Shitike Creek project improves fish habitat

Spilyay Tymoo photo by Shewczyk

Natural Resources department summer worker Creston Smith seeds areas where heavy equipment caused damage during stream improvement project.

Spilyay Tymoo photo by Shewczyk

Heavy equipment is used to place boulders which will provide increased cover for fish and increase dissolved oxygen in the stream.

The major fisheries habitat improvement project of the eleven year Confederated Tribes/ Bonneville Power Administration Program has recently been completed on Lower Shitike Creek. Project construction took place between the Shaker Church and Strawberry Rhoan's property on approximately a one and one-half mile stretch of the stream.

Project objectives which were achieved included the improvement of riparian and instream habitat by construction of two rock berms, nine log weirs, juniper rip-rapping, placement of 1200 rock clusters, turning rocks, alteration of gravel bars and planting of grass on exposed banks.

Log weirs and berms provide upstream pools for pools for fish and rearing and resting places for migrating fish. Downstream, they provide cover and help to introduce dissolved oxygen into the stream. Rock clusters provide cover for fish in shallow, wide creek areas and add habitat diversity. Juniper rip-rapping protects eroding bank areas resulting in low instream sedimentation. Excessive sedimentation can smother fish spawning areas (redds) and lower levels of dissolved oxygen in the creek.

It is anticipated that the habitat improvement work, along with work planned for next summer, will double the existing spring chinook salmon and steelhead trout runs while increasing resident rainbow trout populations.

Project crew included project leader Bob Heinith, field supervisor Louie Pitt, Jr., fisheries technicians Orvie Danzuka and Carmela Scott and summer youth intern Creston Smith. Warm Springs Crushing and Construction, under the direction of Ted Brunoe and Mike Scarlett, contracted the work and provided heavy equipment.

Creek users are asked to keep motorized vehicles off delicate seeded and mulched areas next to the stream. Warm Springs tribal police will be enforcing tribal regulations which prohibit motor vehicle operation in areas adjacent to reservation creeks. These are fragile areas, needing protection.

Spilyay Tymoo photo by Shewczyk

(Left to right) Project supervisor Bob Heinith, fisheries technician Orvie Danzuka and project field supervisor Louie Pitt, Jr. place screen at bottom of log weir in Shitike Creek to help stabilize the structure.

Dams can cause migration obstacles

Dams built to create small pools for swimming continue to be a problem on Shitike Creek.

Blocking the stream with these structures can create a passage problem for fish migrating upriver. It is important that the creek remain free-flowing without obstacles.

Warm Springs fisheries biologist Mark Fritsch suggests that those wishing to construct dams build them only tall enough to create a small pool. Walls that extend two feet out of the water are too high for the fish to surmount. Fish can jump the shorter dams and easily continue their migration upstream.

Litter also remains a problem in well-used areas. Disposable diapers and plastic beverage containers are often left by visitors to the area, making the streamsides unsightly.

One other suggestion Fritsch makes is to avoid swimming below the sewage treatment ponds.

Driving and parking vehicles at streamside and in the water is also occurring. This practice compacts the rocks and soil on the bottom of the stream, causing ruts and preventing vegetation from growing. In general, It's not good for either the stream or fish living in Shitike Creek.

Prescribed burns prove useful

PRESCRIBED BURNING: "Skillful application of fire to natural fuels under conditions of weather, fuel moisture, soil moisture, etc. that will allow confinement of the fire to a predetermined area and at the same time will produce the intensity of heat and rate of spread required to accomplish certain planned benefits to one or more objectives of silviculture, wildlife management, grazing, hazard reduction, etc. Its objective is to employ fire scientifically to realize maximum net benefits at minimum damage and acceptable cost." (Society of American Foresters 1958)

Successful prescribed burning depends on:

SKILLFUL APPLICATION of fire from a
CAREFUL PRESCRIPTION developed for a
DEFINITE AREA to accomplish
SPECIFIC OBJECTIVES

Fire, if managed properly, can create conditions that are ecologically pleasing and useful to man.

Burning for the purpose of improving soil conditions, tree growth, disease and insect control, forage and browse for livestock wildlife and to reduce fire hazard has long been used. Historically, fires were used to improve range grasses.

A variety of prescribed burns are utilized in treating an area "depending on the intended objective," according to Warm Springs Bureau of Indian Affairs Fire Management officer Jim Steele.

As a hazard reduction the prescribed burn reduces dry material which might easily ignite resulting in a fire which would be difficult to control. Thinning debris and logging slash are often removed by this method.

Burning is used as a silviculture technique for site preparation, vegetative manipulation and insect and disease control. Removing vegetation, duff and slash helps prepare a site for seeding or planting. Different frequencies, intensities and seasons for a fire will favor different plant communities.

Although fire does create insect problems it is also use to control insects directly or to reduce damage through indirect means by removing habitat conditions in which insects thrive.

Fire favors some wildlife species while lack of fire favors others. Meadows invaded by trees can be maintained by prescribed burning. In general burning improves habitat for large mammals and birds.

In range management fire can produce more palatable and nutritious forage for domestic livestock in both timber and open range areas. In areas that have been overgrazed, sagebrush, juniper and other woody species may have become predominant. Fire could help to rejuvenate desirable grasses.

Prescribed burns are used to increase the aesthetics of an area, to provide better access and to improve recreational use. Parklike vistas are created after a short period of scorched land where fire was used to clear the area.

Fire is important in recycling nutrients from living and dead plant materials. It improves the growth potential for surviving or new vegetation.

Prescribed burns on the Warm Springs reservation are closely reviewed and monitored. A team determines the objectives and conditions under which a burn will take place. They review safety procedures and decide how an area will best be burned and when. The team continues to monitor the area to provide the best possible conditions for the burn.

Prescribed Burns are generally scheduled during the fall but Fire Management usually cannot keep up with the damand as "burns for local clearcuts are overwhelming," says Steele.

Fires are well-controlled during burns. "A small percentage gets away," he explains but overall they do little damage. He adds that fire is an "excellent tool."

Firefighters are continuously trained in firefighting and control methods. The public too will be hearing more about fires and ways to both prevent and use them to advantage as the Fire Management department begins an educational program geared to community members. Steele says, we "feel there are ways we can help you or ways you can help yourself" in regards to fire.

Challenge Camp offers numerous activities for participants

by Luanne Foltz

This year's Challenge Camp had 13 campers, four of whom were counselors, and two cooks. The camp had many activities such as swimming, night hikes, blind hikes, aerobics with Lucinda Greene, singing and hiking up to Ollalie Butte. They also made different kinds of meals, ice cream and also did flag ceremonies daily.

This is the camp's first year and they plan to have many more.

(Photo right) Camp participants get a chance to see some of the life that Trout Lake supports.

(Below) Warm Springs fisheries biologist Mark Fritsch explains relationship of vegetation to areas around Trout Lake.

Spilyay Tymoo photo by Shewczyk

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