



Southern Colorado Ag and Range Newsletter

Inside this Issue

Ag Agent Greeting..... 1

Drought Monitors 2

Three-month Precip Outlook 3

Seedling Tree Program 3

Frost Seed..... 4-5

Classes..... 5

Winter Animal Care 6-7

Upcoming Events. 7

Know a Noxious 8

Office Hours:

Monday—Friday 8 a.m.—5 p.m.
(excluding holidays)

CSU Extension Pueblo County
701 Court St., Suite C
Pueblo, CO 81003

Phone:

(719) 583-6566

Fax:

(719) 583-6582

<http://pueblo.colostate.edu>



www.facebook.com/CSUExtensionPueblo

All articles written by Tom Laca unless otherwise indicated.

Ag Agent Greeting

As I write this introduction to yet another newsletter, we are sitting on the possibility of a good winter storm. Thus far this winter has been relatively mild with not much precipitation. Hopefully, this storm will bring some of that much needed moisture and be the start of more moisture to come. By the looks of the long range forecasts I have included in this issue, as well as those from other meteorologists, the predictions are for the next few months to be wetter than normal. I hope they have it right for once, only time will tell.



As far as upcoming programs go, we are looking at continuing as well as expanding some popular programs we have held over the last few years. We will be hosting another Bee Class in February and starting a club in which beekeepers and enthusiasts can get together to discuss successes, issues, and concerns about beekeeping. My hope is that this will provide a place for us to learn from each other as well as identify the areas where we can provide further education to assist those involved. We will also be offering the Backyard Poultry class again in March for those interested in raising chickens. Keep a look out in late spring and early summer for your opportunity to participate in a range walk and discover the many diverse natural resources in Pueblo County.

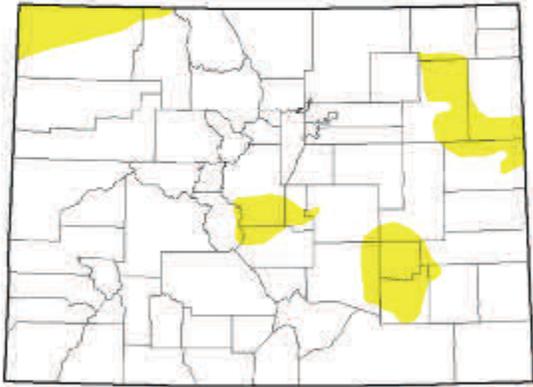
Some other things we are working on bringing to you include a class on permaculture and using all your available resources in a sustainable manner. I am also working on putting together some small acreage courses to help landowners learn about the natural resources they own and how they can better manage them.

As always, feel free to contact me with any questions, comments or snide remarks you may have. I am happy to serve the community and provide you with the tools needed to reach your goals when it comes to your livestock and land.

U.S. Drought Monitor
Colorado

January 26, 2016
(Released Thursday January 28, 2016)
Valid 7 a.m. EST

Statistics type: Traditional Percent Area Exportable: PDF CSV XLS



Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current 2016-01-26	90.01	9.99	0.00	0.00	0.00	0.00
Last Week 2016-01-19	90.01	9.99	0.00	0.00	0.00	0.00
3 Months Ago 2015-10-27	68.15	31.85	0.00	0.00	0.00	0.00
Start of Calendar Year 2015-12-29	90.02	9.98	0.00	0.00	0.00	0.00
Start of Water Year 2015-09-29	71.49	28.51	0.00	0.00	0.00	0.00
One Year Ago 2015-01-27	51.88	48.02	21.43	12.26	0.00	0.00

Estimated Population in Drought Areas: 0 [View More Statistics](#)

Intensity:

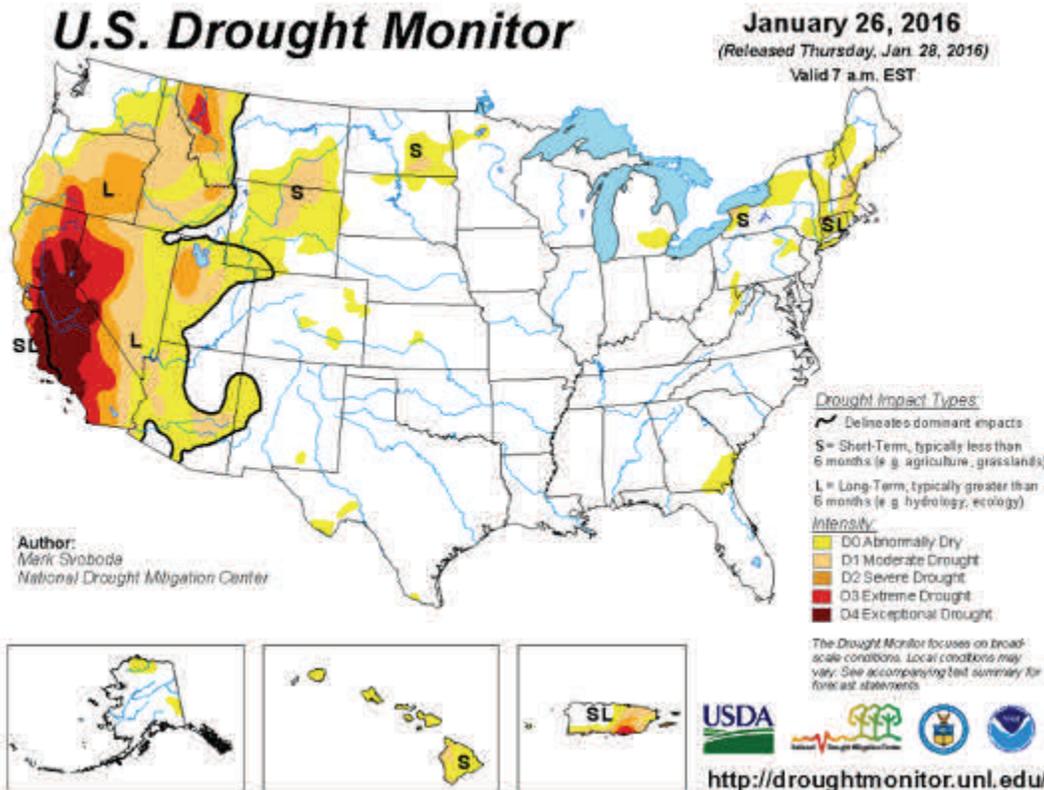
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author(s):
Mark Svoboda, National Drought Mitigation Center

For more details and maps go to:

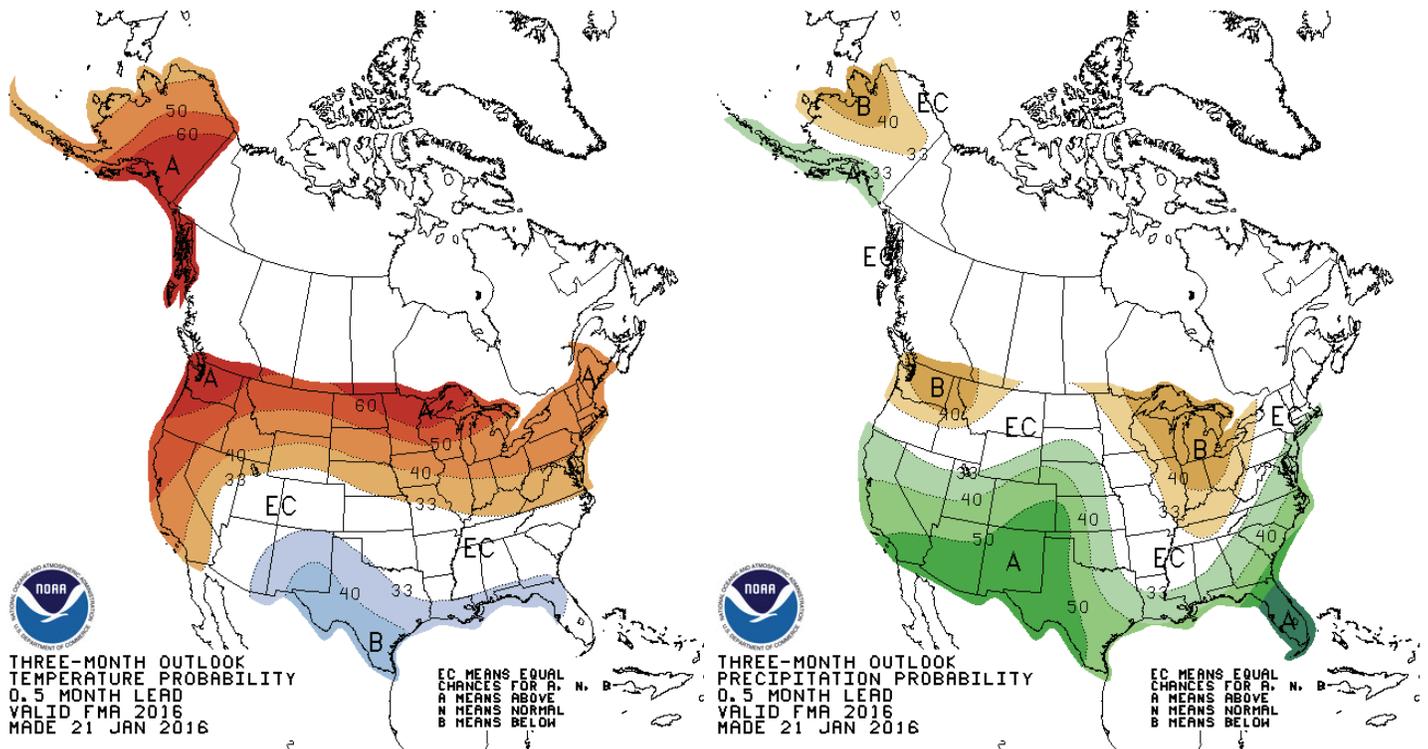
http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php



This map is updated weekly and can be viewed at <http://droughtmonitor.unl.edu/>

From this website, if you are viewing the US map, click on the state of Colorado to view a more detailed map.

The U.S. Drought Monitor is produced through a partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration.



Seedling Tree Program—2016

CSU Extension-Pueblo County has seedling trees for sale in cooperation with the Colorado State Forest Service (CSFS) Nursery. Applications will be taken until April 8 with delivery scheduled for April 29, 2016 at the Colorado State Fairgrounds. This year the nursery has new species in addition to their wide variety of trees and shrubs and are sold on a first come, first served basis, so order early. No plant purchased from the CSFS may be resold. Before ordering you can check the inventory at: <http://csfs.colostate.edu/nursery/inventory.aspx>. The only program qualification is that the seedlings be used for conservation practices only. If you have purchased trees from us in the past, you should have received an application in the mail. Applications are also available through our website at <http://pueblo.colostate.edu/agri/agri.shtml> or by contacting CSU Extension – Pueblo County at 719-583-6566.



Noxious Weed Control Plan

- 50% **Cost Share** is available to property owners who apply and are afflicted with a species of weed listed on the Colorado Noxious Weed A or B List.
- Turkey Creek Conservation District highlights their role in Pueblo County's **Noxious Weed Control Program**.
- User friendly method of making this cost share an easy reality for landowners.
- Contact Turkey Creek Conservation District at 719-543-8386 ext. 116 or email: info@puebloweeds.com

website: www.puebloweeds.com

I seem to get questions often about when is the best time to plant to rejuvenate the drought stricken rangeland of the area. More often than not these questions arise in the spring immediately following a good rain or snow. My answer in these cases is "Yesterday!" So, before it is too late let's talk about when to seed in order to take advantage of our winter and early spring moisture that we all know we may or may not get.

The particular seeding strategy that I would like to talk about here is called frost seeding. Frost seeding involves the distribution of seed onto the land while the ground is still frozen. This method has been proven to be successful in many areas and utilizes the freezing and thawing or expansion and contraction of the soil to draw the seed in and obtain good soil contact. This method of seeding does not require tillage and can be accomplished with minimal equipment.

Frost seeding works best on sites that lack much ground cover. The key to the success of this method is obtaining that good soil to seed contact. Broadcasting seed on an area that already has good plant cover and litter on top of the soil will affect the number of seeds that actually reach the soil and germinate. The goal is to get the seed on the ground and let Mother Nature, in the freezing and thawing cycles, draw that seed into the soil. Moisture events such as rain or snow will then also aid in getting the seed into the ground and the soil around it. Closely-grazed or fields that have been mowed are good candidates for frost seeding as they have more bare or exposed soil.



Photo courtesy of: Extension.org

An area can be frost seeded even with some snow cover. Applying seed over a light snow base can help you to see where you have spread seed and eliminate gaps and overlaps of seed. Be aware that if the snow is too deep, a rapid thaw can actually cause run-off and the seed to be washed away. It is also recommended that frost seeding be done on loam and clay soils. The physical properties of sandy soils are not conducive to this method. It is not necessary, but grazing livestock after spreading seed can increase success as the hoof action will aid in incorporating the seed into the soil.

Frost seeding can be done anytime during the dormant season with optimal timing being 45 to 50 days before grass growth begins. This allows for multiple freeze-thaw cycles to occur, incorporating the seed into the soil. The seed will remain dormant until the soil reaches the appropriate temperature and moisture for germination. When the soil reaches the appropriate temperatures, the seeds will germinate and growth will begin.



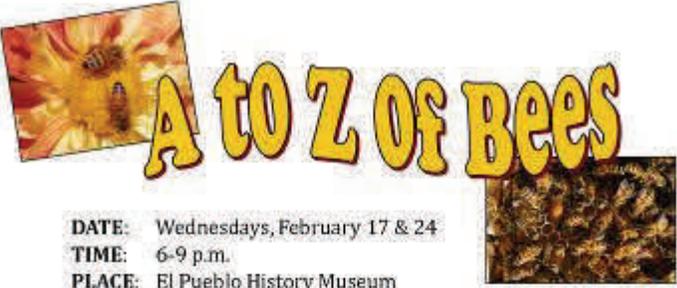
Photo courtesy of: Extension.missouri.edu

Frost seeding is an effective way to introduce cool season legumes and grasses into an area. Species that germinate fast and at cooler temperatures work the best. Red Clover, White Clover and Birdsfoot trefoil have shown the most success when frost seeded. Grasses that

Continued page 5

have proven to work well are Perennial Ryegrass, Orchardgrass and Smooth Bromegrass. Alfalfa has not had as much success when frost seeded as it does not germinate as well at cooler temperatures.

Depending on your goals and individual situation, frost seeding can be an economical means to reestablish those areas that are under producing. The costs and equipment needs of this method are minimal when compared to other methods of seeding, but the risks of failure are also greater. All other management practices need to be considered when deciding to frost seed as well. Soil fertility, moisture, weather and competition from other plants can all affect the success of a frost seeding program.



A to Z of Bees

DATE: Wednesdays, February 17 & 24
TIME: 6-9 p.m.
PLACE: El Pueblo History Museum
 301 N Union Avenue, Pueblo
COST: \$20/person, \$30/Couple
 Registration deadline: February 12, 2016

New this year - Pay with credit or debit card through Eventbrite link only: <https://www.eventbrite.com/e/a-to-z-of-bees-tickets-21278386226> - We still accept cash or checks (payable to Extension Program Fund) through our office at 701 Court Street, Suite C, Pueblo, CO 81003

Topics covered:

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

Brought to you by the Agriculture program of CSU Extension/Pueblo County coordinating with Rebecca Sunderlin, Pikes Peak Bee Association. Call 719-583-6566 for more information.




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

For those interested in small scale production, from backyard to small business, CSU Extension is offering

BACKYARD POULTRY WORKSHOP



**Tuesday, March 22, 2016
6-8 p.m.**
 CSU Extension/Pueblo County,
 701 Court Street, Ste C., Pueblo, CO

Topics covered:

- ✓ Purchasing Chickens
- ✓ Housing
- ✓ Care
- ✓ Nutrition
- ✓ Health
- ✓ Waste Management

Presented by: CSU Extension—Pueblo County Extension Agent Tom Laca, Small Acreage/Range/Natural Resources Management

Register by Friday, March 18
Cost: \$10/person, \$15/couple
 Cash or check only
 Call CSU Extension at (719) 583-6566 with questions.




Colorado State Extension

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

Monthly meetings:

Pueblo County Stockmen's Association meets the first Thursday of each month at Mesa Vet Clinic at 7 p.m.

Turkey Creek Conservation District meets the 2nd Tuesday of every month, Time: 2:30 p.m. Location: 200 S. Santa Fe Ave., 4th floor, Call: (719) 543-8386 Ext. 116 for details.

South Pueblo Conservation District meets the 3rd Thursday of every month, Time: 6:00 p.m. Location: 200 S. Santa Fe Ave., 4th floor, Call: (719) 543-8386 Ext. 3 for details.

Cold temperatures, snow, wind, and ice not only affects our lives but our animals as well. The recent storm in New Mexico and Texas has been reported to claim at least 30,000 head of cattle. These numbers are still preliminary as ranchers continue to file loss reports with the USDA. The best numbers I could find in regards to the South Dakota blizzard in 2013 reports as many as 43,000 head of livestock lost in the storm. These are major events with massive losses, and we too live in an area that is not immune to experiencing similar events. Does anyone remember December of 2006? I realize that these are all extreme cases that do not occur often, but they are things to consider no matter how strong the storm or cold front on its way is predicted to be.

One of the first items of concern in cold, stormy weather is that of water. Water is the first nutrient required for sustaining life in all organisms. Without proper hydration the systems within the body begin to fail. I know I have been guilty of thinking that there is snow on the ground and it is cold, they should not need to drink that much water. The fact is that, yes, water requirements may not be as high in these times but there still is a requirement. Also, eating snow to meet the water requirements is not practical as the consumption of the cold snow raises the amount of energy used by the animal just to maintain body temperature. In an attempt to maintain necessary body functions, the blood vessels to the extremities constrict forcing more blood and heat to remain in the core increasing the chances of frost bite. Providing water at a temperature 37°F or above will help to keep the animal hydrated. When properly hydrated, the health and performance of the animal is not as easily compromised. Lack of water intake can lead to many issues such as colic and impaction. It doesn't matter what the weather is, your animals should always have a fresh, adequate supply of clean drinking water that is not frozen.



Photo courtesy of CSU Extension

The next item of consideration is that of meeting the animal's energy needs. Cold, wet and windy weather can cause the energy requirements of the animal to go up significantly. For most dry animals temperatures below 32°F begins the need for more energy consumption in order to maintain body temperature. Generally speaking, the larger the animal the lower this critical temperature is as they have more mass and less surface area to lose heat from. If the



Photo courtesy of: J. Laca

the animal is wet from rain or snow. the critical temperature raises to 60°F as the moisture wicks away the animal's body heat. Add wind to either of these situations and the problems get worse increasing the energy needs by one percent for every degree drop in wind chill on the dry animal and two percent for the wet animal. Just like any other day, animals should have access to quality nutrition even in a storm. Feed supplies should be maintained in order to always have at least a week's supply on hand in case access to town is not available. Increasing hay is the most

Facts:

- Non-native, perennial
- Its extensive root system and stored nutrients allow it to recover from control attempts.
- Infestations generally begin in disturbed or stressed ground.
- Tillage that cuts the roots into segments, allows new plants to start from the vegetative buds on that segment.
- Most of its energy is spent on shoot and root development and less on seed production.



Control:

- Because of its large root system, the key to control is to continue to stress the plant to deplete its stored nutrients.
- Combine several methods of control to yield the best results.

Cultural:

- Proper management to increase preferred plant species will increase competition to Canada thistle.

Mechanical:

- Mowing is effective when the plants are cut at least once a month to encourage the continual draw from its root resources.

Biological:

- There are insects available that target Canada thistle plants causing stress and possibly even leading to the death of the plant.

Chemical:

- Always read the label and follow directions when using any chemical. There are many products available, labeled for use on Canada thistle. See table below for a list and recommendations provided by Colorado State University Extension Fact Sheet

Source: CSU Extension

Herbicide	Rate (Product/A)	Application timing	Comments
Tordon	1 quart	Anytime when weeds are rapidly growing	Fall applications consistent results; may need re-treatment 1 to 2 years
Milestone	5 to 7 fl oz	Spring at pre-flower-bud growth stage; or fall	Use higher rate for older or dense stands; Milestone may be used to edge of ponds or streams; may need re-treatment 1 to 2 years
Transline	0.67 to 1.33 pints	Spring after all shoots have emerged, rosette to early bud growth stages; or fall	Apply 1 pint/A or more in fall; may need re-treatment 1 to 3 years
Perspective	5.5 oz	Spring rosette to flower bud growth stage; or fall	Use with a non-ionic surfactant at 0.25% v/v
Telar	1 oz	Spring bolting to bud growth stages; or fall	Fall applications most consistent results; essential to use non-ionic surfactant at 0.25% v/v; may need retreatment 1 to 2 years
Banvel, Vanquish, or Clarity (dicamba)	2 quarts	Spring rosette growth stage; or fall	Fall applications most consistent results; may need re-treatment 2 to 4 years