below:

Darwin, C. (1964) On the Origin of Species (A Facsimile of the First Edition). Harvard University Press, Cambridge.

Articles in Books

The third record type is designed to hold information about Articles that are taken from a compilation of articles on one subject. This record type contains fields for the volume number, the Book Title, the Page Number, the Publisher, City of Publication and the editors. A bibliography entry for this type of record (using the default Biobase format) is listed below:

Kroodsma, D.E. (1982) Learning and the ontogeny of sound signals in birds. pp. 1-23 in Acoustic Communication in Birds, vol. 2 (Kroodsma, D.E. and Miller, E.H., eds.) Academic Press, New York.

Menu Commands

Each of the topics below lists the commands that are accessed from one menu item. Keyboard equivalents are listed in the topics for each command

File Menu
Edit Menu
Search Menu
Records Menu
Report Menu
Bibliography Menu
Help Menu

File Menu

New
Open
Save
Save As
Export
Import
Log Screen
Print
Exit

New

Located On: File Menu

This command opens a new data file. All information currently in memory is cleared. If there is unsaved data in memory, then the program asks if you wish to save the new information.

Keyboard Equivalent: Ctrl-N

OpenLocated On: File Menu
Selecting this menu item allows you to open a previously saved database. The program assumes an extension of ".SDB" on all data files.

Keyboard Equivalent: Ctrl-O

Save

Located On: File Menu

Saves the currently opened database. All information stored in memory is written to disk. If the file has not been saved previously, then the user is asked to provide a name. The program assumes an extension of ".SDB" to data files.

Keyboard Equivalent: Ctrl-S

Save As

Located On: File Menu

Allows you to save the current database with a new name.

Export

Located On: File Menu

This command will export all the records in the current database that are tagged for export to an external file with the same name as the data file and an extension of ".XPT". If there is already a file with that name, then the extension is changed to .X00, X01, X02 etc. For example, a file named "TESTING.SDB" would produce an export file named "TESTING.XPT". This allows you to move records from one database to another. Currently, BioBase can only export files in its own format -- this function is currently only able to move records between one SDB file and another.

Keyboard Equivalent: Ctrl-E

See Also: Import

Import

Located On: File Menu

Imports data from an external file. You will be presented with a standard file selection dialog box to choose the file you want to import. The current version of BioBase only supports the import of BioBase exported files. The extension for Exported files is assumed to be ".X??" (although a complete SDB file could be imported as well).

Keyboard Equivalent: Ctrl-I

See Also: Export

Log Screen

Located On: File Menu

Selecting this menu item will cause the program to put a checkmark next to it on the menu. If the item is selected again, the checkmark will be removed. If the menu item is checkmarked when the program is terminated, then it will save the information on the main screen to a file called "FILENAME.LOG" when you quit BioBase. If there is already a file with that name, then the extension is changed to ".L01" ".L02" etc. For example, a database named "TESTING.SDB" would produce log files named "TESTING.LOG", "TESTING.L01" etc. The data is only saved when the program is terminated, so any information that has been removed from the main screen will not be saved.

Print

Located On: File Menu

Selecting this command prints all the information in the main screen of the program to the currently selected printer.

Keyboard Equivalent: Ctrl-P

Exit

Located On: File Menu

Quits the program. If there is unsaved information in memory, then you will be asked if you want to save it. This can be accessed from the keyboard by pressing Ctrl-Q or Alt-F4.

Edit Menu

Cut
Copy
Paste
Clear
Select All
Edit Configuration
Compact Database

Cut

Located On: Edit Menu

Cuts the currently selected text and places it into the clipboard.

Keyboard Equivalent: Ctrl-X

Copy Located On: Edit Menu

Copies the currently selected information to the Windows clipboard.

Keyboard Equivalent: Ctrl-C

Paste

Located On: Edit Menu

Copies text from the clipboard at the insertion point.

Keyboard Equivalent: Ctrl-V

Clear

Located On: Edit Menu

Clears all the information out of the clipboard.

Select All

Located On: Edit Menu

This command selects all the text on the main screen.

Edit Configuration

Located On: Edit Menu

Choosing this command displays the configuration dialog box, where you can set several different aspects of the programs behavior. You can tell the program when it should add punctuation to the Reports and the Bibliography, determine if the <u>edit screens</u> are displayed after finishing a search, modify the amount of memory the program occupies when it runs and change the format the program uses when it makes a bibliography. You can also edit the <u>Template</u> and <u>Style</u> information. Click on one of the topics below for more information.

Punctuation
Displaying Search Results
Memory Usage
Overwrite Deleted Records
Bibliography Format
Edit Template
Edit Style
Edit Defaults

Displaying Search Results

Located On: Edit Configuration Dialog Box

There are two possible choices for this option: either the program goes to the edit screens after finishing a search or it does not. Either way, the program will print a report on the records that matched your search criteria. If Display Immediately is chosen, then the program will display the edit screens for each record that matched your search so that you can modify them if you wish. See the <u>Search Menu</u> topic for more information.

Memory Usage

Located On: Edit Configuration Dialog Box

BioBase has been written to take advantage of your computer's memory by storing as much of its information in RAM as possible, reducing the number of disk reads and speeding up program execution. However, if you are running several large applications or your computer does not have a great deal of RAM, then you may have problems running this program. Two options allow you to decrease the memory requirements for BioBase, but both come at the cost of program speed. The first of these options is to decrease the size of the memory buffer. The default value is 20 records being stored in memory. Each record takes approximately 3500 bytes to store, so decreasing the number of records in memory at one time will (slightly) reduce the amount of memory required by the program. More significant amounts of memory are saved by choosing to have the program not save dialog boxes in memory (by dialog boxes, it means the data entry screens as well as standard dialog boxes). Storing these in memory decreases the amount of memory the program will occupy, but it also significantly increases the number of disk accesses which must be made and slows the program. Some dialog boxes cannot be stored in memory because their contents can only be updated when the form is read in from disk.

Overwrite Deleted Records

Located On: Edit Configuration Dialog Box

You can choose how the program adds records to the database with this option. If you mark this check box then as new records are added, they will be put in the data file in the place of any records you may have deleted resulting in a smaller file. Since the program must scan the database to find records marked for deletion, there is some speed loss. However, with databases of fewer than 500 records, the time spent trying to find deleted records is not overwhelming. However, if you rarely delete records or if you are importing a large number of records or if your data file is large, you will probably want to turn this option off. Particularly in the case of importing a large number of records in to a large data file, this procedure can take several times longer when this option is enabled. If this option is not enabled, then records are simply added to the end of the database. If you do not use this option you should Compact the database any time you have deleted a large number of records so that the data file does not become unnecessarily large because of the deleted records

Bibliography Format

Located On: Edit Configuration Dialog Box

This lets you choose the type of bibliography that BioBase makes when you choose the Make Bibliography command (Ctrl-B) from the <u>Bibliography Menu</u>. You have two options. To produce an RTF bibliography, which can include formatting for the different fields of each records (such as bold, underlined or italicized text) or a text bibliography, which only contains the text of the fields, with no formatting. Depending on which option button you select, you will have a different set of secondary options to choose from:

RTF Formatting:

When you select the RTF Bibliography option, you are able to choose two other options for the bibliography. The first is the font to use for the bibliography and the second is the font size. These default to the font Times New Roman with a size of 1 Other options, such as text formatting for specific fields (e.g. bold, italic text) are set using the Edit Style command of the Bibliography Menu

Text Formatting

When you choose to make a text bibliography, you have two other options to work with:

Include Carriage Returns:

This option tells BioBase whether or not it should add carriage return characters when a line reaches the maximum length you specify. If you plan on opening the text file in a word processor, you probably don't want this option checked. This option includes hard carriage returns in the text file and if they are not in the proper place for your word processor's margins, then the bibliography will have carriage returns in odd places.

MaxLength:

This text box contains the maximum number of characters that you want BioBase to put on a line. If carriage returns are not being added, then this box is not enabled.

Rules for Alphabetizing the Bibliography

Located On: Edit Configuration Dialog Box

If this check box is selected the following four rules are used to alphabetize the records while making the bibliography. If this box is not selected only the first rule is followed.

- 1) If the first fields for two citations are **exactly** the same, then the second field will be used to alphabetize them. For example, if the authors are the first field and the journal title is the second field in the Journal Article Style, then an article by "Smith, J." published in "Animal Behavior" would be listed before one by "Smith, J." published in "Behaviour". If a particular record does not have information entered for a field that is listed for adding to the bibliography, then that field is ignored, and the bibliography is generated using the fields containing at least one character. If the field that is blank is the field that is being used to alphabetize the records, then the citation will be alphabetized on the first field that does contain text. This rule is always followed.
- **2)** If one of the fields contains "Mc" (e.g. McKone, McGregor etc.) the text is treated as if it started with "Mac" for purposes of determining the alphabetical order. For example "McKone" becomes "MacKone" for purposes of determining the order of records in the bibliography. This is mainly designed for use with names.
- **3)** All commas and periods are ignored while determining the correct order. For example, "Smith, J." and "Smith J" are considered equivalent.
- **4)** The word "and" is ignored when determining the correct order. For example, "Smith, J. and Jones, J." is the same as "Smith, J. Jones, J.". This is to prevent the word "and" which is present in many author listings from affecting the order of the citations in the bibliography. This may result in some citations being out of order if the bibliography is being alphabetized by title.

Using all four rules results in the order of citations being slightly different from the order determined without using these rules, but the procedure is slower. These rules were designed primarily for use when the Authors or Editors were the first item in the citation. If this is not the case, then these extra rules will not serve much purpose. If you are not alphabetizing by one of those fields or if your are just making a rough draft, I would recommend turning this option off since the order of citations may be different then you expect and the speed increase is very noticeable on even moderate (~100 records) databases. For the final draft when the Authors/Editors are the first field, I turn this option on.

Compact Database

Located On: Edit Menu

This removes all deleted records from the database. All records that have been marked for deletion are removed from the database. If you have selected the option to <u>Overwrite Deleted Records</u> from the <u>Edit Configuration</u> dialog box, then this procedure is not necessary. This should only be done with a **backup** copy of your data to make sure your data is not damaged or corrupted.

Search Menu

The items on this menu allow you to search records in the current database based on a number of different criteria. The different searches are divided up based on how they search through the records:

Search All Fields
Search One Field
Search Multiple Fields
Goto Record

Search All Fields

Located On: Search Menu

Choosing this command displays a dialog box where you can type in the String(s) to search for. You may enter two strings to find, and you may choose to have the program report a citation as a positive result if it contains either of the two strings (using an OR search) or if it contains both strings (using an AND search). You can also choose to have the program perform some action on the records that match your search criteria using the <u>Search Editor</u>, including deleting them from the database or marking them for adding to the bibliography. Clicking OK (or pressing Return) will search every field in every record in the current database to find matches for the search string(s) you specified. By checking the Case Sensitive box, matches will only be reported for fields that contain an **exact** match for the search string you entered. For example, if Case Sensitive is selected and you type "Jones" as the search string, then the field "Jones, R. A." would be a match while "jones, R.A." would not.

Once the search is completed, a report of all the records that contained a match will be displayed on the main screen and, if you have chosen to have the editing screens displayed after a search (see <u>Displaying Search Results</u>), you will be able to edit each of the records that matched your search criteria. While you are displaying search results, pressing the Left Arrow will go to the previous record and pressing the Right Arrow goes to the next record. If you are at the end of the list, then pressing the arrow key will return you to the main program. Pressing the OK button will also move to the next record. Pressing Cancel will terminate the editing session, while pressing the Delete button on a given record will mark that record for deletion and move to the next record in the list.

Search One Field

Located On: Search Menu

Choosing this type of search presents a dialog box where you can type your search string(s) and choose one field to search for matches. You may enter two strings to find, and you may choose to have the program report a citation as a positive result if it contains either of the two strings (using an OR search) or if it contains both strings (using an AND search). You can also choose to have the program perform some action on the records that match your search criteria using the <u>Search Editor</u>, including deleting them from the database or marking them for adding to the bibliography. Only record types with that particular field will be searched, so that, for example, Book types are not searched for a Volume or page number match. Clicking Case Sensitive will cause matches to be counted only if they contain a string that **exactly** matches the string you typed. For example, if Case Sensitive is selected and you type "Jones" as the search string, then the field "Jones, R. A." would be a match while "jones, R.A." would not. There are also four special choices: Search for Export, Search Not for Export, Search for Bibliography and Search Not for Bibliography. This allows you to search for records based on the status of these two flags. This method is the only way to search for these conditions.

Once the search is completed, a report of all the records that contained a match will be displayed on the main screen and, if you have chosen to have the editing screens displayed after a search, you will be able to edit each of the records that matched your search criteria. While you are displaying search results, pressing the Left Arrow will go to the previous record and pressing the Right Arrow goes to the next record. If you are at the end of the list, then pressing the arrow key will return you to the main program. Pressing the OK button will also move to the next record. Pressing Cancel will terminate the editing session, while pressing the Delete button on a given record will mark that record for deletion and move to the next record in the list.

Search Multiple Fields

Located On: Search Menu

This type of search allows you to search for different search strings in different fields so that you could, for example, search for all authors named Smith and all citations from the year 1992. To search through different fields, you must first check the box next to the fields name, then type a search string in the text box next to it. As in the other type of searches, choosing Case Sensitive will cause the program to only report matches for fields that had exact matches to the search string you typed. You may also elect to have the searches done using either AND logic, where only records with matches for **all** the text you entered are counted as matches or OR logic, where every record with at least one field that matches the text you entered is a match. You can also choose to have the program perform some action on the records that match your search criteria using the <u>Search Editor</u>, including deleting them from the database or marking them for adding to the bibliography.

Once the search is completed, a report of all the records that contained a match will be displayed on the main screen and, if you have chosen to have the editing screens displayed after a search, you will be able to edit each of the records that matched your search criteria. While you are displaying search results, pressing the Left Arrow will go to the previous record and pressing the Right Arrow goes to the next record. If you are at the end of the list, then pressing the arrow key will return you to the main program. Pressing the OK button will also move to the next record. Pressing Cancel will terminate the editing session, while pressing the Delete button on a given record will mark that record for deletion and move to the next record in the list.

Search Editor

The search editor allows you to choose what range of records to search as well as what actions to take (if any) on records that match your search criteria You can search using one of three criteria:

- 1) You can search all records (the default)
- 2) You can search within the results of the last search operation -- this allows you to successively refine the results of your search until you have exactly the records you want
- 3) You can search a range of records, giving a minimum record number and a maximum record number. This is most useful on large datafiles when you wish to speed the results of your search

You should remember that changes made to the search editor remain in effect until they are changed, so you should be certain that you are searching the records you want, otherwise, your search results may not contain all the records with matches. Once you have selected where you wish to search, then you can choose to have some action performed on records that match your search string(s). The actions you can choose from are:

Do Nothina

Mark matches for adding to the bibliography Matches are removed from the bibliography Mark matches for export Matches are not marked for Export

Delete Matches

Note: any changes made in the search editor carry over from one search to the next, so you should be careful when using the Delete Matches option to be certain that you dont delete records that are still good.

Goto Record

Located On: Search Menu

Choosing this from the <u>Search Menu</u> will present you with a dialog box where you can type the number of the record you want to edit. If the record number you typed is valid, then you will be presented with the data entry screen for that record. Pressing OK saves any changes you make, pressing Cancel ignores any changes you made and pressing Delete marks the record for deletion and it can only be recovered by using the Recover Record command under the <u>Records Menu</u>.

Keyboard Equivalent: Ctrl-G

Records Menu

This menu has commands for manipulating the current database:

Add Record
Count Records
Display All
Recover Records
Set Defaults

Add Record

Located On: Records Menu

Choosing this command displays a dialog box with three radio buttons, one for each type of record. You select the type of record you wish to add and press OK. This causes a new record to be created in the memory buffer and displays the data-entry screen for you to type in the relevant information.

Keyboard Equivalent: Ctrl-R

Count Records

Located On: Records Menu

This causes the program to count the number of non-deleted records in the current database and display the number on the main screen.

Display All Located On: Records Menu

This makes the program cycle through all the active records in the current database, displaying the <u>edit screen</u> for each one so that it can be edited.

Recover Records

Located On: Records Menu

Selecting this command from the menu causes all records that are marked for deletion to be restored to their normal state. When a record is deleted, then its space in the database is marked as available so that new records can be written in that location. If you have selected the option to overwrite deleted records (see Edit Configuration) then over time, the number of records that are marked for deletion will decrease because they will be overwritten by new records. This means that a deleted record should be recovered immediately so that the information is not lost. If you do not have the program overwriting deleted records, then deleted records will remain in the database until you choose Compact Database from the records menu. This command currently recovers all deleted records, you are not given the option to only undelete certain records in this version of the program.

Set Defaults

Located on Records Menu

Selecting this option calls up the Defaults dialog box. This box allows you to enter information that is common to several different citations that you are entering so that you save time typing. This is useful for fields such as the owner field -- the user can enter default values for this field type and it will be added to the appropriate fields of any new records the user creates. Checking the boxes labeled Export or Add to Bibliography will cause these boxes to be checked on the new records. This dialog box also allows the user to save different default files. Default files are created with the extension .DEF. To save default values, the user enters the information for the file, then presses the Make New Default File button. This presents a dialog box where the user can type a 12 character description for the defaults as well as the 8 letter filename (the extension cannot be typed by the user). Note that the Save Default dialog box does NOT check to see if the filename the user chooses already exists, so be certain that you do not choose an already existing filename for the DEF file, otherwise, you will overwrite the old file. A standard default file is created the first time the program is run. To make changes to the current file (without saving it as a new file) simply make the appropriate changes and press the OK button. To restore the defaults to their previous values, simply press the Cancel button. If you do not want the program to add the default values to the records you add, simply uncheck the Use Defaults check box and any default values you have set will be ignored when new records are created.

Report Menu

This menu allows you to edit the template used for displaying records and to choose what happens when Make Report is chosen from the menu. The last three menu choices do not perform any action. Selecting one of them puts a check mark next to that item (only one of the three has a checkmark at a time) and determines the recipient of a report, either the main screen, the printer or a file.

Edit Template
Make Report
Report to Screen
Report to File
Report to Printer

Edit Template

Located On: Reports Menu

This command allows you to modify the way the program displays the reports on the main screen. Reports are generated when you select report from the Report menu or when you conduct a search. This screen allows you to set which <u>Fields</u> are used to display a report. See Also:

Editing the Template

Make Report

Located On: Reports Menu

Choosing this command causes a report to be output to the location chosen from the three items on the Report menu. While the report is being generated, the caption of the main screen will change to indicate that the program is active.

Keyboard Equivalent: Ctrl-M

Report to Screen

Located On: Reports Menu

When this menu item has a checkmark next to it, BioBase produces a report on all the non-deleted records in the current database and displays it on the screen whenever $\underline{\text{Make Report}}$ is chosen from the menu. How the report looks depends on the settings in the $\underline{\text{Template}}$.

Report to File

Located On: Reports Menu

When this menu item is checked, <u>Make Report</u> produces a report of all the non-deleted records in the current database and puts it into a text file called FILENAME.RPT, where filename is the name of the current database. If there is already a file with that name, then the extension will be changed to R01, .R02 etc. Up to 100 different reports can be generated this way. How the report looks depends on the settings in the <u>template</u>.

Report to Printer Located On: Reports Menu

When this menu item is checked, <u>Make Report</u> produces a report on all the non-deleted records in the current database and sends it to the currently active printer. How the report looks depends on the settings in the <u>template</u>.

Bibliography Menu

The items on this menu allow you to produce a bibliography from the current database and to modify the format that the program uses when making a bibliography. Any changes to the style are saved in the BIOBASE.STL file in the program directory.

Edit Style Make Bibliography

Edit Style

Located On: Bibliography Menu

This selection allows the user to edit the \underline{style} information that is used to produce the bibliography. The style contains information about the order of $\underline{\text{Fields}}$ in a citation, any text formatting that is applied to a field and the punctuation that precedes or follows a particular field.

See Also: Editing the Style

Make Bibliography

Located On: Bibliography Menu

Choosing this command will cause BioBase to produce a bibliography including all the records in the current database that have been tagged. It will use a format defined by the user in the <u>Style</u>. The records will be alphabetized before being sent to the bibliography. While the program is busy generating the bibliography, the caption of the main screen will change to show that the program is still active and the icon (if the program is minimized) will change regularly to indicate that the program is still working. You will be able to switch to other applications while BioBase generates the bibliography. The order of records is determined using the field that you have selected as the first one in the <u>Style</u>. See <u>Rules for Alphabetizing</u> for an explanation of the rules used to determine the order of the records.

Keyboard Equivalent: Ctrl-B

Help Menu

This menu allows you to activate the Windows help system and get information about the program, including the version number and how to contact the author.

<u>Index</u> <u>About BioBase</u>

Index

Located On: Help Menu

Selecting this command calls up the Windows help system, and displays the contents of the help index for the program.

Keyboard Equivalent: F1

About BioBase

Located On: Help Menu

This menu command displays the program's "About" dialog box. This box contains information on the version of the program, free memory and system resources and how to contact the author.

Getting Started

Once you have started the program, you can either open a previously saved database or you can begin working on a new one. To add records to a new database, choose the command add Record from the Records menu. This will present you with a dialog box allowing you to choose the type of record to add: Journal Article, Book or Article in a Book. Selecting a record type and clicking the OK button brings up a data entry screen for that record type. Here you can enter the data about a particular citation. If you have chosen to have the program enter default information from the DEF file in the new records, that information will be entered on the screen when it is displayed (see Setting Defaults for instructions on using the DEF files). The information should be typed in exactly as you want it to be displayed on the bibliography (with the possible exception of punctuation - see below). For example, if you want the author of an article to be displayed as Smith, J.H. then you must type the name that way in the Author(s) box. Once you have entered all the data, you can return to the main screen by clicking on the OK button or pressing Return. This will save all the information to a new record. If you wish to add another record of the same type, then you can automatically create a new record by pressing the Right Arrow button on the data-entry screen. This will save the information in the current record and immediately create a new one of the same type. Continue adding records in this manner to build you database. Select one of the topics below for more information.

Punctuation
Making a Report
Editing the Template
Making a Bibliography
Setting the Defaults
Editing the Style
Searching for Records
Editing Records
Deleting Records
Saving a Database
Quitting the Program

Punctuation

By default, the program adds punctuation when producing bibliographies only when it finds a field that is missing some form of punctuation. This is to allow the user to forget some punctuation without having to go through and edit the bibliography produced by the program (this is selected by choosing "Add when needed"). If, however, you dont want to have this turned on or if the program does not use punctuation in the manner that you wish. then you can tell BioBase to never add punctuation by choosing Edit Configuration from the edit menu. Simply select the button labeled Never Add and BioBase will produce output exactly as it was typed in. Note, that choosing this option will prevent **all** punctuation from the Style from being added. If you wish to have some text to be placed after a field, but no punctuation, you can enter only the text you want after those fields and leave all the other punctuation boxes blank. If no text is in the punctuation box, then nothing will be put in the bibliography. Alternately, if you want the program to always add punctuation for you, then you can choose that option from the same menu item. This selection does not have any effect on the placement of the <u>Prefixes</u> as they will be added to the bibliography regardless of this setting. The punctuation marks that BioBase adds are determined by the settings in the <u>Style</u>. See the <u>Edit Style</u> command for more information.

Prefixes

Prefixes are the text that the program adds to the bibliography before the fields. This can include such things as the abbreviation to go before a field (such as no. or num. for the number field). The prefixes are set on the <u>Edit Style</u> screen. They are automatically added by the program when the bibliography is created.

Making a Report

Once you have entered some records into the database, you might want to see a list of the information that is currently stored in the file. To do this, choose the report menu and select Make Report. Make sure that the Report to Screen option on the menu has a checkmark next to it. This will display a list of all the records that are currently in the database in the main window. You can customize the way that this information is displayed by selecting Edit Template from the Report menu. It is also possible to edit the Template by choosing the Edit Configuration option from the Edit Menu and pressing the Edit Template button.

Editing the Template

The <u>Template</u> is the information that the program uses to format the reports. When choose to edit it, you are presented with a dialog box where you can choose the fields that are put in a report. Checking the box next to a particular field causes that field to be included in the report. Pressing OK saves any changes you have made, and BioBase will now produce a report that includes the fields you selected. Changes to the Template are saved in the INI file, so that the program will consistently display the reports based on your specifications.

Making a Bibliography

Once you have entered all the records you want you can have BioBase produce a bibliography for you from your database. **Note that only records that have the check box marked Add Record to Bibliography selected will be put in the bibliography file. If this box is not checked, then the record will be skipped.** The program will alphabetize the records and format the output in the way that you choose based on the Style. You can choose to have to bibliography output to a plain text file, or to an RTF file which will contain all the formatting you specify in the Style. To choose the format for the bibliography, choose Edit Configuration from the Edit Menu and make a selection from the choices listed in the Bibliography Format section. The RTF format should be readable by most major Windows and DOS word processors. It can also be read by some Macintosh word processors. **NOTE: Wordperfect for Windows is not able to read the RTF files produced by this version of BioBase. Attempting to open a BioBase RTF file with WordPerfect for Windows will cause WordPerfect to crash!**

Editing the Style

The <u>Style</u> is the information that BioBase uses to format the bibliography. You can edit this information by choosing Edit Style from the Bibliography menu or clicking on the Edit Style button on the Edit Configuration dialog box. The screen contains three sets of Check boxes, one for each type of <u>citation</u>. Each citation type has a separate section, so that any changes made to one section have **no** effect on the other types of citations. There is one check box for each field that a particular record contains. Checking this box tells BioBase that you want this field included in the bibliography.

					P Punct
_		•	D	U	r runct
Author	1				
⊠ Year	2				
☐ Month	8				
⊠ Title	3				
⊠ Journal `	4		\boxtimes		
⊠ Volume	5				□ :
Number	7				
□ Pages	6				

The picture above shows the section of the Edit Style screen used to modify the attributes that the journal article will have in the bibliography. Next to each field check box is a text box that contains a number. This number is the order that the fields will be placed in the bibliography. For example, the Title field is marked as the third field to be included in the bibliography. You can change these around in any way you like. If the field name box is not checked, then the number in the place box is ignored. The final four columns of check boxes are for applying text formatting to the bibliography. If the "I" box is checked, then the field will be in italics when it is placed in the bibliography. "B" means that the field will be in bold text. "U" and "P" represent underlined text and parenthesized text, respectively. You can have any mix of these boxes selected for a particular field. These formatting options apply mainly to RTF files. When BioBase produces an ASCII text bibliography, it ignores the formatting information except for adding parentheses around fields that you select (using the column of check boxes under the letter "P").

The final column of boxes is used to change the text that is placed in the bibliography preceding and following the particular field. This column only displays one set of information at a time. Which information is displayed depends on the option button selected from the bottom right corner of the screen -- either Show Punctuation which displays the information that will be placed in the bibliography after each field or Show Prefixes that will show the text that the user has chosen to follow that particular field. Note that the characters chosen for the punctuation are only added when you choose the "Always Add" or "Add When Needed" options from the Edit Configuration dialog box . If you have it set for Add When Needed, the punctuation will only be added when the last characters of the particular field do not match the punctuation you have selected for that field. The punctuation can consist of up to 5 characters, but it cannot include leading or trailing spaces. Any spaces coming before or after any text are removed when the punctuation is added to the bibliography. If The "Never Add" button is selected, then the text in the Punctuation boxes is ignored and the bibliography is produced using the information exactly as it was typed in. The characters typed in for the prefix are always placed in the bibliography.

You can also have the program add the information contained in the Keywords, the <u>Comments</u>, <u>Abstract</u>, <u>Location</u>, <u>Owner</u> or <u>Language</u> fields to the bibliography. To do this, press the Extra Options button. This calls up a dialog box where you can choose which of the fields to add and what formatting to apply to them. The check boxes work identically to those on the Edit Style dialog box, with boxes for bold, italic, underlined or parentheses.

The box labeled General Formatting allows you to set the indentation and spacing of the citations, and it applys to both text and RTF bibliographes:

□ <u>G</u> eneral Formatting
☐ DoubleSpace
☐ Indent Citations
O Indent First Line
Indent after First Line

The function of the check box marked Doublespace is to set how the citations are spaced. If doublespace is checked, then the citations will have a blank line between each line of the citation. In the RTF bibliography, this is achieved by telling the word processor to use double spacing, but in the text bibliography, this is accomplished by adding hard returns to the end of each line. If this option is not checked, then there will be no blank line in the citations, but there will still be a blank line between citations. The indent citations check box allows you to set how the citations are indented (if at all). If this box is checked, then either the first line of each citation will be indented or every line following the first will be indented. A citation produced with Indent After First selected is shown below

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie 68: 89-114.

Example Citation with Indent First selected:

Baker, M.C. (1982) Genetic population structure and vocal dialects in Zonotrichia (Emberizidae). pp 209-235 in Acoustic Communication in Birds (Kroodsma, D.E. and Miller, E.H., eds.) Academic Press, New York.

You can also have the program add the infromation contained in the <u>Keywords</u>, the <u>Comments</u>, <u>Abstract</u>, <u>Location</u>, <u>Owner</u> or <u>Language</u> fields to the bibliography. To do this,

click on the Extra Options button. This calls up a dialog box where you can choose which of the fields to add and what formatting to apply to them. The check boxes work identically to those on the Edit Style dialog box, with boxes for bold, italic, underlined or parentheses being applied to the text.

Clicking the OK button saves the changes to the style information, while pressing the Cancel button cancels any changes and returns the Style to its previous values. You can save different style settings in different files and then select the style settings to use from the listbox at the bottom of the screen. Each Style has a 12 character descriptive name and the actual filename listed in the box. The default style created by the program when it first starts is called BIOBASE.STL and is named Default. To save a new style, set the options as you like them to be, then click the Save Style button. This brings up a dialog box where you can type in the 12 letter descriptive name and the 8 character file name. The extension for Style files is .STL and cannot be changed, so you should not type an extension in the filename dialog box. Note that the Save Style dialog box does NOT check to see if the filename you have selected already exists, so you should make certain that you do not overwrite a previously designed style when you type in your filename. To save changes to the current style (without saving it under a different name) simply make the appropriate changes and then press the OK button. The program will save the changes and write them to the STL file when the program terminates. The changes are also saved when you change from one style to another using the list box. The style files are saved in the same directory as the main program, and it will only be able to find STL files stored in its directory.

Searching for Records

After entering some information into a database, you may find it necessary to find a particular record or a series of records that all contain the same information. For this reason, BioBase has several different search functions. Each search is slightly different, but they all allow you to type in some text to seek in your databases. They also allow you to search within different ranges in your database, as well as allowing you to perform some actions on the records that match your criteria (see Search Editor for more information). Below are the different types of searches. The difference between the three searches is which fields they search for the text you enter. Click on one of the topics below for more information.

<u>Search All Fields</u> <u>Search One Field</u> <u>Search Multiple Fields</u>

Editing Records

You can edit the information about a particular record at any time. Either by selecting <u>Goto Record</u> from the <u>Edit Menu</u>, <u>Display All</u> from the <u>Records Menu</u> or by conducting a search and editing the records that have matches in them. Any changes you make on the <u>Edit Screen</u> for a particular record are saved when you click on the OK button or either of the Arrow buttons.

Deleting Records

To delete a record from a database, you need to have that records <u>Edit Screen</u> displayed. Pressing the Delete button on the edit screen will mark the record for deletion. Deleted records are not removed from the data file unless you choose <u>Compact Database</u> from the Edit menu. When a record is marked for deletion, then the space it occupies is marked as available for use by the program so that new records can be put in that space. For this reason, deleting records will not decrease the size of the database file. However, as you add new records, they will be written over those records that have been marked for deletion. If you accidentally delete a record, then you should recover it immediately so that BioBase does not overwrite the information with a new record.

Saving a Database

When you have made some additions to your database, you may want to save it to prevent any of the information it contains from being lost in the event of a crash. To do this, choose either <u>Save</u> or <u>Save As</u> from the File menu. If you have not saved the data before, you will always be presented with a dialog box to name your file. If you have saved previously (and you chose Save) then any new information is written to the hard drive from memory. If you choose Save As, you will always be asked to enter a file name.

Quitting the Program

Once you have finished entering your data, you can exit the program by choosing $\underline{\text{Quit}}$ from the $\underline{\text{File Menu}}$, pressing Ctrl-Q or Alt-F4. If you have not saved your database, then you will be asked if you wish to discard your changes.

Entering Data

By choosing <u>Add Record</u> from the <u>Records Menu</u> you can enter information about a new record. If you have chosen to have the information in the DEF file added to the records automatically, the default text will be set when the screen is displayed (see <u>Setting the Defaults</u> for more information). After you finish entering the information, you can press OK on the <u>edit screen</u> to save the new record. To return to the main screen with out saving the information, you can press the Cancel button. To save the information and create a new record of the same type, press the Right Arrow Button.

Glossary

This section lists some of the terms used throughout the help file and their definitions.

Article in a Book
Book
Citation
Defaults (DEF File)
Edit Screens
Field
Journal Article
Record
Style (STL File)
Template

Citation

A citation consists of all the information needed to produce a bibliography entry for one source, such as the author, title, year of publication, etc. Each citation is equivalent to a <u>Record</u> in BioBase.

Defaults

The Defaults are values that the user sets to have the program enter certain information in to the fields of new records automatically. This is useful, for example, if you want the program to automatically add your initials to the <u>Owner</u> field so that you do not have to repeatedly type the same information for each new record. The defaults are set using the <u>Set Defaults</u> command on the <u>Records Menu</u>.

Edit Screens

The Edit Screen is the data-entry form that is displayed when you choose to add a record. In the different text fields of the form, you can type the relevant information about the citation. Edit Screens are also displayed when you choose <u>Goto Record</u>, <u>Display All</u> or the results of a search are displayed. On these screens, you can modify the information for a current record. All changes are saved when you click either the OK button or one of the arrow buttons (see below). Clicking the Cancel button discards any changes you have made to the citations data and the Edit Screen is removed.

Field

The following fields are in every record:

<u>Author</u>

Year

<u>Title</u>

Location

Language

Owner

Keywords

Comments

<u>Abstract</u>

Extra fields in Journal Article Citation:

Month

Journal Title

<u>Volume</u>

<u>Number</u>

Starting Page

Ending Page

Extra Fields in Book Citation:

<u>Publisher</u>

City of Publication

Extra Fields for an Article in a Book Citation:

Starting Page

Ending Page

Book Title

Volume

Editors

<u>Publisher</u>

City

Author

This field contains the name(s) of the author(s) of the current citation. The field is 150 characters long. All citation types have this field.

Year

This field contains the year of publication for the citation. All citation types have this field. The Year field is 15 characters long.

Title

This field contains the name of the citations source, such as the title of the article (in the case of a Journal citation or Article in a Book) or the title of a book (in the case of a Book citation). This field is 200 characters long.

Location

This fields is intended for the user to store a short string indicating where the citation can be found such as call letters for a book etc. This field is 80 characters long.

Language

This field is intended for the user to enter a string identifying the language of the citation. The field can store 15 characters.

Owner

This field is a meant to hold a short string (a maximum of 20 characters) that identifies who entered this citation. This is useful if the same data file is being shared by several people -- this field can be used to determine who needs a particular citation. This, coupled with the ability of the Search functions can allow several people to use the same data file with a minimum of confusion.

Keywords

This field is meant to store a list of short words or phrases that can be used to distinguish between the different records in your database. Using clear keywords can make searching for a particular record much easier. This field is 255 characters long.

Comments

This field is for you to store a few phrases about a particular citation. Like keywords, they can be used to distinguish different records and make searching easier. The comments field holds 255 characters.

Abstract

This field can be used to store more comments/keywords, or to store relevant parts of the citations abstract so that you dont need to keep searching for the actual source to find out basic information. This field stores 2000 characters, allowing it to hold a fair amount of information.

Journal Title

This field holds the name of the journal that published the particular article. This field is 100 characters long. This field only applies to the <u>Journal</u> citation type. For example, the journal title in the citation below is in bold type:

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. **Zeitschrift fur Tierpsychologie** 68: 89-114.

Month

This field contains the month or season of publication. The field is 10 characters long, and it is only present in $\underline{\text{Journal Articles}}$

Sample Citation:

Payne, K. and Payne, R. **Summer**, 1985 Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie 68: 89-114.

Volume

The volume refers to the volume of the source that contained the citation. This field is 6 characters long. This field only applies to <u>Journal Article</u> and <u>Article in a Book</u> citation type. The volume is bolded in the sample citation below:

Journal Article:

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie **68**: 89-114.

Article in a Book:

Number

This field contains the Number of Publication. This field is only present in the <u>Journal Article</u> citation type. The fields is 6 characters long.

Sample Citation:

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie 68**(2)**: 89-114.

Starting Page

This field contains a string containing the beginning page of the citation. This applies only to the <u>Journal Article</u> and the <u>Article in a Book</u> citation types. This field is 6 characters long.

Sample citations with relevant field highlighted: Journal Article:

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie 68: **89**-114.

Article in a Book:

Ending Page

This field contains a string containing the page number that ended the citation. This applies only to the <u>Journal Article</u> and the <u>Article in a Book</u> citation types. This field is 6 characters long.

Sample citations with relevant field highlighted: Journal Article:

Payne, K. and Payne, R. (1985) Large scale changes over 19 years in songs of Humpback whales in Bermuda. Zeitschrift fur Tierpsychologie 68: 89-**114**.

Article in a Book:

Publisher

This field is used to store the name of the publisher of a book. This field applies only to the <u>Book</u> and <u>Article in a Book</u> citation types. This field is 100 characters long.

Sample citations with relevant field highlighted: Book:

Darwin, C. (1964) On the Origin of Species (A Facsimile of the First Edition). **Harvard University Press**, Cambridge.

Article in a Book:

City of Publication

This field contains the name of the city in which a book was published. Applies only to the <u>Book</u> and <u>Article in a Book</u> citation types. This field is 40 characters long.

Sample citations with relevant field highlighted: Book:

Darwin, C. (1964) On the Origin of Species (A Facsimile of the First Edition). Harvard University Press, **Cambridge**.

Article in a Book:

Book Title

This field contains the title of the book that contained an article. This field only applies to the <u>Article in a Book</u> citation type. The <u>Title field</u> contains the name of the book for a <u>Book</u> citation. This field is 120 characters long.

Editors

Field to contain the name(s) of any editor(s) for a book containing the citation. This field only applies to the <u>Article in a Book</u> citation type since this type of citation often comes from a compiled and edited volume. This field is 80 characters long.

Record

A record is the unit that the program uses for data storage. Once record contains all the information about a single citation. Each record takes 1751 bytes of disk space.

Report

When the program outputs a list of $\underline{\text{Records}}$ to the screen, a text file or the printer. Reports are generated by choosing one of the options from the $\underline{\text{Report Menu}}$ as well as at the conclusion of a successful $\underline{\text{search}}$ operation.

Style

The information used by BioBase to format the bibliography. Contains information about the order that the fields will put in the bibliography as well as any text formatting (bold, italics) that will be applied to the fields. The program allows the user to save different sets of style information (for example the style information needed by different journals) in individual files so that changing from one style to another is easier. Style files have the default extension STL

See Also

Editing the Style

Template

The information used by the program to determine which fields will be included in a <u>Report</u>. Changes to the template are stored in the BIOBASE.INI file in the same directory as the EXE file so that modifications to the template are preserved from one session of the program to the next.

See Also

Editing the Template

Contacting the Author

I welcome any correspondence concerning BioBase, I've worked hard on this program, and I hope you find it useful. Any bug reports, questions or comments can be sent to me by the following methods:

Ground Mail:

Stephen Burnett 1088 Union Mill Rd Mt. Laurel, NJ, USA 08054

Internet Mail

sburnett@veblen.acns.carleton.edu

I am offering BioBase on an "as-is" basis. I do not make any warranties, express or implied as to the suitability of this program for a particular use. I have made every effort to eliminate any bugs and ensure that the program will perform as explained, but I'm unable to account for the millions of combinations of hardware and software that exist today. I'll be more than happy to help anyone who has problems running the program, but I cannot guarantee that the program will perform correctly for any particular individual

Registering BioBase

If you find BioBase to be useful, a donation of \$20 US would be appreciated to cover the cost of maintaining and upgrading the program. Registered users will receive a copy of the program imprinted with their name as well as being notified of updates to the program. If you do not want a copy with your name imprinted, then the cost to register is only \$15. After registering, future upgrades cost only \$6 US for duplication and shipping (specify 1.2 M 5.25" or 720K 3.5" disk). See "Contacting the Author" for my address.