

Memo



NH NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER

To: Jack Watton, TFMoran
48 Constitution Drive
Bedford, NH 03110

From: Amy Lamb, NH Natural Heritage Bureau

Date: 8/28/2017 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB17-2622

Town: Manchester, Hooksett

Location: Tax Maps: 557-7, 38-1

Description: To build a perimeter road encompassing the southeastern portion of Southern New Hampshire University.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments: Please send a site plan (digital is preferred) that shows existing conditions and proposed impacts. It appears that the project may impact a former railroad corridor, which may have the open, sandy conditions to support the rare plants listed below: clasp ing milkweed and licorice goldenrod. If there is a list of species observed on the site, please provide it to NHB as this would be helpful in determining whether potential habitat is present. This site is within an area flagged for possible impacts to the state-listed *Alasmidonta varicosa* (brook floater) in the Merrimack River. Please contact NH Fish & Game to address wildlife concerns.

Invertebrate Species

	State ¹	Federal	Notes
Brook Floater (<i>Alasmidonta varicosa</i>)	E	--	Contact the NH Fish & Game Dept (see below).

Plant species

	State ¹	Federal	Notes
clasp ing milkweed (<i>Asclepias amplexicaulis</i>)	T	--	This species grows in sandplains and disturbed openings, and is sensitive to disturbances that eliminate its habitat.
licorice goldenrod (<i>Solidago odora ssp. odora</i>)	T	--	This species occurs in dry forests, thin woods, sandplains, and disturbed openings. Threats would include development of its habitat or recreational use that directly impacted the plants.

Vertebrate species

	State ¹	Federal	Notes
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	SC	--	Contact the NH Fish & Game Dept (see below).

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

Memo



NH NATURAL HERITAGE BUREAU
NHB DATACHECK RESULTS LETTER

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.



New Hampshire Natural Heritage Bureau - Plant Record

clasping milkweed (*Asclepias amplexicaulis*)**Legal Status**

Federal: Not listed
 State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
 State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
 Comments on Rank:

Detailed Description: 1999: 16 stems total (1 patch of 9, 1 patch of 7). Past flowering, but no pods. 1958: Specimen from Hooksett. 3-4 plants seen, none in flower. 1921: Specimen from Hooksett. No details.

General Area: 1999: Powerline corridor on west-facing slope with sandy soils. Dominated by waist-high pitch pine, scrub oak, and hazelnut, plus New Jersey tea, spreading dogbane, sweet fern, and bracken fern. 1958: Wooded ravine with *Vaccinium vacillans* [*pallidum*] (late low blueberry), and *Quercus* spp. (oaks). 1921: Wooded roadside.

General Comments:

Management Comments: 1999: Habitat should remain relatively open so long as powerline is in use. Herbicides might be problematic if applied.

Location

Survey Site Name: Hooksett Riverbluff Barrens
 Managed By:

County: Merrimack

Town(s): Hooksett

Size: 2.8 acres

Elevation: 355 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 1999: From Rte. 3/28 in Hooksett, take Martins Ferry Road west towards the river. Drive to back of city cemetery off Martins Ferry Road. Follow dirt road off northwest corner of cemetery to powerline corridor. Plants are located in the cleared area near pole #7. 1958: Wooded ravine.

Dates documented

First reported: 1921-07-16

Last reported: 1999-07-21

New Hampshire Natural Heritage Bureau - Plant Record

licorice goldenrod (*Solidago odora ssp. odora*)**Legal Status**

Federal: Not listed
 State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
 State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Poor quality, condition and/or landscape context ('D' on a scale of A-D).
 Comments on Rank: Small population.

Detailed Description: 2009: Searched for but not found. 2003: One large, compact clump of ca. 35 stems. 75% vigorous, 25% normal. 1984: 13 stems in 2 clumps, each clump with a few flowering stems (4 total). Probably representing 2 individual plants (robust).

General Area: 2003: **Appalachian oak - pine forest**. Associated species include: *Quercus coccinea* (scarlet oak), *Quercus velutina* (black oak), *Quercus prinoides* (dwarf chestnut oak), *Acer rubrum* (red maple), *Pinus strobus* (white pine), *Pteridium aquilinum* var. *latiusculum* (bracken), *Carex lucorum* (distant sedge), and *Corylus americana* (American hazelnut). Forest by and large has not been managed for many decades. 1984: SNE dry oak/pine forest on sandy/gravelly soils. Characteristic associated species: scarlet oak (*Quercus coccinea*). Shaded, mid-slope.

General Comments:

Management Comments: 2003: Prior logging next to the plants may have affected it positively, or negatively. No suggestion of threat.

Location

Survey Site Name: Hooksett Riverbluff Barrens
 Managed By:

County: Merrimack
 Town(s): Hooksett
 Size: 2.8 acres

Elevation: 220 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2009 (Not found): Turn left onto Martin's Ferry Road. Follow straight until reach railroad tracks. Searched in northerly direction on the east side of the railroad tracks. 2003: At base of bluffs east of railroad on east side of Merrimack River, ca. 0.5 mile north of Martins Ferry Road.

Dates documented

First reported: 1984-09-06

Last reported: 2003-09-08

New Hampshire Natural Heritage Bureau - Animal Record

Bald Eagle (*Haliaeetus leucocephalus*)

Legal Status

Federal: Not listed
State: Special Concern

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2002-2012: Wintering eagles regularly observed at locations along the Merrimack River, day perching and night roosts:2012: Solitary eagles observed at 2 separate locations on 1/7. Solitary eagles observed at 2 separate locations on 1/31. 2 eagles observed at a single location on 2/7. 1 eagle observed on 2/9. Solitary eagles observed at 3 separate locations on 2/25.2011: 3 eagles observed at a single location and 2 at a separate location on 1/8. 1 eagle observed on 1/9. 1 eagle observed on 1/11. 1 eagle observed on 1/13. 2 eagles observed at a single location on 2/7. 1 eagle observed on 2/9. 1 eagle observed on 2/15. 1 eagle observed on 2/17. 1 eagle observed on 2/22. 1 eagle observed on 3/2. 4 eagles observed at a single location, 2 eagles at 2 separate locations, and a solitary eagle observed on 2/26. 1 eagle observed on 12/13. 1 eagle observed on 12/15. 2010: 7 eagles observed at a single location, 4 eagles at a single location, 2 eagles at a single location, and solitary eagles at 6 locations on 1/9. Solitary eagles at 2 separate locations on 2/28. 1 eagle observed on 12/17. 1 eagle observed on 12/20. 1 eagle observed on 12/22. 1 eagle observed on 12/30.2009: 4 eagles observed at a single location, 2 eagles observed at 2 separate locations, and solitary eagles at 5 separate locations on 1/10. 4 eagles observed at a single location, and 2 eagles located at 4 separate locations on 2/28.2008: 3 eagles observed at a single location, 2 eagles at a single location, and solitary eagles at 2 separate locations on 1/12. 2 eagles observed at a single location and 1 at a separate location on 2/23.2007: 6 eagles observed at a single location, 2 eagles at a single location, and solitary eagles at 2 separate locations on 2/24.2006: 3 eagles observed at 3 separate locations, 2 eagles at 3 separate locations, and solitary eagles at 7 separate locations on 1/7. 2 eagles observed at a single location and 1 at a separate location on 2/18. 6 eagles observed at a single location, 3 at a single location, 2 eagles at 2 separate locations, and a solitary eagle at 1 location on 2/25.2005: Solitary eagles observed at 6 separate locations on 1/8. 1 eagle observed on 1/10. 12 eagles observed at a single location, 5 eagles at a single location, and 3 eagles at 2 separate locations on 2/4. 5 eagles observed at a single location, 3 eagles at a single location, and solitary eagles at 4 separate locations on 2/26.2004: Solitary eagles observed at 6 separate locations on 1/10. 1 eagle observed on 12/20.2003: 4 locations with 2 eagles observed on 1 location with a single eagle on 1/9. 2 eagles at a single location on 1/11. 1 eagle observed on 1/31. 4 eagles at a single location on 2/1. 5 eagles at one location and 2 at another location on 2/2. 9 eagles at a single location on 2/28. 3 eagles at a single location, 2 eagles at 2 separate locations, and 1 eagle at 2 separate locations on 3/1.2002: 2 eagles observed at separate locations on 1/12. Observations of 2 and 3 eagles at 2 separate locations on 12/22.1993: Near Amoskeag Bridge, suspected roosting behind the Youth Center, perching on north side of bridge. Perching on Amoskeag Islands. Some sightings near mouth of Piscataquog River. Also roosting behind Caldor's, NSS Corporation. Confirmed roosting at Sebbins Brook between Rte 3 and the river. Also at Reed's Ferry islands, Pennichuck Brook, all the way south to the Nashua River. 1991: Consistent perching near Amoskeag Bridge, between Queen City bridge and 101/283. Roosting behind Youth Development Center north of Amoskeag Bridge.

General Area:
General Comments:
Management
Comments:

Eagles perch, sometimes roost in large white pines along the riverbank.

Location

Survey Site Name: Lower Merrimack River
Managed By: Smiths Ferry Heritage Park

County: Hillsborough

Town(s): Manchester

Size: 116.0 acres

Elevation: 130 feet

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Various locations along the banks of the Merrimack River.

Dates documented

First reported: 198?

Last reported: 2012-02-25

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

Item 1: No known sites within the SNHU campus by the listed organizations. Wetlands and Endangered species are protected by local, State and Federal law.

Item 2: N/A

Item 3: For a number of separate wetlands and AoT permit applications ESA habitat assessments were completed to search for and identify any endangered or sensitive species (plant/animal) to ensure the projects would not result in an incidental take or cause adverse impacts to the resource or resources.

Item 4: For any wetland or terrain alteration permit issued through the NH Department of Environmental Services, the NH Fish & Game Natural Heritage Bureau will screen the project area through their database for known occurrences of state listed rare, threatened, or endangered species (plant/animal). Positive hits require further site evaluation to identify the presence or absence of the listed species. The US Fish & Wildlife Service also requires screening for Federally listed species.

Item 5: Small Whorled Pogonia, Threatened, is a federally listed species that was flagged for the West Alice Road extension. A search was conducted for the plant and not found. The IPaC report is attached. There are no ongoing assessments or monitoring programs for any potential species located within the SNHU Campus. A 10 acre riparian zone around Messer Brook was protected by a deed covenant established as partial compensatory mitigation for development of the campus. There is no ongoing monitoring or assessments conducted for this protected area.

Item 6 &7: N/A

Response:

1-2) I am not aware of land internationally recognized or priority sites for biodiversity. SNHU has land adjacent to the Merrimack River that has regulations that limit work within the Shoreland Protection area as required by NHDES (New Hampshire Department of Environmental Services) and for the Prime Wetlands where Messer Brook meets the river. Also, there are jurisdictional wetlands throughout the campus land that have NHDES and Town regulations that limit work and protect those areas. In addition SNHU abuts Messer Brook to the north, that they have put a conservation deed restriction on the land area adjacent to the brook to preserve the area buffering that brook.

3) SNHU has not had an independent study / assessment performed to identify endangered and vulnerable species for their land, but we contact the NH Natural Heritage Bureau to see if they have any endangered or threatened species in their data base for each proposed project area (see attached responses for recent projects on-campus) and contact the NH Division of Historic Resources for any historically significant sites. We have avoided environmentally sensitive areas or received the necessary permits.

4) SNHU has a base map of the campus property , and have had all jurisdictional wetlands mapped on that land. No other assessments have been performed that I am aware of.

5) Outlined in responses above.