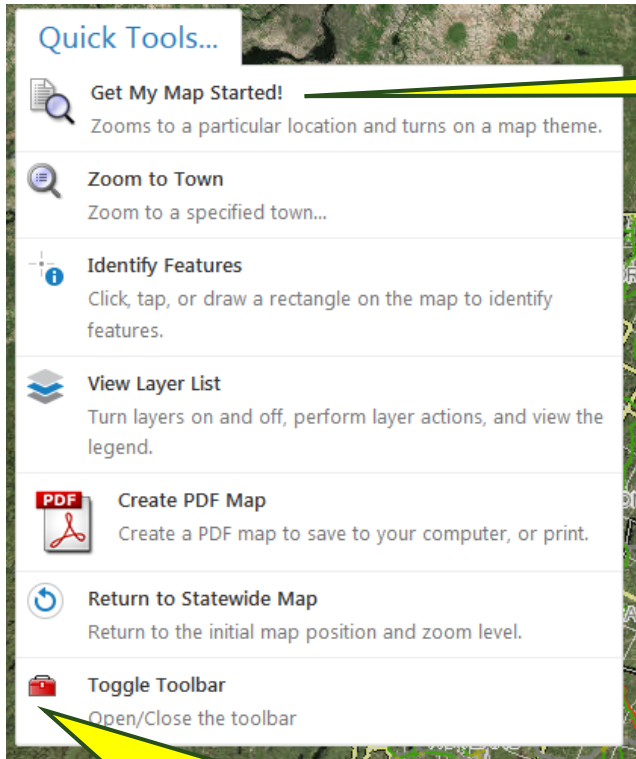


Quick Guide to Forest Stewardship Atlas

Vermont's RPCs and ANR have developed a new online map/ atlas which provides access to a wide variety of forest data for across the state. Web accessible forest stewardship data will help landowners, towns and forest managers to inventory and assess forest resources in order to more effectively manage these resources.

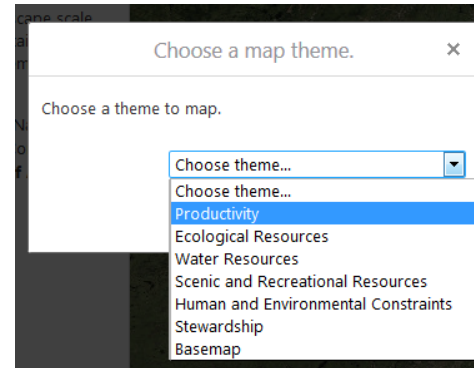
Check it out at <http://anrmaps.vermont.gov/websites/ForestStewardship/>

Digging into the Atlas



Best place to get started...And it guides you into the Atlas – selecting location, theme

Themes are a group of data that are useful to see together



Caution: when you are looking at a lot of land area (eg an entire town), some data may not show on the map. Zoom in a little and the data will start to show.

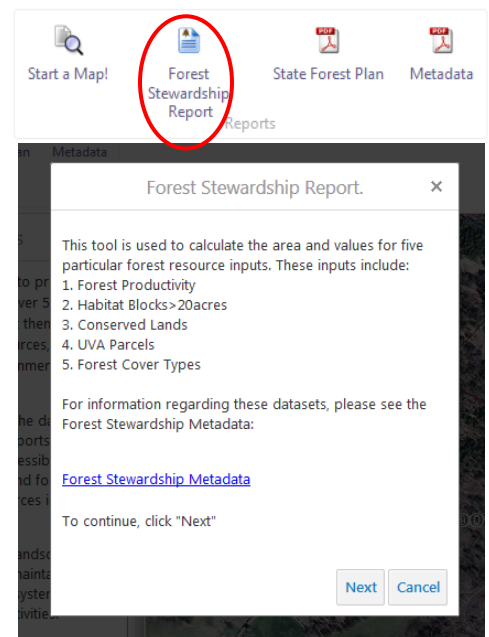
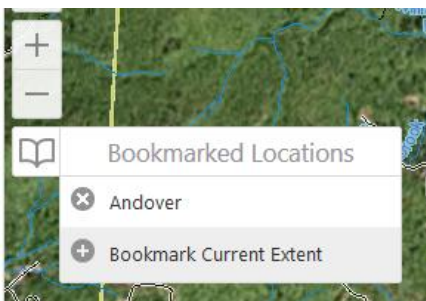
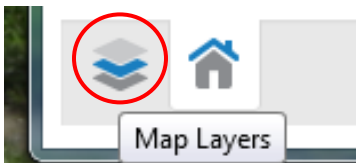
Remember to “turn on” what you want to see in the “Layers List” so that it shows on the map and in the “Legend”

Useful toolbar which appears at the top of the Atlas, including ability to print, identify data and measure

Some useful buttons explained

In general, just click on a button or hover your mouse over the button and it will tell it what it can do. Here are some useful ones to get you started:

- Forest Stewardship Report – Allows you to calculate information about a certain study area (Town, County, Watershed, etc)
- Map Layers – where you can see what symbols can be shown]
- Bookmarked Locations – you can save what area the map is showing (“Current Extent”)



Key Words

Base Maps – the map shown behind all the data – aerial/ orthophoto, topographic, simple grey canvas (with roads)

Current Extent – What area the map is currently showing

Layer – Can mean two things – either a group of data in a map (eg ANR Natural Resources Atlas) or how data is viewed (usually referring to a GIS type .lyr).

Legend – Also known as the “Key” – ie the color/ symbols on the map explained

Metadata – Data about the data – ie information about what your data shows, who collected it, when it was last updated, and other things you might want to know

Orthophoto – also known as aerial photo

Toggle Toolbar – Useful toolbar which appears at the top of the Atlas, including ability to print, identify data and measure

Theme – A group of data that are useful to see together

What data can I see in the Atlas?

For more information about any of this data, see the “Metadata”.

I. PRODUCTIVITY

- a. Forest Productivity (SARS Map 15) Forest blocks greater than 500 acres were ranked according to their predicted forest productivity as either lower or higher productivity, based on the following inputs – geology (30%), elevation (25%), hardness zones (15 %), landforms (15%), slope (10%) and precipitation (5%)

II. ECOLOGICAL RESOURCES

- a. Species Datasets
 - i. Bobcat
 - ii. Bear
 - iii. Amphibian and Reptile
 - iv. Moose
- b. Deer Wintering Areas
- c. Rare Species and Communities
- d. Wildlife Habitat Blocks
- e. Climate Change Refugia (SARS Map 31)
- f. The Nature Conservancy (TNC) Matrix Blocks – large areas with minimal fragmentation by roads that were selected as the best locations for conservation of the dominant forest natural community types
- g. Biophysical Region (SARS Map 4) – divides Vermont on the basis of bedrock geology, gross physiography, climate, and broad-scale patterns of potential natural vegetation.
- h. Land Type Association (SARS Map 5) – subdivisions defined by similar patterns of characteristics such as: glacial land forms, depth to bedrock, bedrock type, topographic roughness, soil parent material, regional hydrology, and presettlement vegetation.
- i. Percent Forested (SARS Map 6)
- j. Forest Cover Types (SARS Map 7)

III. WATER RESOURCES

- a. Surface Waters
- b. Priority Aquatic Features
- c. Wetlands
- d. Flood and Fluvial Erosion Hazard Areas
- e. Vermont Major Watersheds (SARS Map 34)

- f. Source Protection Area (SARS Map 35)
- g. Vermont Headwater Land Class (SARS Map 36)
- h. Ability to Produce Clean Water (SARS Map 37)
- IV. SCENIC AND RECREATIONAL RESOURCES**
 - a. Forest Recreation Sites
 - b. Trails
- V. HUMAN AND ENVIRONMENTAL CONSTRAINTS**
 - a. Areas of Forest Decline (SARS Map 23)
 - b. Sensitivity to Acid Deposition (SARS Map 24)
 - c. Vermont Wildfire Risk (SARS Map 32)
 - d. Susceptibility to Emerald Ash Borer (EAB) (SARS Map 27)
 - e. Asian Longhorned Beetle (ALB) Risk (SARS Map 28)
 - f. Hemlock Woolly Agedid (HWA) Risk (SARS Map 29)
 - g. Number of Invasive Species Observed (SARS Map 30)
 - h. Density of E-Site (Housing Density)
- VI. STEWARDSHIP**
 - a. Conserved Lands (SARS Map 11)
 - b. Percent of Land Area Conserved by Town (SARS Map 12)
 - c. Percent of Town Acres in Use Value Appraisal (UVA, otherwise known as Current Use) (SARS Map 13)
 - d. UVA Average Parcel Acres by Town (SARS Map 14)
 - e. Priority Urban Forest Enhancement (SARS Map 39)
 - f. University of Central Florida's (UCF) Index of priority areas for urban tree canopy enhancements – Medium to Medium/High (SARS Map 40)
 - g. Stewardship Potential (SAP - Spatial Analysis Project)

Other Useful Links

CVRPC Resources

- <http://centralvtplanning.org/programs/gis-mapping/> - every so often add link to a new resource as it becomes available
- <http://centralvtplanning.org/programs/forest-stewardship/> - Includes the work SWCRPC has done since 2013 on Landscape-Based Forest Stewardship

Online Resources

- VT BioFinder Mapping Tool - <http://biofinder.vermont.gov/biofindermap.htm>
- ANR Natural Resources Atlas - <http://anrmaps.vermont.gov/websites/anra/>
 - Includes several “Layers” which are related data grouped together in a map
 - “FloodReady Map” – known as “[Floodplain Management](#)” layer
- Wide variety of mapping apps for your tablets/ smartphone – for some examples and reviews see http://vcqi.vermont.gov/sites/vcqi/files/event_archive/Webinar_Smartphones_Dec2013.pdf

Other Forest Resources

- NOAA Coastal Change Analysis Program (CCAP) Land Cover Atlas - <http://www.coast.noaa.gov/ccapatlas/>
- U.S. Forest Service Geodata Clearinghouse - <http://data.fs.usda.gov/geodata/>
- U.S. Forest Service Forest Inventory Data Online (FIDO) - <http://apps.fs.fed.us/fia/fido/index.html>
- Vermont Division of Forestry – Forest Resource Harvest Summary - http://www.vtfor.org/util/for_utilize_harvsumm.cfm
- USDA National Agriculture Statistics Service – Quick Stats Adhoc Query Tool - <http://quickstats.nass.usda.gov/>
- Vermont Natural Resources Council Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information - <http://www.vnrc.org/subdivisionreport/index.html>
- Vermont Forest Resources Plan (including SARS maps) http://anrmaps.vermont.gov/websites/sars_data/