Control of Common Mullein

PREVENTION: Minimize soil disturbance from vehicles, machinery and overgrazing. Early detection is vital to prevent invasion.

MECHANICAL CONTROL:

- Cutting below the soil surface or digging is effective.
- Common mullein will not withstand tillage.
- Pulling small plants in loose soil is effective.

BIOLOGICAL CONTROL:
The mullein seed-eating weevil, *Gymnetron tetrum* has been successful. The larvae feed on the seeds within the capsule on the flowering stalk. Biological control is a slow and long term control method, with varying results. Getting the insects established on common mullein may be helpful in the future, because the seed bank can be viable for 100 years.

HERBICIDE CONTROL:

The 2018 UNL Guide for Weed, Disease and Insect Management in Nebraska (EC-130) recommends the following herbicide options for common mullein:

.5 ounce Ally®, Escort® or Cimarron® Plus (metsulfuron) plus 2 quarts crop oil per acre

- OR -

4 pints Graslan® L or Grazon P+D (picloram + 2,4-D), plus 6 ounces Overdirve® (diflufenzopyr) plus 2 pints surfactant per 100 gallons of water

ALL herbicide labels recommend spraying when the common mullein plant has 6-12 leaves, and before the stem lengthens.

Crop oil or a good surfactant is very important, to help the herbicide penetrate the extremely hairy leaf surface.

Persistent monitoring is very important, as new rosettes will appear throughout the growing season.

For all herbicide control, read and follow the product label; the label is the law.

Common mullein was first identified in Nebraska in 1885. Once called cyclical, it was said to show up and grow for a few years, then die out. In the past 5 years, the acres infested have increased drastically in some parts of Nebraska.

Common mullein reproduces only by seed. Preventing seed production will control common mullein. Chopping off the flower stalk is not recommended as a method of control. The plant will re-grow one or several stalks and will bloom, even at ground level, working to produce seed. If you wish to control common mullein mechanically, you should dig it below ground level to prevent re-growth.

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COMMON MULLEIN

NEBRASKA INVASIVE WEED

Verbascum thapsus L.

NEWMAC

Nebraska Weed Management Area Coalition

GROWTH FORM:
Erect herb

LIFE SPAN: Biennial. Common mullein produces a basal rosette the first year. Plants mature in the second year, producing stalks which bloom June through August, yield seed in the fall and then die, completing the plant's normal life cycle.
Origin: Native to Europe, Northern Africa and Asia

HEIGHT: 2 – 8 feet

LEAVES: Bluish gray-green, 4-12 inches long and 1-5 inches wide. Leaves are opposite, and elliptic to ovate. All surfaces of the leaf are covered with fine hair, making herbicide penetration difficult.

FLOWERING DATES:
June to July into fall.

FLOWERS: 5 lobed sulfur yellow colored flowers alternate along the flowering stalks. Flowers mature from the base to the tip of the stalk.

SEEDS: A single common mullein plant can produce 100,000 – 180,000 seeds which may remain viable for more than 100 years.

UNDERGROUND: The taproot of common mullein can access soil moisture from a deeper profile, giving it a competitive advantage, especially in dry years.

Common mullein rosette... for excellent results, control at this stage of growth.

WHERE FOUND IN NEBRASKA:
Rangeland, woodland, pastures, roadsides. Common mullein is one of the first weeds to germinate in a disturbed site. The biggest increase in the past 5 years has been on idle acres, where desirable forbs make controlling just the common mullein difficult. Areas impacted by wildfires have also seen a large increase in common mullein infestations.

USES: Common mullein was originally used medicinally as a remedy for coughs and diarrhea. Herbalists use common mullein to treat upper respiratory tract infections, coughs, bronchitis and asthma.

OTHER FACTS ABOUT COMMON MULLEIN

- **It is unpalatable to livestock, and has no feed value.**
- **Heavy stands of common mullein can reduce grass production as much as 50%, especially in dry years.**