

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 economic value of land. They are non-native species that become very aggressive in taking over land at the expense of other plants (including crops). Because they are non-native, they have few natural controls and a low value for native wildlife. Because they take over land from crops or useful grasses they lower land productivity and eventually agricultural land values. 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 around the town of Stoneham. **Working with the Lower South Platte Cooperative Weed Management Area and County Pest Control Districts, the Centennial Conservation District took the lead to provide education and find funding sources to control the knapweed in this defined area.** Around 8,000 acres of Conservation Reserve Program (CRP) land was suffering from severe infestation and this project provided 50% cost share for treatment with the landowner providing 30% and federal funds 20%. CRP lands are restricted in terms of treatment options and landowners can face higher costs for treatment than on other lands.

What was achieved?

- **Newsletter containing educational information** about diffuse knapweed mailed to 1,100 producers
- Natural Resource Conservation Service (NRCS) **visited specific sites to identify complete treatment area**
- **2,778 acres of diffuse knapweed infestation treated** - focusing on perimeter to maximize control of spread
- Local commercial company - Aero Applicators - **conducted review of acres they had treated** and provided funding to retreat areas as necessary. NRCS also reviewed all treatment sites to monitor treatment success
- **Average of 79% reduction in live knapweed plants** on monitored treated transects
- **Untreated transect demonstrated 77% of rosette stage plants will mature into seed-producing plant** if untreated - even in moderate-severe drought conditions.
- **Future plans** - Centennial District will continue to seek funds for treatment of knapweed on CRP lands and is seeking other fund sources for knapweed control on rangelands in the Stoneham area. The District plans to continue education efforts through landowner workshops, newsletters and field days.



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)

