Will County Ecological Database Manual

Ecological Database

Developed for the

Forest Preserve District Will County

by the Conservation Research Institute

funded by US Fish and Wildlife Service and the Forest Preserve District of Will County, Illinois

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Purpose of the Database

The primary purpose of this project was to develop for the Forest Preserve District of Will County a scientific **Relational Database Management System** (RDBMS) to aid efforts to conserve biodiversity and strengthen local government support. It will allow ecological management decisions to be made with a broader range and higher level of easily accessed scientific information of various sorts. The relational database organizes existing information in such a way that the Forest Preserve District can look at that information in new ways that will help them to identify conservation priorities. It will also help them to improve their management of natural communities and thus sustain native biodiversity, and it will enable them to evaluate past, present, and future management practices. The database system provides tools for the correlation and analysis of complex, interrelated data for management and restoration purposes. In addition to containing data that is specific to Will County sites owned and managed by the Forest Preserve District, the database system has basic information on the area's soils, plants, plant communities, wildlife, and endangered and threatened species.

Prototype Function

This RDBMS will serve as a prototype for a Chicago Wilderness scientific database, so that eventually this type of ecological data can be shared throughout the region. Access, part of the widely distributed Microsoft Office suite, was a logical choice for this prototype, as it is currently the database standard for many, if not most, of the partners in Chicago Wilderness, and it is currently in use in all six of the county forest preserve or conservation districts in the immediate Chicago area.

Scope of the Database

The Will County relational database management system specifically provides the following:

1. a relational database management system for ecological inquiry and analysis
2. a standardized, compatible information storage system for all types of data
3. a tool for quick and easy retrieval of data
4. tools for rapid comparison and analysis of complex ecological and biological relationships
5. a scientifically based tool for site management planning and execution
6. a tool to enable efficient and accurate exchange of information among agencies
7. a tool to direct and coordinate the gathering of basic ecological information on plants, animals, soils, plant communities, restoration techniques, etc.
8. a tool to increase accuracy and reliability in the gathering of ecological and restoration management information, including the state of plant communities
9. standards for information gathering and storage for the future
10. cross-references of existing information of various types

Computer Database Terms and Definitions

A database is a vehicle for storing information (data) about a particular topic or purpose, such as community health, bird-nesting requirements, ecosystem management, or watershed properties. This data is stored in a tabular format (table) consisting of columns and rows grouped according to similarities of data. A computer database management system (DMSA) stores and retrieves information in a database (a single table) on a computer, rather than on paper in a file cabinet where it is less accessible. A rela-

tional database management system (RDBMS) enables quick and easy storage, organization, and analysis of data from many databases that have been linked by user-defined relationships. These relationships are defined through queries, which ask questions or define criteria about the data in a number of related tables (a dynaset). The results of the queries can then be conveniently displayed in a generalized printable form or in a custom report format.

Uses and Potential

By means of queries, information in different databases can be compared and analyzed. The impact of burns on insect populations, for example, can be analyzed to determine the ideal management program for a site. If information is desired about a particular species of plant or animal, a customized program can provide the Latin and common names, identifying characteristics, associates, habitat information, a picture or illustration, and sites where it has been positively identified. A link can be made to a map to pinpoint a precise location and provide directions for getting there. Sensitive information, such as endangered species data, is available to those with special passcades.

Accurate entry and revision of material is made easy and reliable through customized data input forms that were developed for this project. These also serve to block duplicate entries, and they trigger an automatic update to all databases linked to the original.

A database management system contains its own unique information, but it can be linked to other such systems if there is a link to common types of information. Separate systems could be maintained independently, for example, by various member organizations of Chicago Wilderness, yet the data in each system could be accessed, if a common link exists, by any other user within a broader integrated constellation of database management systems. Databases (tables) and entire systems can also be readily transferred among cooperating database users through e-mail. Once this is done, the imported data from one user can be related to existing information in another's database.

Flexibility and Compatibility

This system is extremely flexible, as there is virtually no limit to the amount of data that can be stored, or to the number of databases or links that can be created and combined. In practice, of course, all programs are limited by hardware platforms and computer memory. It is the responsibility of any potential users to ensure that their hardware is capable of handling large amounts of information.

Access is fully compatible with other Microsoft programs, such as MSWord and Excel, and with a wide range of other software. Data in Access can be transferred (converted) to and from other database systems and spreadsheet programs. Access 2000 is SQL or web compatible, and it can be used with standard Geographical Information Systems (GIS), so there is full potential for spatial and graphic representation of the data.

The database is grouped by search type and data entry/analysis type.

Main Menu

 A. Specific Information Menu

   1. Specific Plant Information

   2. E/T Plant Species List

   3. Specific Wildlife Information

   4. E/T Wildlife Species List

   5. Specific Soil Information

   6. Specific Preserve Information

   7. Community Equivalence Information

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 B. Location/Distribution Menu

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   3. Update Preserve Information

   4. Update Document Information

 D. Add New Information Menu

   1. Add to Preserve Plant List

   2. Add to Preserve Soils List

   3. Add to Document List

   4. Add to INAI Information List

   5. Add to Preserve General List

   6. Add to Wildlife Master List

   7. Add to Preserve Wildlife

   8. Add to Burn Information

   9. Add to Preserve Insect List

 E. Documents Information

 F. Species Finder/Analyzer

   1. Plant List Analyzer

   2. Plant Species Finder

   3. Preserve Flora Analyzer

As mentioned in the previous section, the database is organized by 1) general search type, 2) data entry type, and 3) analysis type. These general types are options in the Menu Menu window, the first menu you will see upon opening the database. Here is how to navigate through the database.

You opened the database for a reason, right? What do you want to do? Let's say you want to find some information about a certain preserve. Because you want to search for information about a *specific* preserve, you will first click on the Specific Information option button in the Main Menu. That will take you to the Specific Information secondary menu, where you will click the Specific Preserve Information option button. This action will take you to the Specific Preserve Information form. Figure 1 illustrates this series of selections.

Figure 1. Steps to get to search or data forms
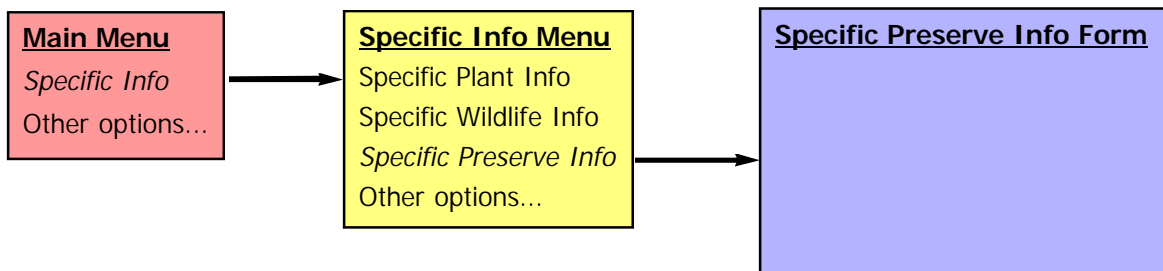
You will notice that many of the menus and forms feature a Help button which opens a Help information window. These will explain options or data fields and can help direct your choices. When opening a form for the first time, it is a good idea to look at the Help window to familiarize yourself with the form's features and options.

Each form has a Return to Main Menu or Close Form button that will close the form window and take you back to the Main Menu. Many forms also have a Help button that provides information about the interactive selection or entry fields.

Figure 2 shows the Main Menu, the first pop-up window you will see upon entering the database. The available selections direct you to the query or data modification options found in the secondary options menus. Click on the Help button (**Figure 2a**) for an explanation of the options.
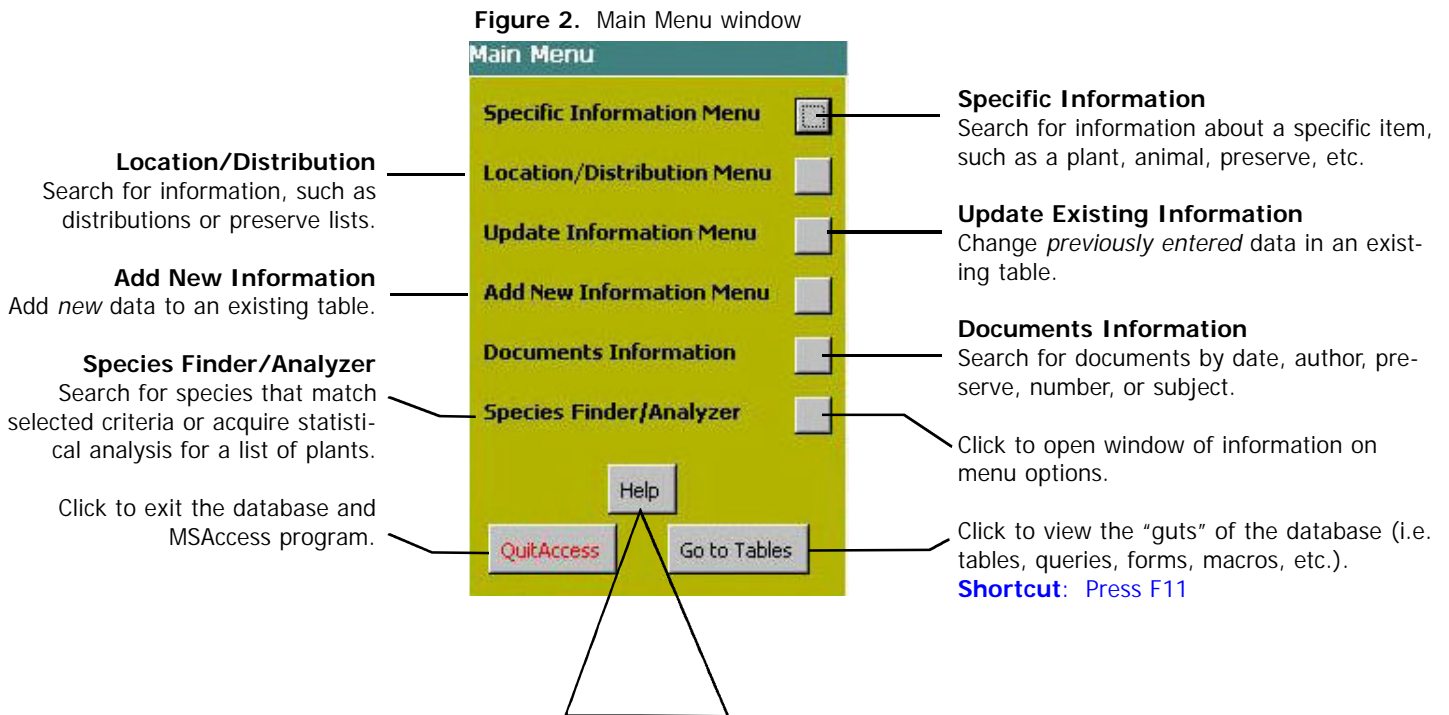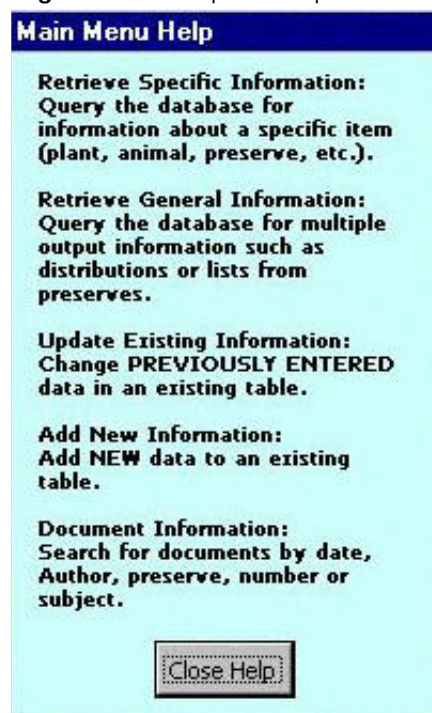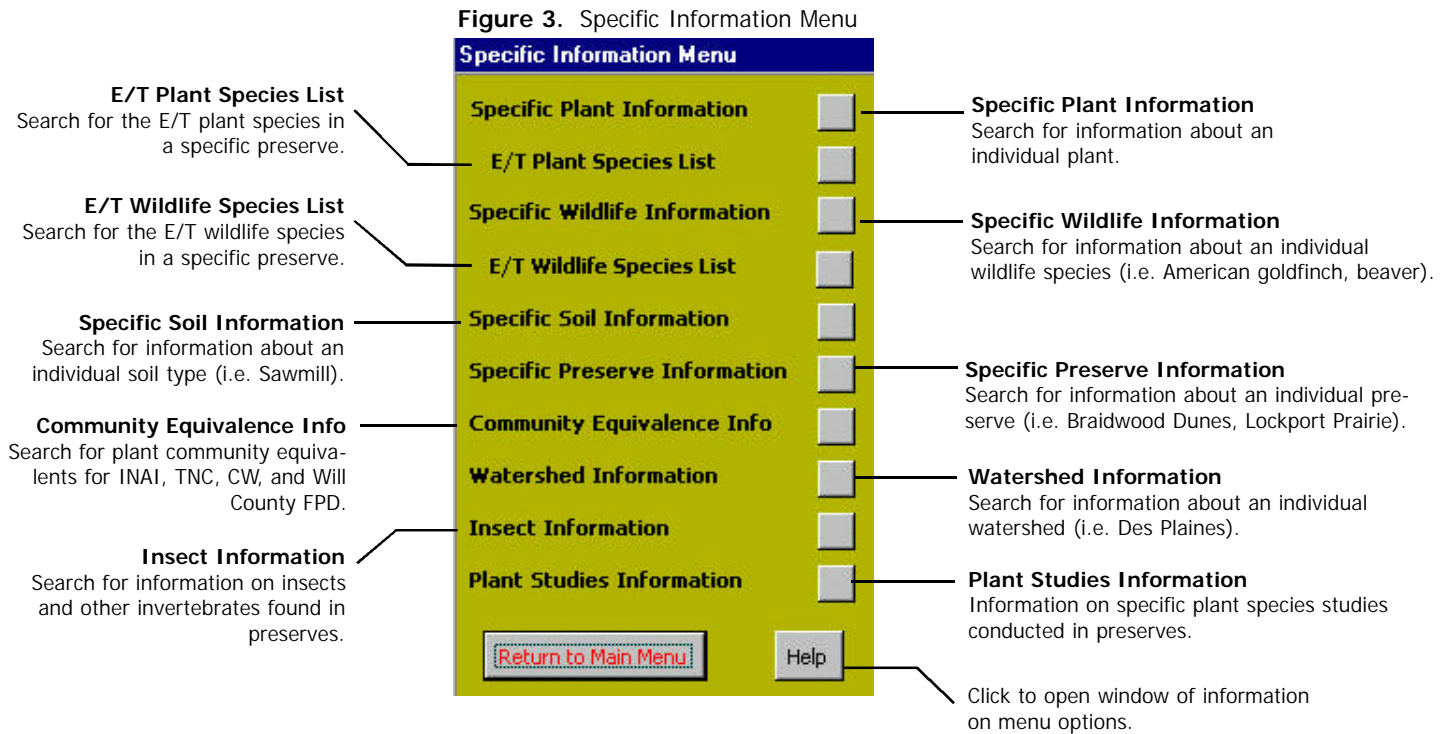
Figure 2. Main Menu window

Specific Information
Search for information about a specific item, such as a plant, animal, preserve, etc.

Update Existing Information
Change *previously entered* data in an existing table.

Documents Information
Search for documents by date, author, preserve, number, or subject.

Click to open window of information on menu options.

Click to view the "guts" of the database (i.e. tables, queries, forms, macros, etc.).
Shortcut: Press F11

Location/Distribution
Search for information, such as distributions or preserve lists.

Add New Information
Add *new* data to an existing table.

Species Finder/Analyzer
Search for species that match selected criteria or acquire statistical analysis for a list of plants.

Click to exit the database and MSAccess program.

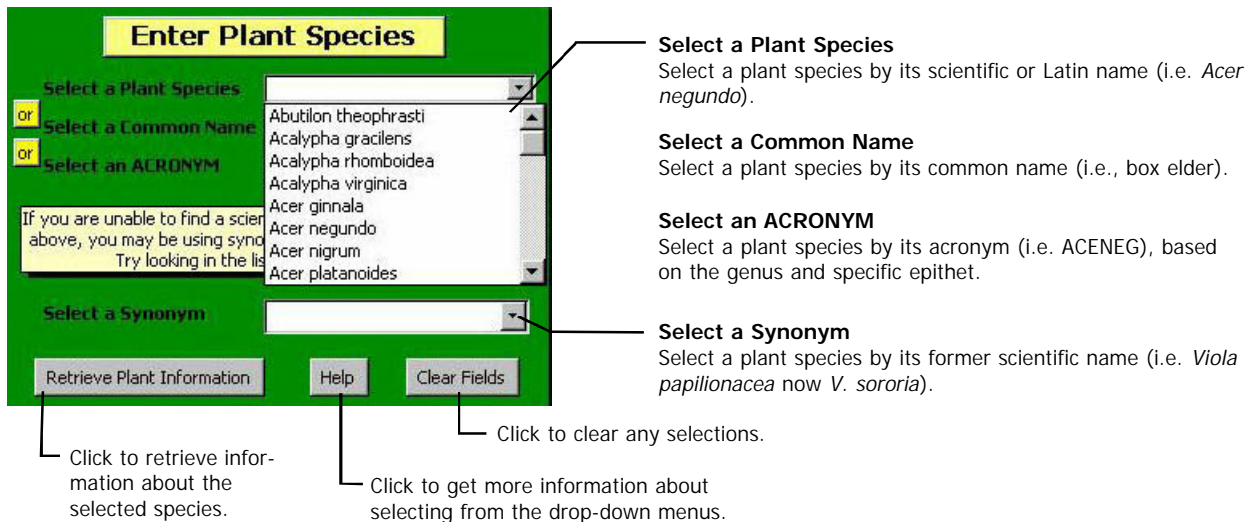**Figure 2a.** Example of Help window

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The menu shown in **Figure 3** provides a variety of database searching options for basic information on specific items (i.e. plant, animal, soil, preserve, etc.). Click the Help button to view more information about the available options.

Figure 3. Specific Information Menu

E/T Plant Species List
Search for the E/T plant species in a specific preserve.

E/T Wildlife Species List
Search for the E/T wildlife species in a specific preserve.

Specific Soil Information
Search for information about an individual soil type (i.e. Sawmill).

Community Equivalence Info
Search for plant community equivalents for INAI, TNC, CW, and Will County FPD.

Insect Information
Search for information on insects and other invertebrates found in preserves.

Specific Plant Information
Search for information about an individual plant.

Specific Wildlife Information
Search for information about an individual wildlife species (i.e. American goldfinch, beaver).

Specific Preserve Information
Search for information about an individual preserve (i.e. Braidwood Dunes, Lockport Prairie).

Watershed Information
Search for information about an individual watershed (i.e. Des Plaines).

Plant Studies Information
Information on specific plant species studies conducted in preserves.

Click to open window of information on menu options.

To search for information on a specific plant species, select the desired species from one of the four available drop-down lists (Plant Species, Common Name, Acronym, or Synonym) and click the Retrieve Plant Information button (**Figure A1a**). Details about the species are reported in the field on the right side of the form (**Figure A1b**). Click the Print Report to print a report of the search results.

Figure 4. Drop-down selection fields for Plant information

Select a Plant Species
Select a plant species by its scientific or Latin name (i.e. *Acer negundo*).

Select a Common Name
Select a plant species by its common name (i.e., box elder).

Select an ACRONYM
Select a plant species by its acronym (i.e. ACENEG), based on the genus and specific epithet.

Select a Synonym
Select a plant species by its former scientific name (i.e. *Viola papilionacea* now *V. sororia*).

Click to retrieve information about the selected species.

Click to get more information about selecting from the drop-down menus.

Click to clear any selections.

Figure 5. Search results for Plant Information

S/W (Swink & Wilhelm's) 4th Ed[ition] #1: Primary scientific or Latin name from *Plants of the Chicago Region*, 4th edition.

S/W 3rd Ed. #1: Primary scientific or Latin name from *Plants of the Chicago Region*, 3rd edition.

Mohlenbrock1: Primary scientific name from Mohlenbrock's *Guide to the Vascular Flora of Illinois.*

Common Name: Primary common name from *Plants of the Chicago Region*, 4th edition.

Family: Name of family to which plant species belongs.

Perennial?: Annual, biennial, or perennial.

"C" Value: Conservatism value as provided in *Plants of the Chicago Region*, 4th edition.

Endangered or **Threatened:** Status if state or federally listed.

FPD Areas Found: Number of preserves in which species is found.

S/W (Swink & Wilhelm's) 4th Ed[ition] #2: Secondary scientific or Latin name from *Plants of the Chicago Region*, 4th edition.

S/W 3rd Ed. #2: Secondary scientific or Latin name from *Plants of the Chicago Region*, 3rd edition.

Alternative(s) #1 and **#2:** Alternative common names from *Plants of the Chicago Region*, 4th edition and other sources.

Native?: Native or adventive.

Plant Type: Forb, grass, sedge, vine, tree, or shrub.

Wetness Type: Army Corps of Engineers' wetness classification. Click Help button to view descriptions of all wetness types.

Acronym: Plant species' six-letter acronym.

Click to go directly to the Plant Distribution form.

To search for information on a specific wildlife species, select the desired species from one of the two available drop-down lists (Wildlife Species or Common Name) (**Figure A2a**). Click on the Preview Report button to view a report of the search results (**Figure A2b**).

Figure A2a. Drop-down selection field for E/T Plant Species List

Select Area ID
Select a preserve by its Area ID or acronym.

Figure A2b. Example of species list printout

E/T Plant Species List

Braidwood Dunes and Savanna — BDS

Plant species	Endangered	Threatened	Document
Calopogon tuberosus	State		001
Calopogon tuberosus	State		004
Calopogon tuberosus	State		003
Calopogon tuberosus	State		010
Calopogon tuberosus	State		048
Drosera intermedia		State	001
Drosera intermedia		State	003
Drosera intermedia		State	004
Drosera intermedia		State	048
Drosera intermedia		State	010
Filipendula rubra	State		010
Tofieldia glutinosa		State	001
Tofieldia glutinosa		State	004
Tofieldia glutinosa		State	010
Tofieldia glutinosa		State	003
Vaccinium macrocarpon	State		048
Vaccinium macrocarpon	State		010

To search for information on a specific wildlife species, select the desired species from one of the two available drop-down lists (Wildlife Species or Common Name) (**Figure A3**). Details about the species will automatically appear in the fields below. Click on the Print Report button to print a report of the search results.

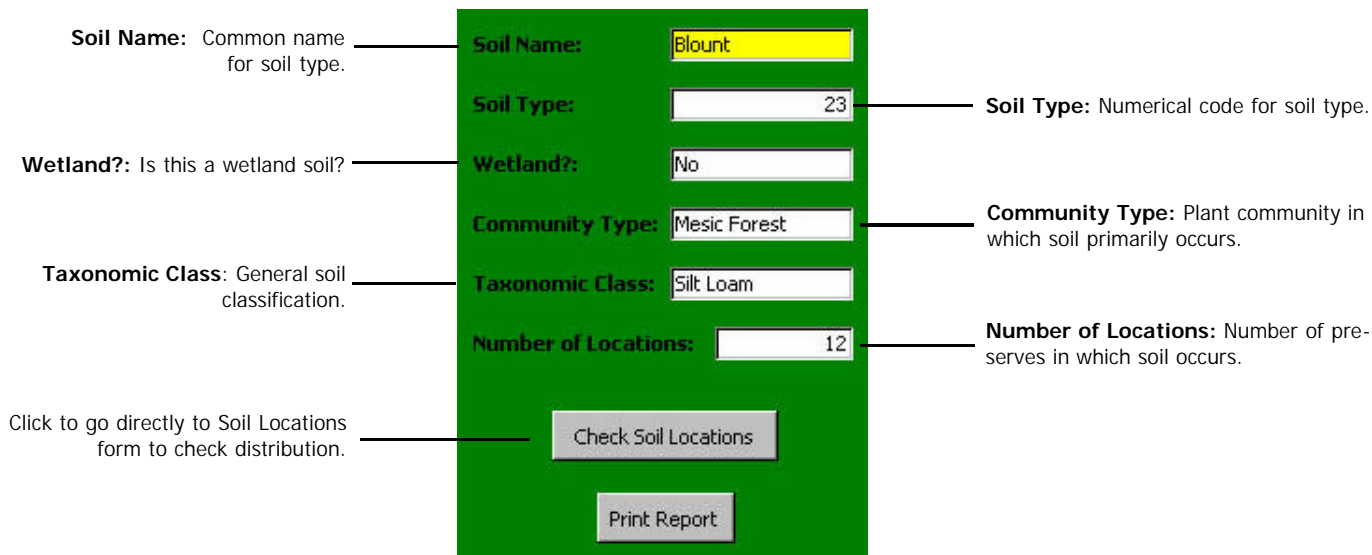**Figure A3.** Drop-down selection fields and search results for Wildlife Information.

Select Wildlife Species
Select a wildlife species by its scientific or Latin name (i.e., *Accipiter cooperii*).

Select Common Name
Select a wildlife species by its common name (i.e., Cooper's Hawk).

Wildlife Type: Type of species (i.e., bird, mammal, reptile).

Family: Family to which wildlife species belongs.

Wildlife Species: Scientific or Latin name of wildlife species.

Common Name: Common or English name.

Endangered or **Threatened:** Status if State or Federally listed.

Number of Locations: Number of preserves in which species is found.

Preferred Habitat: Primary habitat in which wildlife species occurs.

Secondary Habitat: Secondary habitat in which wildlife species occurs.

Enter a Wildlife Species

Select Wildlife Species:

OR

Select Common Name:

Wildlife Type:	Bird
Family:	Accipitridae
Wildlife Species:	Accipiter cooperii
Common Name:	Cooper's Hawk
Endangered:	
Threatened:	
Number of Locations:	13
Preferred Habitat:	
Secondary Habitat:	

Check Fauna Locations   Print Report   Clear Fields

Click on the Check Fauna Locations to go directly to the Fauna Location form.

Click to clear the drop-down selections.

To search for the list of endangered and/or threatened species in a preserve, select the desired preserve acronym from the drop-down list (**Figure A4a**). Click on the Preview Report button to view a report of the search results (**Figure A4b**).

Figure A4a. Drop-down selection field for E/T Wildlife Species List

Select Area ID
Select a preserve by its Area ID or acronym.

Figure A4b. Example of wildlife species list printout

Wildlife species	Type	Subtype	Endangered/Threatened	Document
Ammodramus henslowii	Bird		State Endangered	001
Asio flammeus	Bird		State Endangered	001
Circus cyaneus	Bird		State Endangered	010
Circus cyaneus	Bird		State Endangered	001
Emydoidea blandingii	Reptile		State Threatened	152
Laterallus jamaicensis	Bird		State Endangered	009
Laterallus jamaicensis	Bird		State Endangered	001
Sistrurus catenatus	Reptile		State Endangered	001

To search for information on a specific soil type, select the desired soil from the drop-down list (**Figure A5a**). Details about the soil will automatically appear in the fields below (**Figure A5b**). Click on the Print Report button to print a report of the search results.

Figure A5a. Drop-down selection field for Soil Information

Select a Soil Type
Select a soil type by its soil type number (i.e., 23).

Figure A5b. Search results for Soil Information

Soil Name: Common name for soil type.

Wetland?: Is this a wetland soil?

Taxonomic Class: General soil classification.

Click to go directly to Soil Locations form to check distribution.

Soil Type: Numerical code for soil type.

Community Type: Plant community in which soil primarily occurs.

Number of Locations: Number of pre-serves in which soil occurs.

To search for information on a specific preserve, select the desired Area ID from drop-down lists (**Figure A6a**). Details about the preserve will automatically appear in the fields below. To access other information about the preserve, such as flora, fauna, or insect species occurrences, click on one of the labeled tabs that run along the top of the form (**Figures A6b,c,d,e,f**). Each tab lists the name of the selected preserve at the top of the form and has a Close Form button at the bottom of the form that will take you back to the Main Menu. Click on the Print Report button located on the Preserve Info form to print a report of search results.

Figure A6a. Drop-down selection field for specific preserve and preserve search results for Preserve Info

Click each tab to access other information about the selected preserve.

Area ID: Select a preserve by its Area ID or acronym.

Area Acronym: Acronym given to preserve or area within a preserve.

Preserve Name: Full (official) name of preserve.

Watershed Name: Watershed in which preserve occurs.

Management Units: Number of management units in preserve.

Acreage: Total number of acres preserve covers.

Township: Township in which preserve occurs.

City: City in which preserve occurs.

Sector: Sector in which preserve occurs.

Division: Division in which preserve occurs.

Area ID	BDS
Area Acronym:	BDS
Preserve Name:	Braidwood Dunes a
Watershed Name:	Kankakee Sands
Management Units:	0
Acreage:	347
Township:	
City:	
Sector:	
Division:	

Figure A6b. Flora General search results

 # Plant Communities: Number of plant communities occurring in preserve.

Native CC: Mean native coefficient of conservatism.

Total CC: Total (native and adventive) mean coefficient of conservatism.

 # Native Species: Total number of native species.

Total # Species: Total number of native and adventive species ocurring in preserve.

%Conservatism: Percent of native species with coefficients of conservatism of 4 or greater.

E/T: Number of endangered and/or threatened plant species.

Native FQI: Native floristic quality index.

Total FQI: Total (native and adventive) flora quality index.

Native Wetness: Total (native and adventive) mean coefficient of wetness.

Total Wetness: Total (native and adventive) mean coefficient of wetness.

Wetness Category: Army Corp of Engineer's wetness category.

Inventory Year: Last year preserve was inventoried.

# Plant Communities:	12
Native CC:	5.81
Total CC:	5.73
# Native Species:	279
Total # Species:	275
%Conservatism:	0.83
E/T:	3
Native FQI:	96.42
Total FQI:	95.73
Native Wetness:	0.10
Total Wetness:	0.20
Wetness Category:	Facultative
Inventory Year:	1979

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Figure A6c. Fauna Info: Number of species in each faunal type occuring in selected preserve.

Mammals:	
Birds:	
Amphibians:	
Reptiles:	
Fish:	
State Endangered:	
State Threatened:	
Federal Endangered:	
Federal Threatened:	

Figure A6d. Non-Vascular: Number of species in each non-vascular plant type occurring in selected preserve.

Number of Fungi:	
Number of Mosses:	
Number of Lichens:	

Figure A6e. Invertebrates: Number of invertebrate species occuring in selected preserve.

Number of Invertebrates:	

Figure A6f. Flora Specific: Specific flora statistics, organized by native and adventive, for selected preserve.

% Native: Percentage of all preserve plant species that are native

% Tree: Trees

% Shrub: Shrubs

%Woody Vine: Woody vines

%Herb. Vine: Herbaceous vines

%Per. Forb: Perennial forbs

%Biennial Forb: Biennial forbs

%Ann. Forb: Annual forbs

%Per. Grass: Perennial grasses

%Ann. Grass: Annual grasses

%Per. Sedge: Perennial sedges

%Ann. Sedge: Annual sedges

% Cryptogam: Cryptogams (i.e., ferns)

Native		Adventive	
% Native:	98.60%	% Adventive:	1.40%
% Tree:	3.90%	% Tree:	0.00%
% Shrub:	8.20%	% Shrub:	0.40%
%Woody Vine:	0.70%	%Woody Vine:	0.00%
%Herb. Vine:	0.40%	%Herb. Vine:	0.00%
%Per. Forb:	59.10%	%Per. Forb:	0.40%
%Biennial Forb:	2.90%	%Biennial Forb:	0.00%
%Ann. Forb:	6.50%	%Annual Forb:	0.40%
%Per. Grass:	6.10%	%Per. Grass:	0.40%
%Ann. Grass:	0.70%	%Ann. Grass:	0.00%
%Per. Sedge:	6.50%	%Per. Sedge:	0.00%
%Ann. Sedge:	0.00%	%Ann. Sedge:	0.00%
%Cryptogam:	3.60%		

% Adventive: Percentage of all preserve plant species that are adventive

%Tree: Trees

%Shrub: Shrubs

%Woody Vine: Woody vines

%Herb. Vine: Herbaceous vines

%Per. Forb: Perennial forbs

%Biennial Forb: Biennial forbs

%Ann. Forb: Annual forbs

%Per. Grass: Perennial grasses

%Ann. Grass: Annual grasses

%Per. Sedge: Perennial sedges

%Ann. Sedge: Annual sedges

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To search for information on community equivalents, select the desired community type from one of the four available drop-down lists (Will [County], CW [Chicago Wilderness], INAI [Illinois Natural Areas Inventory], or TNC [The Nature Conservancy]) (**Figure A7a**). Equivalent community types will automatically appear in the results fields (**Figure A7b**). Click on the Print Report button to print a report of the search results.

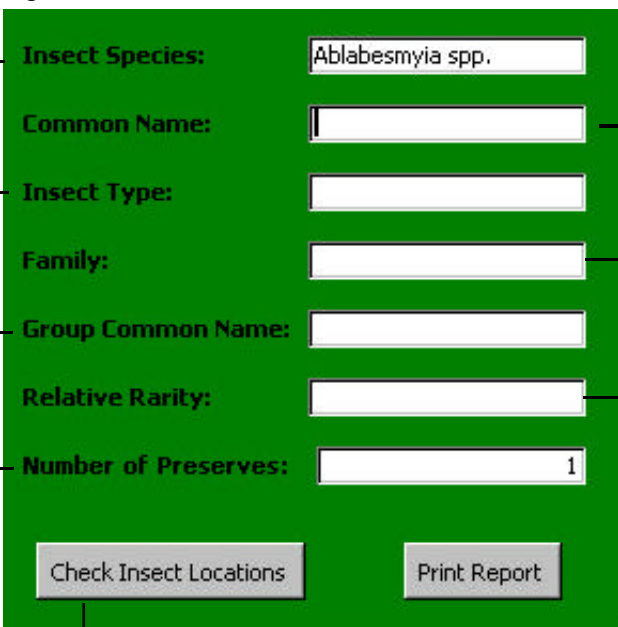**Figure A7a.** Drop-down selection fields for Community Equivalents Information.

Select Will Community Type
Select a plant community designated by Will County FPD

Select CW Community Type
Select a plant community designated by Chicago Wilderness

Select INAI Community Type
Select a plant community designated by Illinois Natural Areas Inventory

Select TNC Community Type
Select a plant community designated by The Nature Conservancy

Figure A7b. Search results for Community Equivalents Information.

Will Community Subtype: Will County plant community subtype.

CW Equivalent #1-3: Chicago Wilderness community equivalent(s), where applicable.

INAI Equivalent #1-4: Illinois Natural Areas Inventory community equivalent(s), where applicable.

TNC G-Rank: The Nature Conservancy global rank.

Click to go directly to Community Locations form to check community distribution.

TNC Equivalent: The Nature Conservancy community equivalent, where applicable.

Click to clear drop-down list.

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To search for information on a specific watershed, select the watershed from the drop-down list (**Figure A8a**). Details about the watershed will automatically appear in the results fields (**Figure A8b**). Click on the Print Report button to print a report of the search results.

Figure A8a. Drop-down selection field for Watershed Information

Select or Enter a Watershed Name:

Select Watershed Name
Select or type in a watershed name (i.e., Des Plaines).

Figure A8b. Search results for Watershed Information

Watershed Name: Name of selected watershed.

Number of Preserves: Number of preserves within watershed.

Number of Plant Species, Mammals, etc.: Total number of certain type of species occurring within watershed.

Number of Lakes: Number of lakes within watershed.

Total Acreage of Ponds: Total acreage of ponds within watershed.

Total Stream Length: Total feet of stream within watershed.

Watershed Name:	Des Plaines
Area Acronym:	DPS
Number of Preserves:	11
Total Acreage in Preserves:	1123
Number of Plant Species:	761
Number of Mammals:	13
Number of Birds:	154
Number of Fish:	0
Number of Reptiles:	15
Number of Amphibians:	9
Number of Invertebrates:	0
Number of Lakes:	0
Total Lake Acreage:	0
Total Acreage of Ponds:	0
Number of Permanent Streams:	0
Total Stream Length:	0

Print Report

Area Acronym: Preserve's Area Acronym.

Total Acreage in Preserves: Total number of acres in preserves within watershed.

Total Lake Acreage: Total acreage of lake communities within watershed.

Number of Permanent Streams: Total number of permanent (not ephemeral or intermittent) streams within watershed.

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To search for information on a specific insect species, select the species' scientific name from the drop-down list (**Figure A9a**). Details about the species will automatically appear in the results fields (**Figure A9b**). Click on the Print Report button to print a report of the search results.

Figure A9a. Drop-down selection field for Insect Information.

Select an Insect Species:

Select an Insect Species
Select an insect genus or species by its scientific or Latin name (i.e., *Ablabesmyia* spp.)

Figure A9b. Search results for Insect Information.

Insect Species: Scientific or Latin name of selected insect species.

Insect Type: General group to which species belongs (i.e. moths, skippers).

Group Common Name: Family group to which species belongs (i.e. Moths, Skippers).

Number of Preserves: Number of preserves in which species is found.

Insect Species: Ablabesmyia spp.

Common Name:

Insect Type:

Family:

Group Common Name:

Relative Rarity:

Number of Preserves: 1

Check Insect Locations   Print Report

Common Name: Common or English name.

Family: Family to which species belongs.

Relative Rarity: Numerical rating for how rare species is in Will County.

Click to go directly to Insect Locations form for distribution of a particular species.

To search for information on plant studies, select the desired criteria from one to all of the available drop-down lists (Study Area, Native or Adventive, Conservatism #, Wetness Category) (**Figure A10a**). Click on the Preview Full Report button to view and/or print a detailed report of the search results (**Figure A10b**). Click on the Preview Summary Report button to view and/or print a summary of the search results (**Figure A10c**).

Figure A10a. Drop-down selection fields for Plant Studies Information

Select a Study Area
Select which preserve is the subject of the study.

Select Native or Adventive
Select plant type.

Select a Conservatism #
Select a C (conservatism) value.

Select a Wetness Category
Select federal wetness category.

Click to clear any selections.

Figure A10b. Example of Full Report printout

Figure A10c. Example of Summary Report printout

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B. LOCATION/DISTRIBUTION MENU

The menu shown in **Figure B** provides a variety of database searching options. Click the Help button to view more information about the available options. Species or item distributions or species lists at selected location(s). Usually more than one parameter can be selected to narrow results.

Figure B. Options in ocations/Distributions Menu

Burn Histories
Search for information about dates, locations, and acreages of prescribed burns.

Plant Locations
Search for all locations for selected plant species or all plants at a specified location.

Wildlife Locations
Search for all locations for selected wildlife species or all wildlife at a specified location.

CW Community Locations
Search for locations of selected communities throughout entire Chicago Wilderness area.

Community Locations/Acreages
Search for all of the locations and acreages for specific or all communities at a specified location.

Soils Locations
Search for all locations for selected soil types or all soil types at a specified location.

Insect Locations
Search for all locations for selected insect species or all insects at a specified location.

To search for information on burn histories, select the desired criteria from those available in the drop-down lists (Area, Year, and/or Month) (**Figure B1a**). Multiple selections may be made to narrow search parameters. Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure B1b**).

Figure B1a. Drop-down selection fields for Burn Histories

Select an Area
Select preserve/area burned.

Select or Enter Year
Select or enter year of burn.

Select a Month
Select month during which burn occurred.

Click to clear any selections.

Figure B1b. Example of report printout

Prescribed Burn Information

Braidwood D   BCU

Acreage	Burn Type	Day	Month	Year	% Bur	Total Burn	Portion	DocNu
152.00	Prescribed	11	Novem	1999	0.95	144.4		159
152.00	Prescribed	12	March	1996	0.95	144.4		159
152.00	Wildfire	12	April	1989			Partial	159
152.00	Prescribed	7	April	1988	0.80	121.6	East	159
152.00	Prescribed	5	April	1988	0.76	115.52		159

Sum   760.00   **525.92**

To search for information on community locations and acreages, select the desired criteria from those available in the drop-down lists (Area[s], Community Type[s], and/or INAI Rating) (**Figure B2a**). Multiple selections may be made to either expand or limit the search parameters. Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure B2b**). Click on the Help button to view more information about the use of this form.

Figure B2a. Drop-down selection fields for Community Locations/Acreages

Select an Area Acronym
Select preserve/area.

Select a Third Area
Select an additional preserve/area (defaults to None).

Select a Community Type
Select plant community type.

Select a Third Community
Select an additional plant community type.

Select a Second Area
Select an additional preserve/area (defaults to None).

Select a Second Community
Select an additional plant community type.

Select an INAI Rating
Select INAI rating (i.e., A, B, etc.).

Click to preview report of search results.

Click to clear drop-down list.

Figure B2b. Example of report printout

To search for information on soil type locations and acreages, select the desired criteria from those available in the drop-down lists (Soil Type, Area, Wetland?, Community Type, and/or Slope) (**Figure B3a**). Multiple selections may be made to narrow search parameters. Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure B3b**). Click on the Help button to view more information about the use of this form.

Figure B3a. Drop-down selection fields for Soils Locations

Select a Soil Type
Select soil type by name (i.e., Sawmill).

Wetland? Enter Yes or No
Select whether or not you wish to view wetland soil (blank will render both).

Select Slope Code/Percent
Select NRCS (Natural Resources Conservation Service) slope code.

Select an Area Acronym
Select preserve/area acronym.

Select a Community Type
Select plant community type.

Click to view slope code equivalents.

Click to preview report of search results.

Click to clear drop-down list.

Figure B3b. Example of report print-out of forest soils with an NRCS slope code of "B".

Soil Distributions

Area	Area Name	Soil Name	Community Type	Soil Type	Slope	Wetland	Taxonomic Class	Document
BRA	Black Road Access	Rodman	Forest	313	B	No	Loam	93
MWP	McKinley Woods Preserve	Rodman	Forest	313	B	No	Loam	49

To search for information on wildlife locations, select the desired criteria from up to all of the following drop-down lists: Area, Wildlife Type, and Habitat Type) and one of the following two drop-down lists: Wildlife Species or Common Name (**Figure B4a**). (Multiple parameters may be selected unless otherwise noted by "OR"). Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure B4b**). Click on the Help button to view more information about the use of this form.

Figure B4a. Drop-down selection fields for Wildlife Locations

Select an Area
Select preserve/area.

Select a Wildlife Type
Select a wildlife type
(i.e. bird, reptile).

Select a Wildlife Species
Select a wildlife species by
scientific name.

Select a Common Name
Select a wildlife species by
common name.

Select a Habitat Type
Select plant community type.

Click to preview report
of search results.

Click to clear drop-down list.

Figure B4b. Example of report printout list of Goodenow Grove mammals.

Wildlife Locations

Area	Preserve Name	Wildlife Species	Family	Wildlife Type	Common Name	Preferred Habitat
GGN	Goodenow Grove Nature Preserv	Didelphis marsupialis	Didelphiidae	Mammal	Opossum	Woodlands
GGN	Goodenow Grove Nature Preserv	Glaucomys volans	Sciuridae	Mammal	Southern Flying Squirrel	Woodlands
GGN	Goodenow Grove Nature Preserv	Peromyscus leucopus	Cricetidae	Mammal	White-Footed Mouse	Woodlands
GGN	Goodenow Grove Nature Preserv	Scalopus aquaticus	Talpidae	Mammal	Eastern Mole	Woodlands
GGN	Goodenow Grove Nature Preserv	Sciurus carolinensis	Sciuridae	Mammal	Gray Squirrel	Woodlands

To search for information on insect locations, select the desired criteria from up to all of the following drop-down lists: Area, Insect Type, Insect Species, and Insect Family) (**Figure B5a**). Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure B5b**). Click on the Help button to view more information about the use of this form.

Figure B5a. Drop-down selection fields for Insect Locations.

Select an Area Acronym
Select preserve/area.

Select an Insect Species
Select an insect species by scientific name.

Select an Insect Type
Select an insect type
(i.e. butterfly, moth).

Select an Insect Family
Select an insect family name.

Click to preview report
of search results.

Click to clear drop-down list.

Figure B5b. Example of report printout.

Insect Information

Insect Species   Amblyscirtes vialis

BDS   Braidwood Dunes and Savanna

Type	Family	Common Name	Document Number
S	Hesperiidae	Roadside skipper	2
S	Hesperiidae	Roadside skipper	
S	Hesperiidae	Roadside skipper	7

Insect Species   Ancyloxypha numitor

BDS   Braidwood Dunes and Savanna

Type	Family	Common Name	Document Number
S	Hesperiidae	Least Skipper	7

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To search for information on community locations and acreages, select the desired criteria from one to all of the available drop-down lists (CW Community Type, CW County, and INAI Quality Rating) (**Figure B6a**). Multiple parameters may be selected to narrow search results. Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure B6b**).

Figure B6a. Drop-down selection fields for CW Community Locations.

Select a CW Community Type
Select a Chicago Wilderness plant community type.

Select an INAI Quality Rating
Select INAI rating (i.e., A, B, etc.).

Select a CW County
Select a Chicago Wilderness county.

Click to preview report of search results.

Click to clear drop-down list.

Figure B6b. Example of report printout

Chicago Wilderness Community Locations

CW Community Type: Graminoid Fen

Category: Wetland Communities   Subcategory: Fen

County	Community Name	Site Name	Size	Quality
Will	graminoid fen	Romeoville Prairie Nature Preser	1	B

Category: Wetland Community   Subcategory: Fen

County	Community Name	Site Name	Size	Quality
Will	graminoid fen	Romeoville Prairie Nature Preser	1	C

The menu shown in **Figure C** provides a variety of options for updating tables of existing data.

Figure C. Update Information Menu

Update Burn Histories
Update burn information.

Update Preserve Info
Update preserve/area information.

Update Preserve General Flora Info
Update preserve/area general flora information.

Update Document Info
Update document information.
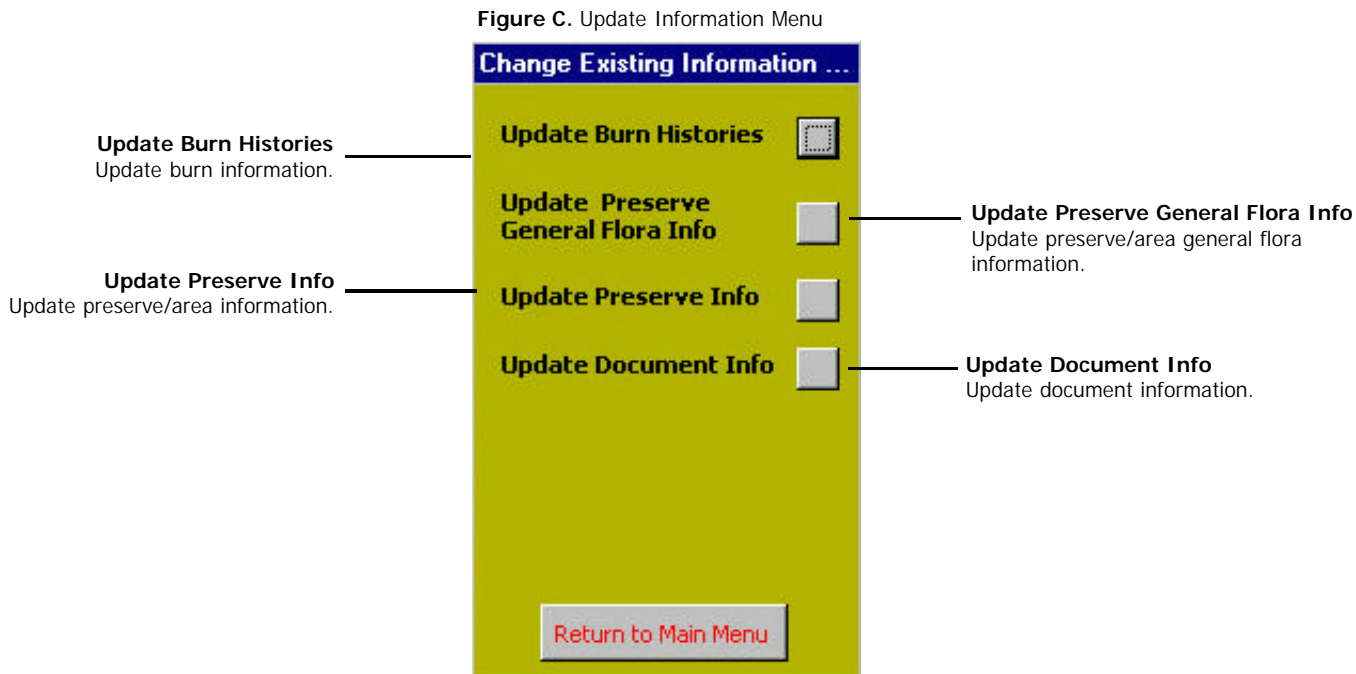
To update burn data, select an Area or Year from the drop-down list (**Figure C1**). Make the necessary changes to the data displayed, and click on the Save Changes button to save your updates.

Figure C1. Drop-down selection fields for Update Burn Histories

Enter an Area/Year
Select preserve/area acronym or year.

Acreage: Enter total acreage.

Day: Enter day (of the month).

Year: Enter year (in "YYYY" format, i.e., 1995).

Portion: Portion (acreage) of the area actually burned.

Area Info: Enter comments on the burn.

Burn Type: Type of burn conducted (defaults to prescribed).

Month: Enter month in numeric format (i.e., 1, 12).

% Burned: Enter percent of area burned.

Document Number: Number assigned to document.

Click to save your changes.

To update preserve general flora information, select a Preserve Acronym from the drop-down list (**Figure C2a**). The data in the fields below will be displayed. Make the necessary changes to the data, and click on the Save Changes button to save your updates (**Figure C2b,c**).

Figure C2a. Drop-down selection field for Update Preserve General Flora Information.

Enter an Area Acronym: **Then alter the information below as needed:**

Figure C2b. Entry fields for Update Preserve General Flora Information.

Year: Year of flora inventory

Mean CC: Mean native coefficient of conservatism.

Total Species: Total number of species (native + adventive).

E/T: Number of endangered and/or threatened plant species.

Conservatism: Percent of native species with coefficients of conservatism of 4 or greater.

Total FQI: Total (native and adventive) flora quality index.

Adv. Wetness: Total (native and adventive) mean coefficient of wetness.

Year:	1996
MSR:	
Mean CC:	3.68
Total CC:	2.72
Total Species:	219
Total Native Spp:	296
E/T:	0
Special Concern:	
Conservatism:	0.55
Native FQI:	54.60
Total FQI:	46.96
Native Wetness:	-1.20
Total Wetness:	-0.10
Wet. Category:	Facultative+

Save Changes

MSR: Mean Species Richness

Total CC: Total (native and adventive) mean coefficient of conservatism.

Total Native Spp: Total number of native species.

Special Concern: Number of special concern plant species.

Native FQI: Native floristic quality index.

Native Wetness: Native mean coefficient of wetness.

Wet. Category: Army Corp of Engineer's wetness category.

Click to save your changes.

Figure C2c. Entry fields for Update Preserve General Flora Information.

% Native: Percentage of all preserve plant species that are native

% Shrubs: Shrubs

% Herb. Vines: Herbaceous vines

%Bien. Forbs: Biennial forbs

%Per. Grass: Perennial grasses

%Per. Sedge: Perennial sedges

% Cryptogam: Cryptogams (i.e., ferns)

Number of Mosses: Number of mosses

Natives

% Native:	73.90%
% Trees:	5.40%
% Shrubs:	4.40%
% Woody Vines:	1.40%
% Herb. Vines:	1.00%
% Per. Forbs:	37.60%
% Bien. Forbs:	2.40%
% Annual Forbs:	9.50%
% Per. Grass:	4.70%
% Annual Grass:	1.40%
% Per. Sedge:	5.10%
% Annual Sedge:	0.70%
% Cryptogam:	0.30%
Number of Fungi:	
Number of Mosses:	
Number of Lichens:	

% Trees: Trees

%Woody Vines: Woody vines

%Per. Forbs: Perennial forbs

%Annual Forbs: Annual forbs

%Annual Grass: Annual grasses

%Annual Sedge: Annual sedges

Number of Fungi: Number of fungi (i.e. mushrooms)

Number of Lichens: Number of lichens

% Adventive: Percentage of all preserve plant species that are adventive

% Shrubs: Shrubs

% Herb. Vines: Herbaceous vines

%Bien. Forbs: Biennial forbs

%Per. Grass: Perennial grasses

%Per. Sedge: Perennial sedges

Adventives

% Adventive:	26.10%
%Trees:	1.70%
% Shrubs:	2.40%
% W. Vines:	0.30%
% Herb. Vines:	0.00%
% Per. Forbs:	7.40%
% Bien. Forbs:	4.70%
% Ann. Forbs:	4.70%
%. Per. Grass:	3.40%
% Ann. Grass:	1.40%
% Per. Sedge:	0.00%
% Ann. Sedge:	0.00%

% Trees: Trees

%Woody Vines: Woody vines

%Per. Forbs: Perennial forbs

%Annual Forbs: Annual forbs

%Annual Grass: Annual grasses

%Annual Sedge: Annual sedges

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To update preserve information, select a Preserve Acronym from the drop-down list (**Figure C3**). The data in the fields in the below will automatically update. Make the necessary changes to data, and click on the Save Changes button to save your updates.

Figure C3. Drop-down selection and entry fields for Update Preserve Information

Select a Preserve Acronym
Select preserve/area by its acronym

Size: Acreage of preserve.

City: City in which preserve is located.

Division: Division in which preserve is located.

Lake acreage: Total acreage of lakes in preserve.

 # Streams: Number of streams in preserve.

Trails Length: Total length of traisl (in lineal feet).

Screenings trails: Number of lime-stone screenings trails.

Select a Preserve Acronym:

Then change information below as needed

Preserve Name: Allesio Prairie Preserve
Size: 13
Township:
City:
Sector:
Division:
Lakes: 0
Lake acreage: 0
Ponds: 0
Streams: 0
Stream length: 0
Trails length: 0
Grass trails: 0
Screenings trails: 0
Asphalt trails: 0

Save Changes

Township: Township in which preserve is located.

Sector: District sector in which preserve is located.

 # Lakes: Number of lakes in preserve.

 # Ponds: Number of ponds in preserve.

Stream Length: Total length of stream (in lineal feet).

Grass trails: Number of grass trails.

Asphalt trails: Number of asphalt trails.

Click to save your changes.

To update document information, select a Document Number from the drop-down list (**Figure C4**). Make the necessary changes to the data displayed, and click on the Save Changes button to save your updates.

Figure C4. Drop-down selection and entry fields for Update Document Information

Enter a Document Number
Select number assigned to document.

Enter a Document Number:

Then change document information below as necessary and press the "Save Changes" button.

Enter a New Document Number:
Update document number, if necessary.

Enter a New Document Number: 001

Enter Another Year: 1983

Enter Another Year:
Update year, if necessary.

Enter a Revised Document Name:
Update document name.

Enter a Revised Document Name: Lockwood, Riggs, Paulson, Bowles, and Keesy. 1983. Master Plan for Braidwood Dunes and Savanna Nature Preserve. Unpublished Master Plan. The Natural Land Institute.

Enter a New File Location: Cabinet 47

Enter a New File Location:
Update file location.

Click to save your changes.

Save Changes

Close this Form

This menu displays options for adding information to existing data tables (i.e. new plants found in a preserve) (**Figure D**).

Figure D. Select table to add new records.

Add to Preserve Plant List:
Add new record(s) to preserve/area plant species records.

Add to Document List:
Add new record(s) to document records.

Add to Preserve General List:
Add new record(s) to preserve/area general information records.

Add to Preserve Wildlife:
Add new record(s) to preserve/area wildlife records.

Add to Preserve Insect List:
Add new record(s) to preserve/area insect records.

Add Information Menu

- Add to Preserve Plant List
- Add to Preserve Soils List
- Add to Document List
- Add to INAI Info List
- Add to Preserve General List
- Add to Wildlife Master List
- Add to Preserve Wildlife
- Add to Burn Info List
- Add to Preserve Insect List

Return to Main Menu

Add to Preserve Soils List:
Add new record(s) to preserve/area soils records.

Add to INAI Info List:
Add new record(s) to INAI information records.

Add to Wildlife Master List:
Add new record(s) to wildlife species master list.

Add to Burn Info List:
Add new record(s) to burn information records.

To add a new species to a preserve's plant list, enter the preserve/area's acronym and the appropriate document number in the entry fields and select the new plant species from the drop-down list (**Figure D1**). Click on the Add New Record button to save your update. To add additional new records, repeat the above steps for each record.

Figure D1. Entry fields for Add to Preserve Plant List

Enter the Area Acronym:
Enter preserve/area acronym.

Enter Document Number:
Enter new document number.

Enter Plant Species:
Select plant species from drop-down menu.

Enter the Area Acronym:

Enter Document Number:

Enter Plant Species:

Add New Record   Close this Form

Click to add the new data to the table.

To add a new soil to a preserve's soils list, enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D2**).

Figure D2. Entry fields for Add to Preserve Soils List

Enter the Area Acronym:
Enter preserve/area acronym.

Enter a Document Number:
Enter the document number from which the information was derived.

Enter the Soil Type:
Enter the NRCS soil type code (i.e., 23).

Enter the Slope Code:
Enter the NRCS soil slope (i.e., D or F).

Enter the Erosion Code:
Enter the NRCS soil erosion code (i.e. 2 or 3).

Click to add the new data.

To add a new document to the documents list, enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D3**).

Figure D3. Entry fields for Add to Documents List

Enter a Document Number:
Enter the number assigned to new document.

Enter the Document Name:
Enter the new document's title/name.

Enter a Year: Enter the year the document was published.

Enter the File Location:
Enter the location where the file is stored.

Click to add the new data.

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To add new information to the INAI information list, enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D4**).

Figure D4. Entry fields for INAI Information List

Enter an Area Acronym:
Enter preserve/area acronym.

Enter a Will County Community Code: Enter a plant community code designated by Will Co. FPD.

Enter the Acreage:
Enter the site's total acreage.

Enter the INAI Rating:
Enter INAI rating (i.e., A, B, etc.).

Click to add the new data

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To add a new preserve to the preserve general list, enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D5**).

Enter a New Area Acronym: Enter three-letter preserve/area acronym.

Enter a Preserve Name: Enter preserve/area name.

Enter a Preserve Size: Enter acreage of preserve/area.

Enter a Township: Enter township.

Enter a City: Enter city.

Enter a Watershed Name: Enter name of watershed.

Enter a Sector: Enter sector in which area resides.

Enter a Division: Enter division.

Figure D5. Entry fields for Preserve General List

Enter # Lakes: Enter number of lakes in preserve/area.

Enter Total Lake Acreage: Enter total acreage of lake(s).

Enter # Ponds: Enter number of ponds.

Enter # Permanent Streams: Enter number of permanent (nonephemeral) streams.

Enter Total Stream Length: Enter total linear feet of stream(s).

Enter Total Trails Length: Enter total linear feet of trail.

Enter Grass Trails Length: Enter total linear feet of grass trail.

Enter Screenings Trails Length: Enter total linear feet of screenings trail.

Enter Asphalt Trails Length: Enter total linear feet of asphalt trail.

Click to add the new data.

To add a new species to the wildlife master list, enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D6**). To add multiple records (a list), repeat the above steps for each record.

Figure D6. Entry fields for Add to Widlife Master List

Enter a Wildlife Species: Enter a wildlife species' scientific or Latin name (i.e., *Accipiter cooperii*).

Wildlife Type: Type of species (i.e. bird, mammal, reptile).

Secondary Habitat: Secondary habitat in which wildlife species occurs.

Common Name: Common or English name.

Preferred Habitat: Primary habitat in which wildlife species occurs.

Tertiary Habitat: Tertiary habitat in which wildlife species occurs.

Wildlife Family: Family to which wildlife species belongs.

Enter a Wildlife Species:
Enter a Common Name:
Enter a Wildlife Type:
Enter a Preferred Habitat:
Enter a Secondary Habitat:
Enter a Tertiary Habitat:
Enter a Wildlife Name:
Enter a Wildlife Family:

Add New Record   Close this Form
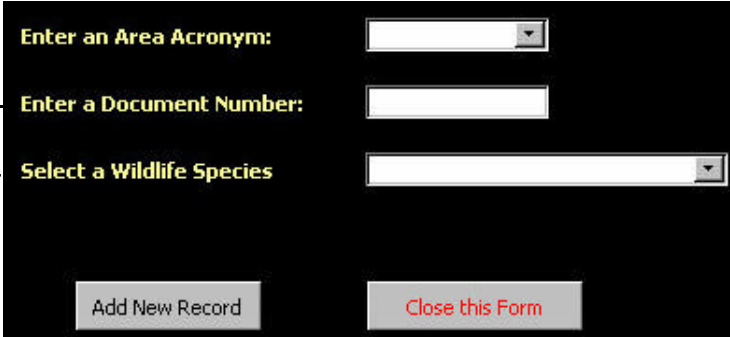
Click to add the new data.

To add a new species to a preserve's wildlife list, select or enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D7**). To add multiple records (a list), repeat the above steps for each record.

Enter an Area Acronym:
Select preserve/area acronym.

Enter a Document Number: Enter number assigned to new document.

Select a Wildlife Species: Select wildlife species' scientific or Latin name (i.e., *Accipiter cooperii*).

Figure D7. Entry fields for Add to Preserve Wildlife List

Enter an Area Acronym:

Enter a Document Number:

Select a Wildlife Species

Add New Record   Close this Form

To add new burn information, enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D8**).

Figure D8. Entry fields for Add to Burn Information

Area ID: Enter preserve/area three-letter acronym.

Acreage: Enter total acreage of burn.

Day: Enter numerical day (of the month) of burn.

Year: Enter year of burn (in "YYYY" format, i.e., 1995).

Portion: Portion burned.

Area Info: Enter any comments on burn area.

Burn Type: Type of burn conducted (defaults to prescribed; could be wildfire).

Month: Enter month in numeric format (i.e., 1, 12).

% Burned: Enter percent of area burned.

Document Number: Enter the number assigned to the document.

Click to add the new data.

To add a new species to a preserve's insect list, select or enter the appropriate data into the entry fields, and click on the Add New Record button to save your update (**Figure D9**).

Figure D9. Entry fields for Preserve Insect List

Enter an Area Acronym:
Select preserve/area acronym.

Select an Insect Species: Select insect
species' scientific or Latin name

Enter a Document Number: Enter number
assigned to new document.

To search for a document, select the desired criteria from those available in the drop-down lists (**Figure Ea**). Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure Eb**). Multiple entries are permissible.

Figure Ea. Drop-down selection fields for Documents Information

Select a Document Number: Select document by its assigned number.

Select a Year: Select a year to see what document(s) were published at that time.

Select a Subject: Select content subject to see documents with information on that subject.

Select a Document Number:

Select an Author:

Select a Year:

Select an Area Acronym:

Select a Subject:

Preview Report   Clear Fields

Select an Author: Select an author to see document(s) written by that person.

Select an Area Acronym: Select preserve (by acronym) that was included in document.

Click to preview report of search results.

Click to clear drop-down list.

Figure Eb. Example of Document Information search results printout

Find Documents

078   *Taft. 1987. Thorn Creek Woods Nature Preserve Master Plan Appendices K and L. Illinois Department of Energy and Natural Resources, State Natural History Survey Division*

Year	Location	Author	Area ID	Subject
1996	NR File Cabinet copy in Cabinet	Taft	TCW	Birds

156   *Milosevich 1996. Breeding Bird Survey, McKinley Woods Preserve.*

Year	Location	Author	Area ID	Subject
1996	NR File Cabinet	Milosevich	MWP	Birds

This menu includes options for 1) acquiring floristic quality assessment information (FQI, CW, CC, etc.) for entered or existing species lists, and 2) finding one or more plant species meeting selected criteria (**Figure F**).

Figure F. Options in Finder/Analyzer Menu

Plant List Analyzer
Searches for information about a list of species.

Preserve Flora Analyzer
Searches for general statistics about a list of species from a preserve.

Plant Species Finder
Lists single or multiple species meeting entered criteria.

To create and analyze (via FQA [Floristic Quality Analysis]) a list of plants, enter plants one at a time, then select the desired criteria from those available in the drop-down lists to analyze the list (**Figure F1a**). Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure F1b**).

Figure F1a. Drop-down selection fields for Plant List Analyzer

Select a Plant Species
Select plant species by scientific or Latin name.

Click to add to temporary plant list table.

Select Native or Adventive:
Select native or adventive.

Select a Plant Type: Select forb, grass, sedge, vine, tree, shrub, or cryptogam.

Select Wetness Category:
Select Army Corps of Engineers' wetness classification (i.e., obligate wetland).

Click to see a temporary plant list table for analysis using the parameters below.

Annual/Biennial/Perennial:
Select plant characteristic.

Select Conservatism Number: Select conservatism value as provided in *Plants of the Chicago Region*, 4th ed.

Click to preview report of search results

Click to delete plant data in table

Select Plant Species:

Add Record   Open Plant List Table

Select Native/Adventive:

Annual/Biennial/Perennial:

Select a Plant Type:

Select Conservatism Number:

Select Wetness Category:

Preview Report   Delete Table Data   Close Form

Figure F1b. Example of Plant List Analyzer results printout

Plant List Analysis

Adventive

Annual   **forb**

	Count of Species	Avg Conservatism	Avg Wetness
	3	0	1.66666666667

Summary for forb (1 detail record)
 Total Species   3
 % of Total   23.08%
Summary for Annual (1 detail record)
 Total Species   3
 % of Total   23.08%

Biennial   **forb**

	Count of Species	Avg Conservatism	Avg Wetness
	2	0	2.5

Summary for forb (1 detail record)
 Total Species   2
 % of Total   15.38%
Summary for Biennial (1 detail record)
 Total Species   2
 % of Total   15.38%

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Find single or multiple species by their characteristics useful for creating a list of species meeting desired criteria (**Figure F2a**). Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure F2b**).

Figure F2a. Drop-down selection fields for Plant Species Finder

Select Native or Adventive: Native or adventive.

Annual/Biennial/Perennial: Select plant characteristic

Select a Plant Type: Forb, grass, sedge, vine, tree, shrub, or cryptogam.

Select Conservatism Number: Conservatism value as provided in *Plants of the Chicago Region*, 4th edition. Last four fields default to the number 12. If you want more than one number, change the 12 to the desired digit.

Select Wetness Category: Army Corps of Engineers' wetness classification (i.e. obligate wet).

Click to preview report of search results

Click to clear drop-down list

Figure F2b. Example of Plant Finder results printout.

Plant Finder

Plant species	ACRONYM	Common Name	Native/Ad	Annual/B/P	Physiognomy	C Value	Wet
Adlumia fungosa	ADLFUN	ALLEGHENY VINE	Native	Biennial	forb	10	5
Arabis canadensis	ARACAN	SICKLE POD	Native	Biennial	forb	10	5
Arabis glabra	ARAGLA	TOWER MUSTARD	Native	Biennial	forb	6	5
Arabis laevigata	ARALAE	SMOOTH BANK CRESS	Native	Biennial	forb	5	5
Arabis missouriensis deamii	ARAMID	MISSOURI ROCK CRESS	Native	Biennial	forb	10	5
Artemisia caudata	ARTCAU	BEACH WORMWOOD	Native	Biennial	forb	5	5
Cirsium altissimum	CIRALT	TALL THISTLE	Native	Biennial	forb	6	5
Cirsium discolor	CIRDIS	PASTURE THISTLE	Native	Biennial	forb	2	5
Cirsium pitcheri	CIRPIT	DUNE THISTLE	Native	Biennial	forb	10	5
Corydalis flavula	CORFLA	PALE CORYDALIS	Native	Biennial	forb	8	5
Corydalis sempervirens	CORSEM	PINK CORYDALIS	Native	Biennial	forb	10	5

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To run general statistics for a list of species found in a selected preserve, select a preserve from the drop-down menu (**Figure F3a**). Click on the Preview Report button to view and/or print a detailed report of the search results (**Figure F3b**).

Figure F3a. Drop-down selection field for Preserve Flora Analyzer

Select a Preserve: Select preserve/ area

Figure F3b. Resulting Preserve Flora Summary report

Preserve Flora Summary

Preserve Name   Braidwood Dunes and Savanna   BDS

Count of Species	Native/Adventi	Annual/Bi/Perenni	Physiognomy	Percent of total
3	Native	Annual	sedge	1.08%
4	Adventive	Biennial	forb	1.43%
13	Adventive	Perennial	forb	4.66%
7	Adventive	Perennial	grass	2.51%
2	Adventive	Perennial	shrub	0.72%
1	Adventive	Perennial	tree	0.36%

WILL COUNTY DATABASE CONTENTS

TABLES and FIELDS

1. Alternative Common Plant Names
   - Plant Species
   - Common Name
   - Alternative #1
   - Alternative #2
2. Area/Doc
   - Document Number
   - Area ID
3. Author/Doc
   - Document Number
   - Author
4. Chicago Wild Plant Community Types
   - CW Community Category
   - CW Community Subcategory
   - CW Community Type
   - Native   (yes or No)
   - Wetland   (yes or No)
5. Common Plant Names List
   - Plant Species
   - Common Names
6. Community Type (CW)
   - Site Name
   - County
   - Size   (# acres)
   - Size Data Source
   - Quality   (INAI)
   - County Community Name
   - CW Subcategories
   - CW Category
   - Auto Number
7. Count of Preserve Animals
   - Area ID
   - Mammals
   - Birds
   - Amphibians
   - Reptiles
   - Fish
   - Invertebrates
   - State Endangered
   - State Threatened
   - Federal Endangered
   - Federal Threatened
8. CW Comm - Alpha
   - CW Community Type   (Alphabetized)
9. CW plant Equivalents
   - Plant Species   (Swink & Wilhelm 4th Edition 1)
   - S/W 4th Edition 2
   - S/W 3rd Edition 1
   - S/W 3rd Edition 2
   - Mohlenbrock 1
   - Mohlenbrock 2
10. Documents
    - Document Number
    - Year
    - Document Name
    - Location

11. Federal Wetness Category
    - COW   (coefficient of wetness)
    - Wetness   (category)
    - Wetness Type
12. Forest Preserve General Information
    - Area ID
    - Preserve Name
    - Size
    - Township
    - City
    - Watershed Name
    - Sector
    - Division
    - Management Units
    - # Lakes
    - Lakes Acreage   (total)
    - # Ponds
    - # permanent Streams
    - Stream Length   (total)
    - Trails Length   (total)
    - Grass Trails   (total length)
    - Screening Trails   (total length)
    - Asphalt Trails   (total length)
13. INAI Communities
    - INAI Natural Community   (Alphabetized)
14. INAI Plant Community Types
    - INAI Community Type
    - INAI Community Subtype
    - INAI Natural Community
15. Lichens - Hyer   (from Hyesceck)
    - Lichen Species
    - Physiognomy
    - Substrate C   (corticolus)
    - Substrate L   (lignicolus)
    - Substrate S   (saxcicolus)
    - Substrate T   (terricolus)
    - Document Number
16. lichens 1
    - Lichen Species
    - Physiognomy
    - Substrate
17. Master - Invertebrates
    - Insect Species
    - Common Name
    - Type
    - Order
    - Family
    - Common Group Name
    - RR   (Relative Rarity)
18. Master - Mussels
    - Mollusk Species
    - Common Name
    - E
    - T
    - W
19. Master Lichen List
    - Lichen Species

20. Master plant List
- Plant Species
- Common Name
- Family
- NAT/ADV
- A/B/P
- PHYSIOG
- C
- W
- WETNESS
- ACRONYM

21. Master Soil List
- Soil Type
- Soil Name
- Wetland
- Community Type
- Taxonomic Class

22. Plant Community Equivalents
- Will Community Subtype
- CW Community Type
- CW Second Community
- CW Third Community
- INAI Natural Community
- INAI Second Community
- INAI Third Community
- INAI Fourth Community
- TNC Name
- TNC G-Rank

23. Plant Species Table
- Plant Species
- Counter

24. Plant Studies
- Area ID
- Plant Species
- Document Number
- Relative Abundance

25. Plant Synonyms
- Plant Species
- Synonym

26. Preserve Areas INAI Quality Assessment
- Area ID
- Will Community Code
- Acreage
- INAI Rating

27. Preserve Crustacea Species
- Preserve Acronym
- Crust Species
- Document Number

28. Preserve Flora Information - General
- Area ID
- Year
- MSR
- Mean CC
- TCC
- TS
- TNS
- E/T
- Special Concern
- Conservatism

NFQI
AFQI
NW
AW
W Category
% Native
% Adventive
% N Trees
% N Shrubs
% NW Vines
% NH Vines
% NP Forbs
% NB Forbs
% NA Forbs
% NP Grass
% NA Grass
% NP Sedge
% NA Sedge
% Cryptogam
Number of Fungi
Number of Mosses
Number of Lichens
% A Trees
% A Shrubs
% AW Vines
% AH Vines
% AP Forbs
% AB Forbs
% AA Forbs
% AP Grass
% AA Grass
% AP Sedge
% AA Sedge

29. Preserve Fungi List
- Area ID
- Plant Species
- Plant Type
- Common Name
- Family
- Document Number

30. Preserve Invertebrates List
- Preserve ID
- Insect Species
- Document Number

31. Preserve Lichen List
- Area ID
- Lichen Species
- Document Number

32. Preserve Mosses
- Area ID
- Plant Species
- Plant Type
- Collection #
- Document Number

33. Preserve Plant Lists
- Area ID
- Plant Species
- Document Number

34. Preserve Plants (Genus only identified)
- Area ID
- Plant Type
- Plant Genus
- Document Number

35. Preserve Soil Types
- Area ID
- Soil Type
- Slope Code
- Erosion Code
- Document Number

36. Preserve Wildlife Lists
- Area ID
- Wildlife Species
- Document Number

37. Pres Total Flora
- Area ID
- Plant Species
- Species Count

38. Soil Slope List
- Slope Code
- Percent Slope

39. State & Federal E&T Animals
- Wildlife Type
- Wildlife Subtype
- Wildlife Species
- Endangered
- Threatened

40. State & Federal E&T Plants
- Plant Species
- Endangered
- Threatened

41. Subject/Doc
- Document Number
- Subject

42. TNC Comm - Alpha(betized)
- TNC Name

43. TNC Plant Comm - Alpha
- TNC Name

44. Watershed General Information
- Area ID
- Watershed Name
- Size
- Preserves
- Plants
- Mammals
- Birds
- Fish
- Reptiles
- Amphibians
- Invertebrates

45. Wildlife Breeding Information
- Area ID
- Wildlife Species
- Document Number
- Breeding
- Breeding Details

46. Wildlife Master List
- Wildlife Species
- Common Name
- Wildlife Type
- Preferred Habitat
- Secondary Habitat
- Tertiary Habitat
- Family
- Field 4
- Field 5
- Field 6

47. Wildlife Species Conversions
- Wildlife Species
- Old Species
- Common Name
- Wildlife Type

48. Will County Burn information
- Area ID
- Area Info
- Acreage
- Burn Type
- Day
- Month
- Year
- % Burned
- Portion
- Document Number

49. Will County INAI Sites
- SITE NAME
- County
- Total Acreage
- Status
- INAI Community Type
- INAI notes
- Acres
- Grade
- CW Category
- CW Community Type
- Ownership
- CW Subcategory

50. Will County Mosses
- Plant Type
- Moss Species
- Common Name
- a/p
- Habitat
- Conservative
- Source Document #

51. Will County Non-vascular Plants
- Plant Species
- Plant Type

52. Will County Plant Community Types
- Will Community Type
- Will Community Subtype
- Will Community Code

QUERIES and LINKED TABLES

FORMS and LINKED TABLES OR QUERIES

44. Update Document Files   Table 10
45. Update General Flora Info   Table 28
46. Update Menu
47. Update Preserve Info   Table 12
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49. Wetness Information
50. Wildlife Info Input   Query 25
51. Wildlife Locations   Query 26
52. Pres E/T Plants   Query 36
53. Pres E/T Wildlife   Query 37
54. SubformArea/Doc   Form 44
55. SubformAuthor/Doc   Form 44
56. SubformSubjuct/Doc   Form 44

REPORTS and LINKED QUERIES

1. Area Plant Lists   Query 1
2. Burn Information   Query 2
3. Community Equivalence   Query 3
4. Community Locations/Acreages Query 4
5. CW Community Locations   Query 5
6. Find Documents   Query 6
7. FPD General Information   Query 7
8. Insect Info - printable   Query 9
9. Insect Information   Query 10
10. Plant Finder   Query 11
11. Plant Information   Query 12
12. Plant List Analysis   Query 13
13. Plant Species Locations   Query 14
14. Plant Studies Information   Query 15
15. Plant Studies Summary   Query 15
16. Preserve Flora Summary   Query 16
17. Preserve Flora Summary 1   Query 16
18. Quality Assessment   Query 17
19. Soil Distributions   Query 18
20. Soil Information 1   Query 19
21. Watershed Info (general)   Query 23
22. Wildlife Information   Query 25
23. Wildlife locations   Query 26
24. E/T Plant Species   Query 52
25. E/T Wildlife Species   Query 53

MACROS and LINKED TABLES

2 Open Main Menu & Maximize   (Form 42)
3 Maximize   (Form 42)
6 Close Specific Info Form   (Forms 12, 16, 19,
                             20, 32, 37, 48, 50)
7 Move text box to 2.75" X 1.45" on screen (Forms 2, 18, 35,
                             40)
9 Move text box to 5.25" X 1.45" on screen (Forms 26, 36,
                             41)
10 Close Reports Menu   (Forms 11, 14, 15, 22,
                             23, 39, 51)
11 Close Update Menu   (Forms 43, 44, 45,
                             46, 47)
12 Close Add Menu   (Forms 1, 3, 4, 5, 6, 7,
                             8, 9, 10)
14 Close Main Menu   (Form 17)
18 Close Main Menu, Run Command "WindowUnhide",
             Maximize   (Form 24)
19 Echo = No; Close Enter Plant Data; Open Enter Plant
             Data; Echo = yes   (Form 16)
20 Echo = No; Close Wildlife Info Input; Open Wildlife Info
             Input; Echo = Yes   (Form 50)
21 Echo = No; Close Burn Entry; Open Burn Entry; Echo =
             Yes   (Form 11)
22 Echo = No; Close Community Locate/Acres; Open
             Community Locate/Acres; Echo = Yes (Form 14)
23 Echo = No; Close soil distribution Entry Form; Open Soil
             Distribution Entry Form; Echo = Yes (Form 39)
24 Echo = No; Close Wildlife Locations; Open Wildlife
             Locations; Echo = Yes   (Form 51)
25 Echo = No; Close Insect Locations; Open Insect
             Locations; Echo = Yes   (Form 22)
27 Echo = No; Close Community Information; Open
             Community Information; Echo = Yes (Form 12)
28 Echo = No; Close CW Comm Locations; Open CW Comm
             Locations; Echo = Yes   (Form 15)
29 Echo = No; Close Plant Studies Sum; Open Plant Studies
             Sum; Echo = Yes   (Form 32)
30 Echo = No; Close Find Documents; Open Find
             Documents; Echo = Yes   (Form 17)
31 Echo = No; Close Locations Entry; Open Locations Entry;
             Echo = Yes   (Form 23)
32 Open Table, Plant Species Table   (Form 27)
33 Echo = No; Close Plant Species Finder; Open Plant
             Species Finder; Echo = Yes   (Form 29)
34 Close Finder/Analyzer Menu   (Form 27, 29, 33)
35 Run Command "RecordsGoToLast" (Form 34)
36 Open Query, Delete Temp Plant List (Form 27)

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