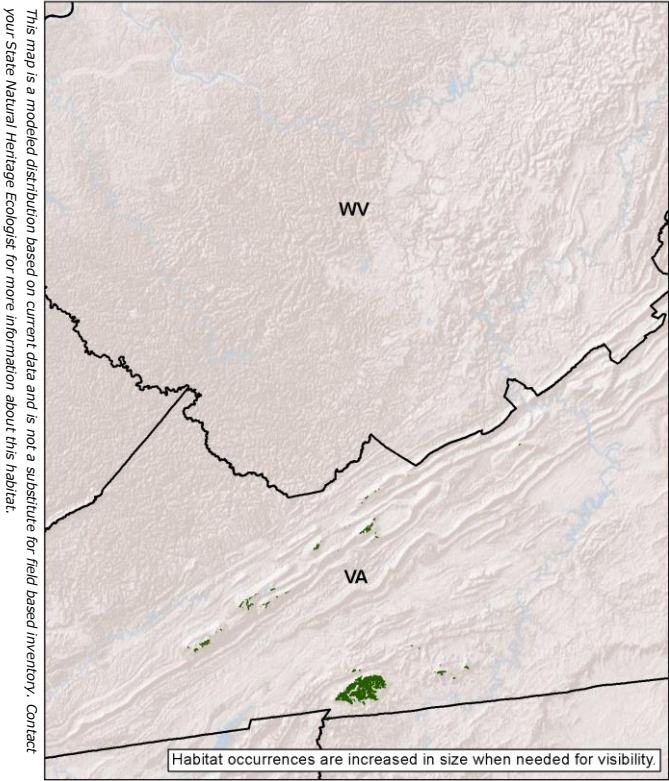


Macrogroup: Northern Hardwood & Conifer



© Gary P. Fleming (Virginia Department of Conservation & Recreation Natural Heritage Program)

Description:

A hardwood forest of high elevations in the southern Appalachians, dominated by various combinations of mesophytic northern hardwoods such as sugar maple, yellow birch, beech, and yellow buckeye. It is generally found above 4500 feet elevation, where cool and wet conditions are the most important ecological factor. Red oak-dominated stands in the same elevation zone are also included in this system. A dense herb layer is typical, as is a well-developed shrub layer. With its core distribution in the southern Appalachians, it occurs only on the highest peaks and ridges in the very southwestern part in our region, with the largest occurrence centered on Mount Rogers in Virginia. Included in this system are limited areas locally known as "beech gaps" and "boulderfields."

Ecological Setting and Natural Processes:

Most commonly on convex landforms, though it occurs on most of the landforms that are present in its elevational range, from exposed peaks and ridges to sheltered coves. Any type of bedrock can be present. Strong winds, icing, and extreme cold are occasional. Fire is probably more important in oakier examples of this system, which are generally on warmer exposures.

Similar Habitat Types:

Has a more montane setting than Appalachian (Hemlock-)Northern Hardwoods, and differs from Laurentian-Acadian Northern Hardwoods in having a more moderate mountain climate, no history of glaciation, and a flora and fauna that has many southern Appalachian endemics. Transition to oakier systems below and spruce fir above involves a gradual shift in species dominance.

Crosswalk to State Wildlife Action Plans:

Forest Habitat - Deciduous Forest (VA)

| State Distribution: VA | | | | | |
|-------------------------------|-----------------|---------------|-----------------|---------------|-------------------|
| Total Habitat Acreage: 12,752 | | | | | |
| Percent Conserved: 90.9% | | | | | |
| State | State Habitat % | State Acreage | GAP 1&2 (acres) | GAP 3 (acres) | Unsecured (acres) |
| VA | 100% | 12,752 | 3,916 | 7,676 | 1,160 |

Crosswalk to State Name Examples:
Southern Appalachian Northern Hardwood Forest (VA)

Places to Visit this Habitat:

George Washington and Jefferson National Forest | VA
Grayson Highlands State Park | VA
Lewis Fork NF Wilderness Area | VA

Associated Species: *Appendix lists scientific names*

BIRDS: black-capped chickadee, black-throated blue warbler, blue-headed vireo, dark-eyed junco, rose-breasted grosbeak, ruffed grouse, veery

PLANTS: lance-leaf grape-fern (*Botrychium lanceolatum* var. *angustiseg*), linear-leaved willowherb (*Epilobium leptophyllum*), narrowleaf peatmoss (*Sphagnum angustifolium*), pale sedge (*Carex pallescens*), red peatmoss (*Sphagnum rubellum*), three-toothed cinquefoil (*Sibbaldiopsis tridentata*)

Species of Concern (G1-G4): *Appendix lists scientific names*

BIRDS: hermit thrush, magnolia warbler, northern saw-whet owl, red-breasted nuthatch, yellow-bellied sapsucker

MAMMALS: carolina northern flying squirrel

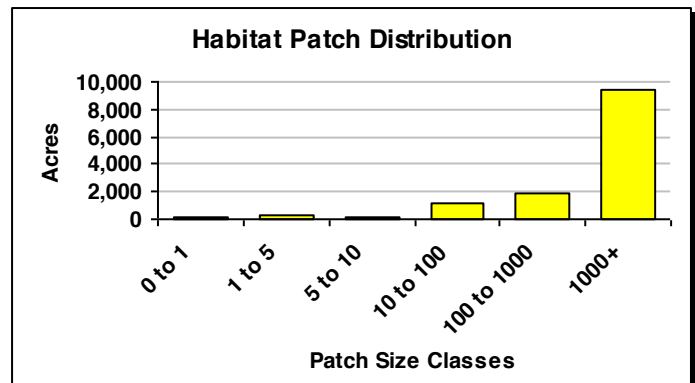
HERPTILES: blue ridge two-lined salamander, northern pygmy salamander, pygmy salamander, weller's salamander

INSECTS: smokies needlefly

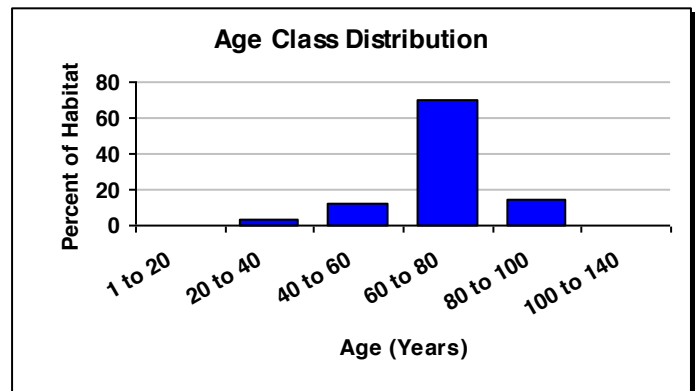
PLANTS: Appalachian fir-clubmoss (*Huperzia appalachiana*), beaked dodder (*Cuscuta rostrata*), fringed scorpion-weed (*Phacelia fimbriata*), great indian-plantain (*Arnoglossum muehlenbergii*), long-stalked holly (*Ilex collina*), small mountain bittercress (*Cardamine clematidis*)



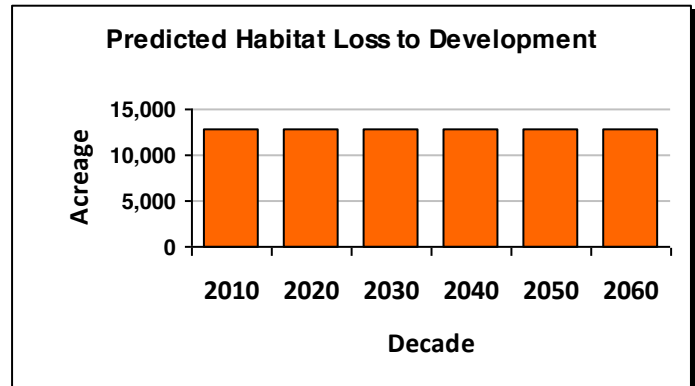
© Gary P. Fleming (Virginia Department of Conservation & Recreation Natural Heritage Program)



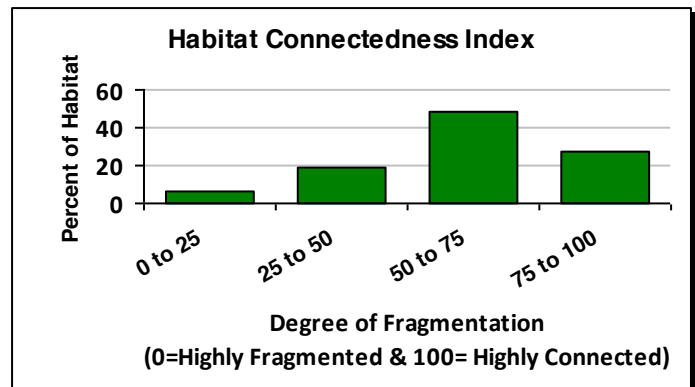
The average patch size for this habitat is 20 acres and the largest single patch is 4,441 acres. This chart shows the proportion of the habitat that is in each patch-size class.



This chart shows the average age of trees associated with this habitat based on forest inventory data. For non-forested systems or small habitats the average age is influenced by the surroundings.



This chart shows the predicted loss of habitat over the next five decades (acres) if loss continues at the same rate as 1990-2000. The average rate of loss is acres per year.



This metric measures how connected or fragmented the land directly surrounding (18 square miles) the habitat is, this the chart shows the proportion of the habitat in each connectedness class.