

**VIRGINIA DEPARTMENT OF GAME AND INLAND FISHERIES  
GUIDANCE DOCUMENT ON  
BEST MANAGEMENT PRACTICES FOR  
CONSERVATION OF LITTLE BROWN BATS AND TRI-COLORED BATS**

**(Approved February 16, 2016)**

**Purpose:** This guidance document specifies the best management practices and processes to be utilized in conserving little brown and tri-colored bats and in determining whether a specific practice is eligible for incidental take of either of these species as endangered in the Commonwealth of Virginia (4VAC15-20-130) and per The Virginia Endangered Species Act (Article 6, Chapter 5, Title 29.1 of the Code of Virginia, §§29.1-563 through 29.1-570).

**Electronic Copy:** An electronic copy of this guidance in PDF format is available online on the Virginia Department of Game and Inland Fisheries (VDGIF) Web site at [http://www.dgif.virginia.gov/wildlife/LBBA\\_TCBA\\_Guidance.pdf](http://www.dgif.virginia.gov/wildlife/LBBA_TCBA_Guidance.pdf).

**Contact Information:** Please contact the Department of Game and Inland Fisheries at Rick.Reynolds@dgif.virginia.gov or by calling 540-248-9360 with any questions regarding the application of this guidance.

**Disclaimer:** This document is provided as guidance and, as such, sets forth standard operating procedures of the Board of Game and Inland Fisheries and the Department of Game and Inland Fisheries that administers the program on behalf of the Board. This guidance provides a general interpretation of the applicable Code and Regulations but is not meant to be exhaustive in nature. Each situation may differ and may require additional interpretation of the Virginia Endangered Species Act and attendant regulations.

**I. Background:**

The Virginia Endangered Species Act, Article 6 of Title 29.1 of the Code of Virginia, specifies that the Board of Game and Inland Fisheries may allow the incidental take of state-designated endangered or threatened species under certain provisions. State endangered and threatened species are designated as such by regulation of the Board (4VAC15-20-130.B); the updated list may be found online at <http://legl.state.va.us/cgi-bin/legp504.exe?OOO+reg+4VAC15-20-130>. The Act also clearly indicates that the taking of state endangered or threatened species is illegal unless specifically allowed by Code or regulation. The Code of Virginia specifies that any regulation adopted by the Board that allows the incidental take of state endangered or threatened species must describe the circumstances that must exist to allow for incidental take, include appropriate conservation actions that must be taken that enhance the survival of the species, and require the actual taking to be at a minimum.

This guidance document shall provide additional details on the circumstances under which the Board will allow the incidental take of little brown bats and tri-colored bats, consistent with the designation of these species as state endangered.

**II. Definitions (pursuant to Article 6, Title 29.1, Code of Virginia and 4VAC15-20-140):**

"Species" are defined as any subspecies of fish or wildlife and any distinct population segment of any species or vertebrate fish or wildlife which interbreed when mature.

"Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, possessing, or collecting, or attempting to do any of these activities.

"Incidental take" is defined as any taking of an endangered or threatened species of fish and wildlife, excluding those species appearing on the federal list of endangered and threatened species, that otherwise would be prohibited by law or regulation, if the taking is incidental to, but not the purpose of, an otherwise lawful activity.

**III. Authority:**

The Endangered Species Act in the Code of Virginia contains the following authorities applicable to this guidance:

**§ 29.1-564. Taking, transportation, sale, etc., of endangered species prohibited.**

The taking, transportation, possession, sale, or offer for sale within the Commonwealth of any fish or wildlife appearing on any list of threatened or endangered species published by the United States Secretary of the Interior pursuant to the provisions of the federal Endangered Species Act of 1973 (P.L. 93-205), or any modifications or amendments thereto, is prohibited except as provided in § 29.1-568.

**§29.1-566. Regulations.**

The Board is authorized to adopt the federal list, as well as modifications and amendments thereto by regulations; to declare by regulation, after consideration of recommendations from the Director of the Department of Conservation and Recreation and from other reliable data sources, that species not appearing on the federal lists are endangered or threatened species in Virginia; and to prohibit by regulation the taking, transportation, processing, sale, or offer for sale within the Commonwealth of any threatened or endangered species of fish or wildlife.

**§ 29.1-568. When Board may permit taking of endangered or threatened species; designated experimental populations.**

A. The Board may permit the taking, exportation, transportation, or possession of any fish or wildlife which is listed by the provisions of this article, for zoological, educational, or scientific purposes and for propagation of such fish or wildlife in captivity for preservation purposes. Any person may, in accordance with all applicable federal and state laws, possess, breed, sell, and transport any nonnative wildlife included on any list of threatened or endangered species published by the United States Secretary of the Interior pursuant to provisions of the federal Endangered Species Act of 1973 (P.L. 93-205), as amended, when (i) the federal designation does not specifically prohibit such possession, breeding, selling, or transporting and (ii) the nonnative wildlife is not included on the list of predatory or undesirable animals specified by regulations of the Board adopted pursuant to § 29.1-542.

B. The Board may adopt regulations that:

1. Allow the taking, possession, exportation, transportation, or release of fish or wildlife within or among designated experimental populations of a specific species, within the context of an approved conservation plan for the species. Any regulation designating an experimental population shall (i) specify the circumstances under which taking of an individual member of an experimental population will be exempt from the prohibitions and penalties authorized under this article and (ii) describe the geographic extent of the experimental population, which shall be distinct from naturally occurring populations continuing to be subject to the prohibitions and penalties authorized under this article.
2. Allow incidental take provided such regulations shall (i) describe the allowable circumstances; (ii) include provisions that ensure offsets through the implementation of conservation actions specified by the Department to enhance the long-term survival of the species or population; and (iii) require any actual taking to be at a minimum.

#### **IV. Discussion and Interpretation:**

Little brown bats and tri-colored bats have experienced substantial declines across the Commonwealth since the discovery of white-nose syndrome (WNS) in 2009. Recent monitoring surveys document that populations of both species have declined more than 95% across the state since then. The following best management practices are provided as guidance for maintaining and improving habitats for these species, minimizing purposeful or accidental take of these animals, and enhancing the long-term survival of these species in Virginia.

##### Hibernacula: Current Knowledge of Hibernacula and Conservation Measures

The VDGIF knows about 132 hibernacula (places where these animals hibernate during the winter) with little brown and or tri-colored bats present. These hibernacula typically are located in western Virginia and are typically caves. Of the 132 hibernacula, 50 have combined little brown and tri-colored counts of 50 or more individuals and supported over 95% of the hibernating populations pre white-nose syndrome. Of the 50, 10 are on public lands, and an additional four have private landowner protections (e.g., easements). Our goal is to protect and manage these 50 hibernacula and surrounding fall swarm habitat (roost trees, open areas, riparian, and other habitats within a 0.25-mile radius of a hibernaculum used by bats for roosting or foraging before hibernating) that historically supported 97.5% of the hibernating populations of these two species.

While there is no literature guiding the decision to protect a specific number of hibernacula or percentage of a population to maintain these species in Virginia during hibernation, the VDGIF thinks that protecting and managing approximately one-third of the known hibernacula, that supported a majority of known pre-WNS hibernating populations, is appropriate. As new information is gathered through surveys, monitoring and modeling, sites may be added or removed from the list.

- *Conservation Measures:* For hibernacula containing over 50 individuals of little brown and/or tri-colored bats (documented between 1995 to present), a two-tiered buffer zone is recommended:
  - o Between December 1 and April 30, implement a 250-foot radius buffer zone with the following restrictions: no tree removal, prescribed fire, or land disturbance impacting the entrance(s) to the hibernacula. This action will protect the immediate area around the hibernacula by reducing disturbance during fall swarm, hibernation, and spring emergence. Tree removal and prescribed fire are permitted outside of these dates.
    - *Incidental Take Protocol:* If tree removal needs to occur due to public safety or property damage concerns, and there are no known roost trees, then no further action is necessary. If there are known tree roosts, follow the guidance under Roost Trees below.
  - o Between September 1 and November 30, increase the buffer to a 0.25-mile radius, with the following conditions: for timber harvests greater than 20 acres, retain snags (dead, broken-off trees), "wolf" trees (large trees with wide spreading crowns that may have broken branches, cavities or sloughing bark) (if not presenting public safety or property risk) and small tree groups (1 per 20 acres harvested) of up to 15 trees of 3 inches diameter at breast height (dbh) or greater. Because of the significant decline (greater than 90%) documented for little brown and tri-colored bats, the VDGIF does not anticipate that fall swarm roost trees will be a limiting factor in the protection and conservation of these species. These timber harvest actions will retain and provide fall roost trees for these species near their winter hibernating areas. Tree removal and prescribed fire are permitted outside these dates.
    - *Incidental Take Protocol:* If there are known tree roosts that need to be removed due to public safety or property damage concerns, follow the guidance under Roost Trees below.

Under these circumstances and conditions, we anticipate little to no lethal take of little brown bats or tri-colored bats.

#### Roost Trees: Current Knowledge of Roost Trees and Conservation Measures

The VDGIF has not tracked and is not aware of any little brown or tri-colored bat roost trees (places where the animals live when not hibernating) in Virginia. The VDGIF is in the process of surveying for roost trees and will provide updated guidance as new information becomes available. Typically, both species utilize human dwellings (barns, sheds, attics, buildings, etc.) as well as trees for maternity roosts. Our goal is to identify and protect as many of the remaining maternity colonies as possible

- *Conservation Measures:*
  - Between June 1 and July 31, implement a 150-foot radius buffer zone with the following restrictions: no tree removal, prescribed fire, or land disturbance within the buffer zone. This will protect the known roost tree(s) and foraging habitat close to the roost tree during the maternity season. Tree removal and prescribed fire are permitted outside these dates.

- If a little brown or tri-colored maternity roost needs to be excluded due to public safety or property damage concerns, then the following *Incidental Take Protocol* will apply:
  - ◆ The exclusion will be performed by a Nuisance Wildlife Control Operator (NWCO) or individual that is certified in bat exclusion techniques through a program recognized by the VDGIF and is permitted by the VDGIF.
  - ◆ Exclusion devices will be used to allow volant (capable of flight) individuals to escape.
  - ◆ Individual animals incapable of sustaining themselves will be collected and transport to a willing and appropriate VDGIF-permitted wildlife rehabilitation facility.

Under these circumstances and conditions, we anticipate little to no lethal take of little brown bats or tri-colored bats.

#### Human Structures: Current Knowledge of Human Structure Use and Conservation Measures

Little brown and big brown bats are the two species most commonly found in human-occupied dwellings and the ones most likely to cause human conflicts. The VDGIF is currently aware of three structures that serve as roosts for little brown bats. Tri-colored bats utilize human structures as well, but are more commonly found in barns, sheds, and abandoned structures and less so in occupied dwellings. Currently, the VDGIF is not aware of any tri-colored bat roosts in Virginia. The VDGIF is in the process of surveying for roost trees and artificial roost structures and will provide updated guidance as new information becomes available.

- *Conservation Measures:* Between May 15 and August 31, no exclusion of bats from maternity colonies, except for human health concerns or property damage, as determined by the landowner.
  - If a little brown or tri-colored maternity roost needs to be excluded due to human health or property damage concerns, then the following *Incidental Take Protocol* will apply:
    - ◆ The exclusion will be performed by a Nuisance Wildlife Control Operator (NWCO) or individual that is certified in bat exclusion techniques through a program recognized by the VDGIF and is permitted by the VDGIF.
    - ◆ Exclusion devices will be used to allow volant (capable of flight) individuals to escape.
    - ◆ Individual animals incapable of sustaining themselves will be collected and transport to a willing and appropriate VDGIF-permitted wildlife rehabilitation facility.

Under these circumstances and conditions, we anticipate little to no lethal take of little brown bats or tri-colored bats.

Facility or Project Operations: Operation under a VDGIF-approved plan

The VDGIF understands and recognizes that white-nose syndrome is the primary cause for the rapid and significant decline of little brown and tri-colored bats in Virginia. However, additional losses that result from other activities may exacerbate these losses. Under certain approved circumstances, the VDGIF can allow facility operations that might otherwise result in taking of bats when those operations are conducted in a manner than implements measures to specifically minimize impacts to these species.

- *Conservation Measures:* Project or facility operations that might incidentally take little brown or tri-colored bats can be allowed when conducted in accordance with a plan developed by the project or facility operator and approved by the VDGIF. The plan must include, but is not limited to, the following information:
  - the specific circumstance/operational activity or condition that may result in taking;
  - the specific measures to be implemented that avoid, minimize and/or mitigate incidental take associated with an otherwise lawful activity;
  - the expected incidental take;
  - the implementation schedule; and
  - an explicit point of contact for communications to and from the VDGIF.

The operator must acknowledge and implement practices to report bats taken, even in circumstances where specific measures have been approved and implemented. If project operations occur within areas described in other parts of this document (e.g., Hibernacula; Known Roosts), the operator is expected to abide by the conservation measures described in those sections.

Under these circumstances and conditions, we anticipate little to no lethal take of little brown bats or tri-colored bats.

In any instance of allowable incidental take, it is the landowner's responsibility to document the circumstance, actions taken, and number of animals taken (if any), in making a determination that these species should be removed to address human health, public safety or property damage issues. The landowner is responsible for retaining this documentation.

**V. Adoption, Amendments, and Repeal:**

This document will remain in effect until rescinded or superseded.



**Robert W. Duncan**

Executive Director, Department of Game and Inland Fisheries

02.. / 16 / 2016  
Date