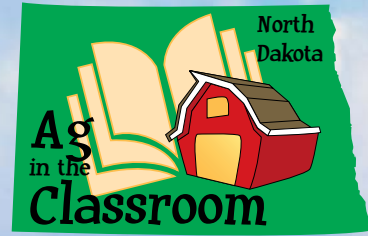


NORTH DAKOTA

# Ag Mag

A Magazine about Agriculture for North Dakota Students

Spring 2013



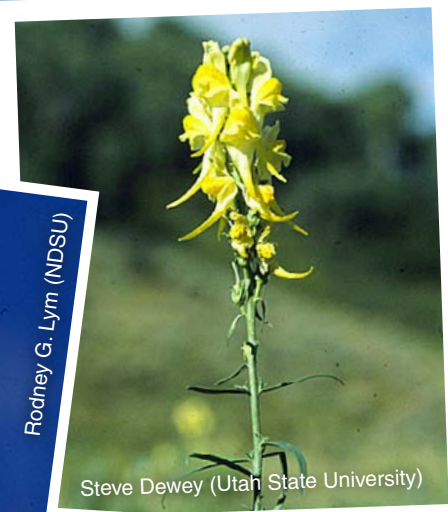
## Weeds, ~~WEEDS,~~ weeds!

They grow in yards, gardens, crop fields and pastures; along roadsides; and by rivers and lakes. They grow in all shapes, sizes and colors.

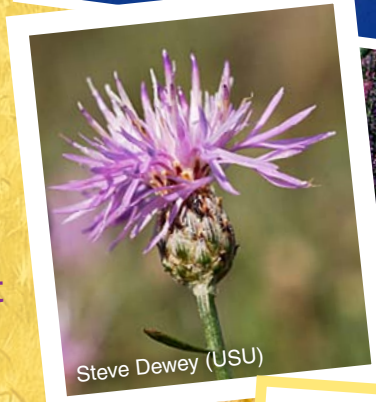
Some people define a weed as any plant growing where it is not wanted, such as a dandelion in a lawn, field bindweed in a wheat field or musk thistle in a pasture.



Rodney G. Lym (NDSU)



Steve Dewey (Utah State University)



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Rodney G. Lym (NDSU)



### What is a Weed?

Circle the correctly spelled word in each sentence.

1. An invasive weed does not naturally occur in a specific area and its introduction is likely to cause economic or (environmental or enviromental) harm or harm to human health.
2. Noxious means harmful or injurious to health or (fiscal or physical) well-being.
3. Noxious weeds are harmful or poisonous to humans, domesticated grazing animals and (wildlife or wild life).
4. North Dakota law requires every person to do all things necessary and proper to control the (spred or spread) of noxious weeds.

# WANTED

## What Weed Am I?

Use the photos to try to name each weed described.

1. My pale green stem has thick clusters of leaves surrounding it, my leaves are narrow and alternate on the stem. My many yellowish-green clusters of small flowers are on the stem ends. What am I?

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2. I'm actually a shrub or small tree that can grow 5-30 feet tall with reddish-brown bark and branches with many small gray-green leaves. My pink or white flowers are crowded into clusters on the end of the branches. What am I?

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3. I have sharp spines on my tall, thick stalk and can grow to 6 feet tall. I have a purple to pink flower on top of my single stalk that's usually bent to the side and have sharp brown bracts that resemble a pine cone under my flower. What am I?

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4. I grow 6-8 feet tall with purple flowers arranged on spikes that shoot up from many different stalks. My spikes have flowers and may grow to 1 foot long. I have a square stem. What am I?

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5. I have light green leaves that are divided 2-3 times, and leaves and stems covered with fine silky hairs. I grow 3-5 feet tall, and have a very strong and stinky sage odor. What am I?

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6. I grow 2-3 feet tall and have light green, waxy, heart-shaped leaves. My bright yellow flowers grow at the base of the upper leaves and are shaped like a snapdragon flower. What am I?

---

7. I look very much like Dalmatian toadflax, but instead of its broad, heart-shaped leaves that clasp a woody stem, I have narrow, linear leaves with a narrow stem. What am I?

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# NORTH DAKOTA'S 11 MOST WANTED WEEDS

8. I can grow up to 4 feet tall and have several branching flowers that grow from the stalk. My pink to purple and sometimes white flower is urn-shaped with a tuft of hair at the top, and I have prickly leaves with spines. What am I?

9. I grow 1-3 feet tall with branches that branch out from several different stems. I have 2 to 3 clusters of urn-shaped flowers at the end of my branches, and my pinkish-purple flowers have a yellowish-green bract at the bottom. What am I?

10. My hairy branches and leaves spread out giving me a ball-shaped tumbleweed appearance. I grow 1-3 feet tall and have small purple and sometimes white urn-shaped flowers growing on the tips of my branches. What am I?

11. My stem and leaves are covered with fine white hairs, and I have pink, purple or white urn-shaped flowers at the ends of my branches and rounded bracts with transparent tips. What am I?

**Knapweeds have bracts, which are specialized leaves at the base of the flower.**



## Word Search Activity

Find and circle the North Dakota noxious weeds. The words can be horizontal, vertical, backwards or crossways.

- Absinth Wormwood
- Canada Thistle
- Dalmatian Toadflax
- Diffuse Knapweed
- Leafy Spurge
- Musk Thistle
- Purple Loosestrife
- Russian Knapweed
- Saltcedar
- Spotted Knapweed
- Yellow Toadflax



## Weeds in North Dakota

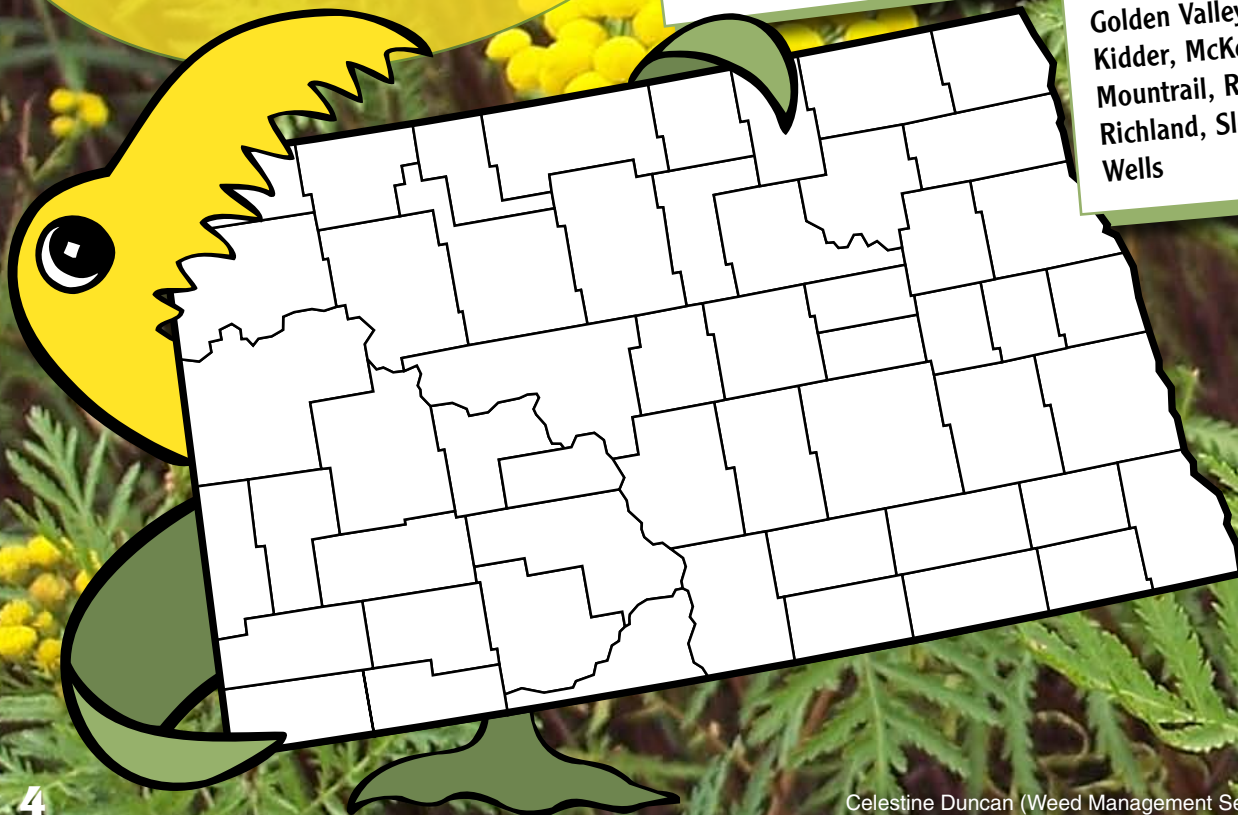
Some counties have additional weed problems (besides the state's top 11) that affect their area. County leaders added them to their own county noxious weed list.

Mark the counties with Milkweed with an **M**, counties with Common Tansy with a **T** and counties with Houndstongue with an **H**.

**COMMON TANSY** - Burke, Cavalier, Mountrail, Pembina, Rolette

**MILKWEED** - Cavalier, Ramsey, Renville, Sheridan, Trail, Wells

**HOUNDSTONGUE** - Billings, Bowman, Golden Valley, Grant, Kidder, McKenzie, Mountrail, Ransom, Richland, Slope, Ward, Wells



# Control Those Weeds!

Write which picture is a mechanical, chemical, biological, cultural or integrated pest management control method.

Farmers and ranchers do not want weeds in their fields and pastures. Weeds grow rapidly and reduce crop production as well as the amount of grass in a pasture for the livestock to eat. Since weeds reduce the profitability of the land, farmers and ranchers use different methods to control them.

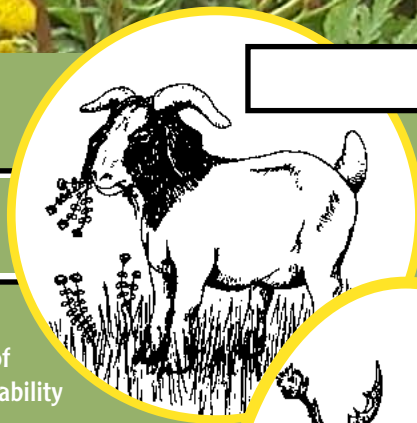
**Mechanical** weed control uses machinery, such as a mower or disk, to get rid of the weeds by cutting them off or plowing them under the soil. Physically pulling the weed out by hand or with a hand tool is mechanical control in a garden or lawn.

**Chemical** control is the most common form of weed control. Farmers and ranchers use chemicals called herbicides that harm or kill certain plants. Herbicides are usually sprayed as a liquid on weeds with special spraying equipment.

**Biological** weed control is the use primarily of insects to control the spread and growth of weeds. Insects, such as certain weevils and beetles, can be released into weedy patches. The insects live off of and eat the weeds to control them.

**Cultural** weed control maintains field conditions so weeds are less likely to become established or increase in number. Examples are having sheep or goats graze to eat some types of weeds, rotating crops, mulching, maintaining good soil fertility, and selecting more desirable plants that can shade or "smother" weeds.

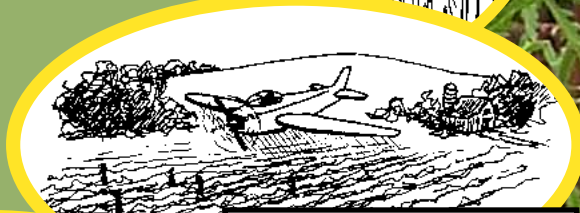
Sometimes more than one method is used to control weeds. This is called **integrated** pest management. For example, if a landowner puts beetles in a patch of weeds and also sprays or mows the weeds in the fall when the beetles are dormant and won't be harmed, the weeds may die faster.



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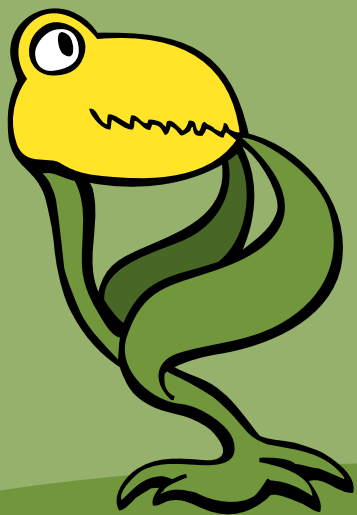
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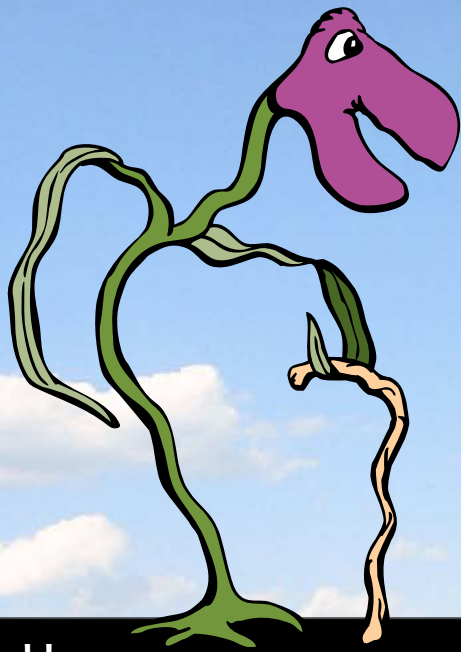


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## Annual, Biennial or Perennial?

Plants, including weeds, are annuals, biennials or perennials.

- **Annuals** grow quickly from seed each spring or summer and then die within a year.
- **Biennials** live for two years.
- **Perennials** are able to live from one year to the next because they have special structures, such as bulbs, tubers or woody crowns. Perennials bloom in spring to summer and then die back in the fall or winter. Each spring they come back from their special structures rather than growing from seeds like annuals do.

## Math Problems

1. Nathan has a 100-acre field of wheat. He didn't spray his field to kill the weeds, so 30 acres have been taken over by absinth wormwood. How many acres of wheat will Nathan have left to harvest? \_\_\_\_\_
2. If Nathan's wheat averages 45 bushels per acre, how many bushels of wheat will he harvest from 70 acres?  
\_\_\_\_\_
3. The grain elevator will pay Nathan \$8.00 per bushel for his harvested wheat. How much money will Nathan make when he harvests his 70-acre wheat field? \_\_\_\_\_
4. If Nathan lost 1,350 bushels of wheat because of weeds in his field, how much money did he lose if the grain elevator would have paid him \$8.00 per bushel? \_\_\_\_\_
5. How much total money would Nathan have made if he had been able to harvest the entire field? \_\_\_\_\_
6. If the grain elevator paid Nathan \$25,200 for his wheat crop and it cost him \$15,000 to plant the crop, how much money did Nathan actually profit? \_\_\_\_\_



## How Weeds Travel

How do weeds spread so quickly to many different areas? Weed seeds travel by wind, water or hitchhiking on an animal or person. In this story, underline the ways weed seeds travel.

Rufus is playing in a yard full of dandelions. As the wind blows, the white seeds from the dandelions drift across the yard.

Dandelion seeds cling to Rufus' long, shaggy hair. He gets warm from playing in the hot sun and jumps in the river to cool down. As Rufus jumps into the water, the dandelion seeds attached to his hair end up floating in the river. The dandelion seeds travel on the water until they reach the shore. At the shoreline, the seeds germinate, and a new patch of dandelions begins.





**Take this issue of North Dakota Ag Mag home to share what you've learned about weeds.**

The North Dakota Ag Mag is a project of the North Dakota Agriculture in the Classroom Council, which is organized through the North Dakota Department of Agriculture.

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