



# OLD FIELDS, NEW FIELDS

**USING GRANITVIEW TO MAP THE  
SOILS ON YOUR PROPERTY**

**OCTOBER 19, 2013**

# GRANITView: [granitview.unh.edu](http://granitview.unh.edu)

The screenshot displays the GRANITView web application interface. At the top, the browser address bar shows the URL <http://granitview.unh.edu/>. Below the browser, the application header includes the GRANITView logo, a search bar, and navigation links for "Map Layers", "Tools", and "Help". A "Basemap" button is also visible. On the left side, a "Map Layers" panel is open, listing various layers with checkboxes and visibility sliders. The main map area shows a detailed map of New Hampshire with various geographical features, roads, and place names. A navigation toolbar is located on the right side of the map, including a "Basemap" button, a compass, and a zoom control. The current scale is displayed as 1:2,311,162. The bottom of the interface shows the current latitude and longitude coordinates: Latitude: 44.183393, Longitude: -70.006427. The Esri logo is visible in the bottom right corner.

**Map Layers**

- Layer Visibility
- Label Features
- Base Layers
- Floodplains (DFIRMS)
- Geodetic Control
- Land Conservation
- Recreation
- Soils
- Water Resources
- Wildlife
- Environmental Data
- Landcover/Land Use
- Orthophotography

Current Scale = 1:2,311,162

Latitude: 44.183393 Longitude: -70.006427

GRANITView provides a simple general soils mapping option in New Hampshire

# Zoom to Your Location

The screenshot displays the GRANITView web application interface. At the top left, the logo features a compass rose and the text "GRANITView". To the right of the logo is a navigation menu with "Map Layers", "Tools", and "Help" options, and a link to "Visit the GRANIT website at www.granit.unh.edu/".

A "Map Layers" panel is open on the left side, showing a list of layers with checkboxes and a vertical slider for visibility. The layers listed are:

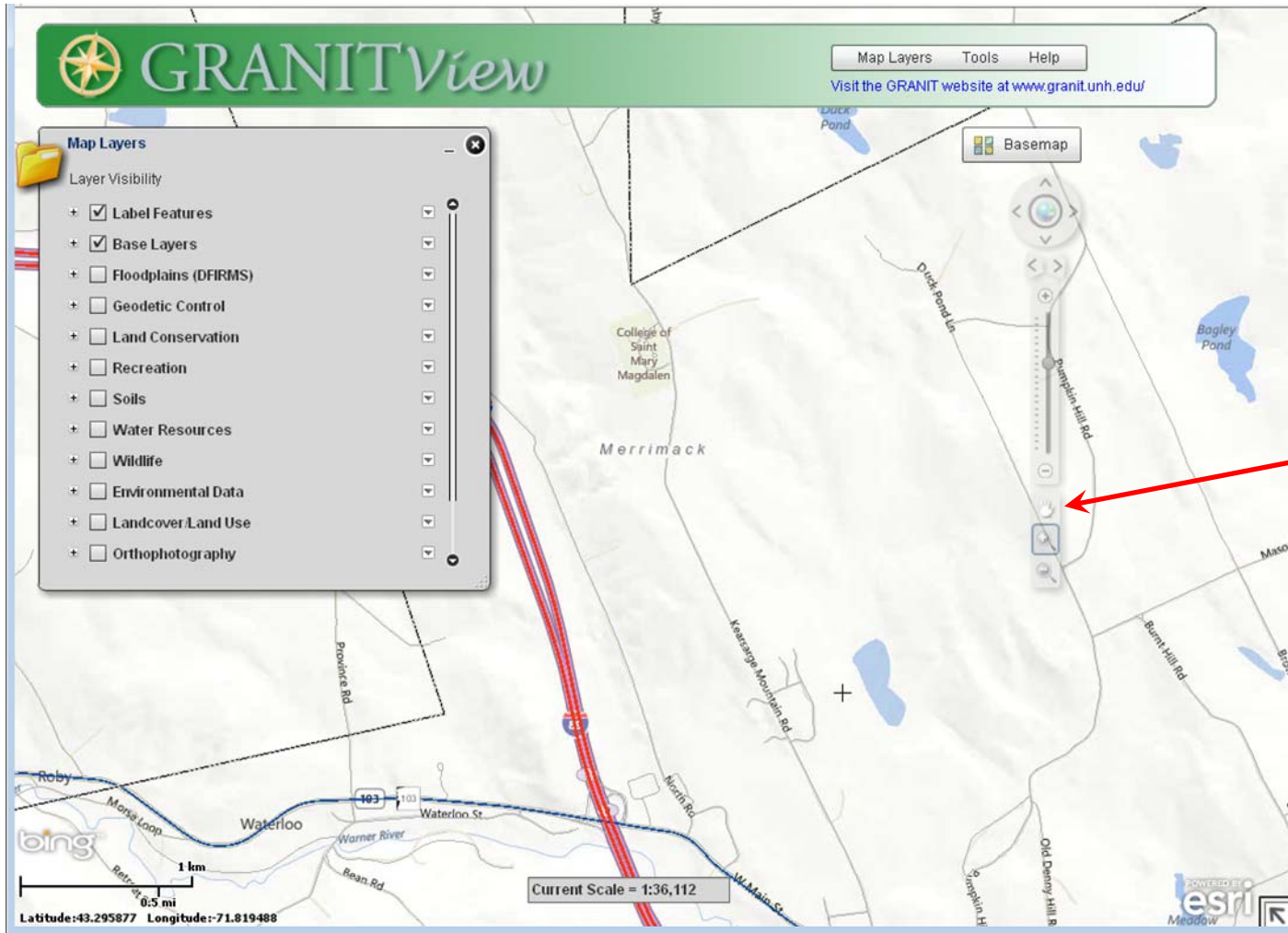
- Label Features
- Base Layers
- Floodplains (DFIRMS)
- Geodetic Control
- Land Conservation
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- Soils
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The main map area shows a detailed view of Vermont, with a red square highlighting a specific location near the Merrimack River. A "Basemap" button is visible in the top right corner of the map area. On the right side of the map, there is a vertical navigation toolbar with a "+" magnifier button. A red arrow points from a text box on the right to this "+" button.

At the bottom left, there is a scale bar showing 50 km and 50 mi, and the coordinates "Latitude: 43.206384 Longitude: -71.588458". At the bottom center, it says "Current Scale = 1:2,311,162". At the bottom right, it says "POWERED BY esri" with the Esri logo.

Use the "+" magnifier to zoom to your location.

# Center Your Location on the Map



Use the Hand Tool to navigate to your location.

# Turn on the Aerial Photos

The screenshot displays the GRANITView web application interface. At the top left is the GRANITView logo. To the right are navigation links for "Map Layers", "Tools", and "Help", along with a URL: "Visit the GRANIT website at [www.granit.unh.edu/](http://www.granit.unh.edu/)".

The main map area shows an aerial photograph of a forested region with some buildings and roads. A "Basemap" button is visible in the top right corner. Below it is a navigation control panel with a compass, zoom in/out buttons, and a scale bar.

On the left side, a "Map Layers" panel is open, showing a list of layers under "Layer Visibility". The "Orthophotography" layer is checked and highlighted with a red arrow. Below it, the "Statewide" layer is also checked and highlighted with a red arrow. Other layers include "Regional", "NH 2010/2011 1-foot RGB", "NH 2010/2011 1-foot CIR", "NH NAIP 2012 RGB", "NH NAIP 2012 CIR", "NH NAIP 2011 RGB", "NH NAIP 2011 CIR", "NH NAIP 2009 RGB", and "NH NAIP 2008 RGB".

At the bottom left, there is a "bing" logo, a scale bar showing "500 m" and "2000 ft", and coordinates: "Latitude: 43.310519 Longitude: 71.814568". At the bottom center, a box indicates "Current Scale = 1:18,056". At the bottom right, it says "POWERED BY esri".

Check the map layers above

# Sketch Your Property on the Map

The screenshot displays the GRANITView web application interface. At the top, the logo "GRANITView" is visible next to a compass icon. A navigation bar contains "Map Layers", "Tools", and "Help" buttons, along with a link to "Visit the GRANIT website at [www.granit.unh.edu/](http://www.granit.unh.edu/)".

The main map area shows an aerial photograph of a wooded area with a red polygon sketching a property boundary. On the left, a "Map Layers" panel is open, showing a list of layers with checkboxes and expand/collapse icons:

- Layer Visibility
- +  Landcover/Land Use
- Orthophotography
  - +  Regional
  - Statewide
    - +  NH 2010/2011 1-foot RGB
    - +  NH 2010/2011 1-foot CIR
    - +  NH NAIP 2012 RGB
    - +  NH NAIP 2012 CIR
    - +  NH NAIP 2011 RGB
    - +  NH NAIP 2011 CIR
    - +  NH NAIP 2009 RGB
    - +  NH NAIP 2008 RGB

On the right side of the map, there is a "Basemap" button, a compass, a zoom slider, and a hand tool. At the bottom left, a scale bar shows "500 m" and "2000 ft". At the bottom center, a box indicates "Current Scale = 1:18,056". At the bottom right, the "POWERED BY esri" logo is visible.

Often you can see the property lines on the aerial photo if you know the shape of the property from a survey or tax map

# Turn on the Farm Soils Layer

The screenshot displays the GRANITView web application interface. At the top, the GRANITView logo is on the left, and navigation buttons for 'Map Layers', 'Tools', and 'Help' are on the right. Below the navigation buttons is a link: 'Visit the GRANIT website at [www.granit.unh.edu/](http://www.granit.unh.edu/)'. The main map area shows a satellite-style view with overlaid soil layers. A 'Map Layers' panel is open on the left, showing a list of layers with checkboxes. The 'Soils' layer is checked, and its transparency is set to 50%. Below the 'Soils' layer, there are sub-layers for 'Farmland' with a legend showing 'Conditional F', 'All Areas are', 'Farmland of', and 'Farmland of'. The map shows three distinct soil categories highlighted with blue arrows: 'Prime Farm Soils' (dark blue), 'Soils of Local Importance' (yellow), and 'Soils of Statewide Importance' (orange). A red arrow points to the 'Soils' checkbox in the 'Map Layers' panel. The interface also includes a 'Basemap' button, a scale bar (500m/2000ft), and coordinates (Latitude: 43.314703, Longitude: 71.835082). The current scale is 1:18,056. The map is powered by ESRI.

Turn on the map layers shown above, adjust the transparency





# Choose the Identify Tool

The screenshot displays the GRANITView software interface. At the top, a green header contains the logo and the text "GRANITView". Below the header, a menu bar includes "Map Layers", "Tools", and "Help". The "Tools" menu is open, showing options: "Navigation Tools", "Bookmarks", "Identify" (highlighted in green), "Draw/Measure", and "Print". A red arrow points from the "Identify" option in the menu to the "Tools" menu item in the header. On the left side, a "Map Layers" panel is visible, listing various layers such as "Label Features", "Base Layers", "Floodplains (DFIRMS)", "Geodetic Control", "Land Conservation", "Recreation", "Soils", "Soil Series", "Hydric Soils", and "Farmland". The "Soils" layer is expanded, showing sub-options like "Conditional Prime Farmland", "All Areas are Prime Farmland", and "Farmland of Local Importance". The main map area shows a topographic map with various colored overlays and labels. A scale bar at the bottom indicates "Current Scale = 1:18,056". The bottom right corner features the "esri" logo and "POWERED BY" text.

The Identify tool provides detailed info about any layer

# Identify “Farmland” Types

The screenshot displays the GRANITView software interface. At the top, the logo "GRANITView" is visible on the left, and navigation buttons "Map Layers", "Tools", and "Help" are on the right. Below the logo, a green banner contains the text "Visit the GRANIT website at www.granit.unh.edu/".

On the left side, there are two panels:

- Map Layers:** A panel with a folder icon and a list of layers. The "Layer Visibility" section includes:
  - Label Features
  - Base Layers
  - Floodplains (DFIRMS)
  - Geodetic Control
  - Land Conservation
  - Recreation
- Identify:** A panel with an information icon and a list of layers to identify. The "Identify:" dropdown is set to "All Visible Layers". The list includes:
  - Soil Series
  - Hydric Soils
  - Farmland** (highlighted in green)
  - Forest Group
  - Drainage Class
  - Representative Slope

A red arrow points from the "Farmland" option in the Identify panel to the main map area. The map shows a topographic view with contour lines and various colored regions representing different land types. A scale bar at the bottom indicates "Current Scale = 1:18,056". The Esri logo is in the bottom right corner.

Scroll down and choose Farmland

# Click on the Area of Interest

The screenshot displays the GRANITView web application interface. At the top, there is a green header with the GRANITView logo and navigation buttons for "Map Layers", "Tools", and "Help". Below the header, a map shows a topographic area with various soil units labeled (e.g., 77C, 380C, 379C). A blue-shaded area of interest is highlighted on the map, corresponding to soil unit 77C. On the left side, there are two panels: "Map Layers" and "Identify". The "Map Layers" panel shows a list of layers with checkboxes for visibility. The "Identify" panel displays detailed information for the selected area, including soil code, soil unit, parent material, representative slope, farmland class, NH forest soils group, drainage class, hydrologic group, and area in acres. Red arrows point to specific details in the "Identify" panel, such as "Soil Unit: Marlow fine sandy loam, 8 to 15 percent slopes very stony" and "Farmland Class: Farmland of local importance". The bottom of the interface shows the current scale (1:18,056) and coordinates (Latitude: 43.307302, Longitude: 71.827572).

**Map Layers**

Layer Visibility

- Label Features
- Base Layers
- Floodplains (DFIRMS)
- Geodetic Control
- Land Conservation
- Recreation

**Identify**

Farmland  
Soil Code: 77C  
Soil Unit: Marlow fine sandy loam, 8 to 15 percent slopes very stony  
Parent Material: lodgement till derived from granite, gneiss, or schist  
Representative Slope: 12  
Farmland Class: Farmland of local importance  
NH Forest Soils Group: Group IA  
Drainage Class: Well drained  
Hydrologic Group: C  
Area (acres): 72

Current Scale = 1:18,056

Latitude: 43.307302 Longitude: 71.827572

POWERED BY esri

Review the details provided – there's lots of info here!



# **OLD FIELDS, NEW FIELDS**

**CONSERVATION EASEMENTS**

**OCTOBER 19, 2013**



# WHAT IS A CONSERVATION EASEMENT

- A conservation easement is
  - a **perpetual**, legally binding agreement
  - **voluntarily** donated or sold by a landowner to a conservation organization or agency;
  - **limits** certain types of **land uses**, including development;
  - **protects conservation values** for future generations;



## UNDER A CONSERVATION EASEMENT:

- Land remains privately owned and can be bought/sold;
- Provisions remain in force for future owners;
- Land remains on the tax roles.

# TYPICAL AUSBON SARGENT EASEMENT

## LAND USE LIMITATIONS

- No commercial or industrial uses \*
- No subdivision or development
- No structures or improvements \*
- No soil, wetland or topographical disturbances \*
- No billboards\*
- No mining, quarrying, removal of sand, gravel, rocks, topsoil;
- No dumping

\* except forestry/agriculture, with limitations



# TYPICAL AUSBON SARGENT EASEMENT LAND USES **ALLOWED**

Any land uses not limited, including

- Forestry
- Agriculture
- Conservation
- Wildlife habitat management
- Non-commercial outdoor recreation

**However, no use can be detrimental to  
the purposes of the easement**





## UNDER A CONSERVATION EASEMENT:

- Landowner promises not to exercise the property rights limited by the easement
- The limited rights are forfeited and no longer exist;
- Conservation organization monitors and enforces the landowner's promise:

**to abide by the terms of the easement.**



# LOOKING AT LAND WITH A CONSERVATION EASEMENT IN PLACE?

- contact the easement holder,
- get a copy of the easement deed,
- READ IT,
- discuss the easement and your plans for the land with the easement holder

**Don't make assumptions –  
ask questions before you buy/lease!**



# INTERESTED IN CONSERVING YOUR LAND WITH A CONSERVATION EASEMENT?

- Find a land trust near you at the  
NH Land Trust Coalition Web Site:

**[www.nhltc.org](http://www.nhltc.org)**

# AGRICULTURAL MANAGEMENT UNDER AN AUSBON SARGENT CONSERVATION EASEMENT

Typically, forests can be converted to agriculture on suitable sites, soils, terrain

- Especially on Prime and statewide ag soils,
- Often on soils of local agricultural significance, for suitable purposes,
- NOT on shallow to bedrock soils or
- NOT on mucky wetland soils,
- NOT on steep slopes.

**Use Farm Soils Maps to identify suitable Sites, Soils, Terrain**

# AGRICULTURAL MANAGEMENT UNDER AN AUSBON SARGENT CONSERVATION EASEMENT

- Typically Best Management Practices required,
- Sometimes management plan required.
- Funding source often dictates specific agricultural provisions
  - placement of ag buildings
  - timing of mowing,...

# AGRICULTURAL MANAGEMENT UNDER A CONSERVATION EASEMENT

- Agriculture must be balanced with other conservation priorities
  - Water resources – unmowed/uncultivated stream buffers, slope limitations, to minimize erosion
  - Wildlife habitat – time of mowing, height of mower
  - Outdoor recreation – varies depending on situation – public funding often requires public access, but provisions for farm posting likely included

# AGRICULTURAL MANAGEMENT UNDER A CONSERVATION EASEMENT

- Conservation concerns with farm practices
  - » soil erosion,
  - » water quality,
  - » nutrient loss/management

# **WILDLIFE MANAGEMENT UNDER AN** **AUSBON SARGENT** **CONSERVATION EASEMENT**

- Typically:
  - forests can be converted to early successional habitat/fields
  - often requires forestry or wildlife management plan prepared by a professional



# **LAND VALUE UNDER A CONSERVATION EASEMENT**

- Conservation easements typically lower the value of land,
- Lower value often makes land more accessible to farmers for purchase.