Do woodstove catalytic combusters work?

Q.: If I put a catalytic combuster on my wood stove, will it really decrease the amount of wood it takes to heat my home?

A.: Many people who have installed catalytic combusters in their stoves are able to use a third less wood and still get as much heat as they did without the catalytic combuster. The savings, however, really depend on your ability to change your habits and not feed so much wood into your stove.

Catalytic combusters are made of ceramic with a small amount of

If your home is tucked in among

trees and forests, there may be a

considerable amount of flammable

material, or fuel, that can add

greatly to the fire hazard around

your home. Brush, pine needles,

twigs and branches and trees are

natural fuels that gradually accum-

ulate around your home. In the

event of a wildland fire, these fuels

burn with intense heat and may

carry the fire to your home. What

can you do to reduce the fire danger?

safety zone around your home.

Within this designated safety zone,

all fuel should be removed. This

The first thing to do is establish a

palladium and platinum metals coating the surface. They are placed in or on the stove above the fire. Smoke passing through the combuster is deposited on the surface. Then the metals on the combuster cause the deposited smoke to ignite at a lower temperature than it otherwise would.

After the smoke ignites, the temperature rises to about 1,100 degrees Fahrenheit. This high temperature in the combuster causes the rest of the smoke released from the fire to ignite.

home to flames and radiant heat.

In general, a 30-foot radius safety

zone is sufficient, but if your home

is on a steep hillside or within an

area with a lot of down, beetle-

killed fuels, you should increase

this radius to 50 to 100 feet if

should thin out existing live trees

so that tree crowns do not touch. In

addition, you should prune the

lower branches of the remaining

trees up to 10 to 12 feet. This will

prevent the fire from moving from

the ground up into the tree crowns.

Yyou should also remove the

Within the safety zone, you

Keep your home safe from fire

Because the heat from the combustion of the smoke is released into the room rather than going up and out the flue, the heat output from the stove increases 10 to 50

Not only can a catalytic combuster help you use less wood, but it also decreases pollutants coming out of the chimney as much as 90

Oregon State University Extension energy agents and specialists will answer energy questions of interest to readers. Send your questions to Energy Answers, OSU.

branches, brush and other debris

and placing it in a pile. These small

debris piles can be burned during

the winter when the fire danger is

be made more attractive by adding

a lawn of green grass and ornamen-

tal shrubbery, which may further

establish a safety zone around their

homes as well. Over time this safety

zone will increase and eventually

encompass the entire neighborhood

Encourage your neighbors to

buffer your home from fire.

and make it fire-safe.

The area around your home can

Corvallis, OR 97331. Send your name, address and phone number. The OSU Extension Energy program is conducted in cooperation with the Oregon Department of Energy with funding from Bonneville Power Administration and the U.S. Department of Energy.

Information on this page provided by the by the Warm Springs Office of the Oregon State University **Extension Service**

Phone: 553-1161, ext. 238 or 239

Shawl making offers fun, creativity

Laura says, "The girls are really into their shawl-making."

Laura Switzler has been a 4-H leader in 4-H Shawl Making for two years. Laura encourages and guides the young 4-Hers in first using their hands to attach fringes to their shawl with a crochet hook. The girls then choose which picture or design they want to go on the backs of their shawls which will show when they are dancing. Next is marking and painting, which takes a lot of patience and artistry.

Jeri Blodgett is very special, too. Jeri has been assisting her mom in the 4-H club since it started. Jeri was taught by her mom how to make shawls.

The 4-Hers this year started out from scratch by going to Payless and purchasing their own shawl material. Laura also showed the

girls other material to purchase pleare eager to learn skills they can McDonalds, where no instruction Muppet Baby Miss Piggy.

The 4-Hers and Laura are a special combination. The young peo- and your beautiful shawls!

and the yardage they would need to use throughout their lives. 4-H has do their next shawl project. After also taught them how to make selecting their material, it was on to decisions, how to be active and how to set individual goals and was needed. Everyone took home a values. That is pretty special and unique

We'll be watching for you 4-Hers

Listed below are the 1989 registered 4-H leaders and volunteers at the Warm Springs 4-H office. The list includes both returning and new 4-H leaders and volunteers.

Dan Brisbois 4-H Volunteer Joanne Brisbois 4-H Volunteer Arlene Boileau 4-H Leader-Grooming Club Mollie Marsh 4-H Leader and Extension Agent Elmer Scott, Jr. (Buzz) 4-H Leader-Fish Net Making Clay Penhollow 4-H Leader and Extension Agent

Any person interested in being a 4-H leader, call Deb at 553-1161, ext.

Take resolutions in stride

is the time to set new goals, improve week, several weeks or month(s). yourselves, change or turn over a Soon our good intentions are gone new leaf. Resolutions or goals are and forgotten until the end of the

Warranty provides product insurance

will reduce the exposure of your ground fuels by picking up dead

and hair dryer all have in common? Besides being electrical appliances vou may give or receive at Christ

Before you call a repairman...

Almost 40 percent of all appliance repair house calls are unnecessary, according to the Association of Home Appliance Manufacturers. More often than not, the appliance fails to perform because of a simple problem the average person can fix, knowing what to look for. Following are the most common causes of unnecessary service calls:

* Temporary electricity shut-off in the area Extenison cord plug not firmly

inserted into outlet * Fuse burned or circuit breaker

tripped on circuit serving appliance

Overload circuit breaker on appliance tripped and needs reset-

* Appliance switch not "on" or not switching properly

* Ducts, vents, filters plugged Before attempting to do-it-yourself repairs:

 Plug an appliance you know is working into outlet to rule out circuit or outlet problems.

 Disconnect appliance or trip circuit breaker on circuit serving appliance before attempting any repair work.

set January 1. Some may work on year when it is "time" to set resolu-

What do a blender, waffle iron mas, they all have a manufacturer's warranty card. Have you been throwing this card away with the Christmas gift wrapping? Or do you plan on returning the card at a

later date in the false hope that this

will extend the warranty period

(but somehow seem to forget about

it or lose it)? These cards, when completed, do two things. First, they provide a warranty which is the seller's promise to the buyer that the product will do what it is supposed to do and be free of hidden defect. Second, they help to ensure the safety of people who will be operatcard provides access to the consu mer should the manufacturer have

to recall the product for any reason. Warranty cards can protect you and your family so take the time to in your goal. You set yourself up compelte and return them. How for failure. We can't be perfect all about making that a New Year's the time.

tions again. How can we be successful in working on our goals all

year long? 1. Do not set too many goals. If you try to change too many behaviors, you will fail and won't change anything. Work at one thing at a time; get it down good; then work on changing somethinng else. Changing slowly is important to the success of any behavior change.

2. Be specific in your goal. "I'm going to be a better parent" is too general and you probably won't be successful. "I will spend 10 minutes each day before bed with my children just discussing happenings of the day" is specific and you can measure your success on being a better parent.

3. If this goal is important to you, set aside time every day to work on this goal. Accomplishing a goal takes time and work. They just don't happen.

4. Write down your goals. Tell someone your goal. This may help ing the appliance. The warranty you remember your goal and to

5. Be realistic about your goal. Don't set it too high or too low. Don't use never, always and every

4-H PLEDGE

I pledge my Head to clearer thinking, My Heart to greater loyalty, My Hands to larger service, My Health to better living for my club, my community, my country and my world.

4-H Clubs underway

The 4-H Grooming Club will start January 9. All third through eighth graders are invited to attend. The meetings will be held in the Employee Development Training room each Monday, starting at 6 p.m. and ending at 9 p.m. For more information, contact the Extension office at 553-1161, ext. 238.

The first meeting and sign-up for the 4-H Net Making Club will be Monday, January 9, 1989 at the 4-H Center from 5:30 to 6:30 p.m. Class instructor is Buzz Scott.

Potassium is necessary

within the body such as maintaining water balance, assisting nerves to transmit signals and muscles to contract and maintaining the heart-

The average person is able to meet the body's requirements for potassium through a varied diet. The athlete may have an increased

Potassium has many functions need for this mineral. Here's why. When the body is overheated due to physical exertion, it tries to cool itself by sweating. Individuals who exercise intensely in a sports event lose water and nutrients in their sweat. An untrained, unacclimated person may lose even more than the trained athlete. The nutrients lost are water and specific minerals called electrolytes. Potassium is one of those electrolytes.

Potassium-Rich Foods Fruits: 10 dried apricot halves 397 mg 1/3 avacado

471 mg 1/4 cup cantaloupe 450 mg 2 kiwifruit 1/3 cup raisins Vegetables

Learning is what 4-H is all about

What can be learned in 4-H-

Share everything Play fair

Respect others' feelings and

Say you're sorry when you've hurt someone

Put things back where you found them.

Wash your hands before you eat. Warm cookies and milk are good for you.

Live a balanced life. Learn some and think some and draw and paint and sing and dance and play and

work some everyday. When you go out into the world, watch out for traffic, hold hands and stick together.

4-H teaches citizenship

Good citizenship isn't something you're born with-it's something you learn. And it's something 4-H teaches young people. Want to get involved in Warm Springs' future? Then, get involved with 4-H! Learn to care, to ask questions and to be a leader. You'll find a sense of satisfaction in completing a job well done. Call the Warm Springs Extenison office at 553-1161, ext. 238. Or stop by the office on the second floor of the Old Administration Building and ask for Deb.

Pierce both sides of meat tho-

roughly with a fork. Place roast in

a 2 to 21/2 quart casserole or utility

dish. In a small bowl, combine

remaining ingredients except sour

cream. Pour over meat. Cover

tightly. Microwave at 50% (med-

ium) 65 to 75 minutes, or until

meat is tender. Be sure to turn roast

over after half the cooking time.

Let stand, covered, 10 minutes.

Remove meat from casserole. Set

aside. Slice roast thinly across the

grain. Place slices in sauce to serve.

increase cooking time to 11/4 to 2

To microwave at 30% (low),

Book offers advice on divorce impact When parents divorce, their mar- Shared physical custody, the childriage relationship ends, but their ren spending significant amounts

rewards of being a parent continue after divorce.

Increasing numbers of divorcing parents attempt to structure their children's living situations to ensure that the children spend sufficient time with each parent to develop meaningful relationships with both.

relationships with their children do of time with eac parent, is not for not end. The responsibility and the all divorcing parents. But, it may be a feasible alternative for some.

form of co-parenting or joint custody, a book that is particularly helpful is Mom's House, Dad's House. This book is a guide for parents who are developing two homes for thier children after

If you are contemplating some

The book is written by Isolina Ricci and published by Macmillan Publishing Company in New York. If it is not available in the libarary or the bookstore, ask the bookstore to order copies for you and our co-parent.

1/2 cup beet greens 1/2 cup Swiss chard

Recipes give alternative tastes

lic, minced

hours.

Spudnuts

quart milk

cup butter

tsp. vanilla

cup sugar

Set aside.

Dissolve:

minutes.

Boil together and cool:

packages yeast in

cup warm potato water

Mix with the cooled milk, butter

and sugar mixture. Let raise 30

I cup sour cream

New fabric changes color

A new process has been developed that may revolutionize the apparel industry, particularly the children's market-clothes that change color!

A finishing corporation has developed a color-changing system that works like this. A color series is built into the dye formula. When

ple to royal blue to aqua. In fact,

a change of color is desired, the garment is washed in chlorine bleach. The change can be as subtle or dramatic as the amount of bleach added to the wash. For example, red jeans can be bleached to orange, then bleached again to yellow. the process works on any type of Another specturm ranges from purfabric. Such products are not yet in

any range of colors can be achieved. Even patterns or messages can be painted on the fabric at home with a paint brush or Q-tip following a prescribed method, and removed at a later date in a bleach wash. The manufacturer claims that

> Don't mix plastic pails and food For most families, holidays

the marketplace, but may be soon.

today mean large gatherings with generous menus. The quantities of food prepared make for storage problems.

But don't use non-food grade plastic pails, garbage bags and containers. Polyvinyl chloride contained in some of the nonfood grade plastics could react with acid food to cause serious poisoning. Experts recommend against using anything other than products designed especially for food storage

If you can't find containers large enough to handle your holiday cooking, ask local bakeries and delis for the commercial-size containers they throw away after use. When the original use of a plastic product is to contain food, you can safely reuse it to store your food, as well. Just make sure it's clean and free of cracks

cup raisins cup boiling water cup oil 2 cups sugar 16 oz. can pork and beans cups flour tsp. cinnamon 1/2 tsp. baking powder

Pork and Bean Bread

tsp. soda I tsp. vanilla 1/2 tsp. salt

I cup chopped nuts Mix raisins with boiling water, set aside. Beat eggs, oil, sugar and beans until beans are broken. Add flour and rest of dry ingredients to bean mixutre. Add nuts and vanilla. Drain raisins and add, stirring to mix well. Pour batter into three well greased loaf pans. Bake at 350, 50 to 60 minutes or until they test

Nachos

1/2 lb. hamburger small onion, chopped 1/3 pkg. taco seasoning mix

done. This bread freezes well.

2/3 small can refried beans cup grated cheddar cheese 1/2 cup grated Monterey Jack cheese cup mild taco sauce 1/4 cup sliced black olives

I tomato, sliced in half rounds Brown hamburger and onion over medium heat. Mix in taco seasoning mix and drain extra fat. Spread refried beans in glass pie pan. Spread hamburger mixture on beans. Mix cheeses together and sprinkle on top of hamburger mixture. Drizzle taco sauce over cheeses. Bake 15 minutes at 375. Sprinkle olives on top. Poke broken taco shells all around outside. Garnish with

tomato slices. Serve with extra 1/8 tsp. garlic powder or I clove gartaco chips or shells and salsa.

Microwaving Beef

Can you cook a large beef roast in a microwave oven? The answer is, yes. And it can be even more tender than when cooked in a conventional oven.

Cook it slower at a lower temperature-the medium-low power setting-and rotate the meat several times during cooking. This ensures even heating. Do not microwave the beef on a high setting since it does not allow enough time for the tenderness and flavor to develop.

Also remove large bones from the meet before cooking, since bone is dense and shields the tissue around it from the microwaves.

To be thoroughly cooked, the thickest part of any beef should reach at least 160 degrees F for medium doneness, or 170 degrees for well-done. The meats to microwave are the less tender cuts. such as chuck, stew meat or rolled rump roasts. It's best to choose pieces that are even in shape, size and thickness. And be aware that fat attracts microwaves and can lead to overcooking. Ground meats do very well in microwave ovens. And if you have some leftover beef, it will reheat extremely well in the microwave, retaining its moisture

and texture. Chuck Roast with Mushroom Sauce

21/2 to 3 pound chuck roast can (10%oz.) cream of mushroom soup Tbsp. Worcestershire sauce

usps. parsley flakes ½ tsp. salt

1/4 to 1/2 tsp. pepper

10 to 12 cups flour - a few cups at a time-and absolutely no more than 12 cups as you want to have the dough as soft as you can possibly handle it.

heaping Tbsp. salt

Mix thoroughly. Let raise until double. Knead down. Roll out, cut with doughnut cutter. Let cut doughnuts raise until almost double. Fry in hot oil and drain. Glaze while still warm



OSU Extenison Agent Molie Marsh received "Newer Staff" and "Search for Excellence" awards at the annual Extension conference in early December.