

Golden Dock



Rumex fueginus



Photo credits: Troy Weldy

Scientific Name *Rumex fueginus*
Phil.

Family Name Polygonaceae
Buckwheat Family

Did you know?

This species is known from Canada all the way south to the southern tip of South America, also known as Tierra del Fuego or Fuegia, thus the species name (Fernald 1950). It was named by Rodolfo Armando Philippi, a German-born scientist who moved to Chile in 1851 (Wikipedia contributors).

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, S1

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 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 six existing populations but two of them may have been destroyed by exotic invasive plants. Only one population has hundreds of plants and the rest have less than 50 each. There are 13 populations recorded from the late 1800s to 1971 which need to be rechecked. Three populations no longer exist because their habitat has been destroyed

Short-term Trends

The short term trend seems to indicate a sharp decline but only four of the six sites have been resurveyed since 1990. Two of the smaller populations may have vanished, and a third was substantially smaller, but other population increased to 400 plants which is a 4 to 8 times its initially documented size. The remaining two populations seen since 1984 have not been resurveyed but were small or modest with 3 and 50 plants respectively.

Long-term Trends

This species appears to have significantly declined in the last 100 years. Resurveys of the thirteen historical and additional three extant sites known from prior to 1990 are needed to confirm this decrease.

Conservation and Management

Threats

Direct disturbance by trampling and off road vehicle use are threats in unprotected beach and salt marsh habitat. Salt marsh and interdunal habitat is also threatened by the uncontrolled expansion of Phragmites.

Conservation Strategies and Management Practices

The saltmarshes need to be protected from the expansion of Phragmites into the areas where this plant grows. Natural buffers around the saltmarshes need to be maintained, and off-road vehicles excluded from the areas around known populations.

Research Needs

Propagation studies could be done to see if small populations can be augmented.

Habitat

In New York Golden Dock has been almost exclusively in or adjacent to coastal wetlands, including barrier beaches, the edges of saltwater ponds and creeks, interdunal swales, and ballast areas. Saline habitats and possibly inland salt ponds or inland salt marshes represent the habitat of the species in the historical upstate records (New York Natural Heritage Program 2015). Saline, brackish or alkaline marshes and shores, as a weed in disturbed soil (Fernald 1970). Shores, streambanks, and wet ground, avoiding acid soils (Gleason & Cronquist 1991).

Associated Ecological Communities

Brackish Interdunal Swales

Temporarily tidally flooded temperate marshes in interdunal swales dominated by salt-tolerant graminoids. Individual swales occur as small patches positioned between fore-, primary and secondary dunes in a maritime dunes system, typically on barrier islands.

Brackish Intertidal Shore

A community of the intertidal gravelly or rocky shores of brackish tidal rivers and creeks where water salinity ranges from 0.5 to 18.0 ppt.

Maritime Beach

A community with extremely sparse vegetation that occurs on unstable sand, gravel, or cobble ocean shores above mean high tide, where the shore is modified by storm waves and wind erosion.

Saltwater Tidal Creek

The aquatic community of a shallow, tidally flooded saltwater or brackish creek with submerged areas averaging less than 2 m (6 ft) deep at low tide.

Other Probable Associated Communities

Brackish meadow
Brackish tidal marsh
Coastal salt pond
High salt marsh
Inland salt marsh
Low salt marsh

Associated Species

Aster spp.
American Sea-rocket (*Cakile edentula*)
Coast-blite Goosefoot (*Chenopodium rubrum*)
Dwarf Umbrella-sedge (*Fuirena pumila*)
Saltmarsh Fleabane (*Pluchea odorata* var. *succulenta*)
Water Pimpernel (*Samolus valerandi*)

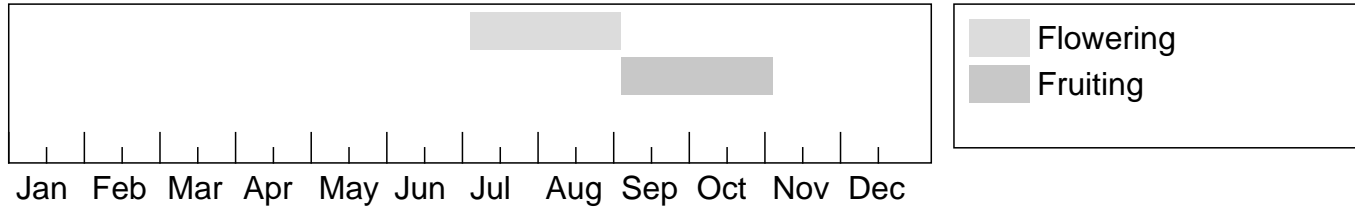
Identification Comments

Best Life Stage for Identifying This Species

Plants with mature fruits are necessary for identification.

The Best Time to See

Golden Dock flowers from July through August, and the fruits persist through September and October.



The time of year you would expect to find Golden Dock in New York.

Similar Species

R. persicarioides occupies similar habitats to *R. fueginus* and was historically known from New York, though there are no known extant records. The valves enclosing the achenes of *Rumex persicarioides* have much shorter (0.5-1.5 millimeters) wings, about as long as the width of the inner tepals, and the tubercle covering the achene is broad, rounded, and straw-colored. In contrast *R. fueginus* has valves with wings 1.5 to 2.5 times as long as the width of the inner tepals, and brown or reddish, narrow, lanceolate tubercles.

Taxonomy

Kingdom Plantae

└ Phylum Anthophyta

└ Class Dicots (Dicotyledoneae)

└ Order Polygonales

└ Family Polygonaceae (Buckwheat Family)

Additional Common Names

Seashore Dock

Synonyms

Rumex maritimus var. *athrix* (St. John)

Additional Resources

Links

USDA Plants

<http://1.usa.gov/ySVk8T>

New York Flora Atlas

http://newyork.plantatlas.usf.edu/Plant.aspx?id=2451&syn_name=Rumex+maritimus+var.+fueginus

Flora of North America

http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250037804

Best Identification Reference

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