Salmon River Cooperative Noxious Weed Program (CNWP)

As directed by the Klamath Basin Fisheries Task Force since 1993, the **SRRC has taken a lead role in enlisting stakeholder cooperation for coordinating watershed/ fisheries restoration throughout the Salmon River Subbasin**. Through our cooperative restoration work, emphasizing education, we've come to better understand the **import role that the native plant community plays in the health of the Salmon River Wildland Ecosystem. T**here are many examples nation-wide of the degradation that noxious weeds can cause when left unattended In 1994 the SRRC launched a program to manage prioritized noxious weeds, due to the threat posed by aggressive invasive plants species entering the watershed. An expanding group of community restorationists have been dedicated to preventing this degradation, by safely and effectively controlling prioritized noxious weeds before they spread.

By using an inclusive inter-disciplinary approach, we believe that there is a high potential for the Salmon River Cooperative Noxious Weed Program to succeed In response the SRRC has developed a multi-faceted detailed strategy to manage noxious weeds in a manner that highlights the recovery of healthy native plant communities, contributing to watershed recovery and improving conditions for all the inhabitants of the Salmon River Wildland Ecosystem as a whole.

This Presentation is Dedicated in Loving Memory to
"Red" Tom Holzem -- aka: Captain Knapweed
1943 – 2002 Rest In Peace
"Only a Fool Forgets His Tool"

What's Wrong with Noxious Weeds in the Wildland Ecosystem Setting

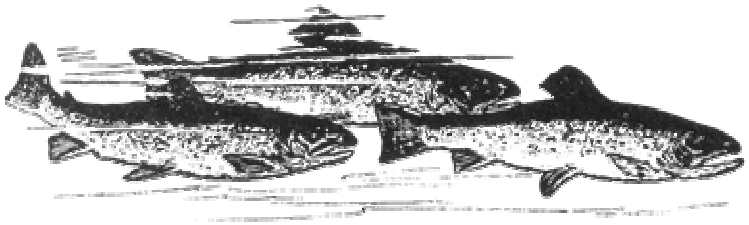
Nationally, invasive species infest 4,600 acres of new land daily (Westbrooks, 1998). Scotch Broom, Spotted knapweed, Starthistle and other non-native species have spread along human transportation routes and other disturbed areas to invade millions of acres in the West (BLM 1995; BLM 1996). These plant invasions may lower water tables, prevent recovery of disturbed riparian habitat, decrease food available to wildlife or alter other important ecological processes and resources (Melgoza et al. 1990), affecting food webs (Harty 1986) and leading to endangerment of native species (Parenti and Guerrant 1991, Flather et al. 1994).

Bolted yellow starthistle with California poppy.

Flowering Marlahan mustard along the edge of the Salmon River.

Impacts to Fish and Water

Noxious weeds decrease ecosystem health along rivers, streams and in forests. These aggressive alien plants can colonize disturbed areas and prevent the succession of native plants, resulting in a slower recovery of disturbed habitat and increasing sediment run-off. Riparian shade will also be reduced. **Noxious weeds are a potential problem to water quality, fisheries and watershed health.**



Spotted Knapweed along the river

Pesticides are a standard method used by the agricultural community to control noxious weeds. It has been well documented that many of the **pesticides used by these interests can be toxic to anadromous salmonids**, causing sub-lethal effects such as: increased stress, altered swimming ability, disruption of schooling behavior, and changes in migration patterns. Pesticides also can disrupt the immune system of anadromous salmonids, mimic or block important sex hormones and indirectly affect fish by interfering with their food supply or habitat. **The need for alternatives to pesticide methods of noxious weed control is important to the long-term health of anadromous fisheries**.

The Salmon River community has shown a strong desire to accomplish this project without the use of pesticides as a forest management tool. This is consistent with the results of a survey, which was conducted in the Salmon River Community Action Plan process. This same community interest was illustrated by the signing of hundreds of names onto locally circulated petitions for this project, which included many landowners and an overwhelming majority of the residents.This project increases the opportunity for the Community to participate in a meaningful planned stewardship Program. Through the SRRC, there is growing support from the community, agencies, tribes and others to control prioritized species of invasive weeds through manual methods that SRRC has developed. **Our Cooperative Noxious Weed Program amplifies our focus on fisheries resource recovery in the Salmon River.**

Salmon River Noxious Weed Control Program and Management Strategy for Restoring Native Plant Communities

An Action Plant for the Salmon River Restoration Council

Forks School successfully digging knapweed at their Adopt A Site, Can you dig it!

13 Steps to Recovery

The Cooperative Noxious Weed Program (CNWP), and the 13 Steps to Recovery, have evolved with the assistance of several key stakeholders, including the: Salmon River Restoration Council, US Forest Service (Klamath & 6 Rivers National Forest), Siskiyou County Dept. of Agriculture & WMA, Karuk Tribe, local resource users, Klamath Forest Alliance, Ca. Dept. of Fish and Game, and UC Davis – Ag Extension.

Each Step provides a background of past and present conditions and actions and also prescribes various actions to be taken for various species. Each Step is inter-related.

A species rating matrix was developed and used to identify the highest priority species to manage which currently includes: **Spotted and Diffuse knapweed (Class A), 2 Broom species, Malta & Yellow Star Thistle, and Marlahan Mustard**. **Spotted and Diffuse Knapweed are the only class "A" species known to be present in the Salmon River**. The prioritization matrix also identifies new species for the cooperators to be on a close watch for, such as: Leafy Spurge, Scotch, Musk and Milk Thistle, Dalmatian Toadflax, and Canada Thistle. Small populations of new species were found and managed in 2002, including Perennial Whitetop, Italian Thistle, Goathead and Meadow knapweed They will be added to the matrix. We've learned that next to prevention the early detection and aggressive response to invasives increases our chances for success.

This demonstration project provides an alternative to pesticide use for managing noxious weeds in the Salmon River and elsewhere. It applies to private, public, and tribal land mangers, as well as the general society.

Salmon River Cooperative Noxious Weed Program and Management Strategy for Restoring Native Plant Communities

Step #1 – Cooperation

Step #2 – Planning

Step #3 – Education/Outreach

Step #4 – Prevention

Step #5 – Mapping/Assessment

Step #6 – Adaptive Management

Step #7 – Groundwork

Step #8 – Inventory

Step #9 – Revegetation

Step #10 – Monitoring

Step#11- Evaluation/Recommendations

Step #12 – Support

Step #13 - Reporting

Step #1 – Cooperation

The success of this project has been largely due to multi-stakeholder cooperation. In addition to the overwhelming support from the local community, this project has attracted many managers/regulators and resource user groups associated with fisheries and water quality management. Through CNWP we've found that noxious weed programs can only be successful if all or most of the related stakeholders are participating in educational, persistent, thorough, and careful approach. **Increased technical support is being sought from academic institutions and funding sources.**

Local schools provide extra-ordinary commitment

SRRC discuss maps and inventory with the USFS to develop strategy for noxious weeds.

SRRC and USFS reviewing groundwork and determining progress in 2000. **Overall scores at the management unit level (Salmon Subbasin) are very high for progressively eradicating knapweed.**