

Snags play vital role

Most people probably think of dead trees (snags) as nothing more than a source of firewood. The truth is: **There's life in dead trees!**

Snags serve the forest well. They have been part of nature's scheme since forests have existed. They have played a vital role in the health and fertility of the forest ecosystem (the total forest environment).

When trees die, but are still standing, they provide habitat for many kinds of birds and animals. Habitat means the part of the natural environment, that serves as home and shelter for animal life. Habitat can serve as places for feeding, nesting, perching, resting, etc. Without the proper habitat, creatures that depend upon it cannot survive.

Up to 100 different species of animals are in some way supported by snags. Many species, primarily birds like woodpeckers and chickadees depend totally on snags in which to make a home. The great importance to the forest of most of these species is that their primary diet is insects. Many of the types of insects eaten by these birds are ones that can cause problems to trees, in particular, trees managed for the commercial benefit of the Tribe. Part of nature's checks and balance against insect outbreaks are the birds and bats that are dependent upon snags as a place to live in and use. Snags are also used as perches and nests by hawks and owls, which help keep the populations of mice and squirrels in balance.

So, it can be seen that standing dead trees serve to maintain the health and balance of the forest and provide homes and shelter for numerous forest dwelling creatures.

Over time snags fall to the forest floor, but they are far from finished providing benefits for the forest. Fallen trees provide homes and shelter for different forest animals and organisms, such as small mammals. As these trees decompose and begin to soften, they are invaded by many types of insects and fungi. These decomposing organisms help the complex breakdown of the wood. With time (often decades), the rotting wood provides many benefits for the forest. The wood as it rots and softens acts like a sponge to hold water near the surface instead of it being lost through runoff. The process of decay recycles nutrients and minerals held in the wood, which acts like fertilization. The decaying wood also builds up the soil with new organic matter

which makes the soil richer. More water, fertilizer, and humus, just like a garden, makes for better crops.

It is nature's way to recycle every thing in the forest to keep the whole system healthy and in balance. From new seedlings through decaying wood, all parts are important. Snags serve many purposes through their long life cycle.

Snags and woody debris on the forest floor, and the life they support are all necessary to keep the forest healthy and productive.

It is for these reasons that the Branch of Forestry and Tribal Natural Resources Department are trying to manage snags and downed woody debris as a truly important resource in the forest. The management and retention of snags and woody debris on the ground has been addressed in the past management of the Warm Springs Forest. New information and research is constantly providing more reasons and benefits concerning snags and woody debris.

During the present work on the Forest Plan of the Integrated Resource Management Plan, old

policies will be reviewed and new information will be studied regarding snags and downed woody material. The new plan will try to provide management that will address the benefits of this resource and manage so as not to lose the important benefits they provide.

Special logging provisions may be developed in the plan addressing management and woody debris goals. New guidelines may be developed concerning the cutting of snags for firewood.

Some dead trees have blue signs on them designating them as wild-life trees to be saved from cutting by loggers and woodcutters. It is hoped that through education about the importance of this resource and the necessary part it plays keeping the forest healthy, that Tribal Members will appreciate the natural role dead trees play within the forest as a whole.

As with all Integrated Resource Management Plan activities, advice and comments from tribal members is encouraged and welcome. The health and productivity of forest resources will benefit everyone.

No significant impact posed

Based on an environmental assessment and public comments gathered from March 2 to March 24, it has been determined that controlled burning of tribal land assignment number 121 does not pose a significant impact upon the human environment. Therefore, preparation is not required of an environmental impact statement cited under section 102(2)(c) of the National Environmental Policy Act of 1969, 42 USC 4223 (2) (c).

The reasons supporting this finding are as follows:

There will be a reduction fuel hazard due to weed control from subsequent cultivation operations.

Environmental factors were assessed and found not to be adversely affected by the proposed action, provided the buffer zone marked out by the tribal water management department is protected and the fire management burn guidelines are adhered to.

Oregon ranks second

Oregon most comprehensively addresses state growth issues. Oregon was the first state to develop statewide land-use planning and it is one of eight states addressing solid waste problems with a recycling program.

Although Oregon ranked high in these areas, according to scoring by the national environmental group Renew America, it was considered only average in protection of food from pesticides and in its protection of drinking water.

Oregon ranked fourth in forest management.

Overall, things are not so good in the rest of the country and even in Oregon many problems still exist. Farm lands in Oregon are still

being developed despite planning laws, and forest development is still the center of controversy.

The State of Washington is one of seven states that has drawn up its own comprehensive forest management law and it received recognition by the environmental group.

Highest ranking states in the categories of forest management, solid waste, recycling, food safety and control of growth to protect the environment are: 1. California, 2. Oregon, 3. Minnesota, 4. Massachusetts, 5. Wisconsin, 6. Iowa, 7. New Jersey, 8. Florida, 9. Maryland, 10. Connecticut, 11. Washington. Idaho ranked 25 on the scoring.

Flow may not meet fish needs

Average and slightly above average water flows are predicted for three of Warm Springs' streams this summer and fall. In Mill Creek this will still not be sufficient to meet the needs of migrating anadromous fish.

Streamflow data, continuously collected at Shitike Creek below Wilford Canyon and at the Warm Springs River below Kah-Nee-Ta, correlated with snow surveys, indicate average or above average flows for 1989.

Predicted flows for the Warm Springs River (in cubic feet per second) for 1989 are based on data collected over a 15-year-period. Average flows over that period are in parentheses: **June—414 (399); July—292 (287); August—262 (259); September—256 (253); October—259 (254).**

Shitike Creek projected flow in cfs is: **May—139 (135); June—147 (141); July—97 (92); August—61 (59); September—51 (50).**

Flows on Mill Creek have been monitored only since October 1983. Although this is not sufficient data to make accurate predictions, an estimation on flow for 1989 can be made.

The snow pack for 1989 which produces water to feed Mill Creek is slightly above average. This

should provide for average flow conditions in Mill Creek which still will not be enough to meet minimum flow requirements for anadromous fish in August and September.

Estimated flow for 1989 is: **May—84.0 (85.5), minimum cfs**

required for anadromous fish is 46; June—81.0 (77.4), 30 cfs required; July—56 (50.7), 30 cfs required; August—47 (43.2), 51 cfs required; September—45.0 (43.7), 51 cfs required; October—46.1 (45.3), 38 cfs required.



Microcomputer instruments are used collect rainfall and weather data at various places on the Warm Springs reservation.



Warm Springs assistant watermaster Buzzy Scott takes snow pack measurement. Data helps determine water flow in reservation streams.

Homeowners can eliminate fire hazards around their homes

People are building homes in wildlands for a variety of reasons. High desert and fringe pine areas around Warm Springs offer beauty and solitude, consequently many residents are moving away from immediate community services. The national trend of increase rural housing is apparent throughout central Oregon. Each year state and federal statistics reflect increasing populations living in the country that become affected by wildfire. Professional jargon for this situation is wildland/urban interface. It is not a new condition, but one that has developed into a serious problem of international proportions. We can make positive strides

to reduce the threat of wildfire to ourselves and property. To help guide us we need to look at some of the contributing factors. One consideration is wildland fuels and the combustible fuels we create around our homes.

Growth characteristics and chemical makeup of plants in the high desert and fringe pine make them very fire prone. Mature plants, e.g. sagebrush, juniper and bitterbrush, are full crowned with limbs and fine branching that extends to the ground. This distinction plus loss of live plant moisture with aging invites intense burning. Cheatgrass and medusa head are fire borne grasses that comprise a

large portion of our rangelands. They are fine stemmed grasses that lose moisture very rapidly and become extremely fire susceptible early in the summer. Grasses and shrubs combined can produce opportunities for easy fire starts and intense, fast running fires.

This situation was apparent in the Greeley Heights and County Line fires last summer. High winds caused intense fire behavior which was difficult for fire fighters to overcome as fire was driven toward and around homes. These fires were so extreme that fire fighters had to establish control lines and implement tactics quickly. Although these fires were extinguished

without measurable damage, property loss and personal injury could have easily occurred. What can we do? Professional organizations anticipate and plan field operations to deal with these threats; homeowners can also take positive steps to eliminate many of the hazards around their homes.

It is important to create a fire safe environment around our homes because of wildland fuel types we have on the Warm Springs reservation. Here are some suggestions that have proven to be very effective.

1. The key to fire safety around your home is to reduce or eliminate combustible materials close to buildings.

2. If you have trees growing around your homes, remove limbs within 15 feet of chimneys; cut away dead branchwood overhanging the roof; remove loose, fine combustible material like dryleaves, tree needles, paper and bird nests from rain gutters, roofs and eaves. Complete this chore before each fire season (April or May) or whenever they build up to a one inch depth or more.

3. Keep your house free of wood piles. Stack wood away from buildings and wooden fences.

4. Maintain a green zone or green belt within 30 feet of your home. It helps to establish non-combustible landscaping such as lawns, border plantings, flower and vegetable gardens.

5. Within the 30 feet to 100 feet zone from your house, remove dead, woody plants, and if possible, eliminate weed species that die and cure out early in the year.

6. Remove older vegetation in favor of younger vegetation.

7. Keep trees and shrubs from growing into powerlines.

8. Using walls of non-combustible material (stone walls) for landscaping design and seclusion will provide heat shields to deflect flames and radiant heat.

9. Maintained hedge rows can deter wind and screen out wind blown embers. Hedges should be planted only if they are watered

regularly, and you remove dead branch wood and leaves. Deciduous species are best, because evergreen shrubs ignite easily. Example of fire resistant shrubs are cherries, roses, honeysuckles, currants, sumac, lilac, apples and buffalo berry.

10. Try to avoid evergreen shrubs, but if you plant them, keep them well spaced, at least twenty feet from buildings, and prune frequently.

11. If you plant trees, keep them well spaced; tree crowns should not touch or overlap; prune to a height of eight to 10 feet above the ground and reduce combustible materials under the trees.

12. If you wish to design a wind break using trees, plant them no more than 10 feet apart, about 100 feet from the area to be protected and plant on flat areas or at the base of slopes.

13. In central Oregon, where irrigation can be a problem, crested wheat grass planted 10 to 20 feet, or as much as 300 feet around homes, can establish an effective firebreak. This will require minimal irrigation, and can also retard the growth of highly flammable grasses such as cheatgrass and be aesthetically pleasing.

Any further information on making your rural home fire safe should be directed to Fire Management or Fire Control.

Results seen from SMILE efforts

The green of newly planted grass can be seen in a fire swept area bordering Shitike Creek. The efforts of Madras Jr. High students is showing.

Students in the Science and Math Investigative Learning Experience (SMILE) planted three acres of grass last February as one of their projects. With the assistance of

program leader and Madras Jr. High science teacher David Vick and Warm Springs fisheries biologist Bob Heinith, students planted six sacks of seed and spread straw for mulch. The students also picked up a truck full of trash and debris uncovered by the fire.

The SMILE program, sponsored

by the Office of Academic Affairs and the College of Science at Oregon State University, is aimed at sparking science and math interest in minority students. With grants from AT&T, Hewlett-Packard, Mentor Graphics Foundation, Apple Computer, The Oregon Community Foundation, Sunneville Fund, Tektronix Foundation and the Title II pro-

gram, students at Madras Jr. High, Chiloquin High School, Woodburn Jr. High and Ontario Jr. High are able to participate in the program.

Vick is interested through the program in developing basic academic skills, attitudes and self confidence in students. He is also interested in providing science-based enrichment activities for students and helping them to think about career opportunities in math and science.

Vick would also like to see an increase in the number of Warm Springs students enrolling in college math and science programs such as engineering, medicine, resource management and computer sciences.

During the Shitike Creek reseeded project students learned about the health and ecology of streams. The grass they planted will help prevent erosion along stream banks and will also provide food and cover for insects that trout and salmon rely on for food.

Students in the SMILE program at Madras Jr. High include Velina Currie, Nathan Dexter, Satchen Smith, Marcella Brunoe, Sunmiat Minnick, Andrea Moroyyqui, Rhea Pierre, Jo De Goudy, Bobbie Calica, Alyssa Macy, Lzif Suppah, Russel Graham, Teri Courtney, Jennifer Mollman, William Parker, Mindy Walker, Elva Gonzales, Direlle Calica and Mando Rios.



Madras Jr. High science teacher and SMILE coordinator David Vick works with students during reseeded project on Shitike Creek.

Spring clean-up time

April is spring clean-up time. Garbage bags are available, free of charge, from the Housing Office located next to the administration building. A truck will be picking up garbage at homes in the Warm Springs community April 24-28. Large items will be picked up April 27 and 28. For those who work, a truck will make a last pick-up on May 1.