

United States Department of Agriculture



2003 Nevada State Story

USDA Natural Resources Conservation Service



Our Mission

To provide leadership in a partnership effort to help people conserve, maintain and improve our natural resources and environment.

NRCS Helps Battle Noxious/Invasive Weeds in Nevada

NRCS is proud to be an active partner in the battle against noxious and invasive weed species in Nevada. Besides our deep commitment to apply integrated pest management to private lands in Nevada through NRCS programs, our activities extend to active participation with the Nevada Weed Action Committee and the Nevada Weed Management Association, support of Cooperative Weed Management Areas (CWMA), and maintaining the Nevada Noxious Weed Geographic Information System (GIS). Our employees are working with the Nevada Department of Agriculture, University of Nevada Cooperative Extension, federal and state agencies, counties, municipalities, private landowners, and others to wage the war on weeds.

The Nevada Weed Action Committee was formed to help coordinate activities surrounding the noxious weed problem in the state. Its accomplishments include the development and maintenance of the State Weed Plan which guides the state noxious weed effort in areas of weed management, education and awareness, noxious weed mapping, coordination and cooperation, and research. The Nevada Weed Management Association provides a forum each year for participants to report on accomplishments and research efforts, to learn from experts in the field, and

to network with colleagues and develop new professional relationships.

NRCS staff and conservation district members have participated in the formation and on-going activities of CWMA's. The CWMA effort brings the noxious weed problem to the local level, as local agencies and private citizens come together to develop action plans to guide them in control activities, thus creating local solutions for local problems.

The NRCS developed the Nevada Noxious Weed GIS in 1999 and continues to manage it. The challenges of developing and implementing standards, normalizing submitted data to the data model, and providing training to a wide spectrum of field workers continue to be met as we enter its fifth successful year. The GIS is an integral part of the state strategy for combating noxious weeds. Its products provide support to the education and awareness effort. They help us gauge progress on control efforts and they help us show the spatial and temporal spread of noxious weed species. Further, the GIS allows us to respond rapidly to queries from researchers and other interested parties regarding the status of noxious weeds in Nevada.

—Dave Pickel

NRCS and Conservation District Help Farmers Conserve Water

More than 100 farmers, ranchers and high school students watched a ditch lining demonstration at the Churchill County Fairgrounds/Agricultural Service Center complex in September. Three different synthetic ditch lining materials were used, and representatives from the three companies, Huesker Inc., Firestone, and Siplast, were on hand to demonstrate how to install the materials, answer questions and offer technical expertise. Resource

specialists from the Natural Resources Conservation Service were also there to answer questions on improving irrigation water efficiency and cost share assistance that is available through the 2002 Farm Bill.

In addition to saving water, the new liners cost approximately 30-50 percent less than concrete to install and are guaranteed to last 20 years. Delivery efficiency is improved and the smooth lining reduces friction losses through the ditch. The rubber liners can be installed in existing earthen or concrete ditches, or can be used to patch and repair ditches. The liners also reduce the maintenance requirements for weeds and vegetation along delivery ditches.

The synthetic materials are designed to meet NRCS standards and specifications, and are eligible for USDA conservation program

cost share through the Environmental Quality Incentives Program or the Agricultural Management Assistance Program.

The Lahontan Conservation District, as part of its on-going water conservation program, sponsored the project to demonstrate how the synthetic liners compare to earthen and concrete ditches. District and NRCS personnel will monitor the project over the next several years.

Several organizations and agencies help cosponsor the demonstration project, including Churchill County, Churchill County Parks and Recreation Department, and the Bureau of Reclamation.



—Rod Dahl

SEARCH AND DESTROY MISSION — GOATS ATTACK TAMARISK ON THE WALKER RIVER PAIUTE TRIBE RESERVATION

The Walker River Paiute Tribe is trying out an experimental method of eradicating tamarisk on their reservation. The tribe has been battling tamarisk for decades, putting everything from machines to insects to the task, without much luck. So far, it seems they may have found the best control in a herd of goats.

Tamarisk, or salt cedar, is one of the largest noxious weeds in the West. It is not a native plant, but it has adapted well to Nevada's desert climate. One tree can use up to 200 gallons of water per day. It is a deep-rooted plant that pulls salts out of the soil and exudes it out of its leaves, so nothing else can grow around it. For the Tribe's grazing land, that is bad news.

Chuck O'Rourke with the Bureau of Indian Affairs, and NRCS's Ed Biggs and Tracey Jean Wolfe, joined the battle to help the Tribe combat the weed and restore native vegetation. Wolfe developed a conservation plan outlining the steps to follow, and O'Rourke was successful in obtaining funding to pay for the goats.

Goats have been used successfully on other weeds in the western U.S. Several years ago, one canyon in Idaho could feed 250 cows per month before leafy spurge was found. Leafy spurge crowded out the native grasses and reduced the grazing capacity to 12 cows per month. Chemicals were sprayed on the land, costing \$150 per acre. The spray killed the leafy spurge as well as every broadleaf plant growing in the area. "When we looked at the canyon, the leafy spurge was four feet tall. The only animals living in it were snakes, mice and skunks. There were no deer or anything else," said Hugh Bunten of Lakeview, Ore. Bunten set up a grazing plan with the Idaho Resource Conservation District and other government agencies. The new technique he was pioneering worked—the goats stayed in their herd, they ate the leafy spurge and, within three years of return visits, had almost cleared the canyon of the noxious weeds.

In addition, the goat's digestive system kills the seeds of the plants that are eaten, so the germination from seed is greatly reduced. "We go back each year, but now we need only a handful of goats. They have become addicted to the leafy spurge. When turned loose, they mount a regular search and destroy attack on the few remaining noxious plants," Bunten said.

The Walker River Tribe is counting on this same success for their land. About 600 goats were brought in and temporary fences were put up to keep the goats in a confined area about 3 acres in size. Once the goats have done their job attacking the tamarisk in that area, they are moved to another area. About 3,000 acres of tamarisk will be treated. So far, they have done a remarkable job stripping the leaves off of the tamarisk and gnawing at the trunks.

The goats will be brought back next summer for the next treatment. Before that, however, the area will be seeded with native grasses and forbs. Then, the goats will trample the seed into the ground and fertilize it while they are attacking the tamarisk.

If everything goes as hoped, a third treatment won't be needed.

—Cub Wolfe



SOIL SURVEYS STILL PROVIDE VALUABLE INFORMATION

Continuing the legacy started by Lewis and Clark in the 1800's, NRCS soil scientists continue to map and update soils across Nevada. This year, 435,000 acres of initial soil survey were completed and mapping on 230,000 acres was updated. Field mapping was completed for the White Pine County (East Part) Soil Survey, and mapping is being conducted in Clark and Lincoln Counties. Update mapping is being done in Douglas County, Fallon-Fernley Area, Lovelock Area, Surprise Valley-Home Camp, and Virgin River Area.

Soil surveys have been published and are available in 38 of the 49 soil survey areas of Nevada. The soil survey for the southwest part of Nye County will be published in a few months. So far, 43 of Nevada's surveys have been digitized and certified.

The Nevada NRCS State Office houses one of the nation's eighteen Major Land Resource Region Offices and one of six national Digital Map Finishing Sites for the agency. Although physically housed in Nevada, these employees have multi-state responsibilities specific to the Soil Survey Program. The Major Land Resource Region Offices, referred to as MO offices, service areas with similar ecological properties. For example, the Nevada MO office covers the Northern Basin and Range Region which includes Northeastern California, Southeastern Oregon, Southwestern Idaho, Western Utah, and most of Nevada. The MO office has a leader, three soil data quality specialists, an editorial assistant, and a GIS Specialist to guide the entire soil mapping process, from the field work to publishing the soil survey.

The Digital Map Finishing Office utilizes numerous types of geospatial technology to compile the soils information into a digital format. This team, made up of two cartographic technicians and four part-time students, prepares maps for eight states: Nevada, California, Utah, Arizona, Kansas, Colorado, Wyoming, and Nebraska.

The U.S. Department of Agriculture, in cooperation with State agricultural experiment stations and other Federal and State agencies, has been making soil surveys and publishing them since 1899.

—Bill Dollarhide



2002 Farm Bill Programs

The 2002 Farm Bill provides farmers and ranchers with more incentives than ever before to voluntarily conserve natural resources on their land. The conservation provisions will help reduce erosion, protect streams and rivers, and restore and establish wildlife habitat. In Nevada, the following programs have benefited landowners, people in Nevada, and the environment:



Environmental Quality Incentives Program (EQIP)

Improves water quality and quantity and protects endangered species

144 applications received

115 contracts approved for \$3,966,694

9 contracts over \$100,000, primarily water quantity projects addressing water savings and effects of long term drought

21 Native American contracts approved for \$457,170



Ground and Surface Water

5 contracts approved for \$655,400



Wildlife Habitat Incentive Program (WHIP)

Develops and improves fish and wildlife habitat

28 applications

7 contracts awarded for \$108,469

21 backlogged contracts amounting to \$272,402

123 acres of wetland projects

525 acres of upland habitat - sage grouse habitat restoration, species of concern



Grasslands Reserve Program (GRP)

Restores and protects grassland including rangeland and pastureland

1 contract awarded for \$39,400

—Peggy Hughes