

## SPECIES AND COMMUNITIES OF CONCERN IN VIRGINIA

### Information for Family Forest Owners

One of the environmental issues of concern today is the worldwide decline in forest habitat and the related loss of biodiversity. As a good land steward, it's important to be aware of plant and animal species and ecological communities of concern that are designated as "imperiled, critically imperiled, threatened, or endangered" and how forest management activities on your lands may affect these species. Critically imperiled (G1) or imperiled (G2) species or ecological communities are globally rare or, because of some factor(s), especially vulnerable to extinction. They are designated as imperiled or critically imperiled by non-government organizations such as NatureServe (and its constituent Natural Heritage programs) or the IUCN (The World Conservation Organization). Threatened and endangered species are listed by government agencies under the U.S. Endangered Species Act or the Canadian Species at Risk Act and may also be listed under state or provincial laws; yet they may or may not be listed as critically imperiled or imperiled, globally.

The **Virginia Natural Heritage Program** can provide information on species and communities of concern in your area. Log on to [www.dcr.virginia.gov/dnh](http://www.dcr.virginia.gov/dnh) or call the office at (804) 786-7951. **NatureServe**, [www.natureserve.org](http://www.natureserve.org), has additional information on species and communities of concern. These organizations coordinate the management of inventories of biological diversity in the U.S. and Canada.

The Sustainable Forestry Initiative® (SFI) program ([www.aboutsfi.org](http://www.aboutsfi.org)) combines the perpetual growing and harvesting of trees with the long-term protection of wildlife, plants, soil and water quality. To meet the SFI Standard, program participants who procure wood from family forest owners provide outreach opportunities to family forest owners on conservation of biodiversity for imperiled species.

In Virginia, the SFI program has partnered with Forests for Watersheds & Wildlife™ to provide you with a series of profiles on species of concern native to Virginia's forests. The species and communities featured in this profile are examples of many that depend on family forest owners for protection. To view other profiles, visit [www.forestedflyways.org](http://www.forestedflyways.org).

#### Roanoke logperch – *Percinia rex*



Noel Burkhead and  
Robert Jenkins, USGS

Using their snouts, adults searching for food  
may turn over 7-10 stones a minute.

The Roanoke logperch is a critically imperiled (G1G2) and federally-listed endangered fish found only in the Roanoke and Nottaway River drainages in Virginia. Four distinct populations, believed to have been a single, population separated due to river damming, are found in the low-gradient upper Roanoke, Pigg, Nottaway, and Smith Rivers. Adults can reach lengths of 6 inches and have pale-yellow, cylindrical bodies with 8-11 vertical blotches on their sides. They also have patterned fins, a dark, vertical bar at their eyes, and a conical snout. Habitat that

supports the Roanoke logperch and its prey, primarily aquatic insects, has loosely embedded gravel and low levels of silt cover. Spawning occurs in April-early May and requires clear water, deep runs and chutes with gravel bottoms. While not historically abundant, recent population declines have been attributed to dams, chemical spills, and siltation, which is the most widespread threat.

### Smooth coneflower – *Echinacea laevigata*

In Virginia, the smooth coneflower, a globally imperiled (G2), federally-listed endangered species, has been found in small populations in Alleghany, Amherst, Botetourt, Campbell, Franklin, Halifax, Montgomery, Nottoway, Pulaski, Roanoke, and Wythe counties. This perennial grows in abundant sunlight in open woods, roadsides, and other clearings where magnesium- and calcium-rich soils are present. Flowers bloom during May to July, displaying petal-like rays that are light pink to purple and often drooping. A few elliptical, toothed leaves grow on the stems and at the base. Threats include habitat destruction and fire suppression. Periodic disturbance, such as fire, thinning or mowing, are essential for this plant, exposing bare soil and increasing sunlight.



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This plant's name comes from its smooth stem, which can grow up to 5 feet in height.

### Peatland Atlantic White-cedar Forest – *Chamaecyparis thyoides/Persea palustris/Lyonia lucida-Ilex coriacea*



G.F. Russell, courtesy of Smithsonian Institution

Without natural fire regimes, red maple and swamp tupelo eventually dominate.

This globally imperiled (G2) community can be found in the sheltered bay regions of southeast Virginia and northeast North Carolina on saturated, acidic organic soils. The terrain is distinctive with slightly elevated hummocks dominated by cedar interspersed with water-filled hollows. The standing water is the result of a high ground water table, not flooding. Even-aged Atlantic white cedar dominates with red maple, swamp tupelo, and swampbay scattered throughout. The open shrub layer consists primarily of swampbay and shining fetterbush.

Herbs are sparse but mosses are abundant. Due to its resistance to decay, the cedar has been logged since European settlement. Trees often failed to regenerate because seedlings were shaded by logging slash. Agricultural drainage and fire suppression have led to further decline. Regeneration requires sufficient soil saturation and infrequent (25 – 100 years), stand-replacing fires which expose mineral soil and reduce woody competition for the shade-intolerant Atlantic white cedar.

#### Technical and Cost-share Assistance:

The Partners for Fish & Wildlife program of the U.S. Fish & Wildlife Service offers technical and financial assistance to landowners for restoration of native habitat types. Contact: (804) 693-6694 x125 or go to [www.fws.gov/northeast/partners](http://www.fws.gov/northeast/partners).

The Virginia Department of Forestry offers cost-share assistance through the Forest Land Enhancement Program. Go to [www.dof.virginia.gov](http://www.dof.virginia.gov) or call (434) 977-6555.

If you want to develop a conservation strategy for these or other rare species or ecological communities or find out if they might occur on your land, contact the Virginia Natural Heritage Program at (804) 786-7951 or go to [www.dcr.virginia.gov/dnh](http://www.dcr.virginia.gov/dnh). You might also contact the Virginia Department of Game and Inland Fisheries for information on rare species at (804) 367-1000 or [www.dgif.virginia.gov](http://www.dgif.virginia.gov).



Produced by Forests for Watersheds & Wildlife™ (FW<sup>2</sup>), a program of the American Forest Foundation.  
FW<sup>2</sup> works with partners and family forest owners to conserve and create critical habitat for imperiled wildlife species.

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