• Issue 1
• Winter 2009

High Sierra WEEDS

Sierra Valley Resource Conservation District
and the
Upper Feather River Watershed Group

Welcome!

Welcome to the first issue of High Sierra Weeds. This newsletter's purpose is to inform landowners about the thorny, seedy and prolific plants we call noxious weeds.

You may wonder why people should care about noxious weeds. Well, don't get us started.

Noxious weeds put a big dent in our nation's pocketbook. Invasive weeds in pastures and farmland alone cost the US about **$33 billion** per year.

On a note closer to home, noxious weeds can drastically reduce the **value of your land**, and they do a fine job of crowding out crops and rangeland forage. Some weeds are even toxic to livestock.

And that's not to mention their effect on **wildlife and game species**. Noxious weeds degrade wildlife habitat and put stress on native species.

You can look forward to reading High Sierra Weeds twice a year, courtesy of the Serra Valley Resource Conservation District and the Upper Feather River Watershed Group. The SVRCD has been working with landowners to manage invasive weeds in Sierra Valley for the past 3 years.

Photo by Gabe Miller

The SVRCD spray rig in Sierra Valley

Our hope is that this newsletter will give landowners in Plumas and Sierra Counties the information and tools they need to nip weed problems in the bud (pun intended), and preserve agriculture viability in our region.

Featured Weed: Tall Whitetop

aka: perennial pepperweed

Tall whitetop is one of the worst weedy scourges of the west. Originally from Europe and Asia, tall whitetop is doing a bang up job of infesting rangeland, grass pasture, hay and row crops, and riparian areas across California.

A tall whitetop problem can be overwhelming, but tackling the weeds right away is the best way to get results. Without treatment, a small patch of tall whitetop can quickly turn into a thick mass of weeds, requiring a hefty investment in money and labor.

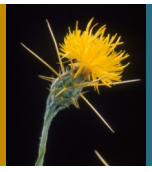
HABITAT: Tall whitetop grows best in seasonally wet areas like ditches and stream sides, though it also invades dry areas.

ID: Leaves are 6 or more inches long and up to 2 inches wide. Basal leaves are larger than the stem leaves. The stems and leaves have a waxy coating, making it hard for herbicides to stick.

Photo courtesy of Richard Old, www.xidservices.com

A tall whitetop flower

In This Issue:



Coming Next Issue:
Yellow Starthistle - how to treat it and beat it!

Some New Faces at the Plumas Sierra Co. Department of Agriculture

The County Ag Department has undergone some changes the past year. Pictured from left to right is Andrea Oilar, Weed Technician, Tim Gibson, Ag Inspector, Melissa Nisbet, Administrative Assistant, and Keith Mahan, Ag Commissioner/Sealer.

Andrea started work last July and has already killed a fair share of noxious weeds. Melissa came on January last year and has gotten the department organized again. Tim has been around forever and provides the institutional knowledge. Keith hired on at the end of November and comes with lots of experience from Stanislaus and Merced Counties.

The County team looks forward to eradicating and controlling weeds in 2009.

Tall Whitetop, *continued*

Roots: Tall whitetop has deep and widely spreading roots, little pieces of which can start a new plant.

Flowers: The white flowers are small, numerous, and fragrant.

Height: Stems grow 2 to 6 or more feet high, and plants often form a thick monoculture.

Seeds: The seeds are tiny and are produced in abundance.

Mechanical Control: Discing and plowing aren't usually effective because they fragment roots, making stands thicker. Pulling small patches of tall whitetop can be successful. Pulling is most effective in areas where soil is loose and large portions of the roots can be removed. Winter burning and grazing can also be helpful for removing thatch and allowing for revegetation.

Chemical Control: Herbicide is a common treatment for tall whitetop. Talk to your local Ag. Department or Cooperative Extension office to determine which herbicide is best for your situation. Some herbicides are more effective when applied in the fall after summer mowing.

Multi-Year Treatment: Most methods of treating tall whitetop require 3 to 5 consecutive years in order to be effective.

Photo by the Bureau of Land Management

A tall whitetop infestation.

Revegetation: Establishing desirable vegetation is an important step in tall whitetop control. No-till seeding of native perennial bunch grasses can be an effective follow-up to treatment, and provides competition so further infestations are less likely.

Get the Facts:

A Seedy Character: A thick infestation of tall whitetop has been estimated to produce over 6 billion seeds per acre.

Lurking Below the Surface: Perennial roots can remain dormant in the soil for several years, which is why monitoring, early detection and removal are the best ways to control tall white top.

Spreading Out: Roots spread laterally from the parent plant up to 10 feet per year.

Not Worth its Salt: Plants act as "salt pumps," taking salt ions from deep in the soil and transporting them to the soil surface, eventually making the landscape uninhabitable for other species.

Wayward Water Travelers

For centuries humans have grappled with pollutants that botch water quality. Sediment, human waste, oil spills, and chemicals have all worked havoc on the health of waterways.

Well watch out because now there's a new contaminant in town:

biological pollutants

Yes, noxious weeds are considered biological pollutants of our ecosystems. But unlike other pollutants, which can often be stopped at their source, noxious weeds spread on their own accord once they're released. Proliferating across the landscape, they conjure images of classic horror film characters terrorizing the countryside.

Waterways quickly carry noxious weed pollutants down stream. Whether seeds and root fragments flow to the ranch next door or all the way down to the Sacramento Valley, these travelers are sure to be unwelcome guests.

Once established, the noxious invaders can limit wildlife habitat, spread into neighboring agricultural land, and choke out riparian plant species. When weeds displace natives in riparian areas the likelihood of flooding and erosion is increased. Sediment lowers water quality, and the erosion enables even more invasive species to take root.

Tools for treating noxious weeds near waterways include goat grazing, hand pulling, and herbicide application. Check with the local ag department to find out what herbicides are safe to use near waterways. Contact the SVRCD for referral to goat grazing resources.

An Ounce of Prevention is Worth a Pound of... *Herbicide*

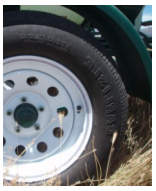
Prevention is by far the easiest and cheapest weed management strategy. Treating an established weed population can cost hundreds of dollars per acre, and require multiple years of treatment. Use these tips to prevent weeds from coming onto your property… and to save a lot of time and cash.

Know your Enemy

Learn to identify noxious weeds. Know how they grow, how they spread, and how to manage them if you do get an infestation.

Watch for Invaders

Prevent weed seeds from entering your property by inspecting all hay, gravel and fill dirt (at their source, if possible) that come onto your property.



Prevent Spread

Avoid moving equipment and vehicles from weed-contaminated sites to non-contaminated sites. Wash equipment in a staging area before moving between sites. Limit activity in weedy areas to times when the spread of seed is least likely, such as before seed development.

Encourage Natives

Minimize disturbance of native vegetation along roads, trails and waterways. Revegetate disturbed soil with desirable plants. Remember, weeds love bare soil, so give them some competition.

Keep an Eye on 'Em

Monitor disturbed sites for 3 to 5 years. Look for weeds in areas where hay or gravel have been brought onto your property, or areas with lots of foot or equipment traffic.

If you do Find Weeds

Kill any new weeds before they set seed. Eradicate small patches of weeds as soon as possible. Reseed with desirable plants to discourage weeds from sprouting.

Resources:

Plumas-Sierra Co. Department of Agriculture weed information brochures
http://www.countyofplumas.com/agcomm/index.htm

CA Department of Food and Agriculture Encycloweedia
http://www.cdfa.ca.gov/phpps/ipc/encycloweedia/encycloweedia_hp.htm

HIGH SIERRA WEEDS

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The Sierra Valley Resource Conservation District (SVRCD) has been coordinating local conservation and restoration programs since 1947.

One of the SVRCD's current projects involves mapping locations of tall white top in the Sierra Valley area in an effort to better monitor and treat existing populations. Look for more information on this project in the Spring/Summer issue of High Sierra Weeds.

Have a weed success story that you'd like to share? Tell the SVRCD about it!

Upper Feather River
Watershed Group

PO Box 975
Loyalton, CA 96118
Website: www.ufrwg.org

The UFRWG is a nonprofit group of agriculture interests and operators in the upper feather river watershed region including Sierra Valley, American Valley, Indian Valley, Mohawk Valley and other areas of Plumas and Sierra Counties.

The UFRWG offers individual irrigators and operators the opportunity to work together as a coalition to address water quality issues pertaining to agricultural discharges. The group works closely with the Plumas-Sierra Co. UC Davis Coop Extension to monitor area creeks and streams to determine the effects, if any, of local agriculture and rural communities on waters flowing into the Feather River tributaries.

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