

## FIDO Webinar Training – Exercise 2: Advanced Navigation

Created with FIDO version 1.4.2 – the screen shots may not match exactly with other versions.

**Red font indicates specific instructions for you to follow.**

The object of this exercise is to show some of FIDO's more advanced features, including filters, circular retrievals, output in Google maps, and saved reports used in other FIDO sessions.

1. If you do not have a session open already, start the FIDO application – From the FIA Data and tools page (<http://www.fia.fs.fed.us/tools-data/>), **click on the FIDO button** (Forest Inventory Data Online) to go to the FIDO Welcome Page (<http://apps.fs.fed.us/fido/>).

**Click on Custom Retrievals, and then on the Begin Creating Custom Reports>> button** to start the custom FIDO session.

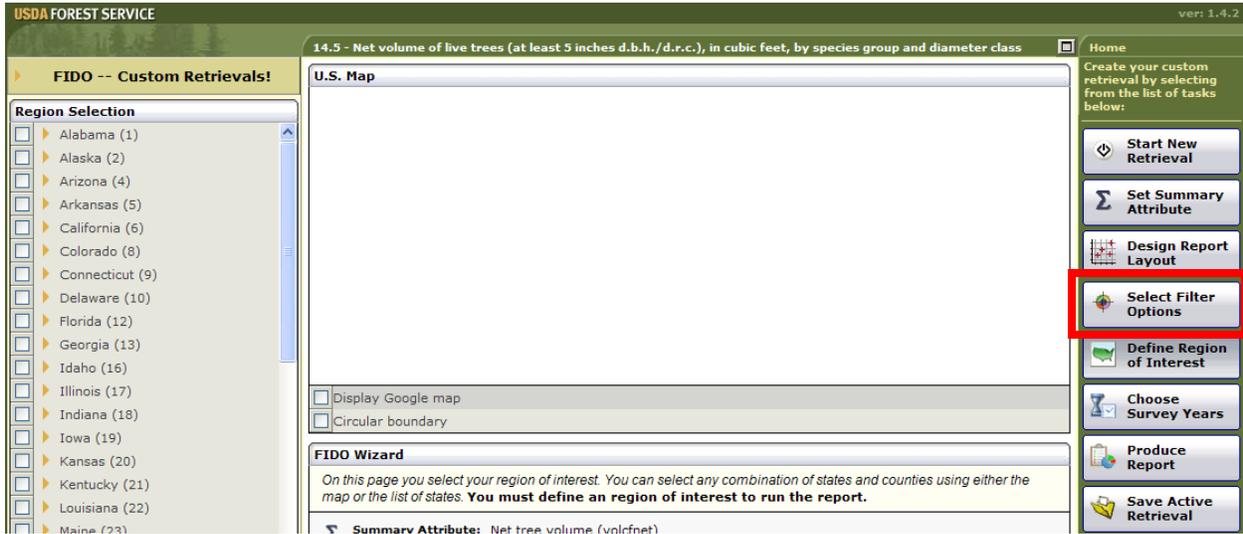
The screenshot shows the FIDO Welcome Page. On the left, under 'Start New...', there are two options: 'FIA Standard Reports' and 'Custom Retrievals'. The 'Custom Retrievals' option is highlighted with a red box. On the right, under 'Creating Custom Retrievals', there is a button labeled 'Begin Creating Custom Reports >>' which is also highlighted with a red box. Below this, there is a section titled 'Creating a Custom Retrieval' with instructions.

2. From the **Retrieval Templates/Reports** list, **select tree volume report 14.5 – Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and diameter class**. Review the template information and click on **Use as Template**.

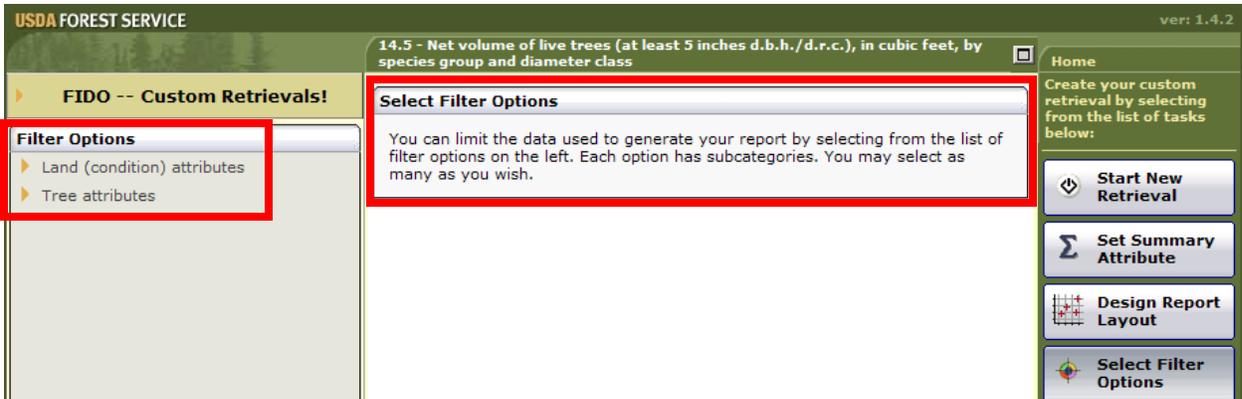
The screenshot shows the FIDO application interface. On the left, there is a tree view under 'Retrieval Templates/Reports' with 'Tree volume reports' expanded. Report 14.5 is selected. On the right, the 'Selected Template Information' panel shows details for report 14.5, including the report name, title, description, summary attribute, report layout, filter options, and geographic region. A 'Use as Template' button is visible at the bottom right.

3. FIDO skips over the **Set Summary Attribute** and **Select Filter Options** menus to the **Define Region of Interest** menu (because the summary attribute has already been selected in the pre-made template, and filters are optional).

To further refine the scope of the report, click on the **Select Filter Options menu bar**



- a. The **Filter Options** menu allows you to limit the report to a subset of data. There are 2 main categories of filters – **Land (condition) attributes** and **Tree attributes**. Land filters allow filtering by overall conditions, such as forest type or stand-size. Tree filters allow filtering by individual tree attributes, such as specific species or diameter ranges.

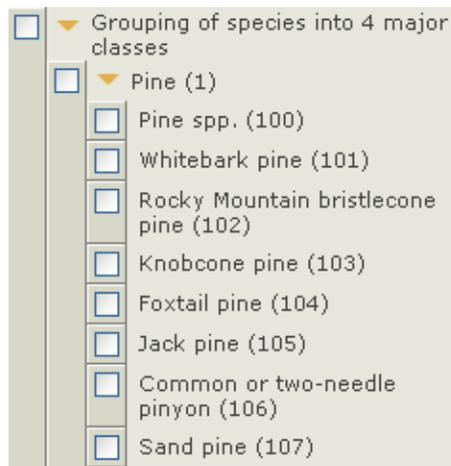


- b. View the list of filters available for Land attributes by clicking on the arrow next to **Land (condition) attributes**. Expand the categories to see the list of options available. Filter the report to only include **private ownership**.

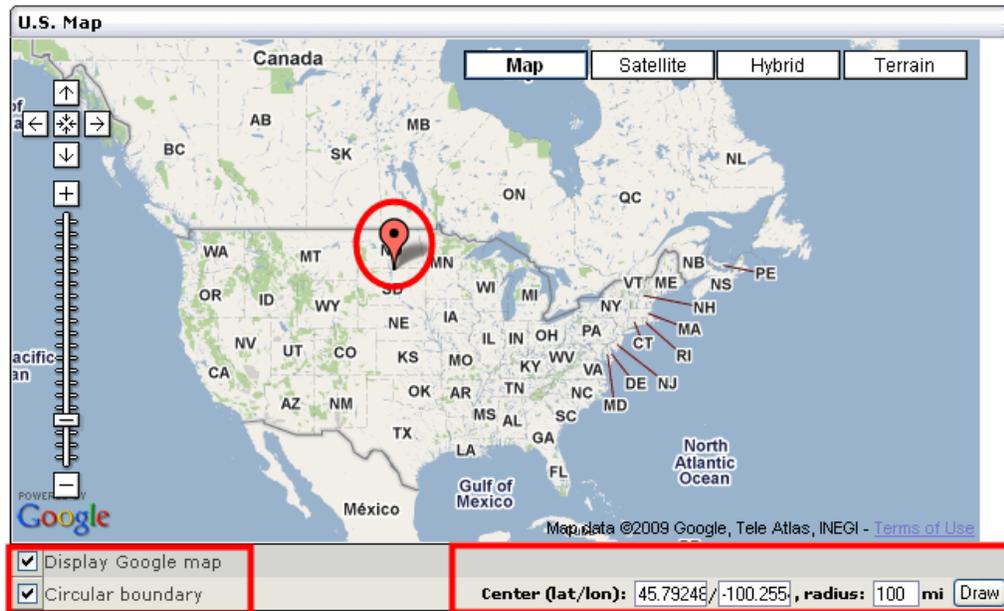


- c. Click on the **Tree attributes** category to view the tree filter options. Note that some filters are already selected for the pre-made template.

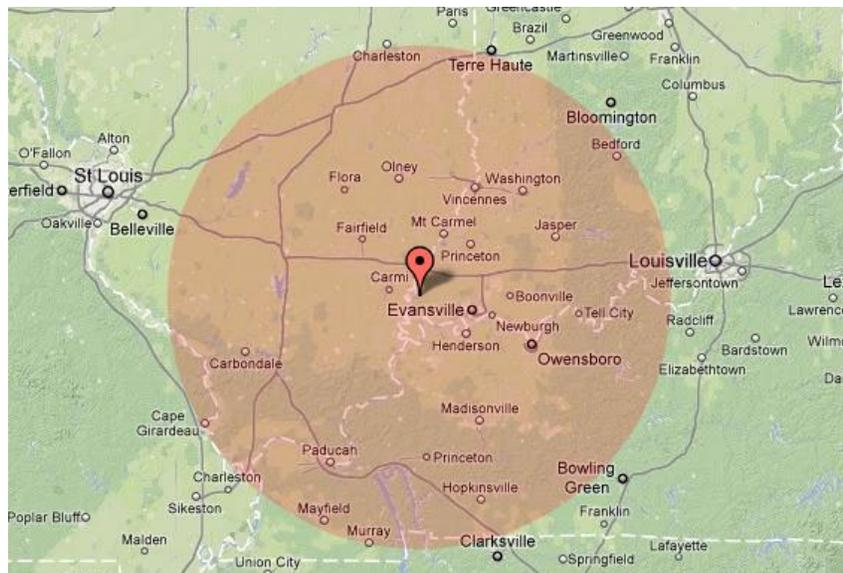
FYI – To select filters for specific species, drill down the list of **Grouping of species into 4 major classes**, click on the header to reveal the four major classes, and then click on the classes to get the full list of FIA tree species.



- d. Click **Continue** >> to advance FIDO to the next step.
4. The Region of Interest will be a circular area that you define on the Google Map display.
- a. Click on the **Display Google map** and **Circular boundary** boxes to view a map of the U.S. The circular boundary selector (the big orange teardrop) appears, and the center latitude and longitude are displayed. Next to the **Center (lat/lon)** display boxes, enter "100" in the **radius** box, and select **Draw**.



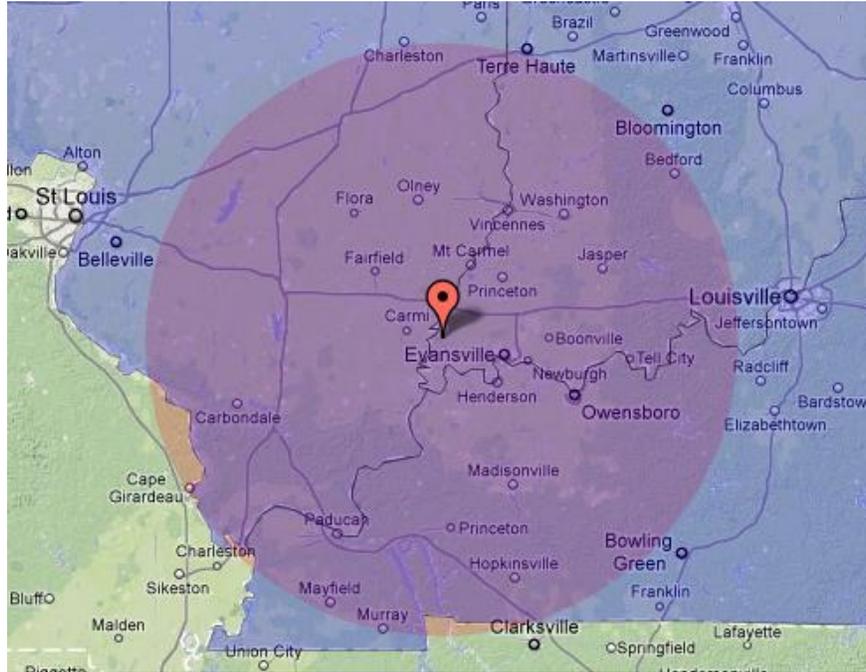
- b. The teardrop can be easily moved by selecting it and dragging it to your preferred location. Drag the teardrop to an area WNW of Evansville, IN as shown in the figure below. Note how the circular area is now defined.



- c. You can further manipulate the area by either dragging the teardrop or entering exact coordinates in the lat/lon boxes. You can also change the radius distance and a new boundary will be drawn on the map.
- d. Although you have defined the boundary, you still must select the areas within the circle that you want to include in your report. **Either click on the map, or select from the state list in the left hand column.** Only those areas in the shaded circular area will be included in the report. Therefore, in the example below, only those areas in Indiana and Illinois that are within the circle will be included (the purplish shaded area). If you want the entire circle included in the report, you must select all the relevant states or counties.

The screenshot displays the USDA Forest Service FIDO II interface. The main window is titled "14.5 - Net volume of live trees (>=5 inches dbh/drc) by species group and diameter class (cu ft)". On the left, the "Region Selection" panel lists states from Alabama to Nebraska, with checkboxes for Illinois (17) and Indiana (18) selected. The central "U.S. Map" shows a circular boundary centered on Evansville, Indiana, with a radius of 100 miles. The boundary is shaded in a purple-to-orange gradient. The map includes various cities and towns, and a "Map" tab is selected at the top right. At the bottom, the "Center (lat/lon)" is set to 38.04805, -87.94551, and the "radius" is 100 mi. There are also checkboxes for "Display Google map" and "Circular boundary", both of which are checked.

- e. For this example we will also include Kentucky, but will not select those areas in Missouri and Tennessee that are also within the circular boundary.



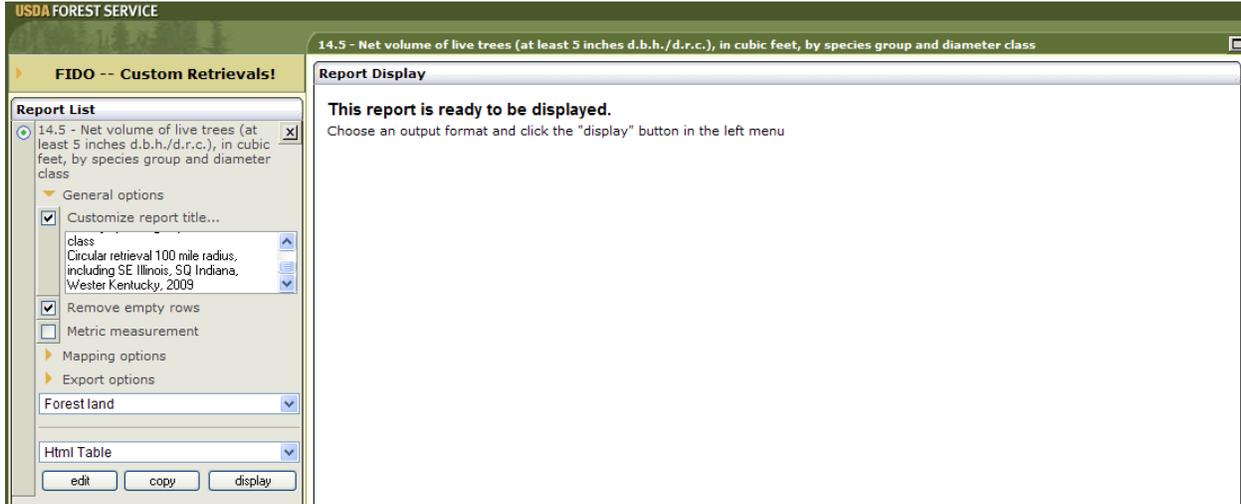
- f. Click on **Continue >>** to go to **Choose Survey Years**.
5. Select **2009** for the survey year for all 3 states. Click on **Continue >>** to produce the report.

**FIDO -- Custom Retrievals!**

Survey Years	
<input checked="" type="checkbox"/>	▶ 2009 (IL, IN, KY)
<input type="checkbox"/>	▶ 2008 (IL, IN, KY)
<input type="checkbox"/>	▶ 2007 (IL, IN, KY)
<input type="checkbox"/>	▶ 2006 (IL, IN, KY)
<input type="checkbox"/>	▶ 2005 (IL, IN, KY)
<input type="checkbox"/>	▶ 2004 (IL, IN, KY)
<input type="checkbox"/>	▶ 2003 (IL, IN)
<input type="checkbox"/>	▶ 1998 (IL, IN)
<input type="checkbox"/>	▶ 1988 (KY)
<input type="checkbox"/>	▶ 1986 (IN)
<input type="checkbox"/>	▶ 1985 (IL)

6. Click on the **Submit** button to run the report.

- a. When the report is ready for display, check **Customize report title...** under **General options**, and customize the title to reflect the special circular retrieval. Display the report for Forest land in HTML format.



- b. The report includes three separate tables for the individual states (remember that the reports are only based on the areas selected within the circular retrieval). The final summary table includes the entire area within the circular boundary that was selected.

14.5 - Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and diameter class Circular retrieval 100 mile radius, including SE Illinois, SQ Indiana, Wester Kentucky, 2009

**Summary** Net tree volume (volcfnet)  
**Attribute:**  
**Report:** Table break:  
**Layout:** U.S. States (plot.statedc)  
 Row break:  
 Species group (tree.sprgcd)  
 Column break:  
 Diameter class (tree.p2:diaclcd)

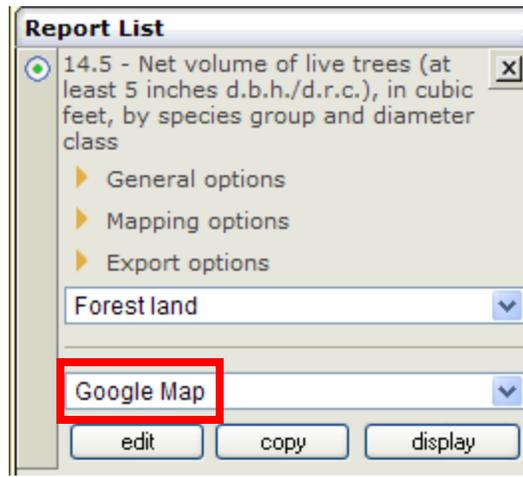
(The color of each estimated value represents its percent sampling error (pse); if estimate is **black**, pse is less than or equal to 25%; if estimate is **teal**, pse is greater than 25% and less than or equal to 50%; if estimate is **gold**, pse is greater than 50%)

**Inventory -- Illinois 2005-2009: area/volume**

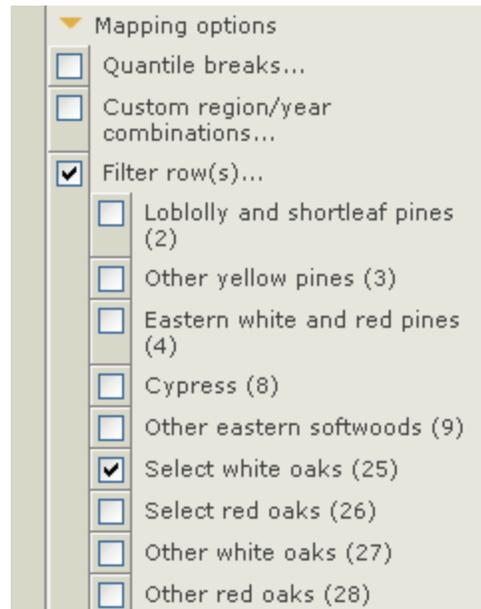
Tree species group	Tree Diameter Classifications										Total
	5.0-6.9 in (3)	7.0-8.9 in (4)	9-10.9 in (5)	11-12.9 in (6)	13-14.9 in (7)	15-16.9 in (8)	17-18.9 in (9)	19-20.9 in (10)	21-28.9 in (11)	29+ in (12)	
Loblolly and shortleaf pines (2)	256,028	357,621	488,102	461,463	243,557	--	1,936,623	--	--	--	3,743,394
Other yellow pines (3)	--	--	570,182	--	--	--	--	--	--	--	570,182
Eastern white and red pines (4)	--	314,862	1,870,301	--	--	1,300,712	1,864,120	--	--	--	5,349,994
Cypress (8)	--	123,515	312,327	1,149,971	--	--	--	2,770,242	3,838,023	--	8,194,079
Other eastern softwoods (9)	4,215,885	2,785,617	4,586,127	2,872,002	1,607,123	1,591,562	--	--	--	--	17,658,316
Select white oaks (25)	5,058,558	6,590,351	14,941,760	24,943,802	37,799,176	55,945,448	39,965,112	37,840,594	85,040,852	23,709,431	331,835,082
Select red oaks (26)	1,221,178	2,626,402	4,731,787	2,592,036	7,842,204	5,421,122	14,518,637	10,121,489	17,271,948	7,202,417	73,549,219
Other white oaks (27)	952,971	2,156,198	5,252,750	12,008,659	6,596,390	13,959,354	4,666,422	16,019,017	19,954,700	--	81,566,461
Other red oaks (28)	6,993,621	11,386,094	24,412,719	33,627,255	56,027,755	54,890,783	50,495,894	37,631,935	119,374,352	24,221,583	419,061,992
Hickory (29)	19,330,674	38,688,643	39,710,221	56,600,184	66,938,368	36,008,665	43,721,456	28,130,630	20,568,445	18,023,684	367,720,969
Hard maple (31)	8,779,295	10,623,732	12,543,315	12,069,831	14,133,112	17,438,290	3,724,334	8,426,063	7,045,225	--	94,783,196
Soft maple (32)	11,777,164	20,666,879	30,053,012	41,910,377	43,501,504	33,080,441	22,249,336	46,048,191	86,292,617	17,101,310	352,660,831
Beech (33)	218,635	148,455	--	--	950,852	--	--	2,010,811	--	--	3,328,753
Sweetgum (34)	3,946,985	4,323,720	10,997,101	11,104,526	8,322,447	14,291,300	6,114,314	5,547,673	--	--	64,648,067
Tupelo and blackgum (35)	3,986,672	4,078,039	6,686,741	432,982	--	--	1,050,099	--	--	--	16,234,533

7. View report in Google Map Output.

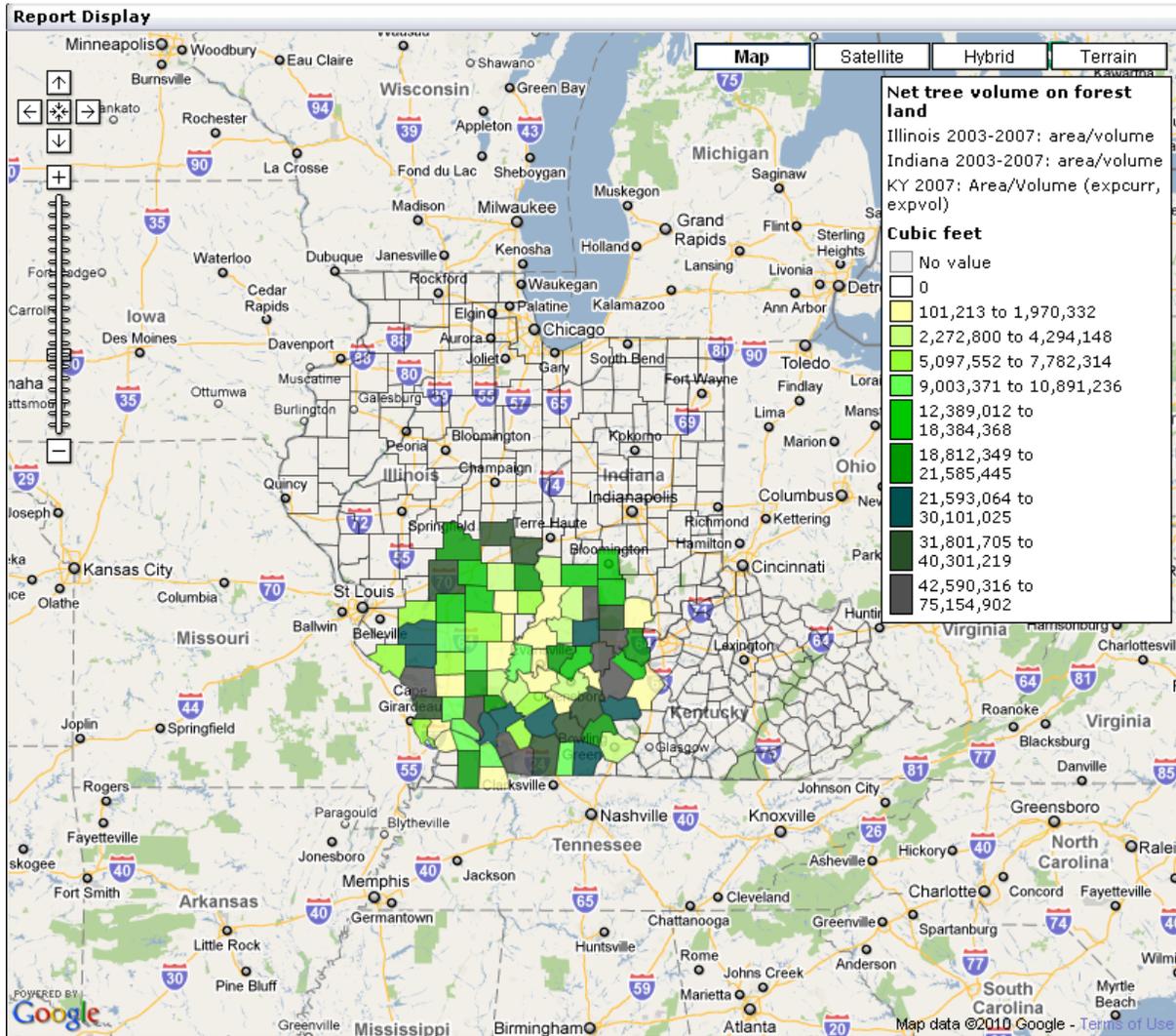
a. Select the Google Map output option.



b. Select Filter row(s) from the Map options list, and check the box next to Select white oaks (25)



c. Click on display to view the map.



d. The map displays the volume estimations by county (but note that partial county estimations are colored in for the whole county)

8. Save the Report.

- Since you have worked so hard on this report, you may want to save it for future use. Saved reports can be further manipulated to include other filters, different regions, or other surveys.
- Saving a report is a two-step process. First you save it to the active FIDO session (the report will then be available for use in the current session, but would be lost if you ended the FIDO program without completing the second step). The second step is to

save the report in a configuration file that is stored on your PC and can be uploaded to a later FIDO session (more reports may be added to that same configuration file).

- c. To save the report in the active session. Click on the **Save Active Retrieval** menu bar.



- d. The template information appears. Here you may choose to edit the report name, title, description, and author (**go ahead, do it**). You can also direct FIDO to always stop at certain menus. The default placement of the retrieval in the USER-DEFINED REPORTS category.

The screenshot shows a dialog box titled "14.5 - Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and diameter class". The "Template Information" section contains the following fields:

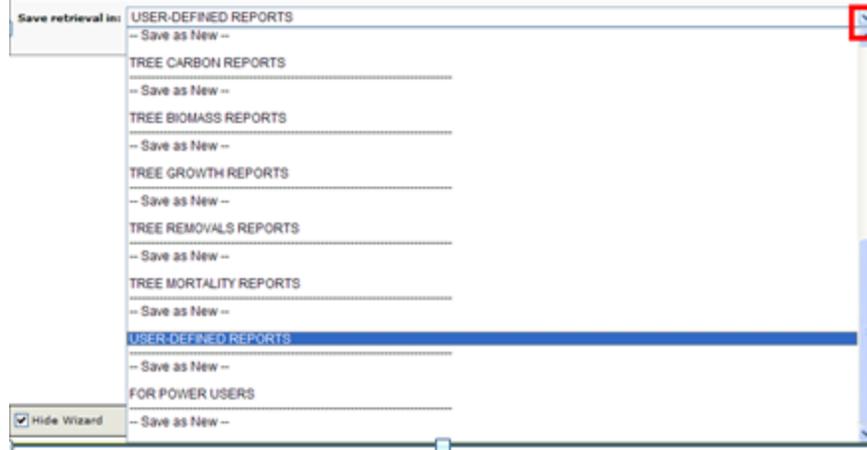
- Report name:** 14.5 - Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and diameter class
- Title for report:** Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet, by species group and diameter class
- Description:** For timber species (trees where the diameter is measured at breast height [DBH]), this is the net volume of wood in the central stem of a sample tree at least 5.0 inches in diameter, from a 1-foot stump to a minimum 4-inch top diameter, or to where the central stem breaks into limbs all of which are less than 4.0 inches in diameter. For woodland species (trees where the diameter is measured at root collar [DRC]), this is the net
- Author:** Barbara O'Connell

Below the fields is a section titled "Wizard always stops on:" with the following options:

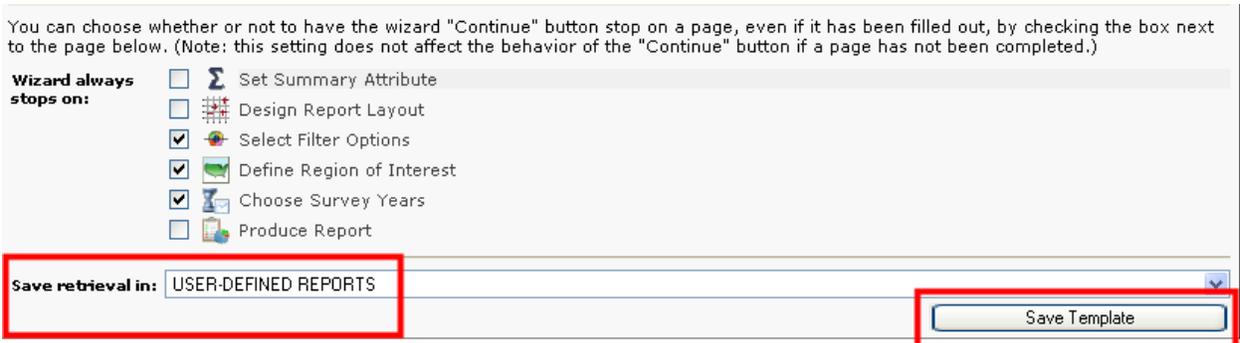
- Set Summary Attribute
- Design Report Layout
- Select Filter Options
- Define Region of Interest
- Choose Survey Years
- Produce Report

The "Save retrieval in:" dropdown is set to "USER-DEFINED REPORTS". The "Save Template" button is at the bottom right.

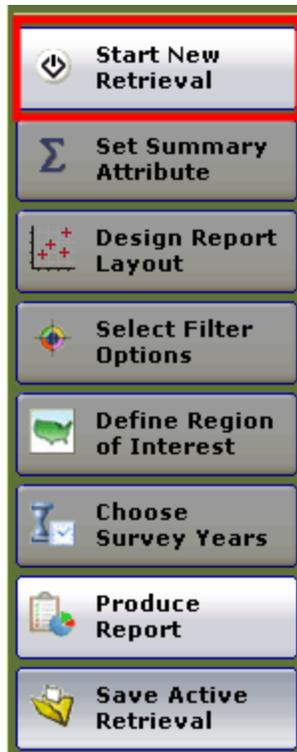
- e. You may also choose to save the template in any of the other categories. **Click on the down arrow to view the other categories available for saving the template.**



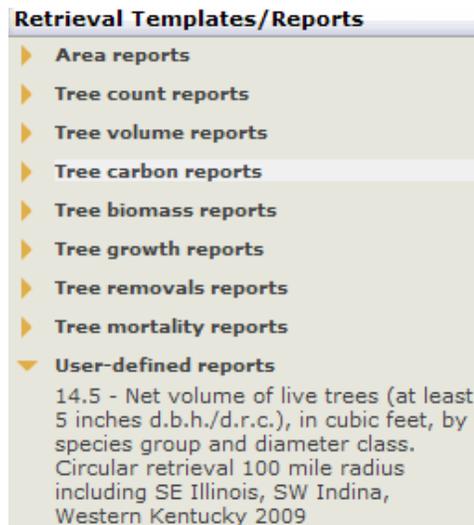
- f. **Choose the default category, USER-DEFINED REPORTS, and then click on the Save Template button.**



- g. You have completed the first step in saving a report. To see what you have done, **click on the Start New Retrieval button to go back to the first menu.**



- h. Look in the **User-defined reports** category to view your saved report (you may need to close the Tree volume reports list to get a good view).



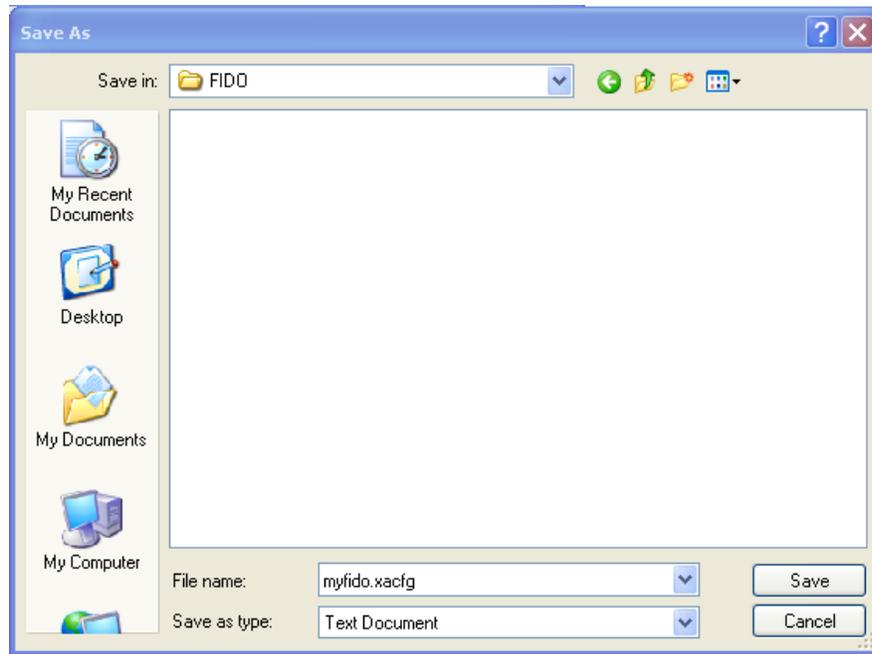
- i. However, at this point, if you close your browser, or otherwise close the current FIDO session, your saved template will disappear into the internet ether. For step 2, go back to the **Save Active Retrieval** menu and click on the **Save Custom FIDO** button.



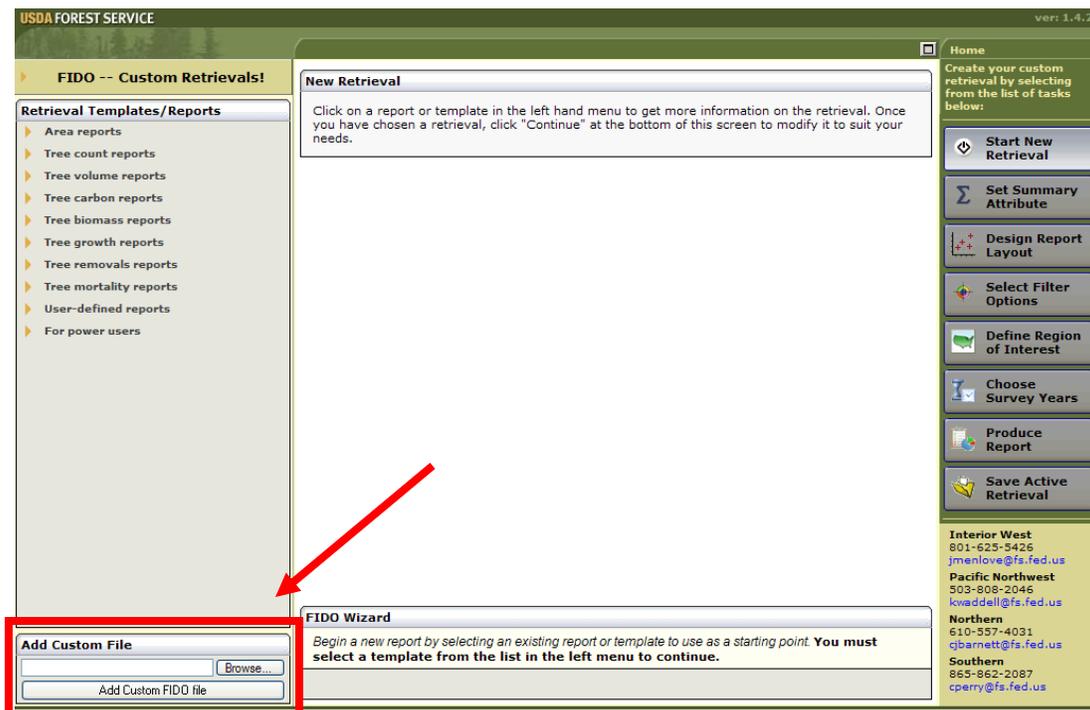
- j. The following box appears.



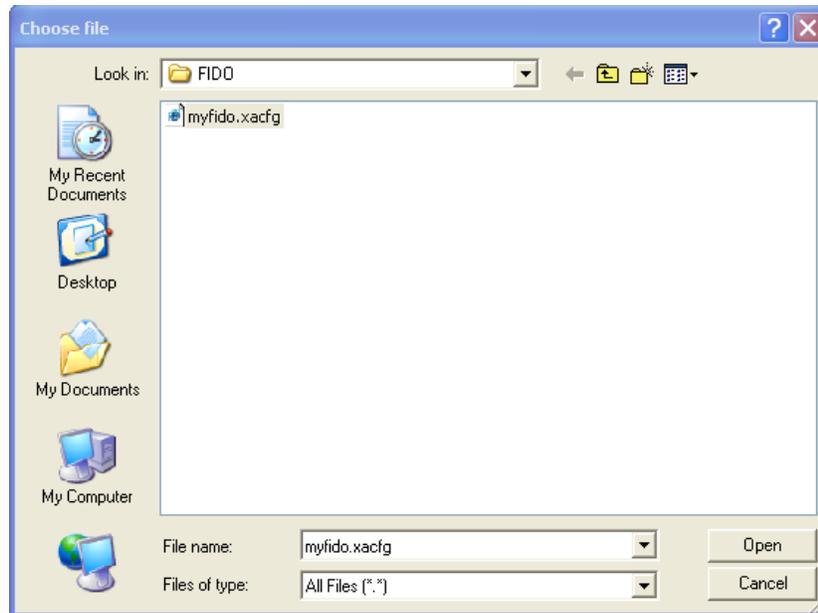
- k. Click on **Save**. The default filename is fido.xacfg. Browse to the directory of your choice, and change the filename to something that makes sense to you. Click on **Save**.



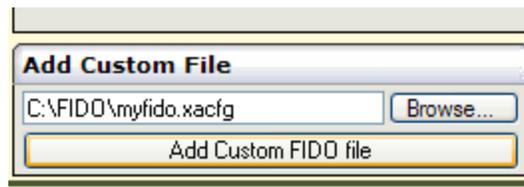
- l. A message box may appear stating that the download is complete. **Click on Close.**
9. Reload a saved configuration file.
- a. End the current FIDO session. There are several ways to do this – use your browser’s **Back** button, or click on the FIDO **Home** button, or you can close your browser and open a new window. **Choose your method** (note, the first two are fastest).
  - b. Go back and **begin another FIDO session, custom reports.** Click on the **Browse** button in the **Add Custom File** option to find your saved FIDO configuration.



- c. Find your file and click on open.



- d. The file address will appear in the Add Custom File box. Then click on **Add Custom FIDO file**.



- e. Lo and behold! – Your saved template is now available for selection.

