



2020 Annual Report

What was relevant then, is just as relevant now.



**Nevada County
RESOURCE CONSERVATION DISTRICT**

Your Partner in Local Conservation and Agriculture

Nevada County Resource Conservation District

2020 ANNUAL REPORT

The year 2020 was less productive than usual for the NCRCD. During the first few weeks of the COVID-19 pandemic, with fervent hopes that it would be over soon, staff responded to the Governor's March 19 stay-at-home order by working from home and attending meetings via Zoom.



Unfortunately, it would soon become evident that the efficacy of working from home, and our hopes for a speedy return to societal normalcy, were not to be. So, with safety measures firmly in place, staff returned to the office to resume business and evaluate which of our programs and events could be salvaged while complying with COVID-19 pandemic orders and laws. While most of our seminars and events could not be offered to the community, we were able to continue serving the community by safely partnering with other organizations in smaller, but still valuable, ways.

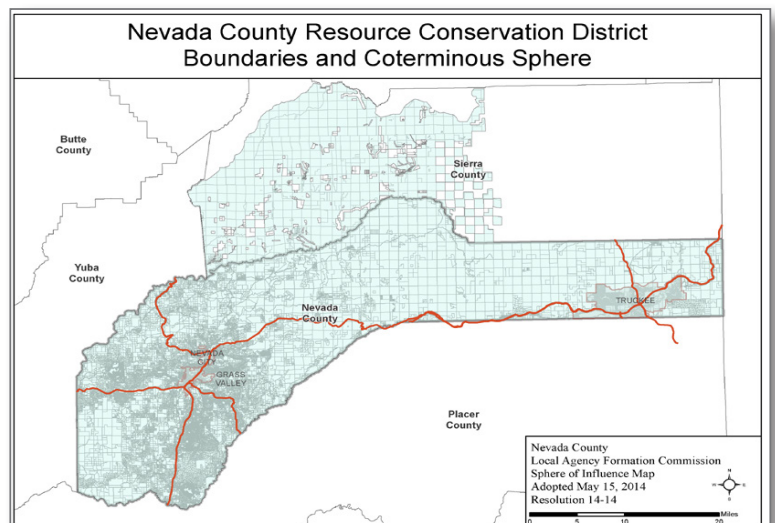


In this 2020 Annual Report, you will find a little history on the NCRCD, how RCDs and NRCS began, a few of the endeavors we were able to accomplish, and an update on what our partners at the Natural Resources Conservation Service (NRCS) were able to contribute to the community. Alone, we wouldn't have been able to achieve very much, but together with our partner organizations, we were able to achieve much more. ■

NEVADA COUNTY RCD

The Nevada County Resource Conservation District (NCRCD) was founded on November 13, 1943 with a mission to promote responsible natural resource management within our jurisdiction. The NCRCD is a state mandated Special District that is neither a regulatory authority nor a county entity. We are a "political subdivision" of the State of California (under California Public Resources Code, Division Nine, Section 9003), not funded by the state, and required to pay state sales tax. We are a not-for-profit, federally tax-exempt organization under Section 170(c)(1) of the Internal Revenue Service code and can accept donations as tax-free contributions. We receive a small percentage of revenue from property taxes of Nevada County residents. We are governed by a board of 5 local landowners who provide input for local resource management and are appointed by the Nevada County Board of Supervisors.

The NCRCD is housed with the USDA Natural Resources Conservation Service (NRCS). We partner with the NRCS to assist landowners and land managers in improving and conserving their land. The NCRCD and the NRCS provide technical assistance regarding issues that include erosion control, pond management, invasive weed control, fuels management, wildlife habitat improvement, and pasture, rangeland, orchard and vineyard management. ■



Natural Resources Conservation Service

NRCS 2020

The USDA Natural Resources Conservation Service (NRCS) has been providing technical conservation assistance to private landowners since 1935. The Environmental Quality Incentives Program (EQIP) is a cost-share program administered by NRCS that provides financial and technical assistance to install conservation practices that address natural resource concerns. It was first authorized in the 1996 Farm Bill and has been reauthorized and modified in each subsequent farm bill since then.

In 2020, the conservationists in the NRCS' Grass Valley field office provided conservation planning to 28 Nevada County landowners who wanted to make conservation improvements to their land. Through the EQIP cost-share program, our office obligated \$1,336,580 for 21 forestland

projects (which included 2 tree mortality-based projects), 4 pasture projects, and 1 cropland project.

And sadly, we had to say our goodbyes to Josue Gandia-Rivera, who moved to North Carolina with his family to join an NRCS office closer to his family in Puerto Rico, and Marcoantonio Salazar who moved to the NRCS Bakersfield office. However, we have since welcomed a replacement for our open Point Blue position (Maddison Easley) and our new engineer (Kristin Perano). Both women are stationed here in our Grass Valley office, but Kristy will be splitting her time with the Auburn office. A very busy and productive year despite the COVID-19 complexities! ■



MADDISON EASLEY



KRISTIN PERANO



Maddison Easley joined the NRCS' Grass Valley field office as a Point Blue/NRCS Working Lands Partner Biologist in September 2020. Maddison grew up in Nevada County on her family's historic ranch off of North Bloomfield Road above Nevada City. After graduating from Cal Poly in San Luis Obispo with a bachelor's degree in Agricultural Science and a minor in Rangeland Management, she worked at UC ANR's Sierra Foothill Research and Extension Center and the Placer County Resource Conservation District. Professional interests include rangeland management, invasive species ecology/control, prescribed grazing, forestry, prescribed fire, wildlife habitat enhancements, and overall conservation of working lands. Personal passions include helping on the family ranch, enjoying locally grown/produced food, learning about birds/wildlife, hunting, fishing, hiking, traveling, and anything outdoors.

Maddi enjoys seeing, meeting, and working with all land stewards in Nevada County! You can reach her at (530) 798-5528, maddison.easley@usda.gov, or measley@pointblue.org.

Kristin Perano is the new Civil/Agricultural Engineer with the Natural Resources Conservation Services' Nevada and Placer counties offices. She graduated from UC Davis with a major in Biological Systems Engineering and a minor in Animal Science Livestock and Dairy Production in 2012. She then attended Cornell University where she earned her Master's and PhD degrees in Biological and Environmental Engineering. Kristy's thesis for her PhD focused on conductive cooling systems for dairy cattle, specifically the production benefits, moisture accumulation, and heat flow in a cooling system that circulates chilled water through cows' mats to relieve heat stress.

Kristy also contributed to research projects on ventilation systems, computational fluid dynamics, and bioenergetic modeling for dairy cattle while at Cornell. Kristy is originally from Jackson, CA where she grew up on a cattle ranch that has been in the family for five generations. In her free time, she enjoys outdoor activities such as helping on the family ranch, gardening, hiking, and cross-country skiing. She can be reached at (530) 798-5538 or kristen.perano@usda.gov.

How It All Began

The Homestead Act, passed May 20, 1862, accelerated the settlement of the western territory of the United States by granting any adult citizen, who had never borne arms against the U.S. Government, a claim of 160 acres of surveyed public land. Claimants were required to “improve” the plot by building a dwelling and cultivating the land for a minimal filing fee and 5 years of continuous residence on that land. After 5 years on the land, the original filer was entitled to the property, free and clear, except for a small registration fee. The Homestead Act was followed by the Kinkaid Act of 1904 and the Enlarged Homestead Act of 1909. These three Acts led to a massive influx of new and inexperienced farmers across the Great Plains.



Now, at this point in time, the land of the Great Plains had been covered by miles upon miles of prairie grass. But when waves of new migrants and immigrants reached the Great Plains, they greatly increased the acreage under cultivation. Widespread conversion of the land by deep plowing and other soil preparation methods to enable agriculture ended up eliminating the native grasses which held the soil in place and helped retain moisture during dry periods. An unusually wet period on the Great Plains mistakenly led settlers and the federal government to believe that “rain follows the plow” (a popular phrase of the time among real estate promoters) and that the climate of the region had changed permanently.



Initial agricultural endeavors were primarily cattle ranching, but the adverse effect of harsh winters on the cattle led many landowners to increase the amount of land under cultivation.

The United States’ entry into World War I in 1917 created a huge demand for wheat. Farmers began to push their fields to their limit, plowing under more and more grassland with the newly invented tractor, which chewed up huge amounts of land at unheard of rates as compared to what the horse drawn plows had been able to manage.



Then in 1931 a severe drought hit the mid-west and southern plains states. The drought is the worst ever in United States history, covering more than 75 percent of the country and affecting 27 states severely. As those crops died, the “black blizzards” began. Dust from the over-plowed and over-grazed land began to be blown.



On May 11th, 1934, a massive dust storm two miles high sent millions of tons of topsoil flying 2,000 miles toward the East Coast right over Washington, D.C., and 300 miles out into the Atlantic Ocean. Approximately 35 million acres of formerly cultivated land had essentially been destroyed for crop production, one hundred million acres of crops had lost all or most of their topsoil, and another 125 million acres of land were rapidly losing their topsoil.

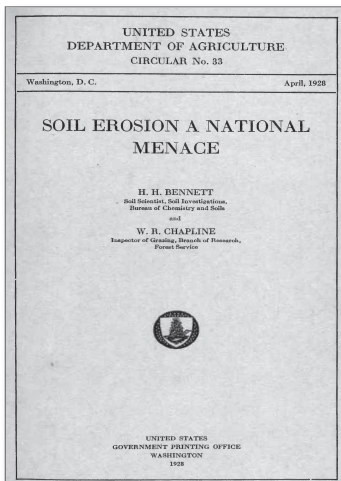


History of RCDs & the NRCS

One man, Hugh Hammond Bennett the “father of Soil Conservation”, became aware of the threat posed by the erosion of soils early in his career as a surveyor for the USDA Bureau of Soils. He observed how soil erosion by water and wind reduced the ability of the land to sustain agricultural productivity and to support rural communities who depended on it for their livelihoods. He launched a public crusade of writing and speaking about the soil erosion crisis. His highly influential publication “Soil Erosion: A National Menace” influenced Congress to create the first federal soil erosion experiment stations and demonstration projects in critically eroded areas across the country to show landowners the benefits of conservation.



In 1935 Congress passed Public Law 74-46, in which it recognized that “the wastage of soil and moisture resources on farm, grazing, and forest lands . . . is a menace to the national welfare,” and it directed the Secretary of Agriculture to establish the Soil Conservation Service (now called the Natural Resources Conservation Service or NRCS) as a permanent agency in the USDA. Hugh Hammond Bennett was their first Chief. But by this time, the damage had been done. By 1936, 850 million tons of topsoil had been blown off the southern plains.



Soil conservation laws enacted in 1937 allowed farmers to set up their own local districts, controlled by local boards of directors, and empowered to manage soil and water resources for the purpose of conservation. Until the formation of these Soil Conservation Districts (now called **Resource Conservation Districts or RCDs**), there was no organized mechanism for disseminating resource conservation information, expertise, and assistance. Farmers and ranchers often had no way of reaching SCS scientists for soil and water conservation information or methods. One of the few grassroots organizations set up by the New Deal still in operation today, the soil conservation district program recognized that new farming methods needed to be tested, accepted, and enforced by the farmers working the land rather than scientists in Washington.



RCDs continue to sponsor educational efforts to teach children and adults alike the importance of conserving resources. Though there are growing contributions by other groups and organizations in communities that raise public awareness of resource conservation, **RCDs** remain one of the primary links between local people and the government on issues related to conservation.



It took a crisis of national proportions, the Dust Bowl, to bring this about. Farmers and ranchers still need up-to-date scientific information and techniques to manage the natural resources on their properties, and the need for ongoing conservation education and assistance among all sectors of the public is as great or greater than it ever has been. ■

Grant Writing Workshop

The NCRCD, in partnership with Sierra Nevada Conservancy, offered an intensive 2-day grant writing workshop to members of the community who were interested in learning how to write a successful grant request. The content and presentation for the workshop were provided by Elissa Brown with Sierra Nevada Conservancy.



Elissa was a wonderful instructor, and the workshop was full of helpful instruction, tips and tricks, and the realities of the grant writing process. It was very interactive and gave participants an opportunity for one-on-one time as well as to share and collaborate with others in the group. We were really excited to see the interest in this topic and to be able to help so many people in the community. ■



Senior Firewood Program

The Gold Country Community Services' Senior Firewood Program (SFP) is local natural resource conservation at its best. Local landowners who are reducing wildfire fuels on their property by removing downed trees, removing trees for defensible space, thinning trees for forest health, and removing dead or hazardous trees will save money, use less fuel, and reduce their catastrophic wildfire risk by donating those trees to the SFP.



In support of this concept, the NCRCD donated \$3,000 to the SFP to purchase an additional wood splitter for the program. This donation will help to support community-wide wildfire preparedness, reduce methane emissions, and supply our low-income seniors - whose only source of heat is wood-heat - with the firewood they need to warm their homes.

Wood — unlike oil, coal, and natural gas — is not considered a fossil fuel. Burning dry or “seasoned” wood produces less greenhouse effect than letting it rot in the forest. A dead tree left to rot (whether standing or down) produces methane, a potent greenhouse gas; whereas burning wood releases CO₂, a much less potent greenhouse gas. Seasoned firewood is clean-burning, carbon neutral, and doesn't contribute to global warming. ■



Gold Country
COMMUNITY SERVICES

Advisory Visit Program

One of the few of our programs to have survived *the COVID*, the Advisory Visit Program is more popular now than ever. Over the past 7 years we have received over 550 requests for assistance with 6,335 acres of land and our Resource Conservationist, Jason Jackson, has been with us from the very beginning. In fact, his retirement from the NRCS in 2014 is what sparked the idea for this program. With 37 years of natural resource management experience through the NRCS, Jason was the perfect person for us to offer personalized assistance with the natural resource concerns of our community. ■



Virtual Junior Livestock and Ag Mechanics Auction

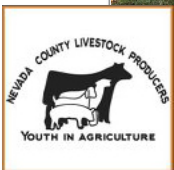
Since the cancellation of the 2020 Nevada County Fair (due to the COVID-19 pandemic) meant that our traditional, in-person Junior Livestock and Ag Mechanics auctions would not be allowed to take place, the Nevada County Fairgrounds Foundation, in partnership with the Nevada County Livestock Producers and with assistance from the Nevada County Farm Bureau and the NCRCD, converted our junior livestock and ag mechanics auctions into a *Virtual* Junior Livestock and Ag Mechanics Auction.

The Junior Livestock and Ag Mechanics auctions typically take place on the last day of the Nevada County Fair and represent the culmination of a long

year of hard work and dedication by our young ag producers. These auctions provide the community with an opportunity to support youth in agriculture, fill freezers with locally-raised meat, and purchase hand-crafted projects for home, garden, or as gifts.

To help get the word out, the NCRCD donated \$1,000 to cover the postage and printing of advertising flyers and postcards which were mailed to the community.

As a result of everyone's efforts, every exhibitor's animal or project (all 202 of them!), were sold and more than \$465,000 was raised for these exhibitors thanks to our community and the virtual auction. ■



ONLINE AUCTION

AUG 13-15 BUY LOCAL. SUPPORT LOCAL.

BID & BUY ONLINE

Support **YOUTH IN AGRICULTURE**

ONLINE JUNIOR LIVESTOCK & AG MECHANICS AUCTION

INTERESTED IN BEING A NEW BUYER? CONTACT THE NEVADA COUNTY FAIRGROUNDS OFFICE AT 530-272-8827 OR VISIT NEVADACOUNTYFAIR.COM

- MARKET STEERS
- MARKET LAMBS
- MARKET GOATS
- MARKET SWINE
- MARKET RABBITS
- AG MECHANIC PROJECTS

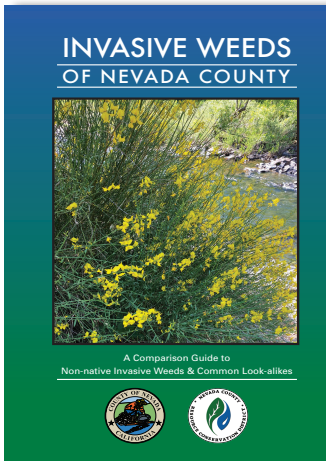


Invasive Weeds of Nevada County Booklet

The NCRCD, in partnership with the Nevada County Ag Commissioner's Office, collaborated to create the *Invasive Weeds of Nevada County* booklet. This handy, pocket-sized, spiral bound booklet is intended to assist in the identification of invasive weed species commonly found in Nevada County. Some weed species are especially difficult to manage so recommendations are given as to how to remediate and report a sighting. It is not only important to recognize these plants, but it is

imperative that we report small infestations before they become too difficult to control.

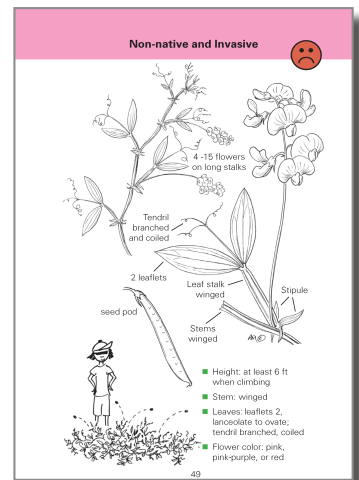
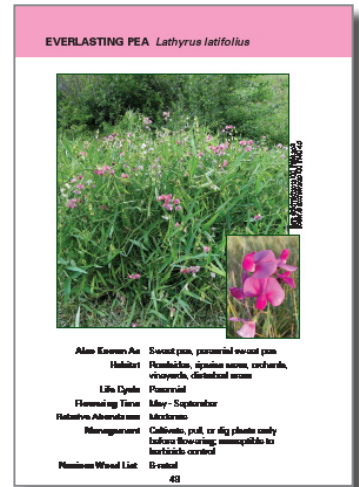
Non-native invasive plants are aggressive plants that have been introduced into an environment outside of their natural range. They threaten native species, compete with our native plants for water, light, and nutrients, and prosper in a variety of settings (especially where land has been disturbed).



Not all non-native weeds are invasive, but some have been designated as noxious by the State of California, thereby requiring weed control efforts by property owners.

If you find a non-native invasive weed, please report the infestation to the appropriate weed management authority (contact information is on the inside back cover).

Booklets are available at no cost at the NCRCD office in Grass Valley, the Ag Commissioner's office in Nevada City, and the Visitor's Center in Truckee. ■



Scholarship Opportunities



The NCRCD offers scholarships to local students pursuing studies within the wide variety of agricultural and conservation-related fields with possible careers including but not limited to: heavy equipment operation, agricultural engineering, forestry, chemistry, biology, research, rangeland management, welding, ag economics, firefighting, ag teaching, and ag communications among many other career concentrations.

We offer scholarships to passionate students with the intention of becoming future agriculturalists and conservationists, and perhaps even bringing that acquired knowledge and experiences back to our community to inform and lead.

Our world and society depend on the future of agriculture, and through these scholarships, we hope to inspire and enable students to develop into working lands managers, advocates, and leaders.

Congratulations to our 2020 Scholarship awardees: Coal Barker, Tressie Constantino, and Kambree Thompson! ■