## To be a weed. To not be a weed. It all depends.

Recognizing what isn't a weed is just as important as what is a weed.

There are many definitions of a weed. Some favorites include Ralph Waldo Emerson's description that a weed is a plant whose virtue hasn't been discovered yet, and the often-used "a plant out of place"—for example, a lonely volunteer corn plant in a dry bean field or a garden. While generally a non-weedy plant, the corn plant is a weed as it is likely not wanted in the dry bean field or garden.

With this in mind, it seems any plant can be considered a weed. But ... some plants have more "weedy" tendencies than other plants!

A total of 300,000 species of plants in the world are generally accepted in the science world, yet about 3 percent of those behave as weeds, and less than 0.1 percent are problems in agriculture around the world.

## Weedy ways

Certain characteristics of plants can make them more adept at surviving and spreading.

Examples of "weedy" characteristics include:

- Rapid seedling growth—Palmer amaranth (pigweed) can grow 1 inch per day.
- Quick maturation—Canada thistle can produce viable seed two weeks after flowering.
- Environmental adaptability— Russian thistle can germinate at soil temperatures between 28 and 110 degrees F.
- Resistance to poor environmental conditions-Common mullein seeds can survive in soil for over 100 years.
- Seeds are small or similar to desirable vegetation—Jointed goatgrass is difficult to sort out of wheat seed.
- Prolific seed production—Some species produce thousands or even millions of seeds per plant.
- Protective structures/
   chemistry—Burrs, spines, odor,
   toxins, etc., prevent grazing or
   being eaten by insects.

 Dual modes of reproduction— Dalmatian toadflax reproduces by seed and by roots.

A weed might not have all of these characteristics, but the more they do have the "weedier" they can behave.

A wildflower can persist within its natural habitat, but it has a small chance of becoming weedy in that habitat due to its characteristics.

A weedy plant in the same environment can not only persist but thrive and potentially overtake the environment if it has a few of the above characteristics. So, while a plant might not be where we expect or want it, most of these plants won't become a problem if they don't exhibit weedy characteristics.

Trees are a plant classification generally overlooked as a potential weed. The Russian olive is an example of a weedy tree that can spread aggressively and rapidly alter the landscape. Aquatic plants, such as hydrilla and milfoil, can also become weedy and problematic for recreation, water flow, habitat, etc.



## **Noxious notes**

The second (and final) caveat for this article is that Wyoming has a clear definition of a weed! "Noxious" is a legal classification for a plant, animal, or insect determined to be a weed or pest. The Wyoming Weed and Pest Control Act defines noxious weeds and pests as "... A plant, animal, or insect species that is determined to be detrimental to the general health or welfare of the state based upon the following:

- Has demonstrated the ability to aggressively invade native plant communities and agricultural crops;
- Is injurious or poisonous to livestock;
- Is a carrier of disease or parasites;
- Can, by virtue of either direct or indirect effect, negatively impact management of agricultural or natural ecosystems."

There are 30 weed species on the statewide noxious list under this definition. Each weed and pest district may have more weeds on their county declared noxious list. This list is subject to changes by the Wyoming Weed and Pest Council and approved by the Wyoming Department of Agriculture.

There are websites, books, guides, magazines, and even organizations dedicated to weeds. On the other hand, there are websites, books, guides, magazines, and even organizations dedicated to plants that aren't weeds. Some plants even occur on both the "weedy" and "non-weedy" sides of the discussion.

While not very many plants exhibit actual weedy characteristics, the ones that do are thriving!

Weed. Weedy. Weedier. Weediest. We bet **Jenna Meeks** knows the "W's" well in Webster's. She is the assistant supervisor with the Goshen County Weed and Pest Control District. She can be reached at (307) 532-3713 or at gocoweeds@gmail.com.