



Arlene Boileau
4-H & Youth

Bob Pawelek
Livestock

Clint Jacks
Staff Chair, Madras

Deanie Johnson
Secretary

Bernadette Handley
Home Economics

Zack del Nero
Natural Resources

4-H Assistant

Internet Address: <http://www.orst.edu/dept/wsext>

The Oregon State University Extension Service staff is devoted to extending research-based information from OSU to the people of Warm Springs in agriculture, home economics, 4-H youth, forestry, community development, energy and extension sea grant program with OSU, United States Department of Agriculture, Jefferson County and the Confederated Tribes of Warm Springs cooperating. The Extension Service offers its programs and materials equally to all people.



Join Warm Springs 4-H at Peter's Pasture this summer for camping, Cultural experience and lots of fun!

There are two sessions:

Session One-Second through fifth grades is August 8th-14th

Session Two-Sixth through ninth grades is August 16th-22nd.

Cost is \$20. You must sign up by July 15 to get a Culture Camp T-shirt!

Absolute deadline sign-up is July 26th.

Come by the 4-H office to register in the Education Building on Wasco Street.

Natural Resource notables

La Nina will bring colder winter. Last year's strong El Niño event, which brought us very mild weather last winter, is a thing of the past. In the last several months, a La Niña (or cold event) has begun forming in the tropical Pacific. Typical jet stream and cloud patterns in the Pacific during La Niña involve both tropical moisture and polar air. The well-developed subtropical jet stream often brings moisture to the Northwest by way of Hawaii (hence the nickname "Pineapple Express"). In the North Pacific, the polar jet stream brings much colder air from the northwest; when the polar jet is over us, cold, sometimes snowy weather occurs. If La Niña are moderate in intensity, the subtropical jet is likely to be a dominant winter feature here (thus, wet and fairly mild winters occur). Strong La Niña, however, produce much stronger polar jet streams which exert a very profound effect on the Northwest: our area's

coldest winters, with a high likelihood of snow, even at low elevations, occur during such conditions. Such was the case during the last strong La Niña, in 1988-89 (February, 1989 was one of the coldest months of the century in this region).

Nationwide, La Niña tend to bring wetter than average conditions to the northern states, drier than average in the south. The Oregon Climate Service believes that La Niña conditions will continue to strengthen through the fall and into early winter. There is consensus among predictive models that the La Niña will reach its peak in mid-winter (Dec-Jan-Feb), then begin to wane this spring, and that it will be moderate to strong in intensity. They are predicting a wetter than average early winter (October-December) for most of Oregon. They predict temperatures to be generally near

average statewide through December, then cool to below average levels for the period January through March. They also expect the precipitation in the second half

of the winter to be near average statewide, except in northeastern Oregon where wet-



ter than average conditions will occur. As in past La Niña winters, there is a strong possibility of above average snowfall in the mountains this winter. Furthermore, there is an increased likelihood of significant snowfall in the western valleys.



HOME SWEET HOME

By Bernadette Handley, OSU Extension Home Ec Agent



Not convinced water is important? Consider that we can live weeks without food but only days without water.

Q: How much water do I need?

A: The average adult needs about 8 cups (8 ounces each) of water or liquid each day. This amount may be higher if you weigh more, your physical activity is very high, you eat a high fiber diet or you are sick. Other reasons you may need more water: you are pregnant, breast-feeding or the climate calls for it.

Q: Where should I get most of the water I need each day?

A: Drinks like plain water, juices (which usually contain Vitamin C or calcium in calcium-fortified juices) and milk (which has calcium and Vitamins A and D) are your best choices. Foods also supply some water, especially fruits and vegetables (celery, lettuce, tomatoes, watermelon all have a lot of water in them). You can also choose from decaffeinated coffee, tea and soups.

Q: What about coffee, tea and other drinks?

A: Coffee, tea, some soft drinks with caffeine can cause your body to lose water

so they are not the best choices. Alcohol is another drink that is dehydrating, like the ones just mentioned. Sports drinks are not needed if you are involved in moderate activity. And, if you choose herbal teas, make sure they do not contain ingredients that contain caffeine.

Q: Isn't thirst a good way to tell if you need water?

A: No. Thirst is not always a good indicator of your needs for fluids especially if you are young, old, sick or very active.

Q: What about babies? Do they need water?

A: Yes. Babies 6 months or less get their water from breast milk or properly made baby formula. In hot weather, however, babies may need extra water (about 1/2 to 1 cup each day). Also, babies who begin eating solid foods, especially protein foods can be given 1/2 to 1 cup of water each day. If in doubt about the amount of water needed, check with a doctor.

Q: Is bottled water safer than tap water?

A: The same standards for tap water are

applied to bottled water. Tap water has safe levels of chemicals, pesticides or other harmful substances in it. These same safety levels are applied to bottled water. Remember that some bottled water comes from community water systems anyway so it is like buying "bottled" tap water.

Q: How is bacteria reduced in water?

A: There are two disinfectants to treat water so that it is safe to drink. Chlorine is used to disinfect many public water systems. It is very effective at reducing the number of bacteria in water. Some people do not like its after-taste. Some statistical studies have linked chlorine to some kinds of cancer. However, we need to know more about this link. Is it the chlorine or some other substance in the water that may cause these cancers? We don't know. This needs to be studied before we no longer recommend using chlorine as a disinfectant. Most bottled water uses ozone, a type of oxygen, as a disinfectant. Ozone's ability to disinfect water may decrease over time. Thus, it is not as effective as chlorine for long periods of time. There is no after-taste or smell from ozone.

New publications now available

Several new publications of interest to owners of small farms are now available through OSU Extension and Experiment Station Communications. See below for how to contact them.

***Using Cover Crops in Oregon (EM 8704—\$5.50)** This handy publication addresses the benefits and disadvantages of using cover crops, how to choose a cover crop, cover crops in annual and perennial systems, and estimating nitrogen contributions from cover crops. In addition, it includes a two-page fact sheet on each of 13 common cover crops.

***Watershed Stewardship: A Learning Guide (EM 8714—\$32)** This is a comprehensive guide intended for use by watershed councils. Its 425 pages include three major sections: I. Working together to create successful groups, II. Understanding and enhancing watershed ecosystems, and III. Connecting resource management to watershed ecosystems. Each of these

sections includes chapters that include background information, references and related exercises for individuals and groups. The guide was written by over 15 OSU faculty and collaborators and was reviewed extensively by watershed council representatives, professionals in numerous agencies and other specialists.

These publications may not be regularly stocked at Extension offices. It is easiest to order them directly from Extension and Experiment Station Communications, 422 Kerr Administration, Corvallis, OR 97331, 541-737-2513.

Native American Experience Revisited

Dr. Kurt Peters returns to Warm Springs offering a follow up course to the Native American Experience class that he offered two years ago. This course, begins Thursday, August 24th and will have class sessions in September and October. The class will provide students with an in-depth study of the historical and current practices, policies, and perspectives that create what is known as Native American Experience. Discussions will cover a wide variety of topics such as sovereignty, the boarding school experience, Native American perspectives on resource management, definitions of what it means to be tribal, and the impacts of these experiences on day-to-day relationships and world views.

There are a limited number of GTE scholarships available to tribal members to help cover tuition costs. Scholarships are available to students who have not received a grant, and on a first-come basis. Please call Diane Bohle Johnson at OSU/Warm Springs Extension for more information at 553-3238. Call Deanie Johnson at Extension to sign up for the course.

Master Food Preservers

Do you need an answer your food preservation questions? Call the Certified Master Food Preservers and Extension educators in Lane County on the OSU Extension Service Food Preservation Hotline. The hotline will be available from

July 15 - October 15. Phone calls may be directed to 1-800-354-7319 between the hours of 9 AM - 4 PM Monday-Friday (except holidays).

Reprise of Large Supplies For U.S. Agriculture

by Bob Pawelek

Large supplies of major U.S. field crops are expected to persist in 1999/2000, with season-average farm prices stabilizing or declining. Wheat is the exception, with production expected to decline and average price to rise moderately.

Red meat and poultry production in 2000 is forecast about the same as expected record production in 1999. Increased poultry production, bolstered by continued profitability and low corn and soybean meal prices, will offset modest declines in beef and pork output. Broiler prices in 2000 will continue to decline from record levels reached in 1998, while cattle and hog prices will continue to recover some from 1998's extreme lows.

This is according to USDA's Economic Research Service.

Viewpoint: Benefits and impacts of wildlife water developments

The following is an abstract from the July 1999 issue of Journal of Range Management. Steven S. Rosenstock and Warren B. Ballard, authors, are research biologists with Arizona Game and Fish Department.

Abstract Resource managers in the western United States have long assumed that water was a key limiting factor on wildlife populations in arid habitats. Beginning in the 1940s-1950s, state and federal resource management agencies initiated water development programs intended to benefit game species and other wildlife. At least 5,859 such developments have been built in 11 western states.

Most state wildlife management agen-

cies in the western United States have ongoing wildlife water development programs that vary greatly in extent. Ranchers and range managers also have developed water sources for livestock, many of which also are used by wildlife. Recently, critics have suggested that wildlife water developments have not yielded expected benefits, and may negatively impact wildlife by increasing predation, competition, and disease transmission. Based upon a comprehensive review of scientific literature, we conclude that wildlife water developments have likely benefited many game and non-game species, but not all water development projects have yielded expected increases in animal distribution

and abundance.

Hypothesized negative impacts of water developments on wildlife are not supported by data and remain largely speculative. However, our understanding of both positive and negative effects of wildlife water developments is incomplete, because of design limitations of previous research. Long-term, experimental studies are needed to address unanswered questions concerning the efficacy and ecological effects of water developments.

We also recommend that resource managers apply more rigorous planning criteria to new developments, and expand monitoring efforts associated with water development programs.

STOCKMAN'S ROUNDUP: Cows and crested wheatgrass aide firefighters



by Bob Pawelek
OSU Livestock Agent

High winds, high temperatures, heavy fuel loads and low humidity are a deadly combination in the control and suppression efforts of range fires. When residential areas are in a wildfire's path, the potential for disaster is particularly high.

These conditions existed in Elko, Nevada on July 3, said Ron Torell, University of Nevada at Reno Extension Northeast Area Livestock Specialist. "We had 30 mile-per-hour winds, gusts up to 40, tem-

peratures in the 90s, low humidity and a high fuel load. At noon, a fire ignited near the Hunter Exit, 10 miles west of Elko. High winds moved the fire quickly toward nervous residents in Sundance and Crestview subdivisions. The subdivisions are on Elko's western outskirts.

Sundance residents Kyle and Lauri Vogler commented, "We were very nervous. The winds were moving the fire in our direction. We turned on the lawn sprinklers and were preparing to hose down the house. Fortunately the fire slowed and changed directions." The Voglers can thank cows and crested wheatgrass for the fire's change of heart. They helped fire crews, bombers and helicopters detour and slow the fire, alter its course and remove the threat of fire to homeowners. The cows accomplished this task at no cost and very little effort.

According to Kent McAdoo, Extension's rangeland resources specialist in Elko, "Crested wheatgrass is an introduced grass species planted on some rangeland areas to provide early spring

grazing for livestock. It's not as flammable as annual grasses such as cheatgrass, and is known to be fire-resistant. Because of this, it's also been planted in 'greenstrips' in some areas to slow down wildfires. Native brush is removed from areas where crested wheatgrass is planted, thus eliminating additional fuel loads. When cattle graze crested

wheatgrass seedlings in early spring, even more of the fuel source is removed, thus further reducing the threat of fire."

The rangeland that burned July 3 are part of the Heguy and Maggie Creek ranches' Bureau of Land Management allotments. Mitch and Rhonda Heguy grazed cattle on the west and east Avenal fields in early spring. "The west Avenal is primarily annual cheatgrass and brush in the lower elevations and native perennial grasses and brush in the higher elevations," said Mitch Heguy, owner/manager of Heguy ranches.

"The fire blew through the lower west Avenal in a matter of hours," continued Heguy. The cheatgrass and brush was like

diesel-soaked paper. Once the fire hit the fence-line boundary of the east Avenal, where crested wheatgrass is the primary vegetation, the fire stopped and changed directions to the north, away from residential areas. We moved our cows out of the Avenal fields two weeks ago after they had removed some of the vegetation from the area. Had they not grazed there, the fire could have been much worse, threatening residential areas," concluded Heguy.

"Reducing fuel loads as a preventive measure and establishing a vegetative fire resistant boundary around your home are the best known methods to protect your residence from wild fires," said Smith. "Both of these measures were in place on the Avenal fire."

"The hard work of fire crews, bomber planes and dispatchers deserve much of the credit for extinguishing the July 3 fire," said Torell. "However, crested wheatgrass and the cow should also be given credit for detouring the fire and keeping those residents of Sundance and Crestview subdivisions out of harm's way."