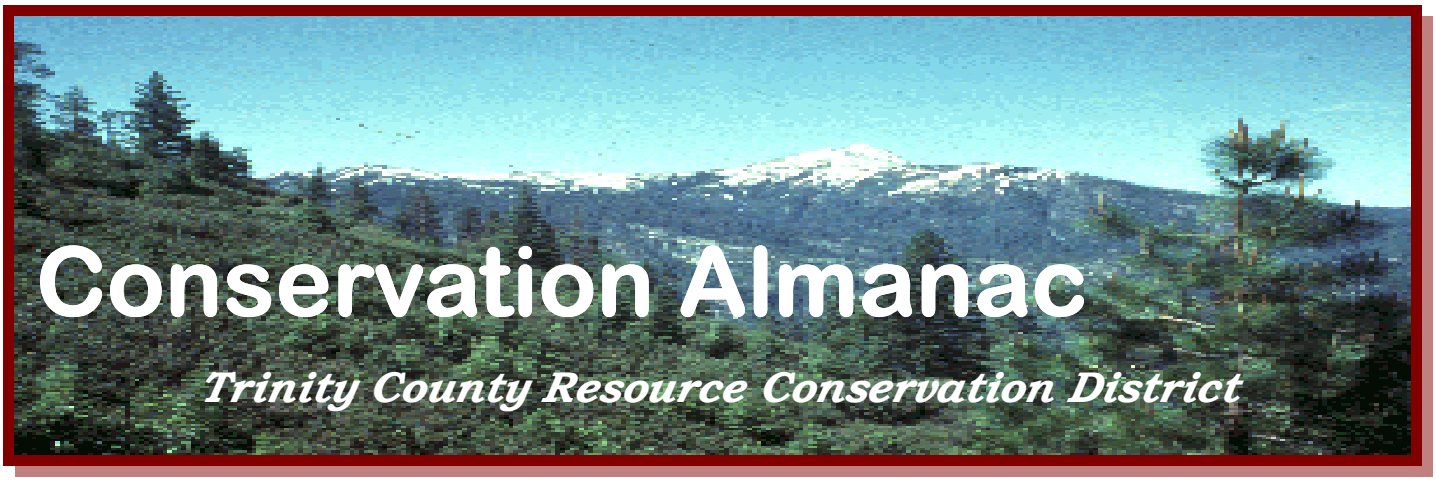

Conservation Almanac

Trinity County Resource Conservation District

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Fuels Reduction in Hayfork Valley

Fuels reduction creates a Park-like look to forested property.

It could be started by anything--a lightning strike on a hillside, a cigarette casually thrown from a vehicle, the spark from a backfiring tractor--but once it gets started it may rage frantically and uncontrollably through brush, forest and property alike. Several land owners in Hayfork realized their danger and decided to take the Trinity County Resource Conservation District (RCD) up on their offer to participate in a demonstration project to reduce the risk of fire by clearing underbrush and thinning trees--a process known as "fuels reduction"--along roads and near buildings on their properties.

The TCRCD garnered funds available through a cost-sharing arrangement with the Agricultural Conservation Program (a part of the Farm Services Agency) and worked cooperatively with Community Geographic Information Service, US Forest Service, California Department of Forestry and Fire

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Since the 1960's, attitudes about fire have shifted from viewing fires as an external destructive force to recognition that it is part (Continued on Pg. 5)

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Protection (CDF), and the Watershed Center in Hayfork to begin work on eight adjacent properties along Hyampom road in Hayfork.

The "natural" look of dense undergrowth and dark, tangled masses of bushes and trees is really quite un-natural. It is only recently that aggressive fire-suppression campaigns gave fire a bad name and made it the forest's deadliest foe. In actuality, naturally occurring fires can be a friend to forest habitat, and Native Americans have long viewed fire as a forest-friendly tool for reducing the risk of catastrophic fires, for regenerating certain conifers, and restoring nutrients to the soil. Ironically, the risk of disastrous fires has increased in the wake of fire-suppression efforts of the last thirty years or so. This year's major fires in both Northern and Southern California bear witness to this fact.

Fuels reduction is seen as a safe alternative to controlled burning, which, as in the raging 1996 Montana fires, can get out of hand and lead to uncontrolled, catastrophic burning over large areas. Fuels reduction addresses the problem of fire "ladders" (dense underbrush and lower tree limbs) without the risk of sparking wildfire.

It *is* labor-intensive, however. A crew of five TCRCD employees worked for nearly a month in the dense undergrowth along Hyampom road, sawing limbs, clearing manzanita, thinning trees and running cut material through a "chipper" to turn the cut branches into mulch. But landowners and others seriously interested in reducing the risk of fire in the area agree it was well worth the effort.

Once work got underway on one property interest spread like wildfire among neighbors of Chuck George, who signed on early in the project. Residents agree that not only are they safer from the risk of fire, but the clearing of underbrush and debris gives their properties a new, park-like atmosphere: views of tangled undergrowth have turned to clear views up hillsides and through trees where one can catch a glimpse of Don and MaryAnn Coon's beautiful white alpine-style home festooned with balustrades, birdfeeders, and curving walkways.

The TCRCD will continue spreading the news about fuels reduction and in February expects to begin work on other Hayfork property with a CDF Stewardship grant. This grant is a cost-sharing program and landowners will be expected to contribute at least 25 % of the total cost of doing the work.

Home Fire Protection

It is important to create a defensible space around houses on forested homesites. Fire hazard can be reduced if you follow the these safety guidelines:

1. Create a 30-foot buffer zone around the house by thinning trees and brush cover to acceptable levels. Adequate thinning is when the outer edges of tree crowns are at least 10 to 12 feet apart. Occasional clumps of 2 or 3 trees are permitted for aesthetic reasons if more space surrounds them. Small patches of brush or shrubs may be left if they are separated by at least 10 feet of irrigated grass or noncombustable material. If your home is on a slope, enlarge the defensible space, especially on the downhill side. If it is located at the crest of a steep hill, thin fuels at least 100 feet below the crest.

2. Dispose of all slash and debris left from thinning. Common disposal methods are a. lop and scatter (cut debris into small pieces and disperse over area to accelerate decomposition); b. pile and burn (only when moisture is sufficient to prevent fire spread); and c. chipping.

3. Remove dead limbs, leaves, and other ground litter within the defensible space.

4. Stack firewood uphill and at least 15 feet from your home.

5. Maintain an irrigated greenbelt immediately around your home using grass, flower gardens, or ornamental shrubbery. An alternative is rock or other noncombustable material; avoid bark or wood chip mulch in this area.

6. Mow dry grasses and weeds to a height of 2 inches or less and keep them well watered, especially during periods of high fire danger.

7. Prune branches from trees within the defensible space to a height of 10 feet above the ground. Also, remove shrubs, small trees, or other potential "ladder" fuels from beneath large trees; left in place these can carry a ground fire into tree crowns.

8. Trim branches which extend over the eaves of your roof. remove branches within 15 feet of a chimney.

9. Clean roof and gutters of pine needles and leaves to eliminate an ignition source for firebrands, especially during the hot, dry weather of the fire season.

10. Reduce intensity of surrounding forest at least 100 feet out from homesite (it is preferable to thin your entire lot). Thin trees so crowns do not touch each other.

The original Weaverville Basin Trail Committee on the bridge at East Weaver Creek Campground.

Weaverville Basin Trail System

This fall, the Weaverville Basin Trail Committee Chairman, Scott Morris, requested the Trinity County Resource Conservation District (RCD) to be the lead agency to help the Trail Committee fulfill its goal of creating a basin-wide trail system. The RCD has agreed to adopt this community-development project and to facilitate funding and trail maintenance. The Trail Committee now functions as a sub-committee of the RCD Board of Directors. Members of the volunteer Committee have been working for more than ten years to designate approximately 40 miles of trail, complete an Environmental Assessment with the Forest Service, and include the preliminary trail system map in the Trinity County General Plan. The Weaverville Community Plan is being amended to accurately reflect the trail system and to protect it as development progresses in the basin.

The Trail Committee submitted a Community Economic Revitalization Team (CERT) proposal for funds to develop a Master Plan for the System and for trail maintenance and development. The proposal was prepared by the Resource Conservation & Development Coordinator, Scott Eberly, with assistance from members of the Trail Committee.

The Weaverville Basin Trail system is unique because of the many opportunities that exist for interpretation of historical sites and natural features, and it incorporates the overall historic theme of the community. The RCD supports the effort to complete a "Trail Through Time" to be enjoyed by the local community and tourists interested in hiking, biking, horseback riding, and sightseeing. The trail system will provide users with a sense of wilderness adventure but also offer hot showers, good meals, and comfortable accommodations at the end of the day. This in turn will provide much needed revenue to the community as well as local businesses, which have been hard hit by changes in the timber-based economy.

A Memorandum of Understanding (MOU) between the RCD and the Forest Service--the primary landowner of the trail system--was recently signed by the Shasta-Trinity Forest Supervisor, Sharon Heywood, and the RCD Chairman of the Board of Directors, Gregory Lowden. The purpose of the MOU is to provide a framework for cooperation between parties in support of the trail system. Construction and maintenance of the trail will enhance the recreation experience of area hikers, mountain bikers, equestrians, and, to a limited extent, Off-Road Vehicles (ORV's).

One of the efforts currently being made by the Trail Committee is to educate local ORV users about the sections of trail that are off-limit to motorized vehicles. In a letter to the editor of the Trinity Journal, the Committee pointed out that in order to obtain access on private lands within the system, permission was granted in many cases only if motorized use was not to occur. Many locations still exist in the basin for ORV use, but in order to maintain trail access for a majority of users, it is critical that the trail designations be followed. The volunteer Committee invites ORV users to participate in development of the trail system so that all uses can be effectively planned.

Caltrans has donated a pickup-truck load of treated wood posts for use as trail signs for the project. Boy Scout Troop No. 15 is assisting in making the signs as part of their effort to earn Eagle Scout Merit badges.

This project is now a cooperative effort, with many interested people helping to move this project forward. Other ideas about getting community members even more involved include: having a logo contest for the Trail System by local artists, developing an Adopt-A-Trail system, and organizing a "Volksmarch"--a thematic fundraising walk-- as a means of generating funds for the trail system. The Trail Committee meets every second Wednesday of the month at 7pm at #3 Horseshoe Lane in Weaverville. Everyone interested in the Weaverville Trail System is welcome and encouraged to attend.

Restoration Work Begins on Indian Creek

Work began in September on a stream restoration project on Indian Creek. The stream reach between Mule Gulch and Frietas Gulch has never recovered from hydraulic mining disturbance, which occurred in the early days of Trinity County settlement. The disturbed channel was unstable, poorly vegetated and had intermittent flows in the late summer season. Before the mining disturbance, Indian Creek was an important part of Trinity County's productive anadromous fishery supporting abundant salmon and steelhead populations. Stream channel conditions restricted migration, spawning and rearing of this valuable fish resource.

Those cooperating in the project include the Bureau of Land Management, the lead agency, the Natural Resources Conservation Service, the Trinity County Resource Conservation District (RCD), and private land owners. Project participants hope to improve the long-term health of the stream for the fish and stop extensive bank erosion caused by frequent stream-course changes. The project seeks to create a stable stream channel that will improve flow and habitat conditions throughout the year.

Survey crews at the site were surprised to discover hundreds of young fish (mostly steelhead) surviving in the creek, indicating the stream is still an active spawning and rearing site for anadromous fish. These fish are at risk due to diminished surface flow, elevated water temperatures, and a lack of cover. Fish in the immediate project area were captured and relocated within Indian Creek.

Initial work on the creek utilized heavy equipment to construct a channel along a course interpreted from historic photos. Ron's Backhoe Excavating of Hayfork and Manning Construction of Redding were awarded the construction contracts. Such projects coordinated by the RCD frequently utilize local businesses such as Ron's Backhoe, contributing to the health of the local economy as well.

By early October, the work crews had finished the new stream channel architecture, and some of the water from the creek that had been diverted was allowed into the new channel to begin replenishing the ground with water. Once the new stream course is firmly established, crews will plant willows, alders, cottonwoods, and other riparian species to revegetate the area and create a functional riparian zone. Healthy vegetation on stream banks provides shade to keep the water cool for the fish, establishes root structure to prevent erosion, and traps sediment.

It is hoped that such efforts will create improved habitat for the fish, as well as decrease erosion and deposition of sediment in the main stem of the Trinity River downstream from the site. Future monitoring of the physical habitat of the creek and its anadromous fish populations will determine if the project is achieving the desired effect.

RCD crew `rescues steelhead and salmon before restoration work begins.

Trinity Agriculture Forum

The Trinity County "Ag" forum is a coalition of farmers, ranchers, and other property owners interested in developing new agricultural strategies for Trinity County farm- and ranchland. The main interest of the group is building relationships among group members, which also include employees of local government agencies such as the Natural Resources Conservation Service, The Resource Conservation and Development Council, and the Resource Conservation District. The monthly meetings serve as a forum for building trust between members, sharing information on new agricultural products and strategies, and finding out what others are doing. The group plans to sponsor a workshop on viticulture (grape growing), one of the new agricultural items sparking interest in Trinity County, early in 1997. For information on Ag Forum meetings and other events, contact Scott Eberly at 623-2009.

No-Till Drill Demonstration Day

The Trinity County Resource Conservation District (RCD) and UC Cooperative extension hosted a no-till drill demonstration day at the Dick Jesse Ranch in Hayfork on October 26th. The event was well attended and included farmers from Hyampom and Van Duzen Village. During the course of the day, the features of the RCD's no-till drill were explained and a 10-acre field was seeded with a mixture of irrigated pasture grasses and legumes. Trinity County's UC Cooperative Extension Livestock Advisor, Larry Forero, was there to explain how to calibrate the drill for correct seeding depth and seeding rate. The group seemed to be fascinated with the ease of which the drill was able to cut through the existing pasture grasses and deposit and cover seed in one passing. In fact, it was difficult to see any soil disturbance at all. Some farmers expressed interest in renting the drill to seed cover crops and others are looking forward to drilling clovers and other legume into their existing pastures. Carol Joroski, NRCS Conservationist, is interested in the drill's potential use to seed starthistle-infested areas.

The drill is stored at the Trinity County Fairgrounds and will be administered by the fairground manager, Jerry Fulton. Mr. Fulton anticipates there to be a fair amount of use of the drill and said that "three people have called me already about renting the drill and I expect there to be more."

Dave Copeland Pulls the No-Till Drill at the Demonstration

There is a $75.00-a-day rental fee for the drill. In addition, it is recommended that the drill be pulled with a 45-hp tractor with external hydraulics. On flat land with loamy soils, however, it is expected that a 35-hp tractor with hydraulics could pull the drill. If you are interested in renting the no-till drill, please call Jerry Fulton at 628-5223.

Fire! (Continued from page 1)

of many ecosystems. This in turn has led to a shift in management policies away from total fire suppression to strategies in which fire is an important management tool.

Total fire suppression does not prevent wildfires; in fact, it makes matters worse. Fires are a natural feature of mountain environments and frequent burning prevents the long-term destruction by wildfires at some later time. In the primitive forests of California, crown-fires were rare whereas frequent ground fires of low intensity, ignited by Native Americans were a common feature. California's primitive forests were kept open and park-like by frequent surface fires set by lightening and by Native Americans. The forests were in a stable equilibrium, immune to extensive crown fires.

The problem of wildfires is related to the large and unnatural accumulations of fuel with the result that crown-fires of catastrophic proportions develop, and the succession pattern which follows is markedly different from that which follows light burns. Wildfires have often caused the development of brushfields with almost totally degraded forests, the process of recovery to a mixed coniferous forest being greatly impaired.

In forestry, the main purpose of prescribed burning is to enhance the production of growth of certain trees, by manipulating the major environmental factors that influence reproduction and growth: light, temperature, water and mineral nutrients. Fire reduces brush cover to favor a parkland of grasses, trees and intermittent stands of brush. The general effect of fire is to check succession, reduce competition, remove aged and diseased trees, increase plant and animal activity, and improve the flow of springs by maintaining a sub-climax condition. Frequent fire is the agent of soil regeneration, releasing the nutrients from plant tissue and recycling them into new biomass.

Fire has even influenced the evolution of various species of the forests, grasslands, and xeric (dry) shrub communities in mediterranean climate regions of the world such as those characteristic of California.

Grass Valley Creek Watershed Revegetation Plan

In a cooperative effort between the Bureau of Land Management (BLM) and Resource Conservation District (RCD), a 10-year revegetation plan has recently been completed for the Grass Valley Creek watershed. The main objective of the plan is to detail a large-scale restoration effort to improve forest health within the watershed.

In order to meet this objective, the plan includes four components: the first provides a summary of ecological information pertinent for making appropriate revegetation prescriptions. This section analyzes soils, plant communities, plant genetics, precipitation, and overall forest health. The second section details (on a yearly basis) specific areas of the watershed to be reforested, with the goal of increasing vegetative cover to reduce sediment loss from the watershed. This section also provides general guidelines for plant species and quantities needed for each year and area of restoration work, with an overall goal of planting 70-100 acres per year. The emphasis will be on planting conifers, such as ponderosa, sugar, and Jeffrey pines, as well as white and Douglas firs.

A third component of the plan includes a long-term monitoring program to collect data on the revegetation treatments already being used in the watershed. A fourth component of the plan concerns the experimental field studies that will be used to evaluate new revegetation techniques before they are utilized on a large scale throughout the watershed.

For further information or a

Seed drying in hand-made bins during summer seed collection.

RCD Seed Collection

From June until October of 1996, the Trinity County Resource Conservation District (RCD) conducted an extensive seed collection. The goal of the collection was to collect plants specific to the Grass Valley Creek (GVC) watershed in order to develop a seed bank to be drawn on over the next several years. Due to the uniquely harsh soil of the GVC watershed, and the need to keep plantings specific to site conditions, the RCD collected seed from plants growing only in the watershed. A large amount of native grasses, forbs, and shrubs were collected.

The RCD began collecting seeds in 1994 with a conifer cone collection. After collection, the cones were sent off to be cleaned, processed, and stored. After cleaning, many of the conifer seeds were sent to nurseries for propagation--including Tsemta Forest Nursery in Hoopa and Humboldt Nursery in McKinnleyville. The resulting ponderosa, Jeffrey, and sugar pines, as well as incense cedar, were planted in the spring of 1996.

Likewise, many of the shrub species--primarily ceanothus--have been sent off for propagation and will be planted in the fall of 1997 and/or the spring of 1998. Because grasses and shrubs are an important component of a recovering forest, the RCD has been supplementing conifer stock with many different species. Among those collected to be planted are species of manzanita, ceonothus, rabbittbrush, lupine, needlegrass, and fescue.

In addition to having nurseries propagate plants, the RCD has created a mini-nursery of its own: in October, approximately 15,000 tubes with native grass seed, consisting of seven different species, were sown. Some of these plants will be ready for planting this spring, depending on the species, and in the future the RCD may grow forbs or shrubs. With a good stock of seeds in storage and a large amount of species planted, the RCD has made an investment that may create a healthier forest in the future.

Meet the RCD Board of Directors

GREGORY LOWDEN has been a resident of Weaverville since 1967. He graduated from Trinity High School in 1969. After a tour of duty with the U.S. Army, he attended Shasta Junior College in Redding, graduating with an AA degree in history in 1974. He has been employed as a surveyor with Hunt Land Surveying, Inc., since 1978. He served as a member of the board of directors of the Weaverville-Douglas City Parks and Recreation District from 1989 to 1995. He has served on the Trinity County Resource Conservation District (RCD) board of directors since 1992, the last two years as Board Chairman. Active in community affairs, he is a member of the Weaverville Lion's Club and the Weaverville Basin Trails Committee. He finds his role as an RCD director to be both challenging and rewarding.

DOUG NOWACKI is a retired entrepreneur with a long history of successful creative enterprises. He holds a Bachelor of Science in Marketing from Indiana State University, 1973. He has served on the board of trustees of American Herbal Products Association, 1990-93. He is a lifetime member of Safe Alternatives for Our Forest Environment and Citizens for Better Forestry, a member of the Rainforest Action Network, Nature Conservancy, League of Conservation Voters,the Sierra Club, and Amnesty International. Besides being on the board of the RCD, Mr. Nowacki is currently serving on the Board of Directors of the Trinity County Arts Council, and representing county-based environmental organizations on Trinity County General Plan Policy Advisory Committee. He is a riparian forest-land owner and resident, a husband, and a father.

ROSE OWENS has been a resident of Hayfork since April of 1946. She graduated from Trinity High School in 1952. She had been a school employee for 24 years and 10 months,first as a bus driver for 14 years and then as Business Assistant for the Trinity County Office of Education She retired in October of 1996. She has worked for the Trinity County Fair for about 10 years during summers, when driving school buses. Her family owned and operated a sawmill and logging company and moved to Hayfork in 1946. Her husband Lonnie is a retired lumber grader and they have three children and seven grandchildren. Together they have raised horses and cattle and are very much interested in both the lumber and ranching industries as well as a common-sense approach to managing our natural resources. She currently serves on the RCD Board of Directors and the Trinity County Public Utilities District Board. She is a member of California Women in Timber and past Vice President of the Trinity Chapter. She also represents the Public Utilities District on the Resource Conservation and Development Council.

PATRICK TRUMAN is currently coordinator for the South Fork of the Trinity River Coordinated Resource Management Planning effort; Vice Chair of the RCD Board of Directors; Chairman of the Salmon Restoration Task Force of the California Association of Resource Conservation Districts; member of the Pacific Fisheries Enhancement Committee for Oregon, Washington, Idaho and California; member Collaborative Learning Circle of southern Oregon and northern California; member of Citizens for Better Forestry of northern California and member of the North Lake Community Advisory Committee to update the Land Use Element of the General Plan. Patrick has been an Executive Director for seven years of the Human Response Network, a non-profit social service agency; wilderness resource management technician with the Forest Service for nine years; a fisheries restoration technician; cadastral survey member; electronic engineering technician; Chair and Board Member of the Far Northern Regional Center; Trinity Center School Board of Trustees member; and Trinity County Private Industry Council member.

Access the RCD on the Net

For all the environmentally concerned WWWeb crawlers out there, the Trinity County Resource Conservation District (TCRCD) now has a Home Page on the Internet. It provides the latest information on the TCRCD's current projects, the past year's work, and our plans for the future. You will also be able to find out about our Board of Directors, Staff, descriptions of our conservation practices and techniques, electronic informational brochures for land owners, and links to other conservation-related web sites. Even this Newsletter (with scanned color photographs) can now be found online.

The TCRCD Home Page was designed to inform the public on all aspects of our efforts here in Trinity County. Pay us a visit.
Our address is:

http: //www.snowcrest.net/tcrcd/index.htm .

We hope you find it useful!