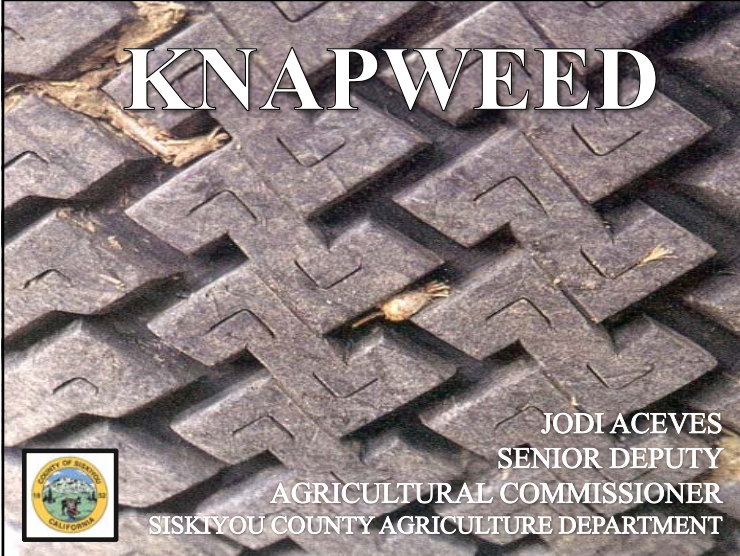



KNAPWEED



JODI ACEVES
 SENIOR DEPUTY
 AGRICULTURAL COMMISSIONER
 SISKIYOU COUNTY AGRICULTURE DEPARTMENT



Prevention!!
The most important link!
You are the most important step in prevention.
You live here, work here and recreate here.....
You are the key to help protect your landscape, rangelands, forests and riparian areas!

Spotted Knapweed

Area of Origin: Europe CDFA Rating: A
 Plant Characteristics: biennial to short lived perennial; stems branching with many urn-shaped flower heads, uncommonly white or yellow; phyllaries spiny at the black tip; leaves resin-dotted.








Spotted knapweed can form huge infestations that impact rangelands and habitat.

Squarrose Knapweed

Area of Origin: Asia, CDFA Rating: A



Plant characteristics:
Perennial with a woody base, sturdy long taproot, highly competitive, dense stands and have allelopathic properties.

Diffuse Knapweed

Area of Origin: Southeastern Eurasia CDFA Rating: A

Plant characteristics: Biennial, forms large, dense infestations, sturdy, long taproot, flowers can be white, pink or pale purple, seeds disperse when stems break off near the ground and tumble along with the wind.



Area of Origin: Central Asia CDFA Rating: A

Extensive dark creeping root system. Allelopathic properties (zinc), aggressive, toxic to horses, drought tolerant, rapidly colonizes disturbed areas.

Russain Knapweed

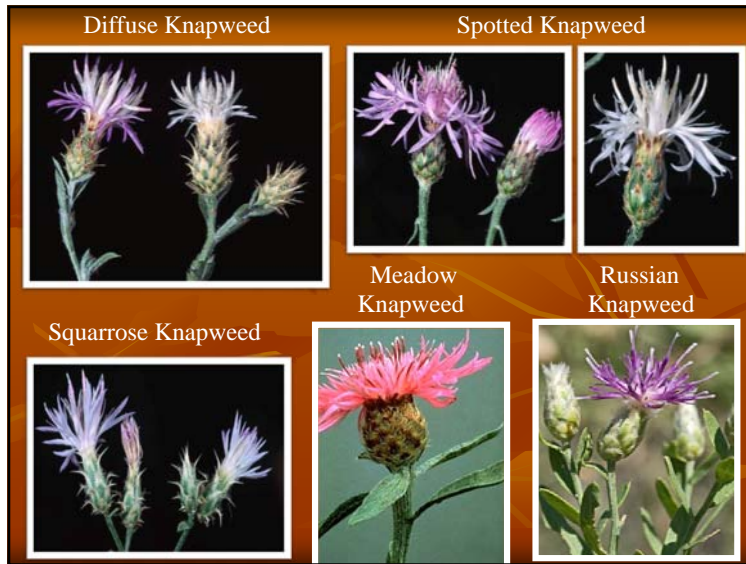


Meadow Knapweed

Area of Origin: Europe CDFA Rating: A

Plant characteristics: biennial to short lived perennial; stems unbranched, flower heads large, rounded; phyllaries brown, fringed at tip, not spiny.





Prevention is the most cost effective treatment!

- Early Detection is the next best!
- IPM (Plant Life Cycle, Accessibility, Population, Land Use, Cost)
- Controls (Mechanical, Cultural, Biological, Herbicides)

Herbicide Treatment

- Early Spring in areas that will be worked multiple times:
 - Rosette Stage: Transline-10 oz and 2,4-D
- Late Spring
 - Bolting, Pre-bud stage: Transline-10 oz, 2,4-D and Adjuvant
 - Bud, Flower stage: Milestone-7 oz, 2,4-D and Adjuvant
- Seed Fill - Late Season
 - Milestone-7 oz, Telar-1oz, 2,4-D and Adjuvant

Biological Control

A close-up photograph of a single purple knapweed flower, showing its numerous thin, radiating petals and a central cluster of developing buds or seeds.



Acknowledgment

Pictures and information in this presentation provided from multiple sources including the following:

- “Weeds of California and Other Western States” by Joseph M. DiTomaso and Evelyn A. Healy
- “Weeds of the West” by the Western Society of Weed Science
- Siskiyou County Department of Agriculture
- Siskiyou County Cooperative Extension Service
- U.S.F.S, Klamath National Forest