USDA/USFS Listed Invasive Plant Species:



- cheat grass (Bromus tectorum), in photo
- •Diffuse knapweed (Centaurea diffusa)
- •Leafy spurge (Euphorbia esula)
- •Field bindweed (Convolvulus arvensis)
- •Scotch thistle (Onopordum acanthium)
- •Russian thistle (Kali tragus)
- •Sweet clover (Melilotus officinalis)
- •Dalmatian toadflax (Linaria dalmatica)
- •Kochia (Kochia scoparia)
- •Prickly lettuce (Lactuca serriola)
- •Foxtail barley (Hordeum jubatum)
- •Common mullein (Verbascum thapsus)
- Poison hemlock (Conium maculatum)



(Above: Field bindweed; right: Scotch Thistle)



References:

University of Nevada Cooperative
Extension—"Measures to Prevent the
Spread of Noxious and Invasive Weeds
During Construction Activities"

USFS/Coconino National Forest http://www.fs.usda.gov/coconino/

Other resources:

The Arboretum at Flagstaff http://www.thearb.org

San Francisco Peaks Weed Management Area -

http://www.swvma.org/ sanfranciscopeakswma.htm

Coconino County Cooperative Extension -

http://extension.arizona.edu/invasiveplants

Contact Us

Coconino County Community

Development

2500 N Fort Valley Rd Building 1 Flagstaff, AZ 86001

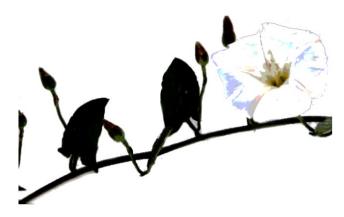
928-679-8850

www.coconino.az.gov

Invasive Plants

of Coconino County

Management During
Building Project
Construction





What is an invasive plant species?

A species is defined as invasive if it is nonnative to an ecosystem and its introduction changes environmental conditions, causes economic losses due to landscape degradation, or causes harm to human health (Executive Order 13112, 1999 - USDA). Invasive plants have expanded populations with increasing large-scale soil disturbance associated with development and severe fires.

Why remove invasive plants species?

Invasive species compete directly with native species for water, sun, and soil nutrients. By not managing invasive plants, we are allowing them to potentially out-compete northern Arizona's plant communities and harm delicate processes that support the biodiversity we see in Coconino County. Invasive plants can increase the likelihood of soil erosion, decrease wildlife habitat quality, and contribute to the decline of endangered and threatened species (*National Wildlife Federation*).





Left: Diffuse Knapweed (Centaurea diffusa). Above: Leafy Spurge (Euphorbia esula). Photos: USDA



Weed Management During Construction:

- Before disturbing the project grounds, take inventory of current weed infestations and prioritize treatment in project areas and along access points. Areas with noxious weeds should be treated prior to construction. Contact the Arizona's Natural Resources Conservation Service to learn how to map weed populations on your property (602-280-8808).
- Operate and stage in an area that is not infested with weeds as much as possible to eliminate further contamination.
- Avoid or limit traveling in areas that are weed infested, or go through an area where seed spread is less likely to occur.
- Clean construction equipment before arriving to a project site and when leaving. Ensure that equipment is clean of dirt or any seed harboring media.
- For seed and straw material, make sure it is certified as weed-free.
- In areas with canopy vegetation, retaining the canopy may help shade/suppress further weed establishment and growth.
- Avoid creating soil conditions that promote weed germination and spread (excessive tilling, etc.)
- Minimize soil disturbance to the extent consistent with project goals.

Best Management Practices:

- It is best to remove a weed at an immature stage. Mechanically remove (hand pull, etc.) weeds that are young to not disturb multiple layers of soil.
- Dispose of all flowering weeds by incinerating them or transport them to an appropriate disposal location in sealed, thick bags. It is not adequate to compost them at a typical residential site.
- Areas treated to remove noxious weeds should be revegetated with native species.
- Utilize seed and other plant materials that have been checked and certified as noxious weed-free and have a weed content of 0.5% percent
- After seed or transplants are installed, area should be mulched immediately to prevent erosion, prevent new establishment of weed species, and to conserve water. Most likely, more weeds will emerge from the soil. Proactively removing these weeds after treatment will make a site's restoration easier and less laborious.
- Herbicide may be worth considering for situations where invasive plant populations cannot be mechanically removed due to site conditions or available manpower. Consult with local experts who understand the specific species' life cycles in which you are managing and with experts who are certified in herbicide applications.