

# ENDANGERED

## Bog Turtle

**It's unlawful to harm, harass, collect, or possess these bog turtles. These species are protected in Pennsylvania.**



**pennsylvania**

DEPARTMENT OF TRANSPORTATION

[www.penndot.gov](http://www.penndot.gov)

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All photos by Andy Brookens, Skelly and Loy under contract with PennDOT

## Bog Turtle

The bog turtle, a federally threatened and Pennsylvania state endangered species, may be found in, or near your location. Bog turtles are small-sized (4- inches adult shell length), semi-aquatic turtles typically found in wetland and stream habitats. The dull brown upper shell can vary from rough to smooth, and each section of the shell may exhibit growth rings. There is great variation in this trait, however, and the upper shell of older turtles typically appears smooth. Bog turtles have a black head, and dark brown extremities with a very characteristic orange skin patch on the neck.

If a bog turtle is found within the construction or maintenance work area, then all work activities within 300 feet of the capture will cease immediately. Contact the PennDOT construction manager or environmental manager immediately. It is a violation of federal and state law to harm or to possess a bog turtle. The penalties for violations of these laws include criminal prosecution and civil litigation.

The federal and state permit authorizations issued for this transportation improvement project or maintenance activity are dependent upon the protection of this species and implementation of special permit conditions.



Note the small size and the brightly colored orange markings on the side of the neck.

## Standard Avoidance & Minimization Measures

The following must be implemented for all activities and projects that may affect the bog turtle. Some activities and projects will require implementation of additional avoidance measures that may include seasonal restrictions, pre-construction bog turtle exclusion surveys, installation of exclusion fencing and/or purchase of mitigation credits. Refer to the PA DEP permit and contact the district environmental manager to determine if additional measures are required.

**1** Ensure that all persons working in areas of known, or assumed occupied bog turtle habitat are aware and familiar with PennDOT bog turtle briefing materials prior to starting the action. Place sensitive resource signs to notify personnel of potential bog turtles. Implement equipment disinfection protocols to limit the spread of pathogens harmful to bog turtles: brush off mud, wash, disinfect with a bleach-water solution and thoroughly rinse all equipment, tires, vehicles, boots, hand tools, etc. that were in contact with streams or wetlands before bringing equipment to or moving from the site.

**2** Conduct all work associated with the action in accordance with the approved erosion and sediment pollution control plan. Implement erosion and sediment control best management practices before, during, and after all land disturbance to prevent the potential for smothering of bog turtles or accidental sedimentation and filling of the adjacent wetland habitats they depend on. Monitor the project site daily to ensure the erosion and sedimentation control practices are implemented and properly maintained.

**3** Complete all rock scour protection placement to prevent large voids where bog turtles may get trapped. Fill voids in the rock scour protection with smaller rock and mineral material. Install all rock scour protection areas as specified in the PA DEP permit.

**4** Store and dispense vehicular fuels and fluids at least 300 feet from the action's limit of disturbance and any aquatic habitats present. Develop and implement a hazardous material construction spill revention control and countermeasure plan (SPCC Plan) during the transportation action. Monitor the project site daily to ensure spill avoidance/ remediation practices are implemented. The project foreman, on-site inspector, or environmental monitor may complete the daily inspections.

**5** Locate project storage and staging areas only in upland areas located as far away as possible from wetland/ watercourse habitat areas. This shall include all areas required for stockpiles, equipment storage, and parking.

**6** Notify all public utilities potentially associated with the action of the potential presence of the species and their need to consult with the USFWS/ PFBC on their respective relocation activities.

**7** Use high visibility orange construction fencing shall be used to delineate avoidance areas during the action. The fencing will act as a visual warning to prevent construction equipment and personnel from entering and disturbing sensitive areas outside of the project limit of disturbance.

**8** Avoid the introduction and spread of invasive species into supporting habitats, minimize the duration of exposed soils, utilize erosion control blankets on disturbed areas immediately after project completion to minimize sedimentation, and promptly revegetate areas of temporary disturbance with native wetland or upland seed mixes dependent on the location of the disturbance. Thoroughly wash/disinfect construction equipment and vehicles offsite, especially the undercarriage and wheels, before use within 300 feet of supporting habitat. Thoroughly wash/ disinfect temporary crossing measures such as composite matting or timber matting before use within 300 feet of supporting habitat.

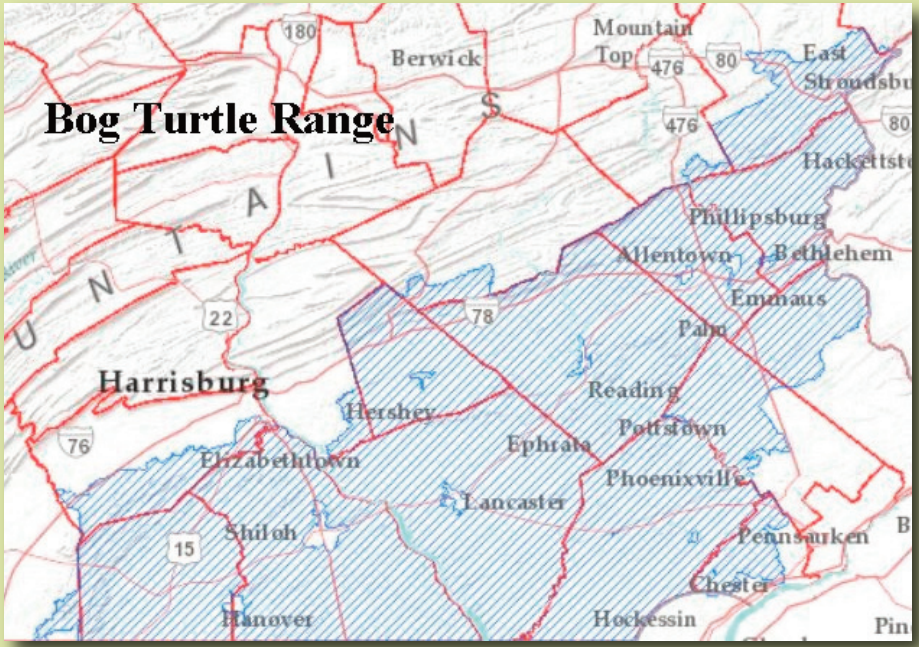
**9** If a turtle is encountered then all construction activities within 300 feet of the turtle will cease immediately. Inform the district environmental manager and/or qualified bog turtle surveyor immediately of the encounter.



## Activities With Potential to Impact Bog Turtles

- Shaping
- Restabilization
- Pavement Widening
- Shoulder Cutting
- Drainage Cleaning
- Drainage Replacement
- Drainage Installation
- Bridge/Culvert/Pipe Replacements
- Pipe/Culvert Extensions
- Bridge Maintenance
- Vegetation Maintenance
- Mowing
- Sink Hole/Slide Repairs
- Repair/Install Gabions
- Repair/Install Retaining Walls





Maintenance assemblies and construction activities proposed within the counties of Adams, Berks, Bucks, Carbon (only Aquashicola Creek Watershed), Chester, Cumberland, Dauphin (only Spring Creek and Conewago Creek Watersheds), Delaware, Franklin (only Antietam Creek Watershed), Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill (only Swatara Creek Watershed), or York must avoid adverse impacts to the bog turtle.



