

Know size and type of woodstove best suited for you

Before buying a wood stove for your home, make sure you know the size and type of stove best suited to your home heating requirements. "Don't buy a stove based simply on an advertiser's claim about how big an area it will heat," cautions Rich Topielec, Oregon State University Extension energy agent.

The size of wood stove you need depends on your home's size and interior layout, on how well it is weatherized, and on how cold the winters are, explains Topielec. A properly sized wood stove is capable of supplying needed heat for the typical and coldest winter temperatures of your locale.

"The right size wood stove provides the best performance and saves you money," says Topielec.

All stoves sold and installed in Oregon must be certified. Certified wood stoves are designed to meet federal Environmental Protection Agency (EPA) air emissions standards and have operating efficiencies of about 65 to 80 percent. That's well above the 40 to 50 percent efficiencies of the 1970s and early 1980s. A list of certified stoves is available from stove dealers or from the Oregon Department of Environmental Quality (1-800-452-4011).

If you live in an area classified as "non-attainment," which is an area more susceptible to lingering air pollutants and has difficulty achieving EPA air quality standards, find out if there are any restrictions or regulations that may influence your stove buying decision.

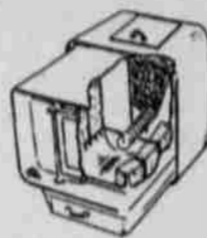
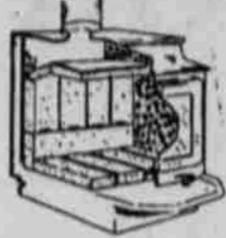
The Energy Note "Sizing and Buying a Wood Stove" takes you step-by-step through determining

how big a stove you need for your home. It also helps you choose among three types of wood stoves: non-catalytic, catalytic, and pellet. And it tells how other space heating options compare to wood stoves. Request Energy Note B215 from the Warm Springs Extension office.

Non-catalytic wood stoves are the type of stove most people are familiar with. They consist of a firebox, air controls, and baffles to contain and recirculate combustible gases for efficient combustion. Their design features allow them to achieve low emissions and high efficiencies if properly operated.

Catalytic stoves contain a ceramic, honeycomb-shaped combustor typically placed in a baffle plate out of direct contact with flames. The combustor is coated with a chemical catalyst (platinum or palladium) that promotes ignition of gases at lower temperatures (350-600° F).

Pellet stoves burn wood pellets manufactured from wood waste. Pellets are loaded into a hopper where a motorized auger, controlled by a dial or thermostat, moves the pellets into a small burner in the firebox.



Non-catalytic wood stoves are the type of stove most people are familiar with. They consist of a firebox, air controls, and baffles to contain and recirculate combustible gases for efficient combustion. Their design features allow them to achieve low emissions and high efficiencies if properly operated.

Catalytic stoves contain a ceramic, honeycomb-shaped combustor typically placed in a baffle plate out of direct contact with flames. The combustor is coated with a chemical catalyst (platinum or palladium) that promotes ignition of gases at lower temperatures (350-600° F).

Pellet stoves burn wood pellets manufactured from wood waste. Pellets are loaded into a hopper where a motorized auger, controlled by a dial or thermostat, moves the pellets into a small burner in the firebox.



Information provided by:
OSU Extension
at Warm Springs
1110 Wasco Street
553-3238.

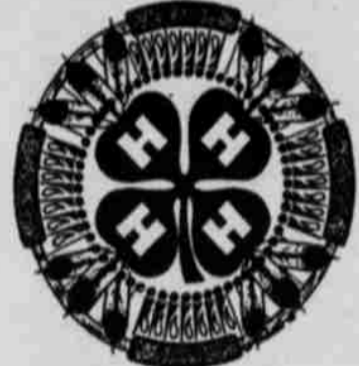
OSU Extension Staff:

- Arlene Bolleau 4-H & Youth
- Bob Pawelek Livestock
- Norma Simpson Home Economics
- Carol Stevens 4-H
- Crystal Winishut 4-H Assistant
- Tim Wojtusik Agriculture
- Clint Jacks Staff Chair, Madras

The above individuals are devoted to extending research-based information from Oregon State University to the people of Warm Springs in Agriculture, Home Economics, 4-H Youth, Forestry, Community Development, Energy and Extension Sea Grant programs. Oregon State University, 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.

EDUCATION THAT WORKS FOR YOU

Clover speaks



office located at 1110 Wasco Street. Thank you

4-H Guide for Leaders
Often it becomes a challenge for 4-H leaders to plan exciting, involving meetings. Variety in activities will help make 4-H meetings educational and enrich the 4-H experience for club members. Active club programs help create interest and provide inspiration and stimulation for members to learn through new experiences. There are many ways to incorporate active, fun learning into the 4-H club experience.

- Some 4-H clubs have business meetings on a monthly basis and project meetings in between.
- Some 4-H clubs have business meetings as a part of project meetings on an "as needed" basis.
- Some 4-H clubs plan educational field trips and activities (such as tours, guest speakers, family socials, judging activities, etc.) separate from business or project meetings.

How your 4-H club is organized and the activities you participate in are determined by the club leaders, members, and parents. You may want to appoint a program planning committee to help develop your club calendar for the year.

This committee should be appointed early in the club year. The 4-H Club Planning Worksheet (4-H 0241L) is a helpful tool. It is available from your county office of the Oregon State University Extension Service.

Examples of 4-H club programs

When planning 4-H club programs, be sure to incorporate some variety in learning experiences. New and different experiences arouse interest and attention in youth of all ages. Following are some examples of 4-H club programs that you and your program planning committee may want to consider.

- Parent's night.** Ask the parents of your club officers (or others) to be in charge of one program. It may be serious or on the humorous side.
- Club exchange.** The entire club from one area visits another club. The visiting club usually presents the program. It may be helpful for a new club to visit an experience club to become more familiar with the club meeting process.
- Officer experience night.** Younger 4-H members "hold an office" at one meeting and are "coached" by club officers and junior/teen leaders. This provides an opportunity for members to "try out" an office that they may want to run for later.
- Future 4-H'er night.** Invite prospective 4-H members and their parents to the meeting, have prospective 4-H members involved as

"helpers" for officers, demonstrators, etc.

Community program. Involve local elected officials or presidents of community organizations to introduce them to 4-H via talks, skits, presentations, judging, etc. Ask them to talk about their organization, too.

Club family picnic or campout. Hold the meetings during a family picnic or campout night with program emphasis on nature and conservation.

Office nomination, campaign, election, installation. Promote citizenship by having members "declare" intentions for various offices, then "campaign" like a political convention, hold election by ballot, secure a voting booth from county officials, and have officers "sworn in" with an impressive ceremony.

Social events surrounding holidays. Example: Thanksgiving, Halloween, Christmas, or Valentine's Day, with the entire program centered around that holiday's theme. Be sure to invite and involve the whole family.

Citizenship night. Have a "Know your State Government" delegate give a speech or a flag ceremony. Invite a county government official to talk about his/her job.

4-H awards trip winners. Invite delegates to National 4-H Congress, the Washington, D.C. trips, or judging trips to give a "pep talk" to your club.

Project tour and club activity. Hold your club's meeting in connection with a project tour, picnic, or swimming party.

Family "favorite game" night. Have members and their families bring a favorite game to the club meeting. It's best to have games that can be played at least once in a 30-minute time span. Playing together may help members learn to work together.

Presentation night. Have members who are preparing for county presentation competition present their demonstrations or speeches. Invite an "outside" judge to give feedback. You might also have a presentation on "How to Give a Demonstration" given by an experienced member.

4-H Graduation. Plan an impressive ceremony or a "This is Your 4-H Life" theme for a graduating 4-H member, followed by refreshments. This would also be a good time to invite the whole family.

Member initiation. Plan a fun, positive ceremony carried out by junior/teen leaders to welcome new members. Be sure it is positive and that each child is made to feel an important part of the group.

Local club achievement night. Have each 4-H member exhibit the

results of his/her projects and discuss and encourage enrollment in that project. This activity could be held in the fall when members are making project choices.

All-club judging night. Each member in the club brings a judging class representing his/her project; for example, clothing—a class of seams or scissors; woodworking—hammers, fasteners, etc.; beef—halters, brushes, etc. Use official judging cards and have members, leaders, parents, and guests judge each class. Talk about the classes and placings. This is also a good way to introduce new projects to 4-H members.

Suggested speakers for club members:

- law enforcement official
- animal breed association representative
- Red Cross representative
- blood bank staff member
- county health nurse
- county 4-H Leaders Council officer
- Department of Fish and Game personnel
- forestry staff member
- volunteer or paid firefighter
- County Commissioner
- junior leader club representative
- State or County Fair board member
- retired citizen
- probation officer
- service club and fraternal order member
- exchange student
- local business owner
- county agent of the OSU Extension Service

In the 4-H program we are working with a wide range of youth from many different backgrounds, and with different skills and abilities. From research and everyday observations we can readily determine that a flexible and varied program is necessary to meet the various needs of youth.

As a 4-H leader you need to determine, with your club, what you are trying to accomplish (goal setting) and what experiences you are providing to meet those goals. You may need to help your program planning committee understand those goals as they identify programs for their yearly 4-H club calendar.

Remember: plan, participate, review, and evaluate

1. Plan
Thorough planning is the key to successful 4-H programs. Ask yourself: Is this program necessary? Does it have a purpose? What do we hope to gain? A special program or speaker is a method of teaching—an opportunity to learn. A program that results from the desire to see, do, and learn is most effective. A special program should help accomplish the

goals of your club.

Who plans a special club program? Remember that interest and learning result from involvement. Therefore, the club members should be involved in planning and making arrangements. For a large club program or activity you may want to have several subcommittees to plan and arrange for special set-up needs, food, publicity, etc.

At the meeting prior to a special program or guest speaker, announce and explain the upcoming program. Members and parents should know what they will see, hear, and learn. This stimulates interest and sets the stage for better understanding, appropriate questions, and greater learning.

Be sure to publicize a special program before it occurs. A news story alerts the community to what 4-H is doing and stimulates interest. You may want to have a phone committee call members to remind them of special programs.

2. Participate

Meet at the scheduled time and place. Check to see that everyone is present and comfortable, and has what he or she needs.

Be sure to have someone appointed to introduce a guest speaker at the beginning of the program and thank the speaker at the end. If additional family members are attending, take the time for 4-H members to introduce them to the club. This is important in making family members feel a part of the activity.

Avoid distractions. People learn best when they are comfortable. Allow participants to be seated when practical. Have a loudspeaker or portable PA system available if needed.

Encourage everyone to participate in activities. Handle conduct problems courteously, firmly, and promptly. At the end of the program, give participants a chance to ask questions.

3. Review and evaluate

At the next club meeting, review what was learned at the program. Encourage club members to tell what they liked about the program and what they learned that was new. Help them understand the program and how it relates to them. This will help to reinforce the learning process.

Have your program planning committee send thank-you letters to the speaker, host, and others who helped out. Writing thank-you letters can help club members develop the habit of expressing appreciation. Sometimes letters should be written by each member. Other times, letters can be written by a committee chair and signed by all members. As club leader, you, too, may want to write to a special speaker expressing your appreciation.

A follow-up news story about the program may be very appropriate. Include this story (or the highlights) in the secretary's book or club scrapbook, as it will be helpful in planning future club programs. Also include those things you would like to change or do differently next time.

Good 4-H club programs don't just happen automatically. They take discussion, involvement, and planning. Work with your members and their parents to develop a variety of interesting, fun, and educational programs for your 4-H club. Learning can be fun!

Piece of our world: DE Plant

In the last issue I ran an article on the new newspaper recycling program for the Reservation. In the article I mentioned that the old newspapers would be used by the Composite Products division of Warm Springs Forest Products in the production of fire proof building materials. Many people had questions about Composite Products so I felt that a little information would be helpful.

Composite Products (sometimes called the DE projects) is located at the mill next to Highway 26 down near the Deschutes River. It's offices and manufacturing facilities occupy the large Southeast building that was formerly used for manufacturing plywood. Unlike other divisions at the mill, Composite Products uses no timber or wood in its manufacturing processes. In fact the only two important ingredients in their products are old newspaper pulp and diatomaceous earth, a mineral dug from the ground.

Diatomaceous earth (sometimes called diatomite by geologists) is a soft, white material like chalk that crumbles into powder. Diatoms are microscopic, single celled creatures that occur in many environments on the earth but are probably best known as part of the mass of drifting organisms in oceans and lakes known as plankton. These tiny creatures have hard shells composed of silica, which is the same as quartz. When these creatures die their shells remain intact and eventually sink to the bottom of the water. Over thousands of years the layer of diatom shells can become very deep. These deposits of diatom shells can be found in many places in Oregon and in other parts of the world where it is mined for many uses. The diatomaceous earth used at

the mill is mined just south of the Reservation in Terrebonne.

The question still remains: "How can you make something fireproof out of this powdery stuff and old newspapers?" I wondered this myself, so I gave Frank Smith a call down at the mill to ask him. Mr. Smith told me that the fireproof building materials that they produce are made of newspaper fiber, diatomaceous earth, and not much else. The old newspapers are pulverized, mixed with water and diatomaceous then formed into the desired shapes before they harden and dry. Its a little more complicated than that but that is basically it. Mr. Smith said that the insulating qualities of the diatomaceous earth make these finished products extremely fire resistant. He went on to tell me that a type of panel door manufactured by Composite Products was tested in a fire where temperatures exceeded 24,000 degrees Fahrenheit! The door not only survived but it even kept its color. Mr. Smith is very enthusiastic about the work going on at Composite Products and he encourages any interested Tribal member to ask questions about what they are doing and arrange for a tour of the project.

This is what will happen to old newspapers that are collected in the Warm Springs recycling program. Its a chance for all of us to make a positive step toward conserving our natural resources and to support the work of Composite Products. The money made by the mill means income for the Confederated Tribes and the Tribal members.

If you have any questions on this or other topics that interest you please call me at the Extension Office (553-3238) or stop in during office hours.

Whole wheat dough has less gluten

By Norma L. Simpson

If you like to make whole wheat bread, you could wonder why your loaves are so flat when other people manage to have lovely loaves with rounded tops.

The answer is the concept of "whole wheat." Most bakers prefer to mix 50% whole wheat flour and 50% white flour. Whole wheat has less gluten, the protein in flour. Kneading the dough to develop the protein so it will trap gas produced by the yeast. As a result the bread made with both white and whole wheat tend to raise better and to keep the gas inside the loaf until it is baked. There are two options to get more

gluten. One is to buy it and the other is for those people with plenty of time. You can make gluten by washing whole wheat flour to remove the starch. You start with 9 cups of whole wheat flour to eventually have 2 1/2 cups of gluten, which would have to be dried ground into the bread to get a more glutinous type bread. I have the directions for anyone who wants to give it a try.

To improve all bread making during cold winter months bring all of the ingredients into the room the night before you want to make bread. Bring cold flour to room temperature for better wintertime bread.

Stockman's Roundup: Ten ways to get a little more for your calves



By Bob Pawelek
OSU Extension Agent
Livestock and Range

on a single day's prices.

3. Manage cattle to fit the market. The average producer should stay away from the extremes. If a producer deviates from the industry norm, he should do so with a marketing plan and a purpose. For example, if you want to produce calves for a bull feeding market, be sure your animals fit the program. Sit down with someone who is knowledgeable about that market and find out what it takes to produce for it.

4. Check out auction markets. Markets have people who can help you get a better price. If you need to sell cattle that are out of the ordinary, let the auction company know in advance, so they have time to prepare for you.

Different markets have different personalities. Some markets may sell larger numbers of some cattle than others — for example, maybe more stock cows or baby calves or cross-breeds.

5. Stay informed of market trends. Don't just show up at the sale barn with a trailer load of cattle and your fingers crossed. Read or listen to market reports on a regular basis — daily, or at least weekly. Call the market operator occasionally and ask him what trends he foresees. A good market manager likes for his customers to call him. That's what he's there for — his customers.

A cow-calf man shouldn't just

watch for calf prices. Also check prices for yearlings and fat cattle. They determine what calves will bring.

6. Take advantage of weather markets. When heavy snow in Eastern Oregon or perhaps a lengthy period of rainfall in the valley slices the number of cattle brought to markets there, prices here in Central Oregon may go up.

An order buyer may have only a week to put together a load or pen of cattle. If the weather has been bad and cattle marketings have been down, he's going to bid higher to fill his orders.

However, a weather market can also work against you. For example, weather conditions that block transportation to the destination point for stockers or feeders can depress the price at the local market.

7. Sell calves when they peak. That's when they've made all the growth they can from milk, and they need a change in feeding to continue to gain. You may want to wean and sell a calf right after he peaks, or else feed him for 60 to 90 days, but at least 40 days. You'll probably lose money if you try to hold a calf for a week or two after he's weaned. He'll lose his bloom and attractiveness to buyers. So you're forced to feed him until he gets that bloom back.

8. Avoid stress. Wean calves and move them directly to the sale. Do not let them stand out in the hot sun while you drench their mothers and then load them out. The overall attractiveness of a calf is severely reduced if he has been drenched, is covered with mud, and has been drained of energy. Any calf that's tired when he comes to the sale barn will even be tired by the time he leaves. Buyers mentally take that into account when they're bidding.

Nervous, high-strung animals — like most strains of Brahms have a tendency to buckle or go down when they've been stressed or run in muddy pens.

There is no way to salvage a buckling calf. A buyer won't even be able to get him on the truck. Again, the solution is to have dry pens or solid pastures in which you can hold cattle until you are ready to load them.

10. Move 'em out slow and easy. Ease calves onto your truck or trailer with as little hassle as possible. Don't try to crowd too many calves onto a single truck or trailer. Make sure they have solid footing.

There's no way to guarantee that your cattle will always top the market. The truth is that you can do more to keep from getting discounted than you can to get a higher price. But, you can increase their dollar value by having a market strategy and by using good common sense in taking your calves to the sale barn.