Dwarf Hawthorn

Leaves

Photo credits: *Stephen M. Young*

Scientific Name *Crataegus uniflora* Muenchh.

Family Name Rosaceae
Rose Family

Did you know?
This small hawthorn was first collected in New York in 1868 near Tottenville, Staten Island. It was only collected six more times on Long Island and Staten Island up to July 1919. It was not seen again in New York until 2003 when one small shrub was rediscovered near Kreischerville, Staten Island, a locality where it had been last collected almost 100 years earlier!

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 G5, SH

A global rarity rank of G5 means: This species is demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
A state rarity rank of SH means: This plant is only historically known from New York State, typically with the last plant observed over 20 years ago. Many SH plants have not been seen in 50-100 years.

Conservation Status in New York

There is one existing population in a state park but it is under stress by deer browse and may not be viable. There are six historical occurrences.

Short-term Trends

One small shrub barely continues to survive on Staten Island.

Long-term Trends

This shrub has always been very rare in New York but apparently populations have declined on Long Island since no plants have been found in recent decades.

Conservation and Management

Threats

Browsing by deer and inadvertent trampling by humans are threats to the remaining population.

Conservation Strategies and Management Practices

The remaining one shrub needs to be protected from deer and humans by erecting a protective barrier.

Research Needs

Research is needed to figure out the best way to augment the surviving population.

Habitat

The only known, current record of Dwarf Hawthorn in New York is from a sandy opening in a Staten Island coastal forest. (New York Natural Heritage Program 2010). Open woods and dry slopes (Rhoads and Block 2000). Usually in sandy or rocky ground (Gleason and Cronquist 1991). Sandy or rocky banks and woods (Fernald 1970).

Associated Ecological Communities

Coastal Oak-beech Forest
A hardwood forest with oaks and American beech codominant that occurs in dry well-drained, loamy sand of morainal coves of the Atlantic Coastal Plain. Some occurrences are associated with maritime beech forest.

Other Probable Associated Communities

Coastal oak-heath forest
Coastal oak-hickory forest
Coastal oak-holly forest
Coastal oak-laurel forest

Associated Species

Red Maple (*Acer rubrum*)
Fringed Boneset (*Eupatorium hyssopifolium var. laciniatum*)
Sweet Gum (*Liquidambar styraciflua*)
Blackgum (*Nyssa sylvatica*)
Virginia Pine (*Pinus virginiana*)
Pin Oak (*Quercus palustris*)
Red Oak (*Quercus rubra*)

Post Oak (*Quercus stellata*)
Black Oak (*Quercus velutina*)
Virginia Meadow-beauty (*Rhexia virginica*)
Roundleaf Greenbrier (*Smilax rotundifolia*)
Showy Goldenrod (*Solidago speciosa*)
Highbush Blueberry (*Vaccinium corymbosum*)

Identification Comments

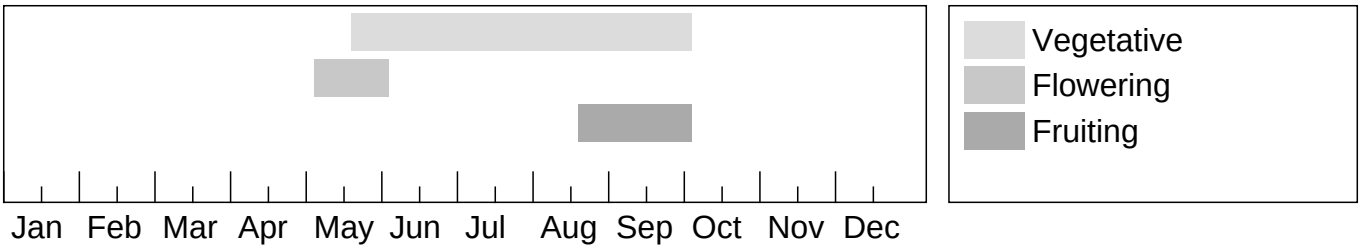
Dwarf hawthorn is a slender shrub growing up to 2 meters tall. Its twigs have long (2 to 7.5 cm) sharp thorns, and are slender and soft-hairy when young. The leaves are alternate, toothed, and obovate to elliptic or spatulate, shiny above and hairy on the veins below. They are borne on short (2 to 5 mm) hairy petioles. The flowers have 5 white petals, and are borne singly (or rarely in clusters of 2 or 3). The 5 green, toothed sepals persist at the top of the fruit, which are greenish-yellow or red pomes (Gleason and Cronquist 1991).

Best Life Stage for Identifying This Species

This shrub can be identified when it is in leaf and also in fruit.

The Best Time to See

Dwarf Hawthorn flowers in May before the leaves emerge, and the fruits can remain on the shrubs through September.



The time of year you would expect to find Dwarf Hawthorn in New York.

Similar Species

Having only one (or rarely two or three) flowers per cluster distinguishes Dwarf Hawthorn from all other Crataegus species in New York. Most other Crataegus species are larger in size.

Taxonomy

Kingdom Plantae
└ **Phylum** Anthophyta
└ **Class** Dicots (Dicotyledoneae)
└ **Order** Rosales
└ **Family** Rosaceae (Rose Family)

Synonyms

Crataegus parviflora (Ait.)
Crataegus smithii (Sarg.)
Crataegus tomentosa (Eggl. ex B. Robinson & Fern.)

Additional Resources

Links

Trees, Shrubs, and Woody Vines of North Carolina
http://www.duke.edu/~cwcook/trees/crun.html
USDA Plants Database
http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=CRATAEGUS+UNIFLORA
NatureServe Explorer
http://natureserve.org/explorer/servlet/NatureServe?searchName=CRATAEGUS+UNIFLORA
Google Images
http://images.google.com/images?q=CRATAEGUS+UNIFLORA

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Association http://wwws.nyflora.org/, Albany, New York

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