## Colorado State Conservation Board 2008 Matching Grants Project: Centennial Conservation District: Diffuse Knapweed Control

## What natural resource problem(s) did the project address?

Noxious weeds threaten the ecological and agricultural value of land. They are non-native species that become very aggressive in taking over land at the expense of other plants. Because they are non-native, they have few natural controls and a low value for native wildlife. By their biological nature they are resilient, fast spreading and difficult to control. This makes early treatment of infestations key to successful and cost-effective control.

In 2006 a severe diffuse knapweed infestation was identified in Logan, Weld and Morgan counties and Centennial Conservation District along with Weld County Pest Control Division set to work to organize efforts and raise funds to combat the infestations. In 2007, Centennial Conservation District secured a CSCB Matching Grant to offer landowner cost-share for treatment of the estimated 8,000 acres of knapweed infestation and 2,788 acres was treated. Noxious weeds generally require a minimum of 3 years of sustained treatment to significantly impact a population followed by ongoing monitoring and spot treatments of regrowth. In 2009 CSCB Matching Grant funds were secured for re-treatment of diffuse knapweed treated in 2008 and for beginning a treatment regime on other areas of infestation.

## What was achieved?

- Monitoring transects showed that areas treated in previous 2 years had 95-100% average reduction in number of diffuse knapweed plants
- 1,936 acres treated in 2009
- Additional acres spot-sprayed by landowners without cost-share assistance
- Priority area for treatment was advancing edge or infestation in order to stop or slow spread and shrink core infested area most effectively from outside edge inwards
- Efficacy of previous 2 years treatments reduced third year treatment on several areas to **spot spraying** instead of whole field spraying indication of real impact and reducing costs for control.



Diffuse knapweed
greens up in March and
eventually reaches 1-3
feet high at maturity.
Once seeding occurs it
dries up and breaks off
to form a
"tumbleweed" that can
roll many miles
scattering up to 18,000
seeds per plant
(Colorado Department
of Agriculture)

