

• Issue 2
• Summer
2009

High Sierra

WEEDS

Sierra Valley
Resource Conservation District



Wisdom from the Field: a landowner's success story

Many years ago Dave Goicoechea noticed an unfamiliar plant growing on his property. To his dismay it was identified as the terrible noxious weed, Leafy Spurge. Now, after a decade of diligently treating the infestation, Dave can say with confidence that he's got the weed beat.

When the Goicoecheas first noticed the plant it only covered about 16 square feet. By the second year it had doubled in size and the Goicoecheas knew they had a weed problem on their hands

The family enlisted the help of

Tim Gibson of the Plumas-Sierra County Department of Agriculture in identifying and treating the Leafy Spurge. The two have worked closely together over the past decade to control the population.

Gibson gives Goicoechea much of the credit, saying that his willingness to monitor the population and work with the Department of Agriculture made all the difference. Likewise, Goicoechea is grateful for the assistance he received. "It goes to the point that I couldn't have done it by myself."

It's no small feat to control Leafy Spurge. The plant has a root system too deep to dig, and a milky sap that burns the skin of humans and livestock alike. It takes repeated yearly doses of a strong herbicide to kill it. Gibson related that other areas, like the Dakotas, have lost thousands of acres to Leafy Spurge. Luckily this was the only infestation that has been documented in Plumas and Sierra Counties, though there are a few other populations in California.

Goicoechea advises other

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Featured Weed: Yellow Starthistle

Centaurea solstitialis

Yellow Starthistle (YST) is a common sight in agricultural lands, back yards and wildlife habitat across the US. Though it has spread to almost every state in the country, and nearly every county in California, all hope isn't lost for the Sierras. Local populations of YST can be controlled by landowners who arm themselves with a little knowledge and persistence.

Habitat: YST prefers well drained soil, full sunlight, and hot, dry summers. The species takes root most easily in disturbed areas.

ID: Seedlings grow in rosettes with deeply lobed leaves. Mature plants stand rigidly upright and are covered with cottony grayish hairs. Plants are 6 inches to 5 feet in height.



Yellow Starthistle flower

Flowers: Flowers have a yellow tuft of petals, skirted by unmistakably sharp spines. Not sure it's YST? Just walk through a flowering patch in shorts... you'll know.

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Coming Next Issue:

WATER WARS—
how noxious weeds
affect our watersheds

Wisdom from the Field, *continued*

landowners to pay close attention to new plants in their fields and get help identifying anything they don't recognize. "If you've been fortunate enough to not have a weed, I can almost guarantee that you will have one," he paused, "Or you just haven't looked close enough."

He also recommends being particularly watchful of areas where equipment or hay has been, as they're often transporters of weed seed.

"Don't rely on somebody else to take care of your problems. Spray

and go away doesn't work on these worst plants," says Goicoechea.

Goicoechea showed his family how to identify Leafy Spurge so they could all keep an eye out for it. In addition to herbicide treatment they pulled plants to prevent them from setting seed.

At its peak the infestation covered an area of 1600 square feet, and it would have spread more had the family let it.

"It's a terrible, terrible plant and I'm afraid it's lurking somewhere in

somebody's field." If you have a weed problem, Goicoechea highly recommends contacting the local Department of Agriculture. "When you ask them for help, they're there. It's the kind of working relationship you want."

See page 3 for Leafy Spurge identification info.

The Plumas-Sierra County Department of Agriculture can be reached at (530) 283-6365.

Yellow Starthistle, *continued*

Roots: YST's taproot grows 3 or more feet into the soil, accessing groundwater late into the season.

Seeds: A large plant can produce over 100,000 seeds in one season.

Spread: Vehicles and contaminated hay are YST's main mode of transportation. Smaller amounts of seed hitch rides on humans and animals, while wind moves seed only a few feet at a time.

Mechanical Control: Small populations can be controlled by pulling, hoeing and digging plants before they flower. Mowing and targeted goat grazing as plants begin to flower

can be used to reduce canopy, plant density and seed production. These treatments can stimulate branching and increased flower production if used too early in the season.

Chemical: Many herbicides are available to treat YST. Contact the local Department of Agriculture to determine the best plan for your site. Correct timing and rate of application are important for success.

Biological: The bud weevil, hairy weevil, gallfly and flower weevil have all been released locally to control YST. The larvae of these insects feed on the weeds' flower heads and reduce seed production.



Yellow Starthistle seedling

Photo courtesy of Dan Sharratt, Oregon Dept. of Agriculture

Cultural: Establishing healthy, desirable plant communities can help prevent YST from taking root. Young plants don't like shade, and won't thrive under a canopy of shrubs, trees or tall perennial plants.

DIGGING IN: Starthistle roots grow up to 1 inch per day during spring months, establishing a taproot that slurps groundwater long after the spring rains stop.

PERENNIALS COMPETITORS: Perennial grasses have an extended growing season and are better Yellow Starthistle competitors than annual grasses.

NEVER SAY DIE: Seeds can stay viable in the soil for three years, sometimes longer.

BITTER SWEET: Yellow Starthistle is considered an important forage plant for honeybees in California.

Do you use Protection?

If you decide to use herbicide as a tool for weed control, play it safe and protect yourself, your workers and your family from exposure.

COVER UP

Read your herbicide's label. It will tell you what kind of equipment you need. At minimum, always suit up with the following:

- Long sleeve shirt and pants
- Chemical resistant gloves that are unlined & cover your forearm
- Eye protection like safety goggles

Check the label to see if you need rubber boots, face shield, dust mask or a respirator.

PLAY IT SAFE

- Wash gloves often and replace if damaged
- Tuck sleeves into gloves and pant legs into boots
- Wash hands before digging into lunch, lighting a cigarette, or using the john
- Use the recommended amount of herbicide, never more than the label recommends (it's not only wasteful, it's illegal).

CLEAN IT UP

- Wash gloves and boots before removing them, if possible
- Put all clothes in a plastic bag, and wash your hands, arms and face after handling them
- Take a shower
- Wash clothing in hot water & soap, separate from the family laundry
- Run a second load with only hot water and detergent to clean the machine

PURGE THE SPURGE

One Leafy Spurge infestation has been documented—and controlled—in Sierra County. If it can happen once, it can (and likely will) happen again. Arm yourself with the facts so you can quickly identify this tenacious weed.

PLANT

Leafy spurge (*Euphorbia esula*) is a perennial that grows to 3 feet. Leaves are lance-like up to 4 inches. Plant contains milky sap that's toxic to humans and livestock.



Photo courtesy of Kristian Peters

ROOTS

Vigorous root systems. Horizontal roots produce pink buds from which new shoots develop. Vertical roots can grow more than 15 feet deep.



Steve Dewey, Utah State Univ., Bugwood.org

UGA1459608

FLOWERS & SEEDS

Flowers are yellow-green, 1/8 inch, and grow in many small clusters surrounded by heart shaped bracts. Mature seed capsules eject seeds up to 15 feet from the parent plant.



Idaho Weed Awareness Campaign



Steve Dewey, Utah State Univ., Bugwood.org

UGA1624003

SPREAD

New populations are established through spread of seeds and root fragments. Infestation can reduce livestock carrying capacity of pasture and rangeland by 20 to 75%.

HIGH SIERRA WEEDS



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CARTOONS GONE NOXIOUS



The **NOXIOUS 8** are a mean cast of characters. Bugs Bunny wouldn't stand a chance against these guys.

The Feather River and Sierra Valley RCD's partnered up with local artist Scott Cash to produce these fearsome weed cartoons designed to teach the kiddies about local invaders.

These deviants can be found in poster form as well as in an educational booklet complete with ID and habitat information.

For print copies call the Ag Department at 530 283-6365. For digital copies call the SVRCD at 530-993-4580 or the FRRCD at 530-283-7512.



This newsletter is sponsored by the Upper Feather River Watershed Group, a nonprofit group of agriculture interests and operators in the upper feather river watershed region.

To learn more visit www.ufrwg.org

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Save the Date:
Sustainable Agriculture Workshop - *farming & ranching for the future*
September 25, 2009 Taylorsville Grange 9AM—4:30 PM

To register call
the Feather River
Land Trust at
530-283-5758