Managing Invasive Species on Tribal Rangelands

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What is a Weed?

• An unwanted plant
• A nuisance plant
• A plant that interferes with management objectives
What is a Noxious Weed?

- Noxious weeds are plants specified by law or regulation to be particularly undesirable, destructive and difficult to control.
- Often, the word “invasive” is used to describe species that may later become “noxious”.
- Today, we’ll be talking about noxious and invasive weeds.
Why Noxious/Invasive Weeds are Difficult to Manage

- Few natural predators
- Chemical protection
- Physical protection
- Abundant seed production
- Long seed viability
- Extensive root systems and or underground rhizomes
Why be concerned about Noxious/Invasive Weeds?

Noxious weeds can be costly to all because they can adversely affect:

- Agriculture
- Environment
- Fish and Wildlife
- Human Health
- Economics
- Recreation
- Cultural Values
Integrated Pest Management

1. Proper identification of damage and responsible "pest"
2. Learn pest and host life cycle and biology
3. Monitor environment for pest population
4. Establish action threshold (economic, health or aesthetic)
5. Choose appropriate combination of management tactics *
6. Evaluate results

* Cultural, physical, genetic, biological, chemical, and regulatory
Some Invasive Weeds of Concern

- Hoary Cress
- Russian Knapweed
- Spotted Knapweed
- Diffuse Knapweed
- Yellow Starthistle
- Malta Starthistle
- Dalmatian Toadflax
- Scotch Thistle
- Musk Thistle
- Leafy Spurge
- Cheatgrass
- Buffelgrass
- Camelthorn
- Russian Olive
- Salt Cedar
- Tree of Heaven
- Siberian Elm
Hoary Cress (Whitetop)

*Cardaria draba*
Russian Knapweed
Centaurea repens
Spotted Knapweed
*Centaurea maculosa*
Diffuse Knapweed
Centaurea diffusa
A Comparison of Spotted Knapweed vs Diffuse Knapweed
Yellow Starthistle

*Centaurea solstitialis*
Malta Starthistle
Centaurea melitensis
A Comparison of Yellow Starthistle vs Malta Starthistle
Dalmatian Toadflax

*Linaria genistifolia* ssp. *dalmatica*
Scotch Thistle
Onopordum acanthium
Musk Thistle
*Onopordum acanthium*
Leafy Spurge

*Euphorbia esula*
Buffelgrass
*Pennisetum ciliare*
Cheatgrasses
*Bromus tectorum*
*and others*

Downy brome

Ripgut brome

Downy brome
Camelthorn
Alhagi pseudalhagi
Additional Invasive Woody Plants in Arizona and New Mexico

• Tree of Heaven (*Ailanthus altissima*)
• Russian Olive (*Elaeagnus angustifolia*)
• Salt Cedar (*Tamarix ramosissima*)
• Siberian Elm (*Ulmus pumila*)
What You Can Do

• Learn to recognize noxious weeds so you can help control/contain them

• Collect a sample safely for identification and provide explicit directions (GPS if possible) so it can be located and potentially treated

• Kill Weeds When You Find Them!!!