

## Weed of the Week – Marestalk / Horseweed

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Horseweed or Marestalk, *Conyza canadensis*, is a very problematic weed across New York, especially in reduced tillage systems and soybean crops. Marestalk is resistant to several herbicides, including glyphosate, but that does not mean it is hard to control.

Marestalk grows as both a winter annual (germinating in the late summer to fall then maturing the next summer) and a summer annual (germinating in the spring and maturing in the summer). It first grows as a rosette, having several leaves around a central growing point. Leaves lie flat on the ground. Fall germinating rosettes grow larger than spring-germinating rosettes. The older leaves of the rosette have a toothed margin. As the plant matures, it sends up a central stalk that will then produce several branching flower stems at the top. Leaves and stems are hairy. The small white flowers produce seeds that are carried hundreds of yards or more by the wind. The root is a short taproot with fibrous branches.



Seedling, Picture by: Antonio DiTommaso, Cornell Univ.



Rosette, [https://herbarium.ncsu.edu/content/weeds/images/Conyza\\_rosette.jpg](https://herbarium.ncsu.edu/content/weeds/images/Conyza_rosette.jpg)



Bolting stalk, Picture by: Antonio DiTommaso, Cornell Univ.

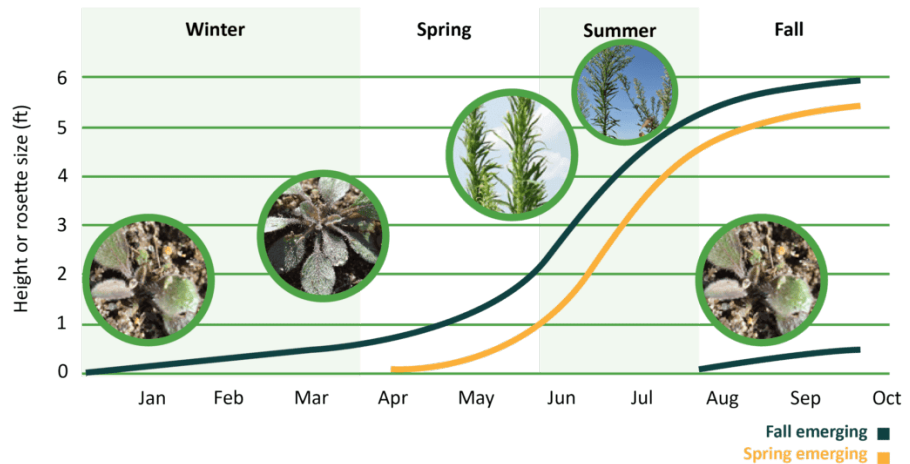


Flowering stalk, Picture by: Joseph Neal, NC State Univ.



Flowers, Picture from Missouri Weed Guide.

### Horseweed lifecycle



Life Cycle, Integrated Weed Management, <https://growiwm.org/weeds/horseweed-marestail/>

The strengths of marestalk is that it produces thousands of seeds that disperse long distances. The seeds are not dormant and light increases their germination. It tolerates drought and low fertility soils that are sandy to loamy. Notoriously it is resistant to five herbicide families including glyphosate. For information on herbicides in field crops refer to these factsheets: <https://blogs.cornell.edu/whatscroppingup/2020/04/>, <https://extension.psu.edu/marestalk-horseweed-management>



This soybean field and border was spray with glyphosate. At the border you can see that all the weeds were killed except the marestalk.

Photo: Aaron Gabriel

The weaknesses of marestalk is that it only germinates from shallow depths, it is susceptible to even light tillage, and is intolerant of shade.

For management, the fall and spring rosettes can be controlled with tillage in the spring. Because the seeds are tiny and shallow, tine weeding is also effective as well as mulching. Vigorous fall-planted cover crops effectively compete with marestalk, and rye mulch is suppressive to marestalk. Rotations with vigorous shading crops will suppress marestalk before planting weed-sensitive vegetable crops. Corn and small grains provide a competitive crop and more herbicide options for control. Also, since marestalk grows around fields, it is important to clean up any other populations that will disperse seeds into crop fields. Marestalk can become infected with aster yellows mycoplasma which can decrease seed production.

Marestalk is a host for several crop diseases such as Sclerotinia blight (*Sclerotinia minor*), grey mold, boytrytis rot (*Boytrytis cinerea*), aster yellows mycoplasma, tobacco mosaic virus, and tomato spotted wilt tospovirus. It is also an insect host for the tarnished plant bug and alfalfa plant bug. Marestalk is allelopathic (suppresses growth) to forage species including orchardgrass, white clover, and alfalfa. It is not palatable for livestock and is irritating to horses. There are several reasons why marestalk should not be tolerated near crop fields.

Are there any beneficial uses for marestalk? In the hands of an experience herbalist, it may have medicinal uses. It has also been put in the bedding of pets to deter fleas. It also is an excellent fire starter when you are camping, especially for the bow and drill method of fire starting.

#### References:

Horseweed, <https://cals.cornell.edu/weed-science/weed-profiles/horseweed>

Horseweed, <https://growiwm.org/weeds/horseweed-marestalk/>

Marestalk (Horseweed) Management, <https://extension.psu.edu/marestalk-horseweed-management>

“Eat the Weeds”, <https://www.eattheweeds.com/conyza-canadensis-herb-fire-food-2/#:~:text=Native%20Americans%20used%20a%20tea,to%20get%20rid%20of%20fleas.>