Invasive Plants in Pennsylvania Goat's-rue

FEDERAL & PA Noxious Weed

Galega officinalis L.



Deric Case, DCNR - BOF

Background:

Goat's-rue is a member of the Legume family. This plant is native to southern Europe and western Asia. Historically, it has been a popular garden plant in both Europe and the U.S., partly because of its religious and medicinal associations.

Range:

Goat's-rue is native to North Africa, the Middle East and Europe. It was introduced into Utah in the 1890s as a possible forage crop.

Habitat:

Galega officinalis grows along stream banks and in moist areas. It prefers full sun but will tolerate light shade.



USDA APHIS PPQ, www.invasive.org

Description:

Galega officinalis is an herbaceous perennial, typically three feet tall at maturity, occasionally reaching heights of six feet. Leaves are pinnately compound, up to nine inches long, with 11 to 17 leaflets that are under two inches long. Spikes of 20 to 50 small purple or white flowers appear in June and continue throughout the growing season. Each flower produces a small pod with up to nine yellow seeds.



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Biology and Spread:

Goat's-rue forms dense crowns capable of regenerating for several seasons. The plants spread along waterways even though the seeds do not float. Apparently the pods are buoyant for a short time before they become saturated with water and sink. Herbivorous animals avoid goats rue so poisoning is a minor concern. Grazing cattle and sheep in the western U.S. eat plants around goats rue, encouraging it to spread. In Pennsylvania no signs of browsing by white-tailed deer have been reported.



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Ecological Threat:

Feeding trials proved that eating the plants would kill goats, sheep and cattle. In 1980, it was designated a federal noxious weed. Goats rue was added to the PA Noxious Weed Control Law list in 2000.

If You Find This Plant:

Goat's-rue is on the **Federal and PA Noxious Weed List**. It is a violation of the Noxious Weed Control Law to sell, transport, plant or otherwise propagate a listed species, like goat's-rue, within the Commonwealth. If you believe that you have found a new population of this plant, please contact:

Botany/Weed Specialist Pennsylvania Dept of Agriculture Phone: 717-787-7204

Look-A-Likes:

Although goat's-rue may be confused with crown vetch (Coronilla varia), it is taller when upright. Flower shape is similar between the two plants but the leaves and leaflets of goats rue are pointed and larger than those of crown vetch. Goat's-rue leaves "unroll" as they develop.



Goat's-rue (Galega officinalus)



Goat's-rue plant growing in reclaimed well pad.





Goat's-rue in flower. Color may vary between white and purple.

Goat's-rue (Galega officinalus)



Goat's-rue seed pods (Photo by Corey Raimond)

Goat's-rue Treatment Guidance

Any goat's-rue found needs to be reported to the PA Department of Agriculture.

If populations are small and have only been established for one or two growing seasons, hand pulling of plants can be an effective treatment as long as the root system is completely removed. Simply mowing or clipping the plants is not recommended. Even small plants will produce flower and fruit.

Using glyhosate or Garlon 3A in summer as a foliar application can be an effective herbicide treatment for controlling goat's-rue. Some states also recommend early season mowing and then treating the re-sprouts later in the growing season with herbicide. It might be necessary to perform a second application of herbicide in late summer to catch new germinants and any missed/resilient plants from the earlier treatment.

Seeds remain viable for up to 26 years so any eradication approach should focus on seed bank management.