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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.



The Clover speaks

by Sue Ryan

The 4-H Timberwolves and 4-H Timbercubs basketball clubs are meeting now, and also signing up new members. Janice Gilbert-Gunshaws is the leader for the Timberwolves, and Sandra Scott is the leader for the Timbercubs. Right now they have a split practice schedule. The TimberCubs are practicing Monday nights in Madras. This club is for those boys 12 and under. The Timberwolves is holding practice on Friday nights from 6 to 8 p.m. at the Warm Springs Elementary gym. This club is for 13 to 18 year old boys. The team could also use a couple of girls as managers, scorekeepers. If you want to sign up, show up at practice and fill out a 4-H Registration form. These forms can also be picked up at the 4-H office in the Old Boys Dorm.

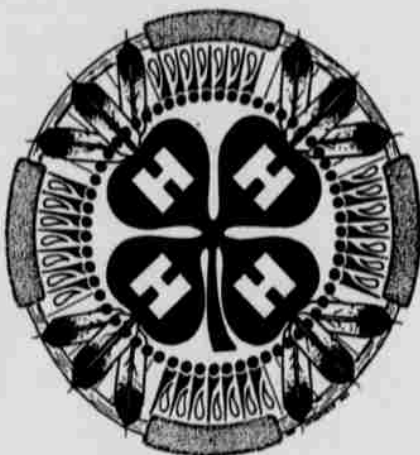
Youth Cooking is swinging along. At the last class, students learned how to cook up frybread. We'd like to say a big THANK-YOU! to Nadine Scott for making the dough up for us ahead of time. I'll share her recipe at the end of Cloverspeaks.

If you are thinking of joining the 4-H Warm Springs Livestock Crew, now's the time to

decide—as they will be holding their first meeting of the year here shortly. This club is for students in 4th grade or higher that are interested in raising a sheep, pig, or steer. Animal Science projects provide opportunities to develop responsibility by regularly caring for an animal. This means learning how to feed and care for your animal, learning about the animal's health, and marketing your animal at fair. It is desirable that 4-H members own their project animals. Parents are advised to help their children get full benefit from 4-H experiences. 4-H'ers learn by doing, not by what someone does for them. With guidance, 4-H'ers should have full control of their projects. A livestock project is a business venture that offers excellent experience in record keeping and

handling money. (4-H 0231L). If you have more questions on the Warm Springs Livestock Crew, contact leaders Sandi Thomas or Angie Orchard or call the Extension office. Now, for Nadine's Indian Fried Bread Recipe

INGREDIENTS
4 CUPS FLOUR
1 TSP SALT
1 TBSP BAKING POWDER
2 TBSP DRY MILK
1 1/2 CUPS HOT WATER



1 1/2 CUPS X-TRA FLOUR
1 CUP CRISCO (OIL)

DIRECTIONS

- Mix dry ingredients together real well. Gradually add really hot water, enough to make flour mixture look like cooked oatmeal.
- Gradually add extra flour, folding the mixture under and pressing down on top of the dough. Fold for at least 5 minutes.
- Let stand (sit) for at least 1 hour.
- Take small amount of dough, press together with palm of hands, use thumb to press center to form a small size pancake.
- Place pancake size dough into hot cooking oil for about 1 minute each side or until golden brown.

Natural Resource Notables

by Bodie Shaw

Water Quality Issues and Livestock

A clean, safe supply of water for homes, recreation, irrigation and wildlife is an important issue of Oregonians. Pollution of our streams may come from a number of sources which, when combined, add up to large problems. These "non-point" sources may carry small amounts of soil particles, bacteria, nutrients or pesticides into streams, decreasing water quality.

Many people own small acreages and raise a few livestock. The manure from these animals can provide organic matter to the soil and be a source of nitrogen, phosphorus, potassium and other nutrients which increase soil fertility. If not properly managed, manure can contribute to pollution. Excess nutrients, disease-causing organisms, and organic matter from manure can contaminate surface and groundwater.

Control grazing and keep livestock off pastures during the winter

Because soils are wet and pasture growth is minimal during the winter, pastures will be overgrazed and physically torn up if livestock is left on it. Because of the land size limitations of small farms, a good approach is to keep livestock in a small winter holding area and collect the manure. These holding

areas will need to be built up into an "all-weather" surface, using wood chips or hog fuel, or gravel.

Keep clean runoff from flowing through livestock facilities and manure storage piles

Provide gutters and down spouts that move clean roof runoff away from buildings and storage areas. Create diversion ditches or earthen berms that move clean water away from livestock facilities.

Overgrazed pastures are potential sources of surface runoff and groundwater contamination, due to compacted soils and lack of filtering vegetation. Cross-fencing the pasture into smaller paddocks and controlling livestock grazing and movement can help maintain a high quality pasture.

Keep manure piles protected from rain and surface runoff

Place the manure storage on high, well-drained ground away from surface water sources. Cover all manure and soiled bedding and protect them from runoff. Make sure that liquids from the manure pile are contained or are allowed to drain into vegetation areas that can filter the leachate.

Store manure in the winter and spread it on pastures when plants are growing

Spread manure on pastures in the early

spring through early summer, when there is little chance of runoff and growing plants can readily use the nutrients. Stored manure is readily compostable. Composting kills most disease-causing organisms, reduces the manure pile size, and provides a more stable source of nitrogen.



Information for this article was extracted from *Manure Management in Small Farm Livestock Operations, Protecting surface and groundwater*, by D. Godwin and J.A. Moore. Extension publication number EM 8649. For a copy, contact Bodie Shaw at the Warm Springs Extension Office at 553-3238.

Club members & leaders wanted

Your friendly Natural Resources/Agriculture Agent (Bodie, for those of you who don't know!) would like some parental assistance in establishing an ACTIVE livestock 4-H program here at Warm Springs. Livestock can include horses, sheep, swine, cattle, dogs or pretty much whatever! If you know of any interested parents or youth for this program, please stop by the office or give me a call, 553-3238.

Lighting candles

Holidays are difficult times for grieving families. Today as I was writing the stories for Spilyay Tymoo, I received a newsletter from the chapter leader of 780 Portland chapters of The Compassionate Friends, Patricia Fortner. A poem on the front page touched me very much.

When the time comes for lighting festive candles Let them remind you, Not only of what you lost, But also of what you had.

by Sasha, Bend, Oregon TCF

On the back page was "Some Ideas for Creating Your Own Memorials" by the 1996 Portland TCF Newsletter borrowed from the TCF Atlanta Newsletter, September 1995, borrowed from the Pen-Parents, Fall 1994. If you want a complete copy of the Portland Newsletter, you can call 553-3238 or come to the OSU/Warm Springs Extension Office. These are a few of the ideas that I modified from on the list:

*Prepare a photograph album and have copies made for each member of the family. Take time to share memories with each other.

*If your loved one wrote stories or poems, have these printed or bound for family or friends.

*Decorate a church or school room with flowers for the holidays.

*Release a helium balloon tied with "love notes."

*Keep precious items in a decorated memory box, trunk or book created for this purpose. Include toys, bulletins, letters, blankets, clothes, photos, cards, poems, journals.

*I would like to add one idea, make "luminaries" of paper sacks, half filled with wet sand to line the walkway or driveway to your house. Put a short, fat emergency candle in the sand. When it is dark, light the way to you home. It's a beautiful signal to your lost loved ones, that you think of them on this holy holiday.

Highway 97 work near completed

by Heather Shaw

Local commuters, vacationers, and hunters alike have undoubtedly been affected by the highway 97 construction between the Crooked River bridge and Madras over the last two months. The State Department of Transportation contracted out the \$4,763,000 job of widening the highway 5 feet on each side and adding two weigh stations to J.C. Compton Construction of McMinnville, OR. According to the company's secretary/treasurer, Susan Brown, the project should be completed by the end of this month. The project started in mid-August of this year. Next spring, the existing road and its extensions will still need to be paved over, which should be done by September 30, 1997.

Jack Boatwright, the assistant on the project, explained that although construction on the highway itself will cease over the winter, construction on the two weigh stations will continue through the cold months. "One station is on the Bend side, for south-bound trucks. Its at the foot of the [Juniper] Butte. The other is for north-bound trucks at the top of the Butte." The two stations are approximately one mile apart and will be heavily used on the busy high-

way. The increased amount of traffic traveling the highway from Bend to Portland has reportedly outgrown the road, and construction is necessary for safety reasons. For example, Boatwright mentions "school buses having to cross into the other lane to swing wide enough to negotiate narrow turns off of the highway. Our main goal is safety. While we are trying to make the highway safer, however, drivers are being greatly impacted. We hope people understand that the travelers and the crews need to work together to make the construction sight a safe place for everyone."

The construction crew ran into a small obstacle when they found a 20" water line which had apparently been overlooked. Boatwright reported that "there was no permanent damage and the issue was mitigated with Deschutes County Water District." When asked if there are best times to travel through the construction, Boatwright responded chuckling "At night, or on the weekend, when we aren't working. Please account for the delay in your traveling plans because chances are, you're going to be stopped for 20 or 30 minute

Memories mixed with giving

by Norma L. Simpson

Today, I read a newsletter from Jo Anne Kock, Extension Agent from Wasco County. She wanted to have an "Old Fashioned" Christmas. She prompted me to remember things in my Christmases. Maybe you will recall pleasures and sorrows of the holidays.

Sometimes father brought a tree from the woods after an elk or deer hunting trip. Aroma of pine or fir trees filled the garage and later the house until New Year's Day.

Each of us still cherish a fragile tree ornament which we had placed on the tree years ago after the strings of pop corn and cranberries were draped with the tree lights. The ornaments must be at least 60 years old now.

It was never the same when the glittery foil streamers displaced the pop corn and cranberries that we made. So we learned to carefully drop shiny foil icicles from the back to the front of the tree's limbs. When the complete foil tree was in fashion, the rotating light and red styrofoam ornaments or plastic bows replaced the fragile old ornaments. Ugh!

Every year my father told us about his saddest Christmas when he was about 6 years old. His father died that year, and his mother baked bread for a living - 10 sacks of flour, she baked bread for the sheepherders from 9 sacks and the one sack was her pay. Needless to say, gifts were nearly non-existent. But my father did get a pair of hand-me-down wool socks with a hole in the toe. His mother said, "they will be warmer when we glean the wool from the barbed wire fence to make yarn to patch the hole".

When I think of our abundance today, and

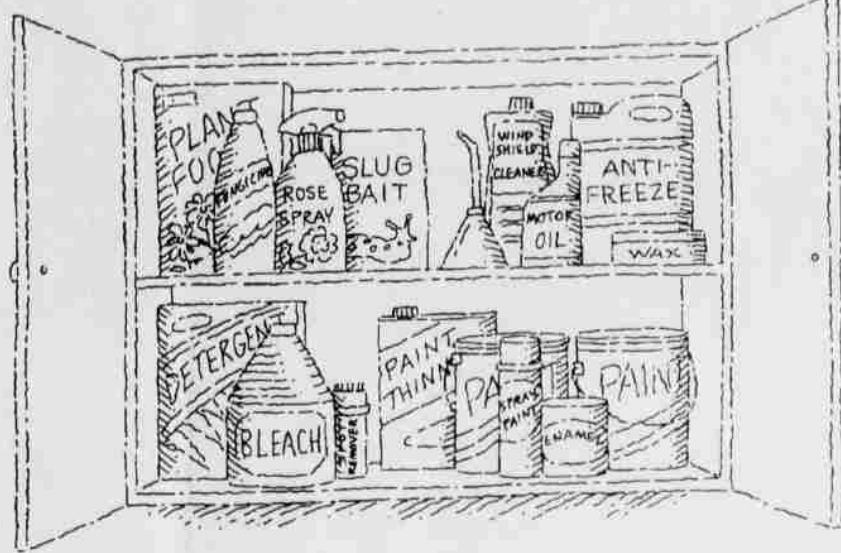
think of how many people still suffer without the basic necessities, I look at the clothes that I hardly wear or have never worn that I can give away. Clean, nicely boxed and wrapped for Christmas, the gifts may bring joy to someone who needs a bit of tender loving care. This year the boxes might go to the Victims Assistance Shelter along with toys, puzzles, decorations and sugar plums.

This week I dug out Mom's "Carrot Pudding and Sauce" recipes. That was never my favorite Christmas dish, but everyone else loved it. Because I didn't like the pudding, Mom pampered me with mince meat pie - still my favorite.

If the weather was dry, Mom whipped up one or two batches of divinity with walnuts. She was smart enough not to make candy when it rained. Sugar continued to absorb the moisture in the air, no matter how much she heat the divinity.

When I was 15, Mom asked me what I wanted for Christmas. I surprised her by saying a "World Atlas." It was the same year that I received my first "surprise" gift from my father, and Ukeleles were the rage. Even Mom was surprised. Fifteen years later, I surprised them both when I gave them a set of World Books. They were used to my set of World Books. When I moved from home, they missed my set. In 1996 when I came to Warm Springs, my old set was left in Papua New Guinea with a small rural school without any books. My folks' set is still with me. Mom and Dad, thanks for the loving memories.

MERRY CHRISTMAS, REMEMBERING, GIVING, SINGING AND PRAISING!



Safeguard your home for tiny tots

Norma L. Simpson

A Tribal woman came to the office this week to express her concern for the tiny tots in her home during the holidays. "I'm not used to having little ones peering into my cupboards where I store my detergents, and bleach and other cleaning agents. When the inspector came to the house, she told her to get the items up, out of reach of the children or in locked cupboards."

We have good publications in the OSU Extension Office that will help you look for the 52 Hazardous Household Products in your home. Some are bad if you eat or drink them; others when you breathe them, and some when they touch your skin. Some be

fire hazards, others will make you sick, others will kill you.

Look for the items in the drawing...from A to W:

Adhesives/glue, aerosols, antifreeze, batteries, bleach, charcoal lighter fluid, cleaners, degreasers, disinfectants, drain cleaners, fertilizers, fingernail polish removers, gasoline and kerosene, medical wastes, expired medicines, Mothballs, oven cleaners, paint thinners and paint strippers, permanent wave solutions, pesticides, shoe and car polish, rat poison, rug cleaners, spot removers, windshield wiper solutions, wood preservatives.

So your tiny tots will be safe, put these hazardous up out of reach or locked up, for a safe and happy holiday.

STOCKMAN'S ROUNDUP: Winter care for cows



by Bob Pawelek
OSU Livestock Agent

Several management practices can be used by many cattlemen to help their herds get through winter. One technique is to sort cattle by age. Nutritional requirements are different for young heifers than for mature cows. Feed and supplement costs can be lowered if cows can be separated and fed according to their needs. For example, bred heifers and thin older cows will benefit if

kept apart from dominant mature cows. If separation is impossible for your outfit, try feeding in as many places as is reasonable, allowing heifers every opportunity to continue growing.

Keeping an eye on the weather is essential to manage nutritional needs of cattle. Severe cold is always a dilemma for the producer who wants his herd to outlast winter's grip. For cows, the critical winter temperature is around 30 degrees Fahrenheit. When temperatures dip below that, there is an increase in the energy requirement for cows. For each one degree drop in Fahrenheit, there is approximately a 1% increase in the TDN or energy required.

For example, at just above 30 degrees, no increase in TDN (no extra hay or grain) is necessary.

At 20 degrees, a 10% increase in TDN (about 4 lbs. extra hay and 2 lbs. extra grain per cow) is required. At 10 degrees below zero, 40% more TDN is required, or 8 lbs. of hay and 4 or 5 lbs. more grain per cow are needed to retain the same amount of energy at 30 degrees. In other words, the colder it gets, the more feed you should put out.

When winter turns into a wet, damp spring, producers should continue to monitor cow condition. Thinner cows are more prone to the effects of this kind of weather. Especially when a thin cow's hair coat gets wet. The critical temperature then increases to around

50 degrees Fahrenheit. Weight losses right before calving season are bad news.

Evaluation of hay to determine nutrient availability is a tool every producer should use to cut costs and produce higher beef yields. Quality of hays vary with each variety, cutting, and even bale. The time to use the poorer quality, weather damaged hay is during the early winter months. As cows approach calving, and after calving, the higher quality hays should be used. The cow's protein needs increase as she gets closer to calving.

Don't winter open cows. Probably the most costly aspects of any cow outfit's wintering program is feeding cows who will not produce. Culling unproductive cows is sensible management. Why feed a cow who will not earn her keep?

Other strategies that achieve good results are feeding supplements on alternate days to cheapen labor and feed costs, changing feeding grounds often to avoid health problems in the herd, and keeping an eye on the flesh or condition of the cows to help them cycle and calve on schedule.

It's difficult to cut the cost of winter feeding. Sensible use of available resources, matching feeds to nutrient needs, and watching the weather will trim the waste and boost profits, while keeping the cow herd producing at their highest potential.

Part 1-Wood Ash can be useful in yard

What can you do with all the ash from burning wood in your fireplace or wood stove? Wood ash can be useful in home gardens, in your compost pile or as a pest repellent, explained Dan Sullivan, soil scientist with the Oregon State University Extension Services.

Wood ash has long been recognized as a valuable substance, Sullivan said. Many centuries ago, ancient Roman scientists and scholars documented the value of returning ash to the land.

In the 18th century, the benefits of ash-derived potash, or potassium carbonate, became widely recognized. North American trees were felled, burned and the ash exported to Great Britain as "potash fever" hit. In 1790, the newly-independent United States of America's first patented process was a method for making fertilizer from wood ash (U.S. patent number 1: "An improved method of making pot and pearl ash.")

Cheaper sources of lime and potassium eventually killed the commercial market for wood ash, said Sullivan.

For the home gardener, however, wood ash can be a valuable source of lime, potassium and trace elements.

"Since wood ash is derived from plant material, it contains most of the 13 essential nutrients the soil must supply for plant growth," said Sullivan. "When wood burns, nitrogen and sulfur are lost as gases, and calcium, potassium magnesium and trace element compounds remain. The carbonates and oxides remaining after wood burning are valuable liming agents, raising pH, thereby helping to neutralize acid soils."

Where soils are acid and low in potassium, wood ash is beneficial to most garden plants except acid-loving plants such as blueberries, rhododendrons and azaleas. Use wood ash on flower beds, lawns and shrubs.

The fertilizer value of wood ash depends on the wood you burn. As a general rule, hardwoods such as oak weigh more per cord and yield more ash per pound of wood burned. Hardwood ash contains higher percentage of nutrients than ash from softwoods such as Douglas fir or pine.

"Hardwoods produce approximately three times as much ash per cord and five times as many nutrients per cord as softwoods," said Sullivan.

Continued in the next Spilyay