

## **Section 9**

# **Unusual Natural Areas**

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## 9.0 UNUSUAL NATURAL AREAS

The Maine Natural Areas Program (Maine NAP), within the Maine Department of Conservation, maintains the state's Biological and Conservation Data System files. These files include information on rare and unique botanical features including the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities.

Tetra Tech, on behalf of Canton Mountain Wind, LLC (CMW), contacted the Maine NAP staff for information on the presence of rare or unique natural areas currently documented in the vicinity of the project area. A letter requesting information on rare and unique botanical features, including the habitat of rare, threatened or endangered plant species, and unique or exemplary natural communities, was sent to the NAP on September 3, 2010, and a response letter was received on September 8, 2010 (Attachment 9-1). The Maine NAP review involves examining maps, manual and computerized records, scientific articles or published references, and the personal knowledge of staff and cooperating experts.

Maine NAP staff did not identify any incidence of rare, threatened or endangered plant species or unique natural communities within any part of the proposed CMW project development area. They did identify some rare and exemplary botanical features that were previously documented within four miles of the proposed project area (see Attachment 9-1). Biologists conducting environmental resource field surveys reviewed the Maine NAP consultation information in advance of their surveys. Because much of the project area encompasses previously disturbed land with existing woods roads or land subjected to timber harvesting operations, detailed field surveys for rare plants/communities were not performed for this project in the vicinity of the proposed access roads or along the ridgeline.

Detailed field surveys were performed in 2010 for a nearly identical list of rare plants/communities for a portion of the Saddleback Ridge Wind Project, a portion of which (i.e., the electric transmission line) will be shared with the Canton Mountain Wind Project.

These detailed field surveys were performed by professional botanist Lauren Stockwell along the transmission line corridor in Carthage, Dixfield and Canton between August 30 and September 13, 2010. The field survey limits were determined using sub-meter accurate Global Positioning System (GPS) equipment. The entire corridor was walked, meandering within the corridor as determined by the GPS technicians. The search focused on the list of rare and exemplary botanical features in the project vicinity within a 4-mile radius identified by the Maine NAP in a letter dated March 19, 2010. However, a lookout was kept for all species included on Maine Rare Plant List.<sup>1</sup>

During the field survey, a list of all observed species was kept. Speciation was conducted in the field; specimens were only collected and keyed by microscope if they were potentially rare species. Therefore, some plants were only identified to genus. For one potentially rare species, identification was confirmed by professional botanist Arthur Haines. The results of Ms. Stockwell's field assessment concluded that no rare plants or unique natural communities occur within the electric transmission line corridor.

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<sup>1</sup> <http://www.maine.gov/doc/nrimc/mnap/features/plantlist.htm>



**Attachment 9-1**  
**Maine NAP Response Letter and Attachment**  
**September 8, 2010**



STATE OF MAINE  
DEPARTMENT OF CONSERVATION  
93 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0093

JOHN ELIAS BALDACCI  
GOVERNOR

ELIZA TOWNSEND  
COMMISSIONER

September 8, 2010

Kathleen R. Miller  
Tetra Tech EC, Inc.  
160 Federal Street, 3<sup>rd</sup> Floor  
Boston, MA 02110

Re: Rare and exemplary botanical features in proximity to: Proposed Timberwinds Project, Canton, Maine

Dear Ms. Miller:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request of September 8, 2010 for information on the presence of rare or unique botanical features documented from the vicinity of the project site in Canton, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$75.00 for our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Sarah Demers  
Environmental Review Coordinator  
Maine Natural Areas Program  
207-287-8670  
[sarah.demers@maine.gov](mailto:sarah.demers@maine.gov)

Enclosures

# Rare and Exemplary Botanical Features in the Project Vicinity

Documented within a four-mile radius of the proposed Timberwinds Project, Canton, Maine.

Feature Name	Global Rank	State Rank	State Status	EO Number	Last Seen	Habitat
Chimaphila maculata	G5	S2	E	14	1996-08-17	Hardwood to mixed forest (forest, upland)
Allium tricoccum	G5	S3	SC	32	2001-05-20	Hardwood to mixed forest (forest, upland)
Silver maple floodplain forest	GNR	S3		21	2009-06-10	Forested wetland
Carex siccata	G5	S2	SC	1	1943-06-03	Old field/roadside (non-forested, wetland or upland)
Allium tricoccum	G5	S3	SC	29	1996	Hardwood to mixed forest (forest, upland)
Eragrostis capillaris	G5	SH	PE	1	1908-08-11	Old field/roadside (non-forested, wetland or upland)
Eragrostis capillaris	G5	SH	PE	2	1943-08-31	Dry barrens (partly forested, upland)
Phegopteris hexagonoptera	G5	S2	SC	6	1931-09-08	Hardwood to mixed forest (forest, upland)
Asplenium platyneuron	G5	S2	SC	5	1917	Rocky summits and outcrops (non-forested, upland)
Galearis spectabilis	G5	S1	E	8	1916-06-16	Hardwood to mixed forest (forest, upland)
Galearis spectabilis	G5	S1	E	7	1906-05-31	Hardwood to mixed forest (forest, upland)
Malaxis monophyllos	G5	S1	E	11	1893-08-10	Forested wetland
Cypripedium reginae	G4	S3	T	39	1908	Forested wetland
Eleocharis quinqueflora	G5	S2	SC	2	1933-08	Non-tidal rivershore (non-forested, seasonally wet)

## STATE RARITY RANKS

- S1** Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2** Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3** Rare in Maine (20-100 occurrences).
- S4** Apparently secure in Maine.
- S5** Demonstrably secure in Maine.
- SU** Under consideration for assigning rarity status; more information needed on threats or distribution.
- SNR** Not yet ranked.
- SNA** Rank not applicable.
- S#?** Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

**Note:** **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

## GLOBAL RARITY RANKS

- G1** Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- G2** Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- G3** Globally rare (20-100 occurrences).
- G4** Apparently secure globally.
- G5** Demonstrably secure globally.
- GNR** Not yet ranked.

**Note:** **Global Ranks** are determined by NatureServe.

## STATE LEGAL STATUS

**Note:** State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

- E** ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
- T** THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

## NON-LEGAL STATUS

- SC** SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
- PE** Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

## ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities; condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A, B, C, or D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

**Note:** **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!  
<http://www.maine.gov/doc/nrimc/mnap>