

How to Get Site-Specific Information on Soils and Forest Management In Vermont using the NRCS Web Soil Survey (version 3.0) March 2014

- Log on to Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/>
- Click the green **Start WSS** button to open Web Soil Survey, version 3.0.

Tab 1. Area of Interest (AOI)

- **Quick Navigation** >> click on **State and County** – choose Vermont as State and your county of interest in the drop-down menu. **All Vermont counties are accessible through WSS.**
- Click **View** to get the county shown on the Area of Interest Interactive Map on right side of screen. A basic map of the county will appear, with major roads and water bodies shown.
- With the **Zoom In** button active (this button looks like a magnifying glass with a plus sign on it), draw a box around the general part of the county you are interested in by holding down your mouse button and enlarging the boxed area. You can repeat this step several times to get to the point where the property you are interested in appears in the map window. An airphoto background will appear with the map. Note: You can also try the **Navigate by Address** option.
- To delineate your Area of Interest, click on one of the two **AOI** buttons on the map toolbar. The **AOI** button showing a red box will delineate a rectangular area. The **AOI** button showing a red multi-sided polygon will delineate an irregularly-shaped area – with this, you must continue clicking at each corner and double-click at the point where you started to close the polygon.
- Once you have delineated your Area of Interest, the interactive map will zoom to show the area, hatched in blue. On the left side of the screen, it will tell you the acreage of the area you have delineated. If your Area of Interest covers more than one county, the acreage will be listed separately by county. You can give your Area of Interest a Name if you desire.
- If you are not happy with the Area of Interest as shown, click the **Clear AOI** button on the right side of the screen and use the **AOI** buttons to re-delineate it. Repeat as many times as needed. When you are satisfied with your Area of Interest, you're ready to produce the Soil Map.

Tab 2. Soil Map

- Click on the **Soil Map** tab on top of the screen, in between the **Area of Interest** tab and the **Soil Data Explorer** tab. This will generate the soil map for the Area of Interest (from here on referred to as AOI) you have delineated. Depending on server traffic, this may take a few minutes. The screen will show the Soil Map on the right and the Map Unit Legend on the left, with soil map unit symbols and names, and their acreage and percentage within the AOI.
- When viewing the soil map on-screen, some soil polygons may not show a map unit symbol. This is due to the scale of the map on-screen. Not to worry – the symbols are there. You can enlarge the scale on-screen, or they will show up when you print a copy of the map.
- At this point, you can print out a copy of the soil map, save it to your computer, save it to the Shopping Cart, or continue on to the Soil Data Explorer section, which is where you'll generate the report and map for Primary Agricultural Soils for your AOI.
- To print a copy of the soil map or to save it to your computer, click the **Printable Version** button. A small window will open – if you wish to give your map a custom name (like your name or your client's name), click the **Custom Subtitle** button and type the name you wish. Then click the **View** button. This will generate a new view of the soil map and associated information as it will appear printed and display it on-screen. This multi-page file is an Adobe® pdf file. Using the toolbar, you can then print the map or save it to your computer. This map can also be emailed, but first has to be saved to your computer as a pdf file.

- After printing or saving the soil map file, close that window by clicking on the red X. You will still have the web-based soil map page open.
- This completes the Soil Map generation process.

Tab 3. Soil Data Explorer

- Click on the **Soil Data Explorer** tab on top of the screen to the right of the **Soil Map** tab.
- Under Soil Data Explorer, you'll see 5 new tabs. Feel free to browse them all (however, the Ecological Site Assessment tab is not active at this time).
- To generate a color-coded interpretative map and report on Forest Productivity (by volume of wood fiber or by site index) within your AOI, click on the tab, **Suitabilities and Limitations for Use**.
- Under that tab, click on the **Vegetative Productivity** button.
- You have the choice to select forest productivity based on volume of wood fiber in cubic feet per acre per year or based on tree site index. Choose the option you prefer from the drop-down menu.
- Under **Basic Options**, select the tree species you wish to highlight. Under **Advanced Options**, choose Dominant Component for Aggregation Method, and check No for Interpret Nulls as Zero.
- Generate the map by clicking the **View Rating** button.
- The new color-coded Forest Productivity map will appear on the upper right side of the screen, with the accompanying table shown below it. To get a quick view of what the different colors mean, click on the **Legend** tab on the left side of the map. This will open up the Legend page. The table below the map will show the status of each soil map unit within your AOI. Soil map units with a "null" rating will be shown in grey on the map. These soils have not been assigned a forest productivity rating for the tree species you selected. They may have a rating for other tree species.
- To print a copy of the Forest Productivity map, legend, and table, click on the **Printable Version** button and repeat the process described to print or save the Soil Map.
- *The yields given in the Forest Productivity report can be compared to the Productivity Classes of Forest Land in the Vermont Use Value Appraisal Manual to determine UVA Productivity Class of Site I to Site IV.*
- You can also generate several Forest Management reports without the color-coded interpretative map for your AOI by clicking on the **Soil Reports** tab at the top.
- Under the Soil Reports choice list on the left side of the screen, select **Land Management**. Under that heading, there are several reports related to forest management. Feel free to browse them all.
- First click on the report title line, and then click the **View Description** button to read the narrative information about the report. To generate the report, click the **View Soil Report** button.
- This will generate a new screen and pdf file of the report. At this time, these Land Management reports are not available for every County in Vermont. Information is being posted to this site continuously, so please check back if you find the report is not available for your area.
- Also quite useful to forest management is the **Drainage Class** report within the **Soil Qualities and Features** heading under the **Soil Properties and Qualities** tab.

Tab 4. Download Soils Data

- The details of the use of this tab are not covered in this document.

Tab 5. Shopping Cart

- The **Shopping Cart** tab/function will generate a customized soil resource report similar to a site-specific soil survey report for your Area of Interest. The details of its use are not covered in this document. Note that the number of pages of the report can be rather lengthy.

If you have questions about Web Soil Survey, please contact VT Soil Resource Specialist (thomas.villars@vt.usda.gov, 802-295-7942, x. 124) for more information.