

## HOW TO CHECK FOR POTENTIAL IMPACTS TO IMPERILED AND CRITICALLY IMPERILED SPECIES IN PENNSYLVANIA

The PNDI Environmental Review Tool within the Pennsylvania Conservation Explorer enables the public to screen for potential harmful impacts to local biodiversity.

<https://conservationexplorer.dcnr.pa.gov/>

1. Create new account and login
2. Click the MAP menu to navigate to the map
3. Navigate to your forest management project area (you can double-click on the map, drag on the map, and/or use the zoom bar). Note you can change the background map by clicking on SWITCH BASEMAP.
4. Areas containing rare, threatened and endangered species can be seen by simply checking and unchecking the various map layers listed under Environmental Review. Use the IDENTIFY tool to bring up additional details on specific polygons.
5. Click on CREATE PROJECT to conduct an Environmental Review
6. Choose the appropriate Project Type
7. Draw (Polygon, line, point) or upload a screening area of interest. Click ACCEPT.
8. Fill out project information and click SUBMIT FOR PRE-ANALYSIS. You may be asked questions if additional information is required. Answer them and click SUBMIT.
9. Click SAVE DRAFT PROJECT. A convenience charge of \$40 will need to be paid to complete the analysis and generate a receipt.
10. When the PNDI analysis is complete, an email message will be sent to you, prompting you to visit MY PROJECTS to view the receipt. The PNDI receipt indicates if there are potential impacts, which agency(ies) they are with, and includes instructions on how to proceed with your project.

For additional help: <https://help.natureserve.org/ert/pa/>

The PNDI system contains only those known occurrences of threatened and endangered species, special concern species and rare and significant ecological features. Therefore, the absence of a record in the PNDI system does not mean that there are not threatened or endangered, or special concern species, or rare or significant ecological features on any particular site.

Pennsylvania's Sustainable Forestry Initiative (SFI) Implementation Committee encourages forest management activities that conserve native biodiversity. Please visit our website for additional information. [www.sfiopa.org/FEVC](http://www.sfiopa.org/FEVC)



### PENNSYLVANIA NATURAL HERITAGE PROGRAM

**Pennsylvania Department of Conservation and Natural Resources,  
Bureau of Forestry, Ecological Services Section** P.O. Box 8552  
Harrisburg, PA 17105-8552  
717-787-2703 PaForester@pa.gov  
[www.dcnr.pa.gov/about/Pages/forestry.aspx](http://www.dcnr.pa.gov/about/Pages/forestry.aspx)

**Pennsylvania Game Commission, Bureau of Wildlife Habitat  
Management** 2001 Elmerton Avenue  
Harrisburg, PA 17110-9797 1-833-742-9453  
[www.pgc.pa.gov](http://www.pgc.pa.gov)

**Pennsylvania Fish and Boat Commission, Division of  
Environmental Services, Natural Diversity Section**  
450 Robinson Lane,  
Bellefonte, PA 16823  
814-359-5237 [www.fishandboat.com](http://www.fishandboat.com)

**U. S. Fish and Wildlife Service  
Pennsylvania Ecological Services Field Office**  
110 Radnor Road, Suite 101  
State College, PA 16801-7987  
814-234-4090 IR1\_ESPenn@fws.gov  
[www.fws.gov/office/pennsylvania-ecological-services](http://www.fws.gov/office/pennsylvania-ecological-services)

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# FORESTS WITH EXCEPTIONAL CONSERVATION VALUE: PROTECTING IMPERILED AND CRITICALLY IMPERILED SPECIES AND COMMUNITIES IN PENNSYLVANIA'S FORESTS



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## FOREST BIODIVERSITY

Forest landowners, foresters, and loggers play an important role in conserving the biodiversity of our forests. Biodiversity simply refers to the variety of life in a particular place. If we think of all the trees, people, animals, plants, fungi, and even microorganisms like bacteria in our forests as pieces to an intricate puzzle, then we can begin to understand how they all work together to create the larger picture of an interconnected ecosystem working to sustain life on earth. We can shrink the puzzle down to the level of genetic diversity within an individual species, or expand it to the diversity of communities, ecosystems, and biomes across landscapes or entire regions. Genetic, species, and ecosystem diversity are all interconnected, and higher diversity at any level provides added stability and vitality. The more pieces we have in the puzzle, the fuller the picture. When we lose pieces from the puzzle we risk losing the health of the species and ecosystems that we rely on to provide us with the air we breathe, the water we drink, the food we eat, and the resources we use.

## FORESTS WITH EXCEPTIONAL CONSERVATION VALUE

Forests with Exceptional Conservation Value (FECVs) are those that support puzzle pieces at significant risk of being lost – rare plants, animals, or ecological communities (i.e., groups of species that are commonly found together). As a good steward of the land, it is important to be aware of plant and animal species and ecological communities of concern designated as imperiled or critically imperiled and how your forest management activities may affect these species.

“Critically imperiled” (G1) or “imperiled” (G2) species or ecological communities are globally rare or, because of certain factors, especially vulnerable to extinction or elimination. Nongovernmental organizations such as NatureServe and Natural Heritage Programs, or the World Conservation Organization (IUCN) designate G1 and G2 species or communities. These status ranks are used to prioritize conservation and protection efforts.

## THE PENNSYLVANIA NATURAL HERITAGE PROGRAM (PNHP)

The PNHP gathers and provides information on the location and status of imperiled and critically imperiled ecological resources in Pennsylvania.

The PNHP is a partnership between the Pennsylvania Department of Conservation and Natural Resources (DCNR), the Pennsylvania Fish and Boat Commission (PFBC), the Pennsylvania Game Commission (PGC), and the Western Pennsylvania Conservancy (WPC) in cooperation with the U.S. Fish and Wildlife Service (USFWS). Each PNHP partner agency is responsible for managing specific taxonomic groups of rare, threatened, and endangered species, as well as species of concern and rare natural features.

At the federal level, the USFWS is responsible for the administration of the Endangered Species Act for federally listed Threatened and Endangered Species. At the state level, species protection is divided among the three state agencies (DCNR, PFBC, and PGC), also called jurisdictional agencies. DCNR is responsible for wild plants; PFBC is responsible for fish, amphibians, and reptiles; and PGC is responsible for birds and mammals.

The PNHP maintains an integrated data management system of site-specific information related to important ecological resources known as the Pennsylvania Natural Diversity Inventory (PNDI). The online PNDI Environmental Review Tool (ER Tool) allows the public to pre-screen timber harvesting and vegetation management projects for potential impacts to imperiled and critically imperiled species and other rare and significant ecological features in Pennsylvania. For more information refer to the **“HOW TO CHECK FOR POTENTIAL IMPACTS TO IMPERILED AND CRITICALLY IMPERILED SPECIES”** section of this brochure.



## STRATEGIES FOR CONSERVING FOREST BIODIVERSITY

It is important to note that imperiled and critically imperiled species can thrive in managed forests. In fact, active management is necessary for the survival of some species. It is up to landowners, foresters, and loggers to take the necessary steps to identify and conserve these species and communities.

The following strategies can help maintain or perhaps increase biodiversity in forest ecosystems. Consider incorporating these strategies into your forest management activities.

- Check for impacts: Utilize the Pennsylvania Natural Heritage Program’s Environmental Review Tool to check for any potential impacts to local biodiversity prior to conducting forest management activities.
- Protect habitat: One strategy for conserving forest biodiversity is to provide and protect a variety of habitats for plants and animals. Diverse habitat types ensure the potential for a wide range of plants and animals.
- Reduce fragmentation: When a large habitat is broken into smaller fragments, certain plant and animal species cannot spread easily. Three species groups affected by habitat fragmentation are:
  - species with large home ranges (e.g., bears and large carnivores)
  - species unable to disperse easily (e.g., many amphibian and reptile species)
  - habitat-interior species (e.g., forest songbirds)
 Some species easily survive habitat fragmentation. Deer and raccoon are generalists and often benefit from fragmentation.
- Control exotic invasive animals or plants: Exotic invasive species may outcompete native species and have detrimental effects on the forest ecosystem. Sponge moths are an example of an exotic invasive species.
- Reduce pollution: Pollution has negative effects on forest ecosystem productivity and may make certain species more prone to damage from insects and disease.
- Use sustainable harvesting practices: Sustainable harvesting practices protect the environment by conserving soil, controlling stream sedimentation, protecting residual trees from damage, and promoting desired regeneration.