

Broom Crowberry



Corema conradii



Photo credits: Troy Weldy

Scientific Name *Corema conradii*
(Torr.) Torr. ex Loud.

Family Name Empetraceae
Crowberry Family

Did you know?

The New York plants on Ulster County's Shawangunk Ridge represent the only non-coastal site in the world where this plant grows naturally. The discovery of this population in 1881 created an exciting stir within the botanical community. Some traveled hundreds of miles to see this non-coastal population. Even today, this *Corema* population attracts many interested botanists and naturalists every year.

Summary

Protection Endangered in New York State, not listed federally.

This level of state protection means: listed species are those with: 1) 5 or fewer extant sites, or 2) fewer than 1,000 individuals, or 3) restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or 4) species listed as endangered by U.S. Department of Interior.

Rarity G4, S1

A global rarity rank of G4 means: This species is apparently secure globally (typically with more than 100+ populations), though it may be quite rare in parts of its range, especially at the periphery.

A state rarity rank of S1 means: This plant is endangered/critically imperiled in New York because of extreme rarity (typically 5 or fewer populations or very few remaining individuals) or is extremely vulnerable to extirpation from New York due to biological factors.

Conservation Status in New York

There are only two known populations that are present on the same ridgeline in the Shawangunks. This may later be merged into a single meta-population with two sub-populations. These plants have been closely monitored since 1881. There is an historical report from Long Island, but numerous searches for it have proved unsuccessful. Besides possible reductions due to deer browse and trampling, the known populations are well-protected. The New York plants on Ulster County's Shawangunk Ridge represent the only non-coastal site in the world where this plant grows naturally.

Short-term Trends

The plant population is fairly isolated and seems relatively stable at the present time. Some observations indicate that deer browse may be having a detrimental impact on these plants, with foot trampling adding to the problem. There is very little habitat for this plant to spread in the immediate area, so recruitment may be difficult. Elsewhere within the Shawangunks, potential habitat abounds.

Long-term Trends

There was only ever one verified location for this plant in New York and this has been somewhat stable since its discovery in the mid 1800s. Some decline has been experienced since the mid 1900s, and this has been attributed to significant deer browse.

Conservation and Management

Threats

The population is not highly threatened and fairly remote but browsing by deer continues to affect accessible plants. Hiking traffic is increasing because of mountain bike accessibility to the trailhead. Absence of fire may allow blueberries to spread into its habitat.

Conservation Strategies and Management Practices

There has been a long discussion to mark the trail through the portions of the populations that are more subject to trampling. This marking may involve placing small stones on both sides of the path to clearly mark the trail boundaries. This seems like a reasonable step. At a minimum, continue to monitor deer browse and hiker traffic.

Research Needs

There are no current research needs.

Habitat

A low-growing evergreen shrub only known from a small region of the Shawangunks where it occurs along the ledges of open exposed siliceous rock (New York Natural Heritage Program 2004). Usually in sandy soil (Gleason and Cronquist 1991). Sandy or rocky soil; pine barrens (Newcomb 1977). Sandy pine barrens, sandhills and siliceous rocks (Fernald 1970).

Associated Ecological Communities

Pitch Pine-oak-heath Rocky Summit

A community that occurs on warm, dry, rocky ridgetops and summits where the bedrock is non-calcareous (such as quartzite, sandstone, or schist), and the soils are more or less acidic. This community is broadly defined and includes examples that may lack pines and are dominated by scrub oak and/or heath shrubs apparently related to fire regime.

Unpaved Road/path

A sparsely vegetated road or pathway of gravel, bare soil, or bedrock outcrop. These roads or pathways are maintained by regular trampling or scraping of the land surface. The substrate consists of the soil or parent material at the site which may be modified by the addition of local organic material (woodchips, logs, etc.) or sand and gravel. Abandoned railroad beds where tracks have been removed are included here. One characteristic plant is path rush.

Other Probable Associated Communities

Maritime heathland

Associated Species

Aronia arbutifolia

Gray Birch (*Betula populifolia*)

Umbel-like Sedge (*Carex tonsa*)

Black Huckleberry (*Gaylussacia baccata*)

Sheep-laurel (*Kalmia angustifolia*)

Mountain Laurel (*Kalmia latifolia*)

Narrowleaf Cowwheat (*Melampyrum lineare*)

Pitch Pine (*Pinus rigida*)

Eastern Bracken (*Pteridium aquilinum* var. *latiusculum*)

Scrub Oak (*Quercus ilicifolia*)

Chestnut Oak (*Quercus montana*)

Red Oak (*Quercus rubra*)

Early Lowbush Blueberry (*Vaccinium pallidum*)

Identification Comments

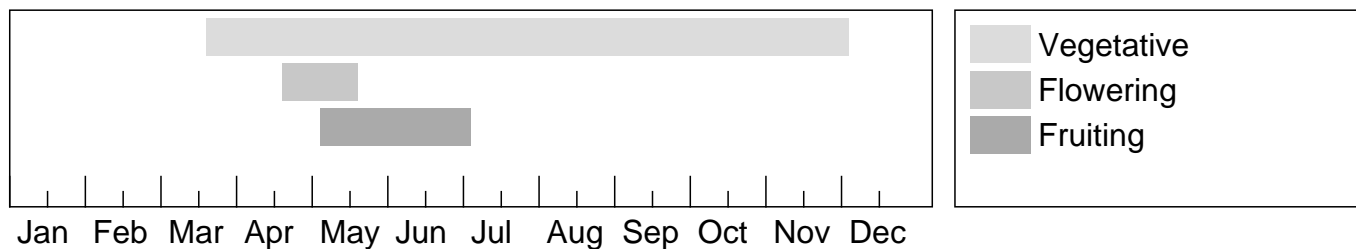
Corema is a low, dense, evergreen shrub usually less than half a meter tall that spreads out in the shallow soil between open rock formations. It is highly branched with tiny, narrow evergreen leaves, green above and white below, covering the branches. The separate male and female flower heads form in a rosette of leaves at the tips of the branches. There are no petals but the other flower parts give a purplish cast to the plant in early spring.

Best Life Stage for Identifying This Species

This evergreen shrub can be identified anytime. For verification, please take a photo of the plant including a close-up of leaves and stems.

The Best Time to See

The plants are vegetative and evergreen nearly year round. The flowers are present late April to early May. Surveys may be conducted anytime, year round.



The time of year you would expect to find Broom Crowberry in New York.

Similar Species

Corema is in the same family as *Empetrum* and may be confused with it. We have two *Empetrum* species within New York and both are considered rare. All *Empetrum* species will have axillary flowers (usually solitary or only a very few) with 6-9 stigmas and 3 petaloid sepals, while the flowers of *Corema* are in small terminal heads with 2-5 (usually 3) stigmas and no calyx.

Taxonomy

Kingdom Plantae

└ Phylum Anthophyta

└ Class Dicots (Dicotyledoneae)

└ Order Ericales

└ Family Empetraceae (Crowberry Family)

Additional Common Names

Poverty Grass

Additional Resources

Links

New York Flora Atlas

<http://www.newyork.plantatlas.usf.edu/Plant.aspx?id=1315>

USDA Plants Database

<http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=COREMA+CONRADII>

NatureServe Explorer

<http://natureserve.org/explorer/servlet/NatureServe?searchName=COREMA+CONRADII>

Google Images

<http://images.google.com/images?q=COREMA+CONRADII>

Best Identification Reference

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New York Natural Heritage Program

625 Broadway, 5th Floor,
Albany, NY 12233-4757
Phone: (518) 402-8935
acris@nynhp.org

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