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[www.ext.colostate.edu/sam](http://www.ext.colostate.edu/sam)

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## Colorado Small Acreage Services Database

The source for Colorado landowners to search for contractors, equipment, and land management services.

CSU Extension offers an avenue for landowners to connect with local contractors through our new landowner services database at <http://sam.ext.colostate.edu/>. If you or your business serves small acreage properties, then consider submitting your company to the online searchable database developed by CSU Extension and the USDA, Natural Resources Conservation Service.

The Small Acreage Services Database (SASD) is a dynamic online tool that enables landowners to search for land management products and services available in a given region of Colorado. Searchable topics include grass seeding, fencing, livestock, forestry, specialty crops, equipment, weed control, and soil nutrition. If you need help implementing your management prescriptions, this website will enable you as a landowner to find local resources, contractors, equipment, and

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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.

## Small Acreage Services Database continued from page 1

services in your specific area. Think of this as an online contact book for local products and services specific to agricultural opportunities.

This service is completely free and open to any business, organization, or individual, in good standing, that grows, buys, or sells products and services that will benefit small acreage landowners as they work to improve and manage their land. No endorsement of named products is intended, nor is discrimination or criticism implied of products mentioned or not mentioned. There is no cost to submit your company information to the database or to search for a company on the database.

As this database is populated, it will be a great tool to connect landowners with contractors in order to implement these activities on the land. If you need help or have questions about this new website, contact the small acreage coordinator at 970-243-5068 x 128 or [jrizza@colostate.edu](mailto:jrizza@colostate.edu).

## Colorado's Cottage Foods Act

By Martha Sullins, CSU  
Extension Specialist



Colorado's Cottage Foods Act can provide a way for you to earn additional income from selling a limited array of products directly to your customers, without using commercial processing facilities.

Here are a few tips to growing a successful cottage food business, and possibly building a small-scale commercial food enterprise. First, know what products you are allowed to produce in your home kitchen under the Cottage Food Act. All products must be non-potentially hazardous, so see the Colorado Department of Public Health and Environment's brochure for more information [www.colorado.gov/cs/Satellite/CDPHE-DEHS/CBON/1251586894464](http://www.colorado.gov/cs/Satellite/CDPHE-DEHS/CBON/1251586894464)

Second, make sure you have the necessary food safety training. Check a list of training options here, <http://cofarmtomarket.com/value-added-products/cottage-foods/>.

Third, remember to use a label on each product that identifies it as a cottage food product and lists all ingredients used.

Fourth, consider getting product liability insurance to protect your business.

Lastly, if you have any questions about the Cottage Foods Act and allowed products, email <http://cofarmtomarket.com/contact-us/> for answers!

### Welcome to the Small Acreage Services Database!

The source for Colorado landowners to search for contractors, equipment, and land management services.

CSU Ext. and USDA-NRCS are working together to provide avenues for landowners to find local small acreage resources and open an avenue for local contractors and suppliers to interact with rural customers.

Products/services are listed as a service to Extension clientele. CSU Extension does not guarantee nor warrant the standard of any products/services, nor does it imply approval of the product to the exclusion of others which also may be available, nor does it intend discrimination or criticism of products or providers that are mentioned or not mentioned. In addition, CSU Ext. assumes no liability for use of any product.

[Submit your company](#)

#### Search for a company by category

- [Click here to search by keyword.](#)
- [Click here to search by county.](#)

Click on one or more categories below to get a list of companies matching your criteria.

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Custom Farming                  | <input type="checkbox"/> Orchards      | <input type="checkbox"/> Specialty Crops |
| <input type="checkbox"/> Fencing                         | <input type="checkbox"/> Grass Seeding | <input type="checkbox"/> Weed Control    |
| <input type="checkbox"/> Livestock                       | <input type="checkbox"/> Equipment     | <input type="checkbox"/> Soil Nutrition  |
| <input type="checkbox"/> Forestry, trees, and windbreaks |  |  |

Company

Address

Website

Click on a box above to show matching companies.

**Businesses can submit their company online and landowners can search for contractors at:**  
**<http://sam.ext.colostate.edu/>**

## Equine Herpesvirus (EHV-1) Update

State Veterinarian's Office

"The most common way for EHV-1 to spread is by direct horse-to-horse contact but it can also spread through the air, contaminated equipment, clothing and hands; this certainly highlights the importance of practicing basic biosecurity practices," said State Veterinarian, Dr. Keith Roehr. "Equine event organizers should continue to practice routine biosecurity practices that are effective in prevention of EHV and other horse diseases as well."

On March 26, 2014, the State Veterinarian's Office was notified by the Colorado State University Diagnostic Laboratory that a Larimer County horse tested positive for EHV-1. Currently there are no known suspected cases of Equine Herpesvirus Myeloencephalitis (EHM) in Colorado and no diagnosed cases or quarantines are in place. The Wisconsin Department of Agriculture has confirmed that one horse was euthanized on April 27, 2014 due to EHM. This horse had been in competition at a large barrel racing event in Lincoln, NE on April 10-13, 2014. A Kansas horse that was at that same event and stalled near the Wisconsin horse was also euthanized on April 27, 2014. Diagnostic tests have confirmed that the Kansas horse was positive on real-time PCR for EHV-1. It was typed as the wild field strain. The Colorado State Veterinarian's office is in the process of contacting all Colorado contestants that were at the mutual event. At this time, no horses have been identified with signs consistent with EHM.

Dr. Roehr, encourages horse owners to practice good biosecurity to limit the risk of EHM. An excellent resource regarding EHM can be found in USDA's brochure:

Equine Herpesvirus (EHV) Myeloencephalopathy.  
[www.aphis.usda.gov/vs/nahss/equine/ehv/equine\\_herpesvirus\\_brochure\\_2009.pdf](http://www.aphis.usda.gov/vs/nahss/equine/ehv/equine_herpesvirus_brochure_2009.pdf)

### Important recommendations for horse owners:

- Contact your veterinarian if your horse has a fever or is showing signs of illness
- Limit horse-to-horse contact at equine events
- Isolate and take temperatures on the participating horses for 7 days after an event. This is the best biosecurity practice on returning home from an equine event.
- Do not share tack, grooming equipment, feed/water buckets among horses, and always properly clean them between uses, because EHV-1 can be spread via these means. Remember to wash your hands and clothing as well.
- Find more biosecurity strategies in USDA's brochure: Biosecurity – The Key to Keeping Your Horses Healthy [www.aphis.usda.gov/publications/animal\\_health/2011/bro\\_keep\\_horses\\_healthy.pdf](http://www.aphis.usda.gov/publications/animal_health/2011/bro_keep_horses_healthy.pdf)

To help keep Colorado horses safe, please report any suspected cases of EHM to our office by calling: 303-239-4161.



# What Is Soil Health & Why Should I Care?

David Lamm, USDA-NRCS

**Soil is a living system** of macroscopic and microscopic organisms that need food to eat and places to live. There are more individual organisms in a teaspoon of soil than there are people on earth; thus, the soil is controlled by these organisms.

## Soil performs essential functions:

⇒ Nutrient Cycling - Soil stores, moderates the release of, and cycles nutrients and other elements. During these biogeochemical processes, analogous to the water cycle, nutrients can be transformed into plant available forms, held in the soil, or even lost to air or water.

⇒ Water Relations - Soil can regulate the drainage, flow, and storage of water and solutes, which includes nitrogen, phosphorus, pesticides, and other nutrients and compounds dissolved in the water. With proper functioning, soil partitions water for groundwater recharge and for use by plants and soil animals.

⇒ Biodiversity and Habitat - Soil supports the growth of a variety of plants, animals, and soil microorganisms, usually by providing a diverse physical, chemical, and biological habitat.

⇒ Filtering and Buffering - Soil acts as a filter to protect the quality of water, air, and other resources. Toxic compounds or excess nutrients can be degraded or otherwise made unavailable

to plants and animals.

⇒ Physical Stability and Support - Soil has the ability to maintain its porous structure to allow passage of air and water, withstand erosive forces, and provide a medium for plant roots. Soils also provide anchoring support for human structures and protect archeological treasures.

Managing for soil health (improved soil function) is mostly a matter of maintaining suitable habitat for the myriad of creatures that comprise the soil food web. Managing for soil health can be accomplished by disturbing the soil as little as possible, growing as

many different species of plants as practical, keeping living plants growing in the soil as often as possible, and keeping the soil covered all the time.

## Consider these four principles for building soil health:

1. Manage more by disturbing soil less - Physical soil disturbance, such as tillage with a plow, disk, or chisel plow, that results in bare or compacted soil is destructive and disruptive to soil microbes and creates a hostile, instead of hospitable, place for them to live and work. The soil may also be disturbed chemically or biologically through the misuse of inputs, such as fertilizers and pesticides. This disrupts the symbiotic relationship between fungi, microorganisms, and crop roots.
2. Diversify with crop diversity - The key to improving soil health is assuring that the food and energy chains and webs included as many different plants or animals as practical.

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Soil health is the capacity of a soil to function. Healthy soil gives us clean air and water, bountiful crops and forests, productive grazing land, diverse wildlife, and beautiful landscapes.

## Soil Health continued from page 4

3. Grow living roots throughout the year - There are many sources of food in the soil that feed the soil food web, but there is no better food than the sugars exuded by living roots.
4. Keep the soil covered as much as possible - Soil should always be covered by growing plants and/or their residues, and soil should rarely be visible from above. This is true regardless of land use (cropland, hay land, pasture, or range).

Soil health is improved by disturbing the soil less, growing the greatest diversity of crops (in rotation and as diverse mixtures of cover crops), maintaining living roots in the soil as much as possible (with crops and cover crops), and keeping the soil covered with residue at all times. Drills, planters, seed, fertilizer, pesticides, livestock, fences, water, farm implements, etc. are all tools that can be used to manage soil habitat for the benefit of living members of the soil food web.



Many soils have a water infiltration problem that causes a water runoff problem. If soil health is improved, the structure of the soil results in greater water infiltration, less runoff, less or no erosion, and reduced incidence of flooding and sedimentation. These circumstances protect against drought.

For more information on Soil Health, visit: [www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/)

## A Promising Control for Canada Thistle

By Karen Crumbaker,  
CSU Larimer County Extension

Most small and large acreage landowners in Colorado are all too familiar with Canada thistle (*Cirsium arvense*). Canada thistle is the

most common noxious weed problem in Colorado. It is found in crops, pastures, rangeland, roadsides, and lawns. It is an aggressive, creeping, deep-rooted perennial plant that reproduces by seed and an extensive underground root system. It is the root system that makes Canada thistle a very difficult noxious weed to control.

The Colorado Department of Agriculture (CDA) and the USDA are researching the use of a rust fungus (*Puccinia punctiformis*) to infect the root system of Canada thistle. The rust fungus overwinters in the root system, thereby killing the plant and producing infective spores on the leaves which can spread to nearby plants, or in this case, be collected and redistributed to non-infected Canada thistle plants. The rust fungus is host specific to Canada thistle and will not affect our native thistles. The rust has been present in Colorado for decades, but because the rust spreads very slowly on its own, it has not been identified as a potential control agent.

In 1893, the rust fungus was discovered as a biological control agent for Canada thistle. The effectiveness of the rust fungus in controlling Canada thistle

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## Control for Canada Thistle continued from page 5

has been documented, but due to the lack of understanding of the rust fungus disease cycle, it has not been successfully used. Timing is everything in the success of collecting and distributing the rust fungus to uninfected plants. Dana Berner, a Plant Pathologist for the USDA Agricultural Research Service in Maryland, has been conducting research with the rust on Canada thistle in Maryland, New Zealand, Russia, and Greece. He reported successful control in all 13 sites and has demonstrated the fungus is a safe, effective, and economical control option for Canada thistle.



**Phil Westra demonstrating the extensive root system of Canada thistle**

Last year in late summer, spores of the fungus were collected from two sites with infected Canada thistle plants on the Western Slope of Colorado and redistributed to non-infected plants in September and October. Dan Bean, Director of the Biological Pest Control Program at the CDA Insectary in Palisade, Colorado, stated that once the rust enters the root system, “the plant is doomed.” USDA researchers have noted that Canada thistle plants do not recover from systemic infections. These sites will be monitored by the CDA over the next couple years to determine the effectiveness of the rust fungus.

If you have a large area of Canada thistle on your property and are interested in allowing the CDA to inoculate the thistle with the rust fungus, contact Dan Bean at the CDA Insectary at 970-464-7916 or [dan.bean@state.co.us](mailto:dan.bean@state.co.us). Landowners must be willing to allow the CDA to monitor the progress of the rust fungus.

## Organic Farming Research Foundation Invites Grant Proposals

The Organic Farming Research Foundation (OFRF) invites proposals from all applicants, and encourages farmers, ranchers, researchers, and Extension personnel to consider applying for funding.

Funding is offered for research on organic farming and food systems and the dissemination of these research results to organic farmers and the greater agricultural and research communities.

Through our grants program, OFRF has supported innovative approaches in subjects ranging from disease, weed, and insect management, to bees and pollinators, nutrient management, and cover crops. Past grants have been awarded to projects such as *Developing “Organic Ready” Maize Populations*; *Farmer-based Plant Breeding for Organic Quinoa, Buckwheat, and Spelt*; and *Grafting Vegetables for Soil-Borne Disease Resistance*. The OFRF grants program is open to all applicants residing in Canada, Mexico, and the United States.

**The deadline to submit a proposal is Thursday, May 15, 2014.** We are only accepting proposals in the spring for one cycle of awards per year. The next application deadline will be in 2015 and a RFP will be released for that cycle later this fall.

For more information about what OFRF funds and how those studies can benefit your organic farm, go to [www.ofrf.org/](http://www.ofrf.org/)

## Colorado Fruit and Vegetable Growers Association

If you are a fruit or vegetable grower in Colorado, consider joining the newly formed Colorado Fruit and Vegetable Growers Association (CFVGA). Membership is half price in 2014 and your support will help CFVGA toward meeting its mission of improving business conditions for commercial fruit and vegetable growers in Colorado.

### In 2014/2015 CFVGA will serve members in the following ways:

- Be the voice of CFVGA members at Ag Council (for State Legislators), other policy makers and to media
- Promote Colorado Fruit and Vegetables
- Network with other national fruit and vegetable grower groups
- Network with other commodity specific growers groups
- Provide a website with a password protected section just for members
- Coordinate research and educational programming with CSU
- Host an annual conference
- Publish a quarterly newsletter

### Who is on the Board?

Our board is composed of conventional and organic fruit and vegetable growers of various scales and marketing channels from four key produce-growing regions of Colorado: Arkansas Valley (Shane Milberger and Paul Casper), Northern Colorado (Robert Sakata and Jason Condon), San Luis Valley (Amy Kunugi), and the Tri-River Area (Western Colorado, Kerry Mattics and Bruce Talbott). We have two seats available for board members from SW Colorado. Additionally, the board is supported by CSU Extension staff: Mike Bartolo, Adrian Card, Bob Hammon, and Martha Sullins. Our administrator is Vickie Root.

### How we are a unique organization

Our niche is providing one voice for all produce growers in Colorado. Other groups promote commodity specific marketing and improved growing practices. We are keenly aware of groups in the state working on behalf of produce growers. In many cases we are in active communication with them.

CFVGA works to improve business conditions by addressing business risks of produce growers head on with education, outreach, and engagement. Those include but are not limited to:

- Food Safety
- Labor
- Water
- Other business risk issues

We will incorporate as a 501c6 under the IRS tax code. This will give us clear ability to have a voice in politics.

We will also develop a focus on the specific needs of beginning farmers and organic growers.

The time has come for Colorado fruit and vegetable growers to launch a statewide professional association that will represent their interests!

Learn more at <https://www.facebook.com/CFVGA> and <http://coloradoproduce.org>





### **Native Plant Master® Program Colorado**

The Native Plant Master® Program has announced a newly expanded 2014 schedule of offerings. Explore a new park by taking an award-winning Native Plant Master® course. Sample one of the exciting new classes taught by CSU faculty and other experts. Topics include native plant landscaping, poisonous plants, native lawns, invasive weeds, grasses, orchids and more, alpine/subalpine plants, and ecological restoration. Most of these popular offerings have a waiting list each year, so register early to ensure you get the class you want.

The Native Plant Master® Program is offered in many locations throughout Colorado. For more information and to register, please visit [www.conativeplantmaster.org](http://www.conativeplantmaster.org)

### **Maximizing Irrigated Pasture Productivity Webinar May 8, 2014**

12:00-1:00 pm MT

The webinar will be presented by Steve Fransen, WSU Forage and Extension Agronomist. Steve will be highlighting the following topics in the webinar:

1. Growth, development, and defoliation of pasture grasses and legumes
2. Irrigation management of pastures
3. Fertilization and establishment of pasture species under irrigation

**To register for this free webinar go to <https://docs.google.com/forms/d/1wfUQWtLVvNCmf08CK24g2lItebMyo-IVmJ4ls0xn6j4g/viewform>**

This webinar is made possible by Colorado State University Extension and USDA-Natural Resources Conservation Service. Contact [jennifer.cook@colostate.edu](mailto:jennifer.cook@colostate.edu) or 303-659-7004 ext. 3 with questions.

### **Delta County Farm Tour**

**May 17, 2014**

**8:30 am – 3 pm MT**

Tour of grass seeding demonstration project at Delta County Fairgrounds in Hotchkiss:

- Grass seeding demonstration and discussion on grass seeding for both dryland and irrigated systems
- Look at on-site irrigation system, learn proper irrigation techniques
- Observe and discuss how permanent vegetative cover improves soils and reduces soil losses
- Discuss pasture management techniques

Lunch is included. Meet at Delta County Fairgrounds, 403 S. 4th Street, Hotchkiss, CO 81419. **To register and for more information go to**

[www.ext.colostate.edu/sam/soil-program.html](http://www.ext.colostate.edu/sam/soil-program.html)

Contact John Rizza with questions at [john.rizza@colostate.edu](mailto:john.rizza@colostate.edu) 970-243-5068 ext.128



## Maximizing Irrigated Pasture Productivity Workshop

May 17, 2014

8:30 am - 4 pm MT

Berthoud, CO

Workshop and field tour will focus on providing you the management tools needed to transform pastures and improve forage quality and quantity. Principles are also applicable for dryland situations. Topics include growth, development, and defoliation responses of forage; irrigation and water requirements to maximize production; fertility requirements using heat days, field demos; and quiz the experts. Event starts at Berthoud Community Center. For the flyer go to [www.ext.colostate.edu/sam/pasture.pdf](http://www.ext.colostate.edu/sam/pasture.pdf)



## Small Acreage Information Day

May 31, 2014

Wray, CO

Join us at the Buchannan Middle School in Wray. (Turn at the tennis courts on Hwy 385, south of the stoplight.) Stop by with your small acreage questions. We are also inviting people to bring small animal husbandry items to swap/give away to those who do not have them (chicken crates, rabbit hutches, egg incubators, etc.) For more information contact Barbara Clayburg, Yuma County C.D. Manager at 970-332-3173 ext. 3.

## Park County Farm Tour

June 14, 2014

Fairplay, CO

Participants will visit a small acreage farm in Fairplay:

- 1) Soil pit will allow participants to look at soil horizons and discuss soil characteristics.
- 2) Carrying capacity and clipping a pasture/measure production/etc.
- 3) Noxious weeds and weed control
- 4) Pasture Management and reseeding discussion
- 5) Discuss soil erosion issues and tree planting techniques for windbreaks.

We will meet at the CSU Extension office, 880 Vogue in Fairplay, and take a bus from there. To register, or for more information contact Deb Lester at 970-523-6971 or [deborah.lester@colostate.edu](mailto:deborah.lester@colostate.edu)



For a list of upcoming events in your area visit CSU Extension Small Acreage Management website

[www.ext.colostate.edu/sam/](http://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.