



# Boulder County Small Acreage Management Newsletter

Winter 2017

<http://boulder.extension.colostate.edu/natural-resources/>

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### **From the SAM Coordinator**

Happy 2017.

I hope that your Holidays were happy, spent with family and friends and safe. Please check out the coming events section as there are several opportunities in the beginning of 2017.

If you are thinking about planting a windbreak, now is the time to submit your order to the Conservation Districts for your seedling trees.

Over the winter, I will be working on some new resources and planning workshops. Also check out the new Boulder County website (see title above) with some new resources.

Thank you,  
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View previous newsletters via the link above.

### **SAM Email Listserv**

If you are receiving this newsletter for the first time and are not subscribed to the [boco\\_small\\_acreage@colostate.edu](mailto:boco_small_acreage@colostate.edu) listserv, you may request subscription on the SAM website (linked in header above). This quarterly e-newsletter and other timely info will be distributed via this email listserv.

Subscribers may use the listserv also as a SAM info gathering mechanism. For example, you may inquire about who is available in the area supply hay, to perform swathing/baling, etc. The listserv is not a marketplace, however. Because it is hosted on the CSU server, **NO COMMERCIAL EMAILS ARE ALLOWED. DO NOT ATTEMPT TO SELL ANYTHING VIA THE LISTSERV – THANKS.** Use the newsletter ad section for these purposes.

Currently, there are 220 subscribers to the listserv



## Weather Outlook

The NOAA forecasts for the next 30 and 90 days are showing that the state might be slightly above normal in temperature and about average in precipitation.

[http://www.cpc.ncep.noaa.gov/products/predictions/long\\_range/seasonal.php?lead=1](http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1)

According to “The Old Farmer’s 2017 Almanac”, the central high plains should be around normal in both temperature and precipitation. The northern High Plains will be above normal in precipitation and below normal in temperature. The southern High Plains will be below normal in precipitation and above normal in temperature.

<http://www.almanac.com/>



## Coming events and workshops

The National Western Stock Show will take place January 7 – 22, 2017 at the Stock Show Complex in Denver. In addition to all the rodeos, events and livestock judging, the Stock Show is a great place to connect with livestock producers. If you are thinking about getting some livestock, you can talk to producers and attend seminars to learn more.

<http://www.nationalwestern.com/>

The Colorado Farm Show will occur January 24 – 26, 2017 at Island Grove Park in Greeley. There are 4 buildings of equipment and supplies at the show. The Farm Show also has 3 days of

workshops ranging from marketing to climate to beef quality and fitting a saddle to your horse.

<http://www.coloradofarmshow.com/>

The 2<sup>nd</sup> “Landscaping with Native Plants” conference will be held February 11, 2017 at The Ranch in Loveland. Topics will include native plant options for your specific region of Colorado, both in-depth and basics of design, propagation of natives and more. Registration at <https://landscapingwithcoloradonativeplants.wordpress.com/>

There will be a soil health conference in Longmont on March 9, 2017 (see article later in the newsletter). The conference will host several featured speakers and panels of producers who are implementing soil health practices in their operations.

<http://boulder.extension.colostate.edu/agriculture/2017-soil-health-conference/>

On March 18, 2017 there will be a small acreage workshop at the Ranch in Loveland. The topics that will be covered are soils, water rights, developing habitat for pollinators, weed management, sprayer calibration and others. Registration to be available in January.

I will be planning other workshops this year and will advertise them in future newsletters. I hope that you will take advantage of the events.





## Seedling Tree Sale

By Nancy McIntyre, Longmont and Boulder Valley Conservation Districts

The Longmont and Boulder Valley Conservation Districts are offering seedling trees for windbreaks, snow fences, erosion control and wildlife habitat. The program is not meant to compete with local nurseries but was established to provide low cost seedlings for landowners for conservation practices. The Colorado State Forest Service Nursery grows the plants at their facility in Fort Collins and sets the rules for the sale of the plants. This year they have removed the acreage limitation that has been on this program in the past.

The order form for the seedling tree program is available on our website at [www.longmontcd.org](http://www.longmontcd.org) under programs or you can contact the Conservation District office at (720) 378-5521 to request a paper order form. Your check must accompany the order form to reserve your trees. We will be taking orders until March 23, 2017. You will be able to pick up your seedlings at the Exhibit Building on the Boulder County Fairgrounds on April 7 from 8:00 am to 5:00 pm or on April 8 from 8:00 am to 11:00 am. We also do a planting workshop at

8:30 am and 1:30 pm on April 8 to provide instruction on how to plant the seedlings and the use of the planting supplies that we also offer for sale. If you need help with selection of the seedlings for your property, you can contact the office at (720) 378-5521.

The available seedlings are sold in a variety of sizes and containers. The bare root seedlings are sold in lots of 25 for \$26.00. The deciduous seedlings are a minimum of 10" tall and the conifers have a 5" minimum. These species include lilac, native plum, cottonwood and hackberry. Currently all the willow species are sold out. We have a large selection of species but some of them have limited quantity so you need to get your order in soon.

The large tube species are sold in lots of 30 for \$76.00. These species include Ponderosa, Scotch pine and this year lilac and Mountain mahogany. Small tube trees come in lots of 30 for \$65 or trays of 50 for \$50. These seedlings have a minimum height of 3". Most of the same varieties are available in the small tubes—the difference is the size of the seedling.

The selection of extra large potted trees this year has increased. They are sold individually at a cost of \$9. The deciduous seedlings in this size are in a very limited quantity and include the native plum, chokecherry and lilac.

Quantities are very limited this year on most species because of a bad growing season. Please go to the following website to check availability: <http://csfs.colostate.edu/seedling-tree-nursery/seedling-sursery-inventory/>. You can also call the Conservation District Office at

(720) 378-5521 before ordering to see if your choice of seedling is available.



**The Soil Revolution: It’s More than Dirt!**  
**By Sylvia Hickenlooper, NRCS Soil Conservationist**

Soil health is at the heart of agriculture no matter what crop you grow or animals you raise. Join us to learn more: Match 9, 2017 at the Plaza Conference Center in Longmont, Colorado.

Featured speakers include Rudy Garcia, State Agronomist for New Mexico Natural Resources Conservation Service (NRCS), and Meaghan Schipanski, Assistant Professor in the Department of Soil and Crop Sciences at Colorado State University (CSU) and extensive farmer panel with producers who have put soil health practices to work on their operations.

In addition to training NRCS employees on soil health plans and implementation, Rudy’s main focus in the past 5 years has been hosting more than 60 soil health workshops for farmers and ranchers throughout New Mexico. These sessions have been attended by both large and small-scale agricultural producers and are slowly

creating a soil heal movement in this arid southwestern environment that adds irrigation to the usual set of challenges facing those who choose to improve their land’s soil health. Meaghan heads the Agroecology Research Group at CSU, focusing on understanding how plant-soil interactions mediate carbon and nitrogen cycling and placing this research within broader social and economic contexts. The necessity of sustainably producing food has never been more evident as agriculture both contributes to and is impacted by many global change issues. In particular, increased climate variability requires the development of resilient, regionally adapted production systems.



This soil health conference is organized by CSU Extension Boulder County, USDA – NRCS, Boulder County Parks and Open Space and the City of Boulder.

Content for the workshop includes soil health demonstrations, presentations from scientists and farmers and networking with participants and exhibitors.

Registration at <http://boulder.extension.colostate.edu/agriculture/2017-soil-health-conference/>

## The Weeds of 2016

Each year I pick a few weeds that have appeared to be more prevalent than others to be my weeds of the year. So here are my weeds of 2016

Horseweed, *Conyza canadensis*, an annual weed that has been more abundant the last couple of years. Being an annual, keeping it from going to seed is the main management method. You can do this by hoeing, hand pulling or mowing.



I have seen both poison and water hemlock more since the flood of 2013. Poison hemlock *Conium maculatum* is an introduced biennial weed that is on Colorado's noxious weed list as a C list weed (must manage it). Water hemlock *Cicuta douglasii* is a native perennial plant and is therefore not a "weed". Both of these plants are toxic to livestock. Care, wear eye protection, long sleeve pants, shirt and gloves, should be taken when handling both plants. Since poison hemlock is a biennial, keeping it from going to seed is essential to management. You can either dig up the rosettes or cut off the seed heads prior to seed dispersal. Water hemlock is a perennial so keeping it from going

to seed is only part of management. You can try to dig out the root system.



Both moth *Verbascum blattaria* and common *Verbascum thapsus* mullein have been more abundant since the flood. Both are biennial C listed weeds. Keeping them from producing seed by either removing the rosettes or cutting off the flower stalk are both very effective management techniques. The seeds of both of these can survive for more than 60 years in the soil.

I had not seen jointed goatgrass *Aegilops cylindrical* on any properties until this year but knew it was in the county. It is a winter annual weedy grass that is a B listed noxious weed. The biggest problem with jointed goatgrass is when it invades wheat fields. The seeds are similar in size and the presence of goatgrass in wheat lowers the value of the wheat. The two grasses can also hybridize. For crop areas, crop rotation is vital to managing the goatgrass.

### Winter Pasture Grass Care

Just a quick reminder that you can graze your pastures if your grasses are dormant. You still need to maintain at least 4" of stubble through the winter. The stubble not only provides energy reserves for the grass plants but it also protects your soil from wind erosion (remember

the 75 mph winds on Christmas Day?).

Remember to keep your animals off the pasture after a snow event until the pasture is not muddy or icy both to protect the grass crowns and keep you animals safe.

If you have bare areas that need reseeding, now is the time to seed. When we have days that the upper ½” of soil are not frozen, you can spread seed and lightly rake it in.

Taking care of your grass the way you take care of your animals will benefit both the grass and the animals.



## Winter Livestock Care

### Dealing with Cold Temperatures and Deep

#### Snow

Helping your livestock survive and thrive in winter weather starts with planning. Key considerations are providing them with feed (livestock have increased nutritional needs in colder weather, and getting feed to the livestock may be challenging), protection, water, and your choice of species and breed. Livestock with more hair will stay warmer than those with minimal hair (i.e. beef cattle versus dairy cattle). Consider breeds that originate from colder climates rather than tropical areas. Purchase

your animals locally so that they will be adjusted to our climate and elevation. For poultry, choose those that have smaller combs and wattles to prevent freezing. You may also want to insulate their coop and keep a light on for heat on those subzero nights.

Livestock species are designed to be able to live outside and survive most weather conditions. The Lowest Critical Environmental Temperature (LCT) is the temperature at which animals can maintain their main core body temperature without supplemental energy (feed). For most livestock, if they are dry, the LCT is 20 to 32° F. However, if they get wet, it goes up to 60° F. Both of these temperatures are without a wind chill factor. Another way to think about this is for every 2° F drop in wind chill temperature, livestock energy (feed) requirements go up 1%.

To help your livestock maintain good body condition in adverse weather, you need to do several things.

- Monitor your livestock for excessive shivering, lethargy and weakness. As animals begin to experience hypothermia, they increase their metabolism to generate more heat. Blood flow to the extremities is reduced. Ears and teats may experience frostbite. Rapid warming of the teats is needed to minimize damage and monitoring for mastitis is required after calving. Some frostbit damage may not be reversible.
- Be sure to provide them plenty of forage to meet their added calorie requirement. Have your hay tested so that you know the nutritional value. Providing good, top quality hay is essential during the winter months. For horses, you can provide them

some “comfort” food such as warm bran mash, moistened beet pulp or soaked pelleted feed to increase water intake and provide some warmth. You may need to increase the feed amount and the “nutrient density”. The more nutritionally dense (packed with nutrients) grains may need to be added to the diet.

- Water is critical to all living beings. Livestock daily water requirements range from 3 gal/day for sheep to 14 gal/day or more for cattle. They cannot meet their requirements from either forage or consuming snow or ice. Consuming snow or ice lowers body temperature making them more vulnerable to problems. They need fresh, unfrozen and, if possible, slightly warmed water. They tend to drink less when water is cold so they can become dehydrated. You can use tank heaters to help keep stock tanks clear of ice and water slightly warmed (35 – 40°F). However, you need to check the heaters frequently to prevent fire and electrocution problems. Also have a backup generator in the event power fails.

Young and older animals are especially vulnerable during the cold. Providing them extra bedding, protection, and warm food and water is important. If you are lambing or calving during the cold, make sure that the mothers are in a well-protected building with plenty of bedding for warmth. Make sure that the young get dried off quickly after birth.

Livestock doesn't need a fully insulated, state-of-the-art, heated barn. In many cases, a three sided structure (preferably with a roof), hill, clumps of trees, or a solid fence provides

enough protection from cold winter winds. Reducing winter wind exposure is a must so orient the building based on your winter prevailing winds. The structure, or area, must have plenty of dry bedding. Livestock can conserve 20 to 25% heat loss by lying down on dry bedding. The shelter needs to be sized to handle all the livestock that will be using it. Please refer to the Oregon State document link for square footage needed for each species. Wet, muddy, or no bedding can increase their vulnerability to cold temperatures. During a snowstorm or cold spring rain, a structure that provides not only wind protection but a roof to keep them dry is needed. Remember that the LCT jumps drastically as they get wet. Protection desired will vary by species. Sheep don't mind getting wet but goats do so they will tend to seek shelter rather than graze in the open. Some species have thinner hides and hair and therefore get cold more easily. Dairy cattle will chill quicker than beef cattle since they tend to have less hair to insulate them. The coat condition is critical to providing insulation. The more hair the better as it allows for air space between the hairs to act as insulation. When their hair is wet or muddy, it becomes matted, limiting the insulating air spaces available. Manage mud in your dry lot area and provide drier areas with bedding so animals can stay dry. Check your livestock going into the fall not only for general health and body condition but also for skin and hair health.

### **Deep Snow and Drifts**

When storing hay, consider how you will get it to your livestock in winter. You don't want to lug 50 - 80# bales through 1' or more of snow. You may want to store several days' worth in the stable or barn or wherever your livestock will be

kept during major winter storms. Consider how you will get from your house to the barn in case of a large snow fall or snow drifts. Consider a windbreak or fence that will provide you with a path to the livestock. Also consider a fence or windbreak around their shelter and water tanks. If you can, build feedlots, shelters and other buildings on south facing slopes and other protected areas where temperatures are higher and moisture is lower or melts off quicker. If your livestock is a considerable distance from the house, have equipment ready to plow a path to the area and for the livestock to be able to move around. With deep snows, fencing may be covered so that animals can walk over or through it. Keep your fencing in good condition and check for areas that might allow animals to escape.

Livestock can survive several days without feed but must have access to water. When reintroducing feed, provide livestock smaller portions several times a day. There can be some potential for nitrate poisoning if your feed is high in nitrates and your livestock has not been fed for several days. It is always a good idea to have your hay tested but especially for winter feed. Also make sure that they have sufficient salt and mineral blocks.

Resources:

<https://www.southernstates.com/sscinfor/news/2010/01/livestockcoldstress.aspx>

[http://anr.ext.wvu.edu/livestock/cattle/cold\\_stress](http://anr.ext.wvu.edu/livestock/cattle/cold_stress)

[http://www.clemson.edu/extension/ep/cold\\_livestock.html](http://www.clemson.edu/extension/ep/cold_livestock.html)

<http://www.nws.noaa.gov/om/brochures/wntstrm.htm>

<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/19671/ec1635.pdf>

<http://www.omafra.gov.on.ca/english/livestock/horses/facts/info-coldweather-man.htm>

## **Place your SAM related classified ad or print advertisement here!**

**Classified Advertising Rates are as follows:**

General Public, Individual: \$5

General Public, Business/Show: \$10

**Email Sharon Bokan for more details**

**[sbokan@bouldercounty.org](mailto:sbokan@bouldercounty.org)**





## **All Four Feet Horse Riding Lessons**

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You can reach me, Nicolette, at All Four Feet, on  
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