TUTORIAL

Before we begin, please remember to register this software by using the registration form on the Main Menu's **HELP** pull-down options.

For your convenience, this tutorial document provides two introductory sessions for your use of the North American Bird Reference Book; the first section provides you with an overview of the use of the Reference Book itself, while the second section provides you with an in-depth overview of the use of the LANIUS Excalibur 2000 bird sighting database which is included with the Reference Book. The entire tutorial may take you up to an hour or slightly longer to complete (approximately 25 minutes for section 1, 45 minutes for section 2). As you will likely use the North American Bird Reference Book database for years to come, this will be time well spent. **Note: if you are a previous user of LANIUS Excalibur 2.0, or if you are not interested in creating or maintaining a "Life List", then you will not have to take the second section of this tutorial.**

USING THE NORTH AMERICAN BIRD REFERENCE BOOK

To start the North American Bird Reference Book database application, press the **Start** menu and navigate to the folder where the program was installed; use your mouse to click on **Reference Book 2000**. The application will start and you will be at the Main Menu.

Access the **EDIT** pull-down menu and click on **Edit User Settings ...** Click on the **CD Drive** tab. If the Drive letter for your CD-ROM or DVD drive is correct (by default, it is set to "D"), then click the **Cancel** button; otherwise, change the Drive letter for your CD-ROM to the correct value (e.g., "E", "F", or "G", depending on your computer's configuration) and click on the **OK** button.

Now, click on **REFERENCE BOOK ...** to access the North American Bird Reference Book.

When the North American Bird Reference Book first loads, it will display a *set of records* for Common and/or Widespread Species. Note that the **red status bar** (the horizontal bar below the text field) also describes the type of records (in this case, Common or Widespread Species) that are displayed in the current *record set*.

The first record or species account that is on display will be that for the Pied-billed Grebe. While any species record is showing, you may have up to five different functions immediately available to you:

**PRINTING THE SPECIES ACCOUNT FOR THE SPECIES
DISPLAYING A PHOTOGRAPH OF THE SPECIES
PLAYING THE SONG OR CALL NOTES OF THE SPECIES
VIEWING THE DISTRIBUTION MAP FOR THE SPECIES
FINDING THE SPECIES ACCOUNT FOR A DIFFERENT SPECIES**

To **Print** the species account for the species record currently on display, simply press the **PRINT RECORD ...** button. You may do this now, if you wish. The output will be sent to the default printer attached to your computer. Most species records will print in its entirety on a single page of paper. Note that the shortcut key for printing a species record is [CTRL-P].

To **Display** a photograph of the species whose species account is currently on display, simply press the **SHOW PICTURE ...** button. You may do this now, if you wish. Please note that the **SHOW PICTURE ...** button will be disabled if there are no photographs in the database for the currently selected species. The shortcut key for viewing the image of a species is [CTRL-I].

When you press the **SHOW PICTURE ...** button, the photograph of the species will be displayed in the Inflight Field Viewer. When you use the Inflight Field Viewer, press the **SHOW NEXT IMAGE** button, if it is available, to display additional photographs of the same species; to view previous images of the same species, simply press the **SHOW PREVIOUS IMAGE** button. Press **EXIT FORM** to return to the North American Bird Reference Book. Please note that the **SHOW NEXT IMAGE** button will only be available if there is more than one photograph of a species stored in the database.

To **Play the Song** and/or call notes of the species whose species account is currently on display, simply press the **PLAY SONG** button. You may do this now, if you wish. Please note that the **PLAY SONG** button will be disabled if there is no song recording in the database for the currently selected species. The shortcut key for playing the song of a species is [CTRL-G]. A bird's song may also be played while looking at its photograph in the Inflight Field Viewer.

To **View the Distribution Map** of the species whose species account is currently on display, simply press the **SHOW MAP ...** button. You may do this now, if you wish. Please note that the **SHOW MAP ...** button will be disabled if there is no range map in the database for the currently selected species. The shortcut key for viewing the distribution map of a species is [CTRL-M].

When you press the **SHOW MAP ...** button, the range map of the species will be displayed in the Inflight Field Viewer. To use the Inflight Field Viewer, simply press the **EXIT FORM** button or [ENTER] to return to the North American Bird Reference Book.

There are a number of different ways to **Find** the species account for a different species, and they are described in the following paragraphs. You may find that one option is more appropriate than others, depending on the species account you are looking for.

1. **Accessing the next available record or the previous available record.** Only one species account at a time is displayed on the screen. The accounts are displayed in taxonomic order, by family. To display the next available record, press the **Next** button or the [F7] key. Do this now, if you wish. To display the previous available record, press the **Prev** button or [SHIFT-F7]. Do this now, if you wish.

2. **Finding a specific record in the current set of records.** The red status bar (the horizontal bar below the text field) describes the type of records that are displayed in the current *record set*. To find a specific species account in this record set, simply press the **FIND RECORD ...** button and enter the name of the species you want to find at the prompt. Please note that if the species you want to find has a hyphen or an apostrophe in its name (e.g., Chuck-will's-widow), then you must spell its name with the hyphen or apostrophe included. The shortcut key for finding a species record is [CTRL-F].

3. **Finding a specific record when you don't know the full species name.** What if you know the *kind* of bird you are looking for, but don't know its full name? You can still find it using the **FIND RECORD ...** button. For example, suppose you want to learn more about kinglets, but don't know the actual names of the representative species that are in this group of birds. In this case, simply press the **FIND RECORD ...** button and enter "kinglet" (without the double quotes). Do this now, if you wish. Note that the first record where "kinglet" appears somewhere in the bird's name (Ruby-crowned Kinglet, in this case) is displayed, and the FIND RECORD button turns into a **FIND NEXT ...** button. Click on the **FIND NEXT ...** button to display the next record matching the specified search criterion (the record for Golden-crowned Kinglet will now be displayed). To start a new search, press [CTRL-F] or keep pressing the **FIND NEXT ...** button until no additional matching records are found, in which case the **FIND RECORD ...** button will reappear.

4. **Querying the Reference Book database.** You can query the database by searching all species by abundance (Common and/or Widespread Species), state/province, or family. In addition, you also have options for displaying the records for all species or just for a single species. To do this, simply access the **SEARCH** menu and select one of the five *record set* options just described. If the function you select allows you to choose from a list, make your selection and press [Enter]. Note: if you prefer to access records using an alphabetized list of species names, access the **SEARCH** pull-down menu and choose the option for **Display**ing **a Record for a Specific Species ...**.

If, after pressing **FIND RECORD ...** and entering the name of the species you are interested in (see options 2 and 3 above), you get an error message informing you that the species record could not be found, it may be that the species name was incorrectly spelled by you or that the record for a particular species is not contained within the current *record set*. In either event, you have one of two options:

1. You can correct any spelling errors in the **FIND A RECORD** dialog box (for your convenience, this box remains active until you successfully locate the species you are searching for or until you explicitly **Cancel** the search).

2.   Or, you can switch to a different *record set* which may possibly have the record you are looking for. To do this, review the instructions for **Querying the Reference Book database**, shown above.

Other Features of the North American Bird Reference Book

•LANIUS Software's North American Bird Reference Book also includes over 525 identification hints or secrets about the birds of North America. To view the secret for each species, access the **VIEW** menu and select **LANIUS Software Secret for this Species**. Please note that if this option is disabled, no secret has been entered for the species in question. All secrets were written by LANIUS Software.

•To view the various essays on birds and ornithology that are included in the Reference Book, access the **VIEW** menu and select **Essays on Birds and BirdWatching ...**. The Help File will appear, with the various topics in the BIRD INFORMATION CENTER chapter on display. You may browse these topics at your leisure to locate the subject you are interested in. This feature will be especially helpful for school kids who need to complete homework assignments on a subject related to birds.

•The status of each bird, as recognized under the Endangered Species Act, is recorded for each species. To display the status of a particular species, click on the **VIEW** menu and select **Display Species Status**. If a species has no status recorded under the Endangered Species Act, then the status of a species will be recorded as "No Special Status."

•On the left hand side of the Reference Book form, the population trend for the species is shown. This trend is reported by the survey-wide results of the Breeding Bird Survey, for the years 1966-1996. The U.S. Fish and Wildlife Service's BBS population trend estimates represent a measure of population change for a species over a period of time. These estimates are expressed as a percent change per year. The level of significance is represented by 0-4 stars, with 0 stars being least significant and 4 stars being most significant. Note that if no trend data have been recorded for a species then its BBS trend is indicated as 'N/A'.

•When you think you know a certain number of birds by sight or sound, you can quiz yourself by displaying a random bird sighting or playing a random bird song. Press [CTRL-A] to display a random bird sighting. In response, the Reference Book will display a bird image in the InFlight Field Viewer. Study the bird as long as you want, and attempt to identify it; then press [ENTER] to display the bird's identity.

Press [CTRL-B] to play a random bird song. As the song is playing, attempt to identify the bird. Following the song, the Reference Book will display a message box containing the bird's identity.

•As explained above, accessing the **SEARCH** menu allows you to select one of the five *record set* options that can be used to query the Reference Book database, including choices to display a list of birds for a particular family, state, or province. Once a selection has been made, you have the option of exporting the Species ID Codes for the current *record set* to a file for use as a Species Check-List in your LANIUS Excalibur bird sighting database. To do this, simply select **Export Species ID Codes to File ...** from the **FILE** pull-down menu and follow the prompts on the screen; the Species ID Codes will be written to a file called LXEXPORT.TXT. See the User's Manual to learn how to import a Default Species List into LANIUS Excalibur.

•When you want to learn the latest news about this software product and the other products available from LANIUS Software, why not visit us on the Web? The North American Bird Reference Book can take you there, with one mouse click! To do this, simply select **Access LANIUS Software's Home Page ...** from the **HELP** pull-down menu. This feature requires Internet Explorer or a Netscape browser to function properly.

•To access the help file for the North American Bird Reference Book, simply press [F1] while the program is running and select the Help topic of your choice. Alternatively, you can access the help file by clicking on the **HELP** menu and choosing an appropriate Help option.

•Many of the text boxes and command buttons on the Reference Book are Help Context-sensitive, meaning that if you move your mouse pointer over one of these controls and leave it there, a tiny message will pop up on the screen to tell you more about what that control does or which key needs to be pressed to invoke its features. Press [F1] at any time to access the Help file.

•The North American Bird Reference Book is completely integrated with your LANIUS Excalibur 2000 bird sighting database. Once you have entered one or more sighting records of North American birds into the LANIUS Excalibur 2000 database, you can quickly view these observations while you are browsing through the species accounts in the North American Bird Reference Book! To do this, simply access the **VIEW** menu and select **My Bird Sightings for This Species**. Your observations will be displayed on the screen. Press the [Esc] key to return to the North American Bird Reference Book.

•The previous feature is a valuable one, and it works because the Reference Book has a pointer for each species that points to the corresponding species in your LANIUS Excalibur 2000 database. Currently, both databases are fully synchronized.

However, as time goes by, the ornithological scientists who keep track of bird names may change the name of one or more birds, decide that one bird species is actually two distinctly separate species, or decide that two bird species are actually representatives of a single species and should therefore be lumped as one species. When these decisions are made, you have the option of updating your LANIUS Excalibur 2000 bird sighting database to reflect the new changes (see the Species Split and Species Merge functions, described in the User's Manual and the Help file). If you should update your LANIUS Excalibur 2000 bird sighting database, or if you should receive an upgrade to the North American Bird Reference Book, you may find that the Reference Book needs to be calibrated to accurately point to all of the appropriate species in your LANIUS Excalibur 2000 database.

When this need arises, simply access the North American Bird Reference Book and locate the species account which is currently out of sync with your bird sighting database. When that record is on display, access the **FILE** menu and select **Synchronize Databases ...**. Follow the instructions that prompt you for information.

Credit Where Credit is Due

The species accounts featured in the North American Bird Reference Book were prepared by summarizing information from a variety of sources. These include the 7th edition of the A.O.U. Check-list of North American Birds (A.O.U. 1998), which was the primary source for the habitat and distribution sections of the individual species accounts. The Nest Habits, Eggs, and Incubation sections of the species accounts were prepared using information found in a wide variety of sources, but most often in the works of Terres (1980) and Ehrlich, Dobkin, and Wheye (1988). The range maps featured in the North American Bird Reference Book were prepared by LANIUS Software and are adapted from previously published maps found in the National Geographic Society's Field Guide to the Birds of North America (Scott 1987), the Field Guide to Birds, Eastern & Western Regions (Stokes and Stokes 1996), A Field Guide to Warblers of North America (Dunn and Garrett 1997), and the Birds of North America series (Academy of Natural Sciences 1992-2001). Please consult the Literature Cited section at the end of the User's Manual for a complete list of all references consulted during the development of The North American Bird Reference Book.

USING LANIUS EXCALIBUR 2000

Bird sightings are often described in geographic terms. Consider the following series of bird observations:

15 June 1987, Mont-Megantic Provincial Park, Estrie Region, Quebec Province, Canada
> **Blue Jay (7 birds)**
> **American Crow (10 birds)**

5 May 1992, Mitchell Canyon, Mt. Diablo State Park, Contra Costa County, California, USA
> **Western Wood-Pewee (4 birds), singing**
> **Great Horned Owl (2 birds), calling at 0400 hrs**

7 May 1992, Mt. Diablo State Park, Contra Costa County, California, USA
> **Red-tailed Hawk (5 birds)**
> **Western Wood-Pewee (2 birds)**

The first thing you will notice about LANIUS Excalibur that is different from other ornithological information management systems is the concept of **Major Areas** and **Minor Areas**.

What are Major and Minor Areas?

A **Major Area** is a geographical unit of space that defines a large area of land. Think of a State (in the United States) as a Major Area. Major Areas are generally mutually exclusive of one another (i.e., they do not overlap one another).

A **Minor Area** is a geographical unit of space which represents a subdivision of a Major Area. Each Major Area may have one or more Minor Areas within it. Again, Minor Areas generally do not overlap one another. Think of a County (in the United States) as a Minor Area.

Looking at the above data, we find the following Major Areas: Quebec Province, Canada; and the state of California in the United States. There are a number of "Regions" within Quebec Province. The Estrie Region of Quebec is one such region. The Estrie Region of Quebec is thus a Minor Area. Likewise, Contra Costa County is a Minor Area within California.

With LANIUS Excalibur's powerful **Geographic Management System** (see the User's Manual for more information), you can use Major and Minor Areas to organize your bird sightings hierarchically, within a geographic context.

What are Sites?

A **Site** is a geographical unit of land that is visited in search of birds. Looking at our fictitious set of observations, one should be able to discern three Sites: Mont-Megantic Provincial Park, Mt. Diablo State Park, and Mitchell Canyon. Unlike Major and Minor Areas, Sites may overlap one another. If you're very observant, you will notice in our example that Mitchell Canyon is actually a specific locality within Mt. Diablo State Park.

Starting LANIUS Excalibur

If you have not already done so, start the LANIUS Excalibur database by pressing the **Start** menu and navigating to the folder where the program was installed; use your mouse to click on **Reference Book 2000**. The application will start and you will be at the Main Menu. If you have not already done so, click on the option button for **ADVANCED FEATURES**.

Examine the Main menu for a moment: you will notice you have five choices:

1.   **View Bird Pictures and Hear Bird Songs** in the North American Bird **Reference Book**
2.   **Add** or **Edit** bird sighting records
3.   **View** or **Edit** reference data
4.   **Generate Reports**
5.   **Exit** the database program

A photograph of a Killdeer may appear in the middle of the Main Menu screen. To display a thumbnail sketch of how to use the database, access the **HELP** pull-down menu and click on **Show Introductory Message**. You may later hide this message (and re-display the Killdeer) once you have learned how to use the program.

Starting the Tutorial

DO NOT SKIP THIS STEP!!! To start the tutorial, access the **HELP** pull-down menu and click on **Start Excalibur Tutorial**. (To stop the tutorial at any time, repeat this procedure and click on **End Excalibur Tutorial**.) Note that after the tutorial has been started, a white label with red letters reminds you that the tutorial is currently active. You should turn the tutorial off before you begin to enter your own bird sighting data in earnest. The remainder of this tutorial is described below.

Entering Data

DEFINING SITES

Before you can enter bird sighting data, you must first define one or more sites. This is because bird sightings are assigned to a specific site. To define sites, take the following steps:

1.   Press the **REFERENCE DATA** button on the Main Menu.
2.   You are taken to the LANIUS Excalibur Reference Form. While using the Reference Form, you can choose to view (or edit) the data that ships with LANIUS Excalibur. These data are usually called reference data because other tables make references to these information items.
3.   By default, the SITE table comes up first when you enter the Reference Form. LANIUS Excalibur ships with one default Site already defined: General Location. We will talk more about the General Location site later in this tutorial.

4. However, for now, we wish to add three new sites. To begin this process, press the **Add New** button on the Reference Form. The fields are cleared and a message pops up to confirm you are now in the process of defining a new site. Defining a site involves three steps:

    a. Fill in the Site ID Code. Up to five characters may be entered in this field. The General Location Site ID Code was "001". For consistency's sake, you may want to follow this numbering scheme, thereby identifying your new site as "002". To do this, type **002** in the Site ID Code field now. Then press [ENTER]. Fill in the name of the site. In this case, we will call our site "Mt. Diablo State Park". Type **Mt. Diablo State Park** in the Name of Site field now. Press the **Save** button to save this record and proceed to step 2.

    b. At step 2, we define which Major and Minor areas our site occurs in. We already know that Mt. Diablo State Park is in Contra Costa County, California. Therefore, use your mouse to select **California** from the Major Area list box. In the Minor Area list box, select **Contra Costa**. Then press the **Save** button to save this record. You will be prompted to add an additional record. In this case, we know that all of Mt. Diablo State Park is located within Contra Costa County, so we answer **No**. (Note: If the area of the park had extended into an adjacent county, we could have answered yes and entered another record.) You are now prompted to link this site to another site.

    c. Linking sites to one another is the third step in the process of defining a new site. Since we don't want to link Mt. Diablo State Park with another site, answer **No** here. You are now returned to the SITE table and the new record for Mt. Diablo State Park is displayed.

5. Press the **Add New** button again. Follow step 4(a) above to create a new site, identified by the code **003** and the name **Mitchell Canyon**. Save the record. You are now at Step 2. Again, Mitchell Canyon, will be in **Contra Costa County, California** (see step 4(b) above); make these selections and save the record. Answer **No** when prompted to add another record. At the end of step 2, you will be prompted to link Mitchell Canyon with another, pre-defined site; answer **Yes**. The form will display the third step of defining a site. This is where you get to tell LANIUS Excalibur that Mitchell Canyon is part of Mt. Diablo State Park. To do this, press the **Add Link** button and follow the prompts on the screen. Select **Mt. Diablo State Park** from the blue list box and press **OK**. The link has now been created! Press **Exit** to return to the record for Mitchell Canyon in the SITE table.

6. You could follow step 4(a) above to create a new site for Mont-Megantic Provincial Park, but you would only discover that there are no Minor Areas currently defined for Quebec. To create a record for Estrie Region in Quebec, using LANIUS Excalibur's Geographic Management System, we take the following steps:

    a. Click on the **TABLES** menu and select **Minor Area Types**. The MINOR AREA TYPE table is now on display and the first record is for County. A county is a type of Minor Area (e.g., in the United States). Click on the data control bar to display the next record, which is for Parish (Parishes exist in the state of Louisiana). Since Estrie is a Region in Quebec, we need to create a new Minor Area Type record for "Region". To do this, press the **Add New** button to create a new record.

    b. Type **RE** as the Minor Area Type Code, and enter **Region** as the Minor Area Type Name. Then press **Save** to save the record.

7. Now click on the **TABLES** pull-down menu again and select **Minor Areas** from the list of options.

8. When the MINOR AREA records are displayed (the first record is for Autauga County, Alabama), press **Add New** to begin the process of adding a new record.

9. For the Minor Area Name field, enter **Estrie**. In the Major Area list box, select **Quebec**. Finally, in the Minor Area Type list box, select **Region**. Press **Save** to save the record.

10. Now select the **TABLES** menu again and select **Site Names** to return to the SITE table. Press the **Add New** button to begin creating a new site and follow the instructions in step 4(a) above to create a new site identified by the code **004** and the name **Mont-Megantic Provincial Park**. After pressing the **Save** button, you will be at step 2 in the process of defining a new site.

11. Select **Quebec** from the Major Area list box, and **Estrie** from the Minor Area list box. Press **Save** to save the record; answer **No** when prompted to add additional records or to link this site to another site.

12. Congratulations! You have just entered all the sites that we need to have in order to add our sightings to the database. Press **Exit** to return to the Main Menu.

<div align="center">WORKING WITH THE MAIN MENU</div>

Please take a moment to review the Main Menu again. You will notice three menu options in the upper left hand corner. The **HELP** menu can be accessed to display context sensitive help. The **FILE** menu can be accessed to work with database tools that backup and otherwise maintain your database file. The **EDIT** menu can be accessed to display User Settings or to display the total number of birds currently on your Life List.

The functions available from these menu items are discussed in more detail later in this tutorial and in the User's Manual. For now, however, it is time to enter your bird sightings.

ENTERING BIRD SIGHTING DATA

To enter your bird observations, press the **ADD/EDIT RECORDS** button on the Main Menu. You will be taken to the Census Form. (You may also receive a Data Entry Hint message; if you do, read it then press the OK button). Whenever you access the Census Form any previously entered records will be displayed. Since this is the first time you have used the database, the form will be blank. *For your convenience, instructions on how to add new bird sighting records to the database are always displayed below the Observers data field*. To enter your data, follow these steps.

1.   In the Date field, enter **6/15/1987** and press [ENTER] (note: a 4-digit year is required).
2.   Optionally provide data on the weather for this date (this field may be left blank). Press [ENTER].
3.   Optionally provide the names for observers for this date (this field may be left blank). Press [ENTER].
4.   In the Site Name list box, select **Mont-Megantic Provincial Park**. At this point, **DO NOT** press the Save button; instead, go on to step 5.
5.   Press the [F2] key or **Add New** to automatically add this record to the CENSUS table and to access a screen where you can specify what species were seen.
6.   When the Pick List Form is shown, the site currently in use is displayed at the upper left. Use your mouse to scroll through the list of species names. Click on the records for **Blue Jay** (code 5746) and **American Crow** (code 5835). After these two records have been selected, press the **OK** button.
7.   You will be prompted to update your Life List for Blue Jay; answer **Yes**. Note: LANIUS Excalibur updates and maintains your Life List for you automatically as you enter records!
8.   You will be prompted to enter the number of individuals seen for Blue Jay. Enter **7**. Update your Life List for American Crow and, when prompted for the number of American Crows, enter **10**.
9.   The Observation Form will now be displayed, with the record for Blue Jay showing. Take a moment to examine this form:
        a.   The date and site name for this observation are displayed in the upper left hand corner of the screen.
        b.   The code for Blue Jay is 5746 and is displayed in the Species ID Code field. The green label below this box displays the full common and scientific name for Blue Jay.
        c.   The number of individuals observed is 7.
        d.   No remarks are currently entered for this observation.
        e.   Finally, Estrie Region and Quebec are identified as the Minor and Major Areas where this observation took place.
10.   Press the [F7] key to move to the next record (see the **RECORDS** menu for a list of all the most frequently used functions in LANIUS Excalibur, and the shortcut keys that invoke them). The record for American Crow is now on display.
11.   Let's assume that an Ovenbird (species code 8846) was also seen on this date and at this location. To add this record, simply press the **Add New** button. Do this now.
12.   Note that the data control bar now indicates that you are "**Adding Observation Data**". In addition, LANIUS Excalibur is smart enough to remember your most recently accessed Major/Minor Area combination (i.e., Estrie Region, Quebec). By default, the number seen for all new records is "1". Thus, all you have to do is input the Species ID Code for your next record.
13.   To enter the record for Ovenbird, type **8846** in the Species ID Code field and press [ENTER].
14.   You will be prompted to update your Life List for Ovenbird. Answer **Yes**.
15.   Now press the **Save** button to save your record.
16.   Congratulations! You have just entered your first three bird sighting records.

SETTINGS IN THE OBSERVATION FORM

By default, you enter species records by codes when the Observation Form is showing. Although this is by far the quickest way to enter data, LANIUS Excalibur realizes that not everyone is comfortable using species codes. To change this setting, select the **EDIT** menu, click on **Edit User Settings...** and then select **Specify Species by Typing Common Name**. Do this now. From now on, the database will expect you to type the common name into the Common Name field to identify species when using the Observation Form. Press **Exit** to return to the Census Form. Press **Exit** again to return to the Main Menu.

Select the **EDIT** menu on the Main Menu Form and click on **Edit User Settings ...**. LANIUS Excalibur responds by pulling up a tabbed dialog box where you can view or change the most important user settings in the program.

1. Note that your default species list is the **North America** list. We won't change this setting for now. Note that there are over 9600 species names in the database. Your Default Species List controls what species names are on display whenever you access a list of species in the program. The default list allows you to focus on a specific subset of the more than 9600 species names that are included with the program.
2. Press the **Documentation Info** tab. This setting controls how your name and other information is recorded on the Rare Bird Documentation Form that LANIUS Excalibur can produce for you when you want to document a rare or vagrant bird sighting. Take a moment here to fill in the blanks for your name, address, phone number, and E-mail address. **DO NOT PRESS THE "OK" KEY**
3. Press the **Data Entry Mode** tab. By default, your data entry mode is to select species from a list (using the Pick List Form). Click on the option to **Enter Species Records One at a Time**. Do this now.
4. (Since we modified the setting for the **CD Drive** tab at the beginning of this tutorial, we won't worry about changing that setting now.)
5. Now press the **OK** button.
6. Your new settings are now saved.

ENTERING RECORDS BY TYPING COMMON NAME

1. Press the **ADD/EDIT RECORDS** button on the Main Menu to return to the Census Form. *The label below the Observers data field reminds you that an existing record is now on display; this message is meant to warn you against making inadvertent changes to any of the existing records stored in the database.*
2. *To clear the existing record from the screen and to begin the process of adding a new record*, press the **Add New** button on the Census Form.
3. Fill in the following Date and Site Location info: **5/5/1992** and **Mitchell Canyon**.
4. Press the [F2] key.
5. At the Observation Form, begin entering the name for **Western Wood-Pewee**. As you type each letter, the database uses your input to search the SPECIES table for the most likely match. The more letters you type, the more likely that the database will find a correct match. When the name of the species you want is displayed in the list, press [ENTER]. Pressing [ENTER] selects the species and places its entire name in the green label below the Common Name field.
6. Answer **Yes** when you are prompted to update your Life List.
7. Change the Number Seen from 1 to **4**.
8. In the Remarks field, enter **Singing**.
9. Press the **Add New** button. The record is saved to the database, and the screen is cleared for the next sighting entry.
10. Begin typing the name for **Great Horned Owl** in the Common Name field; when the name for this species appears in the list, press [ENTER].
11. Answer **Yes** when prompted to update your Life List.
12. Change the Number Seen from 1 to **2**.
13. In the Remarks field, enter **Calling at 0400 hrs**
14. Press **Save** to save the record to the database.
15. Press **Exit** to return to the Census Form, where your record for 5/5/1992 is on display.
16. Press **Add New** to add a new census record.
17. Fill in the following Date and Site Location info: **5/7/1992** and **Mt. Diablo State Park**.
18. Press the [F2] key.
19. At the Observation Form, begin entering the name for **Red-tailed Hawk** in the Common Name field. When the name for this species appears in the list, press [ENTER].
20. Answer **Yes** when you are prompted to update your Life List.
21. Change the Number Seen from 1 to **5**.
22. Press the **Add New** button. The record is saved to the database, and the screen is cleared for the next sighting entry.
23. Begin typing the name for **Western Wood-Pewee** in the Common Name field; when the name for this species appears in the list, press [ENTER].
24. Change the Number Seen from 1 to **2**.

25.   Press **Save** to save the record to the database.
26.   Press **Exit** two times to return to the Main Menu.
27.   Congratulations! You have completed your data entry for this tutorial.

Generating Reports

To begin generating reports, press the **REPORTS** button on the Main Menu. You will be taken to the Reports Menu. We will learn how to run three reports.

LIST OF SPECIES SEEN IN A DAY

To generate a list of species seen in a day, select the **SPECIES LISTS** menu and choose the **List of Species Seen in a Day** report, to *Include Site Name and Remarks*. Select **6/15/1987** from the list box that asks you to "Retrieve All Records Equal To This Date." By default, the report will display its output on the screen. Press **Run Report** to execute the report. A list of the three species seen on this date (i.e., Blue jay, American Crow, and Ovenbird) will be displayed along with other information that indicates how many individuals were observed and the location at which the observations were made. Press the [ESC] key to remove the display from the screen.

LIST OF SPECIES SEEN AT A SITE

To generate a list of species seen at Mitchell Canyon, select the **SPECIES LISTS** menu and choose the **List of Species Seen at a Specific Site ...** option; then select the **Execute Report for All Dates** report. Select **Mitchell Canyon** from the list box. Press **Run Report** to execute the report. A list of the two species (Great Horned Owl and Western Wood-Pewee) seen at this site will be displayed. Press the [ESC] key to remove the display from the screen.

To generate a list of species seen at Mt. Diablo State Park, select the **SPECIES LISTS** menu and choose the **List of Species Seen at a Specific Site ...** option; then select the **Execute Report for All Dates** report. Select **Mt. Diablo State Park** from the list box. Press **Run Report** to execute the report. A list of three species (Great Horned Owl, Red-tailed Hawk, and Western Wood-Pewee) will be displayed. Note that the Red-tailed Hawk shows up here (but not for the Mitchell Canyon report) because this observation was not assigned to the Mitchell Canyon site. This example displays some of the power of LANIUS Excalibur: by linking sites, you can always choose at what geographic scale to record your bird observations; in this case, a query of Mt. Diablo State Park sightings will <u>always</u> retrieve any observations for Mitchell Canyon. On the other hand, a query for Mitchell Canyon birds will <u>only</u> retrieve those sightings specifically assigned to that site.

Press the [ESC] key to remove the display from the screen.

Press **Exit Form** to return to the Main Menu.

Ending the Tutorial

This concludes the LANIUS Excalibur tutorial. To exit from the tutorial, access the **HELP** pull-down menu and click on **End Excalibur Tutorial**. Note that after you end the tutorial, the white warning label disappears and the Main Menu returns to its normal state.

You should note that the tutorial accesses a database file that is separate from your normal database file. If you ever want to experiment with the software program without compromising the integrity of your own personal bird sighting data, you can re-start the tutorial to make the tutorial database active. To do this, simply access the **HELP** pull-down menu and click on **Start Excalibur Tutorial**.

Tutorial Summary

In summary, to use the **LANIUS Excalibur Ornithological Database for the Natural World!**, you will want to take the following steps:

1.   Install the program on your computer. Start the program and access the user setting's **CD Drive** tab to specify (if necessary) the drive letter for your CD-ROM or DVD Drive.
2.   Take this tutorial.

3.	Take some time to understand the concept of Major and Minor Areas. See the Tutorial for more information.
4.	Exit from the tutorial after you complete all of the topics covered above.
5.	Organize your bird sightings for data entry:
	a.	Define and enter the Sites to which you plan on assigning bird records. See the section called **Data Entry Strategies** under **ADVANCED CONCEPTS**, in the User's Manual, for additional considerations you should be aware of when creating sites.
	b.	Especially consider how you will use the **General Location** site that ships with LANIUS Excalibur. See the section called **Data Entry Strategies** under **ADVANCED CONCEPTS**, in the User's Manual, for additional information on using the General Location site.
6.	Review the user setting options that are available in LANIUS Excalibur:
	a.	Entering Species Records: you have the option of entering species records by clicking on the names of each species on a Pick List Form <u>or</u> by entering the species one at a time in the Observation Form.
	b.	Specifying Number of Individuals Seen on the Pick List Form: when you decide to use the Pick List Form, you can tell LANIUS Excalibur to prompt you for the number of individuals seen. To do this, check the **Prompt for # of Birds Seen** box in the lower left hand corner of the form.
	c.	Identifying Species in the Observation Form: you have three options: identifying species by codes, by common name, or by Latin name. When identifying species by name, you also have the option to invoke the world list of species names at any time by accessing the **EDIT** menu, pressing **Edit User Settings ...** and clicking on **Invoke World List**.
	d.	Documentation Form: when using the Documentation Form, you can store settings that remember your name, address, phone number, and e-mail address. These values are stored in each Documentation record that you create.
7.	Ensure that your Default List is the North American List before you begin entering data. See the section called **Data Entry Strategies** under **ADVANCED CONCEPTS**, in the User's Manual, for additional information on the use of the Default List and on creating custom species lists.
8.	Prior to using the database, you should access the Reports Menu and run the BASIC reports that print out the names of Countries, Species, and the names for Major and Minor Areas. See the section called **Data Entry Strategies** under **ADVANCED CONCEPTS**, in the User's Manual, for additional information on the use of these reference data reports.
9.	Begin entering your observations. As you use the database, you will quickly gain familiarity with all of the powerful features in LANIUS Excalibur that will be at your fingertips.

You are now ready to begin using LANIUS Excalibur to record all of your world bird sightings!
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