



Scott River Watershed Council

Creating Community Based Solutions

Winter 2011/2012

Scott Valley Schools Watershed Education

A GREAT DAY FOR THE KIDS-SISKIYOU SALMON FESTIVAL

On a chilly Thursday morning (October 20) some 30+ stations were set up on the Ft. Jones field next to the ball park, celebrating the return of the salmon to the Valley. From 9:00 a.m. until 2:30 p.m. almost 600 Siskiyou County students, K-8th grades toured the booths, learning about all phases and stages of the salmon cycle as well as other natural resources.

Two of our SRWC members, Charnna Gilmore and Betsy Stapleton, worked more than 30 hours preparing a Beaver exhibit which included a 'real' beaver, trees cut by the rodents, and a video of beaver activities. Scott Valley artist Joan French and friends were right next door with a quilting project that featured fish and 'helping hands'. Joan and quilting helpers will be putting the pieces together for a quilted wall hanging for each class that visited the booth. Homer Bennett and his helpers provided delicious cooked-over-the-fire salmon samples for everyone. Story telling, puppets, casting, wild animals, and many booths that demonstrated all the myriad tasks that keep the salmon running kept the kids engaged for hours.

Lead agency this year was QVIR (Quartz Valley Indian Reservation) with Marla Bennett as chair person. Other agencies represented on the committee were Shasta RCD, Fish and Game, Fish and Wildlife Service, and Scott River Watershed Council. Organizations who provided funding included QVIR, the Nature Conservancy, Fish and Wildlife Services, Scott Valley Bank, Yreka Kiwanis Club, and the Ft. Jones and Etna Lions Clubs. Salmon Festival organizers are absolutely committed to keeping this event strictly educational and non-political. Thanks to all the schools, teachers and parents who made it a great day!!



Adult Chinook Surveys



EHS Agricultural Dept.—Natural Resources Class .

Every year since 1995, Etna High School students have had the opportunity to participate in the Klamath River Basin Adult Chinook Survey efforts. The purpose of these surveys is to collect population estimates for the Pacific Marine Fisheries Commission. The commission sets the harvest limits for Klamath Basin Fisheries.

These surveys are a cooperative effort involving the United States Fish and Wildlife Service, The California Department of Fish and Game, the Siskiyou RCD, local schools, and the Karuk Tribe.

The survey effort involves walking stretches of the river

and finding Chinook redds, live and carcasses. Carcasses are sampled for scales and DNA samples. Each carcass is then marked with a unique identification number which aids in developing the population estimates.



Chinook Carcasses

er
nook
fish
and
oping

The Scott River Water Trust: Five Years of a Win/Win Option— by Sari Sommarstrom

A win/win option for farmers and fish is what the Scott River Water Trust is all about. Too often the debate appears to be about one side or the other “losing”. We don’t think it has to be that way. Here is what we’ve been doing for the past 5 years, and hope to do for the future, as one means of resolving the stream flow issue in Scott Valley.

Why? The Scott River Water Trust became the first active water trust in California in 2007, and is building on the experiences of older water trusts in the Pacific Northwest. We focus on improving streamflows —when and where needed -- for the Scott River’s important runs of Chinook salmon, coho salmon, and steelhead trout by offering financial incentives to water users. Low streamflows, due to drought and/or water use, can limit suitable over-summering habitat for young coho and steelhead and impede adult Chinook and coho salmon from getting upriver to prime spawning areas in the valley during fall migration.

Where & When? The Water Trust seeks leases of short-term water from active agricultural water users in key areas with the most benefit for fish. Irrigators and stockwater users are paid fair compensation for the instream use of their water in priority stream reaches during critical fish periods. Priority tributaries initially targeted for late summer leases were French Creek, Shackelford Creek, and Patterson Creek. Other critical streams for future summer leases include certain reaches of the East Fork and South Fork of the Scott River. Cold water temperature, perennial flow, streamside vegetation, potential coho use, and instream cover are some of the stream features used to determine which areas should be designated as priority.

Fall leases (after irrigation season ends) target releases of ditch water being used for livestock into the main stem of the Scott River for spawner access. Dry autumn periods with no rain -- like this year -- are an opportune time to help ensure improved flow access.

How? The value paid for the water to the user varies each year, based on farming costs, water year type (higher in drought years), and the number of adjacent diversions leased (more “bang for the buck”.) The price has varied from \$40 to \$75 per acre-foot for summer leases, and \$17 to \$25 per acre-foot for fall leases.

Informal forbearance agreements are signed by the water user and Water Trust before each lease begins. A more formal instream transfer process has also been tried under California Water Code Section 1707, but this method needs to be made more user-friendly before attempting again.

What was done? The first three years of operation were all dry or critically dry water year types, forcing a quick learning curve, while 2010 and 2011 were normal to wet years, with less urgency. Summer leases have ranged from 3 to 8 participants per year, have added flows of 0.2 to 5.0 cubic feet per second (cfs) per lease, have increased volumes from 181 to 330 acre-feet each year, have lasted from 15 to 90 days, and have benefited from 3.7 to 6.1 miles of instream habitat per year.

Fall leases have added from 250 to 720 acre-feet per year to the Scott River’s flow, have helped reconnect the river sooner than later during droughts, and have improved spawning access for up to 53 miles (see graph below). No additional flow was needed in fall 2010 due to early rains.

Monitoring at each lease site evaluates the before and after changes in flow and habitat conditions (see photo below). All of the Scott watershed’s water rights are adjudicated within three decrees, a great help in clarification. The State Watermaster validates the actual diversion amount returned to the stream for certain lease sites.

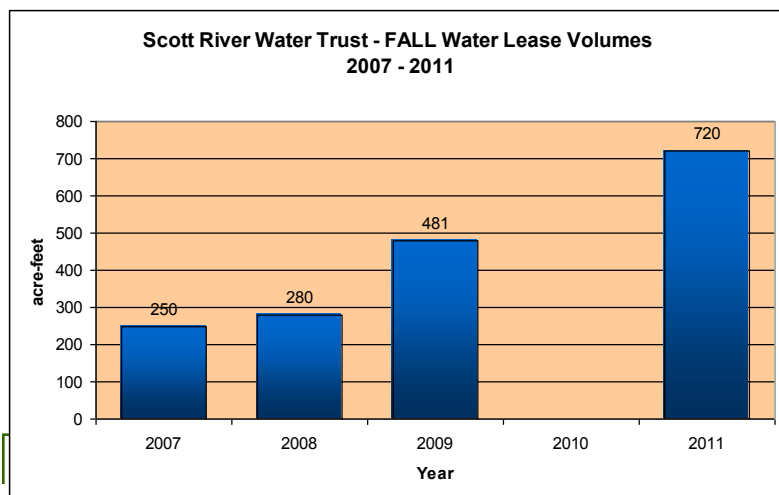
To seek more water leasing options for pasture, a demonstration of several drought-tolerant pasture grass varieties is also being tested locally by the Water Trust, with the help of the UC Cooperative Extension and the Natural Resource Conservation Service.

Example: This year as of July 7th, a water diversion with a 5.0 cfs (1st priority) water right on upper Patterson Creek was leased to stay instream for the benefit of rearing habitat for young coho salmon and steelhead. Good perennial flow habitat exists about ¼ mile above the Highway 3 bridge for several miles upstream, though the reach near the bridge is a natural “alluvial fan”, or rock deposition area, that has only ephemeral flow. Of the 927 adult coho that returned to the Scott River last winter, a significant number were seen spawning in Patterson Creek, which is why this upper stream reach was a priority.

Water Trust Board Members: Brad Erickson, Jim De Pree, Dave Krell, Marilyn Seward (Secretary-Treasurer), Peter Yolles (President).

Water Trust Advisory Committee: Rick Barnes, Gary Black, Mike Bryan, Greg Farnam, Steve Orloff, Mark Pisano, John Spencer.

Website: www.scottwatertrust.org **Contact:** Sari Sommarstrom, Executive Director, (530) 467-5783, sari@sisqtel.net



Winter

Noxious Weeds

Puncturevine (*Tribulus terrestris* L., family **Zygophyllaceae**) is an annual noxious weed familiar to outdoor enthusiasts who have had unfortunate close encounters with this plant's thorny seeds. A native of Europe and Asia, puncturevine may have been introduced to the United States as a contaminant in the wool of sheep imported from the Mediterranean region. Also called goathead, bullhead, or Mexican sandbur, this weed grows rapidly along roads and waste places, leaving an ample seed bank to ensure its spread.

Why should we be concerned?

The large, spiny seeds of the puncturevine plant can cause injury to the mouths and digestive tracts of livestock, and diminish the value of hay and wool. The weed contains a photosensitizing agent that poisons sheep when they eat flowering plants. Recreationists find the weed to be a nuisance, causing punctured bicycle tires and injuries to feet. Because it grows rapidly and produces seed quickly, infestations may increase greatly in size unless controlled or soil moisture becomes limited. The large mat-like infestations crowd out desirable plants.

How is puncturevine controlled?

Long-term control of puncturevine relies upon the elimination of the seed bank. As with all annuals, mechanical controls are effective, although puncturevine's low-growing form makes mowing ineffective. On small infestations, hand-pulling is feasible, especially when soils are moist and the vines are sufficiently long to allow pulling. Hoeing and shallow cultivation are also effective at killing existing plants, and should be initiated prior to flowering and seed production. Shallow tilling of one inch or

less is sufficient, particularly when plants are small. Be aware, however, that tilling may bury seed

that remains viable in the soil for several years. In areas where an existing seed bank has developed due to lack of control in previous years, it may be useful to attempt to harvest seeds by placing carpet or other "sticky" material on boards or a roller that are then applied to or rolled over the soil. With several passes, most of the seed on the soil can be removed. The seeds must be carefully contained, removed, and disposed of to prevent their spread. Application of 4 inches to 6 inches of mulch is also successful in controlling puncturevine.

Biological control of puncturevine has been successful in the past. There are two species of weevils that have been released in Nevada for control of puncturevine. The puncturevine seed weevil (*Microlarinus lareynii*) feeds upon developing seeds. This insect was introduced into Clark County in 1961. A second weevil, the puncturevine stem weevil (*Microlarinus lypriformis*), is an Italian weevil that mines the stems and roots of the weed. It was released in 1963 in Lincoln County (Nv). Both insect species provide good control of puncturevine, although it can take several years to deplete the seed bank in the soil.

<http://www.unce.unr.edu/publications/files/nr/2003/FS0334.pdf>



Did You Know?

Scott River Watershed Council—December Membership Meeting

The ***First General Membership Meeting*** of the reorganized Scott River Watershed Council will be held on

Wednesday December 14th, 2011

Etna United Methodist Church

7:00—9:00 p.m.

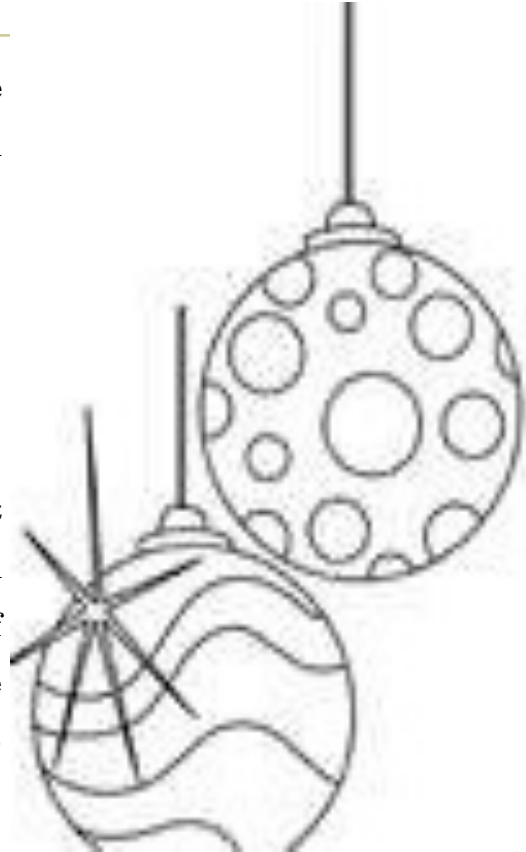
This meeting will include a **Holiday Dessert Social** hosted by the Scott River Watershed Council. This meeting is open to all members of the Scott River Watershed Community, and we especially hope to have all of our members attend.

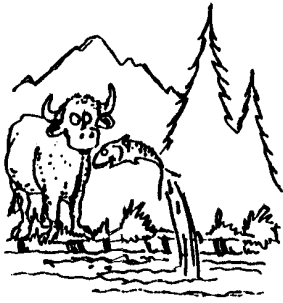


The main purpose of this meeting will be to elect new Board Directors for the Scott River Watershed Council, and to recognize the valuable watershed contributions of various members of the community.

Door prizes will be awarded, and a prize given to each SRWC member who brings a new member with them!

If you have any questions contact Danielle at 530-643-2368





Scott River Watershed Council.

Danielle Yokel—Coordinator

P.O. Box 355

Etna, CA 96027

Phone: 530-467-5511

Cell: 530-643-2368

E-mail: coordsrwc@sisqtel.net

SRWC BOARD OF DIRECTORS

Larry Alexander

Mike Bryan

Jad Dickson

Charnna Gilmore

Marilyn Seward

Michael Stapleton

Steve Ziegler

If you are interested in serving as a Watershed Council Member or serving on the Board of Directors, please contact any Board Director or Danielle Yokel .

Funding for the SRWC and this newsletter is provided by the United States Fish and Wildlife Service and the National Fish and Wildlife Foundation.

Visit our website at www.scottriver.org!

If you are interested in receiving newsletters and agenda via email please send a message to the Coordinator at coordsrwc@sisqtel.net