

Spring 2011



Issue 9

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Land Conservation- Who’s In?

By Eric McPhail, CSU Extension, Gunnison County Director

Conservation, or caring for our natural resources, is typically a practice we hold our ranchers and farmers accountable for without realizing the amount of conservation that can be done right in our own backyards.

Continued on page 2

Understanding How Raspberry Plants Grow

By Joel Reich, Boulder County Horticulture Agent

Raspberries are a great, productive fruit plant that can be grown by gardeners in many parts of the United States, including all but the highest elevation areas of Colorado. In addition to all of the delicious fruit they produce, they can also be an attractive visual element in the landscape. Unfortunately, backyard raspberry patches are often overgrown and unkempt looking. This is primarily due to the fact that most gardeners do not have a good understanding of how raspberry plants grow. This leads to improper pruning, or even a total avoidance of pruning. Without proper pruning and management, raspberries will be less productive and more prone to diseases and pests. The goal of this article is to provide the understanding necessary for everyone to have beautiful, healthy, productive raspberries.

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Front Range Sustainable Small Acreage News is edited and published by Jennifer Cook, Small Acreage Management Coordinator, NRCS/CSU Extension, 57 West Bromley Lane, Brighton, CO 80601
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Natural Resources Conservation Service

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While yes our farmers and ranchers manage 1.4 billion acres of land in the U.S., more than 92 million acres (an area roughly the size of California) are privately developed and primarily tended by homeowners. In a time when everyone is accepting a role to help save the planet, it's interesting to note the ways the average homeowner can be developing the same conservation plans as large acreage owners. Here are some quick tips homeowners can utilize in their own backyards to help conserve and improve natural resources much like farmers and ranchers do.



Mountain bluebird house

Planting trees is a great conservation practice. Trees can reduce heating and cooling costs, help clean the air, add beauty, provide shelter from wind and sun, and add value to your home. Trees are planted on farms to provide many benefits includ-

ing: windbreaks, shelter for livestock and wildlife, prevention of soil erosion, nesting areas for animals, and improvement of air quality by collecting dust. (<http://www.ext.colostate.edu/pubs/garden/07225.html>)

Increasing wildlife habitat by planting a variety of shrubs, wildflowers, and plants helps attract many different birds, beneficial insects, butterflies, bats, and other species. Building birdhouses and placing hollowed out logs and dead wood around the yard can also help.

Farmers establish wildlife habitats for many reasons such as providing buffer strips along waterways, building ponds, and planting food plots and flowers to attract beneficial insects which help in pollination of crops and provide pest control.

Building small ponds and wetlands, sometimes no larger than 4 to 5 feet in diameter are great for birds, butterflies, frogs, fish, you and your family. Strategically placed ponds and shallow water retaining areas help farmers and ranchers stop soil erosion, improve water quality, provide water for livestock and wildlife, store water for emergencies, and add beauty to the landscape. Establishing wetlands also helps filter nutrients, chemicals, and sediment from runoff, keeps ground water pure, holds back floods, and provides habitat for migratory birds and local wildlife.

Composting is another beneficial practice many homeowners can take part in. Depending on how much organic waste is available, this practice can be very simple and provides a healthy nutrient rich supplement to any landscape or garden. Most farms and ranches take advantage of composts and manures through waste management practices and apply these organic supplements to their fields and pastures. (<http://www.ext.colostate.edu/pubs/garden/07212.html>)

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Mulching saves soil and moisture.

Land Conservation continued from page 2

Mulching around plants with a layer of organic material can help add organic matter to the soil, protect soil from erosion, provide a great environment for earthworms and other beneficial organisms, prevent weed growth, moderate soil temperatures, conserve moisture, and prevent soil compaction. On the farm, research is showing that conservation tillage, leaving the last year's crop on top of the ground, shares these same benefits, helps hold carbon in the soil aiding in greenhouse gas reduction and helps prevent blowing and eroding soils. (<http://www.ext.colostate.edu/pubs/garden/07214.html>)

Precision nutrient applications are environmentally friendly and economically important to both gardeners and agricultural producers alike. Excess nutrients leach through soils and can end up in ground water or run off into streams and lakes. Besides the harmful environmental effects, farmers and ranchers know that this waste comes at a huge economic price and they're careful to only apply the amount of nutrients that a plant can use by conducting soil tests frequently. Soil tests are key to correct nutrient applications in the backyard or field and can be picked up at any local Extension office.

There are many other conservation practices that homeowners can do just like large scale farmers. Terracing slopes, drip irrigation, and controlling pest insects and weeds are some of the many. While many of us think that land conservation is limited to small and large acreage owners, the fact is that conservation can and should be practiced in our backyards, schools, parks, apartments, businesses, vacant lots, and community gardens. Encouraging environmentally friendly projects and plans with public officials, neighbors, property owners, and teachers is a great way to help sustain our natural resources and beautify our world. To find out more about land conservation visit your local CSU Extension office or Natural Resources Conservation Service or send comments to eric.mcphail@colostate.edu

Raspberries continued from page 1

Raspberry plants are perennials. This means they come back year after year. But there is a catch... Only the crown of the plant and its roots are truly perennial. The above ground portions, known as **canes**, are actually biennial. This means that the canes have a lifespan of only two years. Their first year is spent growing vegetatively, the second year is spent flowering and fruiting. After they have produced a crop of fruit, they will die.



Source: www.flickr.com/photos/roosterfarm/2876777680/

In any given year, new canes grow from the crown of the plant, emerging sometime during April. These new canes will grow tall and leafy (and prickly), but they will not produce flowers or fruits. These first-year canes are known as "**primocanes**." They will drop their leaves and go dormant during the fall and remain so until the following spring. After emerging from dormancy in their second year, these same canes are referred to as "**floricanes**." At this point, these canes are not going to grow any taller. They will put all of their energy into flowering and fruiting on relatively short branches known as "**fruiting laterals**." These fruiting laterals grow from the axillary buds that formed during the prior year at the base of each leaf. Once the resulting fruits have been harvested, it is time to cut the floricanes to the ground.

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Raspberries continued from page 3

The growth habit described above is the norm for raspberries. Raspberries that grow in this fashion are known as “**summer-bearing**” or “**floricane-bearing**.” They produce crops of ripe berries during July. This is the way all raspberries grew until a major breeding breakthrough in the years after WWII. That was when breeders began working with wild plants that showed the ability to flower and fruit on primocanes (a.k.a. first year canes). These original wild plants produced small, seedy berries, but they did so from mid-August until a hard frost. Plant breeders recognized the season-extension potential of this trait and within a decade had succeeded in creating commercially viable, primocane-fruited raspberries with great flavor. This **primocane-bearing** type of raspberry is also known as “**fall-bearing**” or “**everbearing**.” The vast majority of raspberries grown in Colorado gardens are primocane-bearing varieties.

Primocane-bearing raspberries start each season by producing vegetative canes, just like floricane-bearing types. The big difference occurs in mid-summer. At that point, the primocanes of floricane-bearing types are still busy growing in a purely vegetative fashion. Primocane-bearing types, however, start producing fruiting laterals on their upper portions, leading to a late summer/fall crop of raspberries. The fruits produced typically start to ripen sometime in August (depending on variety) and continue producing fruit until a hard frost or freeze occurs.

There are two major advantages to growing fall-bearing (primocane-bearing) raspberries: 1) easy pruning, and 2) no winter hardiness issues. Both of these advantages come from the fact that the primocanes grow and fruit in one season. Because you do not need to maintain any canes through the winter, pruning is as simple as mowing the whole patch to the ground. Similarly, since no canes need to overwinter, and because fruit buds develop in

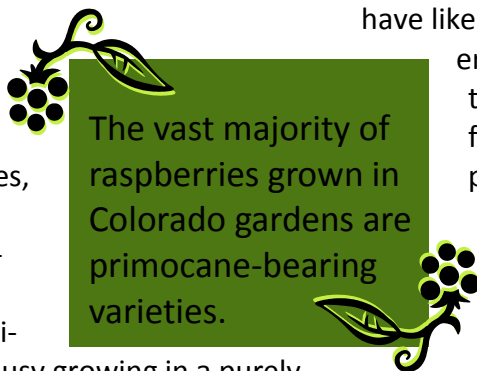
the same year as the fruit will develop, there is no chance for fruit buds to get damaged by cold during the winter. Considering the fickle winter weather we get in Colorado, as well as our frequent spring frosts, the fall-bearing varieties have been hugely popular in our state.

Before you decide you will only ever grow fall-bearing types, you should know that there are several varieties of summer-bearing raspberries that have adequate winter hardiness for our climate. By planting both summer- and fall-bearing varieties, you can greatly extend your raspberry season.

If you want to get a little more advanced in your raspberry pruning, there is a way to get your “fall-bearing” raspberries to give you two crops per year (one in July, the other in August-Sept.). Keep in mind that your primocanes only produce fruit along the upper portions of each cane. The remainder of the cane (the lower 1/2 to 2/3 of the cane) will behave like a summer-bearing type and produce flowers and fruit the following summer. So, after the plants have gone dormant in the fall, you will want to prune off only the upper portions of the primocanes. The following spring, the buds along the length of those shortened canes will start to grow and will produce fruit in July. Simultaneously, new primocanes will emerge from the soil. These will give you your fall crop.

So, are you confused yet? Don't lose hope. While this may seem very confusing now, there is an easy and fun way to understand it all: Observe your plants. Now that you know what kinds of structures and growth habits to look for, you will be amazed at how clear the distinctions are when you watch your raspberry plants grow for a 12-month cycle. You'll be explaining the ins and outs of raspberry growth to your friends and neighbors in no time.

For more info check out *Raspberries For the Home Garden* by CSU Extension <http://www.ext.colostate.edu/pubs/garden/07001.html>



EHV-1 Outbreak Can Affect Horses, Alpacas, and Llamas!



CSU Veterinary Extension Team wants you to be informed about the current EHV-1 outbreak that can affect your horses and your camelids (alpacas and llamas). The situation is constantly changing so we encourage you to refer to reliable sources of information. Word of mouth and blogs are filled with erroneous and hysterical claims. Avoid them. There are good places to go that will give you trustworthy information.

A great source of information about the disease in Colorado can be found on the Department of Agriculture website <http://www.colorado.gov/ag> where there are links to many informative sites. Here you can find information on the disease in general, biosecurity recommendations, vaccination protocols, updates on the situation in Colorado.

Other great resources include the CSU Veterinary Extension website at <http://veterinaryextension.colostate.edu/index.shtml> where you can find information about the disease in llamas and alpacas who are also susceptible.

The Horse.com sponsored a webinar on May 24th that was informative and interactive, answering many commonly asked questions. This will be archived shortly.

The most important thing you can glean from this information is that at this time it is best for you and your horse to stay at home and away from other horses.

Events that you wish to attend this weekend will probably be canceled but this will hopefully slow the spread of the disease and insure that public event locations do not get contaminated with the virus and possibly limit their use later in the summer.

Stay at home. Be part of the solution, not the problem.

Veterinary Extension Team
Colorado State University
Fort Collins, Co
radams@colostate.edu

Wildfire Defense for Small Acreages

By Karen Crumbaker, CSU Larimer County Extension

Wildfire season has begun or did the 2010 fire season ever end? With wildfires already scorching land in the foothills along the Front Range in 2011, are you confident your home and property will survive a wildfire? If not, creating a defensible space around your home and other structures will increase the chances they will survive the threat of a wildfire.

Defensible space is the creation of an area around a structure where existing vegetation is modified to slow the rate and intensity of an advancing wildfire. Defensible space improves a structure's ability to survive a low intensity wildfire in the absence of firefighter intervention. It will also improve firefighter's ability to safely protect structures. One scenario we may not consider is that establishing a

defensible space around structures, you will reduce the likelihood of a structure fire spreading to create a wildfire.

Defensible space is broken down into three zones. Zone 1 requires the removal of flammable vegetation with 15 feet from the outside edge of the home or barn. This includes raking leaves or pine needles that accumulate throughout the year. By pruning branches of trees up to a height of 10 feet will help keep a ground fire from spreading to the canopy. Cheatgrass, also known as downy brome, is an aggressive noxious weed present in the foothills that arrives early in the spring and turns brown and dies by early summer, leaving behind thick, continuous dry fuels and can create extreme wildfire hazards. Keep all grasses mowed to a maximum height of 6 inches. Finally, using decorative rock 3 to 5 feet from the siding of a structure, will help protect the structure in the event of a ground fire.

The goal of **Zone 2** is to create an area of fuel reduction around your home. The size of Zone 2 depends on the slope of the ground where the structure is built. The rate of fire spread increases as the slope of the land increases. Fuels are pre-heated by the rising smoke column or they may even come into contact with the flames themselves. Typically, the defensible space should extend at least 75 to 125 feet from the structure. Within Zone 2, ongoing maintenance requires removing ladder fuels. Ladder fuels are fuels that start at the ground and move into tree crowns. By removing shrubs and small trees or other potential ladder fuels from beneath large trees, the likelihood of fire reaching the canopy is reduced. Be sure to remove stressed, diseased, dead or dying trees and shrubs, as well as pruning branches of larger trees up to a height of 10 feet. Limbs and branches left from thinning (slash) can add significant volumes of fuel to the forest floor. These materials can accumulate and serve as ladder fuels and should be removed.

Creating Wildfire Defensible Space Video

Watch this short video on how you can protect your home and land from wildfire. http://www.ext.colostate.edu/media/sm_acre/index.html
The video was developed through a collaborative effort with CSU Extension, Jefferson County Conservation District, Jefferson County Emergency Management, and NRCS.



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Zone 3 is an area of traditional forest management and is of no particular size. It extends from the edge of your defensible space to your property boundaries. Reducing fuels can improve the health, vigor and fire resistance of the forest.

To learn more about creating a defensible space around the structures on your property, visit the Colorado State Forest Service website at <http://csfs.colostate.edu/index.shtml> or Colorado State University Extension at www.ext.colostate.edu/.

While the defensible space zones require ongoing maintenance to the outside of a structure, it is important not to forget the structure itself. Take a look at the roof. Do pine needles accumulate during the year? If so, remove the needles from the roof and gutters yearly. Are there branches from nearby trees hanging over the roof? If so, trim these branches back away from the roof. We tend to like our firewood near the home so our trip to the wood pile in frigid temperatures is brief. Storing firewood under the deck or within 30 feet of the home creates an ideal situation for a wildfire to spread to the home. Be sure to place firewood at least 30 feet uphill from your home or other structure. Propane tanks can also become a problem in the event of a wildfire. Creating an area around the propane tank free of vegetation and tree branches can help reduce wildfire from reaching the propane tank.

One final consideration to maximize your efforts in creating a defensible space is to be sure firefighters can find and access your property. Placing your address on a metal t-post or other non-combustible support at the head of the drive will help firefighters locate your property. Be sure your driveway can accommodate access by fire trucks and other emergency vehicles.

Although there is no guarantee, taking the steps necessary and spending the time to prepare your property in the event of a wildfire will reduce the possibility a wildfire will damage the structures on your property. We never know what moisture lies ahead, so an ounce of prevention is worth a pound of cure.

Facts About Diffuse Knapweed

By Tina Booton, Weld County Weed Division Supervisor

Diffuse knapweed was introduced in the late 1800's as a seed contaminate in alfalfa. In the late 1980's over 3.2 million acres were infested with diffuse knapweed in the western United States. In a 1998 Colorado survey 83,000 acres were infested with diffuse knapweed. In 1991, diffuse knapweed was first identified within one mile of Rocky Mountain National Park. In 1993 diffuse knapweed was found in the park at High Drive. The United States government estimates that noxious weeds, predominantly the knapweeds, consume 4,600 acres of public land each day.

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Diffuse Knapweed at early growth stage.

Photo by Tina Booton

Knapweed continued from page 6

Knapweed invasions cause losses averaging up to 63% of available forage for livestock and wildlife.

Diffuse knapweed is a non-native biennial forb that reproduces solely by seed. A biennial is a plant that completes its lifecycle within two years. However, diffuse knapweed plants may live for two to six years. During the first year of growth, diffuse knapweed appears as a rosette in spring or fall. During the second year in mid to late spring – the stem bolts, flowers, sets seed, and the plant dies. Once the plant dries up, it breaks off at ground level and becomes a tumbleweed allowing seeds to be dispersed over long distances. **A prolific seed producer, diffuse knapweed can produce up to 18,000 seeds per plant. Seed viability is 10 to 12 years. Therefore, the key to managing this plant is to prevent seed production.**



Diffuse Knapweed flowering.

Photo by Tina Booton

Diffuse knapweed can grow 1 to 3 feet tall, and is diffusely branched above ground. This gives the plant a ball shaped appearance and tumbleweed mobility when broken off. Leaves are small, and are reduced in size near the flowering heads. Flowers are mostly white, sometimes purple, urn shaped,

and are located on each branch tip. Bracts that enclose the flower heads are divided like teeth of a comb, and are tipped with a definite slender spine. Upon drying, the bracts become rough, rendering them injurious to the touch. The plant typically flowers from July through August. Seed set usually occurs by mid-August.

Diffuse knapweed tends to invade disturbed, overgrazed areas. It is also capable of establishing in undisturbed plant communities. It may also be found on rangeland, roadsides, riparian areas and trails.

Diffuse knapweed is unpalatable, this results in livestock overgrazing the remaining vegetation. This opens a window for the diffuse knapweed to continue spreading and taking over the pasture. Diffuse knapweed has allelopathic properties, which helps it compete. Once established, diffuse knapweed outcompetes and reduces the quantity of desirable native species such as perennial grasses. As a result, biodiversity and land values are reduced, and soil erosion is increased.

For more information:

Visit Weld County Weeds at www.weldweeds.org or call 970-304-6496 ext. 3770

For Control Options:

Colorado Department of Agriculture
Diffuse Knapweed Factsheet [http://
www.colorado.gov/cs/Satellite/
Agriculture-Main/
CDAG/1178305507383](http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1178305507383)

&

CSU Extension *Diffuse and Spotted Knapweed Factsheet* at [http://
www.ext.colostate.edu/pubs/natres/03110.html](http://www.ext.colostate.edu/pubs/natres/03110.html)

Request For Seed Collection

LEWIS FLAX

Linum lewisii Pursh

Family: Linaceae

Plant Symbol = LILE3

Project description

Lewis flax is a short-lived, semi-evergreen perennial forb, sometimes semi-woody at base with attractive flowers ranging from white to blue to yellow to red in color.

This species has potential for use in rangeland, restoration seedings and pollinator habitat throughout most of Colorado.

The Colorado Plant Materials Specialist will make wildland seed collections in the summer of 2011.

Your assistance and help is needed in locating stands, monitoring seed maturity and assisting with seed collection.

Description



Figure 1. *Linum lewisii* in habitat setting. Clarence A. Rechenthin. Courtesy of USDA NRCS Texas State Office.

Flax plants have many narrow, small, alternate (rarely opposite), simple and entire leaves that are sessile (lacking stalks) on the stems. The perfect and regular, generally showy flowers are borne in racemes or cymes. The sepals, petals, and stamens are

five, the fruit a capsule, and the seeds in most species are mucilaginous when wet.

Figure 2. *Linum lewisii* flower in late spring.

Photo by Christine Taliga.



Habitat

This species is native to the plains and upper montane communities from 4,500 to over 9,000 feet.

Time to collect

Plants begin flowering in late spring (May-June in lower elevations) to mid-summer. **Seed is ripe in late July to mid-August.** The capsule is ovoid to globose (more or less spherical to egg-shaped), splitting from the top downward into ten 1-seeded segments.

How to collect

Seed can be collected by stripping inflorescences and seed by hand into paper sacks, or by pruning inflorescences using shears. For genetic diversity, each seed collection should be made from no fewer than 50 plants.

To provide enough seed for testing, out-planting and evaluation, we recommend collecting about a half to a full paper shopping sack worth of materials depending on the amount of inert matter. More seed is always better. Please reference the **Colorado Seed and Forb Collection Guide** for more details on seed collection techniques. The Guide is available at http://www.co.nrcs.usda.gov/technical/ecs/PlantMaterials/seed_collection/index.html

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Lewis Flax Seed Collection continued from page 9

Selection criteria

Select plants from large healthy stands with good overall vigor, good seed production, and leafiness. Special selection criteria might include plants found on particularly harsh sites, good seedling establishment traits (young plants found near mother plants), and good early season growth.

Things to include

Please send your collected seed along with the following information: a pressed plant sample, photos of the site, and a completed NRCS seed collection form NRCS-ECS-580 available at

http://www.co.nrcs.usda.gov/technical/ecs/PlantMaterials/seed_collection/index.html

Mail to:

Christine Taliga
Plant Materials Specialist
USDA NRCS Denver Federal Center
Building 56, Room 2604
PO Box 25426
Denver, CO 80225-0426

Thanks: Cooperation from landowners, NRCS field offices, and other partners is essential to produce the best plant material products possible. Your assistance is greatly appreciated.

Any questions or comments should be directed to Christine Taliga at the Denver NRCS office – Phone: (720) 544-2840. Email—Christine.taliga@co.usda.gov



Figure 3. Mature seed pods and flowers. Robert Potts
© California Academy of Sciences



Special Considerations

Watch out for the non-native European flax, which has a similar appearance. For the native flax, the stigmas (female central part of the flower, shaped like a bowling pin) are only slightly longer than they are wide. On the non-native, the stigmas are much longer than they are wide.

References:

US Forest Service: <http://www.fs.fed.us/database/feis/plants/forb/linlew/all.html>

USDA Plants, Plant Guide: http://plants.usda.gov/java/profile?symbol=LILE3&photoID=lile3_005_ahp.tif



United States Department of Agriculture
Natural Resources Conservation Service

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Pocket Gopher Signs are Showing Up Again

By Marvin Reynolds, Extension Director in Pueblo County

Those mounds of dirt showing up in the yard or garden this spring are probably pocket gophers. They have been around all winter. They were waiting for the soil to warm up and thaw out before digging tunnels and creating soil mounds again.

Pocket gophers construct burrow systems by loosening the soil with their claws and incisors (teeth). They then use their forefeet and chest to push the soil out of the burrow. This soil is deposited in the fan shaped mounds we are seeing.

The burrow system consists of a main tunnel and a number of lateral burrows extending from the main burrow. The main burrow may be 4 to 18 inches below the soil surface. It is usually closer to 4 inches rather than deeper.

Pocket gophers feed on the roots of plants they encounter as they dig through the soil. They prefer alfalfa but about any plant will do. Many trees and shrubs lost during the winter may be attributed to pocket gophers. They will eat about anything green and succulent. So, spring plants are a diners delight.

Pocket gophers generally construct one to three mounds per day, but they can do more. Mound building is most active in the spring and fall.

Controlling pocket gophers is important in lawns, gardens and farm fields. They can do aesthetic and economic dam

age to plants. One animal can often seem like there is a whole colony.

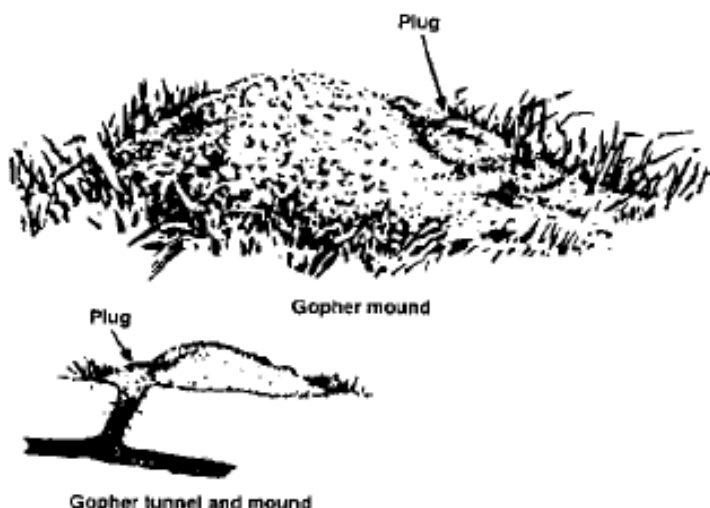
The most successful method of controlling pocket gophers is to trap them. If you have a small number or a small area this can work well. Traps are set according to their directions. They can be set in the main tunnel or in the mound tunnel. Trapping is most successful in the spring and fall.

There are four rodenticides registered to control pocket gophers in Colorado. Often one of these can be found at the local hardware store. Some large hardware stores will also have them. If you ask the local store may be able to order what you need.

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Photo: CO Division of Wildlife



You will rarely see a pocket gopher. They are more likely identified by the fan shaped mounds they create.

Pocket Gophers continued from page 11

When identifying where to put the traps or rodenticides look for the new mounds of soil in the morning. The newest mounds will look like moist soil. In these mounds there should be an indentation near one edge. The indentation is where the tunnel should be found.

Shooting pocket gophers isn't practical as they seldom travel above ground. Also, fumigants are not very good control measures. The gophers may sense the gas and plug the tunnel, or the gas dissipates into the dry soil.

For more information on managing pocket gophers read CSU Extension factsheet, *Managing Pocket Gophers* at

<http://www.ext.colostate.edu/pubs/natres/06515.html>



Preserve @ Home Online Course

Colorado State University Extension and the University of Idaho Extension offer **Preserve @ Home** to teach individuals how to safely preserve a variety of food products. Participants learn how to produce high quality preserved foods and the science behind food preservation and food safety.

Individuals with little or no previous food preservation experience are welcome. Anyone with an interest in food preservation and food safety can enroll in **Preserve @ Home**.

Enrollment & Payment Deadline

June 10, 2011

Cost: \$70

On-line Course Available/Start Date

June 16, 2011 after 1:00 pm

Chats Thursday's 12:00 – 12:45 pm

June 23rd through July 28th

To register, contact Anne Zander at azander@bouldercounty.org 303-678-6238

Weed Workshop

June 4, 2011 from 9-11 am

Keenesburg, CO

Puncture vine, Cocklebur, Russian thistle, Kochia, and other noxious weeds, don't be fooled by pretty flowers and other aesthetic characteristics. These invaders will cause all types of havoc on your property. Join us to learn more. Tina Booton, Weld County Weed Supervisor will be speaking on these noxious weeds. Hosted by Southeast Weld Conservation District. For more information contact NRCS at 303-659-4177 Ext. 3

Canning Jams, Jellies & More

June 11, 2011 (9:30-11:30am)

Littleton, CO

Love the flavors of summer fruits? Learn how you can enjoy the delightful, fresh-picked taste all year long by making jams, jellies, preserves, marmalades, conserves and butters. The workshop will cover the basics of water-bath canning to ensure safe preservation. For more information contact Sheila Gains at sgains@co.arapahoe.co.us or 303-730-1920

Canning Jams, Jellies & More

June 14, 2011 (6-8pm)

Longmont, CO

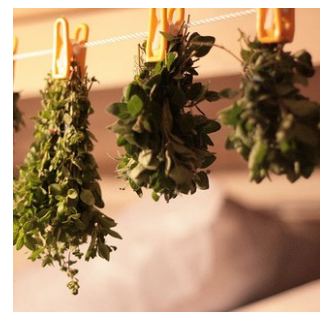
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The Art & Science of Drying Foods

June 25, 2011 (10-11:30)

Longmont, CO

Drying is a creative way to preserve foods. Learn basic methods of drying fruits, vegetables, herbs, leathers and jerkies. Ideas for using dehydrated foods will be included. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org



Events continued on page 13



Viva Salsa!

July 9, 2011 (9:30-11am)

Littleton, CO

Salsa is one of the most popular condiments in America! Learn how to prepare and water-bath can salsa using a recipe that has been tested and is safe for home canning. For more information contact Sheila Gains at sgains@co.arapahoe.co.us or 303-730-1920

Sauerkraut and Kim Chi

July 12, 2011 (6-8pm)

Longmont, CO

Natural fermentation is one of the oldest means of food preservation. Learn the science of making and canning sauerkraut and kim chi safely in this hands-on workshop. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org

Viva Salsa!

July 16, 2011 (9:30-11am)

Longmont, CO

Salsa is one of the most popular condiments in America! Learn how to prepare and water-bath can salsa using a recipe that has been tested and is safe for home canning. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org



Raising Sheep and Goats Webinar

August 11, 2011 from Noon-1:00 pm MT

Basic goat and sheep management will be discussed in this webinar geared for landowners who just started or who are interested in getting started with raising sheep or goats. Participants will learn about feed and nutrition, health concerns, daily care, costs, housing, and products that sheep and goats produce. Dr. Nancy Irlbeck, Associate Dean of Academic Affairs for College of Agricultural Sciences at CSU, will present this webinar.

Email jennifer.cook@colostate.edu for more information and to register.

It's All About Peaches

August 11, 2011 (6-8pm)

Longmont, CO

Learn all the ways to preserve the goodness of peaches by preserving jams, pie fillings, canning peach slices, drying and freezing. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org

Preserving Home-Grown Tomatoes

August 14, 2011 (10am-12pm)

Centennial, CO

Learn how to safely preserve tomatoes to enjoy all year long. This workshop provides an overview of the three main methods of preserving tomatoes: canning, freezing and dehydrating. For more information contact Sheila Gains at sgains@co.arapahoe.co.us or 303-730-1920

It's All About Peaches

August 20, 2011 (10am-12pm)

Longmont, CO

Learn all the ways to preserve the goodness of peaches by preserving jams, pie fillings, canning peach slices, drying and freezing. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org

Canning Basics for Safe Preserving

August 27, 2011 (12-2pm)

Centennial, CO

Learn all about the "how and why" of preserving food at home. This workshop focuses on canning safety, types of equipment and proper canning methods. For beginners or those needing a refresher. For more information contact Sheila Gains at sgains@co.arapahoe.co.us or 303-730-1920

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Upcoming Small Acreage Events

Raising a Healthy Poultry Flock Webinar August 29, 2011 from Noon-1:00 MT

Join us for a basic presentation on keeping chickens for meat and/or eggs. We will discuss different types of chickens and what their uses are, coop design, basic husbandry, feed and care, general health concerns, and disease prevention. Presented by Kristy Pabilonia, Assistant Professor at CSU, and Sarah Millonig, Research Associate at CSU. **To register for the poultry webinar, please go to:** <https://spreadsheets.google.com/viewform?hl=en&formkey=dDQxamdJTfG4RVZZVFBZVzh5Um5TTVE6MQ#gid=0>

Alpacas and Llamas on Small Acreages Webinar August 31, 2011 from Noon-1:00 MT

Thinking of keeping a few alpacas or llamas? Have you just bought a few alpacas and llamas and want to learn more? This webinar will provide you with the basics. Pat Alger, alpaca and llama owner and educator, will present feeding, housing, breeds, health concerns, and general management of these camelids. She will also discuss costs and the various products that can be produced from alpacas and llamas. Presented by Pat Alger, alpaca and llama owner and educator. **To register for the alpacas and llamas webinar, please go to:** <https://spreadsheets.google.com/viewform?hl=en&formkey=dEN0c2hTTmtUanBGWmc4dU1zV1RkVHc6MQ#gid=0>



Viva Salsa!

September 13, 2011 (6-7:30pm)

Littleton, CO

Salsa is one of the most popular condiments in America! Learn how to prepare and water-bath can salsa using a recipe that has been tested and is safe for home canning. For more information contact Sheila Gains at sgains@co.arapahoe.co.us or 303-730-1920

Viva Salsa!

September 17, 2011 (10-11:30am)

Longmont, CO

Salsa is one of the most popular condiments in America! Learn how to prepare and water-bath can salsa using a recipe that has been tested and is safe for home canning. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org



Fundamentals of Small Acreage Swine Production Webinar

September 29, 2011 from Noon-1:00 MT

This webinar is an introduction to raising pigs for meat or for breeding. We will discuss feed, facilities, health, nutrition, and proper management of small-scale swine production. Presented by Brett Kaysen, animal science professor at CSU, and expert in swine production. **To register for the swine production webinar, please go to:** <https://spreadsheets0.google.com/viewform?hl=en&hl=en&formkey=dG1sUWpDYnlHcGNCT0FVSTFtNldrSnc6MQ#gid=0>

Livestock On Small Acreages Workshop

October 15, 2011

SAVE THE DATE!

Break-out sessions will focus on common livestock species: sheep, goats, cattle, llamas, alpacas, swine, and poultry. In-depth information will include nutrition, management, and marketing. Bring your questions! Location to be determined. For more information contact Jennifer.cook@colostate.edu or 303-659-7004 ext.3

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Sauerkraut and Kim Chi
October 22, 2011 (10am-12pm)
Longmont, CO

Natural fermentation is one of the oldest means of food preservation. Learn the science of making and canning sauerkraut and kim chi safely in this hands-on workshop. Contact Anne Zander for more information at 303-678-6238 or azander@bouldercounty.org

For an updated list of events, visit **CSU Small Acreage Management website**
www.ext.colostate.edu/sam/



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