

FIDO Webinar Training - Exercise 1: Basic Navigation

Created with FIDO version 1.5.1.05 – the screen shots may not match exactly with other versions. Shaded font indicates specific instructions for you to follow; **FIDO key words are in bold font**.

The objective of this exercise is to familiarize the user with how to navigate FIDO Custom table menus to create a report from a pre-made template.

Users may want to refer to the **FIADB Users Manual**, which describes the Forest Inventory and Analysis Database (FIADB) structure and defines all the variables in the database. The guide can be downloaded from the FIA Web site library at <http://fia.fs.fed.us/library/database-documentation/>. FIDO reports are created using the FIADB.

1. 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. The home page provides a general overview of FIDO, and information about the system configuration requirements to run the program.

USDA FOREST SERVICE ver: 1.5.1.05

Start New...

FIA Standard Reports
Produce standard FIA reports on your own selection of states, counties, and survey year(s) ... You can also select from a wide range of custom filters.

Custom Retrievals
Customize a retrieval for your own specific needs or build new, user-defined report templates.

Forest Inventory Data Online (FIDO)

Welcome to FIDO!
FIDO gives you access to the National FIA (Forest Inventory and Analysis) databases. You now have the ability to generate tables and maps of forest statistics through a web browser without having to understand the underlying data structures.

With FIDO, you will be able to run any of the standard reports for a specific area of interest and survey year or, if you are an advanced user, create completely customized reports based on whatever criteria you choose. As an advanced user, you can also save your work to your hard drive to load/rerun your custom FIDO retrievals at a later time.

User Alert -- July 11, 2013:
We are experiencing problems with our on-line tools FIDO and Evaluator. FIA and the Forest Service Chief Information Officer's staff are working to remedy these problems. Thank you for your patience.

Technical Assistance

Regional Contacts
If you have any questions or need assistance, please contact the support person for your region (from the list below):

- **Interior West** (AZ,CO,ID,MT,NM,NV,WY,UT)
Jim Menlove: 801-625-5426 (e-mail: jmenlove@fs.fed.us)
- **Pacific Northwest** (AK,CA,HI,OR,WA)
Karen Waddell: 503-808-2046 (e-mail: kwaddell@fs.fed.us)
- **Northern**
(CT,DE,IA,IL,IN,KS,MA,MD,ME,MI,MN,MO,ND,NE,NH,NJ,NY,OH,PA,RI,SD,VT,WI,WV)
Chuck Barnett: 610-557-4031 (e-mail: cjbarnett@fs.fed.us)
- **Southern** (AL,AR,FL,GA,KY,LA,MS,NC,OK,SC,TN,TX,VA)
Carol Perry: 865-862-2087 (e-mail: cperry@fs.fed.us)

IMPORTANT NOTE:
Read the release information below to see if there are any changes you should be aware of before choosing your report generating tool.

Please enjoy -- The FIDO Team!

System Configuration
In order to run FIDO Standard and Custom reports, you will need the following configuration:

- Windows® Internet Explorer 6 or newer; Mozilla Firefox 3 and above;
- Javascript must be enabled in your browser;
- High-speed (broadband) Internet connection;
- 512MB RAM system memory;
- 2.0+ GHz processor, and
- MSXML 4.0 or 6.0 (Internet Explorer only).

Note: the application runs much better on Internet Explorer 7, 8, or 9, than it does on version 6. For best results with Firefox use versions 3, 7, or later.

- a. Select **Custom Retrievals** in the left-hand side box to go to the **Custom Retrieval Welcome** page.



2. Custom Retrieval Welcome Page

- a. This page provides a list of the steps involved in creating a report. As you'll see later, some of the steps are skipped over because they are already pre-selected (e.g. **Set Summary Attribute**), or are optional (e.g. **Set Filter Options**). Review the list and the descriptions of what each step entails. Note that these buttons are not active on this page, but will be active once you start the Custom report application.

Creating a Custom Retrieval
There are 8 steps to creating and saving a custom report. You can go to any step by clicking on the matching button displayed in the right-hand column. You can also let the wizard guide you through the process by clicking the "Continue" button at the bottom of the page. Below is a brief description of each of these steps:

 Start New Retrieval	You start your custom retrieval with this step. You can choose to either start a completely new retrieval/template or pick one of the existing retrievals/templates to use as a starting point.
 Set Summary Attribute	The summary attribute is the value that will be displayed in the cells of your tabular report. Examples include <i>Area of land</i> , <i>Tree volume</i> , <i>Tree mortality</i> , etc.
 Design Report Layout	When you define your report layout, you select how the summary attribute defined above is grouped and reported. FIDO II retrievals are broken down into three axes. In tabular reports the axes define table, row, and column breaks. You will be required to select an attribute for each axis.
 Set Filter Options	Set filters to restrict the data that will be used to generate your report. Each of the filter options has subcategories. You may select as many as you wish.
 Define Region of Interest	Define the geographic region for your report by selecting states and counties here. You can specify a circular boundary (latitude, longitude, and radius in miles) to further refine the region.
 Choose Survey Years	From this page, you will select the survey years on which you want to base your retrieval. The survey years displayed are dependent on the states you selected in the previous step.
 Produce Report	Once you have finished setting up your reports, this step allows you to review your selections and generate a report in various formats (presently only HTML tables are supported, but more are coming soon).
 Save Active Retrieval	Click this button if you want to save your custom retrieval. You will have the option to name the retrieval, give it a title, description, and author. You can also choose in which category the retrieval will appear.

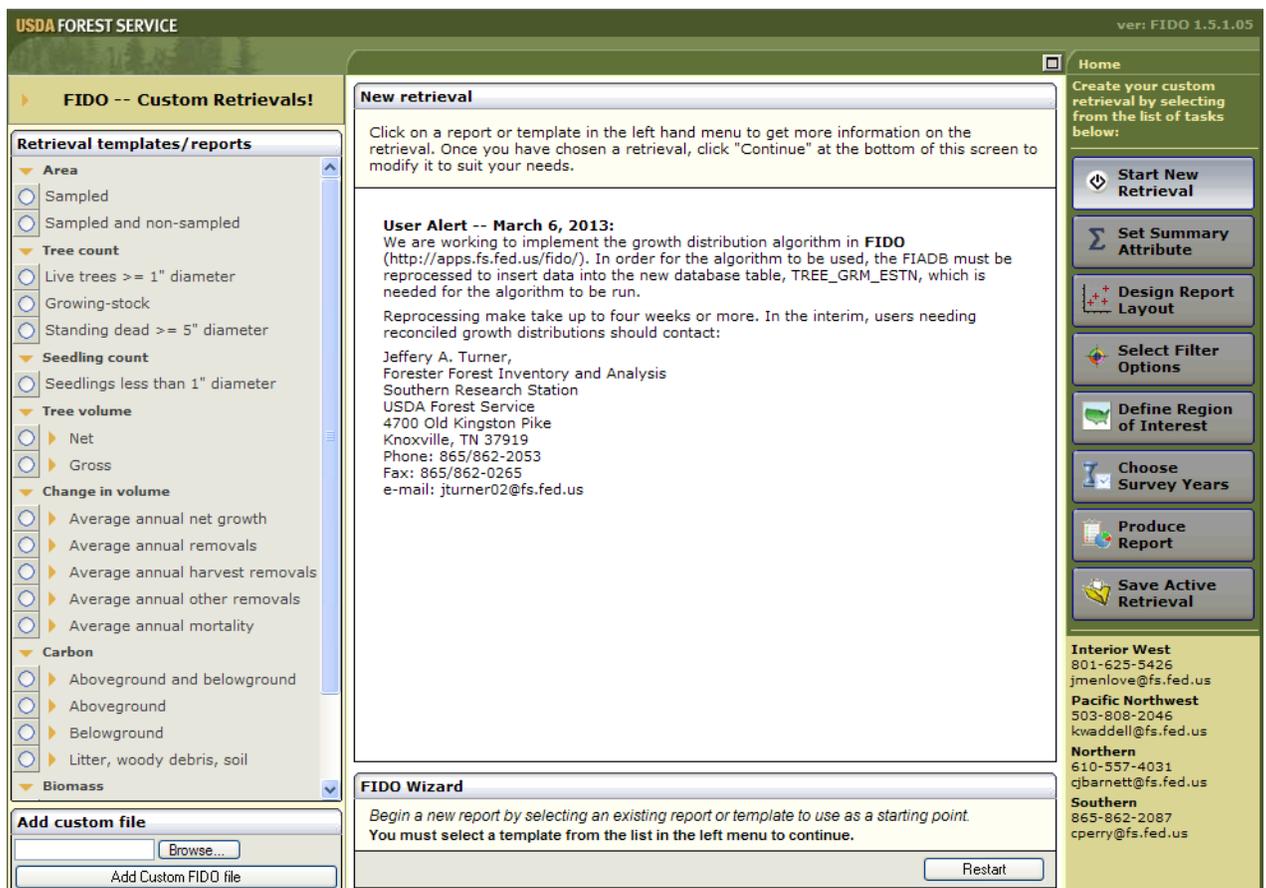
- b. Click on the **Begin Creating Custom Reports>>** button to start the Custom FIDO session.

Creating Custom Retrievals

Use this mode of the FIDO application to create new, custom retrievals. You'll be able to do everything from selecting your summary attribute to choosing custom filters and the report layout display. The next sections describe in some detail how this mode of FIDO works...

Begin Creating Custom Reports >>

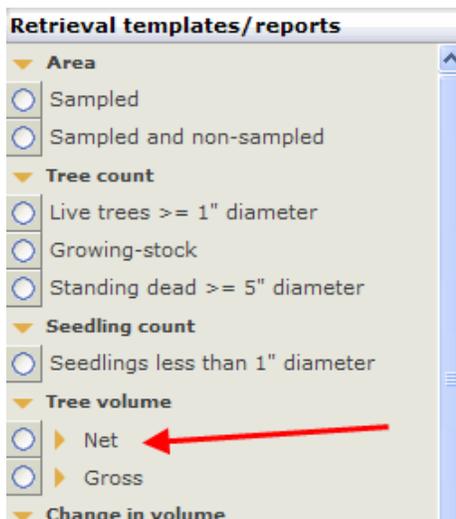
3. Layout of the FIDO tool site. Every page has 3 sections.
 - a. The right hand column displays the 8-step menu buttons for building a custom report.
 - b. The left hand column contains selections that are dependent on which menu is currently running.
 - c. The upper middle space is the area where the report output, information on the menus, and maps of the geographic area of your report are displayed.
 The lower middle space contains the **FIDO Wizard**, which provides instruction for the current menu and an update as to the status of the report.
 As you'll see in subsequent menus, the Wizard's **Continue>>** button leads the user to the next step required to create a report. Also, a **Hide Wizard** option will become available that will provide more viewing space for the upper middle section.



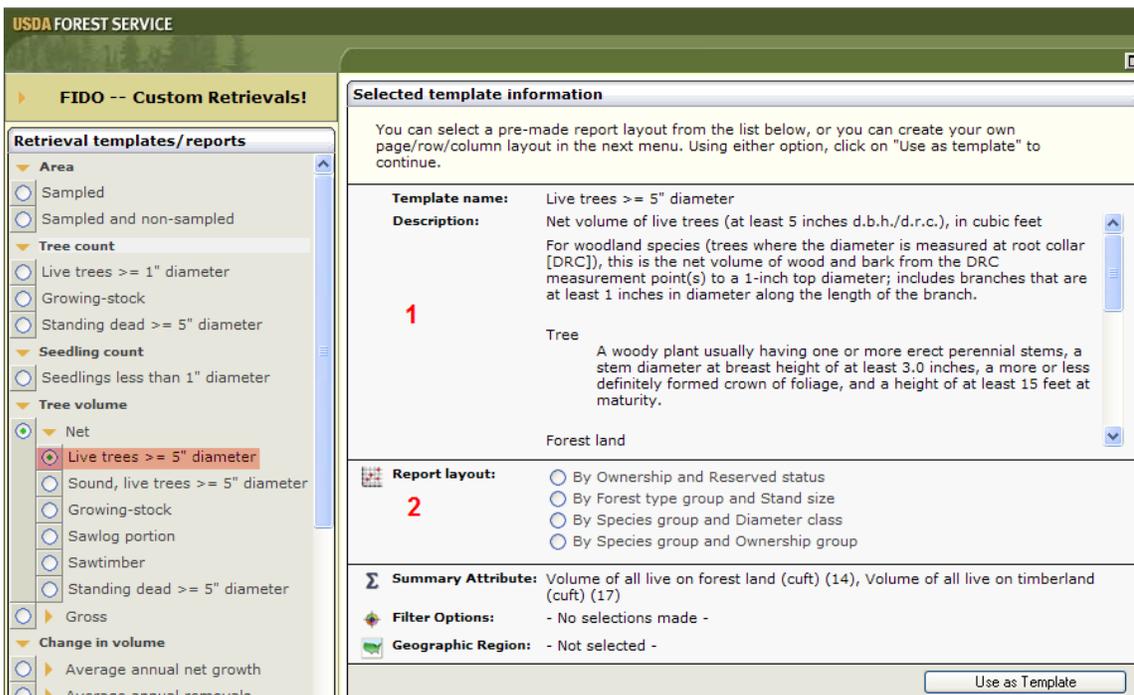
4. Start New Retrieval Page
 - a. The report template is the basic structure of the report, and is the first step towards generating a report. The templates are organized by general summary attribute (e.g. area

of land, tree volume). Note the **FIDO Wizard** states that, in order to continue, a report template must be selected.

- b. Click on **Net** in the **Tree Volume** category in the left hand column to view the list of report types that use net tree volume for a report summary attribute.



- c. Click on the radio button next to **Live trees >= 5" diameter**. Notice that the middle display section now contains descriptive information about the summary attribute (1), and a selection of report layouts (2).



- d. Review the descriptive information for net volume of live trees (use the scroll bar to view all). Choose **By Ownership and Reserved status** for your report layout. The **Selected template information** now includes descriptions of **Ownership** and **Reserved status** attributes for your review. To continue, click on **Use as Template**.

The screenshot shows the USDA Forest Service FIDO Wizard interface. On the left, a tree view under 'Retrieval templates/reports' shows 'Tree volume' expanded to 'Net', with 'Live trees >= 5" diameter' selected. The main panel, titled 'Selected template information', contains the following details:

- Template name:** Live trees >= 5" diameter
- Description:** Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet. For woodland species (trees where the diameter is measured at root collar [DRC]), this is the net volume of wood and bark from the DRC measurement point(s) to a 1-inch top diameter; includes branches that are at least 1 inches in diameter along the length of the branch.
- Row break:** Ownership. Landowner classes are a further categorization of the general landowner groupings. Landowner groups and classes:
 - 11- National Forest
 - 12- National Forest
 - 13- National Forest
 - 21- National Park Service
- Report layout:** By Ownership and Reserved status, By Forest type group and Stand size, By Species group and Diameter class, By Species group and Ownership group
- Summary Attribute:** Volume of all live on forest land (cuft) (14), Volume of all live on timberland (cuft) (17)
- Filter Options:** - No selections made -
- Geographic Region:** - Not selected -

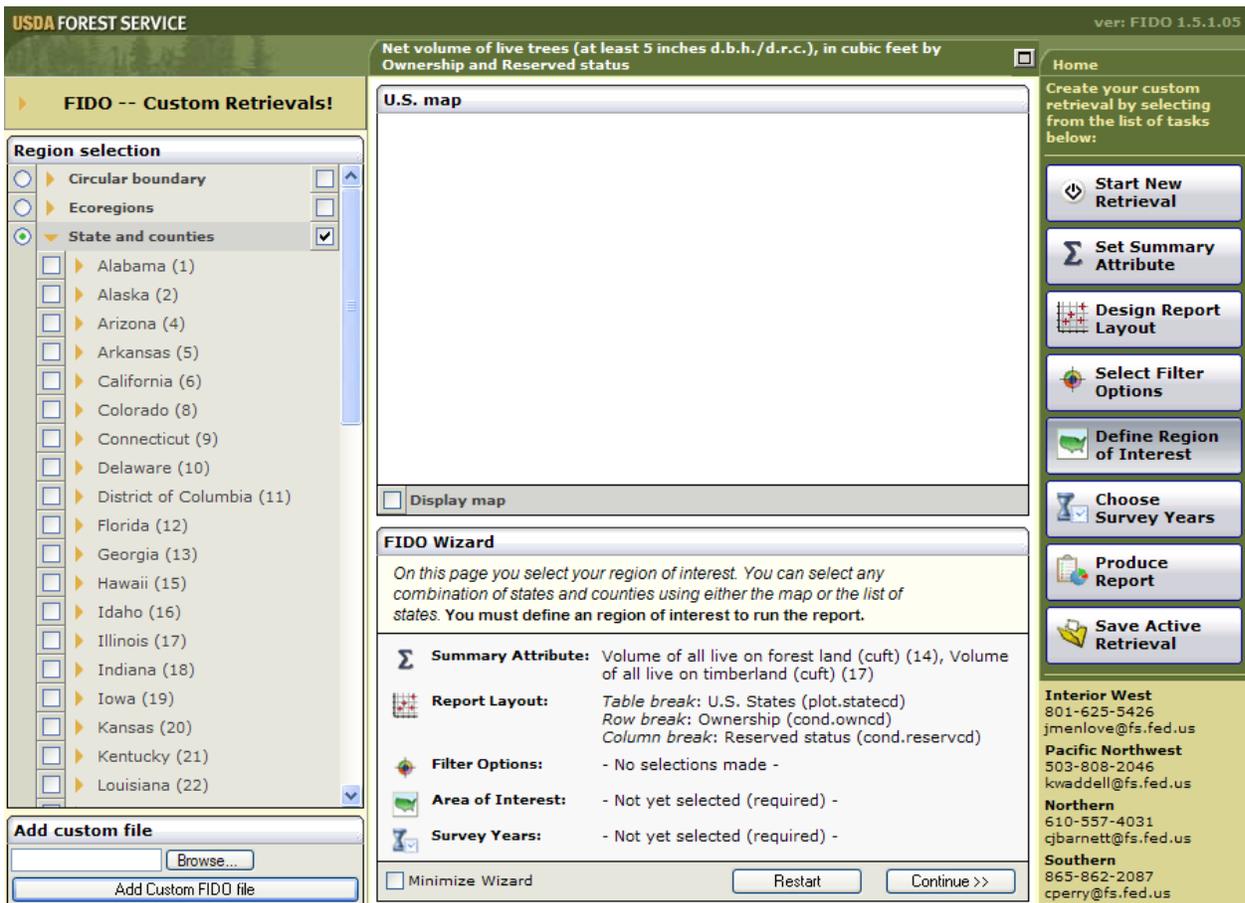
A 'Use as Template' button is located at the bottom right of the main panel. The 'FIDO Wizard' label is visible at the bottom of the window.

5. **Define Region of Interest**

FIDO then automatically takes you to the next step that it needs to complete the report process, **Define Region of Interest**.

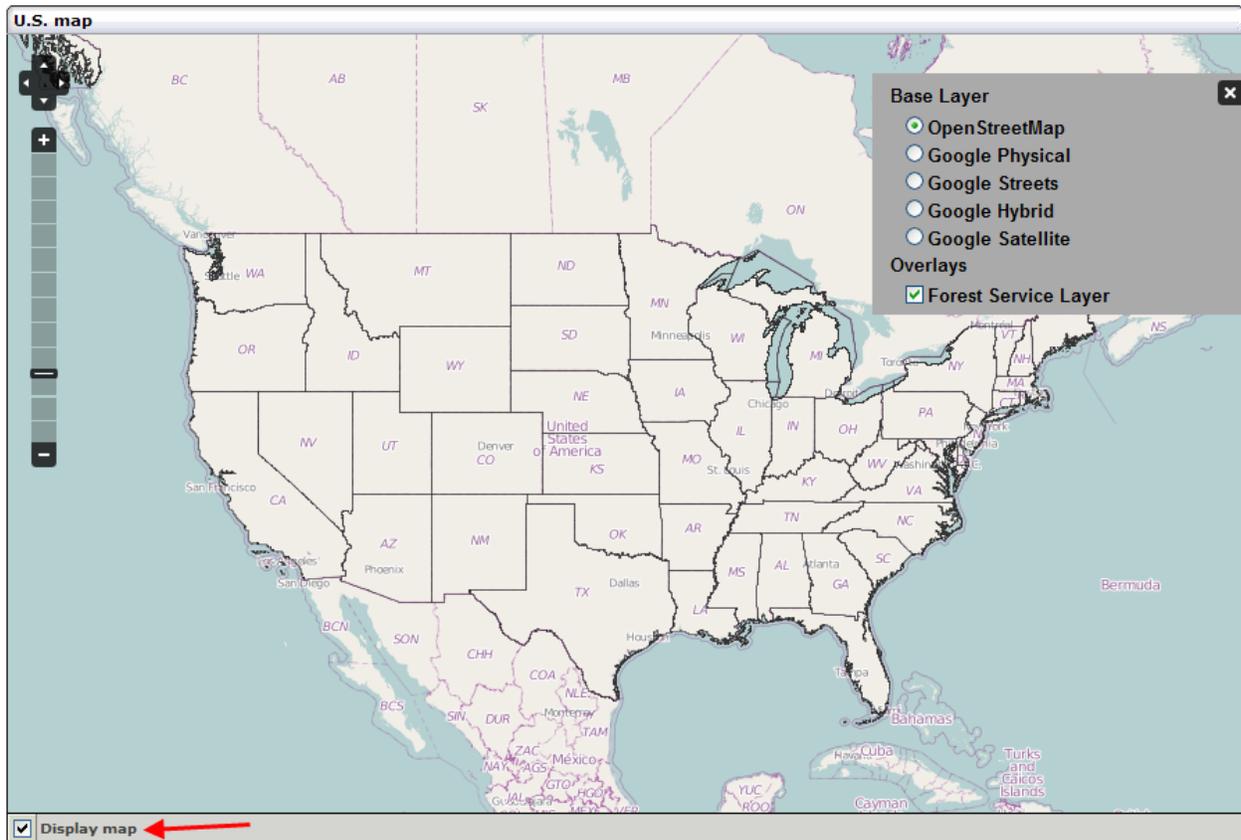
Note that FIDO skipped over steps **Set Summary Attribute** and **Design Report Layout** because these steps have already been taken care of in the pre-made template. Step **Select Filter Options** was skipped over because it is not a requirement to produce a report. When you click on the **FIDO Wizard Continue** button, the program will always jump to the next step required to produce a report.

Also note that the **FIDO Wizard** now contains the report information – what has been selected thus far and what information is still needed to complete a report.

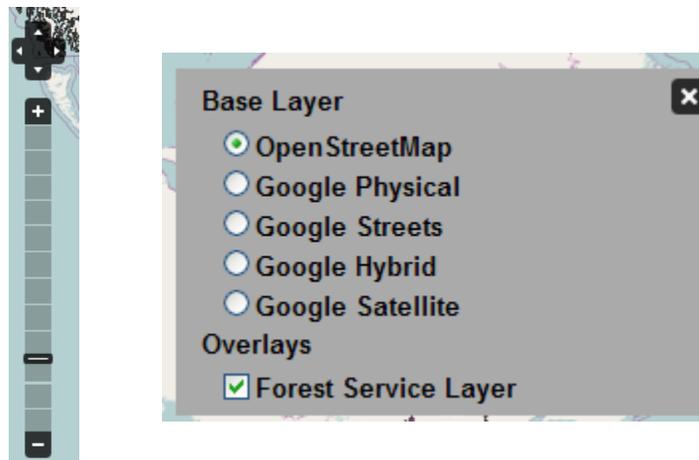


- The **Region of Interest** refers to the county(s), state(s), ecoregion(s), or circular boundary on which the report is based. Note that **FIDO Wizard** states that this step is required in order to continue (also note the **Minimize Wizard** option has appeared).
- Selections can be made using the list on the left hand column or by using the map in the display window. This demo will show you both options.

- c. Check the **Display map** box to view the map of the U.S. (depending on the network traffic, it may take a few seconds for the map to appear).



- d. To get a larger view of the map, click on the **Minimize Wizard** box.
- e. Navigation can be accomplished in a variety of ways. You can pan the map either with a left mouse click and hold; or, use the up, down, right and left arrow buttons on the navigation bar.
Zoom in with a double-left click, zoom out with a double-right click; or, use the + and – scale.
Note the various map view options – **OpenStreetMap**, **Google Physical**, **Streets**, **Hybrid**, and **Satellite**. Click on the options to view the different effects.

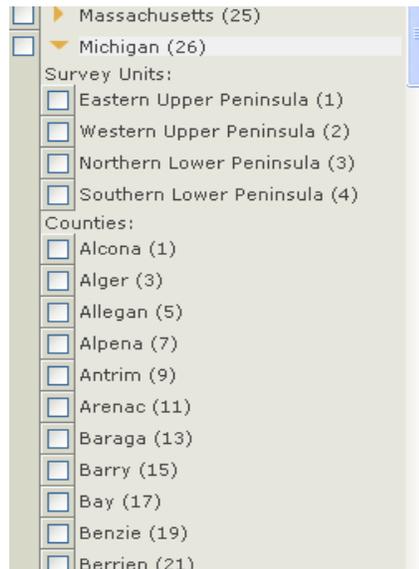


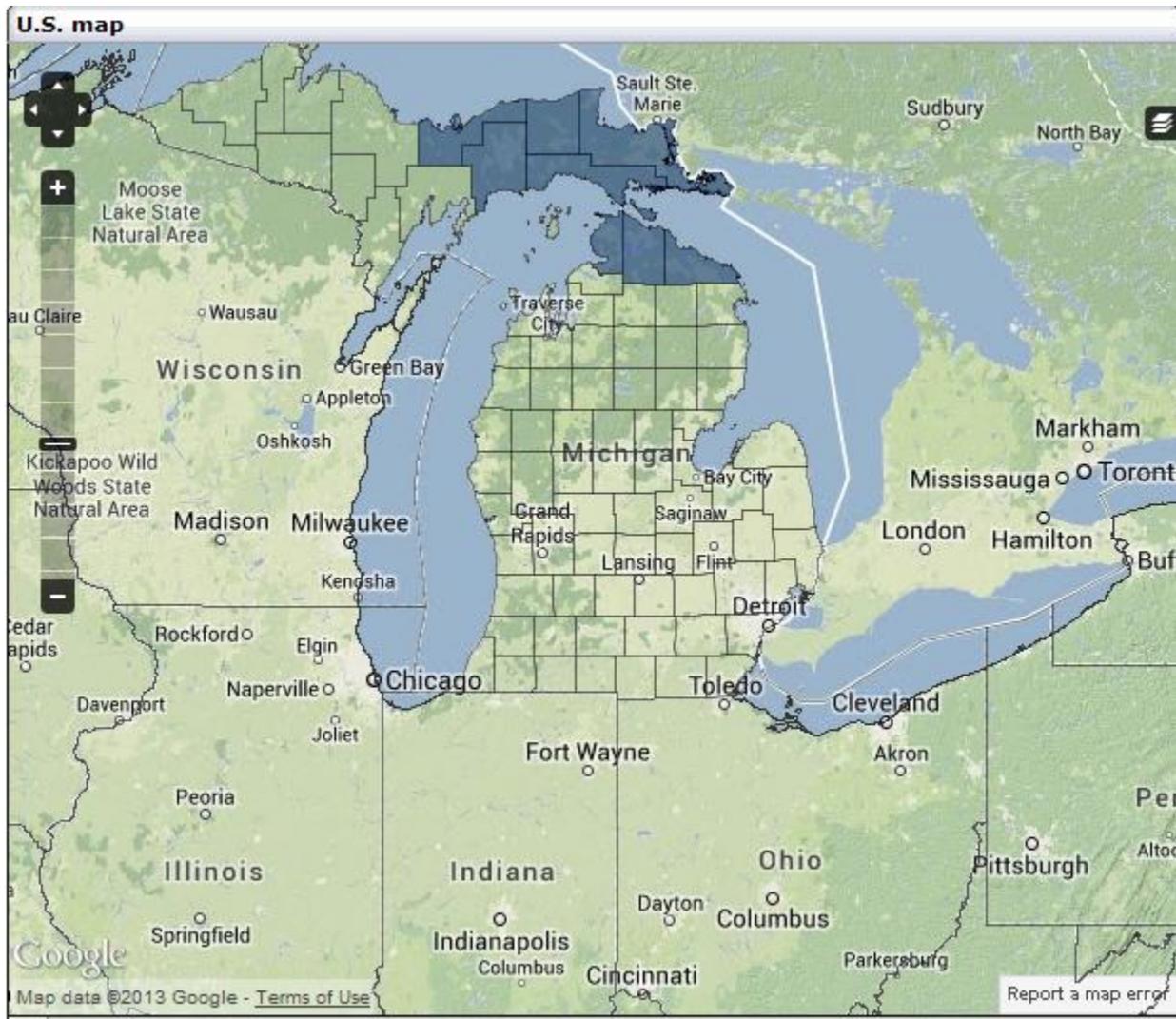
f. Zoom in on Michigan, and choose **Google Physical** view.



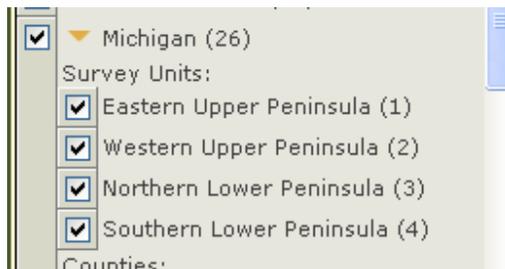
g. Click on **Michigan (26)** in the **Region selection** scroll box to view the list of Michigan FIA Survey Units and Counties. What is displayed on the map?

h. On the map, select and highlight counties in Michigan with a click of the mouse.





- i. What happens to the Michigan county list on the left side of the screen?
- j. Click on the box next to Michigan (26). - Now what is selected on the map?

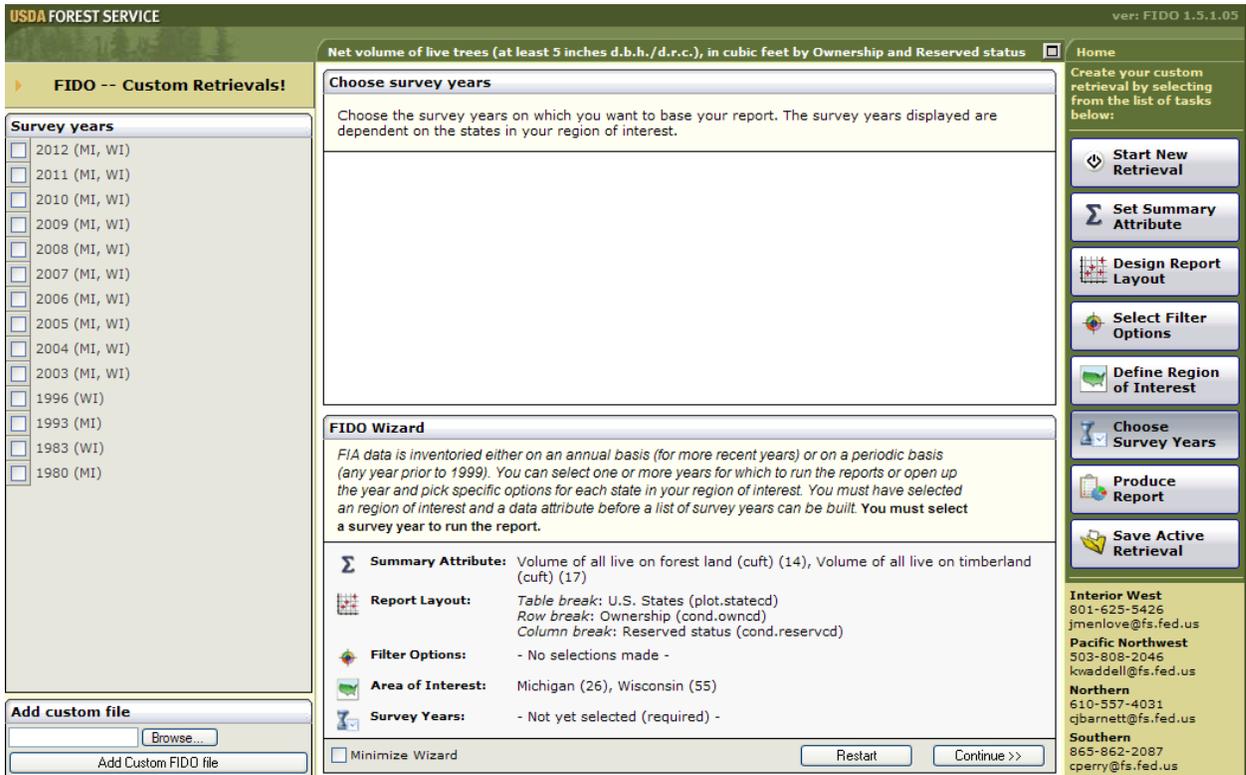


- k. Click on the check box next to Michigan (26) in the state list to deselect.
- l. Close up the county selection list by clicking on Michigan again. The county boundaries on the map should disappear.
- m. Click on Michigan and Wisconsin on the map to highlight and select both states.



- n. Uncheck the **Minimize Wizard** box. Review the **FIDO Wizard** to see that Michigan and Wisconsin now comprise the **Area of Interest** and that **Survey Years** are still to be determined.
Click **Continue >>** to go to the next step, **Choose Survey Years**.

6. Choose the **Survey Years** - the survey year represents the set of plots that are used to make an estimate. For FIA annual-basis inventories, the survey year defines the last annual inventory year for the rolling-panel set of plots. For FIA periodic-basis inventories, the survey year is the year that best represents when the set of plots were measured. For example, Michigan survey year 2012 contains all the plots measured in the 5 annual inventory panels from 2012, 2011, 2010, 2009, 2008, while survey year 2007 contains the 5 annual inventory panels from 2007, 2006, 2005, 2004, 2003.



- a. Click on the box next to **2012 (MI, WI)** to view the listings of the surveys in the middle display area. These describe the years of the survey and what kind of estimations (timberland and/or forest land) can be produced with that survey. The default is that both state surveys are selected for 2012. To choose only one state for a survey year, click on the box next to the individual state/year in the display area.

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Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet by Ownership and Reserved status

FIDO -- Custom Retrievals!

Survey years

- 2012 (MI, WI)
- 2011 (MI, WI)
- 2010 (MI, WI)
- 2009 (MI, WI)
- 2008 (MI, WI)
- 2007 (MI, WI)
- 2006 (MI, WI)
- 2005 (MI, WI)
- 2004 (MI, WI)
- 2003 (MI, WI)
- 1996 (WI)
- 1993 (MI)
- 1983 (WI)
- 1980 (MI)

Choose survey years

Choose the survey years on which you want to base your report. The survey years displayed are dependent on the states in your region of interest.

2012

- MICHIGAN 2012: 2008-2012: CURRENT AREA, CURRENT VOLUME
 - Supported attributes:**
 - Volume of all live on forest land (cuft)
 - Volume of all live on timberland (cuft)
- WISCONSIN 2012: 2008-2012: CURRENT AREA, CURRENT VOLUME
 - Supported attributes:**
 - Volume of all live on forest land (cuft)
 - Volume of all live on timberland (cuft)

b. Choose 2007 and 2012 surveys for both states.

USDA FOREST SERVICE

Net volume of live trees (at least 5 inches d.b.h./d.r.c.), in cubic feet by Ownership and Reserved status

FIDO -- Custom Retrievals!

Survey years

- 2012 (MI, WI)
- 2011 (MI, WI)
- 2010 (MI, WI)
- 2009 (MI, WI)
- 2008 (MI, WI)
- 2007 (MI, WI)
- 2006 (MI, WI)
- 2005 (MI, WI)
- 2004 (MI, WI)
- 2003 (MI, WI)
- 1996 (WI)
- 1993 (MI)
- 1983 (WI)
- 1980 (MI)

Choose survey years

Choose the survey years on which you want to base your report. The survey years displayed are dependent on the states in your region of interest.

2012

- MICHIGAN 2012: 2008-2012: CURRENT AREA, CURRENT VOLUME
 - Supported attributes:**
 - Volume of all live on forest land (cuft)
 - Volume of all live on timberland (cuft)
- WISCONSIN 2012: 2008-2012: CURRENT AREA, CURRENT VOLUME
 - Supported attributes:**
 - Volume of all live on forest land (cuft)
 - Volume of all live on timberland (cuft)

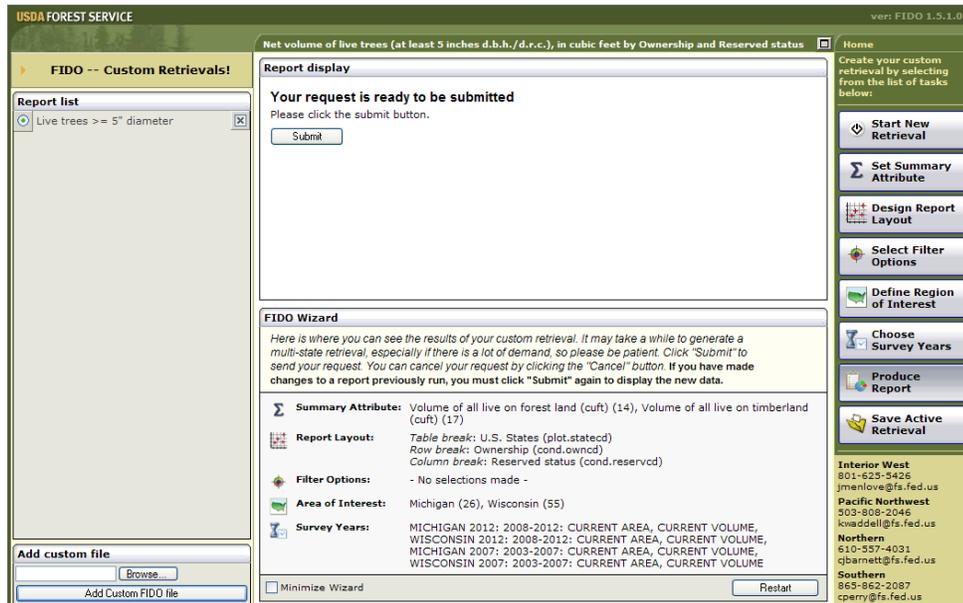
2007

- MICHIGAN 2007: 2003-2007: CURRENT AREA, CURRENT VOLUME
 - Supported attributes:**
 - Volume of all live on forest land (cuft)
 - Volume of all live on timberland (cuft)
- WISCONSIN 2007: 2003-2007: CURRENT AREA, CURRENT VOLUME
 - Supported attributes:**
 - Volume of all live on forest land (cuft)
 - Volume of all live on timberland (cuft)

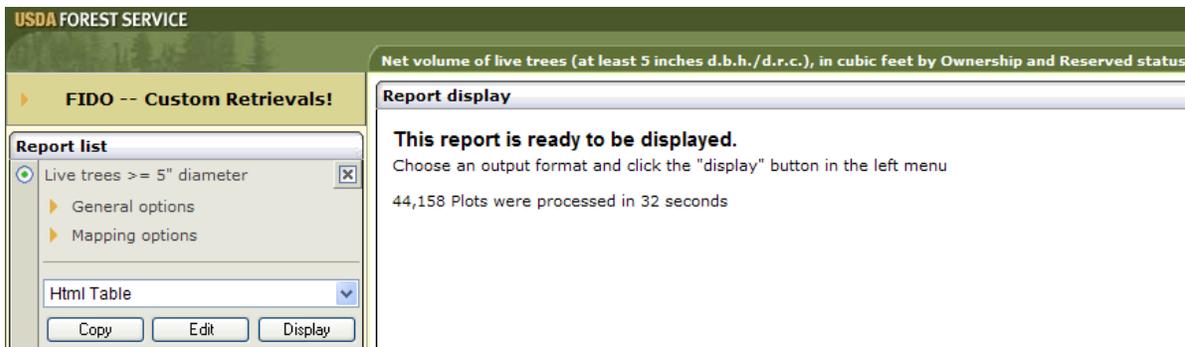
c. Click on **Continue >>**, FIDO moves to the next step, **Produce Report**.

7. Produce Report

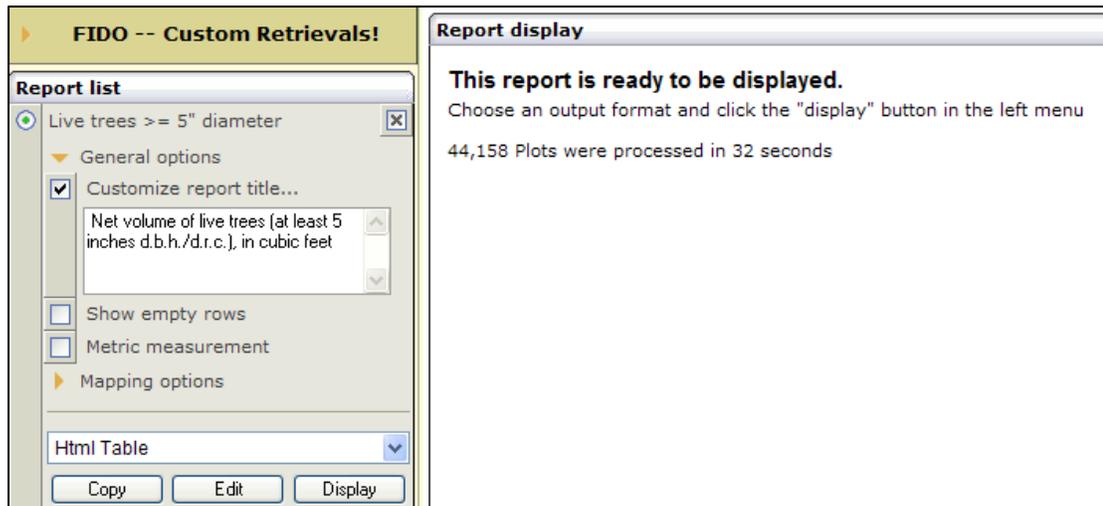
- a. Your report is listed in the left column. The **FIDO Wizard** now includes all the options that have been selected for the report.



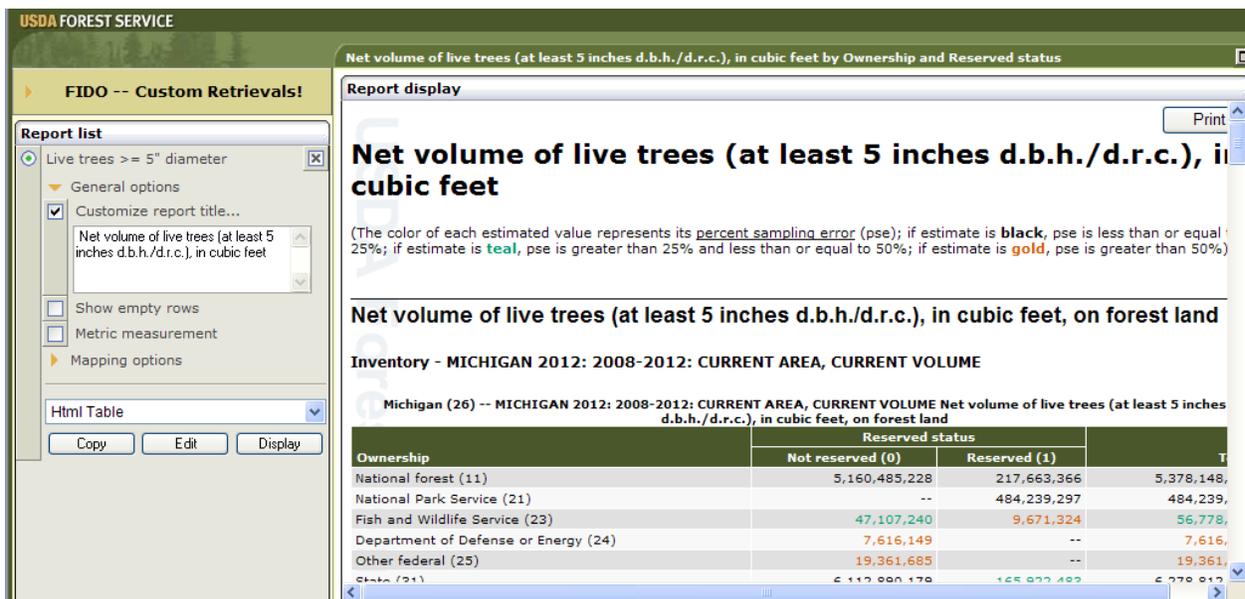
- b. To produce the report, click on the **Submit** button (once!).
“**Your request has been submitted**” appears in the display window. The report list button revolves around until the report is ready for you to choose the display options.
- c. When finished, “**This report is ready to be displayed.**” will appear in the report window. Display options appear in the left column.



- d. **General options** apply to all report formats, while **Mapping options** apply to **Map** format only. Click on **General options** to view the list. Click on the box next to **Customize report title** and type in your own title. The option, **Show empty rows**, displays all possible categories of the row attribute, regardless of zero values for those categories. The option, **Metric measurement** displays the report in metric units.

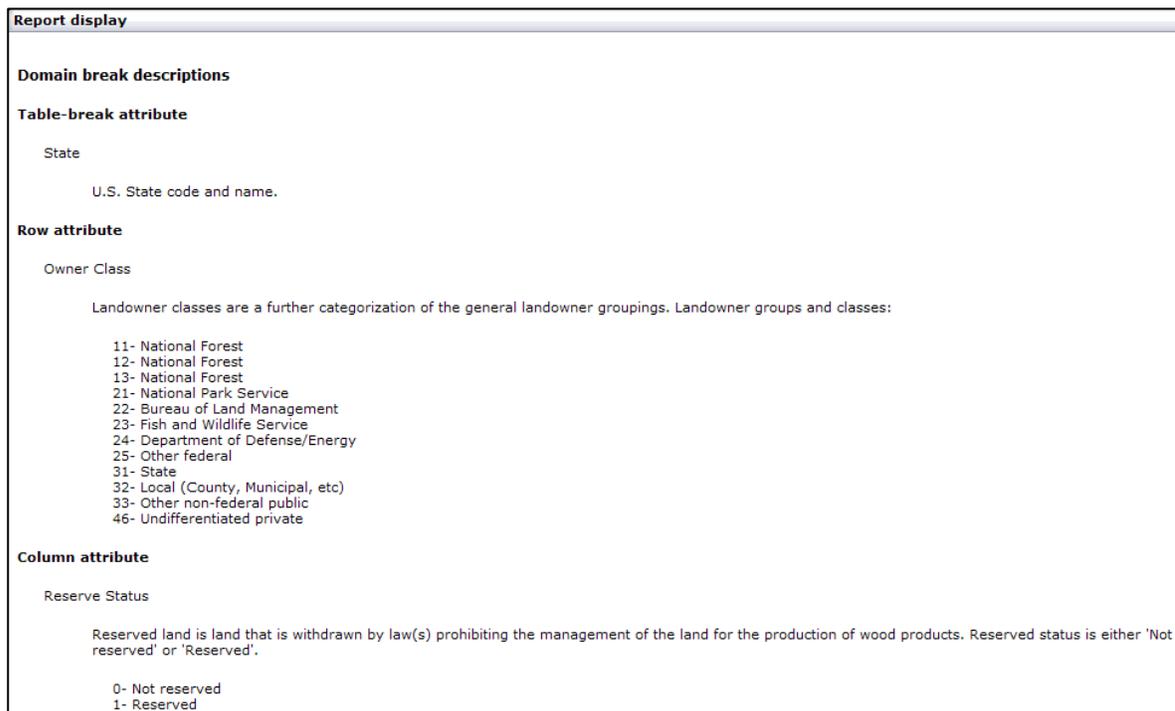


- e. The default format is **Html Table**. Use this default, and click on the **Display** button. The report appears in the center of the screen.



- f. To get a better view of the report, click the maximize button in the upper right corner of the **Report display**.

- g. There are 10 tables displayed in the report. The first five are forest land estimates for the two states and two survey years, followed by a summary report for forest land. The last five are timberland estimates for the two states and two survey years, followed by a summary report for timberland. **Scroll down to view the reports.** Note the different colors of the values throughout the table output. These indicate the range of percent sampling errors (pse) at 68% confidence interval; black estimates represent a pse of 25% or less, green is 26-50%, and red is greater than 50%. **Move your cursor over any estimate** to view the exact percent sampling error.
- h. **Scroll to the bottom of the report** to view the **Domain break descriptions** included in the report.



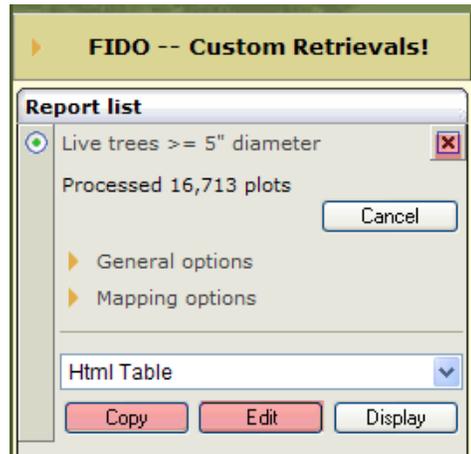
- i. **Other display options and formats** –The other display formats are: **PDF**, **Spreadsheet** (MS Excel), and **Map** (Google map). **General options** apply to all display formats, while **Mapping options** apply to the **Map** format only.
- j. **Choose the Spreadsheet** and then the **PDF** options (map display will be used in the next exercise).
- Note that the spreadsheet contains two worksheets – the first one contains the report estimates and the second one contains the percent sampling errors. The PDF output contains the estimate and pse on the same line. Both outputs can be saved for future use.

k. Other options – **Copy, Edit, Delete**

The **Edit** button will make the task buttons available, so that the report can be changed (user can alter anything – from the **Summary Attribute** to **Survey Years**)

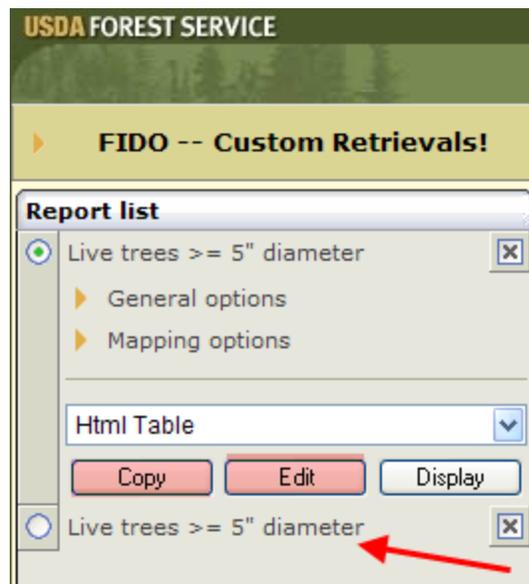
The **Copy** button will add a duplicate report to the report list, which can then be edited.

The **X** button next to the report will remove the report from the list.

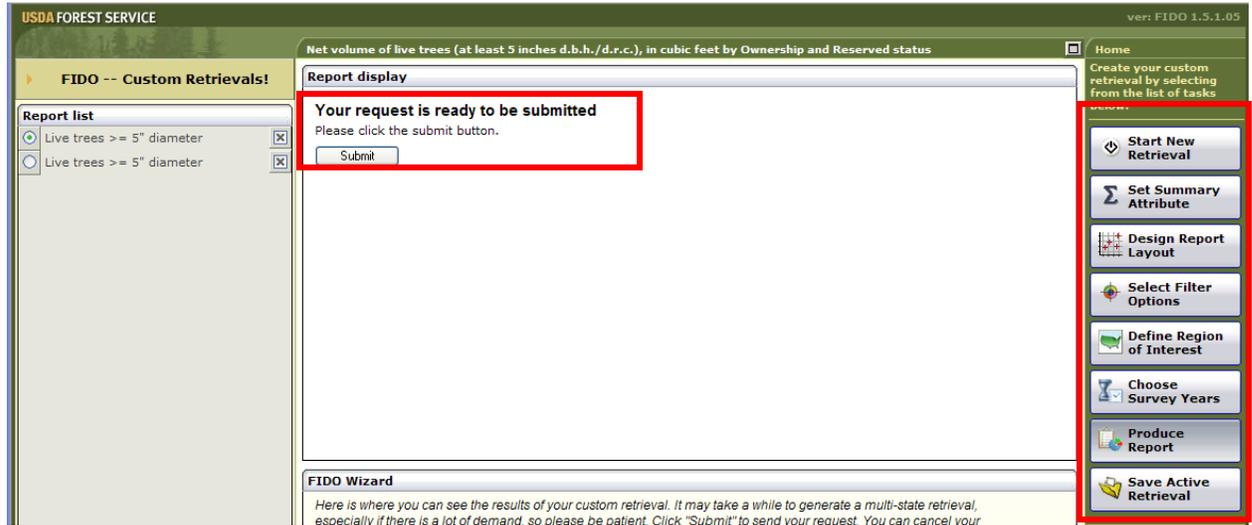


8. Copy and Edit the report.

- a. Click on the **Copy** button to add a copy of your report to the list. You can then click on the **Edit** button to make changes to the report, while keeping a copy of the original report available to you in your session.



- b. “You can now edit your request” appears on the screen, and the menu items in the right column are now available for selecting and making changes to your report. Also, at this point, you can start a completely different report - just click on the **Start New Retrieval button**. While your FIDO session is open, your current report will remain accessible in the **Produce Report** list, and you can continue to add reports.



Congratulations! – You have just mastered basic navigation of FIDO