



Spanish Peaks-Purgatoire River
Conservation District



Purgatoire Watershed
WEED MANAGEMENT
COLLABORATIVE

2021 National Invasive Species Awareness Week (<https://www.nisaw.org/>)

Article #1 in a series of articles emphasizing awareness of noxious weeds and proven management practices

What is a Weed?

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What is a Weed vs. a Noxious Weed?

First, let's start with the definition of a weed, as defined in Merriam-Webster's online dictionary: *A plant that is not valued where it is growing and is usually of vigorous growth, especially one that tends to overgrow or choke out more desirable plants.* A weed is *any* plant, native or non-native that is growing where it is not wanted and is causing problems at a specific site or area. For example, a native sunflower growing on the prairie is part of the ecosystem, but if sunflowers sprout up in your perennial flower bed or vegetable garden, you might consider those a weed; you don't want them in that particular location.

Noxious weeds are defined a bit differently. As defined by the Colorado Weed Management Association: *Noxious weeds are **Non-Native + Invasive** plants that displace desirable vegetation and degrade natural and agricultural lands. They threaten our drinking water supply, agricultural crops, pasture lands and native habitats.* Noxious weeds pose serious economic and environmental threats. Additionally, noxious weeds are legally designated by state and/or local governments. Colorado's noxious weed list is found here - <https://ag.colorado.gov/conservation/noxious-weeds/species-id>.

Why Should We Care About Noxious Weeds?

Based on a 2014 study by Colorado State University, the annual estimated economic impact of *only 10* noxious weed species to the State of Colorado was \$14 Million dollars. Impacts to the agricultural, recreational and wildlife sectors were evaluated. The authors of the study clearly state that further research should be conducted, as they feel there has been severe under-reporting of noxious weed populations within the state. The true economic impact is undoubtedly much higher. Access the research study here: https://lasanimascounty.colorado.gov/sites/lasanimascounty/files/documents/2014_Econ_Impact.pdf.

For example, in Las Animas County, Russian knapweed, Canada thistle, Scotch thistle, tamarisk and Russian-olive have infested *thousands* of acres. This means thousands of acres that were previously inhabited by native plants, or by productive farm or ranch lands, have now become occupied by plants that have little to no economic or ecological value or use.

Additionally, many noxious weeds are toxic in some form to humans and/or animals, and also other plants! Russian knapweed, for instance, is toxic to horses, and is of poor forage quality for cattle or other grazing/browsing wildlife species. It also excretes chemicals into the soil that prevent other plants from growing. African rue is also of particular concern, as all parts of the plant are toxic to all animals and humans, and it also creates bare ground by excreting chemicals, that over time prevent other plants from growing.

Not all noxious weeds are toxic, but most provide very poor forage value for livestock and most wildlife species.



Russian knapweed infestation in the Model area. Russian knapweed spreads primarily by its root system, excreting chemicals that suppress and kill native plants.

Fundamental Information about Noxious Weeds

Where do noxious weeds typically come from?

- Transported accidentally from other continents like Europe, Asia or Africa in seed stock or other plant materials
- Brought into an area intentionally as ornamentals
- Escaped as a contaminated seed source in forage crops

How do they spread?

- Seeds are spread by animals, humans, water, and wind
- Seeds are easily introduced as contaminants in hay, soil, ornamental planting mixes, nursery stock, or by vehicles/equipment
- Prime locations for establishment: Disturbed sites such as roadsides, or land cleared for construction; rangeland/pastureland that is overused by animals or humans; wetlands; public trail systems; and along river or stream corridors
- Transported by surface water (lakes, streams, irrigation ditches)

Why are they so successful?

- Noxious weeds have an advantage in their new environment as the insects, diseases, and animals that would normally control them are typically not found in their new “home” (i.e. their natural controls)
- They are able to adapt to varied climatic and environmental conditions
- They have well-developed and specialized mechanisms for survival, such as prolific seed production, massive root systems, or excretion of chemicals that prevent other plants from growing
- Noxious weeds spread at alarming rates due to lack of natural controls and their specialized mechanisms for survival

How do I Control Noxious Weeds?

- Management techniques that are backed by sound science and research are essential to controlling and stopping the spread of noxious weeds
- Additionally, seeking technical assistance for appropriate application of management techniques should be sought from *skilled, experienced professionals*: Be wary of products or people claiming “natural” weed control, as many products have not undergone extensive testing and research for environmental or human impacts/hazards
- An apparent “harmless” household product may have serious consequences to soil, animal or human health, as those have not been tested nor labeled for weed control – Only use products that are labeled for weed control and follow application and mixing instructions on the label
- The LABEL is the LAW!
- It is illegal to use products for weed control if they do not have a weed control label on the container

Where can I find Assistance for Identifying and Controlling Noxious Weeds?

Taking a skilled approach to noxious weed management is essential. Seek out skilled, experienced professionals for guidance.

The Spanish Peaks-Purgatoire River Conservation District (SPPRCD) houses the Purgatoire Watershed Weed Management Collaborative (PWWMC). PWWMC facilitates noxious weed management in Las Animas County and provides landowner cost share and cost incentive programs for managing noxious weeds and land restoration (NOTE: Landowners must reside within SPPRCD boundaries to qualify for landowner programs). However, PWWMC provides technical assistance and educational programs to *any* interested person or organization.

The PWWMC Coordinator or the SPPRCD Noxious Weed Technician can provide landowners with professional technical assistance for the identification and management of noxious weeds or other weedy plant species, land restoration practices, and information regarding PWWMC/SPPRCD noxious weed cost share programs:

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Helpful Information about Noxious Weeds -

- Local Information – www.purgatoireconservation.org (click on the “Noxious Weed” tab)
- Las Animas County Noxious Weed Guide - <https://www.purgatoireconservation.org/las-animas-county-weed-guide.html>
- CO Weed Management Association - <https://cwma.org/noxious-weed-awareness-campaign/>