



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

PAUL R. LePAGE  
GOVERNOR

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March 29, 2013

Steve Knapp  
Kleinschmidt Associates  
141 Main Street  
P.O. Box 650  
Pittsfield, ME 04967

Re: Rare and exemplary botanical features in proximity to: Trafton Road I-95 Interchange, Waterville and Sidney, Maine

Dear Mr. Knapp:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received March 29, 2013 for information on the presence of rare or unique botanical features documented from the vicinity of the project site in Waterville, 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.

Letter to Steve Knapp, Kleinschmidt.  
Comments RE: I-95, Waterville  
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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 \$150.00 for two hours of 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,



Don Cameron  
Ecologist  
Maine Natural Areas Program  
207-287-8041  
[don.s.cameron@maine.gov](mailto:don.s.cameron@maine.gov)

## Project: I-95 Interchange, Waterville and Sidney, Maine

| Scientific Name                                | State Status | State Rank | Global Rank | Date Last Observed | Occurrence Number | Habitat  |
|--|--------------|------------|-------------|--------------------|-------------------|--|
| <i>Juncus alpinoarticulatus</i> ssp. nodulosus | SC           | S3         | G5T5?       | 1916-07-06         | 6                 | Non-tidal rivershore (non-forested, seasonally wet)              |
| <i>Juncus alpinoarticulatus</i> ssp. nodulosus | SC           | S3         | G5T5?       | 1898-09            | 5                 | Non-tidal rivershore (non-forested, seasonally wet)              |
| <i>Malaxis monophyllos</i>                     | E            | S1         | G5          | 1916-07-06         | 16                | Forested wetland   |
| <i>Ophioglossum pusillum</i>                   | SC           | S1         | G5          | 1924-07            | 8                 | Old field/roadside (non-forested, wetland or upland)             |
| <i>Phegopteris hexagonoptera</i>               | SC           | S2         | G5          | 1915-08-13         | 11                | Hardwood to mixed forest (forest, upland)                        |
| <i>Phryma leptostachya</i>                     | PE           | SH         | G5          | 1916-08            | 4                 | Hardwood to mixed forest (forest, upland)                        |
| <i>Platanthera flava</i> var. <i>herbiola</i>  | SC           | S2         | G4T4Q       | 1916-07-06         | 21                | Open wetland, not coastal nor rivershore (non-forested, wetland) |
| <i>Sagittaria filiformis</i>                   | SC           | S2         | G4G5        | 2003-09-11         | 7                 |  |
| <i>Sagittaria filiformis</i>                   | SC           | S2         | G4G5        | 2003-09-10         | 6                 |  |
| <i>Spiranthes lucida</i>                       | T            | S1         | G5          | 1909-07-01         | 18                | Non-tidal rivershore (non-forested, seasonally wet)              |
| <i>Zosterella dubia</i>                        | SC           | S3         | G5          | 2003-09-10         | 12                | Open water (non-forested, wetland)                               |

Maine Natural Areas Program

Visit our website: [www.maine.gov/doc/nrimc/mmap](http://www.maine.gov/doc/nrimc/mmap)

# Rare & Exemplary Botanical Features within 4 miles of

## Project: I-95 Interchange, Waterville and Sidney, Maine

| Scientific Name                | State Status | State Rank | Global Rank | Date Last Observed | Occurrence Number | Habitat   |
|--------------------------------|--------------|------------|-------------|--------------------|-------------------|---|
| <i>Allium canadense</i>        | SC           | S2         | G5          | 1983-07-14         | 4                 | Hardwood to mixed forest (forest, upland)           |
| <i>Bromus pubescens</i>        | SC           | S2         | G5          | 1915-08-10         | 6                 | Hardwood to mixed forest (forest, upland)           |
| <i>Carex alopecoidea</i>       | PE           | SH         | G5          | 1916-07-06         | 2                 | Forested wetland                                    |
| <i>Cryptotaenia canadensis</i> | PE           | SH         | G5          | 1936-07            | 4                 | Hardwood to mixed forest (forest, upland)           |
| <i>Cryptotaenia canadensis</i> | PE           | SH         | G5          | 1916-08-18         | 3                 | Hardwood to mixed forest (forest, upland)           |
| <i>Cyperus houghtonii</i>      | PE           | SH         | G4?         | 1905-07-22         | 1                 | Dry barrens (partly forested, upland)               |
| <i>Cyperus squarrosus</i>      | SC           | S2         | G5          | 1898-09-02         | 5                 | Non-tidal rivershore (non-forested, seasonally wet) |
| <i>Cyperus squarrosus</i>      | SC           | S2         | G5          | 1898-09-02         | 2                 | Non-tidal rivershore (non-forested, seasonally wet) |
| <i>Cyripedium reginae</i>      | T            | S3         | G4          | 1903-06            | 33                | Forested wetland                                    |
| <i>Elymus hystrix</i>          | SC           | S3         | G5          | 1916-08-18         | 12                | Hardwood to mixed forest (forest, upland)           |
| <i>Elymus hystrix</i>          | SC           | S3         | G5          | 1905-08-05         | 11                | Hardwood to mixed forest (forest, upland)           |
| <i>Galearis spectabilis</i>    | E            | S1         | G5          | 1941               | 16                | Hardwood to mixed forest (forest, upland)           |
| <i>Galearis spectabilis</i>    | E            | S1         | G5          | 1915-08-12         | 13                | Hardwood to mixed forest (forest, upland)           |
| <i>Galearis spectabilis</i>    | E            | S1         | G5          | 1915-08-12         | 12                | Hardwood to mixed forest (forest, upland)           |
| <i>Galearis spectabilis</i>    | E            | S1         | G5          | 1896-06-05         | 11                | Hardwood to mixed forest (forest, upland)           |

## 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.
- SH Known historically from the state, not verified in the past 20 years.
- SX Apparently extirpated from the state, loss of last known occurrence has been documented.
- SU Under consideration for assigning rarity status; more information needed on threats or distribution.
- S#? Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).
- SNR State rank not yet assessed.

Note: State Rarity Ranks are determined by the Maine Natural Areas Program.

## 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 Global rank not yet assessed.

Note: Global Ranks are determined by NatureServe, for more information see <http://www.natureserve.org/explorer/ranking.htm>.

## 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.

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

