

Timber Rattlesnake Construction Monitoring for earth-moving projects:

Background

Timber rattlesnakes (*Crotalus horridus*) are a venomous, state protected Species of Concern in Pennsylvania. They occur in the forested, mountainous regions of the Commonwealth. They prefer forested areas to forage for small mammals (e.g., mice and chipmunks) and southerly-facing slopes for hibernating and other thermoregulatory activities. The timber rattlesnake is threatened by habitat loss/alteration, wanton killing, and poaching.

Although the nature of the timber rattlesnake is rather docile, because it is venomous, it can be dangerous if cornered or handled improperly. Therefore, the people working around rattlesnakes should be mindful of the presence of the snakes in the area. Rattlesnakes are attracted to open, rocky, log-strewn areas for basking and forested areas with thick deciduous leaf litter that tend to support high populations of rodents. We recommend that the workers responsible for implementing this project be advised that timber rattlesnakes may be encountered and that avoidance is the best means of minimizing risks to personal safety. These workers should also be advised that the timber rattlesnake is a state protected species and is not to be harmed. Killing of timber rattlesnakes without a proper permit is prohibited by the Commission pursuant to 58 Pa. Code Section 79.6

During the environmental review permitting process for development or earth moving projects (e.g., pipelines, well pads, etc) in the range of the timber rattlesnake in Pennsylvania, to avoid and minimize negative interactions with workers and protect rattlesnakes, the Commission will recommend “construction monitoring” by qualified individuals - individuals who have demonstrated to the Commission the proper experience working with and safely handling venomous snakes like the timber rattlesnake.

Qualification and Permitting

A Type 3 (Consulting) Scientific Collectors’ Permit is needed to conduct Timber Rattlesnake Construction Monitoring.

As per Title 58 § 51.71 (b)(3)(i)(Scientific Collectors’ Permits), to qualify for a Type 3 permit, applicants shall demonstrate to the satisfaction of the Commission that they possess at a minimum a Bachelor's Degree in biological science, zoology, fisheries science, herpetology or a related field that is specific to the purpose of the scientific collecting described in their application. The Commission will consider professional experience, certification by a professional society or recommendations by acknowledged authorities in the appropriate field of biological science when evaluating an applicant’s qualifications.

Specifically, to be considered for a Type 3 Scientific Collectors’ Permit for Timber Rattlesnake construction monitoring please submit the following information to the PFBC for further review and consideration of Type 3 permit approval:

- 1) educational background
- 2) documentation of timber rattlesnake handling experience
- 3) other pertinent professional experience or certifications

4) two letters of reference from timber rattlesnake experts (can be PFBC qualified/recognized timber rattlesnake surveyors)

5) Identify PA Qualified Timber Rattlesnake surveyor that will oversee construction monitoring work.

Send the information to Attn: Chief, PFBC Natural Diversity Section, 450 Robinson Lane, Bellefonte, PA 16823.

Timber Rattlesnake monitoring conditions:

1. Timber Rattlesnake monitors shall be overseen by a PFBC Qualified Timber Rattlesnake Surveyor.
2. Generally all snakes shall be moved from **harm's** way in active construction areas, temporary or permanent access roads, portions of right-of way being utilized by vehicles for access to active work areas, areas being cleared, areas with open trenches, staging areas, equipment or material storage areas, and any similar area perceived by the monitor to present potential harm to snakes. Note: Snakes need not be moved from areas which are out of the direct path of construction. (i.e., a gestation site on the edge of the project right-of way that will not be impacted.) It is suggested in situations such as this that the monitor coordinate with construction management to have the area fenced off to prevent the accidental entry of workers or equipment.
3. Hooks and Tongs will be permitted for the capturing of snake(s). Snakes shall not be pinned and picked up by the head or tubed prior to placing them in any type of container.
4. The monitor will have multiple clean containers or bags of appropriate size on site.
5. Containers (empty or holding snakes) will not be stored in direct sunlight where they are likely to heat and cause harm or death to the snake. The type of container is optional but the safety of the monitor and of the snake is primary and capture should not involve unnecessary stress to the snake.
6. All snakes should be moved perpendicular to the project right-of way no more than 100 meters, **but preferably less** if safe from construction activity and/or other threats.
7. All snakes shall be released within 15 minutes of capture.
8. Reporting: The snake monitor will document all timber rattlesnake observations, and captures occurring within the project, boundaries, right-of-ways, and access roads associated with the project. This information needs to be reported in the Scientific Collectors' Permit electronic reporting system The following data is to be collected.
 - Capture/Relocation No.
 - Date of capture or observation
 - Monitor name who collected the data
 - Species Name and common name
 - Time of Capture
 - Capture location – Coordinates - identify map datum and coordinate system.
 - Date of release if different from date of capture
 - Time of release
 - Release location – Coordinates - identify map datum and coordinate system.
 - Local watershed
 - Estimated length (snout-basal)
 - Sex
 - Coloration morph

- Reproductive status if female over 32"
 - Gravid
 - Non-gravid
 - Postpartum
- Capture site characteristics (i.e., in trench, crossing well pad etc.)
- Comments
- Photograph of the snake and number