

January 23, 2026

**SUBMITTED VIA EMAIL & THE ONLINE PNDI SYSTEM**

Hope Brooks, Ecological Information Specialist  
Pennsylvania Department of Conservation and Natural Resources  
Bureau of Forestry – Natural Heritage Section  
400 Market Street, P.O. Box 8552  
Harrisburg, PA 17015  
c-hobrooks@pa.gov  
RA-HeritageReview@pa.gov

**Re: Submission of Addendum - Botanical Survey Report (August 2025)  
State College Area Connector – PNDI No. 782938  
Harris & Potter Townships, Centre County, Pennsylvania**

Dear Ms. Brooks:

Skelly and Loy, Inc., A Terracon Company (Skelly and Loy), on behalf of Pennsylvania Department of Transportation (PennDOT) and the Federal Highway Administration (FHWA), is submitting the attached Addendum to the *Botanical Survey Report (August 2025)* for the State College Area Connector project for your review as requested. The Addendum includes the additional information requested by DCNR via email on September 17, 2025, regarding occurrences of seven (7) non-target species of concern / interest that were incidentally identified during the course of the botanical surveys conducted in April & May 2025:

- Balsam Fir (*Abies balsamea*) – Current PA Status: PA Watchlist
- Short Hair Sedge var. brevicrinis (*Carex crinita* var. *brevicrinis*) – Current PA Status: Endangered
- Mountain Wood Fern (*Dryopteris campyloptera*) – Current PA Status: Endangered
- Tamarack (*Larix laricina*) – Current PA Status: PA Watchlist
- Red Mulberry (*Morus rubra*) – Current PA Status: Special Concern Species
- Short-leaf Pine (*Pinus echinata*) – Current PA Status: Special Concern Species
- Kidney-leaved White Violet (*Viola renifolia*) – Current PA Status: Special Concern Species

On September 25, 2025, Skelly and Loy botanists returned to the field to re-identify the locations of the non-target species occurrences, confirm taxonomic identifications, and document these additional non-target species occurrences. The botanical field surveys in April & May 2025 and the re-visitation field efforts in September 2025 documented ten (10) occurrences of non-target species of concern / interest:

- Four (4) small population occurrences of Mountain Wood Fern (*Dryopteris campyloptera*), which is a state-listed endangered species.

- One (1) occurrence of Red Mulberry (*Morus rubra*), which is a special concern species in Pennsylvania. This occurrence consisted of one (1) tree [REDACTED]
- One (1) small population occurrence of Kidney-leaved White Violet (*Viola renifolia*), which is a special concern species in Pennsylvania.
- One (1) occurrence of Short-leaf Pine (*Pinus echinata*), which is a special concern species in Pennsylvania. This occurrence consisted of two (2) individual trees [REDACTED]
- One (1) occurrence of Balsam Fir (*Abies balsamea*), which is a PA Watchlist Species. This occurrence consisted of one (1) individual tree [REDACTED]
- Two (2) occurrences of Tamarack (*Larix laricina*), which is a PA Watchlist Species. One occurrence consisted of one (1) individual tree [REDACTED]. The other occurrence consisted of 30+ individual trees p [REDACTED].

The field efforts in September 2025 also confirmed that the variety of Short Hair Sedge (*Carex crinita*) identified during the spring botanical surveys was *Carex crinita* var. *crinita*, which is fairly common in wetlands throughout Pennsylvania and currently does not have a designated or proposed PA status as a species of concern.

The official DCNR response will be included in the project's Environmental Impact Statement (EIS) and the necessary permit applications to regulating agencies. Please review the enclosed botanical survey report and supporting information, and feel free to contact Samantha Hockenberry at 717-237-2898 or via email [shockenberry@skellyloy.com](mailto:shockenberry@skellyloy.com), if you have any questions. We look forward to coordinating with you on this project.

Sincerely,  
**Skelly and Loy, Inc.**, A Terracon Company

Samantha R. Hockenberry, PWS, CE  
Senior Scientist / Botanist  
Environmental

Paul J. DeAngelo  
Senior Principal / Vice President  
Environmental Lead  
Operations Manager, Harrisburg

**Enclosures:**

1. Botanical Survey Report Addendum (January 2026)

cc: Jesse Sabitsky, PennDOT Central Office  
Nicole Auker, PennDOT Central Office  
Chris Peacock, PennDOT District 2-0  
Eric Munyack, PennDOT District 2-0  
Lori Cole, JMT  
Kevin James, Michael Baker  
Alyssa Lynd, Skelly and Loy  
Jim Sinclair, Skelly and Loy  
File: JN197202

**TO:** Pennsylvania Department of Conservation and Natural Resources (DCNR)  
Bureau of Forestry – Natural Heritage Section  
400 Market Street, P.O. Box 8552  
Harrisburg, PA 17015

**FROM:** Skelly and Loy, Inc, *A Terracon Company* (Skelly and Loy)  
449 Eisenhower Boulevard, Suite 300  
Harrisburg, PA 17111

**CC:** Pennsylvania Department of Transportation (PennDOT)  
Johnson, Mirmiran & Thompson, Inc. (JMT)  
Michael Baker International (MBI)

**DATE:** January 23, 2026

**RE:** **Addendum – Botanical Survey Report (August 2025)**  
**State College Area Connector – PNDI Receipt No. 782938**  
Harris & Potter Townships, Centre County, Pennsylvania

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## Introduction & Project Background

The Pennsylvania Department of Transportation (PennDOT), in cooperation with the Federal Highway Administration (FHWA), proposes to improve roadway congestion and address safety issues along U.S. Route 322 (US 322) between Potters Mills and Boalsburg near State College in Centre County, Pennsylvania. The proposed State College Area Connector project is a transportation improvement project that aims to address roadway congestion caused by high peak hour traffic volumes on the US 322 roadway and intersections. The proposed State College Area Connector project will also address safety concerns associated with the existing roadway configurations and traffic conditions. The proposed project aims to improve the roadway network and configuration which currently lacks continuity and does not meet driver expectations.

## Addendum Purpose

Non-target species on botanical surveys are plants (or other biota) that were not the focus of the survey effort but were incidentally found within the project area or the survey's target habitat types. Documentation of non-target species of concern is described in DCNR's botanical survey protocols and the permit conditions of DCNR's Wild Plant Management Permit program. Documenting the occurrences of non-target species provides additional information on the presence of species of concern and context on the habitats present and comprehensive biodiversity within the surveyed project area.

This technical memorandum serves as an addendum to the *Botanical Survey Report (August 2025)* and provides the additional information requested by DCNR via email on September 17, 2025, regarding occurrences of seven (7) non-target species of concern / interest that were incidentally identified during the botanical surveys conducted in April & May 2025:

- **Balsam Fir (*Abies balsamea*)**  
*Current PA Status:* PA Watchlist

- **Short Hair Sedge var. brevicrinis (*Carex crinita* var. *brevicrinis*)**  
Current PA Status: Endangered
- **Mountain Wood Fern (*Dryopteris campyloptera*)**  
Current PA Status: Endangered
- **Tamarack (*Larix laricina*)**  
Current PA Status: PA Watchlist
- **Red Mulberry (*Morus rubra*)**  
Current PA Status: Special Concern Species; Proposed Status: Threatened
- **Short-leaf Pine (*Pinus echinata*)**  
Current PA Status: Special Concern Species; Proposed Status: Threatened
- **Kidney-leaved White Violet (*Viola renifolia*)**  
Current PA Status: Special Concern Species; Proposed Status: Endangered

The proposed project’s PNDI Receipt and coordination with DCNR regarding the botanical survey and non-target species occurrences are included as **Attachment 1**.

### Occurrence Documentation for Additional Species of Concern / Interest

On September 25, 2025, Skelly and Loy botanists returned to the field to re-identify the locations of the non-target species occurrences, confirm taxonomic identifications, and document these additional non-target species occurrences. Updated botanical survey mapping that depicts the location of each non-target species occurrence is provided as **Attachment 2**. Completed botanical field survey forms for each additional non-target species occurrence is provided as **Attachment 3**. Voucher photos are included with the botanical field survey form for each documented occurrence if available from the botanical surveys or re-visitation field efforts.

Table 1. Occurrences of Additional Non-Target Plant Species of Concern / Interest	
Common Name (Scientific Name)	Documented Occurrences
<p><b>Balsam Fir</b> <i>Abies balsamea</i></p> <p>Current PA Status: PA Watchlist</p>	<ul style="list-style-type: none"> <li>• One (1) occurrence consisting of one (1) individual tree was documented within the project area in September 2025.</li> <li>• [REDACTED]</li> <li>• The proposed [REDACTED] Alternatives avoid the area where the Balsam Fir occurrence was documented. However, the [REDACTED] would impact the area where this species was documented.</li> </ul>

**Table 1. Occurrences of Additional Non-Target Plant Species of Concern / Interest**

Common Name (Scientific Name)	Documented Occurrences
<p><b>Short Hair Sedge var. brevicrinis</b> <i>Carex crinita var. brevicrinis</i></p> <p><u>Current PA Status:</u> Endangered</p>	<ul style="list-style-type: none"> <li>No occurrences of <i>Carex crinita var. brevicrinis</i> were identified within the project area.</li> <li>Two (2) occurrences <i>Carex crinita var. crinita</i> were identified and documented in the project area. This species variety is fairly common in wetlands throughout Pennsylvania and currently does not have a designated or proposed PA status as a species of concern.</li> </ul>
<p><b>Mountain Wood Fern</b> <i>Dryopteris campyloptera</i></p> <p><u>Current PA Status:</u> Endangered</p>	<ul style="list-style-type: none"> <li>Three (3) occurrences of small populations (&lt;10 individual plants/population) [REDACTED] were re-confirmed and documented within the project area in September 2025.</li> <li>One (1) occurrence of a small population (&lt;10 individual plants) was identified [REDACTED] during the Spring 2025 Botanical Surveys. [REDACTED].</li> <li>The proposed [REDACTED] Alternatives avoid the areas where the Mountain Wood Fern populations were documented. However, [REDACTED] would impact the two areas where this species was documented.</li> </ul>
<p><b>Tamarack</b> <i>Larix laricina</i></p> <p><u>Current PA Status:</u> PA Watchlist</p>	<ul style="list-style-type: none"> <li>One (1) occurrence consisting of one (1) individual tree was documented [REDACTED].</li> <li>One (1) occurrence consisting of approximately thirty or more (30+) individual trees were documented within the project area. [REDACTED]</li> <li>[REDACTED]. The project alternatives avoid the area where the individual Tamarack tree was documented [REDACTED]. However, the project alternatives may result in direct impacts to the Tamarack trees located [REDACTED]. The preliminary engineering and final design phases of the project will continue to evaluate measures to avoid and minimize impacts to natural resources.</li> </ul>

**Table 1. Occurrences of Additional Non-Target Plant Species of Concern / Interest**

Common Name (Scientific Name)	Documented Occurrences
<p><b>Red Mulberry</b> <i>Morus rubra</i></p> <p><u>Current PA Status:</u> <i>Special Concern Species</i></p>	<ul style="list-style-type: none"> <li>One (1) occurrence consisting of one (1) individual tree was documented within the project area during the botanical survey investigations in Spring 2025. However, no photos were taken at the time. [REDACTED] this occurrence was not able to be re-identified and confirmed in the field during the September 2025 field efforts.</li> <li>[REDACTED]</li> <li>The proposed [REDACTED] Alternatives avoid the area where the individual Red Mulberry tree was documented. However, the [REDACTED] would impact the area where this species was documented.</li> </ul>
<p><b>Short-leaf Pine</b> <i>Pinus echinata</i></p> <p><u>Current PA Status:</u> <i>Special Concern Species</i></p>	<ul style="list-style-type: none"> <li>One (1) occurrence consisting of two (2) individual trees, was documented within the project area. Both trees were in poor condition [REDACTED]</li> <li>[REDACTED] may result in direct impacts to the area where this species was documented. The preliminary engineering and final design phases of the project will continue to evaluate measures to avoid and minimize impacts to natural resources.</li> </ul>
<p><b>Kidney-leaved White Violet</b> <i>Viola renifolia</i></p> <p><u>Current PA Status:</u> <i>Special Concern Species</i></p>	<ul style="list-style-type: none"> <li>One (1) occurrence consisting of a small population (&lt;10 individuals) was documented during the botanical survey investigations in Spring 2025. However, no photos were taken at the time.</li> <li>The location of this population was not able to be re-identified during the September 2025 field visit as this year's foliage had likely senesced for the growing season.</li> <li>[REDACTED] may result in direct impacts to the area where this species was documented. The preliminary engineering and final design phases of the project will continue to evaluate measures to avoid and minimize impacts to natural resources.</li> </ul>

## Conclusions and Recommendations

On September 25, 2025, Skelly and Loy botanists returned to the field to re-identify the locations of the non-target species occurrences, confirm taxonomic identifications, and document these additional non-target species occurrences. In addition to the non-target occurrence of Goldenseal (*Hydrastis canadensis*, PA Status: Vulnerable) that was documented in the *Botanical Survey Report (August 2025)*, ten (10) additional occurrences of non-target species of concern / interest were documented during the botanical surveys in April & May 2025 and the field re-visitation efforts in September 2025:

- Four (4) small population occurrences of Mountain Wood Fern (*Dryopteris campyloptera*), which is a state-listed endangered species.
- One (1) occurrence of Red Mulberry (*Morus rubra*), which is a special concern species in Pennsylvania. [REDACTED].
- One (1) small population occurrence of Kidney-leaved White Violet (*Viola renifolia*), which is a special concern species in Pennsylvania.
- One (1) occurrence of Short-leaf Pine (*Pinus echinata*), which is a special concern species in Pennsylvania. This occurrence consisted of two (2) individual trees p [REDACTED].
- One (1) occurrence of Balsam Fir (*Abies balsamea*), which is a PA Watchlist Species. This occurrence consisted of one (1) individual tree [REDACTED].
- Two (2) occurrences of Tamarack (*Larix laricina*), which is a PA Watchlist Species. One occurrence consisted of one (1) individual tree located [REDACTED]. The other occurrence consisted of 30+ individual trees [REDACTED].

The re-visitation field efforts in September 2025 also confirmed that the variety of Short Hair Sedge (*Carex crinita*) identified during the spring botanical surveys was *Carex crinita* var. *crinita*, which is fairly common in wetlands throughout Pennsylvania and currently does not have a designated or proposed PA status as a species of concern.

Mountain Wood Fern is currently listed as a state-listed endangered species and is the only non-target species that has a state-listed protection status. The proposed [REDACTED] Alternatives avoid areas where the populations of Mountain Wood Fern were documented. However, [REDACTED] would impact the areas where this state-listed fern species was documented.

[REDACTED] may result in direct impacts to the habitat areas where several of the non-target species occurrences were identified. The preliminary engineering and final design phases of the project will continue to evaluate measures to avoid and minimize impacts to natural resources.

**List of Contributors**

**Samantha R. Hockenberry, PWS, CE, Senior Scientist**

DCNR Wild Plant Management Permit No. 25-697

36-Hour Swamp School Wetland Delineation & Regional Supplement Training

24-Hour OSHA Hazardous Waste Operations and Emergency Response Training

30-Hour OSHA Construction Safety Training

PennDOT Phase I Bog Turtle Habitat Evaluation Training

Professional Wetland Scientist (PWS # 3059), Society of Wetland Scientists

Certified Ecologist (CE), Ecological Society of America

Certified Taxonomist (Aquatic Insects to Family Level), Society of Freshwater Science

Forest Conservation Qualified Professional (FCQP), Maryland Department of Natural Resources

*Professional Experience:* 12 years

*Education:* Bachelor of Science, Biology; Master of Science., Biology

**Luke M. Gaidos, Staff Scientist**

DCNR Wild Plant Management Permit No. 25-875

Graminoids Identification for Wetlands & Wetland Delineators Course, Wetland Training Institute

Wetland Identification & Delineation Survey Methods

Bog Turtle Habitat Survey & Assessment Methods

Botanical Identification & Survey Methods

Environmental Compliance Monitoring & Reporting

*Professional Experience:* 7 years

*Education:* Bachelor of Science, Biology

**Emma J. Shuey, Field Scientist**

Botanical Identification & Survey Methods

Benthic Macroinvertebrate Sampling Protocols & Methods (PA)

Water Quality and Surface Water Sampling Protocols & Methods (PA)

Wetland Identification & Delineation Survey Methods

Biological Evaluation & Assessment Methods

*Professional Experience:* 1 years

*Education:* Bachelor of Science, Fish, Wildlife, and Conservation Biology

**Samuel N. Williamson, Field Scientist**

Botanical Identification & Survey Methods

Benthic Macroinvertebrate Sampling Protocols & Methods (PA)

Water Quality and Surface Water Sampling Protocols & Methods (PA)

Wetland Identification & Delineation Survey Methods

Biological Evaluation & Assessment Methods

Environmental Compliance Monitoring & Reporting

*Professional Experience:* 3 years

*Education:* Bachelor of Science, Earth Sciences

**Austin N. Eberly, Staff Scientist**

MBSS Benthic Macroinvertebrate Field Sampling Certification, 2023

Wetland Identification & Delineation Survey Methods

Biological Evaluation & Assessment Methods

Bog Turtle Habitat Survey & Assessment Methods

Eastern Spadefoot Toad Habitat Survey & Assessment Methods

Botanical Identification & Survey Methods

*Professional Experience:* 4 years

*Education:* Bachelor of Science, Environmental Science and Biology

**Cooper M. Leslie, Staff Scientist**

Botanical Identification & Survey Methods

Wetland Identification & Delineation Survey Methods

Bog Turtle Habitat Survey & Assessment Methods

Environmental Compliance Monitoring & Reporting

*Professional Experience:* 5 years

*Education:* Bachelor of Science, Biology and Environmental Science

**Megan J. Morris, Field Scientist**

Botanical Identification & Survey Methods

Wetland Identification & Delineation Survey Methods

Biological Evaluation & Assessment Methods

Environmental Compliance Monitoring & Reporting

*Professional Experience:* 3 years

*Education:* Bachelor of Science, Biology

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**ATTACHMENTS**

- 1. PNDI Receipt & DCNR Coordination**
- 2. Updated Botanical Survey Mapping**
- 3. Botanical Field Survey Forms**
- 4. DCNR Wild Plant Management Permits**

## **Attachment 1**

### **PNDI Receipt & DCNR Coordination**

## 1. PROJECT INFORMATION

Project Name: **PennDOT\_State College Connector Project - NEPA Study Area PNDI Re-Run**

Date of Review: **1/8/2025 05:14:01 PM**

Project Category: **Transportation, Roads, New construction/ New alignment**

Project Area: **3,963.37 acres**

County(s): **Centre**

Township/Municipality(s): **Harris Township; Potter Township**

ZIP Code:

Quadrangle Name(s): **CENTRE HALL; STATE COLLEGE**

Watersheds HUC 8: **Bald Eagle; Lower Susquehanna-Penns**

Watersheds HUC 12: **Cedar Run; Colyer Lake-Sinking Creek; Spring Creek-Bald Eagle Creek**

Decimal Degrees: **40.788598, -77.706353**

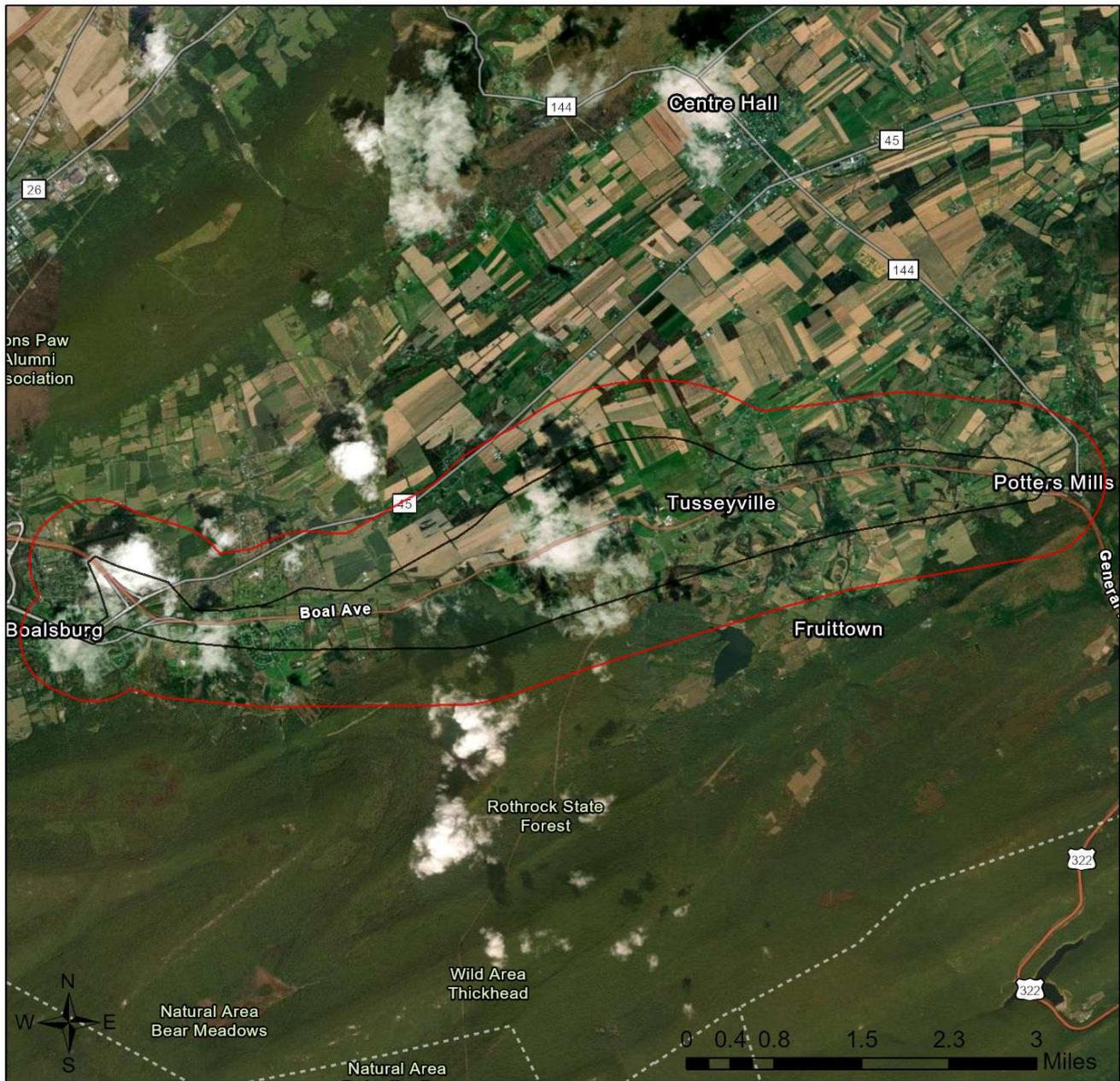
Degrees Minutes Seconds: **40° 47' 18.9510" N, 77° 42' 22.8706" W**

## 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	<b>Conservation Measure</b>	<b>No Further Review Required, See Agency Comments</b>
PA Department of Conservation and Natural Resources	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
PA Fish and Boat Commission	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
U.S. Fish and Wildlife Service	<b>Potential Impact</b>	<b>MORE INFORMATION REQUIRED, See Agency Response</b>

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

# PennDOT\_State College Connector Project - NEPA Study Area PNDI Re-Run

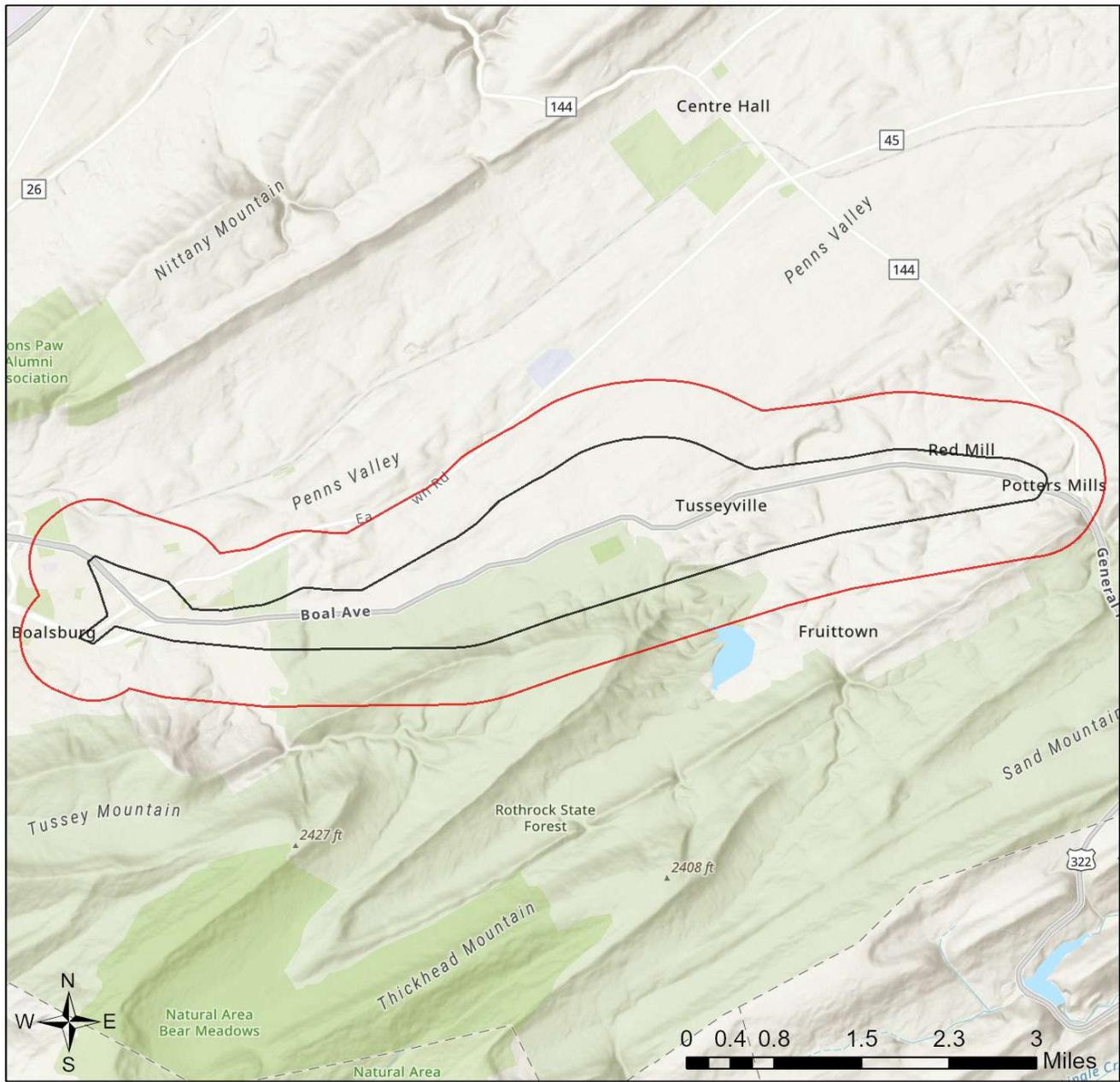


-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

### PennDOT\_State College Connector Project - NEPA Study Area PNDI Re-Run



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

## RESPONSE TO QUESTION(S) ASKED

**Q1:** Does the following statement apply to this project? The project area HAS been investigated by someone qualified to identify and delineate wetlands, and wetlands or streams were located, and some project activities will or might occur within 300 feet of a wetland or stream.

**Your answer is:** Yes

**Q2:** Will the entire project area (including any discharge), plus a 300 feet buffer around the project area, all occur in or on an existing building, parking lot, driveway, road, road shoulder, street, runway, paved area, railroad bed, maintained (periodically mown) lawn, crop agriculture field or maintained orchard?

**Your answer is:** No

**Q3:** The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

**Your answer is:** The project will affect 40 to 200 acres of forests, woodlots and trees AND a seasonal restriction on tree clearing will be implemented (Conduct any tree cutting, tree inundation (flooding), and prescribed burning from October 1 to March 31.)

**Q4:** Is tree removal, tree cutting or forest clearing necessary to implement all aspects of this project?

**Your answer is:** Yes

**Q5:** Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

**Your answer is:** Yes

**Q6:** How many acres of woodland, forest, forested fencerows and trees will be cut, cleared, removed, disturbed or flooded (inundated) as a result of carrying out all aspects or phases of this project? [Round acreages UP to the nearest acre (e.g., 0.2 acres = 1 acre).]

**Your answer is:** More than 50 acres

### 3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

### PA Game Commission

#### RESPONSE:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

## PA Department of Conservation and Natural Resources

### RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**DCNR Species:** (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here:

<https://conservationexplorer.dcnr.pa.gov/content/survey-protocols>)

Scientific Name	Common Name	Current Status	Proposed Status	Survey Window
Hemlock Palustrine Forest	Hemlock Palustrine Forest	Special Concern Resource*	Special Concern Resource*	
Sensitive Species**		Special Concern Species*	Threatened	Flowers late April - early May

## PA Fish and Boat Commission

### RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**PFBC Species:** (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Alasmidonta undulata	Triangle Floater	Special Concern Species*

## U.S. Fish and Wildlife Service

### RESPONSE:

Information Request: The proposed project is located in the vicinity of northern long-eared bat spring staging/fall swarming habitat. Enter project information, including the Pennsylvania Natural Diversity Inventory receipt number, into the U.S. Fish and Wildlife Service's Information for Planning and Consultation tool (IPaC) (<https://ecos.fws.gov/ipac/>). Follow the Northern Long-eared Bat Rangewide Determination Key step-by-step process to review this projects's potential effect on northern long-eared bats.

Avoidance Measure: Conduct any tree cutting, disturbance, inundation (flooding) and prescribed burning from October 1 to March 31.

As the project proponent or applicant, I certify that I will implement the above Avoidance Measure:

  
\_\_\_\_\_ (Signature)

**SPECIAL NOTE: If you agree to implement the above Avoidance Measure and if applicable, any Information Requests, no further coordination with this agency regarding threatened and endangered species and/or special concern species and resources is required.** If you are not able to comply with the Avoidance Measures, you are required to coordinate with this agency - please send project information to this agency for review (see "What to Send" section).

\* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

\*\* Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

## WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload\* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

\*If information was requested by USFWS, applicants must email, or mail, project information to [IR1\\_ESPenn@fws.gov](mailto:IR1_ESPenn@fws.gov) to initiate a review. USFWS will not accept uploaded project materials.

### Check-list of Minimum Materials to be submitted:

\_\_\_ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

\_\_\_ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

**In addition to the materials listed above, USFWS REQUIRES the following**

\_\_\_ **SIGNED** copy of a Final Project Environmental Review Receipt

### The inclusion of the following information may expedite the review process.

\_\_\_ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

\_\_\_ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

## 4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

## 5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page ([www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us)). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

## 6. AGENCY CONTACT INFORMATION

### PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section  
400 Market Street, PO Box 8552  
Harrisburg, PA 17105-8552  
Email: [RA-HeritageReview@pa.gov](mailto:RA-HeritageReview@pa.gov)

### PA Fish and Boat Commission

Division of Environmental Services  
595 E. Rolling Ridge Dr., Bellefonte, PA 16823  
Email: [RA-FBPACENOTIFY@pa.gov](mailto:RA-FBPACENOTIFY@pa.gov)

### U.S. Fish and Wildlife Service

Pennsylvania Field Office  
Endangered Species Section  
110 Radnor Rd; Suite 101  
State College, PA 16801  
Email: [IR1\\_ESPenn@fws.gov](mailto:IR1_ESPenn@fws.gov)  
NO Faxes Please

### PA Game Commission

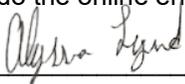
Bureau of Wildlife Management  
Division of Environmental Review  
2001 Elmerton Avenue, Harrisburg, PA 17110-9797  
Email: [RA-PGC\\_PNDI@pa.gov](mailto:RA-PGC_PNDI@pa.gov)  
NO Faxes Please

## 7. PROJECT CONTACT INFORMATION

Name: Alyssa Lynd  
Company/Business Name: Skelly and Loy Inc., A Terracon Company  
Address: 449 Eisenhower Blvd., Suite 300  
City, State, Zip: Harrisburg, PA 17111  
Phone: (717) 510-7770 Fax: ( )  
Email: alynd@skellyloy.com

## 8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

  
applicant/project proponent signature

1/8/25  
date

## Hockenberry, Samantha

---

**From:** Brooks, Hope <c-hobrooks@pa.gov>  
**Sent:** Wednesday, September 17, 2025 11:12 PM  
**To:** Hockenberry, Samantha; NR, HeritageReview  
**Cc:** Sabitsky, Jesse U; Auker, Nicole; Peacock, Christopher; Murnyack, Eric J; Cole, Lori; James, Kevin; DeAngelo, Paul J; Lynd, Alyssa R; Sinclair, James A  
**Subject:** Re: [External] PNDI-782938 PennDOT State College Area Connector Project - Botanical Survey Report Submission  
**Attachments:** image001.png

Hello Samantha,

Thank you for submitting your botanical survey report for the PennDOT\_State College Connector Project - NEPA Study Area PNDI Re-Run (PNDI-782938), and congrats on finding the Golden-seal (*Hydrastis canadensis*). Before I complete my review, I found note of the following species in your species list and elsewhere in your report:

1.  
Balsam Fir (*Abies balsamea*; PA Watchlist Species)
2.  
Short Hair Sedge (*Carex crinita* var. *brevicrinis*; PA Endangered) --> Note, the species list did not list the variety, and only var. *brevicrinis* is listed in the Commonwealth.
3.  
Mountain Wood Fern (*Dryopteris campyloptera*; PA Endangered)
4.  
Tamarack (*Larix laricina*; PA Endangered)
5.  
Red Mulberry (*Morus rubra*; PA Special Concern Species, proposed PA Threatened)
6.  
Short-leaf Pine (*Pinus echinata*; PA Special Concern Species, proposed PA Threatened)
7.  
Kidney-leaved White Violet (*Viola renifolia*; PA Special Concern Species, proposed PA Endangered)

Would you be able to provide the following for all instances of the above species: 1) Filled out botanical survey forms, 2) voucher photos for submission with the botanical survey forms, and 3) maps indicating where these plants were found in the study area?

Thanks,  
Hope

Hope Brooks | Ecological Information Specialist PA Department of Conservation & Natural Resources Bureau of Forestry  
| Natural Heritage Section

400 Market Street, PO Box 8552 | Harrisburg, PA 17105

Work Phone: 717-705-2819 | Cell Phone: 717-262-8231 | E-mail: c-hobrooks@pa.gov<mailto:c-hobrooks@pa.gov>

From: Hockenberry, Samantha <SHockenberry@skellyloy.com>

Sent: Monday, September 8, 2025 8:45 AM

To: Brooks, Hope <c-hobrooks@pa.gov>; NR, HeritageReview <RA-HeritageReview@pa.gov>

Cc: Sabitsky, Jesse U <jesabitsky@pa.gov>; Auker, Nicole <nauker@pa.gov>; Peacock, Christopher <cpeacock@pa.gov>; Murnyack, Eric J <emurnyack@pa.gov>; Cole, Lori <lcole@jmt.com>; James, Kevin <c-kevjames@pa.gov>; DeAngelo, Paul J <pdeangelo@skellyloy.com>; Lynd, Alyssa R <alynd@skellyloy.com>; Sinclair, James A <jsinclair@skellyloy.com>

Subject: [External] PNDI-782938 PennDOT State College Area Connector Project - Botanical Survey Report Submission

ATTENTION: This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the Report Phishing button in

Outlook.<[https://urldefense.com/v3/\\_\\_https://www.pa.gov/content/dam/copapwp-pagov/en/oa/documents/documents/cofense-report-phishing-user-guide.pdf\\_\\_;!!JrcuqBw\\_IQ!m7jhYL4auprig4rJqDkK4c65Y6XCeIFjIIO3jO05c6-Uc1Ksrh7qGtMtHd5NNANeeTHAOeal53Y0nSZtsVIm1wBW-g\\$](https://urldefense.com/v3/__https://www.pa.gov/content/dam/copapwp-pagov/en/oa/documents/documents/cofense-report-phishing-user-guide.pdf__;!!JrcuqBw_IQ!m7jhYL4auprig4rJqDkK4c65Y6XCeIFjIIO3jO05c6-Uc1Ksrh7qGtMtHd5NNANeeTHAOeal53Y0nSZtsVIm1wBW-g$)>

Good Morning Hope,

Skelly and Loy, Inc., A Terracon Company (Skelly and Loy), on behalf of Pennsylvania Department of Transportation (PennDOT) and the Federal Highway Administration (FHWA), is submitting the attached Botanical Survey Report for the State College Area Connector project for your review as requested. The attached botanical survey report PDF also includes a transmittal coordination letter summarizing the results of the botanical survey conducted within the project area in Spring 2025, as well as a summary of the project's coordination with Pennsylvania Department of Conservation and Natural Resources (DCNR) to date.

The botanical survey report and transmittal coordination letter have also been uploaded to the Pennsylvania Natural Diversity Inventory (PNDI) Conservation Explorer online system as part of the project's records under PNDI No. 782938.

The official DCNR response will be included in the project's Environmental Impact Statement (EIS) and the necessary permit applications to regulating agencies.

Please review the attached botanical survey report and feel free to contact me if you have any questions. We look forward to coordinating with you on this project.

Thanks,

Sam

Samantha R. Hockenberry, PWS, CE

Senior Scientist I Environmental

Skelly and Loy, Inc., A Terracon Company

449 Eisenhower Boulevard, Suite 300 I Harrisburg, PA 17111

D (717) 237 2898 I M (717) 816 4579

shockenberry@skellyloy.com<mailto:shockenberry@skellyloy.com> I <http://skellyloy.com> <<http://www.skellyloy.com/>> I <http://terracon.com> <<http://www.terracon.com/>>

[cid:image001.png@01DC2099.86810600]

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Private and confidential as detailed here (<http://www.terracon.com/disclaimer> ). If you cannot access the hyperlink, please e-mail sender.



1/10/2025

**PNDI Number: PNDI-782938**  
 Version: FINAL\_1; 01/08/2025

**James A. Sinclair**  
**Skelly and Loy, Inc.**  
 449 Eisenhower Boulevard, Suite 300  
 Harrisburg, PA 17111  
 Email: jsinclair@skellyloy.com (hard copy will not follow)

**Re: PennDOT\_State College Connector Project - NEPA Study Area PNDI Re-Run  
 Harris Township, Potter Township, Centre County, PA**

Dear James A. Sinclair,

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number **PNDI-782938 (FINAL\_1)** for review. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources under DCNR’s responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

**Potential Impact Anticipated – Survey Request**

PNDI records indicate species or resources under DCNR’s jurisdiction are located in the project vicinity. Based on a detailed PNDI review, DCNR determined potential impacts to the following threatened, endangered, or special concern species.

<b>Scientific Name</b>	<b>Common Name</b>	<b>PA Current Status</b>	<b>PA Proposed Status</b>	<b>Survey Window</b>	<b>Suitable Habitat</b>	<b>Local Habitat</b>
<i>Hemlock Palustrine Forest</i>	Hemlock Palustrine Forest	Special Concern Resource	Special Concern Resources			
<i>Amelanchier sanguinea</i>	Roundleaf Serviceberry	Special Concern Species	Endangered	Flowers mid-April - late May; fruits June - early July	Open woods, rocky slopes and barrens.	Deciduous shrub community on limestone.
<i>Carex formosa</i>	Handsome Sedge	Endangered	Endangered	Flowers / fruits May - July	Dry woods.	Calcareous, dry wooded north facing slope and in moist woods on level ground at the base of the slope.
<i>Trillium flexipes</i>	Declined Trillium	Special Concern Species	Threatened	Flowers late April - early May	Wooded hillsides, swampy woods and floodplains.	A diverse calcareous forest remnant along ██████████, growing on a gentle slope above the floodplain, with rocky and very calcareous soil.

- ✓ **Survey Request:** A botanical survey for the above species should be conducted by a qualified botanist at the appropriate time of year. Please submit the resulting report to our office for review. Contact our office prior to the survey for detailed information about the species or for a list of qualified surveyors.
- ✓ **Your botanist should carefully review the new DCNR Botanical Survey Protocols available at <https://conservationexplorer.dcnr.pa.gov/content/survey-protocols>.** These protocols are recommended to ensure that all necessary information is collected and that survey reports are prepared properly. It is the expectation of DCNR that these protocols will be followed when conducting surveys for species under our jurisdiction.
- ✓ **DCNR recommends that a Wild Plant Management Permit be obtained before conducting botanical surveys for Threatened, Endangered, and Special Concern PA Plant Species.** Permit information and application can be found here: <https://conservationexplorer.dcnr.pa.gov/content/resources>
- ✓ **A list of qualified botanists who have obtained our Wild Plant Management Permit can be found at <https://conservationexplorer.dcnr.pa.gov/content/wild-plant-management-permit-holders>.** These botanists are suitable candidates to perform a survey to our scientific standards.
- ✓ All target and non-target state-listed species found during the botanical survey should be reported to our office. **Please submit a completed Botanical Field Survey Form for each occurrence or population identified:** <http://www.gis.dcnr.state.pa.us/PNDI/2015%20Field%20Survey%20Form.pdf>. Mitigation measures and monitoring may be requested if state-listed species are found on or adjacent to the site.
- ✓ If preferred habitat does not exist on site, a survey may not be necessary. Please submit a habitat assessment report which describes the current land cover, habitat types, and species found on site.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. Should the proposed work continue beyond the period covered by this letter and a permit has not been acquired, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative, description of project changes and accurate map). As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

**Should you have any questions or concerns, please contact Hope Brooks, Ecological Information Specialist, by phone (717-705-2819) or via email (c-hobrooks@pa.gov).**

Sincerely,

A handwritten signature in black ink on a light gray background. The signature reads "Greg Podnieszinski" in a cursive script.

Greg Podnieszinski, Section Chief  
Natural Heritage Section

## **Attachment 2**

### **Updated Botanical Survey Mapping**

## **Attachment 3**

# **Botanical Survey Forms**

## BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

DCNR requests a Botanical Field Survey Form be submitted for each occurrence/population of a PA Plant Species of Special Concern (SOSC) found during a survey. Please attempt to complete as many fields as possible. Please direct any questions to DCNR Bureau of Forestry, Ecological Services Section at (717)-787-3444.

<b>Species Name:</b> Basalm Fir ( <i>Abies balsamea</i> ) PA Watchlist Species	<b>PNDI # (if applicable):</b> PNDI - 782938  <b>EO ID # (if applicable):</b>	<input checked="" type="checkbox"/> <b>New Occurrence</b>  <input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Samantha Hockenberry, Emma Shuey	<b>Survey Date(s):</b> 09/25/2025	<b>Time Spent:</b> 1 hour
<b>Site Name:</b> [REDACTED]	<b>GPS Coordinates of Occurrence (include datum):</b> [REDACTED]	
<b>Directions to Site:</b> [REDACTED]		
<b>Site Owner:</b> [REDACTED]	<b>Landowner aware of Species of Special Concern?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<b>Owner Contact Information:</b> [REDACTED]	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b> [REDACTED]	

<b>General SOSC Habitat Description:</b> [REDACTED]			
<b>Estimate of Area of Potential Habitat:</b> [REDACTED]			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> [REDACTED]			
<b>Relative age/Successional stage:</b> Early to Mid Successional	<b>Aspect:</b> [REDACTED]	<b>Elevation (provide units):</b> [REDACTED]	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry (mesic) <input type="checkbox"/> Dry (xeric)	<b>Light:</b> <input type="checkbox"/> Open <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input checked="" type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input type="checkbox"/> 0-10% <input checked="" type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical

<b>SOSC Occurrence Information (describe below)</b>				
<b>Phenology:</b>	<b># Plants:</b>	<b>Population Area:</b>	<b>Age Structure:</b>	<b>Vigor:</b>
<input checked="" type="checkbox"/> In leaf	<b>Ramets<sup>1</sup></b>	<input type="checkbox"/> 1 yd <sup>2</sup>	<input type="checkbox"/> Annuals	<input type="checkbox"/> Very Feeble
<input type="checkbox"/> In bud	<input type="checkbox"/> 1-10	<input checked="" type="checkbox"/> 1-5 yd <sup>2</sup>	<input type="checkbox"/> % Seedlings	<input checked="" type="checkbox"/> Feeble
<input type="checkbox"/> In flower	<input type="checkbox"/> 11-50	<input type="checkbox"/> 5-10 yd <sup>2</sup>	<input type="checkbox"/> % Immature	<input type="checkbox"/> Normal
<input type="checkbox"/> Immature fruit	<input type="checkbox"/> 51-100	<input type="checkbox"/> 10-100 yd <sup>2</sup>	<input type="checkbox"/> % 1st Year	<input type="checkbox"/> Vigorous
<input type="checkbox"/> Mature fruit	<input type="checkbox"/> 101-1000	<input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac	<input type="checkbox"/> % Mature	<input type="checkbox"/> Exceptional vigor
<input type="checkbox"/> Seed dispersing	<input type="checkbox"/> 1001-10K	<input type="checkbox"/> 1+ acres	<input type="checkbox"/> % Senescent	
	<input type="checkbox"/> 10K+	<input type="checkbox"/> <5 yards Est Area		
	EST #			
		1 Genet		
<b>ID Confidence:</b>		<b>ID Problems (explain):</b>		
<input checked="" type="checkbox"/> Positive ID <input type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain		N/A		
<b>Known or X Inferred Land Use History:</b>				
Property owner said that Balsam Fir ( <i>Abies balsamea</i> ) and Concolor Fir ( <i>Abies concolor</i> ) trees were planted on the property. Aerial photos indicate that a field of fir trees were planted prior to 1995, but over time the land was no longer used for agriculture, and the trees present are secondary growth.				
<b>Integrity/Fragmentation of Habitat:</b>				
Wood lot hedgerow has a total area of approximately [REDACTED]				
<b>Land Use/Disturbance Information:</b>				
[REDACTED]				
<b>Threats (on- or off-site):</b>				
Invasive encroachment; land development				
<b>Conservation or Management Recommendations:</b>				
Invasive species removal to prevent continued encroachment from invasive shrubs and vines.				
<b>Additional SOSC Comments:</b>				
1 individual tree [REDACTED] with scattered trees [REDACTED]				

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

<b>Associated Species :: Most Abundant/Dominant by Strata (est. % cover):</b>		
<b>Canopy:</b> Red Maple ( <i>Acer rubrum</i> ) - 10% Red Oak ( <i>Quercus rubra</i> ) - 10%	<b>Sub-Canopy/Shrub:</b> European Privet ( <i>Ligustrum vulgare</i> ) - 10%	<b>Herbaceous:</b> Canada Goldenrod ( <i>Solidago canadensis</i> ) - 20% Wrinkleleaf Goldenrod ( <i>Solidago rugosa</i> ) - 20% Stout Goldenrod ( <i>Solidago squarrosa</i> ) - 20%
<b>Other Species Present:</b>		
<b>Canopy:</b> Black Cherry ( <i>Prunus serotina</i> ) - 5% Black Walnut ( <i>Juglans nigra</i> ) - 5%	<b>Sub-Canopy/Shrub:</b> Tatarian Honeysuckle ( <i>Lonicera tatarica</i> ) - 5%	<b>Herbaceous:</b> Kentucky Bluegrass ( <i>Poa pratensis</i> ) - 15% Harvest Lice ( <i>Agrimonia parviflora</i> ) - 10% Poison Ivy ( <i>Toxicodendron radicans</i> ) - 5%
<b>Invasive Species Present at Site (est. % Cover):</b>		
Total Invasive Species Cover - 15% European Privet ( <i>Ligustrum vulgare</i> ) - 10%; Tatarian Honeysuckle ( <i>Lonicera tatarica</i> ) - 5%		

**\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.**



### BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

DCNR requests a Botanical Field Survey Form be submitted for each occurrence/population of a PA Plant Species of Special Concern (SOSC) found during a survey. Please attempt to complete as many fields as possible. Please direct any questions to DCNR Bureau of Forestry, Ecological Services Section at (717)-787-3444.

<b>Species Name:</b> Mountain Wood Fern ( <i>Dryopteris campyloptera</i> ) PA Status: Endangered	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Samantha Hockenberry, Emma Shuey	<b>Survey Date(s):</b> 09/25/2025	<b>Time Spent:</b> 1.5 Hours
<b>Site Name:</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>	<b>GPS Coordinates of Occurrence (include datum):</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>	
<b>Directions to Site:</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>		
<b>Site Owner:</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>	<b>Landowner aware of Species of Special Concern?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Owner Contact Information:</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b>	

<b>General SOSC Habitat Description:</b> Upland hardwood forest with thick shrub understory.			
<b>Estimate of Area of Potential Habitat:</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> 0-6 10YR 3/2 - Fibrous Roots			
<b>Relative age/Successional stage:</b> Mid to Late Successional	<b>Aspect:</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>	<b>Elevation (provide units):</b> <div style="background-color: black; width: 100%; height: 1.2em;"></div>	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry (mesic) <input checked="" type="checkbox"/> Dry (xeric)	<b>Light:</b> <input type="checkbox"/> Open <input type="checkbox"/> Partial <input checked="" type="checkbox"/> Filtered <input checked="" type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input checked="" type="checkbox"/> Mid-slope <input checked="" type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> 0-10% <input type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical

<b>SOSC Occurrence Information (describe below)</b>				
<b>Phenology:</b>	<b># Plants:</b>	<b>Population Area:</b>	<b>Age Structure:</b>	<b>Vigor:</b>
<input checked="" type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input type="checkbox"/> Mature fruit <input checked="" type="checkbox"/> Seed dispersing	<b>Ramets<sup>1</sup></b> <input checked="" type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-1000 <input type="checkbox"/> 1001-10K <input type="checkbox"/> 10K+ 1-2 EST #	<b>Genets<sup>2</sup></b> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4-6	<input type="checkbox"/> 1 yd <sup>2</sup> <input type="checkbox"/> 1-5 yd <sup>2</sup> <input type="checkbox"/> 5-10 yd <sup>2</sup> <input checked="" type="checkbox"/> 10-100 yd <sup>2</sup> <input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac <input type="checkbox"/> 1+ acres Est Area	___ Annuals ___ % Seedlings ___ % Immature ___ % 1st Year <sup>100</sup> ___ % Mature ___ % Senescent
<b>ID Confidence:</b> <input checked="" type="checkbox"/> Positive ID <input type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain		<b>ID Problems (explain):</b> N/A		
<b>Known or <input checked="" type="checkbox"/> Inferred Land Use History:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>				
<b>Integrity/Fragmentation of Habitat:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>				
<b>Land Use/Disturbance Information:</b> <div style="background-color: black; width: 100px; height: 15px; display: inline-block;"></div> surrounded by hardwood forest				
<b>Threats (on- or off-site):</b> Invasive encroachment; land development; forest clearing				
<b>Conservation or Management Recommendations:</b> Invasive species removal to prevent encroachment from surrounding shrubs. Leaf litter from surrounding overstory provides overwintering protection of the root system.				
<b>Additional SOSC Comments:</b>  				

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

<b>Associated Species :: Most Abundant/Dominant by Strata (est. % cover):</b>		
<b>Canopy:</b> Red Maple ( <i>Acer rubrum</i> ) - 25% Red Oak ( <i>Quercus rubra</i> ) - 20% Shagbark Hickory ( <i>Carya ovata</i> ) - 20%	<b>Sub-Canopy/Shrub:</b> Autumn Olive ( <i>Elaeagnus umbellata</i> ) - 40% Japanese Barberry ( <i>Berberis thunbergii</i> ) - 30%	<b>Herbaceous:</b>
<b>Other Species Present:</b>		
<b>Canopy:</b> Pignut Hickory ( <i>Carya glabra</i> ) - 15% Chestnut Oak ( <i>Quercus montana</i> ) - 5%	<b>Sub-Canopy/Shrub:</b>	<b>Herbaceous:</b> Shagbark Hickory seedlings ( <i>Carya ovata</i> ) - 5% Poison Ivy ( <i>Toxicodendron radicans</i> ) - 3% Virginia Creeper ( <i>Parthenocissus quinquefolia</i> ) - 3% Red Maple seedlings ( <i>Acer rubrum</i> ) - 3%
<b>Invasive Species Present at Site (est. % Cover):</b> Total Invasive Species Cover - 70% (shrub layer) Autumn Olive ( <i>Elaeagnus umbellata</i> ) - 40% Japanese Barberry ( <i>Berberis thunbergii</i> ) - 30%		

**\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.**

**Mountain Wood Fern (*Dryopteris campyloptera*)**  
**Current PA Status: Endangered**



**Photograph No. 1**  
(September 25, 2025)

View of one specimen within a singular population of Mountain Wood Fern (*Dryopteris campyloptera*) found within upland hardwood forest with thick shrub understory habitat in the project area.



**Photograph No. 2**  
(September 25, 2025)

View of the surrounding upland hardwood forested habitat [REDACTED]. The Mountain Wood Fern population was surrounded by species including Red Oak, Red Maple, Chestnut Oak, Autumn Olive, Japanese Barberry, and Virginia Creeper. View was southeast.



**Photograph No. 3**  
(September 25, 2025)

View of a typical specimen identified as *Dryopteris campyloptera*. This individual plant was located within the population found in upland hardwood forested habitat. Note the kidney-shaped sori and veins that do not reach the edge of the leaf blade.

### BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

DCNR requests a Botanical Field Survey Form be submitted for each occurrence/population of a PA Plant Species of Special Concern (SOSC) found during a survey. Please attempt to complete as many fields as possible. Please direct any questions to DCNR Bureau of Forestry, Ecological Services Section at (717)-787-3444.

<b>Species Name:</b> Mountain Wood Fern ( <i>Dryopteris campyloptera</i> ) PA Status: Endangered	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Luke Gaidos, Austin Eberly, Samuel Williamson, Cooper Leslie, Emma Shuey	<b>Survey Date(s):</b> 04/23/2025	<b>Time Spent:</b> 2.5 Hours
<b>Site Name:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>	<b>GPS Coordinates of Occurrence (include datum):</b> <div style="background-color: black; height: 20px; width: 100%;"></div>	
<b>Directions to Site:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>		
<b>Site Owner:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>	<b>Landowner aware of Species of Special Concern?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Owner Contact Information:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b>	

<b>General SOSC Habitat Description:</b> Steep Upland hardwood forest with thick shrub and herbaceous understory <div style="background-color: black; height: 20px; width: 100%;"></div>			
<b>Estimate of Area of Potential Habitat:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> <div style="background-color: black; height: 20px; width: 100%;"></div>			
<b>Relative age/Successional stage:</b> Mid to Late Successional	<b>Aspect:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>	<b>Elevation (provide units):</b> <div style="background-color: black; height: 20px; width: 100%;"></div>	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry (mesic) <input type="checkbox"/> Dry (xeric)	<b>Light:</b> <input type="checkbox"/> Open <input type="checkbox"/> Partial <input checked="" type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input checked="" type="checkbox"/> Mid-slope <input type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input type="checkbox"/> 0-10% <input checked="" type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical

<b>SOSC Occurrence Information (describe below)</b>					
<b>Phenology:</b>	<b># Plants:</b>	<b>Population Area:</b>	<b>Age Structure:</b>	<b>Vigor:</b>	
<input checked="" type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input type="checkbox"/> Mature fruit <input checked="" type="checkbox"/> Seed dispersing	<b>Ramets<sup>1</sup></b> <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-1000 <input type="checkbox"/> 1001-10K <input type="checkbox"/> 10K+ _____ EST #	<b>Genets<sup>2</sup></b> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ 6 Genets	<input type="checkbox"/> 1 yd <sup>2</sup> <input type="checkbox"/> 1-5 yd <sup>2</sup> <input checked="" type="checkbox"/> 5-10 yd <sup>2</sup> <input type="checkbox"/> 10-100 yd <sup>2</sup> <input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac <input type="checkbox"/> 1+ acres _____ Est Area	_____ Annuals _____ % Seedlings _____ % Immature _____ % 1st Year 100 _____ % Mature _____ % Senescent	<input type="checkbox"/> Very Feeble <input type="checkbox"/> Feeble <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Vigorous <input type="checkbox"/> Exceptional vigor
<b>ID Confidence:</b> <input type="checkbox"/> Positive ID <input type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain		<b>ID Problems (explain):</b>			
_____ Known or <input checked="" type="checkbox"/> Inferred Land Use History: <div style="background-color: black; height: 20px; width: 100%;"></div>					
<b>Integrity/Fragmentation of Habitat:</b> The population of Mountain Wood Fern is located <div style="background-color: black; display: inline-block; width: 200px; height: 1em;"></div>					
<b>Land Use/Disturbance Information:</b> <div style="background-color: black; display: inline-block; width: 100px; height: 1em;"></div> surrounded by forested slope. <div style="background-color: black; display: inline-block; width: 200px; height: 1em;"></div>					
<b>Threats (on- or off-site):</b> Invasive encroachment; land development; logging/land clearing					
<b>Conservation or Management Recommendations:</b> Invasive species removal to prevent encroachment from surrounding shrubs. Leaf litter from surrounding overstory provides overwintering protection of the root system.					
<b>Additional SOSC Comments:</b>					

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

<b>Associated Species :: Most Abundant/Dominant by Strata (est. % cover):</b>		
<b>Canopy:</b> Red Oak (Quercus rubra) - 20% Shagbark Hickory (Carya ovata) - 15% White Pine (Pinus strobus) - 15% Red Maple (Acer rubrum) - 15%	<b>Sub-Canopy/Shrub:</b> Japanese Barberry (Berberis thunbergii) - 10% Multiflora Rose (Rosa multiflora) - 10%	<b>Herbaceous:</b> Garlic Mustard (Alliaria petiolata) - 15% Pennsylvania Sedge (Carex pensylvanica) - 15%
<b>Other Species Present:</b>		
<b>Canopy:</b>	<b>Sub-Canopy/Shrub:</b>	<b>Herbaceous:</b>
<b>Invasive Species Present at Site (est. % Cover):</b> Japanese Barberry (Berberis thunbergii) - 10% Multiflora Rose (Rosa multiflora) - 10% Garlic Mustard (Alliaria petiolata) - 15%		

**\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.**

### BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

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<b>Species Name:</b> Tamarack ( <i>Larix laricina</i> ) PA Watchlist Species	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Samantha Hockenberry, Emma Shuey	<b>Survey Date(s):</b> 09/25/2025	<b>Time Spent:</b> 1 hour
<b>Site Name:</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>	<b>GPS Coordinates of Occurrence (include datum):</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>	
<b>Directions to Site:</b> <div style="background-color: black; width: 100%; height: 30px; margin-top: 5px;"></div>		
<b>Site Owner:</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>	<b>Landowner aware of Species of Special Concern?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
<b>Owner Contact Information:</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b> <div style="background-color: black; width: 100%; height: 30px; margin-top: 5px;"></div>	

<b>General SOSC Habitat Description:</b> <div style="background-color: black; width: 100%; height: 30px; margin-top: 5px;"></div>			
<b>Estimate of Area of Potential Habitat:</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> <div style="background-color: black; width: 100%; height: 30px; margin-top: 5px;"></div>			
<b>Relative age/Successional stage:</b> Early to Mid Successional	<b>Aspect:</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>	<b>Elevation (provide units):</b> <div style="background-color: black; width: 100%; height: 1.2em; margin-top: 5px;"></div>	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input checked="" type="checkbox"/> Moist (mesic) <input type="checkbox"/> Dry (mesic) <input type="checkbox"/> Dry (xeric)	<b>Light:</b> <input checked="" type="checkbox"/> Open <input type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input checked="" type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input checked="" type="checkbox"/> Flat <input checked="" type="checkbox"/> 0-10% <input type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical

<b>SOSC Occurrence Information (describe below)</b>					
<b>Phenology:</b>	<b># Plants:</b>	<b>Population Area:</b>	<b>Age Structure:</b>	<b>Vigor:</b>	
<input checked="" type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input checked="" type="checkbox"/> Mature fruit <input checked="" type="checkbox"/> Seed dispersing	<b>Ramets<sup>1</sup></b> <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-1000 <input type="checkbox"/> 1001-10K <input type="checkbox"/> 10K+ _____ EST #	<b>Genets<sup>2</sup></b> <input checked="" type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-1000 <input type="checkbox"/> 1001-10K <input type="checkbox"/> 10K+ _____ 30+	<input type="checkbox"/> 1 yd <sup>2</sup> <input type="checkbox"/> 1-5 yd <sup>2</sup> <input type="checkbox"/> 5-10 yd <sup>2</sup> <input type="checkbox"/> 10-100 yd <sup>2</sup> <input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac <input checked="" type="checkbox"/> 1+ acres 5 AC Est Area	_____ Annuals _____ % Seedlings _____ % Immature _____ % 1st Year 100 _____ % Mature _____ % Senescent	<input type="checkbox"/> Very Feeble <input checked="" type="checkbox"/> Feeble <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Vigorous <input type="checkbox"/> Exceptional vigor
<b>ID Confidence:</b> <input type="checkbox"/> Positive ID <input type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain		<b>ID Problems (explain):</b>			
X _____ Known or X _____ Inferred Land Use History: _____					
<b>Integrity/Fragmentation of Habitat:</b> _____					
<b>Land Use/Disturbance Information:</b> _____					
<b>Threats (on- or off-site):</b> Land development					
<b>Conservation or Management Recommendations:</b>					
<b>Additional SOSC Comments:</b> Approximately 30+ individual trees _____					

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

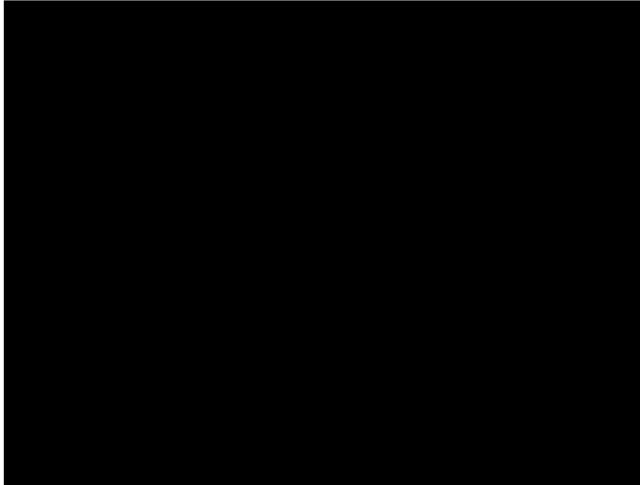
<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

<b>Associated Species :: Most Abundant/Dominant by Strata (est. % cover):</b>		
<b>Canopy:</b> Norway Spruce ( <i>Picea abies</i> ) - 15% Sugar Maple ( <i>Acer saccharum</i> ) - 15% Black Walnut ( <i>Juglans nigra</i> ) - 15%	<b>Sub-Canopy/Shrub:</b> Autumn Olive ( <i>Elaeagnus umbellata</i> ) - 40% Japanese Barberry ( <i>Berberis thunbergii</i> ) - 30%	<b>Herbaceous:</b> Garlic Mustard ( <i>Alliaria petiolata</i> ) - 25% Fuller's Teasel ( <i>Dipsacus fullonum</i> ) - 25% Narrowleaf Cattail ( <i>Typha angustifolia</i> ) - 25%
<b>Other Species Present:</b>		
<b>Canopy:</b> Black Cherry ( <i>Prunus serotina</i> ) - 5%	<b>Sub-Canopy/Shrub:</b>	<b>Herbaceous:</b>
<b>Invasive Species Present at Site (est. % Cover):</b> Autumn Olive ( <i>Elaeagnus umbellata</i> ) - 40%; Japanese Barberry ( <i>Berberis thunbergii</i> ) - 30% Garlic Mustard ( <i>Alliaria petiolata</i> ) - 25%; Fuller's Teasel ( <i>Dipsacus fullonum</i> ) - 25%; Narrowleaf Cattail ( <i>Typha angustifolia</i> ) - 25%		

**\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.**

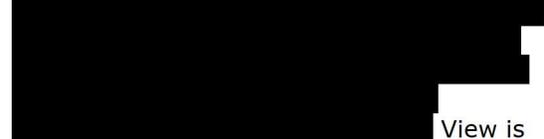
**Tamarack (*Larix laricina*)**

**Current PA Status: PA Watchlist Species**



**Photograph No. 1**  
(September 25, 2025)

View of an additional population of Tamarack (*Larix laricina*) [redacted]



[redacted] View is northwest.



**Photograph No. 2**  
(September 25, 2025)

View of the cone attached to a low-lying branch of a Tamarack (*Larix laricina*) [redacted]

[redacted]. Note the small, egg-shaped woody cone that is approximately an inch long. View is southwest.



**Photograph No. 3**  
(September 25, 2025)

View of an additional population of Tamarack trees [redacted].

This stand of trees is surrounded by species including Norway Spruce (*Picea abies*), Sugar Maple (*Acer saccharum*), Black Walnut (*Juglans nigra*), and Black Cherry (*Prunus serotina*).

## BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

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<b>Species Name:</b> Tamarack ( <i>Larix laricina</i> ) PA Watchlist Species	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Samantha Hockenberry, Emma Shuey	<b>Survey Date(s):</b> 09/25/2025	<b>Time Spent:</b> 1 hour
<b>Site Name:</b> [REDACTED]	<b>GPS Coordinates of Occurrence (include datum):</b> [REDACTED]	
<b>Directions to Site:</b> [REDACTED]		
<b>Site Owner:</b> [REDACTED]	<b>Landowner aware of Species of Special Concern?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Owner Contact Information:</b> [REDACTED]	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b>  	

<b>General SOSC Habitat Description:</b> [REDACTED]			
<b>Estimate of Area of Potential Habitat:</b> [REDACTED]			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> 0-2 inches 10YR 3/2 Loam, Fibrous roots; 2-6 inches 10YR 4/2 Sandy Silt, Fibrous roots [REDACTED]			
<b>Relative age/Successional stage:</b> Mid Successional	<b>Aspect:</b> [REDACTED]	<b>Elevation (provide units):</b> [REDACTED]	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry (mesic) <input type="checkbox"/> Dry (xeric)	<b>Light:</b> <input checked="" type="checkbox"/> Open <input type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input checked="" type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> 0-10% <input type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical

<b>SOSC Occurrence Information (describe below)</b>					
<b>Phenology:</b> <input checked="" type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input checked="" type="checkbox"/> Mature fruit <input checked="" type="checkbox"/> Seed dispersing	<b># Plants:</b> <b>Ramets<sup>1</sup></b> <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-1000 <input type="checkbox"/> 1001-10K <input type="checkbox"/> 10K+ _____ EST #	<b>Genets<sup>2</sup></b> <input checked="" type="checkbox"/> 1 indiv. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Population Area:</b> <input type="checkbox"/> 1 yd <sup>2</sup> <input type="checkbox"/> 1-5 yd <sup>2</sup> <input checked="" type="checkbox"/> 5-10 yd <sup>2</sup> <input type="checkbox"/> 10-100 yd <sup>2</sup> <input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac <input type="checkbox"/> 1+ acres _____ Est Area	<b>Age Structure:</b> _____ Annuals _____ % Seedlings _____ % Immature _____ % 1st Year <sup>100</sup> _____ % Mature _____ % Senescent	<b>Vigor:</b> <input type="checkbox"/> Very Feeble <input type="checkbox"/> Feeble <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Vigorous <input type="checkbox"/> Exceptional vigor
<b>ID Confidence:</b> <input checked="" type="checkbox"/> Positive ID <input type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain			<b>ID Problems (explain):</b> N/A		
<b>_____ Known or <input checked="" type="checkbox"/> Inferred Land Use History:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>					
<b>Integrity/Fragmentation of Habitat:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>					
<b>Land Use/Disturbance Information:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>					
<b>Threats (on- or off-site):</b> Land development <div style="background-color: black; height: 15px; width: 200px;"></div>					
<b>Conservation or Management Recommendations:</b>  					
<b>Additional SOSC Comments:</b> One tree located <div style="background-color: black; height: 15px; width: 600px;"></div> .					

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

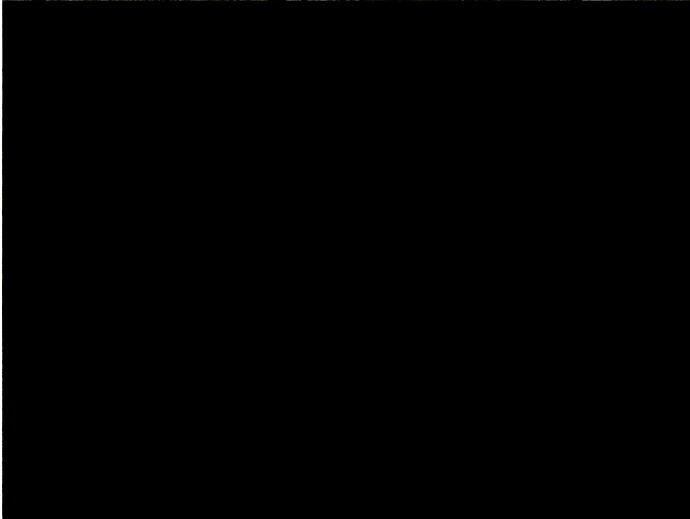
<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

<b>Associated Species :: Most Abundant/Dominant by Strata (est. % cover):</b>		
<b>Canopy:</b> Black Cherry ( <i>Prunus serotina</i> ) - 20% Shagbark Hickory ( <i>Carya ovata</i> ) - 20% Red Maple ( <i>Acer rubrum</i> ) - 20% Red Oak ( <i>Quercus rubra</i> ) - 20%	<b>Sub-Canopy/Shrub:</b>	<b>Herbaceous:</b> Pennsylvania Sedge ( <i>Carex pensylvanica</i> ) - 25%
<b>Other Species Present:</b>		
<b>Canopy:</b>	<b>Sub-Canopy/Shrub:</b>	<b>Herbaceous:</b>
<b>Invasive Species Present at Site (est. % Cover):</b>  		

**\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.**

**Tamarack (*Larix laricina*)**

**Current PA Status: PA Watchlist Species**



**Photograph No. 1**  
(September 25, 2025)

View of the singular Tamarack (*Larix laricina*) specimen [redacted]

[redacted]. The Tamarack specimen was surrounded by species including Black Cherry, Shagbark Hickory, Red Oak, Red Maple, and Pennsylvania Sedge. View was north.



**Photograph No. 2 & 3**  
(September 25, 2025)

View of the typical specimen identified as *Larix laricina*. This tree was located along [redacted]

Bark - Note the reddish-brown and scaly appearance on the outside bark, while the inner bark is a red-purple color. The bark is rough with flaking and nodules.

Cone - Note the small, egg-shaped woody cone that is approximately an inch long. The cone appears to be opening slightly to eventually release small, winged seeds.

### BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

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<b>Species Name:</b> Red Mulberry ( <i>Morus rubra</i> ) Special Concern Species	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Luke Gaidos and Sam Williamson	<b>Survey Date(s):</b> 05/06/2025	<b>Time Spent:</b> 2 hours
<b>Site Name:</b> [REDACTED]	<b>GPS Coordinates of Occurrence (include datum):</b> [REDACTED]	
<b>Directions to Site:</b> [REDACTED]		
<b>Site Owner:</b> [REDACTED]	<b>Landowner aware of Species of Special Concern?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Owner Contact Information:</b> [REDACTED]	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b> [REDACTED]	

<b>General SOSC Habitat Description:</b> [REDACTED]			
<b>Estimate of Area of Potential Habitat:</b> [REDACTED]			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> [REDACTED]			
<b>Relative age/Successional stage:</b> Mid to Late Successional	<b>Aspect:</b> [REDACTED]	<b>Elevation (provide units):</b> [REDACTED]	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input type="checkbox"/> Moist (mesic) <input checked="" type="checkbox"/> Dry (mesic) <input type="checkbox"/> Dry (xeric)	<b>Light:</b> <input type="checkbox"/> Open <input type="checkbox"/> Partial <input checked="" type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input checked="" type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input type="checkbox"/> 0-10% <input type="checkbox"/> 10-35% <input checked="" type="checkbox"/> 35+% <input type="checkbox"/> Vertical

<b>SOSC Occurrence Information (describe below)</b>				
<b>Phenology:</b>	<b># Plants:</b>	<b>Population Area:</b>	<b>Age Structure:</b>	<b>Vigor:</b>
<input type="checkbox"/> In leaf	<b>Ramets<sup>1</sup></b>	<input type="checkbox"/> 1 yd <sup>2</sup>	<input type="checkbox"/> Annuals	<input type="checkbox"/> Very Feeble
<input type="checkbox"/> In bud	<input type="checkbox"/> 1-10	<input type="checkbox"/> 1-5 yd <sup>2</sup>	<input type="checkbox"/> % Seedlings	<input type="checkbox"/> Feeble
<input checked="" type="checkbox"/> In flower	<input type="checkbox"/> 11-50	<input checked="" type="checkbox"/> 5-10 yd <sup>2</sup>	<input type="checkbox"/> % Immature	<input checked="" type="checkbox"/> Normal
<input type="checkbox"/> Immature fruit	<input type="checkbox"/> 51-100	<input type="checkbox"/> 10-100 yd <sup>2</sup>	<input type="checkbox"/> % 1st Year	<input type="checkbox"/> Vigorous
<input type="checkbox"/> Mature fruit	<input type="checkbox"/> 101-1000	<input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac	<input type="checkbox"/> % Mature	<input type="checkbox"/> Exceptional vigor
<input type="checkbox"/> Seed dispersing	<input type="checkbox"/> 1001-10K	<input type="checkbox"/> 1+ acres	<input type="checkbox"/> % Senescent	
	<input type="checkbox"/> 10K+	<input type="checkbox"/> EST #		
		<input checked="" type="checkbox"/> 1 Genet		
<b>ID Confidence:</b>		<b>ID Problems (explain):</b>		
<input type="checkbox"/> Positive ID <input checked="" type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain		N/A		
<b>Known or <input checked="" type="checkbox"/> Inferred Land Use History:</b>				
[REDACTED]				
<b>Integrity/Fragmentation of Habitat:</b>				
The individual Red Mulberry [REDACTED]				
<b>Land Use/Disturbance Information:</b>				
[REDACTED]				
<b>Threats (on- or off-site):</b>				
Invasive encroachment; land development				
<b>Conservation or Management Recommendations:</b>				
Invasive species removal to prevent encroachment from surrounding shrubs and vines.				
<b>Additional SOSC Comments:</b>				
One individual tree located along a hardwood forested slope. Neighboring property owner had indicated that the tree could have been planted along with a variety of hickory trees for game food plots.				

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

<b>Associated Species :: Most Abundant/Dominant by Strata (est. % cover):</b>		
<b>Canopy:</b> White Pine (Pinus strobus) - 30% Sugar Maple (Acer saccharum) - 20% Black Locust (Robinia pseudoacacia) - 20%, Sweet Birch (Betula lenta) - 15% Red Pine (Pinus resinosa) - 15%	<b>Sub-Canopy/Shrub:</b> Multiflora Rose (Rosa multiflora) - 10% Japanese Barberry (Berberis thunbergii) - 15% Amur Honeysuckle (Lonicera maackii) - 10%	<b>Herbaceous:</b> Japanese Stiltgrass (Microstegium vimineum) - 15% Hay-Scented Fern (Dennstaedtia punctilobula) - 10% Garlic Mustard (Alliaria petiolata) - 15%
<b>Other Species Present:</b>		
<b>Canopy:</b>	<b>Sub-Canopy/Shrub:</b>	<b>Herbaceous:</b>
<b>Invasive Species Present at Site (est. % Cover):</b>		
Multiflora Rose (Rosa multiflora) - 10%; Japanese Barberry (Berberis thunbergii) - 15%; Amur Honeysuckle (Lonicera maackii) - 10% Garlic Mustard (Alliaria petiolata) - 15%; Japanese Stiltgrass (Microstegium vimineum) - 15%		

***\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.***

### BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

DCNR requests a Botanical Field Survey Form be submitted for each occurrence/population of a PA Plant Species of Special Concern (SOSC) found during a survey. Please attempt to complete as many fields as possible. Please direct any questions to DCNR Bureau of Forestry, Ecological Services Section at (717)-787-3444.

<b>Species Name:</b> Short-Leaf Pine ( <i>Pinus echinata</i> ) PA Special Concern Species	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Samantha Hockenberry, Emma Shuey	<b>Survey Date(s):</b> 09/25/2025	<b>Time Spent:</b> 1 Hours
<b>Site Name:</b> [REDACTED]	<b>GPS Coordinates of Occurrence (include datum):</b> [REDACTED]	
<b>Directions to Site:</b> [REDACTED]		
<b>Site Owner:</b> [REDACTED]	<b>Landowner aware of Species of Special Concern?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Owner Contact Information:</b> [REDACTED]	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b>  	

<b>General SOSC Habitat Description:</b> [REDACTED]			
<b>Estimate of Area of Potential Habitat:</b> [REDACTED]			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> [REDACTED]			
<b>Relative age/Successional stage:</b> Early to Mid Successional	<b>Aspect:</b> [REDACTED]	<b>Elevation (provide units):</b> [REDACTED]	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input type="checkbox"/> Moist (mesic) <input type="checkbox"/> Dry (mesic) <input checked="" type="checkbox"/> Dry (xeric)	<b>Light:</b> <input type="checkbox"/> Open <input checked="" type="checkbox"/> Partial <input checked="" type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input checked="" type="checkbox"/> Upper Slope <input checked="" type="checkbox"/> Mid-slope <input type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> 0-10% <input type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical

SOSC Occurrence Information (describe below)					
<b>Phenology:</b> <input checked="" type="checkbox"/> In leaf <input type="checkbox"/> In bud <input type="checkbox"/> In flower <input type="checkbox"/> Immature fruit <input type="checkbox"/> Mature fruit <input type="checkbox"/> Seed dispersing	<b># Plants:</b> <b>Ramets<sup>1</sup></b> <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-1000 <input type="checkbox"/> 1001-10K <input type="checkbox"/> 10K+ _____ EST #	<b>Genets<sup>2</sup></b> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ 2 indiv.	<b>Population Area:</b> <input type="checkbox"/> 1 yd <sup>2</sup> <input type="checkbox"/> 1-5 yd <sup>2</sup> <input checked="" type="checkbox"/> 5-10 yd <sup>2</sup> <input type="checkbox"/> 10-100 yd <sup>2</sup> <input type="checkbox"/> 100 yd <sup>2</sup> – 1 ac <input type="checkbox"/> 1+ acres _____ Est Area	<b>Age Structure:</b> _____ Annuals _____ % Seedlings _____ % Immature _____ % 1st Year 100 _____ % Mature _____ % Senescent	<b>Vigor:</b> <input checked="" type="checkbox"/> Very Feeble <input type="checkbox"/> Feeble <input type="checkbox"/> Normal <input type="checkbox"/> Vigorous <input type="checkbox"/> Exceptional vigor
<b>ID Confidence:</b> <input checked="" type="checkbox"/> Positive ID <input type="checkbox"/> Somewhat certain <input type="checkbox"/> Uncertain			<b>ID Problems (explain):</b>		
<b>_____ Known or X Inferred Land Use History:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>					
<b>Integrity/Fragmentation of Habitat:</b> The two short leaf pine trees <div style="background-color: black; display: inline-block; width: 150px; height: 1em;"></div>					
<b>Land Use/Disturbance Information:</b> <div style="background-color: black; height: 20px; width: 100%;"></div>					
<b>Threats (on- or off-site):</b> Invasive encroachment; land development					
<b>Conservation or Management Recommendations:</b> Invasive species removal to prevent encroachment from surrounding shrubs / vines.					
<b>Additional SOSC Comments:</b>					

<sup>1</sup>Ramet: individual reproduced vegetatively (a clone)

<sup>2</sup>Genet: individual generated by sexual reproduction (a seedling)

Associated Species :: Most Abundant/Dominant by Strata (est. % cover):		
<b>Canopy:</b> Virginia Pine ( <i>Pinus virginiana</i> ) - 25% Black Cherry ( <i>Prunus serotina</i> ) - 20% Yellow Birch ( <i>Betula alleghaniensis</i> ) - 20%	<b>Sub-Canopy/Shrub:</b> Autumn Olive ( <i>Elaeagnus umbellata</i> ) - 40% Tatarian Honeysuckle ( <i>Lonicera tatarica</i> ) - 30% Multiflora Rose ( <i>Rosa multiflora</i> ) - 25%	<b>Herbaceous:</b> Garlic Mustard ( <i>Alliaria petiolata</i> ) - 25% Mugwort ( <i>Artemisia vulgaris</i> ) - 25%
<b>Other Species Present:</b>		
<b>Canopy:</b> Slippery Elm ( <i>Ulmus rubra</i> ) - 5% Pitch Pine ( <i>Pinus rigida</i> ) - 10% Colorado Blue Spruce ( <i>Picea pungens</i> ) - 10%	<b>Sub-Canopy/Shrub:</b> European Privet ( <i>Ligustrum vulgare</i> ) - 10%	<b>Herbaceous:</b> Fuller's Teasel ( <i>Dipsacus fullonum</i> ) - 5%
<b>Invasive Species Present at Site (est. % Cover):</b> Autumn Olive ( <i>Elaeagnus umbellata</i> ) - 40%; Tatarian Honeysuckle ( <i>Lonicera tatarica</i> ) - 30%; Multiflora Rose ( <i>Rosa multiflora</i> ) - 25%; European Privet ( <i>Ligustrum vulgare</i> ) - 10% Garlic Mustard ( <i>Alliaria petiolata</i> ) - 25%; Mugwort ( <i>Artemisia vulgaris</i> ) - 25%; Fuller's Teasel ( <i>Dipsacus fullonum</i> ) - 5%		

**\*\*Please also submit site maps indicating species location, any photographs taken (to aid in confirming ID) and if a voucher specimen is collected, the label data, number, and repository.**

**Short-leaf Pine (*Pinus echinata*)**

**Current PA Status: Special Concern Species**



**Photograph No. 1**  
(September 25, 2025)

View of one of two Short-leaf Pine (*Pinus echinata*) specimens [REDACTED]

[REDACTED] View was northwest.

Bark – Note the reddish-brown bark that is furrowed and broken into large, flat, scaly plates.



**Photograph No. 2**  
(September 25, 2025)

View of the second Short-leaf Pine (*Pinus echinata*) specimen [REDACTED]

[REDACTED]. These two Short-leaf Pine trees were surrounded by species including Virginia Pine (*Pinus virginiana*), Black Cherry (*Prunus serotina*), Yellow Birch (*Betula alleghaniensis*), Slippery Elm (*Ulmus rubra*), Pitch Pine (*Pinus rigida*), Colorado Blue Spruce (*Picea pungens*), Autumn Olive (*Elaeagnus umbellata*), Tatarian Honeysuckle (*Lonicera tatarica*), Multiflora Rose (*Rosa multiflora*), and European Privet (*Ligustrum vulgare*). View was north.

## BOTANICAL FIELD SURVEY FORM – PA PLANT SPECIES OF SPECIAL CONCERN

DCNR requests a Botanical Field Survey Form be submitted for each occurrence/population of a PA Plant Species of Special Concern (SOSC) found during a survey. Please attempt to complete as many fields as possible. Please direct any questions to DCNR Bureau of Forestry, Ecological Services Section at (717)-787-3444.

<b>Species Name:</b> Kidney-Leaved White Violet ( <i>Viola renifolia</i> ) PA Special Concern Species	<b>PNDI # (if applicable):</b> PNDI - 782938	<input checked="" type="checkbox"/> <b>New Occurrence</b>
	<b>EO ID # (if applicable):</b>	<input type="checkbox"/> <b>Update</b>
<b>Surveyor(s):</b> Luke Gaidos, Austin Eberly, Emma Shuey	<b>Survey Date(s):</b> 04/21/2025	<b>Time Spent:</b> 1.5 Hours
<b>Site Name:</b> [REDACTED]	<b>GPS Coordinates of Occurrence (include datum):</b> [REDACTED]	
<b>Directions to Site:</b> [REDACTED]		
<b>Site Owner:</b> [REDACTED]	<b>Landowner aware of Species of Special Concern?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<b>Owner Contact Information:</b> N/A	<b>Landowner interested in actively conserving SOSC?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN	
	<b>Additional Comments:</b> [REDACTED]	

<b>General SOSC Habitat Description:</b> [REDACTED]			
<b>Estimate of Area of Potential Habitat:</b> [REDACTED]			
<b>Soil conditions (Substrate and soil type, soil moisture, underlying geology, etc.):</b> [REDACTED]			
<b>Relative age/Successional stage:</b> Early Successional	<b>Aspect:</b> [REDACTED]	<b>Elevation (provide units):</b> [REDACTED]	
<b>Moisture:</b> <input type="checkbox"/> Inundated (hydric) <input type="checkbox"/> Saturated (wet-mesic) <input checked="" type="checkbox"/> Moist (mesic) <input type="checkbox"/> Dry (mesic) <input type="checkbox"/> Dry (xeric)	<b>Light:</b> <input type="checkbox"/> Open <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Filtered <input type="checkbox"/> Shaded	<b>Topo Position:</b> <input type="checkbox"/> Crest <input type="checkbox"/> Upper Slope <input type="checkbox"/> Mid-slope <input checked="" type="checkbox"/> Lower Slope <input type="checkbox"/> Bottom	<b>Slope:</b> <input type="checkbox"/> Flat <input checked="" type="checkbox"/> 0-10% <input type="checkbox"/> 10-35% <input type="checkbox"/> 35+% <input type="checkbox"/> Vertical



## **Attachment 4**

### **DCNR Wild Plant Management Permits**

## WILD PLANT MANAGEMENT PERMIT

**Date:** March 5, 2025

**Permit No.** 25-697

THIS PERMIT IS ISSUED TO:

**Samantha Hockenberry** for collection of Pennsylvania Endangered and Threatened plant species for submission as voucher specimens while conducting botanical studies and research in Pennsylvania.

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THE PERMITTEE MUST CARRY THIS PERMIT DURING THE REMOVAL, COLLECTION, OR TRANSPLANTING OF PA ENDANGERED AND PA THREATENED PLANT SPECIES AND WILL PRESENT THIS PERMIT FOR INSPECTION UPON REQUEST. THE PERMITTEE MUST ALSO COMPLY WITH CHAPTER 45, SECTION 47 AND 48 RELATING TO REPORT INFORMATION.

PERMIT CONDITIONS:

Vouchers are to be deposited in an accredited institution. Notify land managers before conducting permitted activities. Permittee shall report results to the Bureau of Forestry, Ecological Services.  
Land owner permission must be acquired before conducting work.

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DCNR, BUREAU OF FORESTRY, WILD PLANT PROGRAM MANAGER

THIS PERMIT WILL EXPIRE **MARCH 5, 2026**

**NONTRANSFERRABLE**

**THIS PERMIT MAY BE REVOKED FOR GOOD CAUSE.**

## WILD PLANT MANAGEMENT PERMIT

**Date:** March 19, 2025

**Permit No.** 25-875

THIS PERMIT IS ISSUED TO:

**Luke Gaidos** for collection of Pennsylvania Endangered and Threatened plant species for  
submission as voucher specimens while conducting botanical studies and research in Pennsylvania.

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THE PERMITTEE MUST CARRY THIS PERMIT DURING THE REMOVAL, COLLECTION, OR TRANSPLANTING OF PA  
ENDANGERED AND PA THREATENED PLANT SPECIES AND WILL PRESENT THIS PERMIT FOR INSPECTION UPON  
REQUEST. THE PERMITTEE MUST ALSO COMPLY WITH CHAPTER 45, SECTION 47 AND 48 RELATING TO  
REPORT INFORMATION.

PERMIT CONDITIONS:

Vouchers are to be deposited in an accredited institution. Notify land managers before conducting  
permitted activities. Permittee shall report results to the Bureau of Forestry, Ecological Services.  
Land owner permission must be acquired before conducting work.

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DCNR, BUREAU OF FORESTRY, WILD PLANT PROGRAM MANAGER

THIS PERMIT WILL EXPIRE **MARCH 19, 2026**

**NONTRANSFERRABLE**

**THIS PERMIT MAY BE REVOKED FOR GOOD CAUSE.**