

Colorado State University Extension 3

Custer County P. O. Box 360 Westcliffe, Colorado 81252

PH: (719)783-2514 FAX: (719)783-0908 E-mail: coopext custer@mail.colostate.edu Website: www.custercountygov.com/ext

CUSTER COUNTY 4-H IS ON FACEBOOK!

https://www.facebook.com/CusterCountyCO4H



As most of you have Facebook, we are becoming more interactive on our local Facebook page. Like this page and share it with other Custer County 4-H members and watch it for important updates, events and reminders.

2017 FEBRUARY Custer County Courthouse closures:

Monday, February 20th, 2017 for Presidents Day.

We would like to express our gratitude to the Sangre Shooting Sports Range for their continued support of our 4-H Shooting Sports Firearms program. Our youth adhere to their safety rules and practice good sportsmanship when using the range. It is a pleasure to utilize the range that supports our youth! Thank you!

4-H Project Manuals & Record Books — 4-H Project Literature has been ordered. Every 4-H family will receive a letter with their project information listed and any costs associated with their projects and enrollment fees. Please check your mail and respond appropriately with fees due and any changes or corrections to your projects if needed. We hope to have ALL books bundled and ready to pick up no later than February 6th. If you have recently added a project, the books for THAT project will come a little later as we are waiting a bit longer for any other members who have add/drop changes to make before placing a second literature order.

If you have any record book or literature questions, please stop by the Extension Office or give us a call.

CALLING ALL DOG SHOWMEN: Sue Roberts has shared information on 4-H Dog Training Classes in Fremont County. The Fremont County Dog Leader has graciously invited our dog project members to join her classes on Wednesday evenings. The Leader is Margie McNew and her phone number is 719-429-5573 or you can email her at mmmcnew64@gmail.com. Margie's classes are EVERY WEDNESDAY NIGHT. Beginner dogs or kids class starts at 6:30 P.M. and the Advanced class meets at 7:30 P.M. Classes are held at the Fremont County Fairgrounds. If you choose to join one of Margie's classes, please remember that we are invited guests to her classes. You need to be on-time and prepared. You will need to have a Show Lead, Training Treats and any other necessary supplies or equipment when you arrive. We recommend that you contact Margie if you have any questions about the proper equipment or supplies needed before your first class.

Local Resource Leader Katlyn Freeburg has also offered to help dog project kids as well. If you would like contact information for Katlyn, Please call extension.

CLUB NEWS: WHAT'S HAPPENING IN YOUR CLUB?

TRIPLE C CLOVERS

LEADER: Sara Shields

TELEPHONE: 719-783-9798

MEETING TIME & PLACE: All Regular Meetings will be the 1st Sunday of each month at 1:00 P.M. at the Ranchers Roost Meeting Room.

OFFICERS:

◆ President- Lindsey Gillmore

- ◆ Vice President- Kaya Huffman
- ◆ Secretary- Makynna Reiff
- ◆ <u>Treasurer-</u> Keli Smith
- <u>Historians-</u> Shelby Murphey, Kyleigh Martin, Ronja Sutinen

SILVER SPURS

<u>LEADER:</u> Janet Freeburg <u>CO-LEADER:</u> Marci Wommack <u>TELEPHONE:</u> Janet: 719-783-2136 <u>Marci:</u> 719-371-1508

MEETING TIME & PLACE: Regular Meetings will be the 2nd Tuesday of each month at 4:15 P.M. in the Annex Building

There will be NO February Meeting. The March Meeting date will also change. The new date is TBD.

◆ OFFICERS:

- President-Grace Watkins
- Secretary-Scott Freeburg
- ◆ Treasurer- Justice Saraceno
- ◆ Vice President Candidates- Hannah Kennedy and Dalton Wommack

TRAILBLAZERS

LEADER: Alisha Shy

TELEPHONE: 719-783-2399

MEETING TIME & PLACE: All Regular Meetings will be the 1st Sunday of each Month at 1:00 p.m. at the Courthouse. MEET AT THE BACK DOOR. Please be on time, doors will lock at 1:10 p.m.

- OFFICERS:
- President-Cameron Penkoff
- ◆ Vice President-Ben Penkoff
- ◆ **Secretary-**Emma Rusk
- ◆ <u>Treasurer-</u>Brylee Shy

CLOVERBUDS:

Leader: Brianna Evert 719-371-4839

Next Meeting will be Friday February 10th, at 11:00 a.m. in the Courthouse Basement.

NOTES TO LEADERS: Please have your designated club officers contact the Extension Office with any club information that needs to be in the upcoming newsletters. Please have that information into the Extension Office no later than the 25th of the month.

Custer County Important Event Dates:

<u>4-H PUBLIC SPEAKING PRACTICES:</u> We will start practices at the **Courthouse Basement** on February 27th and will continue **EVERY Monday** at 4:15 p.m. for 6 weeks except for Monday March 20, 2017 which falls on Spring Break. **Please Enter through the BACK DOOR, if it is locked KNOCK LOUDLY.**

PUBLIC SPEAKING EVENT: Scheduled for April 13, 2017. Time and location details TBD.

SHOOTING SPORTS SCHEDULES: FIREARMS ONLY: Mandatory Safety meeting for Shooting Sports Firearms will be from 1:00 p.m. to 3:00 p.m. on March 10th, 2017 at the Catholic Church Parish Hall (Enter through the West Doors).

IF YOU CANNOT MAKE THIS SAFETY MEETING YOU MUST LET THE EXTENSION OFFICE KNOW BY MARCH 6^{TH} , 2017.

SHOOTING SPORTS FIREARMS MEETING REQUIREMENTS: You will be <u>required</u> to attend 10 of your 15 scheduled practices in order to qualify to compete at the County or State Shoot. Practices will be held at the SDC Shooting Sports Range.

.22 RIFLE SHOOTING SPORTS PRACTICE: Practices start on March 31st at 9:00 a.m. and will go until noon at the SDC Shooting Sports Range. Practices will be every Friday following first practice.

HUNTER'S EDUCATION CLASS: March 4th & 5th. See Flyer in Attachments for Details!

HUNTER'S EDUCATION IS MANDATORY FOR ALL 4-H ARCHERY AND FIREARMS PARTICIPANTS

ARCHERY SHOOTING SPORTS: Meeting and practice information is TBD.

CUSTER COUNTY 4-H CAMP: The 2017 Camp will be held on Saturday April 22nd. Time and Location TBD.

4-H CARNIVAL

This Year's Carnival is set for March 14th at 4:30 P.M. at the CCHS West Gym. We hope to see you all there!!!

2017 TRUCK RAFFLE

We have received notice that the Rocky Mountain Local Ford Stores are donating a 2017 Ford F-150 truck to the 4-H Foundation for our annual raffle. This is the 10th truck they have provided. The 2016 raffle grossed \$155,000. Let's set a goal of raising \$200,000 in 2017.

Custer County Leaders, Parents and 4-H Members: Let's gear up for another fantastic year of selling Truck
Raffle Tickets!!

ALL THINGS LIVESTOCK: BREEDING AND MARKET

Look for information on livestock camps and clinics in the Upcoming Events & Camps section of this newsletter.

Are you interested in a 4-H market livestock project, but need some financial assistance? The Custer County 4-H Foundation is offering a micro-loan that will fund: (2) Meat Pen Rabbits at \$100 each loan, Swine, Sheep, and Goat for \$500 each. You MUST be a Custer County 4-H Foundation Member in order to apply for the Foundation Micro-Loan. Beef are funded under the Custer County Cattlewomen Micro-Loan and any 4-H or FFA Member can apply for the beef micro-loan. Please ask the Extension Office for more information or fill out an application today! Applications for the Small Animal Livestock Foundation micro-loan are due March 15th.

Look for Foundation Membership information and Application in the attachments of this newsletter.

Meat Quality Assurance: FEBRUARY 19[™] @ 1:00 P.M. AT THE SADDLE CLUB BLDG.

MQA Will Be Required Yearly For ALL 4-H & FFA Market Livestock Members!!

MQA Training along with the New Feed Directive Training will be on February 19th @ 1:00 P.M. at the Saddle Club Building. (The previous rule was that first-year members attend the class and they were to attend again when they turned 14). Please note that ALL 4-H & FFA Market Livestock participants will be required to attend a MQA CLASS EVERY YEAR that they are enrolled in a market livestock project from 2017 forward!

BREEDING BEEF: Would you be interested in a Breeding Prospect Heifer class at our County Fair? If so, contact us at the Extension Office and let us know that you are interested. Remember, the deadline to Add this project is May 1st, 2017, However, you will want your heifer before this date.

MARKET BEEF EXHIBITORS: WOW!! 17 MARKET STEERS weighed and tagged-in at the January Official Market Steer weigh-in. Congratulations to the 4-H and FFA members that helped to bring up the numbers in the Beef barn for the 2017 Custer County Fair. We are really excited to see ALL of our exhibit buildings FULL!!

MARKET & BREEDING SMALL LIVESTOCK (LAMB, SWINE, GOATS): We are quickly approaching March which is when you need to be buying your animals for the County and State Fair. Are you new to livestock showing? Have you contacted a breeder to purchase your Lambs, Pigs or Goats? Many breeders for these species have a waiting list and it's first come first serve. If you have not contacted a breeder yet, you need to. If you NEED names and contact information for breeder's you can call us at the Extension Office for a list of breeders for your species. DO NOT WAIT UNTIL THE LAST MINUTE OR YOU WILL MISS OUT! These species SELL OUT FAST at reputable breeding farms.

SMALL ANIMAL MARKET LIVESTOCK WEIGH-IN usually happens in Mid-April for Custer County. As soon as we have a set date from the Fair Board we will get that information out to you.

STATE FAIR LIVESTOCK EXHIBITORS: RETINAL SCANS

If you have animals that will require retinal scans you will need to take them to **Fremont County** this year. **RETINAL SCAN INFORMATION:**

Cost is \$5.00 per scan.

LOCATION: Fremont County Fairgrounds
Sheep – Saturday, May 13 beginning at 9:00 a.m.
Goats – Saturday, May 13 beginning at 9:30 a.m.

Upcoming Events and Camps:

For a list of ALL upcoming Colorado 4-H Events go to the link below:

http://www.colorado4h.org/events opportunities/index.php

IF YOU WANT TO ATTEND ANY 4-H RELATED CAMPS THE CUSTER COUNTY 4-H FOUNDATION WILL PAY FOR 75% OF ENROLLMENT FEES FOR FOUNDATION MEMBERS AND 25% OF ENROLLMENT FEES FOR NON-MEMBERS. LOOK FOR FOUNDATION INFORMATION IN THE ATTACHMENTS OF THIS NEWSLETTER.

Youthfest: February 10-12, 2017: The Colorado State 4-H Senate Officer Team plans and conducts this camp for 4-H members ages 9-13. This event usually happens in February. 4-H members must be between 9 and 13 years of age as of December 31 of the current enrollment year. The purpose of this camp is to provide an opportunity for youth to learn teamwork, leadership, communication, and citizenship skills through a variety of workshops. Registration is through 4HOnline. Registration for this event opens up towards the end of December.

http://www.colorado4h.org/events_opportunities/youthfest/youthfest.pdf

<u>Look at the bottom of this newsletter for the Youthfest community service project information and MORE!!</u>

<u>The Judging Experience: Colorado Livestock Judging Clinic:</u> February 25th & 26th at the Morgan County Fairgrounds! Registration Deadline: February 1st, 2016.

SEE THEIR FLYER FOR DETAILS IN THE ATTACHEMENTS OF THIS NEWSLETTER!

COMPANION, MARKET AND BREEDING RABBIT MEMBERS: There is a 4-H Rabbit Camp scheduled for March 3-5, 2017 at the La Plata County Fairgrounds, in Durango Colorado! All 4-H Members are invited.

Registrations are due to LaPlata County by February 22nd, 2017.

Registration Details and Costs can be found in the attachments at the end of this newsletter.

SOUTH CENTRAL DISTRICT RETEREAT: March 17th -19th, 2017:

New Location: Golden Bell Camp and Conference Center (380 Co Rd 512, Divide, CO 80814)

Cost: \$140 (not including any additional county fees)

Ages: 13-18

General Activities: Workshops, games, recreation (pool, game room, etc), dance, ice cream social, district and South

Central elections

REGISTRATION OPENS: February 1, 2017 GO TO https://co.4honline.com

REGISTRATON CLOSES: February 28, 2017 (NO LATE REGISTRATIONS WILL BE ACCEPTED)

CAMP CHECK-IN: Friday March 17, 2017 from 5:00 P.M. to 7:00 P.M.

CAMP CHECK-OUT: Sunday March 19, 2017 at 10:30 A.M.

IMPORTANT If you plan to attend District Retreat you need to let the Extension Office know so that we can send you additional paperwork to fill out. If you plan to utilize the Custer County 4-H Foundation Scholarship, please let me know so that I can send you the scholarship paperwork. This is a wonderful Scholarship to take advantage of. If your family is a member of Foundation you will get 75% of your camp registration paid for. If you are a non-member Foundation will still pay for 25% of your camp registration fees. CALL US AT 719-783-2514 OR EMAIL: coopext_custer@mail.colostate.edu.



Congratulations to Grace Watkins on being selected through an interview process to be one of the seven Colorado State Delegates who will attend the National 4-H Conference in March 2017. This is a HUGE accomplishment for Grace and for Custer County. We are excited that Grace will be representing us and the State of Colorado at the National Level!!

NATIONAL WESTERN STOCK SHOW, DENVER: CUSTER COUNTY EXHIBITORS BEEF

Novice Showmen Devynne Schoch & Sheyenne Shy are back from the National Western Stock Show!! They participated in the Open Prospect Steer Show in Denver this year and it was a first for each of them. Devynne had an 8th Place Steer in Class 12, 773 lbs.-779 lbs.

Sheyenne had a 10th Place Steer in Class 5, 682 lbs.-689 lb.

SWINE

Seasoned Showman Lindsey Gillmore placed 5th in the Intermediate Showman-Class 8 (13-16 years old). Lindsey also had a 9th place, Class 16-Medium Weight Crossbreed.

LAMBS

Seasoned Showman Grace Watkins had a 10th place, Class 7-Blackface-lightweight lamb and a 5th place-Speckle Face Crossbreed Lamb.

CONGRATULATIONS TO ALL OF OUR NWSS EXHIBITORS... WE COULDN'T BE MORE PROUD OF YOU GIRLS!!

<u>ACADEMIC:</u> Justice Saraceno is in the top 99% of academic ranking for High School Students. To add to this outstanding accomplishment, Justice is only 13 years old.

<u>CCMS BAND MEMBERS</u>: Local 4-H Members Morgan Foster, Kyleigh Martin, Kaya Huffman & Sheyenne Shy were each selected to play in the Middle School Honor Band. What a prestigious invitation! We are proud to have you girls in our Custer County 4-H family!

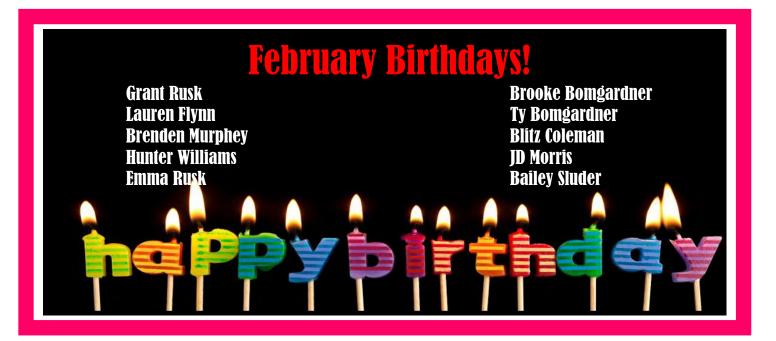
DO YOU HAVE SOME SPOTLIGHT NEWS TO SHARE? LET US KNOW SO WE CAN INCLUDE YOU IN THE **NEXT** SPOTLIGHT!!

<u>PAST CAMP RECOUNTS & EXPERIENCES</u>: Grace attended the Leadership Development Conference (LDC) in Denver. Below you can read all about Grace's trip to the Capital!

For the second year, I had the distinct honor to attend the Leadership Development Conference (LDC) and Colorado 4-H Day at the Capitol from January 28-30, 2017. On Saturday, I attended the District 13 meeting, Senate meeting and Legislative General Session. During the evening, the Recognition Banquet, dance and movie were held. On Sunday, additional Legislative meetings were conducted including debates on current issues such as Gun Control, Texting and Driving, Veterinary Feed Initiative and Hunter Safety. My team and I debated the pros of Concealed Carry in Schools; and yes, we won by a landslide for our views presented. Sunday evening, I had a great time with the Chaffee County delegation at "Escape Works" and would highly recommend the adventure. On Monday, we joined Kevin Grantham, our Colorado Senate President, in the Old Supreme Court Chambers for photos and the 4-H Proclamation with the Senate and the House. Finally, I want to especially thank Fremont County for transportation and hotel accommodations with their delegation. I enjoy so very much the fellowship with Chaffee and Fremont 4-Hers, their Extension Agents and chaperones. You always make me feel like a part of your teams! I strongly encourage Custer County 4-Hers to attend events like LDC and the upcoming South Central District Retreat in March by utilizing scholarships available through our local Custer County 4-H Foundation.

Until my next adventure,

Grace Watkins



Thank You All for being a part of our Curter County 4-H family!!!

Colorado State University, U. S. Department of Agriculture and Colorado counties cooperating. Extension programs are available to all without discrimination.

Individuals requiring special accommodations to participate in any activity, program or service should notify the program coordinator at least 5 business days prior to the scheduled event.

Colorado State University



YOUTHFEST-FEBRUARY 10-12, 2017















Family Consumer Science Projects

Event

Information

Ponderosa Camp Website

Ponderosa Recreational Release Form

Directions: How to Get To Ponderosa

YouthFest Flyer

YouthFest Schedule

Code of Conduct

Health Form

What to Bring/ Payment

Background/Eligibility/Registration

Background: The Colorado State 4-H Senate Officer Team plans and conducts this camp for 4-H members ages 9-13. This event usually happens in February.

4-H members must be between 9 and 13 years of age as of December 31 of the current enrollment year.

The purpose of this camp is to provide an opportunity for youth to learn teamwork, leadership, communication, and citizenship skills through a variety of workshops.

Registration is through 4HOnline. Registration for this event opens up towards the end of December.

Chaperoning:

One adult/ten youth must be present from each group represented by participants to provide supervision. If both male and female campers are in attendance, a feamle and a male chaperon must accompany the local delegation unless special arrangements have been made in advance with another group.

Cost

Agent/Chaperone/Volunteer-Leader (Adults): \$120

Camper (Youth): \$120

Counselor (16 and older): \$75

State Officers: No Fee

Colorado State University, U.S. Department of Agriculture and Colorado counties cooperating. Colorado State University Extension programs are available to all extinute duors mession. To simplify such most reminology trademants or products and equipment occasionally will be used. No and occurrent of product names is intended nor is officially implied of products not mentioned.

HUNTER EDUCATION CLASS WESTCHIEFE CO

WESTCLIFFE, CO

Saturday, March 4th 8am- 5pm AND

Sunday, March 5th 8am-3pm

Attendance on BOTH days is required

Wet Mountain Fire Protection District Firehouse
215 North 4th Street

Cost: \$10

Colorado law requires that anyone born on or after January 1, 1949, complete an approved hunter education course before applying for or buying a Colorado hunting license. Recommended minimum age is 10 years old.

To register please visit:

http://cpw.state.co.us/ > Learn > Hunter Education

Classes-Traditional then put in zip code 81252

OR DIRECT AT:

https://register-ed.com/events/view/96816



is coming to ...



ACREAN COUNTY

AM- CHECK IN

AM- EVALUATION

NOON- LUNCH

I PM- EVALUATION

3 PM- INTRO TO REASONS

AM- REASONS

AM- EVALUATION

NOON- LUNCH

I PM- EVALUATION

4 PM- CAMPERS EXCUSED

Croup Room Rates will be available at the Microtel Inn & Suites in Brush, CO.

Camp cost - \$200 Registration due by Feb 199 For more information contact Curtis Doubet!

(303) 681-7086 CURTISDOUBET@GMAIL.COM

Register Online - www.thejudgingexperience.com By Mail - Curtie Doubet 3270 Monarch Place, Parker, CO 80130 Come Join us... We'll be ...

Hopping Around All Weekend At the 4-H Rabbit Camp

March 3rd to March 5th

(5th will be only for members interested in Rabbit Judging) **La Plata County Fairgrounds**

Calling All 4-H Rabbit Members & Leaders:

You are invited to the 10th annual 4-H Rabbit Camp! This camp is open to 4-H members and potential 4-H members (you do not need to have a rabbit to attend). Cloverbuds are welcome Friday and Saturday. Sunday morning will be a mock Judging contest.

Rabbit Camp will be from Friday, March 3rd to Sunday, March 5th. In addition to showing their rabbit(s), campers will have an excellent opportunity to experience what goes on behind the scenes at a rabbit show. Workshops will include showmanship, judging, records, interviews and creative design and how to compete on the State & National level. Our goal is to meet and challenge every individual. Formal workshops will end Saturday evening following, dinner, awards and clean up.

We need your expertise. If you excel in some area, please offer to help us with a class. We have classes for the very young beginners to the senior 4-Hers, so any and all help is appreciated. Please feel free to call Raejean at 970-946-4130 or email her at riegelrabbit@gmail.com.

All meals are provided. 4-H members and chaperons' will be sleeping at the fairgrounds. Bring your sleeping bags, air mattress and cots.

We encourage and welcome parents to come, stay, learn, help and share!

4-H member \$50.00

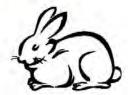
2nd child \$40.00

Adults & Cloverbuds \$20.00 (to cover meals)

If you have any questions, please call or email
Raejean at 970-946-4130 or riegelrabbit@gmail.com or
Angela Fountain, La Plata County Extension Office, 970-382-6465 or fountainai@co.laplata.co.us







Contact the Extension Office for an application if you would like to attend!

CUSTER COUNTY 4-H FOUNDATION MEMBERSHIP

The Custer County 4-H Foundation has been in existence since 1965 with the same mission; to administer and make funds available in the form of scholarships for various 4-H educational purposes and activities that will best meet the needs of the interest in 4-H work. They cooperate with all individuals, groups, institutions, or organizations whose purposes are in accord with the objectives of the Colorado 4-H Foundation. They also sponsor the annual awards ceremony to honor all 4-H members, leaders, families, and volunteers who contribute to the 4-H program.

Membership is for the family members under age 18 or (19 if still enrolled in 4-H of the current year) and the parents. Membership dues are \$25.00. Membership runs from January 1 to December 31. Membership dues are due by January 31.

Scholarship policy: If you are a member of the Foundation 75% of your camp/conference cost may be covered by the Foundation. Only 25% will be covered if you are not a member. Adult fees (50% if a member) may be covered if the Extension Agent is unable to attend.

P. O. Box 360
Westcliffe, CO 81252



Thank You

CUSTER COUNTY 4-H FOUNDATION MEMBERSHIP

Membership is for the family members under the age of 18 or (19 if still enrolled in 4-H of the current year) and their parents.

Membership dues are \$25.00 per family per year.

Membership runs from January 1 to December 31 of the current 4-H year.

Membership dues are due by January 31.

Scholarship policy: If you are a member of the Foundation 75% of your camp/conference cost may be covered by the Foundation. Only 25% will be covered if you are not a member. Adult fees (50% if a member) may be covered if the Extension Agent is unable to attend.

Send payment and form to:

Custer County 4-H Foundation P. O. Box 360 Westcliffe, CO 81252

Name	
Address	
Phone	
Email	
(Email is the preferred method to notify members)	
Amount Paid	
Donation	

Thank You!



DATE: Thursdays, February 16 and 23 (two-part class)

TIME: 6-9 p.m.

PLACE: CSU Extension/Pueblo County

701 Court St., Ste C, Pueblo

COST: \$20/person, \$30/Couple (for both classes)

Registration deadline: February 9, 2017

Payment required at the time of registration. We accept cash or checks (payable to Extension Program Fund) through our office. You can pay with credit or debit card through Eventbrite.com.

Topics covered:



- · Housing and equipment, safety gear
- · Management and care of bees
- Food sources

Brought to you by the Agriculture program of CSU Extension/Pueblo County.

Call 719-583-6566 for more information.









Extension programs are available to all without discrimination. If you have a disability for which you seek an accommodation, please notify CSU Extension at 719-583-6566 at least five (5) business days in advance of the event. Colorado State University Extension, U.S. Department of Agriculture and Colorado counties cooperating.

Colorado State University Extension

Bringing Your Food Product to Market

2017 Food Safety Training for Colorado Cottage Food Producers



- Thursday, February 9th 5:30pm to 9:30pm
- El Paso County Extension Office 17. N Spruce Street, 2nd Floor Colorado Springs, CO 80905
- Friday, March 24th 9:00am to 1:00pm
- Pueblo County Extension Office 701 Court Street, Suite C Pueblo, CO 81003
- Saturday, April 22nd 10:00am to 2:00pm
- El Paso County Extension Office 17. N Spruce Street, 2nd Floor Colorado Springs, CO 80905

Cost \$40 (credit card only), pre-register through EPCExtension.eventbrite.com

For more information please contact:

El Paso County Extension Phone: 719-520-7689 Pueblo County Extension Phone: 719-583-6566 This training covers specifics of the Colorado Cottage Food Act and how to safely operate a food business from a home kitchen.

You will learn:

- Basic food safety for <u>Tier 1</u> foods, including proper hygiene; preventing cross contamination & cross contact of food allergens; temperature control for safe food preparation, storage, transport & sales
- Foods permissible in Colorado's Cottage Food Act
- Ingredient labeling & disclaimer requirements
- Special considerations for food preparation at altitude





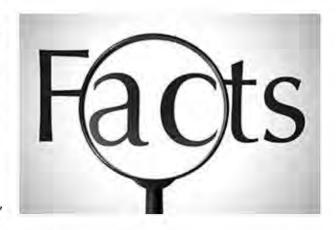


If you have a disability for which you seek an accommodation, please notify CSU Extension at least five (5) business days in advance of the event. Colorado State University Extension, U.S. Department of Agriculture and Colorado counties cooperating. Extension programs are available to all without discrimination.

Radon Fact Sheet

The U.S. Environmental Protection Agency (US EPA) and the Surgeon General's Office have estimated that as many as 20,000 lung cancer deaths are caused each year by radon. Radon is the second leading cause of lung cancer. Radon-induced lung cancer costs the United States over \$2 billion dollars per year in both direct and indirect health care costs. (Based on National Cancer Institute statistics of 14,400 annual radon lung cancer deaths — Oster, Colditz & Kelley, 1984)

According to the US EPA, nearly 1 in 3 homes checked in seven states and on three Indian lands had screening levels over 4 pCi/L, the EPA's recommended action level for radon exposure.



The alpha radiation emitted by radon is the same alpha radiation emitted by other alpha generating radiation sources such as plutonium.

A family whose home has radon levels of 4 pCi/L is exposed to approximately 35 times as much radiation as the Nuclear Regulatory Commission would allow if that family was standing next to the fence of a radioactive waste site. (25 mrem limit, 800 mrem exposure)

An elementary school student that spends 8 hours per day and 180 days per year in a classroom with 4 pCi/L of radon will receive nearly 10 times as much radiation as the Nuclear Regulatory Commission allows at the edge of a nuclear power plant. (25 mrem limit, 200 mrem exposure)

Most U.S. EPA lifetime safety standards for carcinogens are established based on a 1 in 100,000 risk of death. Most scientists agree that the risk of death for radon at 4 pCi/L is approximately 1 in 100. At the 4 pCi/L EPA action guideline level, radon carries approximately 1000 times the risk of death as any other EPA carcinogen. It is important to note that the action level is not a <u>safe level</u>, as there are no "safe" levels of radon gas.

What is radon?

A layman's description

Radon is a cancer-causing <u>radioactive</u> gas. You cannot see, smell or taste radon, but it may be a problem in your home. The Surgeon General has warned that radon is the second leading cause of lung cancer in the United States today. If you smoke and your home has high radon levels, you're at high risk for developing lung cancer. Some scientific studies of radon exposure indicate that children may be more sensitive to radon. This may be due to their higher respiration rate and their rapidly dividing cells, which may be more vulnerable to radiation damage.

A scientific description

PROPERTIES: Radon is a gaseous highly radioactive element discovered by English physicist Ernest Rutherford in 1899. The discovery is also credited to German physicist Friedrich Ernst Dorn in 1900. More specifically, Rutherford discovered radon's alpha radiation and Dorn discovered that radium was releasing a gas.

Radon is a colorless chemically-unreactive inert gas. The atomic radius is 1.34 angstroms and it is the heaviest known gas—radon is nine times denser than air. Because it is a single atom gas (unlike oxygen, O2, which is comprised of two atoms) it easily penetrates many common materials like paper, leather, low-density plastic (like plastic bags, etc.) most paints, and building materials like gypsum board (sheetrock), concrete block, mortar, sheathing paper (tar paper), wood paneling, and most insulations.

Radon is also fairly soluble in water and organic solvents. Although reaction with other compounds is comparatively rare, it is not completely inert and forms stable molecules with highly electronegative materials. Radon is considered a

noble gas that occurs in several isotopic forms. Only two are found in significant concentrations in the human environment: radon-222, and radon-220. Radon-222 is a member of the radioactive decay chain of uranium-238. Radon-220 is formed in the decay chain of thorium-232. Radon-222 decays in a sequence of radionuclides called radon decay products, radon daughters, or radon progeny. It is radon-222 that most readily occurs in the environment. Atmospheric releases of radon-222 results in the formation of decay products that are radioisotopes of heavy metals (polonium, lead, bismuth) and rapidly attach to other airborne materials such as dust and other materials facilitating inhalation.

USE: Radon has been used in some spas for presumed medical effects. In addition, radon is used to initiate and influence chemical reactions and as a surface label in the study of surface reactions. It has been obtained by pumping the gasses off of a solution of a radium salt, sparking the gas mixture to combine the hydrogen and oxygen, removing the water and carbon dioxide by adsorption, and freezing out the radon.

PRODUCTION: Radon is not produced as a commercial product. Radon is a naturally occurring radioactive gas and comes from the natural breakdown (radioactive decay) of uranium. It is usually found in igneous rock and soil, but in some cases, well water may also be a source of radon.

EXPOSURE: The primary routes of potential human exposure to radon are inhalation and ingestion. Radon in the ground, groundwater, or building materials enters working and living spaces and disintegrates into its decay products. Although high concentrations of radon in groundwater may contribute to radon exposure through ingestion, the inhalation of radon released from water is usually more important.



RADON IN THE WORKPLACE: In comparison with levels in outdoor air, humans in confined air spaces, particularly in underground work areas such as mines and buildings, are exposed to elevated concentrations of radon and its decay products. Exhalation of radon from ordinary rock and soils and from radon-rich water can cause significant radon concentrations in tunnels, power stations, caves, public baths, and spas. The average radon concentrations in houses are generally much lower than the average radon concentrations in underground ore mines.

Workers are exposed to radon in several occupations. In countries for which data were available, concentrations of radon decay products in underground mines are now typically less than 1000 Bq/m3 EEC Rn (approx. 28 pCi/L). Underground uranium miners are exposed to the highest levels of radon and its decay products. Other underground workers and certain mineral processing workers may also be exposed to significant levels.

Should you test for radon?

Testing is the only way to know your home's radon levels. There are no immediate symptoms that will alert you to the presence of radon. It typically takes years of exposure before any problems surface. The US EPA, Surgeon General, <u>American Lung Association</u>, American Medical Association, and <u>National Safety Council</u> recommend testing your home for radon because testing is the only way to know your home's radon levels.

Radon is a national environmental health problem. Elevated radon levels have been discovered in every state. The US EPA estimates that as many as 8 million homes throughout the country have elevated levels of radon. Current <u>state</u> <u>surveys</u> show that 1 home in 5 has elevated radon levels.

Can you fix the problem?

If your home has high concentrations of radon there are ways to reduce it to acceptable levels. Most radon problems can be fixed by a do-it-yourselfer for less than \$500. If you want or require the assistance of a professional you may wish to look at the list of <u>certified radon mitigators</u> for your state.

Source: http://www.radon.com/radon_facts/