

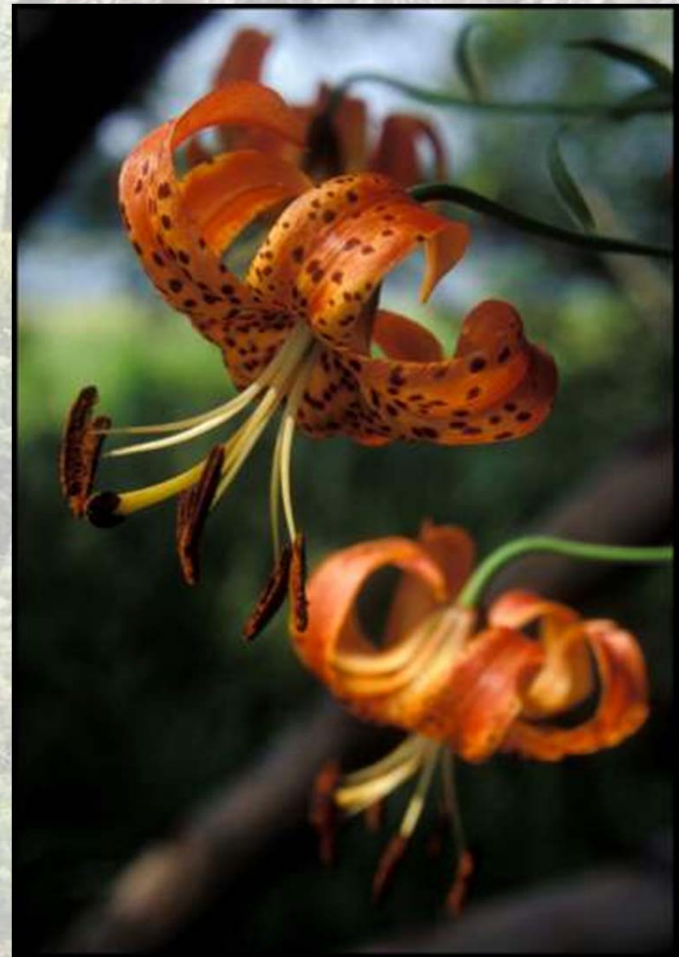


# An Introduction to the Natural Heritage Bureau Datacheck Tool

And brief summary of a few  
forested wetland natural communities

# Natural Heritage Bureau

- Native Plant Protection Act
  - RSA 217:A
- Protect and conserve native plants
  - Inventory
  - Investigation & Research
  - Conservation
  - Information Resources



Turk's cap lily  
(*Lilium superbum*); SE

# Database

- Rare plants
- Exemplary natural communities
- Rare wildlife



# Landowner Request

- Property specific
- No fee for this service
- Results cannot be used for permit requirements
- Examples of when to use:
  - Tree farm certification requirements
  - NRCS Forest Management Plans
  - General planning



# Database Check for Permit Requirements

- Federal or state agencies require a review to determine if a proposed project will impact rare species or critical habitat.
- Examples that apply to forestry:
  - Wetlands Minimum Impact Forestry Notification
  - Standard Dredge and Fill



# Two Methods to Request Review for Permitting Requirements

**[www.nhnaturalheritage.org](http://www.nhnaturalheritage.org)**  
or

**603-271-2215 ext. 323**

**[mcoppola@dred.state.nh.us](mailto:mcoppola@dred.state.nh.us)**

## **Services**

- ❖ On-line via the NHB Datacheck Tool
- ❖ Hard Copy Request Form



**New** Forestry specific request form

# NHB DataCheck Tool

- Developed as a collaborative effort
  - NH Department of Environmental Services
  - NH Fish and Game
  - NH Natural Heritage Bureau
- Web-based interactive mapping tool
- Prescreen projects for potential impacts



# Datacheck Tool Changes Specific to the Wetlands Minimum Impact Forestry Notifications

- **No fee**
- **NHB Datacheck Receipt**
  - Completion of process
  - This is the **ONLY** document required to submit with the Wetlands Minimum Impact Forestry Notification
- **NHB Datacheck Results letter**
  - Only if the project was screened as “potential impacts”
  - Recommendations to avoid or minimize possible impacts
  - May dismiss concerns after review
  - **DO NOT** submit this second letter with the Wetland Minimum Impacts Forestry Notification form. The recommendation in the second letter are for your consideration.

# A Few Technicalities

- Internet Explorer
- Pop-up blockers
- Not Mac-Friendly yet
- Expect a learning curve in the beginning....but it gets easier!



# Mapping Instructions

## SERVICES


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### Information About Rare Species for a Permit Requirement

NH Heritage maintains a database of known locations of rare species and exemplary natural communities. Federal, state, and local agencies may require a check of this database to determine whether a proposed project could impact rare species or critical habitat. There is a \$25 fee for this service.

There are two ways to request a check of the NH Heritage database:

1. Use the [DataCheck Tool](#). This is an interactive web page that can be used to provide NH Heritage with basic information about a project, including a map.



**First Time Users: Please print the [PDE](#) for step-by-step instructions for the mapping portion of the DataCheck Tool.**

If there are no NH Heritage records anywhere in the vicinity, a letter to that effect will be e-mailed within 24 hours and there is no fee.

If NH Heritage records are in the vicinity, a review by NH Heritage is needed. This review can be requested using the DataCheck Tool, and payment of the \$25 fee can be made by sending a check.

**Important Note:** the Tool can only be accessed using the **Windows Explorer** browser.

# Signing In



## PROJECT STATUS

- Sign In

## ■ NHB DataCheck Tool: Sign In

### New to NHB DataCheck?

Using this Tool, a project planner may:

1. Locate and Draw a project on an interactive map.
2. Check the project area for NHB records.
3. Depending on the results of the data check:
  1. Save or print a NHB letter (no records nearby); or
  2. Request a further check by NHB (records found nearby).

### Need Help?

[Click here](#) to view the help document. The help document may also be viewed by clicking on the wildflower in the upper left corner of any page in the NHB DataCheck Tool.

[Enter as Guest\\*](#)

**OR**

[Register Now](#)

### Existing Users

Please enter your Email Address, User Name and Password to sign in.

Email Address:

User Name:

Password:

[Sign In](#)

[Forgot your password?](#)

[Quit](#)

Register

\*Guests may map project areas and get a preliminary check of the NHB database. However, to get official results you should now sign up as a registered user. There is no fee for registering and you will not be placed on any mailing lists.

# Preliminary Project Information

## ■ NHB DataCheck Tool: Preliminary Project Information I

Which of the following describes the maximum project footprint (area disturbed during or after completion of the project)?

- New footprint (no existing structures)
- Completely within an existing footprint (repairs, replacement)
- Expanding an existing footprint (additional area disturbed adjacent to a previously disturbed location)

Will this project be submitted as a *Notification* or *Minimum Expedited* application to the NHDES Wetlands Bureau?

If you are not sure which is the correct choice, please [click here](#) for more information.

- Yes
- No

Select "Yes" if you will be submitting any of the following types of applications to the NHDES Wetlands Bureau :

- Minimum Impact Agriculture
- Minimum Impact Expedited
- Notification of Forest Management or Timber Harvest Activities
- Notification of Routine Roadway & Railway Maintenance Activities
- Notification of Trail Development Activities
- Permit by Notification
- Seasonal Dock Notification for Lakes and Ponds

Select "No" if you are submitting a Standard Dredge and Fill Application to the Wetlands Bureau or are not submitting any Wetlands Bureau application.

How will you provide the project boundaries to NHB?

- I will draw the project boundaries using this Web tool.
- I will send a shapefile with project boundaries to NHB.
- I want to send a hard-copy request.

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Next

Cancel



#### PROJECT STATUS

- Not logged in
- Existing projects
- Preliminary project information**

## ■ ■ NHB DataCheck Tool: Preliminary Project Information II

Select one or more Project Categories that describe your project.

Include at least one selection that covers the full extent of the project (maximum area subject to disturbance).  
For example: "**Buildings and Related Structures** - Residential subdivision" even if only applying for a culvert crossing within the planned subdivision.

Current categories selected: **None.**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Bulkhead                                | <input type="checkbox"/> Transmission line              | <input type="checkbox"/> wastewater facility   |
| <input type="checkbox"/> Canopy (seasonal)                       | <input type="checkbox"/> Utility crossing               | <input type="checkbox"/> Water intake          |
| <input type="checkbox"/> Channel dredge                          |   | <input type="checkbox"/> Water storage tank    |
| <input type="checkbox"/> Dam                                     | <b>Recreation</b>                                       | <input type="checkbox"/> Water supply system   |
| <input type="checkbox"/> Construction requiring Shoreland Permit | <input type="checkbox"/> Athletic fields                | <input type="checkbox"/> Well                  |
| <input type="checkbox"/> Dock (permanent)                        | <input type="checkbox"/> Recreational facility          | <input type="checkbox"/> Wetland creation      |
| <input type="checkbox"/> Dock (seasonal)                         | <input type="checkbox"/> Swim area                      | <input type="checkbox"/> Wetland restoration   |
| <input type="checkbox"/> Dock (tidal)                            | <input type="checkbox"/> Trail Bridge                   |  |
| <input type="checkbox"/> Marina                                  | <input type="checkbox"/> Trails                         | <b>Other</b>                                   |
| <input type="checkbox"/> Personal water craft lift               | <input type="checkbox"/> Walkway                        | <input type="checkbox"/> Airport improvements  |
| <input type="checkbox"/> Pilings                                 | <b>Forestry and Agricultural Activities</b>             | <input type="checkbox"/> Cable                 |
| <input type="checkbox"/> Rock removal                            | <input type="checkbox"/> Pasture                        | <input type="checkbox"/> Composting facility   |
| <input type="checkbox"/> Seawall                                 | <input type="checkbox"/> Pond                           | <input type="checkbox"/> Contaminant removal   |
| <input type="checkbox"/> Steps in the bank                       | <input type="checkbox"/> Timber harvest                 | <input type="checkbox"/> Dry hydrant           |
| <b>Buildings and Related Structures</b>                          | <b>Chemical and Biological Control Applications</b>     | <input type="checkbox"/> Fish Ladder           |
| <input type="checkbox"/> Apartment/condominium complex           | <input type="checkbox"/> Aquatic weed control           | <input type="checkbox"/> Geotechnical drilling |
| <input type="checkbox"/> Campground                              | <input type="checkbox"/> Biological control application | <input type="checkbox"/> Gravel operation      |
| <input type="checkbox"/> Mobile home park                        | <input type="checkbox"/> Biosolid application           | <input type="checkbox"/> Landfill              |
| <input type="checkbox"/> Multiple commercial buildings           | <input type="checkbox"/> ...                            | <input type="checkbox"/> Sign installation     |

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Continue

Cancel



SET MAP'S VIEW EXTENT

Select an option:

- Zoom To selected town
- Zoom to geographic coordinates

Select Town

Go

Close

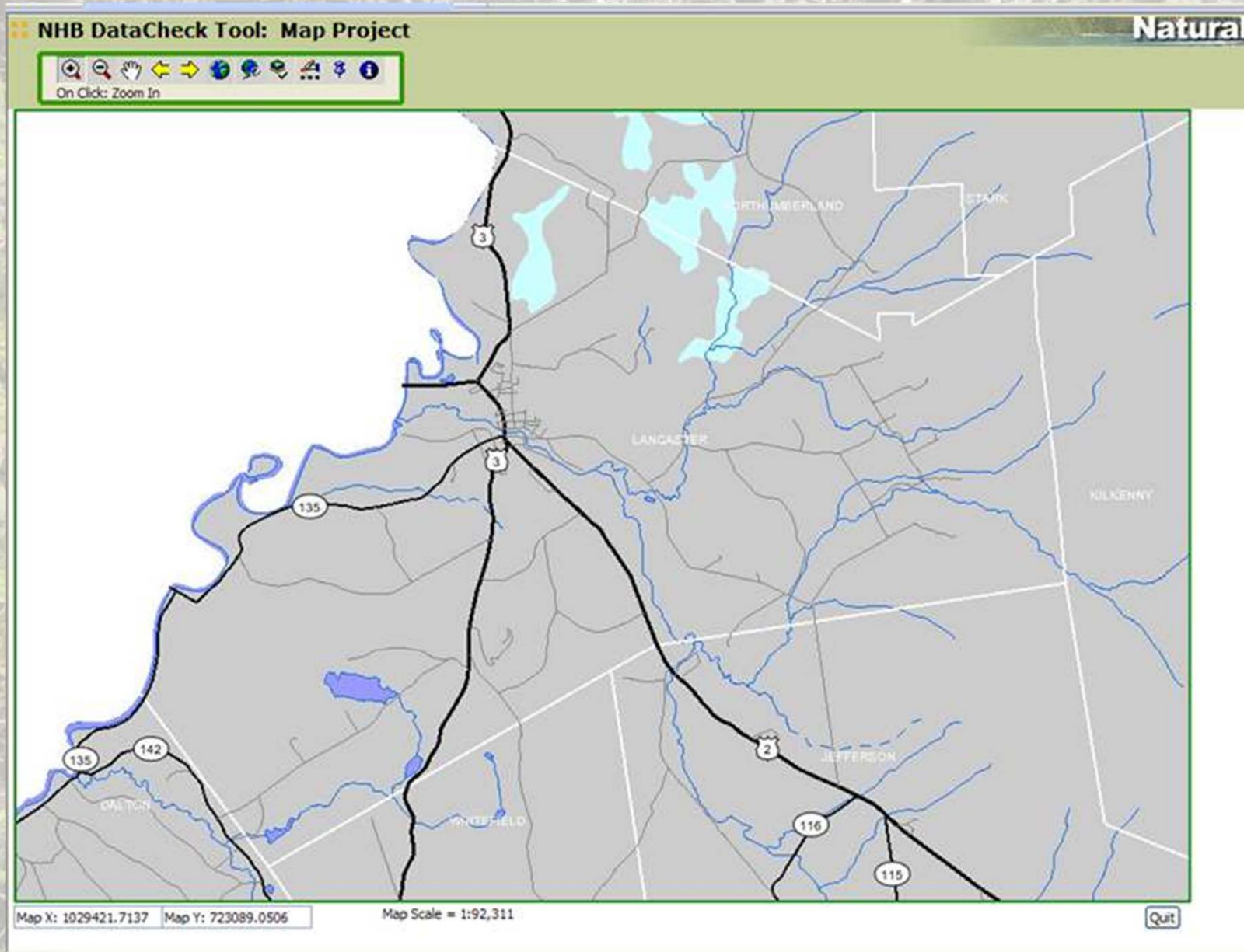


Map X:      Map Y:

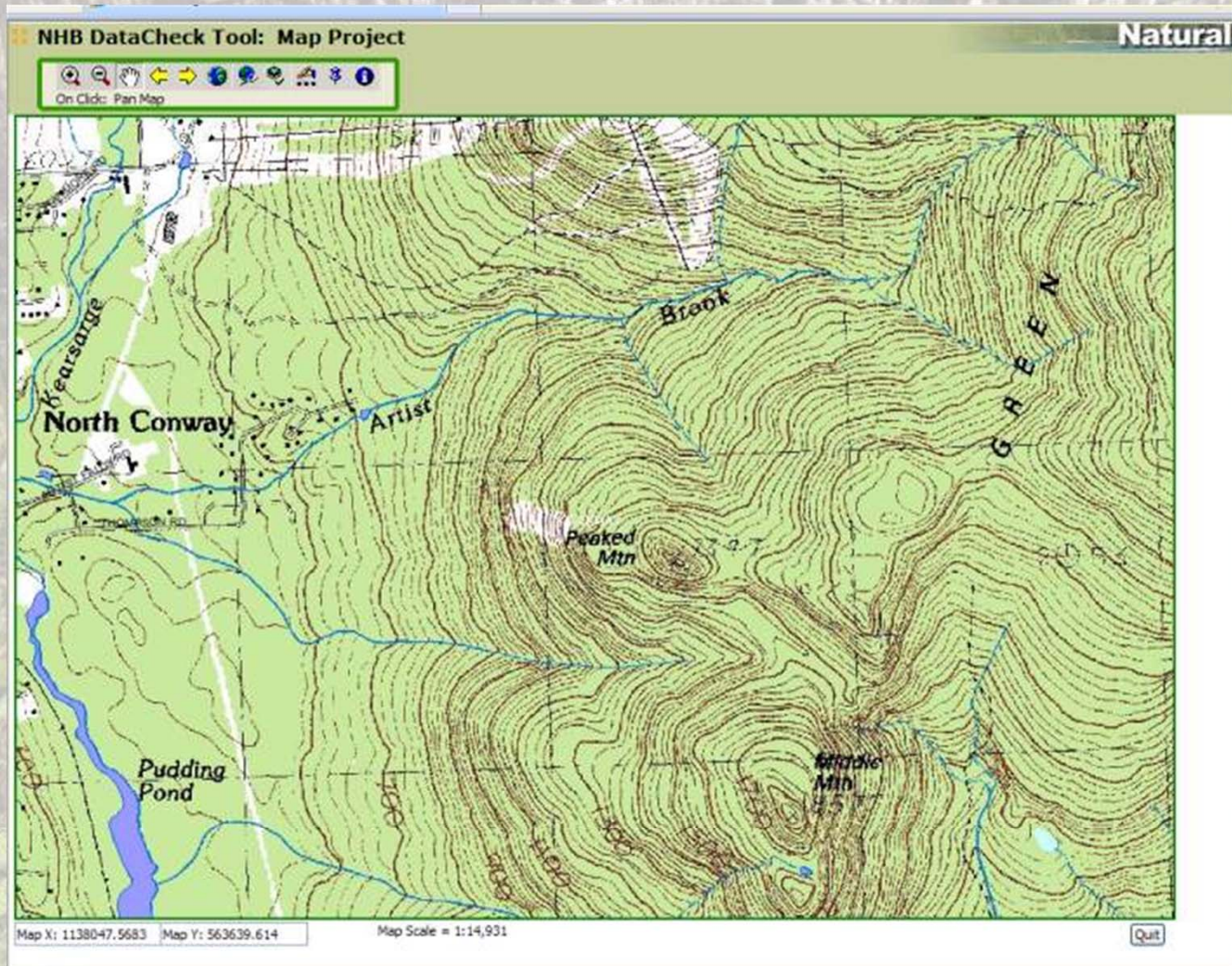
Map Scale = 1:1,722,359

Quit

# Zoom to Town

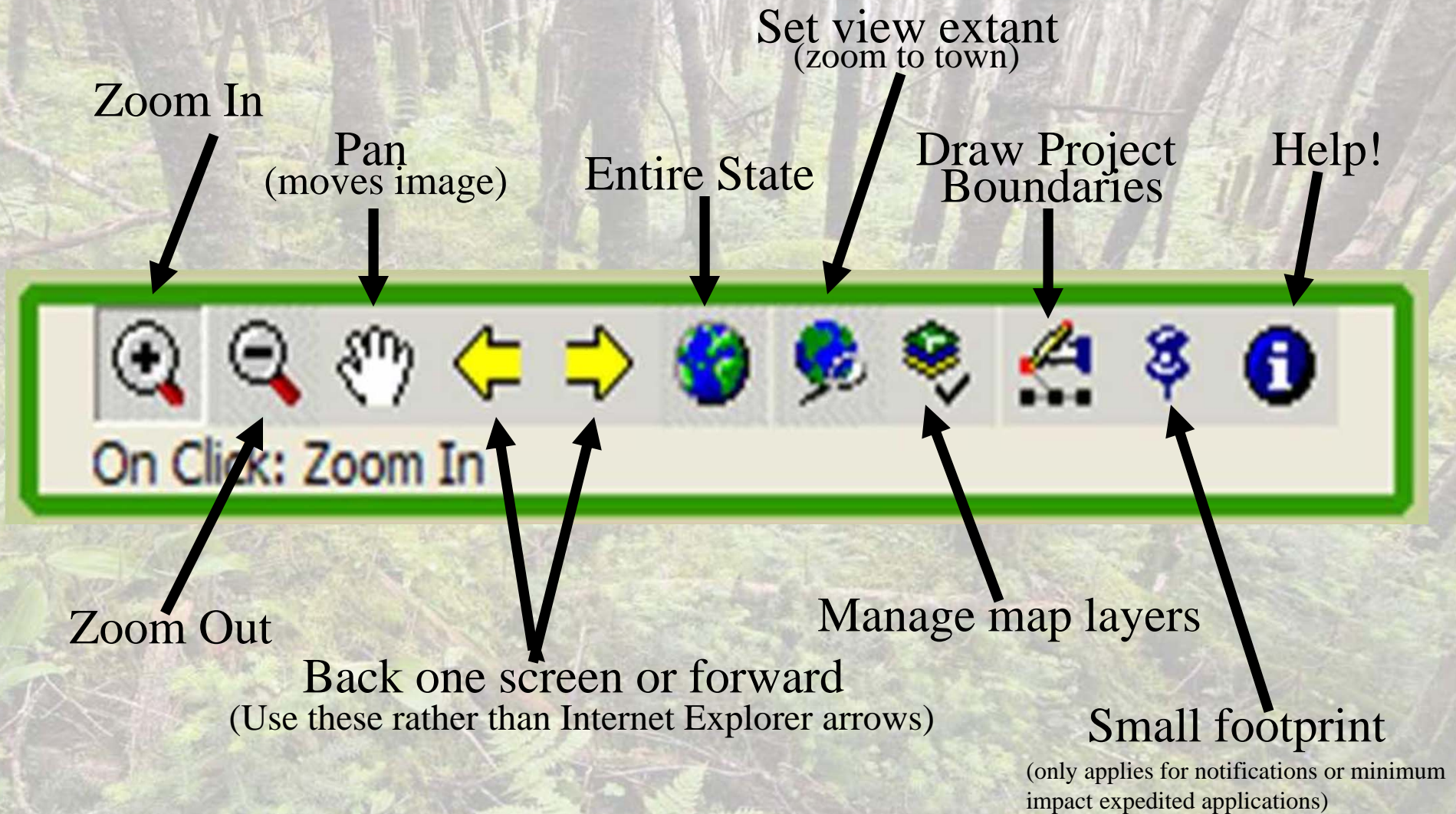


# Zooming further to Project Location



Topo maps automatically added at when zoomed to a scale of 1:24000 or less

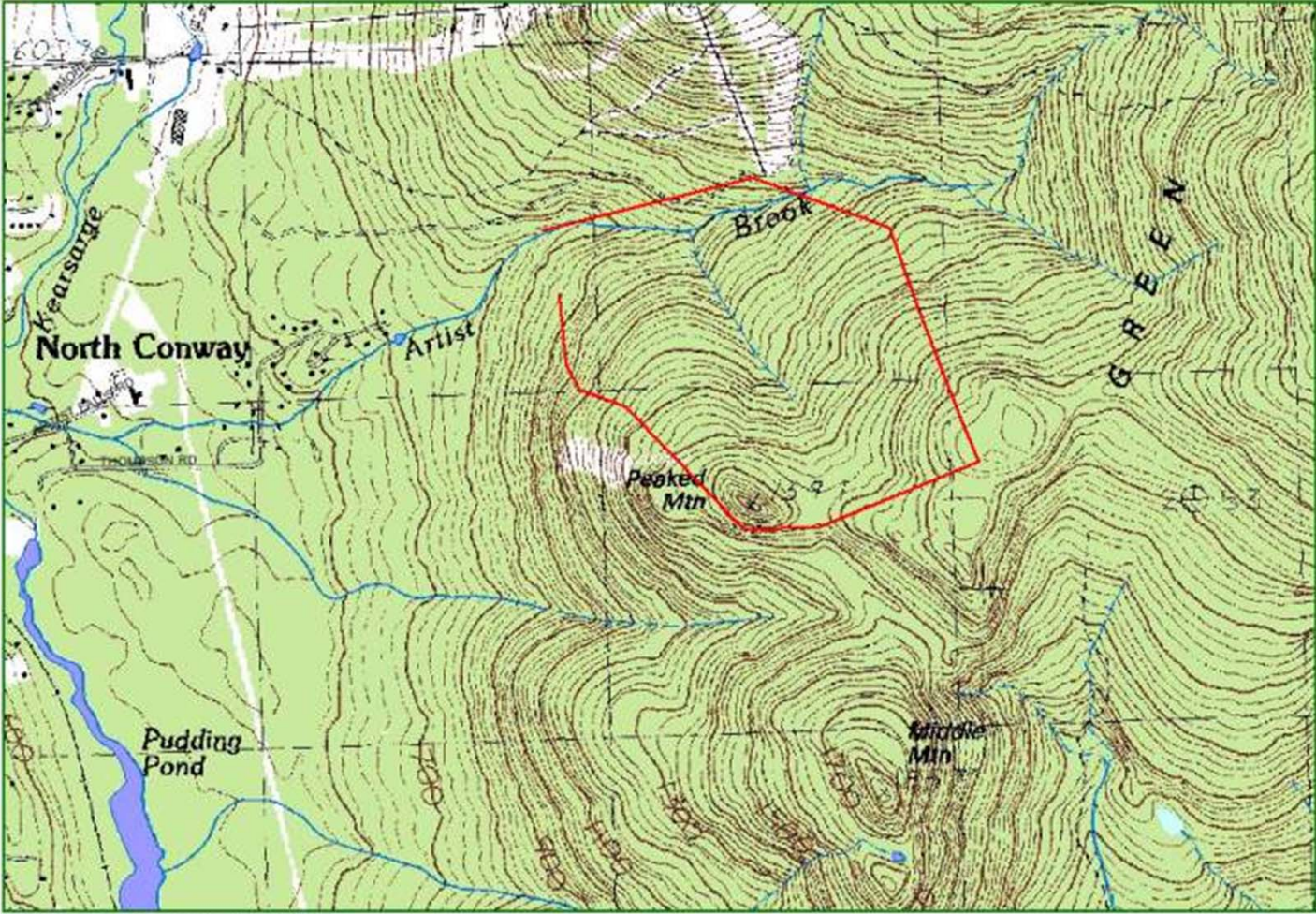
# Mapping Tools



# Drawing Project Boundaries

**NHB DataCheck Tool: Map Project** **Natural Heritage Bureau**

On Click: Map Project Boundary



**MAP PROJECT BOUNDARY**

Drawing project area boundary . . .  
Vertices added: 13

Use **<SHIFT>-click** to automatically close and complete the boundary.

Click on **Cancel** to cancel and stop drawing and start over.

Map X: 1140860.1435 Map Y: 565344.0086 Map Scale = 1:14,931

# A Few Words of Wisdom

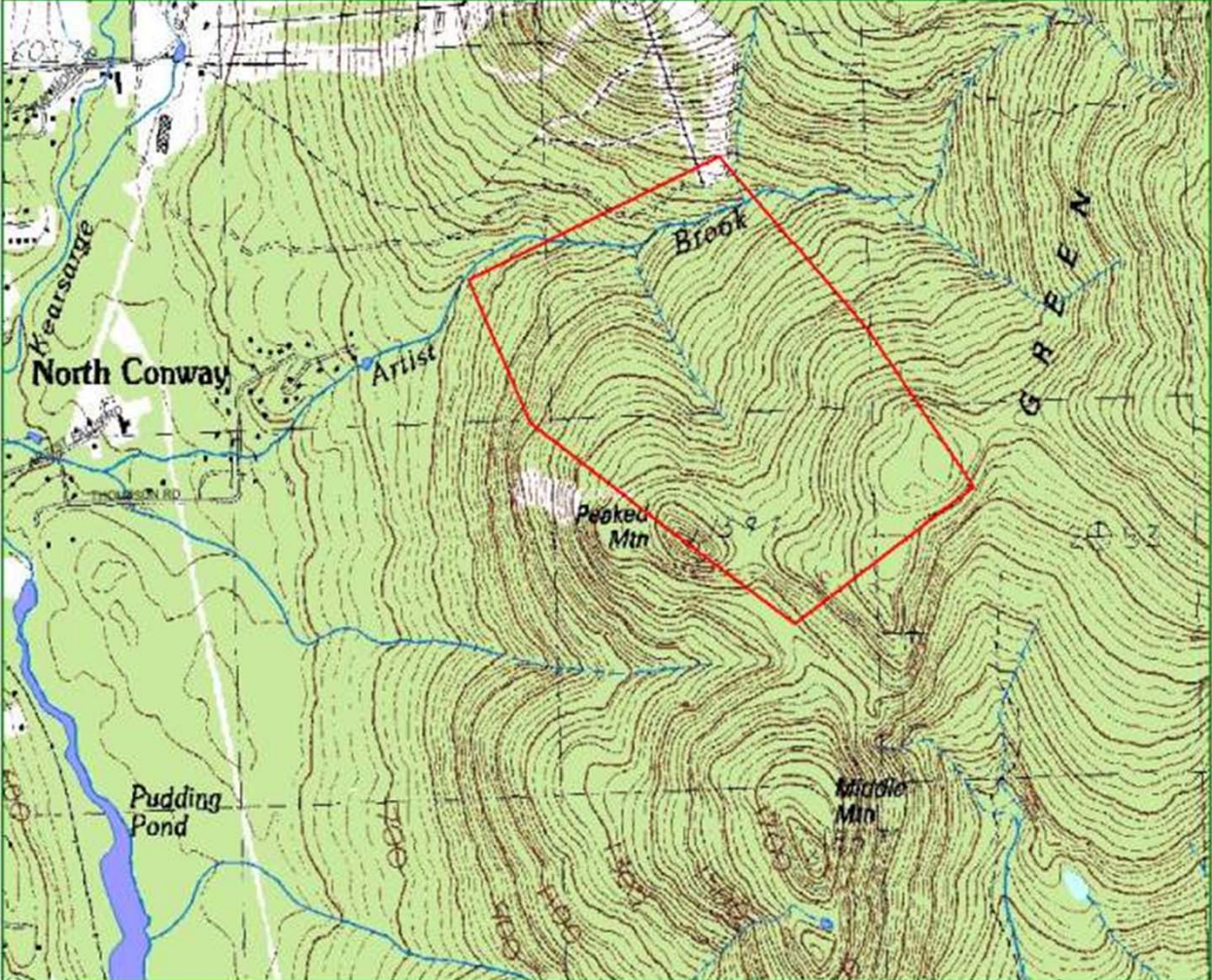
- Single click (no double clicking with mouse)
- You will not see first point (red line will appear after you have added second point)
- Hold “shift” key when adding last point to close polygon



# Completed Project Boundary

**NHB DataCheck Tool: Map Project** **Natural Heritage Bureau**

On Click: Map Project Boundary



**MAP PROJECT BOUNDARY**

Your project area boundary has been completed with an area of **257.13 acres**.

If that is not correct (within 1 to 2 acres for projects under 100 acres, or within 10 acres for larger projects), redraw the polygon.

Below, provide the size of the tax map lot(s) that the project will take place on:

- If less than 1 acre: enter "<1".
- If larger than 100 acres: round to the nearest 10 acres.
- If between 1 and 100 acres: round to the nearest acre.
- If you do not know the size: enter "unknown" (but this could delay processing of the request).

Total tract acres:

If you believe that the area that you mapped is accurate, you may now map small-footprint activities.

If you wish to redraw the boundary, click on the **Redraw** button.

Map X: 1134418.4391 Map Y: 565655.0768 Map Scale = 1:14,931

# Small Foot Print Activities

(only for Notifications or Minimum Impact Expedited Applications to the DES Wetlands Bureau)

**NHB DataCheck Tool: Map Project** **Natural Heritage Bureau**

On Click: Map Small-footprint Activities

**MAP PROJECT POINTS (Small-footprint Activities)**

Current points:

- #1 @ x = 1135118, y = 565500
- #2 @ x = 1135429, y = 564994
- #3 @ x = 1135961, y = 564281

You have mapped 3 Small-footprint Activity points and your Project Boundary has been completed.

If you believe that the project boundary and small-footprint activities that you mapped are accurate, you may now submit the mapped information for a DataCheck by clicking on the **DataCheck** button.

Map Project Boundary.

Map X: 1134003.6815 Map Y: 568001.0497 Map Scale = 1:14,931

“Datacheck” button

# Datacheck Results

**MAP PROJECT BOUNDARY**

Mapped area: 189.79 acres  
Reported tract area: 189 acres

---

**DataCheck Results: POTENTIAL IMPACTS**  
There are NHB records in the vicinity of the area you drew that may be affected by this project.

A further check of the data by NHB is required before you can obtain an official letter to submit to a regulatory authority. There is a \$25 fee for this check.

The final letter may indicate that there are no expected impacts from the project, since the further check takes factors into account that are not included in the automated DataCheck Tool.

The results of the further check and the resulting report will be valid for a period of one year from when it is issued by NHB.



**MAP PROJECT BOUNDARY**

Mapped area: 0.16 acres  
Reported tract area: 25 acres

---

**DataCheck Results: NO KNOWN RECORDS**  
There are no known NHB records in the vicinity of the area you drew.

You can request an official report of this result, which will be valid for a period of one year from today.

You must continue in order to get required documentation...

# Landowner Permission

**Are you the Permit Applicant?**

Yes

No

Permit Applicant Name:

Melissa Coppola

Applicant Company:

DRED-Natural Heritage Bureau

**Are you the Landowner?**

Yes

No

Landowner Name:

Address:

Town:

State:

Zip:

I, , affirm that the Landowner named above knows that I am making this request and agrees that the NHB should release the data to me.

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Cancel

# Submit Request

## Project Submittal

Click on the **Submit** button to submit your project for further NHB review.

Very important to hit this “submit” button (saves your project data)

- **NHB Datacheck Receipt (sent within 1 hour)**
  - Completion of process
  - This is the **ONLY** document required to submit with the Wetlands Minimum Impact Forestry Notification
- **NHB Datacheck Results letter (sent within 3-5 business days)**
  - Only if the project was screened as “potential impacts”
  - Recommendations to avoid or minimize possible impacts
  - May dismiss concerns after review
  - **DO NOT** submit this second letter with the Wetland Minimum Impacts Forestry Notification form. The recommendation in the second letter are for your consideration.



# Swamps

## General:

- ❖ Forested wetlands in depressions and along transitional areas near drainages, marshes, and peatlands

## Swamps are distinguishable from upland forest by:

- ❖ Wet soils
- ❖ Prominent tall shrub layer
- ❖ Well developed hummock & hollow microtopography

## Rare plant species:

- ❖ 26 occur in nutrient-enriched swamps
- ❖ 18 occur in nutrient-poor swamps

Netted chain fern (*Woodwardia areolata*)

SE



# Poor Swamps

- Little inflow & outflow
- Few nutrients from external sources
- Acidic nutrient poor soils
- Saturated to seasonally flooded



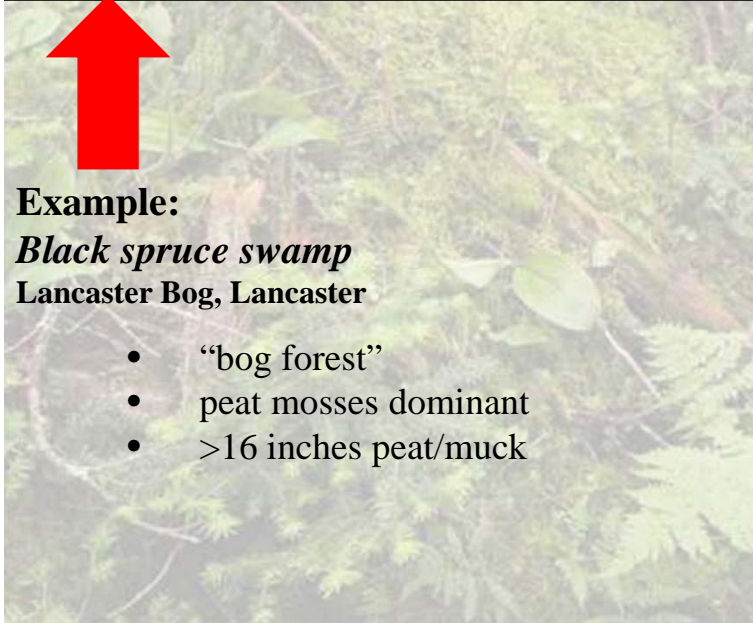
*Atlantic white cedar- giant rhododendron swamp*



## Poor Swamps Northern

**Example:**  
*Red spruce swamp*  
Elbow Pond, Woodstock

- Lush cinnamon fern cover
- Mineral soil with a thin cover of peat/muck (<16 in.)



**Example:**  
*Black spruce swamp*  
Lancaster Bog, Lancaster

- “bog forest”
- peat mosses dominant
- >16 inches peat/muck



# Rich Swamps



*Seasonally flooded red maple swamp*

- Nutrient inputs from surrounding landscape
  - Surface runoff
  - Overbank flow
  - Groundwater seepage
- Fluctuating water levels
- Mineral soils
  - Peat/muck layer is <16 inches

## Rich Swamps Northern



*Northern white cedar - balsam fir swamp*

### High potential for rare plants:

- ❖ Sweet coltsfoot
- ❖ Chestnut sedge
- ❖ Yellow lady slippers
- ❖ Showy lady slippers
- ❖ Fairy slipper
- ❖ Loesel's twayblade

Rich Swamps  
Northern



*Northern hardwood - black ash - conifer swamp*  
Coleman State Park, Stewartstown



*Larch - mixed conifer swamp*  
Cape Horn State Forest, Northumberland



*Northern hardwood seepage forest*  
Pittsburg

# Forest Seeps



*Acidic sphagnum forest seep*



*Subacid forest seep*

*Circumneutral hardwood forest seep*



- ❖ Groundwater discharge in an otherwise upland forest setting
- ❖ Typically < 1 acre

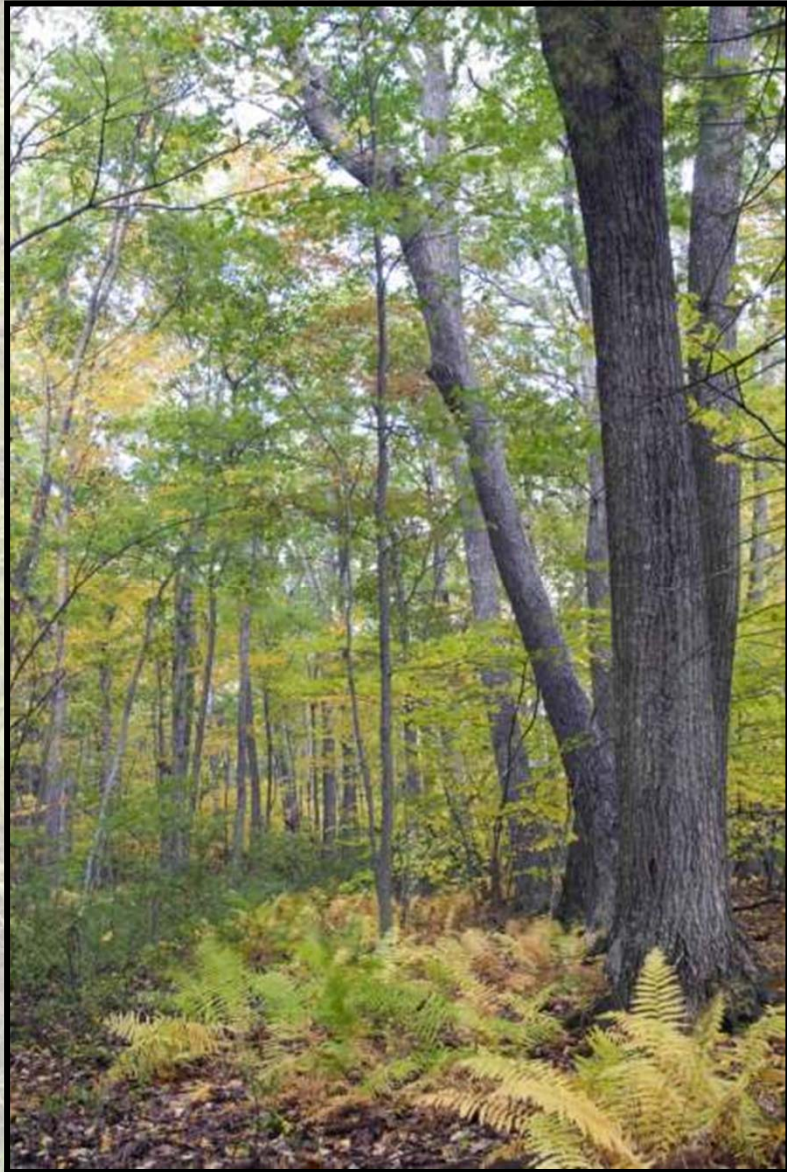
# Forests with Seasonally High Water Tables

- Wet forests
  - Transitional between swamps & upland forest
- May or may not meet legal criteria for wetlands
- Seasonally saturated or seasonally high water table



*Hemlock - cinnamon fern forest*

## Forests with Seasonally High Water Tables



*Red maple - red oak - cinnamon fern forest*

Most examples in northern NH  
are wet examples of the  
*Lowland spruce -fir forest*



# Questions?

## Contact Information:

Melissa Coppola

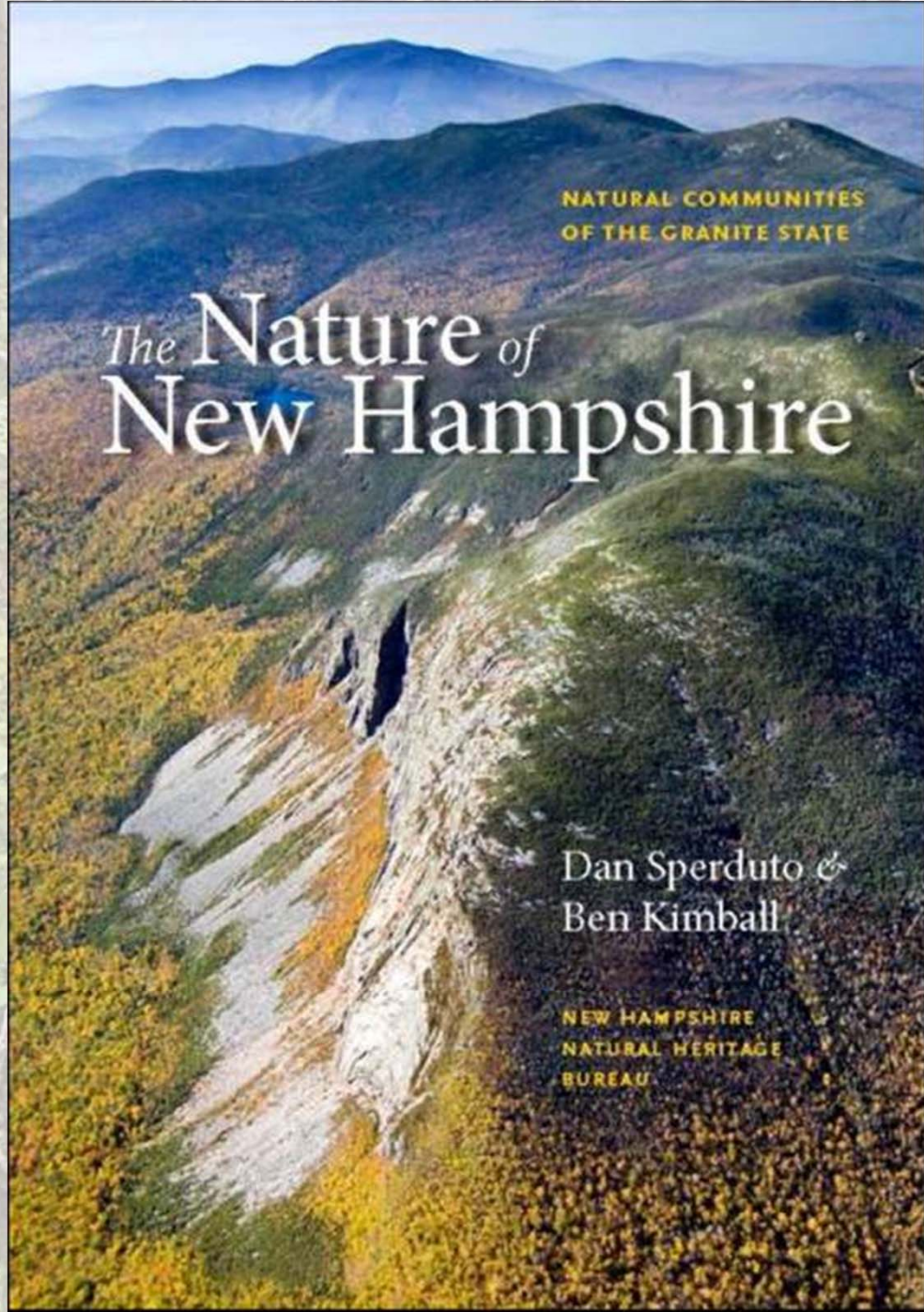
Environmental Information Specialist

DRED-Natural Heritage Bureau

[mcoppola@dred.state.nh.us](mailto:mcoppola@dred.state.nh.us)

603-271-2215 ext. 323





Now Available!  
from the  
NH Natural Heritage Bureau



## Section 217-A:9

II. Nothing in this section shall limit the rights of private property owners to take protected species on their own land.



# RSA 217:A9

- Exemptions

IV. No rule adopted by the department under the provisions of this chapter shall cause undue interference with normal agriculture or silvicultural practices.