

Vitis aestivalis Vine-Shrubland

COMMON NAME Summer Grape Vine-Shrubland
SYNONYM Montane Grape Opening; "Grapehole"
PHYSIOGNOMIC CLASS Shrubland (III)
PHYSIOGNOMIC SUBCLASS Deciduous shrubland (III.B)
PHYSIOGNOMIC GROUP Cold-deciduous shrubland (III.B.2)
PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (III.B.2.N)
FORMATION Temperate cold-deciduous shrubland (III.B.2.N.a)

ALLIANCE *Vitis aestivalis* Vine-Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Upland

RANGE

Globally

This community is known from the Great Smoky Mountains of Tennessee and may possibly occur in montane areas of Arkansas, Kentucky, North Carolina, and Oklahoma.

Great Smoky Mountains National Park

This community was sampled on both the Cades Cove and Mount Le Conte quadrangles, and it is likely elsewhere in the Park. It was sampled in the central and eastern portion of the Mount Le Conte quadrangle, on steep slopes north of Potato Ridge and north of Mt. Winnesoka. On the Cades Cove quadrangle it was sampled or observed on the north slopes of Allnight Ridge, in the northern portion of the quadrangle, and on steep slopes over Rowans Branch and steep slopes south of Pond Knob, in the eastern portion of the quadrangle.

ENVIRONMENTAL DESCRIPTION

Globally

The dynamics of this community are poorly understood. It apparently originates from disturbance, such as an ice storm, and can persist for decades. This community can range in size from less than a hectare to ten hectares.

Great Smoky Mountains National Park

This community occurs on steep to very steep, northerly, middle to upper slopes at intermediate elevations (between 2000 and 3500 feet). All areas sampled showed evidence of disturbance by wind, ice, or logging.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Vine/Liana	<i>Vitis aestivalis</i>

Great Smoky Mountains National Park

<u>Stratum</u>	<u>Species</u>
See above	

CHARACTERISTIC SPECIES

Globally

Vitis aestivalis

Great Smoky Mountains National Park

Vitis aestivalis, *Aristolochia macrophylla*

VEGETATION DESCRIPTION

Globally

This vegetation includes thickets dominated by dense *Vitis aestivalis*. Emergent small to large trees (usually draped in *Vitis*) can occur. Herbaceous cover is low because of the dense vine cover.

Great Smoky Mountains National Park

This community is strongly dominated by the vine *Vitis aestivalis*. Vines, extremely thick in patches and covering nearly every

tree as well as the ground, have 50 to 100 percent coverage. Trees in the canopy and subcanopy have zero to 50 percent coverage and vary from site to site, but typical species include *Acer rubrum*, *Acer saccharum*, *Halesia tetraptera* var. *monticola*, and *Liriodendron tulipifera*. The shrub layer is sparse. The herb layer is sparse to moderate, decreasing with vine coverage. Herbaceous composition varies from site to site but is typical of mesic forests in the Park. Some of the more common species from the sampled areas are *Ageratina altissima* var. *altissima*, *Amphicarpaea bracteata*, *Arisaema triphyllum* ssp. *triphyllum*, *Polystichum acrostichoides*, *Sanguinaria canadensis*, and *Viola* spp. Beneath the vine canopy, coarse woody debris and tip-up mounds are typical.

OTHER NOTEWORTHY SPECIES

Black Bear use this community.

CONSERVATION RANK G2G3

RANK JUSTIFICATION

This is an uncommon community. It is restricted within its range and could be limited by specific disturbance regimes.

DATABASE CODE C EGL003890

COMMENTS

Globally

This community can be important for wildlife, especially bears.

Great Smoky Mountains National Park

Forests previously occupying sites that support this community are mesic forest types, such as cove forests or mesic forest dominated by chestnut oak and red oak. Forests on steep mesic sites may be more susceptible treefall and gap formation.

REFERENCES

MacKenzie 1993