

Guide to Threatened and Endangered Species on Private Lands In Virginia

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Introduction

People own land for a variety of reasons, including privacy, scenery, wildlife habitat, and timber production. To attain these goals, owners often conduct management activities, such as harvesting timber, that temporarily alter existing habi-



An inhabitant of woodland edges, the loggerhead shrike is a threatened species in Virginia.

at. Before implementing any habitat-altering activity, owners should assess their property for the presence of **threatened** and **endangered** species, as well as significant **natural communities**. Under the federal Endangered Species Act (ESA) and Virginia's endangered species regulations, landowners are required to minimize negative effects on threatened and endangered species.

Although there will be situations where management plans must be modified to comply with federal and state requirements, only a small percentage of all land management activities in Virginia are ever affected. It is neither the intent nor the desire of the agencies that regulate threatened and endangered species to needlessly impede the activities of private landowners. Biologists will work with landowners to find a mutually satisfying way to allow work to proceed, which will still afford species the level of protection they need. The presence of threatened and endangered species presents landowners with a great opportunity to help conserve biodiversity.

The main goals of this publication are to increase the awareness and understanding of federal law and state regulations pertaining to threatened and endangered species and to explain how to determine if these species are present. To this end, we present flowcharts to help natural resource professionals and landowners navigate efficiently through the

process to assure compliance with these regulations, avoid **inadvertent take** of threatened and endangered species, protect biodiversity, and achieve desired management goals.

Note: Contact information for the agencies mentioned in the text is provided in appendix I. A complete definition for each bold-faced word in the text is provided in appendix II.

Relevant Legal Statutes Relating to Threatened and Endangered Species

Federal Law

The federal ESA was created in 1973 to conserve threatened and endangered plants, wildlife, and fish and the ecosystems on which they depend. Specifically, the ESA:

- Authorizes the determination and **listing** of species as endangered or threatened.
- Prohibits unauthorized **taking**, possession, sale, and transport of endangered species.
- Provides authority to acquire land for the conservation of listed species, using land and water conservation funds.
- Authorizes establishment of cooperative agreements and grants-in-aid to states that establish and maintain active and adequate programs for threatened and endangered wildlife and plants.
- Authorizes the assessment of civil and criminal penalties for violating the ESA or its regulations.
- Authorizes the payment of a reward to anyone who furnishes information that leads to an arrest and conviction for a violation of the ESA or any regulation issued thereunder.



This green fiveleaf orchid is listed as threatened at the federal level and endangered in Virginia. Photo credit: James Henderson, Gulf Southern Research Corporation, bugwood.org.

www.ext.vt.edu



A high elevation spruce-fir forest on top of Mount Rogers in Grayson County, Va., is an example of a significant natural community.

Responsibility for the administration and enforcement of the ESA falls to the U.S. Fish and Wildlife Service (USFWS). Biologists from USFWS are responsible for identifying species as **candidates** for listing, maintaining the federal list of threatened and endangered species, and developing recovery plans to increase population numbers for all listed species.

Other components of the ESA include the Endangered Species Protection Program (ESPP) and **Incidental Take** permits. The ESPP, enforced by the U.S. Environmental Protection Agency (EPA), stipulates that all herbicide product labels contain reference to published Endangered Species Protection Bulletins whenever an herbicide has the potential to negatively impact threatened and endangered species.

Incidental Take permits protect landowners (including federal, state, and local governments and private individuals) from prosecution under the ESA for incidental takings of listed species during otherwise lawful activities. The idea behind this provision is that, under certain circumstances, a small number of listed individuals or a portion of the habitat that supports them may be taken incidentally; however, use of this provision is typically restricted only to those cases where the merits or benefits of the project are high and where sufficient protection is afforded to the remaining individuals or habitat to ensure long-term species recovery. To receive an Incidental Take Permit, landowners must develop a Habitat Conservation Plan that incorporates the needs of the species into the proposed activity and minimizes and mitigates negative effects on the listed species. Approved Habitat Conservation Plans come with a “no-surprise” assurance: The landowner will not be obligated to commit additional land, water, or finances to the protection aspects of the plan in the future, nor will they be subject to additional restrictions after the Habitat Conservation Plan is authorized. The USFWS will honor the no-surprise assurance as long as the landowner implements the plan in good faith.

Virginia Law

Under provisions of the federal ESA, all 50 states were granted authority to create their own endangered species protection policies. In Virginia, regulations were adopted that:

- Prohibit the taking, transportation, processing, sale, or offer for sale within the commonwealth of any fish or wildlife listed as a federal threatened and endangered species, except as permitted by the Board of Game and Inland Fisheries for zoological, educational, scientific, or captive propagation for preservation purposes.
- Authorize the state to adopt the federal list of threatened and endangered species, to declare by regulation that species not listed by the federal government are endangered or threatened in Virginia, and to prohibit by regulation the taking, transportation, processing, sale, or offer for sale of those species.

The Virginia Department of Game and Inland Fisheries (VDGIF) and the Virginia Department of Agriculture and Consumer Services (VDACS) are responsible for administering and enforcing Virginia’s endangered species regulations. A cooperative agreement with the USFWS, signed in 1976, recognizes VDGIF as the designated state agency with regulatory and management authority over federally listed animals and provides for federal/state cooperation regarding the protection and management of those species. VDACS holds authority to enforce regulations pertaining to plants and insects.

In 1989, the Virginia Natural Areas Preserve Act established the Natural Heritage Program (NHP) through the Virginia Department of Conservation and Recreation (VDCCR). Under a memorandum of agreement, VDCCR/NHP represents VDACS by providing comments regarding potential impacts of projects



The Shenandoah salamander, endemic to Virginia, is a federally endangered species.

on state-listed threatened and endangered plant and insect species. Although the VDCCR/NHP has no legal enforcement authority, it serves in an advisory role. Other functions of the VDCCR/NHP include performing statewide biological inventories and field surveys, maintaining an electronic database of species, identifying resources in need of conservation, and acquiring and managing Natural Area Preserves. The VDCCR/NHP’s database serves as the statewide clearinghouse for threatened and endangered species information and is shared among the agencies responsible for enforcement.

Virginia's list of designated threatened and endangered animal species, excluding insects, is comprehensive, meaning that, in addition to those species specifically designated by the state (i.e., state-listed), it also includes all species listed at the federal level. As a result, species listed by the federal process automatically become de facto state-listed. When a plant or insect is listed at the federal level, however, it is not added to Virginia's list until it is officially listed by the Board of Agriculture and Consumer Services.

What's a Person Supposed to Do?

If you are contemplating starting a project or conducting an activity, such as timber harvesting, that could potentially alter existing habitat, you first need to determine whether threatened and endangered species exist within or immediately adjacent to the area affected by your proposed activities. Where threatened and endangered species do not exist, or where **critical habitat** necessary to support these species is not present, the intended project can proceed as planned. Where threatened and endangered species are known to exist or where critical habitat that may support them is present, you should attempt to avoid or mitigate potential negative effects from your proposed activities on these species and habitats.

So, how do you determine where threatened and endangered species exist? What agency or agencies do you need to work with to make these assessments? In general, it is best to begin your determination of whether threatened and endangered species issues apply to your proposed activity by working with the appropriate state agencies in Virginia. Both the VDGIF and VDCR/NHP maintain accessible databases where landowners can make preliminary determinations about the presence or likely occurrence of protected species in the vicinity of their proposed activities. Although the exact locations of known populations will not be revealed, these databases provide enough information to suggest where further investigation is necessary.

The following is a brief overview of the processes natural resource professionals or landowners should use to determine if threatened and endangered species are present.

Wildlife

There are two ways to begin the process of determining if you have threatened and endangered wildlife species on your property (figure 1). Online you can access the current list of species for which legal protection has been afforded (<http://www.dgif.virginia.gov/wildlife/virginiatespecies.pdf>); you can also create a customized list of protected species by city, county, quadrangle, or watershed using VDGIF's Fish and Wildlife Information Services (<http://vafwis.org/fwis/>). From this website, select "Species Information", then "By Name". Use the menus to select taxonomic groups (i.e., fish, mammal, etc.) and location to create your customized list. If this review suggests threatened or endangered species exist in the



This federally endangered species, the pink mucket pearly mussel, has historically been found in large rivers with fast-flowing waters.

vicinity of your intended work, you should contact the VDGIF regional office (see list of contacts, appendix I) for assistance in making a more refined determination. Alternatively, you may bypass the website altogether and begin the process by contacting your regional VDGIF biologist.

Plants and Insects

A similar process exists for determining the presence of threatened and endangered plants and insects (figure 2). You may begin by visiting the VDCR/NHP website (http://webdat.dcr.virginia.gov/cfprog/dnh/naturalheritage/select_counties.cfm) which provides a list of protected plant and insect species by county. If this review indicates the presence of protected species near the site of your project, contact a VDCR/NHP Project Review Coordinator to request an environmental review (see appendix I for contact information). This service is free for landowners; consultants and other service providers will be charged a fee. Alternatively, you may bypass the website altogether and begin the process by contacting a VDCR/NHP Project Review Coordinator directly.

For private landowners, there is one important difference to note between threatened and endangered wildlife and insects and threatened and endangered plants: Landowners are exempt from threatened and endangered plant restrictions for activities on their own property (note: this exemption does not apply if federal funds are supporting the project – e.g., if the project is being cost shared by a Natural Resources Conservation Service program). While landowners are allowed to take threatened and endangered plants on their own property, most take pride in owning such unusual assets and instead are interested in managing and protecting them. Numerous federal cost share programs are available to assist landowners wishing to do so.

Federal Review Process

If either of the reviews above indicates the presence of federally protected species at the site of your intended project, a federal review process must take place. If you have worked with personnel from the VDGIF and/or the VDCR/NHP, they can help coordinate this review (figure 3). If not, contact the USFWS Field Office in Gloucester for assistance (see appendix I).

Figure 1. Flow chart of review process for animals listed as threatened & endangered in Virginia.

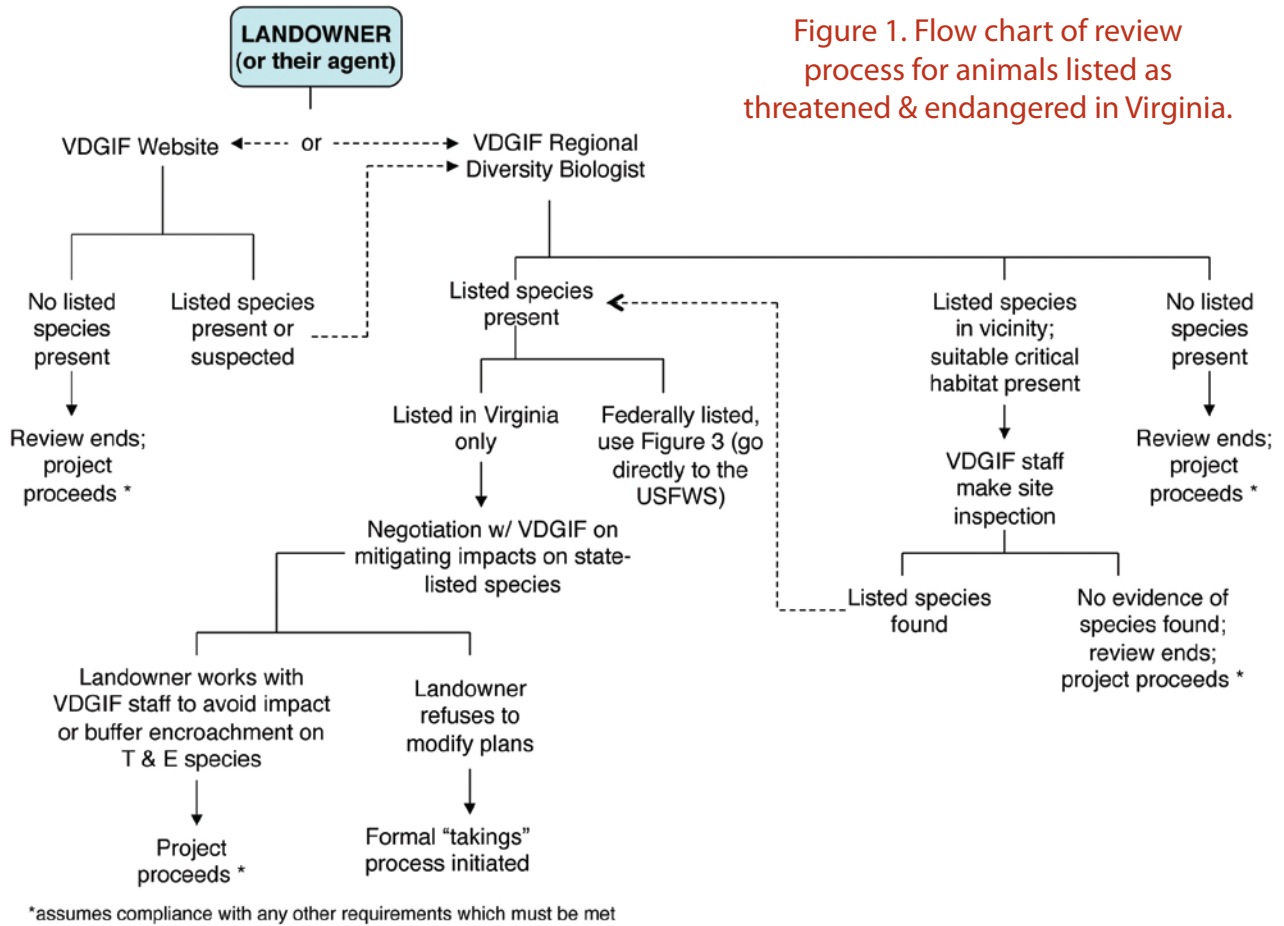
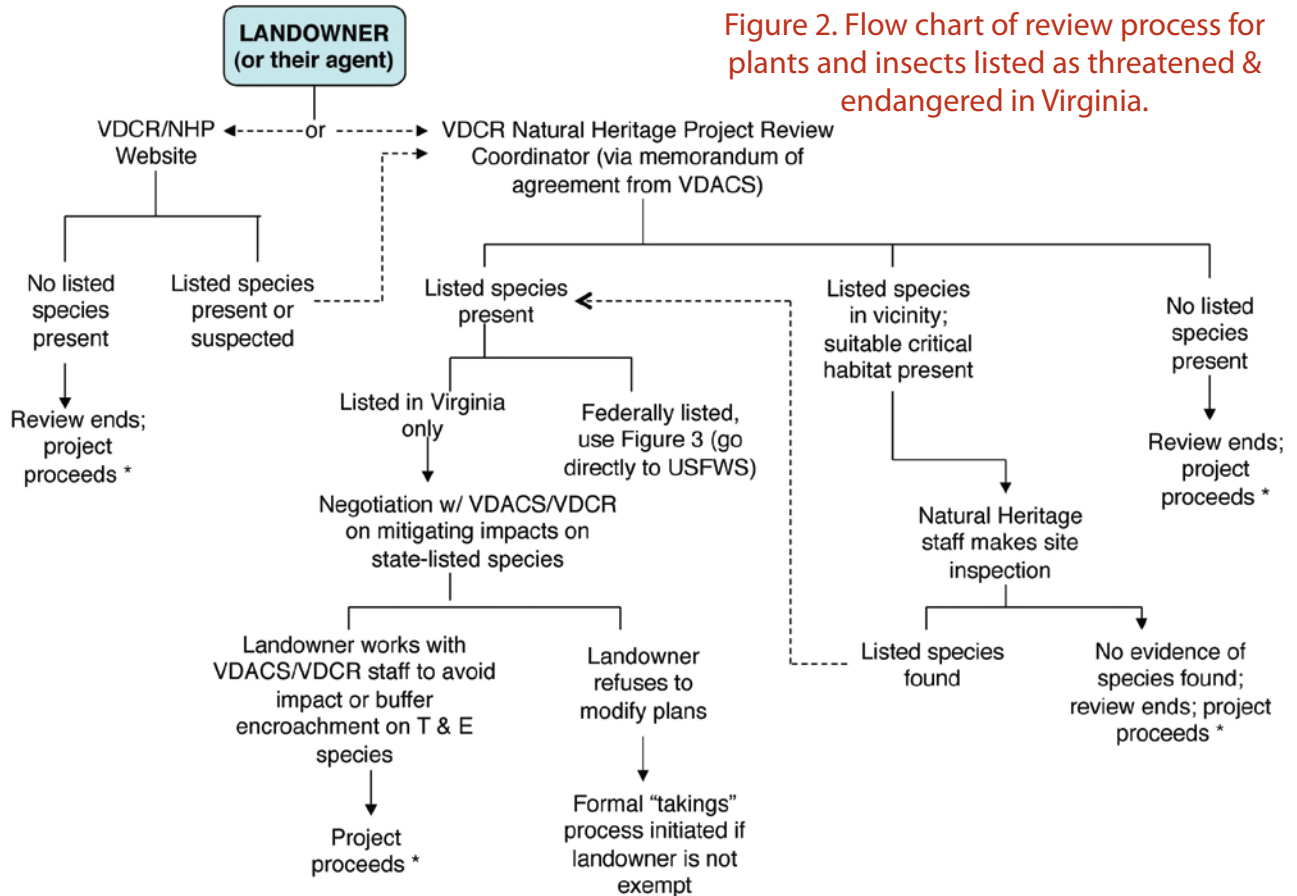


Figure 2. Flow chart of review process for plants and insects listed as threatened & endangered in Virginia.



* assumes compliance with any other requirements which must be met

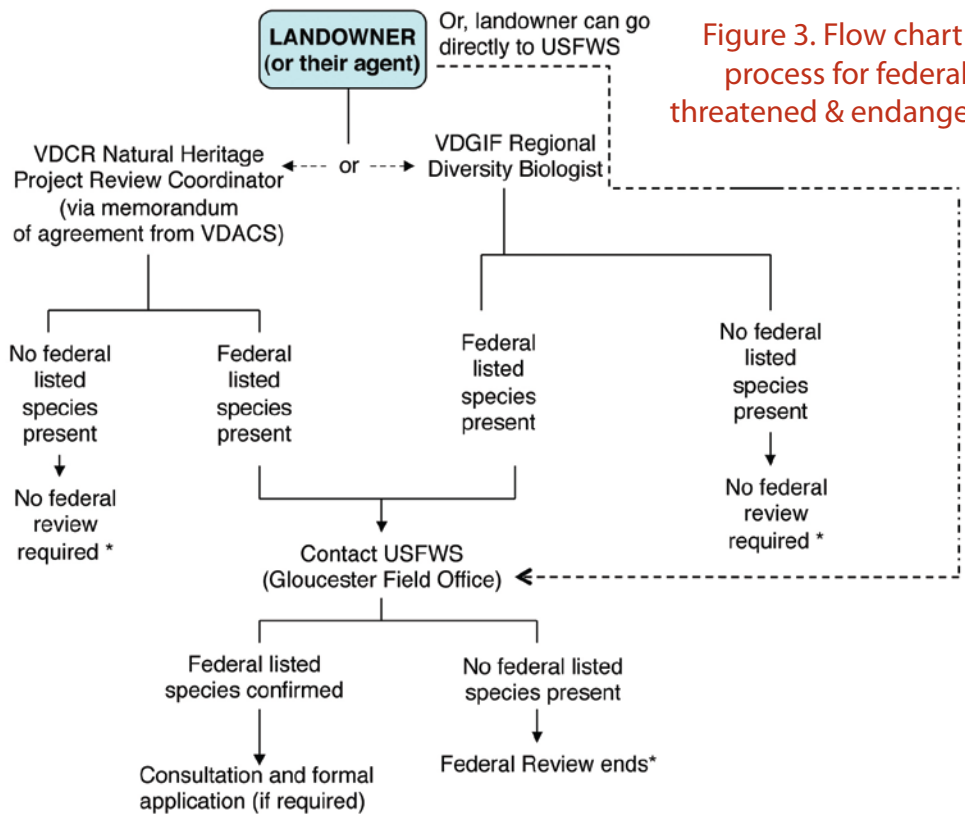


Figure 3. Flow chart of review process for federally listed threatened & endangered species.

* Proposal review and negotiations at state level continue unaffected (see figures 1 and 2)

Other Concerns

Nongovernmental organizations may choose to adhere to higher standards than what is required by federal and state statutes as a means to provide further protection to threatened and endangered species on lands they manage. Some may use ranking systems to identify species that currently may not be listed as threatened and endangered, but still are of concern.

NatureServe, an international network of Natural Heritage Programs, assigns all plant and animal species and natural communities a conservation status **rank** based on their rarity and conservation status across their entire range (www.nature-serve.org). Significant natural communities include those natural community types which are rare in Virginia, as well as exemplary examples of more common types. Species ranked **G1** (global rank 1/critically imperiled) or **G2** (global rank 2/imperiled) are most at risk. Forest certification systems, such as the Sustainable Forestry Initiative, American Tree Farm System, and the Forest Stewardship Council, protect all G1 and G2 species and natural communities, even if they are not listed and protected under the ESA. State rankings are similar (**S1** and **S2**), but only indicate the status of the species within Virginia. The Sustainable Forestry Initiative now uses the term “Forests with Exceptional Conservation Value” to describe sites that support G1 and G2 species and communities.

Although all landowners must be concerned about the presence of threatened and endangered species, if you have one or more state or globally ranked species or natural communities on your land, you should be particularly vigilant. Efforts to manage rare species and significant natural communities also help keep more common species common and off regulated lists.

Examples of significant natural communities in Virginia, based on their global rankings, include:

- High elevation mountain communities
 - Spruce and fir forests
 - High elevation greenstone barren outcrops
- Low elevation mesic forests
 - Eastern hemlock/hardwood forests
 - Northern white-cedar slope forests
- Maritime zone communities
 - Live oak/bluejack oak dune woodlands
 - Maritime mixed deciduous forests
- Sandy woodlands of the Coastal Plain
 - Longleaf pine/scrub oak sandhill woodlands
- Non-alluvial wetlands of the mountains
 - Southern Appalachian high elevation shrub bog
 - Central Appalachian mountain pond
 - Shenandoah Valley sinkhole pond

For more information on aquatic communities, visit the EPA website at www.epa.gov/owow/wetlands/types. Read “The Natural Communities of Virginia” for complete descriptions of the other natural communities (http://www.dcr.virginia.gov/natural_heritage/nchome.shtml.pdf).

Concluding Remarks

The intent of this publication is to clarify the requirements of federal law and state regulations that govern protection of threatened and endangered species as they pertain to private landowners in Virginia and to provide a clear course of action for natural resource professionals and landowners to take if they suspect threatened and endangered species are present. Where protected species are not present, management activities can proceed as planned, keeping in mind that there may be other requirements that must be met, in addition to complying with endangered species laws. If you have any questions about the process, please contact the VDGIF or VDCR/NHP.

If you own land in a state other than Virginia, the particulars in dealing with state-listed threatened and endangered species are likely to be different. You are advised to contact that state’s wildlife protection agency, Natural Heritage Program, or natural resources management agency for regulatory guidelines and assistance.

Appendix I. Agency Contact Information

State

Virginia Department of Game and Inland Fisheries (VDGIF)

www.dgif.virginia.gov

Headquarters

4010 West Broad Street
 Richmond, VA 23230
 (804) 367-1000

Regional Offices

(See the map below to determine which office to contact.)

Region 1

3801 John Tyler Memorial Highway
 Charles City, VA 23030
 (804) 829-6580

Region 2

1132 Thomas Jefferson Road
 Forest, VA 24551
 (434) 525-7522

Region 3

1796 Highway Sixteen
 Marion, VA 24354
 (276) 783-4860

Region 4

517 Lee Highway
 Verona, VA 24482
 (540) 248-9360

Region 5

1320 Belman Road
 Fredericksburg, VA 22401
 (540) 899-4169



Virginia Department of Conservation and Recreation (VDCR)

www.dcr.virginia.gov

Natural Heritage Program (NHP)

217 Governor Street
 Richmond, VA 23219
 (804) 371-2708



Virginia Department of Agriculture and Consumer Services (VDACS)

www.vdacs.state.va.us

Office of Plant and Pest Services

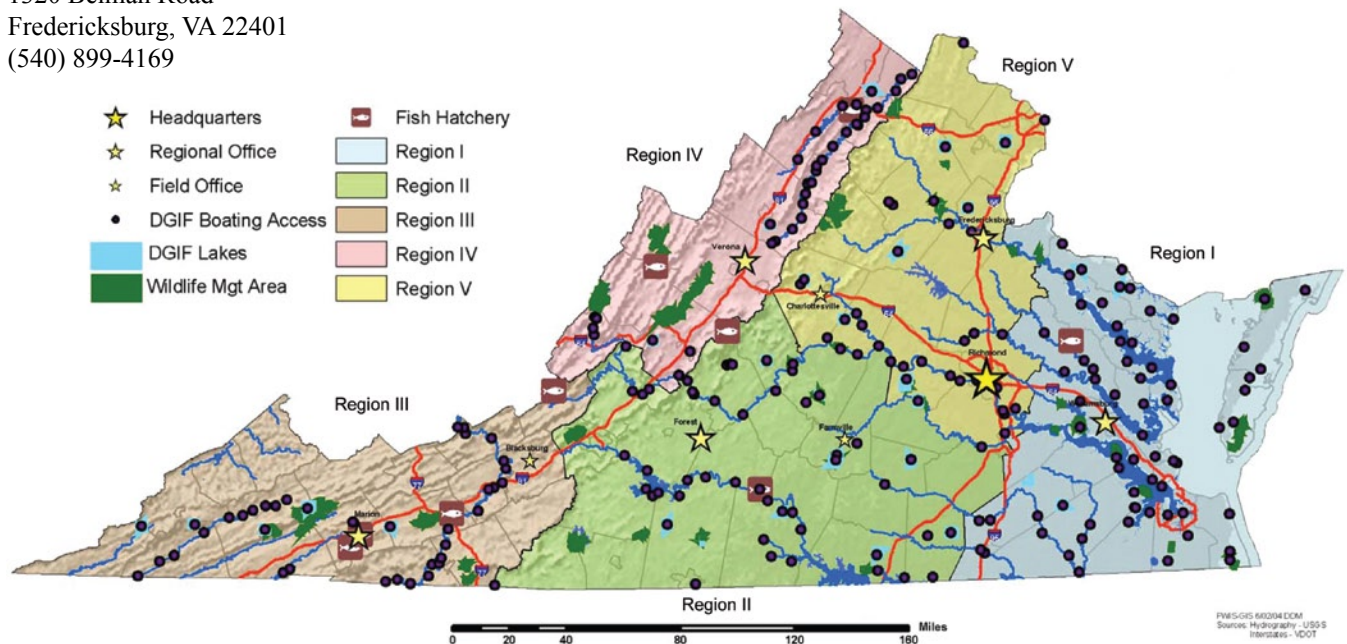
102 Governor Street
 Richmond, VA 23219
 (804) 786-2373



Virginia Department of Forestry (VDOF)

www.dof.virginia.gov

900 Natural Resources Drive
 Charlottesville, VA 22903
 (434) 977-6555



Federal

United States Fish and Wildlife Service (USFWS)

www.fws.gov

www.fws.gov/northeast/virginiafield/index.html

Virginia Ecological Services Field Office

6669 Short Lane
Gloucester, VA 23061
(804) 693-6694



Southwestern Virginia Ecological Services Field Office
330 Cummings Street
Abingdon, VA 24210
(276) 623-1233

Appendix II. Glossary

Candidate – species for which sufficient data exist to warrant listing, but higher priorities preclude it from actually being listed.

Critical habitat – (1) specific areas within the geographical range occupied by the species at the time it is listed on which are found those physical or biological features that are essential to the conservation of the species and may require special management considerations or protection; (2) specific areas outside the geographical area occupied by the species at the time it is listed, but which are deemed essential for conservation.

Endangered – a species in danger of **extinction** throughout all or most of its range.

Exotic invasive – plants, insects, and animals imported from outside of an area that spread rapidly and cause economic and/or environmental harm.

Extinct – no longer occurring anywhere.

Extirpated – complete removal of a species from a specific part of its range.

Fragmentation – division of properties into smaller parcels upon which there are mixed – and sometimes conflicting – uses.

G1 – critically imperiled throughout entire range.

G2 – imperiled throughout entire range.

Harm – an act that kills or injures wildlife. Such an act may include significant habitat modification or degradation where wildlife is killed or injured by significantly impacting essential behavioral patterns, including breeding, feeding, or sheltering.

Inadvertent take – the unintentional take of threatened or endangered species, usually arising from one not knowing of their presence in advance.

Incidental take – when otherwise legal activities result in the taking of a threatened or endangered species.

Listing – the act of placing a species on the list of endangered species so that it may be protected under the ESA.

Natural community – an assemblage of co-existing, interacting species, considered together with the physical environment and associated ecological processes, that has undergone minimal human disturbance.

Nonpoint source pollution – water pollution not from a single determinable source; mainly from stormwater runoff; may contain sediment, nutrients, toxic substances, and/or pathogens.

Rank – based on distribution, rarity, relevant threat, existing levels of protection, and unmet protection and management needs; rankings beginning with a “G” are global rankings that indicate the rarity and conservation status of a species throughout its entire range; rankings beginning with an “S” are state rankings that indicate the rarity and conservation status of a species within a particular state.

S1 – critically imperiled in Virginia, with five or fewer occurrences or few remaining individuals in the commonwealth or because of some factor(s) making it especially vulnerable to **extirpation** in Virginia.

S2 – imperiled in Virginia, with six to 20 occurrences in the commonwealth or because of some factor(s) making it vulnerable to extirpation in Virginia.

Take/taking – to harm, harass, pursue, hunt, shoot, wound, trap, kill, capture, or collect or attempt to engage in any such conduct.

Threatened – a species that is in danger of becoming endangered throughout all or most of its range in the foreseeable future.