Northern Blazing-star

*Liatris scariosa var. novae-angliae*

**Scientific Name**  
*Liatris scariosa var. novae-angliae*  
(Lunell) Gandhi, S.M. Young & P. Somers

**Family Name**  
Asteraceae  
Aster Family

**Did you know?**  
The number and range of this plant has been greatly reduced on Long Island as development has reduced its open upland habitat. An interesting naming problem occurred with this variety as the name *Liatris scariosa var. novae-angliae* (meaning New England) was being used in botany manuals without first being formally published. This was corrected in 2003 with a formal recognition of the name. The origin of the name *Liatris* is unknown.

**Summary**

**Protection**  
Threatened in New York State, not listed federally.

This level of state protection means: listed species are those with: 1)  6 to fewer than 20 extant sites, or 2)  1,000 to fewer than 3,000 individuals, or 3)  restricted to not less than 4 or more than 7 U.S.G.S.  7 ½ minute topographical maps, or 4)  listed as threatened by U.S. Department of Interior.

**Rarity**  
G5?T3, S2

A global rarity rank of G5?T3 means: Vulnerable globally - The subspecies/variety is at moderate risk of extinction due to rarity or other factors; typically 80 or fewer populations or locations in the world, few individuals, restricted range, few remaining acres (or miles of stream), and/or recent and widespread declines. (The species as a whole is most likely common globally.)  
A state rarity rank of S2 means: This plant is threatened/imperiled in New York because of rarity (typically 6-20 populations or few remaining individuals) or is vulnerable to extirpation from New York due to biological factors.
Conservation Status in New York

There are 19 existing populations but only four of these are in good condition. The rest are usually less than 100 plants each in small grassland or roadside habitats. There are approximately 30 historical occurrences but about 10 of these have been extirpated in Western Long Island and Westchester County.

Short-term Trends

The short-term trend seems stable although a few populations were extirpated by habitat alteration in recent years.

Long-term Trends

The long-term trend has been declining over the last 100 years as grassland habitats have become more fragmented by human development. There are only a few populations that remain in fairly large grasslands as others have held on in smaller grassland fragments or along roadsides. The 10 or so historical occurrences from Western Long Island, New York city and Westchester County are considered extirpated.

Conservation and Management

Threats

These plants may be lost to succession if the grassland communities are not maintained, preferably by fire management. Roadside populations are threatened by improper mowing schedules which remove plants before they can disperse seed or by maintenance which can destroy plants. Some plants are threatened by house construction or by picking for flower arrangements. More study needs to be done to see if plants are being over-browsed by deer. Without periodic fires moth larvae eat the seeds of Liatris and reduce reproduction (Vickery 2002, Kane 2001).

Conservation Strategies and Management Practices

Grassland habitats need to be kept open by mowing, grazing, or preferably by prescribed fires which increase seed production for (Vickery 2002, Kane 2001). Mowing schedules should avoid direct damage to plants. High dispersal populations can be targeted for management efforts to promote regeneration (Gravuer 2003).

Research Needs

More research is needed into maintenance techniques that will preserve and augment populations. Deer browse studies are needed to determine their effect (Kane 2001).

Habitat

In New York State this species occupies dry, sandy habitats, usually grasslands or grassy openings. Many of the extant sites are maritime grasslands, or grassy openings within maritime heathlands, though it also will inhabit open rocky summits, as well as artificially disturbed, weedy grasslands on sandy roadsides (New York Natural Heritage Program 2007). Prairies, open woods,
and other dry, open places (Gleason and Cronquist 1991). Dry argillaceous to siliceous open woods, thickets, and clearings (Fernald 1970).

**Associated Ecological Communities**

**Farm Pond/artificial Pond**
The aquatic community of a small pond constructed on agricultural or residential property. These ponds are often eutrophic, and may be stocked with panfish such as bluegill and yellow perch.

**Maritime Heathland**
A dwarf shrubland community that occurs on rolling outwash plains and moraine of the glaciated portion of the Atlantic coastal plain, near the ocean and within the influence of onshore winds and salt spray.

**Other Probable Associated Communities**

- Maritime grassland
- Red cedar rocky summit

**Associated Species**

- Bearberry (*Arctostaphylos uva-ursi*)
- Yellow Thistle (*Cirsium horridulum*)
- Northern Bayberry (*Myrica pensylvanica*)
- Canada Toadflax (*Nuttallanthus canadensis*)
- Switchgrass (*Panicum virgatum*)
- Pitch Pine (*Pinus rigida*)
- Sickle-leaf Golden-aster (*Pityopsis falcata*)
- Beach Plum (*Prunus maritima*)
- White Oak (*Quercus alba*)

**Identification Comments**
Northern Blazing-star is a perennial herb of the Aster family, growing up to 1.2 m tall. Its leaves are long (11 to 27 cm), narrow (.5 to 2.5 cm), and glabrous or minutely hairy. There are 5 to 30 flowering heads of disc flowers only, each on a peduncle 1-5 cm long. The flowers (35-60 per head) are a bright (blazing) pink, and tube-shaped, lending the heads a distinctive "shaggy" appearance.

**Best Life Stage for Identifying This Species**
This species is most easily spotted and identified when in flower, though it may be identified when fruiting as well.

**The Best Time to See**
Northern Blazing-star flowers and fruits in late summer, and may persist until frost.
The time of year you would expect to find Northern Blazing-star in New York.

Similar Species

L. scariosa var. angliae and L. cylindracea are the only Liatris species native in New York, and the only ones with the flowering heads on pedicels as long as the involucres. Liatris cylindracea differs from Liatris scariosa var. novae-angliae by its linear leaves (normally no more than 6 mm wide), and glabrous stem, and is a Midwestern species known in New York only from Niagara County.

Taxonomy

Kingdom  Plantae
  Phylum  Anthophyta
  Class  Dicots (Dicotyledoneae)
  Order  Asterales
  Family  Asteraceae (Aster Family)

Additional Common Names

New England Blazing-star

Synonyms

*Liatris borealis* (auct. non Nutt.)
*Liatris novae-angliae* ((Lunell) Shinners)

Additional Resources

Links

New York Flora Atlas
http://www.newyork.plantatlas.usf.edu/Plant.aspx?id=492

USDA Plants Database
http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=LIATRIS+SCARIOSA+VAR+NOVAE-ANGLIAE

NatureServe Explorer
http://natureserve.org/explorer/servlet/NatureServe?searchName=LIATRIS+SCARIOSA+VAR+NOVAE-ANGLIAE

Google Images
Best Identification Reference


References


