

Issue 16

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Home Energy Audits

By Leigh Fortson, CSU Extension

Home energy audits identify places in the home where energy and money are being lost. Included in an audit report are options on how to correct such problems by making the home more efficient. My husband and I had an energy audit done on our house. We worked with a credible energy auditor. The company (and all reputable ones) provided a detailed report of what's going on in all parts of the home.

Continued on page 2

Naturally Control Insects and Rodents

By Pat Brodbent, *The Bird Man* ®, Professional Speaker, Organic Gardener & Wildlife Extraordinaire

Insect challenges may indeed be the worst problem for any farmer or gardener. There are many ways to control insects such as using biological solutions, mechanical methods, and the use of pesticides. To reduce or eliminate the severity of insect problems throughout the growing season, consider creating and implementing a long-term organic eco-system plan. **Continued on page 3**



This adult green lacewing is a beneficial predator that eats aphids and other garden pests.

Source: ipm.ncsu.edu/cotton/insectcorner/photos/beneficial.htm

Colorado Sustainable Small Acreage News is edited and published by:

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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.

Home Energy Audits from page 1

We found out that 39% of the air in our home is fairly leaky, which is equivalent to a 1.9 square feet hole between our house and the outside! They provided infrared photos and offered cost-effective solutions and priority tables for what should be attended to first.





A picture is worth 1000 words. These two photos from our energy audit tell the story of what's going on with the hearth above our gas fireplace. Sadly, the purple area indicates a colder temperature, where our house is bleeding, or put more blatantly, clues about how bad our carbon footprint actually is.

To learn more about the energy efficient actions you can do to your home, check out CSU's energy webpage, or call a trusted, BPI-certified energy auditor. http://www.ext.colostate.edu/energy/home.html

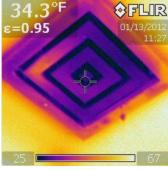
Recharge Colorado maintains a list of energy auditors and other energy-related contractors searchable by zip code at http://rechargecolorado.org

To conduct your own home energy audit, please visit http://diyenergy.colostate.edu

Over 40 participating County Extension offices throughout the state are even offering free loans of Home Energy Audit Loan (HEAL) program kits consisting of a thermal leak detector, power monitor, and flicker checker to help you through your audit.

For a list of participating counties and for more information, visit: http://www.ext.colostate.edu/energy/heal/





Images from our energy audit show air leakage at a fan above the laundry room. The report gave us options on how to fix the leakage.

Naturally Control Insects and Rodents from page 1

Your plan to naturally control insects for 2013 should start in February and March of each year. Benjamin Franklin said, "an ounce of prevention is worth a pound of cure," which should be the motto of every farmer and gardener. Why wait until a problem becomes epidemic when it could have been prevented? Every gardener will experience some type of insect challenge every year, though some years are much worse than others due to many factors including drought and abnormally high temperatures.

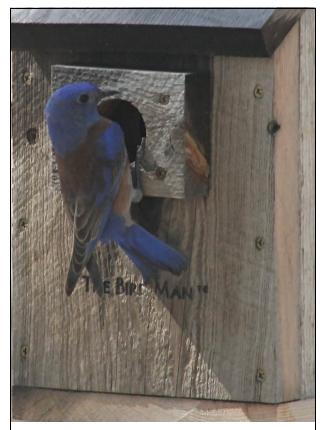
Your plan needs to work towards controlling problematic insects that live above ground and below ground. Above ground control can be accomplished by attracting wild birds, beneficial insects, and bats. In addition mechanical control works well for larger pests, like picking tomato worms off the plants and killing them. The last resort you want to use is an insecticide as these chemicals are nondiscriminatory and will usually kill both bad and good insects.

Wild Birds and Bats

Attracting songbirds to your backyard is easy and can be very beneficial in keeping many day-time pests and rodents under control. Some favorite foods of Western and Mountain bluebirds are grass-hoppers and moths. Swallows only eat insects such as mosquitoes, flies, wasps, grasshoppers, and moths. Even most hummingbirds eat small insects like mosquitoes. Towhees love scratching around in the dirt searching for and eating insects. All of the woodpecker species eat tree-climbing insects such as ants, beetles, and leaf worms. Attracting songbirds to your property will in turn bring hawks to your area. Hawks are mostly meat eaters, and will eat an occasional song bird, but also will consume mice, voles, squirrels, pocket gophers, and rabbits.

Night-time pests such as miller moths and mosquitoes are best controlled by attracting bats. Bats can consume as many as 2000 insects per hour, depending on the species. Once you can effectively attract bats to your property, they will come back to the same bat house every year to raise more babies (pups). Owls will also be around at night and they are serious hunters, eating mice, voles, and an occasional bat. One of the most common owls in Colorado is the Great Horned Owl. They have been documented to eat in excess of 400 mice per day to feed their fast growing babies.

To attract songbirds to your property you need three things: accessible clean water, food (birdseed) and nesting cavities (bird houses). The two kinds of seed you want to start with are Thistle (also known as Nyjer) and Sunflower Seed or a Sunflower Seed Mix. If birds are eating your garden produce, you will find relief in this behavior by supplying birds with birdseed. They are telling you that they are hungry and most seed-eating birds prefer seed over garden produce. Different birds prefer different sized nesting cavities and not all birdhouses are made equal. **Continued on page 4**



Male Western bluebird checking in on mama and his chicks. Photo by Pat Brodbent

Naturally Control Insects and Rodents from page 3

My best advice is to seek out someone who can come see your property to create a long-term plan for attracting wild birds and bats.

Beneficial Insects

Beneficial insects need to be introduced every year because once their food source is eliminated they leave to look for food elsewhere. Some beneficial insects are easier to attract and keep around than others. Two of the best above-ground beneficial insects are lady beetles (ladybugs) and green lacewings. The best below-ground insects are beneficial nematodes.

Ladybugs and green lacewings will consume over 250 different pests. Ladybugs lay their eggs on the underside of leaves. Ladybug eggs are orange football-shaped eggs in circular clusters. Lacewings lay their eggs on the underside of leaves and hang away from the leaf on what look like little strings. If you see either of these types of eggs, you should leave them alone.



Adult ladybird beetles usually lay their eggs in clusters close to aphid, scale, or mealy bug colonies.

Beneficial nematodes can be divided into two categories: those that eat stationary pests (such as ticks, grubs, weevils, termites, and queen ants) and those that eat mobile pests (such as fleas, gnats, maggots, cutworms, caterpillars, soldier ants, thrips, and leaf miners). The species of nematode you want to apply for stationary pests is called *Heterorhabditis bac*

teriophora. There are two species of nematodes used for mobile pests, Steinernema carpocapsae and Steinernema Feltiae. I actually like to add all three to my gardens, lawns, and pastures each year.

The best way to add ladybugs, green lacewings, and nematodes to your lawn, garden, or property is to purchase them each year. Ladybugs and green lacewings can be purchased as egg sacks online or at many garden centers.

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Above: A green lacewing egg hangs from a plant stem.

Below: A green lacewing larva



Naturally Control Insects and Rodents from page 4

Nematodes can also be purchased. They are microscopic and can be mixed with water and sprayed onto soil. There are many other beneficial insects, but some of them like the praying mantids will eat anything in its reach – both good and bad insects – so all your hard work of keeping ladybugs and lacewings around my be devoured by a handful of praying mantids.

Start planning now and be rewarded year after year with great gardening results!

For more information:

Mantids of Colorado, CSU Extension fact sheet at http://www.ext.colostate.edu/pubs/ insect/05510.html

Beneficial Insects and Other Anthropods, CSU Extension fact sheet at http://www.ext.colostate.edu/pubs/insect/05550.html

Alternative Pesticide Management for the Lawn and Garden, CSU Extension Homeowner's Guide at http://www.ext.colostate.edu/pubs/garden/xcm221.pdf

For more information on organic gardening, insect control, attracting wild birds & bats, or if you need a speaker for you next event, contact The Bird Man at www.birdmanusa.com. To contact him directly go to www.birdmanusa.com/eCart/ContactUs.html.

Dexter Cattle

By John Rizza, Small Acreage Management Specialist, CSU Extension/USDA-NRCS

Dexter cattle are a small dual-purpose breed (being raised for milk and meat) that may be a good option for smaller acreages. These mini-cows are about half the size of a traditional Hereford and have proven to be a hardy, sensible choice for alternative livestock owners. While the direct history and lineage of the Dexter breed is not fully understood, the American Dexter is mostly considered to be a descendent of a herd of Irish Mountain Cattle and is closely related to the Kerry cattle breed.

Dexter cattle are not considered a miniature breed, but are smaller than average cattle breeds. Cows weigh approximately 700 lbs., and bulls weigh in at nearly 1000 lbs., growing to an average size of 40" at the shoulder. Owners suggest they are ideal as a family cow, producing about 2 gallons of milk (4% butterfat) per day and dress out at 50-60 percent of full weight.

These cattle do well in hot and cold climates, but still need the basics-windbreak, shelter, fresh water, and feed.

Brenda and PeeWee Anderson, from Lazy EA Ranch in Del Norte, CO, have been running Dexter cattle since 1992 and currently have 150 acres of native pasture, running up to 30 pairs and 20 steer. Currently, the Anderson's sell breeding stock and natural beef and all their cattle are raised without any

vaccinations, hormones, or antibiotics.

These cows are characteristically docile when handled from a young age, and according to Brenda, "if we need them to come in from the pas-Continued on page 6

Dexter cow and her calf. Dexter cattle are a small breed and are generally docile and great with kids.

Dexter Cattle continued from page 5

ture, we just call them and they come running in." Brenda also mentioned that their pastures seem to have "a much lower infestation of weeds, which in turn has improved our pasture health" and they do supplement their cattle with "a mineral 'lick tub' which lowers their roughage intake."

Carol Ann Traynor, from Hi-Country Achers Farm in Fruita, CO, purchased her first four Dexter cattle in 1997. She currently runs a registered heard of 13 head on 15 acres of irrigated grass pasture. Carol breeds and sells calves to local small acreage landowners and maintains a few that are destined for the freezer every winter.

It has been shown that these cows will thrive under a variety of climatic and nutrition conditions. Carol has noticed that her herd "treats the kosha and bindweed as candy, allowing the grass to fill in problem areas and keeping the weeds more manageable."

As with any livestock, sturdy fencing is needed to keep your animals safely within their allotted area. Carol recommends installing lower strands of wire or even woven wire fences since the "calves can squirt underneath just like a goat will."

"They are excellent browsers", says Brenda, and will thrive on lower quality forage. Providing them adequate shelter and proper food and water will ensure a profitable, healthy source of quality beef and/or milk.

Dexter owners will mention a variety of positive reasons for ownership. Carol mentions that over the last 17 years she has only needed veterinary assistance twice during calving. In addition, her "second year steers produce 'portion size' lean, tender, and fine-grained cuts." Now that is ideal for the dinner table on a cold winter's night.

Additional resources and information can be found on the American Dexter Cattle Association's website at: www.dextercattle.org

FSA Microloans

The USDA-Farm Service Agency (FSA) has developed the new Microloan (ML) program to better serve the unique financial operating needs of beginning, niche, and the smallest of family farm operations by modifying its Operating Loan (OL) application, eligibility, and security requirements. The program will offer more flexible access to credit and will serve as an attractive loan alternative for smaller farming operations like specialty crop producers and operators of community supported agriculture (CSA). These smaller farms, including non-traditional farm operations, often face limited financing options.

Microloans can be used for all approved operating expenses as authorized by the FSA Operating Loan Program, including but not limited to:

- Initial start-up expenses;
- Annual expenses such as seed, fertilizer, utilities, land rents;
- Marketing and distribution expenses;
- Family living expenses;
- Purchase of livestock, equipment, and other materials essential to farm operations;
- Minor farm improvements such as wells and coolers;
- Hoop houses to extend the growing season;
- Essential tools;
- Irrigation; and
- Delivery vehicles.

Contact your local FSA office for more information on Microloans. Locate your local FSA office at http://www.fsa.usda.gov/FSA/stateOffices? area=stoffice&subject=landing&topic=landing



Applewood Seed Company Looking for Seed Growers

By Diane Wilson, Applewood Seed Company

In recent years, there has been a huge interest in native wildflower seeds for pollinator plantings and other types of conservation projects. The plight of honey bees and native pollinators has been well documented – populations are declining due to a variety of factors that include disease, pests, malnutrition from a lack of food sources, and insecticide use.

Many of our crops are reliant on pollinators. These include fruits, nuts, clover, alfalfa, berries, canola, and numerous vegetables. A walk through the produce aisle in your grocery store will make it obvious how important pollinators are to our food supply. Melons, tomatoes, cucumbers, squash, apples, peaches, grapefruits, and peppers are available to us as a result of the hard work of honey bees and wild pollinators.

More wildflower species are needed to provide better seed mixes for pollinators. Flowers must provide

Zinnia 'Cherry Queen'- The two fushia off-types would be removed in a production field.

nectar and pollen for pollinators, and there should be spring, summer, and fall-blooming flowers in a seed mix in order to provide nutrition to pollinators throughout the growing season. There is also a need for seeds that are relatively inexpensive to produce so that conservation seed mixtures are economical to purchase.

Applewood Seed Company is looking to establish a network of people who have an interest in growing flowers for seed production and variety improvement. A significant amount of land is not required – anywhere from 5000 square feet to a quarter acre is sufficient to get a small production or do selection work. Staff will provide technical advice and work closely with interested growers in order to achieve success. Once the plants are harvested, Applewood will be responsible for cleaning and testing the seed.

Applewood Seed Company also has an interest in preserving older varieties of garden flowers. There are numerous varieties that have been developed through old-fashioned selection work over the past century or two, and many are no longer being maintained in the seed trade. It is fairly easy to do selection work on flowers if you know what the ideal

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A production field of Greenthread and Colorado native wildflower.

Looking for Seed Growers continued from page 7

appearance is supposed to be. If variety traits are not maintained during production year after year, the flower traits will start to change back to the original form. For instance, Cosmos 'Sea Shells' has fluted petals. If plants with flat petals are not rogued out of the field during production, that trait will start to increase and ruin the integrity of that batch of seed.

Applewood Seed Company is a flower seed production company in Arvada, Colorado that has been in business since 1965. It started out as a small, wildflower packet seed company in the early days and has expanded to producing bulk quantities of openpollinated wildflower, garden flower, and herb seeds for the wholesale trade. Customers include farmers and ranchers, landscapers, reclamation companies, golf courses, highway departments, parks departments, and other seed companies. The company offers single species as well as seed mixtures for an assortment of geographic regions and special applications.

For further information, please contact Diane Wilson at Applewood Seed Company:
Phone (303) 431-7333 or email dwilson@applewoodseed.com

Animal Disease Traceability Rule Released

On January 9, 2013, USDA-APHIS-Veterinary Services released the Animal Disease Traceability (ADT) Final Rule. The new federal rule is effective March 11, 2013. The goal of ADT is to improve the traceability of animals involved in a disease outbreak.

Livestock producers affected the most by the rule will be those who have cattle; other species have minimal changes to current identification standards.

For more details on these new rules, visit http://www.aphis.usda.gov/traceability/

Drought Calls for Change in Grazing

By Sharon Bokan, Boulder County Extension

During drought, plants grow fewer roots and vegetation (stems and leaves). As vegetation, which is used in production of carbohydrates (energy, sugars), is removed, the plant reduces production and storage of carbohydrates for basic life processes. Foot/hoof traffic also damages both vegetation and roots, further cutting energy production. With reduced roots, plants are unable to take up the needed water and nutrients. During a drought these plant functions are especially critical as plants are already stressed due to lack of moisture.

It is best to keep animals off pastures during drought, even in winter. The grasses went into dormancy under stress with fewer roots. Roots and buds need to be preserved over the winter. If you must graze, wait until the pasture is free of ice or mud. The dry grass material can be grazed, but be careful to not let livestock graze the grass clear down to the crown. Even in a dormant state, it is important to maintain at least 3-4" of stubble. Preserving this vegetation will help trap any moisture and will prevent damage to the crowns, where the buds for the next years' growth are located.

With reduced forage, animals are tempted to graze poisonous plants such as locoweeds and larkspurs, which may be green when pasture grasses are brown. Some plants will also accumulate nitrates during drought, which can be deadly. Pastures should be surveyed for such plants.

When there is sufficient moisture again, resist the temptation to start grazing. Allow pastures time to recover and start producing roots and storing energy again. After severe drought you may need to wait a year or more before grazing. Heavily grazed holding areas may need to be reseeded after a drought. Pasture mixtures and reseeding/renovation techniques can be obtained through CSU Extension and Natural Resources Conservation Service.

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Animal Feed Considerations

Horses

Horses need a minimum of 1% of their body weight in roughage per day and preferably 1.5 to 2%. Your horses may normally receive their roughage by grazing but during a drought, grazing is reduced. Any change in feed should be made over a 1-2 week period. CSU Fact Sheet 1.625 provides a list of alternate feeds and roughage sources. http://www.ext.colostate.edu/pubs/livestk/01625.pdf

Cattle

Drought conditions also affect cattle grazing. Consider using a semi-confined area or a feedlot for cattle during drought. See CSU Fact Sheet 1.626 for information of alternate feeds for cattle. http://www.ext.colostate.edu/pubs/livestk/01626.pdf

<u>Sheep</u>

Drought affects sheep the same as horses and cattle. See article on alternate sheep and cattle feeds at http://www.ext.colostate.edu/pubs/ livestk/01615.html

Drought Links

National Oceanic and Atmospheric Administration www.noaa.gov

National Weather Service www.nws.noaa.gov

NOAA Drought Information and Forecast page http://www.drought.noaa.gov

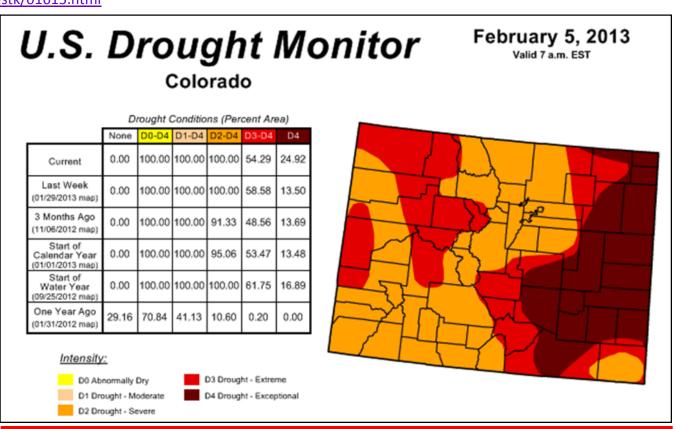
Climate Prediction Center http:// www.cpc.noaa.gov/products/forecasts

Western Regional Climate Center http://www.wrcc.sage.dri.edu

U.S. Department of Agriculture Drought information page http://drought.fsa.usda.gov

Colorado Department of Agriculture http://www.ag.state.co.us

Colorado Climate Center http://ccc.atmos.colostate.edu





Front Range Fruit Growing Symposium February 23-24, 2013 Longmont, CO

The Front Range Fruit Growing Symposium will be the largest "all fruit, all day" educational event ever held in our region. The content provided at the symposium will be valuable to both beginning and experienced fruit growers. The only requirement is an interest in the cultivation of fruit crops in our region. Lecture sessions will occur both Saturday and Sunday. A special hands-on apple grafting class will be featured on Sunday. Contact Joel Reich for more info at jreich@bouldercounty.org

Drought Summit Webinar 3 - Livestock February 26, 2013 (11 am – 1 pm)

Todays' summit topics are Livestock Disease and Drought, Herd Liquidation and Rebuilding Decisions, and Tax Considerations. This webinar is part of a series hosted by CSU Extension Golden Plains Area.

Each Drought Summit will be presented via Adobe Connect. In order to login to the web cast, go to the following web address: http://connect.extension.iastate.edu/colodrought. On this web site, simply click on bullet "Enter as a guest." You will then be prompted for your name. Enter your name and click "Enter Room" to enter the meeting space.

Any time before the meeting you can visit the following URL to confirm your ability to connect to the Connect server: http://connect.extension.iastate.edu/common/help/en/support/meeting test.htm

Each webinar session will be recorded and available for viewing at later times. For more information, please go to the Golden Plains Area web site at http://goldenplains.colostate.edu

Drought Summit Webinar 4 – Trees, Turf, & Flowers March 5, 2013 (11 am – 1 pm)

Todays' summit topics will be Managing Windbreaks and Trees in Drought Conditions, and Managing Perennials, Ornamentals, and Turf in Drought Conditions. This webinar is part of a series hosted by CSU Extension Golden Plains Area.

Each Drought Summit will be presented via Adobe Connect. In order to login to the web cast, go to the following web address: http://connect.extension.iastate.edu/

<u>colodrought</u>. On this web site, simply click on bullet "Enter as a guest." You will then be prompted for your name. Enter your name and click "Enter Room" to enter the meeting space.

Any time before the meeting you can visit the following URL to confirm your ability to connect to the Connect server: http://connect.extension.iastate.edu/common/help/en/support/meeting_test.htm

Each webinar session will be recorded and available for viewing at later times. For more information, please go to the Golden Plains Area web site at http://goldenplains.colostate.edu

A Lasting Legacy: Foundations for Agricultural Estate Planning

March 5, 2013 Longmont, CO

Boulder County Extension in partnership with Boulder County Parks and Open Space is pleased to offer a program for families wanting to develop a stronger framework for improving capacity to develop an estate plan that reflects their values.

Jeff Tranel, CSU Extension Agribusiness Economist, has developed "A Lasting Legacy" from experiences with farm and ranch families in collaboration with colleagues in Western States. Jeff works actively in the Arkansas Valley area to help farm and ranch families have the crucial conversations necessary to develop a well-considered estate plan.

Please join us on Tuesday, March 5 from 10 – 4 pm (lunch served) at the Boulder County Parks and Open Space. Bring family members as this program will have the greatest impact with members of several generations present. Deadline for registration is Friday, March 1. Contact jeff.tranel@colostate.edu for more info.

Managing your Rural Property in Pitkin County March 5, 2013 (6-8:30 pm)

Join CSU Extension, the USDA-NRCS, and our partners to discuss some basic topics related to managing your small acreage property. This will be held at the Pitkin County Library (120 North Mill St., Aspen) from 6:00 pm to 8:30 pm and will offer light refreshments. Learn from professionals about maintaining a healthy property, proper species selection for our climate, keeping noxious weeds in control, and techniques that will improve the value of your land investment. Both beginners and experienced landowners will find value in this workshop. Contact john.rizza@colostate.edu for more info.

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Drought Summit Webinar 5 – Pastures & Pests March 12, 2013 (11 am – 1 pm)

Todays' summit topics will be **Pasture Management, Invasive Weeds, and Insects**. This webinar is part of a series hosted by CSU Extension Golden Plains Area. Each Drought Summit will be presented via Adobe Connect. In order to login to the web cast, go to the following web address: http://connect.extension.iastate.edu/colodrought. On this web site, simply click on bullet "Enter as a guest." You will then be prompted for your name. Enter your name and click "Enter Room" to enter the meet-

Any time before the meeting you can visit the following URL to confirm your ability to connect to the Connect server: http://connect.extension.iastate.edu/common/help/en/support/meeting_test.htm

Each webinar session will be recorded and available for viewing at later times. For more information, please go to the Golden Plains Area web site at http://goldenplains.colostate.edu

Native Plant Landscaping March 12, 2013 (1-5 pm) Golden, CO

ing space.

Colorado has a wealth of native plants, colorful wildflowers, grasses, shrubs and trees, which are well adapted to our variable climate, soils, temperatures and elevations. In this 4 hour class, you'll learn how to use native plants in your landscape, and be introduced to many beautiful, hardy native plants. For more info go to www.conativeplantmaster.org

Silt Mesa Resident Meeting March 14, 2013 (6-8:30 pm) Silt, CO

Join us at the Silt Library for this community meeting. Agenda includes:

Basin States Salinity Program—cost share funds available to improve your irrigation system

Russian Knapweed—a real problem on Silt Mesa! Russian Knapweed can take over quickly, infest forage crops, and degrade property values—AND CAN KILL HORSES. We can get a handle on this problem with your help!

Fire Water Sources—Colorado River Fire and Rescue Services

Meeting sponsored by Bookcliff Conservation District. Please call for reservations at 945-5494 ext. 105.

Colorado Native Fruits Webinar March 19, 2013

12:00 - 1:00 pm MT

There are many tantalizing, tasty, and tough native plants out there that can produce edible fruit and enhance your landscape. We will discuss these plants as well as some choice cultivars. Options are given for all elevations in Colorado. Presented by Irene Shonle, CSU Extension Director in Gilpin County

To register for this free webinar, click on the following link:

https://docs.google.com/forms/d/1vtu9dTd iUuYkDutN8WFafz3pyrYExnldoFlv eYLs/viewform

Drought Summit Webinar 6 – Financial Management March 19, 2013 (11 am – 1 pm)

Todays' summit topics will be **Human Resources and Family Financial Management and Communication**. This webinar is part of a series hosted by CSU Extension Golden Plains Area.

Each Drought Summit will be presented via Adobe Connect. In order to login to the web cast, go to the following web address: http://connect.extension.iastate.edu/colodrought. On this web site, simply click on bullet "Enter as a guest." You will then be prompted for your name. Enter your name and click "Enter Room" to enter the meeting space.

Any time before the meeting you can visit the following URL to confirm your ability to connect to the Connect server: http://connect.extension.iastate.edu/common/help/en/support/meeting_test.htm

Each webinar session will be recorded and available for viewing at later times. For more information, please go to the Golden Plains Area web site at http://goldenplains.colostate.edu

Basic Botony Class

March 26, 2013 (6 -9 pm) Golden, CO

Enjoy an interactive, fun and fact-filled class designed to prepare you for success in your study of Colorado's flora. Participants will be exposed to basic botanical terminology, taxonomy and ecology as we navigate a botanical key and explore some of the more useful bits of the primary reference for field botany in our state, Colorado Flora, Eastern Slope, Fourth Edition. For more info go to www.conativeplantmaster.org

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No-water Gardening for Higher Elevations (above 7500') Webinar April 2, 2013 12:00 – 1:00 pm MT

Colorado water rights can be frustrating for the mountain homeowner. For example, there are no outdoor water rights for houses with wells drilled after May 8, 1972 on less than 35 acres. In this webinar, learn techniques that allow you to grow beautiful ornamentals (and even vegetables) without violating water rights restrictions. Presented by Irene Shonle, CSU Extension Director in Gilpin County

To register for this free webinar, click on the following link:

https://docs.google.com/forms/d/1Y1r8ruH8rUT1-AgkldAxp3eGuqGu0so33 WTZjnVolo/viewform

Plant Families and Keying Class April 2, 2013 (6-9 pm) Golden, CO

This class delves deeper into intricacies of Colorado plant families, including key identifying characteristics, followed by a close-up opportunity to key out plants in the field (weather permitting). It is recommended that participants have basic botany knowledge before attending this class. For more info go to www.conativeplantmaster.org

Introduction to Invasive Weeds and Management April 4, 2013 (9 am - 4 pm) Golden, CO

An entry level class taught by CSU's Dr. George Beck that will cover ID of Colorado's A- and B-list weeds including live specimens; information about our state weed law; weed biology (life cycles, weed evolution, weeds and succession); strategies and methods for weed management and sprayer calibration. For more info go to www.conativeplantmaster.org

Basic Botany Class

April 25, 2013 (6-9 pm) Golden, CO

Enjoy an interactive, fun and fact-filled class designed to prepare you for success in your study of Colorado's flora. Participants will be exposed to basic botanical taxonomy and ecology as we get a close-up look at plant parts, discover botanical terminology, and basic identifying characteristics to set you up for success in the field. For more info go to www.conativeplantmaster.org

Invasive Weed Management for Experienced Land Owners

April 30, 2013 (9 am - 4 pm) Golden, CO

An intermediate to advanced class taught by CSU's Dr. George Beck for those that have experienced previous weed training and will cover weed biology and ecology and how this information is used when designing weed management strategies. Ecologically-based weed management will be emphasized including information on using grazing to manage weeds as well as integrating herbicide use with seeding for site recovery. ID, biology and management of local weeds of importance as identified by course participants also will be included. For more info go to www.conativeplantmaster.org

For an updated list of events, visit CSU Extension 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.