

Instructions for beta-testers

Floras Explorer version of 4 October 2012

This is a revised beta version of the Floras Explorer containing the basic functionalities of the application and improvements incorporated after the first round of beta testing. It also includes an updated bibliography and database. More capabilities will come soon. Your feedback will be greatly appreciated. We are eager to learn of potential bugs, of features you would like to see, and of other issues that would improve this utility.

If you helped with the earlier round of testing, many thanks. We resolved most of the issues you mentioned. Please see the end of this document for known issues that have not (and in some cases, will not) be resolved.

Of course, we would like to know of additional floras not represented in the database – or of errors in flora citations or locations – but that is not the purpose of our current request for help.

For general information about the Floras of America project, and the Floras Explorer, please view the “about” tab.

The following instructions include:

Simple searches

Map searches

Multiple searches

Advanced searches

How to view information from a particular flora

How to download information

Known issues

SIMPLE SEARCHES

You can perform **simple searches** selecting a **state** or **province**, or text within the **site name** of the flora. **IMPORTANT NOTE:** These searches will only yield results for which we have complete information in the database. However, there are many floras which we have rejected from consideration (e.g. those with poorly defined boundaries, those with only woody species, etc.) cannot be found using simple searches. At present, you will need to find these floras searching **bibliographic information** in the **Advanced Search**.

The screenshot shows the 'Floras Explorer' web application. On the left, the 'SEARCH OPTIONS' panel has a 'State or Province' dropdown menu with 'Oklahoma' selected. A red arrow points to this dropdown. Below it is a 'Site Name' search field. To the right, a table displays search results for Oklahoma. The table has columns: REF NO, SITENAME, YEAR, AREA, and SPECIES. A red arrow points to the map of Oklahoma in the background, which is highlighted in green. The table data is as follows:

REF NO	SITENAME	YEAR	AREA	SPECIES
89	Kline County	1937	265475	527
90	Gypsum Hills and Redbed Plains	1975	514892	399
92	Pottawatomie County	1933	212360	374
94	Greer County	1932	165700	401
96	Arkocia Mountains	1947	222740	867
97	Adams' Ranch	1958	12145.7	316
98	Arkocia Mountains	1908	55943	221
99	Muskogee County	1938	213934	842
101	Pottawatomie County	1958	185791.38	730
104	Santa Rosa/Kiamichi	1969	277482.30	1067

Note that you can select multiple states by using ctrl-left click.

The "Site Name" search will allow you to search within the text of all site names. It is case-insensitive. Thus, if you type in "beaver" you would find floras of Beaver County, Beaver Dam Mountains, and Beaver Island, among others.

MAP SEARCHES

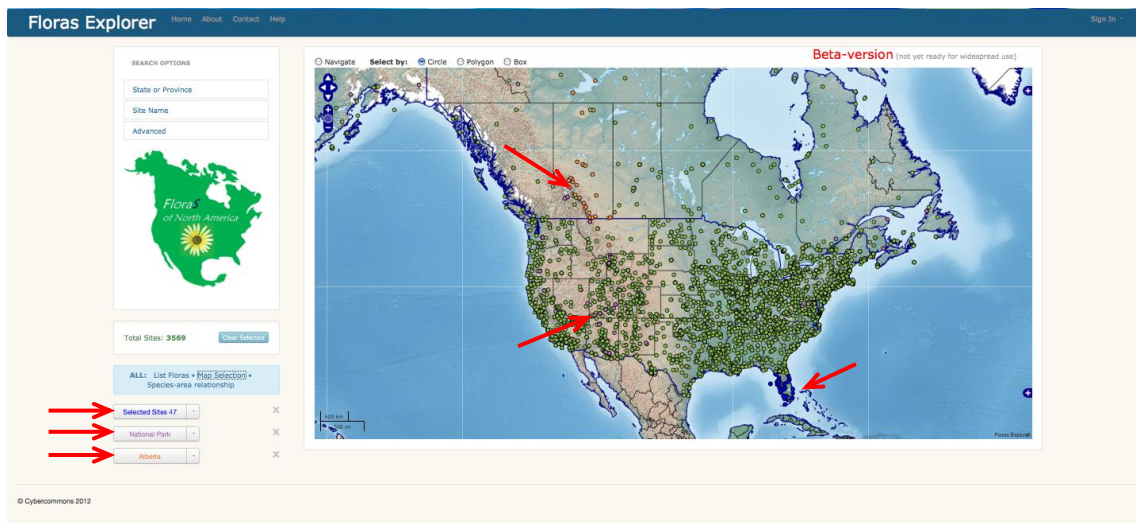
Select one of the options, **circle**, **polygon** or **box** from the top of the map. For circle or box, just click and drag the cursor to outline or circumscribe the desired area. For the polygon, click the vertices of the desired region and end with a double click. Once you have a selection, a new window will pop up with a list of the floras.

The screenshot shows the Floras Explorer web application. At the top, there is a navigation bar with links for Home, About, Contact, and Help. Below this is a search options panel on the left with fields for State or Province, Site Name, and an Advanced search button. The main area features a map of the United States with a search window open. The search window has a 'Name' field set to 'Selected Sites 47' and a table of results. The table has columns for REF ID, SITEMAME, YEAR, AREA, and SPECIES. A red arrow points to a selected area on the map in the Southeastern United States. The search window also includes a 'Close' button and a 'Save' button.

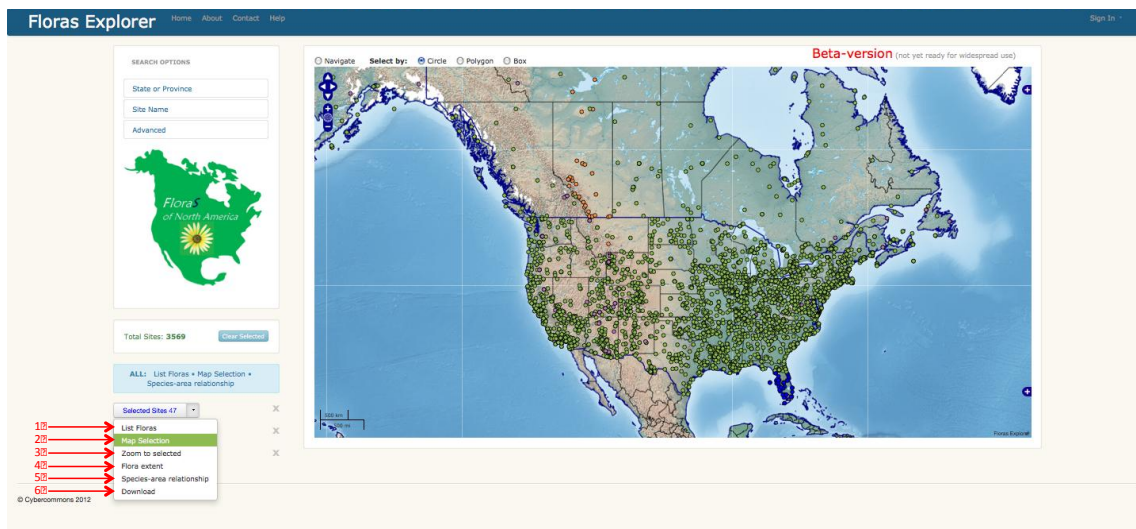
REF ID	SITEMAME	YEAR	AREA	SPECIES
2261.001	Tiger Creek Preserve	2009	1974	519
2261.002	Saddle Branch Preserve	2009	334	242
10147	Archbold Biological Station	1979	1536	470
10197	Bull Creek Watershed, Osceola County	1979	10521.60	475
10312	The Hammock	1976	34.4	336
10320	Cricken Key	1993	#	76
10582	Sandbar Island	1985	4790	309
10590	Big Pine Key and surrounding keys	1953	21300	415
10590.001	Big Pine Key	1953	2376	390
10591	Collier, Dade and Monroe Counties	1965	1316232	1472

MULTIPLE SEARCHES

You can select more than one area as long as you save each selection. Your selections will appear on left of the map and they will be color-coded. You can rename your selections by editing the “Name” box.



Each saved selection will appear left of the map and will contain a dropdown menu. From this menu you can: **(1)** see a **list** of the selected floras, **(2)** highlight the floras in the **map**, **(3)** **zoom** to the selected floras, **(4)** view the selected floras in the species-area relationship plot and **(5)** **download** the **bibliographic references** and **summary statistics** for the selected floras.



ADVANCED SEARCHES

This tool allows you to combine different information in one search.

The search is divided in three main categories:

site description (name, year of study, habitat type, etc.)

geographic information (coordinates, elevation, etc.)

bibliographic information (author, type of publication, etc.)

The screenshot displays the 'Floras Explorer' website. At the top, there is a navigation bar with links: Home, About, Contact, Help, and a Sign In button. Below the navigation bar, on the left, is a 'SEARCH OPTIONS' panel with a map of North America and a 'Flora of North America' logo. A red arrow points to the 'Advanced' search option. In the center, the 'Advanced Search' panel is open, showing fields for Site name, Year of Study (From/To), State/province (select), Type of Region (Arbitrarily delineated, Political: County or Counties, Political: State(s) or Province(s), Political: Other), Protected Area, Physiographic, and Habitat. On the right, a map of North America is shown with a 'Beta-version (not yet ready for widespread use)' label. Below the map, the 'Geographic Information' panel is open, showing fields for Area (hectares), Latitude of centroid (dgrs), Longitude of centroid (dgrs), Elevation midpoint (m), and Geographic Extrema (Latitude of southernmost pt, Latitude of northernmost pt, Longitude of westernmost pt, Longitude of easternmost pt, Lowest elevation (m), Highest elevation (m)). A red arrow points to the 'Bibliographic Information' panel on the left, which is also open, showing fields for Type of Publication (Article, Book, Chapter, Thesis/Dissertation, Government Document, Other), Author name, Text within citation, Flora ID Number (Min/Max), and Status of Flora (Complete, Reject, Work in Progress, Other).

A note on geography: each flora is represented by a bounding box built using the four geographic extrema. The dots on the main map represent the central point of the flora's bounding box. We should note that this representation may be somewhat misleading: an extreme example is the state of Florida, where the central point falls in the Gulf of Mexico.

In a future version, we will have the bounding boxes substituted by the actual shape of each flora's region – when such boundaries are readily available to us.

A note on floras without data: we are aware of many references for which we do not have quantitative data. Reasons for this include: 1) we have not yet seen a copy, 2) we have rejected it from consideration for technical reasons, or 3) it is currently a work in progress. To search for such floras, you must use the **Bibliographic Information search** (state searches or site name searches will NOT work)

HOW TO VIEW INFORMATION FROM A PARTICULAR FLORA

First **select one or more floras** using the search by state or province, search by keywords from the title, or map search tools

A window will pop up with your selection. Simply click on one of the floras' title and a **new tab** will open with a zoomed in map, bibliographic and summary statistics information for the selected flora. Instead of the central point, there will be a bounding box delimitating the area of the flora (based on the 4 extreme geographic coordinates)

The screenshot displays the 'Floras Explorer' web application. On the left, a sidebar contains search options: 'State or Province', 'Site Name', and 'Advanced'. Below these is a map of North America with a green flower icon and the text 'Flora of North America'. A button indicates 'Total Sites: 3569'. A dropdown menu shows 'Selected Sites: 47' with a sub-menu open, highlighting 'List Floras'. A red arrow points to this 'List Floras' option. The main area features a map of the United States with a bounding box around the Zion National Park area. A 'National Park' table lists various parks with columns for REF NO, SITENAME, YEAR, AREA, and SPECIES. A 'Bib' (Bibliography) window is open, showing details for 'Plants of Zion National Park', including the publisher, author, year, location, area, and taxon counts.

REF NO	SITENAME	YEAR	AREA	SPECIES
26	Auyutluc National Park	1988	2147000	94
203	Nahanni National Park and vicinity	1974	70722.6	491
225	Grand Canyon National Park	1987	493076.36	1363
233	Grand Teton National Park and Teton County	1976	1038849	948
234	Mount Rainier National Park	1938	97902	734
240	Mount Rainier National Park	1937	95351.27	673
332	Big Bend National Park	1951	286597.34	830
534	Grand Teton National Park	1958	125336	612
641	Waterson Lakes National Park	1987	67896	866
642	Waterson Lakes National Park			
693	Glacier National Park			
779	Bryce Canyon National Park			
786	Capitol Reef National Park			
788	Zion National Park			

Plants of Zion National Park

Publisher: Zion National History Association
Author: R. A. Nelson
City: Springdale, Utah
Notes: no

Reference Type: Book
Year: 1976
Number of Pages:

Zion National Park

Site Name
Zion National Park
Reference No. 788
Year of Study 1976
Location
State or Province: UT
Latitude: 37.12 - 37.48N
Longitude: -112.85 - -112.21W
Elevation: 1219 - 2660m

Area
5925.86 hectares
Parcels: 1

Taxon Counts
Families: 86
Genera: 307
Species: 702
Total Taxa: 749
Indigenous Species: 657
Percent Exotic: 8.41%

Flora Definition Protected Area
Jurisdiction: Federal
Political: Preserve - Park
Preserve Type: Park
Bot. Ethn: Herbaria - Searched

HOW TO DOWNLOAD INFORMATION

From the dropdown menu of the saved selection choose **download**

Choose the information (and the format) you would like to download

The screenshot displays the 'Floras Explorer' web interface. On the left, there is a sidebar with search options (State or Province, Site Name, Advanced) and a map of North America. Below the map, it shows 'Total Sites: 3569' and a 'Clear Selected' button. A dropdown menu is open, showing 'Selected Sites: 47' and a list of options: 'List Floras', 'Map Selection', 'Zoom to selected', 'Flora extant', 'Species-area relationship', and 'Download'. A red arrow points to the 'Download' option. The main area features a map of North America with a 'Download 86 sites' dialog box open. The dialog box has a 'Citations' section with a note '(Use RIS for downloading to EndNote)' and two radio buttons: 'RIS' (selected) and 'Bib Tex'. Below this is a 'Flora Data' section with a 'CSV' option. A red arrow points to the 'CSV' option. The top of the page has a navigation bar with 'Home', 'About', 'Contact', 'Help', and 'Sign In'. A 'Beta-version' notice is also present.

KNOWN ISSUES

- 1) One cannot currently perform state and province searches for known floras for which we do not (yet) have complete data.
- 2) The Bibliographic Search from the Advanced Search option has a known bug where it is not possible to combine options. In particular, in some cases it returns a Boolean OR search when an AND search is intended. For example: if you select "Book" and enter the "park" in "Text within citation" the search will return all books and all floras with the word "park" instead of the combination (books with "park" in the citation).
- 3) It is not possible to turn on and off features of the base maps (e.g. roads, urban areas, etc.) except by zooming in and out. This is a property of the base map.
- 4) It has been suggested that Google Maps or Google Earth would provide a better base map, and we agree. However, there is no guarantee that this service of Google will be stable indefinitely, nor delivered free of charge.