

JUNE 2015

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UPCOMING EVENTS

June

- 10** Colorado Wheat Field Days – Washington County and Yuma County
- 11** Colorado Wheat Field Days – Kit Carson County, Kiowa County and Prowers County
- 12** Colorado Wheat Field Days – Baca County and Lincoln County
- 15** Colorado Wheat Field Days – Morgan County and Weld County
- 16** Colorado Wheat Field Days – Sedgwick and Phillips County

See articles and enclosed flyers in this newsletter for more information on these events

Golden Plains Area County Fairs

KIT CARSON COUNTY FAIR
July 27-August 1, 2015

PHILLIPS COUNTY FAIR
July 22-26, 2015

SEDGWICK COUNTY FAIR
July 29-August 2, 2015

YUMA COUNTY FAIR
August 1-5, 2015

EASTERN COLORADO ROUNDUP (WASHINGTON COUNTY)
July 28-August 2, 2015

To receive an e-mail notification of publication on-line for the Golden Plains Area Agricultural Newsletter call 970-332-4151 or e-mail coopext_yuma@mail.colostate.edu

GET TO KNOW YOUR AGRICULTURE EXTENSION TEAM WE ARE HERE TO HELP!

For over 100 years, Colorado State University Extension's mission has been to serve the communities of Colorado by determining current issues and offering research based solutions. The Golden Plains Area Extension Agriculture team is a unique network of specialists and agents that serve northeastern Colorado. Take a moment to get to know our Ag team and let us know how we can help.



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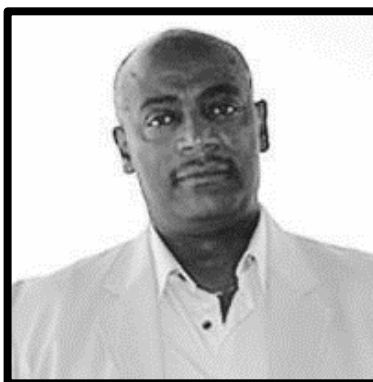
Range/Pasture Economics, Budget/Fiscal, Integrated Resource Management, Ag Production and Farm Management Economics, Business Management, Taxation, Estate Planning, Crop Rotation Planning and Risk Management.



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CSU Extension Rates High With Commissioners

Colorado State University Extension (CSU) has been working with Colorado's County Commissioner's for more than a century. The Extension's new decentralized organizational structure is founded on this long-trusted relationship. The seventh annual survey summary report of county satisfaction with CSU Extension showed that, overall, Colorado county commissioners were positive about Extension program value and quality, and agent expertise and responsiveness. The quality of CSU programs and responsiveness of local agents received particularly positive ratings. "The results are encouraging and reinforce our commitment to Extension's continued responsiveness to each county's needs," said Lou Swanson, director of CSU Extension and Vice President for Engagement. "County fiscal commitment is a sign of support. Our partnerships with counties, who provide office space and staff for Extension's programming, are strong." Commissioners rated the services provided from local Extension office favorably, with more than **97 percent rated as acceptable, above acceptable or excellent.** As one commissioner commented: . . . very

responsive, professional, and capable. Positive, highly satisfied."

The survey, which was conducted from September 22 – October 31, 2014, compared 2014 data on four key indicators to 2013 data and found that key indicators for quality, responsiveness, and overall satisfaction trend slightly higher in 2014, while value trends slightly lower. Overall, the 2014 survey data indicate that commissioners feel very positive about their agents and are highly satisfied with CSU Extension. Counties particularly affected by water issues continue to appreciate the support received from the Colorado Water Institute – part of the Office of Engagement – and the three water specialists in CSU Extension.

Survey details a total of 213 surveys were sent to all commissioners/council members in counties where CSU has extension offices or provides Extension services. Commissioners were encouraged to complete the survey if they worked with extension, or to forward the survey to the appropriate contact. Many counties appoint one commissioner or council member to serve as the Extension liaison; this

means that not every commissioner is expected to complete the survey. The per-county response rate was 82 percent, with 51 of the 62 counties surveyed by CSU Extension responding (Lake and San Juan, two new service counties, chose not to participate in the 2014 survey and will participate in 2015). The survey also provided data for each of the three regions served by Extension – Front Range, Peaks & Plains (Southeast, Northeast, Golden Plains, and San Luis Valley) and Western. A five-point scale was used for evaluation. The variables rated included: (1) the quality of programs and services provided by local Extension offices; (2) the expertise and

knowledge of Extension personnel; (3) the responsiveness and service level of county Extension personnel; (4) the perceived value to citizens of Extension programs and services; and (5) respondent insights and comments regarding CSU Extension.

The survey was designed by CSU Extension and Office of Engagement, and is conducted annually by an external contractor for the Office of Engagement. Survey results are shared with CSU program leaders and regional directors to be used in planning and recommendations for 2016. The survey is now available at www.outreach.colostate.edu.

LIVESTOCK

2015 Livestock Disease Update

Chris Shelley, Golden Plains Area Livestock Extension Agent (chris.shelley@colostate.edu)

Last year, several diseases were particularly damaging to Colorado livestock production. These threats are real possibilities again for 2015; however, education and management practices can limit the extent of their impact and severity. The following is a discussion about three viral threats to Colorado livestock and resources to help producers minimize their risk.

Porcine Epidemic Diarrhea Virus

Porcine Epidemic Diarrhea Virus (**PEDV**) is a corona virus that affects pigs of all ages. It is however, most devastating to sow farms with 100% mortality on piglets ages 3-5 weeks. It was recently diagnosed for the first time in the United States on a sow farm in Iowa in May of 2013. It is highly contagious between pigs and within a year, it had spread to 30 states with just short of 7,000 positive samples sent in. The viral strain is greater than 99 percent similar to the strain in China, but the method of entry into the United States is unknown. The disease is likely spread across states through livestock trailers. At processing plants, it is estimated that for every contaminated truck arriving, two will leave contaminated. The best way to protect against PEDV is prevention through biosecurity. This disease is not zoonotic and not considered a threat to public health or the food supply. For more information on PEDV, visit <https://www.colorado.gov/pacific/aganimals/porcine-epidemic-diarrhea-virus>

Highly Pathogenic Avian Influenza

Unlike PEDV, the Influenza virus is no stranger to the United States. Two strains of Highly Pathogenic Avian Influenza (**HPAI**), H5N2 and H5N8, have been confirmed in the United States. HPAI spreads easily in birds and poultry and has a high mortality rate. The main source of disease

transmission is due to the wild bird population and their migratory routes. HPAI at this time is not considered a threat to public health or the food supply. Practice the following biosecurity measures to stop disease spread and keep your flock safe

Colorado Department of Agriculture recommendations Commercial Flocks

- Restrict on-farm access to essential employees only
- Practice on-farm disinfecting procedures (ex: foot baths and equipment cleaning)
- Use indoor facilities
- Do not have contact with other flocks and limit movement of birds, poultry workers, equipment, and transport vehicles
- Anyone entering the farm should use protective gear on egg farms
- Avoid contact with sick or dead poultry/wildlife
- If contact occurs, wash hands with soap and water and change clothing before having any contact with domestic poultry

USDA APHIS recommendations for Backyard Flocks

- Wash hands thoroughly before and after working with your birds
- Scrub your shoes with disinfectant
- Clean cages and change food and water daily
- Clean and disinfect equipment that is exposed to your birds
- If you do borrow tools or cages, clean and disinfect them before they reach your property
- If visitors have birds of their own, do not let them near your birds
- If you have been near other birds, bird owners, pet/feed store disinfect shoes, clothing, and equipment before returning to your birds.

For a sick bird, call the Colorado Avian Health Call Line at Colorado State University (CSU): (970) 297-4008.

For a dead bird, submit to the CSU Veterinary Diagnostic Laboratory in Fort Collins for free HPAI testing: (970) 297-4008 or (970) 297-1281 or visit <http://dlab.colostate.edu>

For Multiple sick/dead birds, call either the Colorado State Veterinarian's Office at (303) 869-9130 or USDA Colorado Office at (303) 231-5385.

Vesicular Stomatitis Virus

Vesicular Stomatitis Virus (**VSV**) affects most livestock, but particularly horses and cattle. This disease can be spread by insects, animal-to-animal contact, and by livestock transportation. The insects undergo yearly migrations that begin in Mexico and continue north as spring and summer commence. The first case of VSV this year was documented in New Mexico and has since been confirmed in Arizona and Utah. The location and severity of the disease varies from year to year. The outbreak of 2014 was particularly severe for Colorado with 370 premises with positive diagnosis. Livestock owners can reduce the spread of the disease by practicing biosecurity principles and by implementing insect control. Although in rare circumstances, the disease can be spread to humans, this disease is not considered a threat to public health or the food supply. For more information on VSV, visit <https://www.colorado.gov/pacific/aganimals/vesicular-stomatitis-virus-vsuv>

For any unusual livestock/poultry disease or death, contact your **local veterinarian**. Your local **Extension Office** can also help direct calls and answer questions. The **State Veterinarian's Office** can be reached at 303-869-9130.

AGRONOMY

Freeze Damage To Wheat

Wheat in Colorado is subjected to adverse weather conditions during much of its growth period. Low temperature injury during winter and spring can be particularly destructive. However, wheat has some resistance to low temperatures after it begins growing in the spring; but injury from freezes at this time can occur in any part of the state. The table below describes temperature conditions that cause spring freeze injury, and symptoms of injury at different temperatures.

Spring freeze injury occurs when low temperatures coincide with sensitive plant growth stages. Injury can cover large areas of the state or only a few fields or even parts of the fields. It is most severe along rivers, valleys, and depressions in fields where cold air settles. The risk of spring freeze injury is greater when wheat initiates spring growth early due to higher than average temperatures and inadequate moisture and advances through its developmental stages quicker than normal. Actual air temperatures by location can be found at coagmet.com.

Temperatures that cause freeze injury to wheat at spring growth stages and symptoms and yield effect of spring injury.			
Growth Stage	Approximate injurious temperature (two hours)	Primary symptoms	Yield effect
Tillering	12 F (-11 C)	Leaf chlorosis; burning of leaf tips; silage odor; blue cast to fields	Slight to moderate
Jointing	24 F (-4 C)	Death of growing point; leaf yellowing or burning; lesions, splitting, or bending of lower stem; odor	Moderate to severe
Boot	28 F (-2 C)	Floret sterility; spike trapped in boot; damage to lower stem; leaf discoloration; odor	Moderate to severe
Heading	30 F (-1 C)	Floret sterility; white awns or white spikes; damage to lower stem; leaf discoloration	Severe
Flowering	30 F (-1 C)	Floret sterility; white awns or white spikes; damage to lower stem; leaf discoloration	Severe
Milk	28 F (-2 C)	White awns or white spikes; damage to lower stems; leaf discoloration; shrunken, roughened, or discolored kernels	Moderate to severe
Dough	28 F (-2 C)	Shriveled, discolored kernels; poor germination	Slight to moderate

Freeze Injury On Wheat

R.F. Meyer, Golden Plains Area Agronomy Agent (rf.meyer@colostate.edu)

Freezing temperatures have affected many wheat fields within the Colorado High Plains Region this season. In fields where only some of the tillers have been damaged, there is still plenty of time for undamaged tillers to compensate and minimize any potential yield loss. However, frost damaged wheat heads will be permanently damaged.

Important factors determining freeze damage

There are a number of key factors in determining freeze damage: the stage of development of the wheat, the density of the stand and condition of the plants, the amount of residue on the soil surface, the extent and duration of low temperatures, temperature gradients within the field, soil moisture, and the wind speed.

* Stage of development.

-- Greenup. Wheat that has greened up but hasn't started to joint yet will probably suffer damage to the existing foliage, but the growing points will be protected by the soil and should escape injury. This wheat will have cosmetic damage to the leaves that will show up almost immediately. If new leaves emerging over the next few weeks are green, that will indicate that the growing points survived and the plants will still produce tillers. If the new leaves are yellow, the growing point of that particular tiller was killed by the freeze.

-- Jointing wheat can usually tolerate temperatures in the mid to upper 20's with no significant injury. But, if temperatures fall into the low 20's or even lower for several hours, the lower stems, leaves, or developing head can sustain injury. If the leaves of tillers are yellowish when they emerge from the whorl, this indicates those tillers have been damaged. Existing leaves may also be damaged so severely that they turn bluish-black and have a water-soaked appearance, then bleach out. This usually results in the field's having a "silage smell."

-- Heading wheat is most vulnerable. Temperatures of near 31 F. and lower can sterilize wheat flowers rendering the head sterile.

* Density of the stand and condition of the plants. If the stand is thick, that will tend to reduce the extent of freeze damage. Thin stands, which are not common this year, are at higher risk of injury because the air can penetrate the stand more easily. If the plants were wet before the freeze, this can result in a coat of ice on the plants that may help protect the growing points and heads to some extent. If temperatures get too low, however, the cold will go through the ice.

* Residue. Many times we see more freeze damage in no-till fields because the residue acts as a blanket and doesn't allow the heat from the soil to radiate up into the plant canopy.

* Extent and duration of low temperatures. Significant injury becomes much more likely if the temperatures in the damaging range last for two hours or longer.

* Soil moisture. There is often less freeze injury at a given temperature when soils are wet than when dry. Wetter soils tend to radiate a little more warmth than dry soils.

* Wind speed. Slightly breezy conditions during the nighttime hours when temperatures reach their lows will decrease the chance of injury. Warm air is drawn up from the soil surface and insulates heads better with a small amount of breeze.

* Temperature gradients within the field. Low spots in the field are almost always the first to have freeze injury. The coldest air tends to settle in the low areas, especially under calm wind conditions.

Injury symptoms

The best thing producers can do for the first few days is simply walk the fields to observe lodging, crimped stems, and damaged leaves. Be patient. Do not take any immediate actions as a result of the

freeze, such as destroying the field for recropping. It will take several days of warm weather to accurately evaluate the extent of freeze damage. After several days, producers should split open some stems and check the developing head. If the head is green or light greenish in color and seems firm, it is probably fine. If the head is yellowish and mushy, it may have freeze injury.

There are also a couple of early signs producers might have noticed right away.

* Silage smell. If a field of wheat is giving off the aroma of silage, that indicates that leaves have been damaged. Damaged leaves will likely turn black within a few days, then become bleached.

* Ice in the stems. If there was ice in the stems below the first node the morning of the freeze, those tillers will probably be damaged (although not always) and may not produce grain. If plants continue to grow and exhibit a green color, then damage is minimal.

* Lodging. If the wheat lodged immediately after the freeze, that indicates stem damage. Later tillers may eventually cover the damaged tillers.

If the main tillers are injured, secondary tillers may begin growing normally and fill out the stand. The wheat may look ragged because the main tillers are absent, but enough tillers may survive to produce acceptable yields (if spring growing conditions are good). If both the main and secondary tillers are injured, the field may eventually have large areas that have a yellowish cast and reduced yield potential.

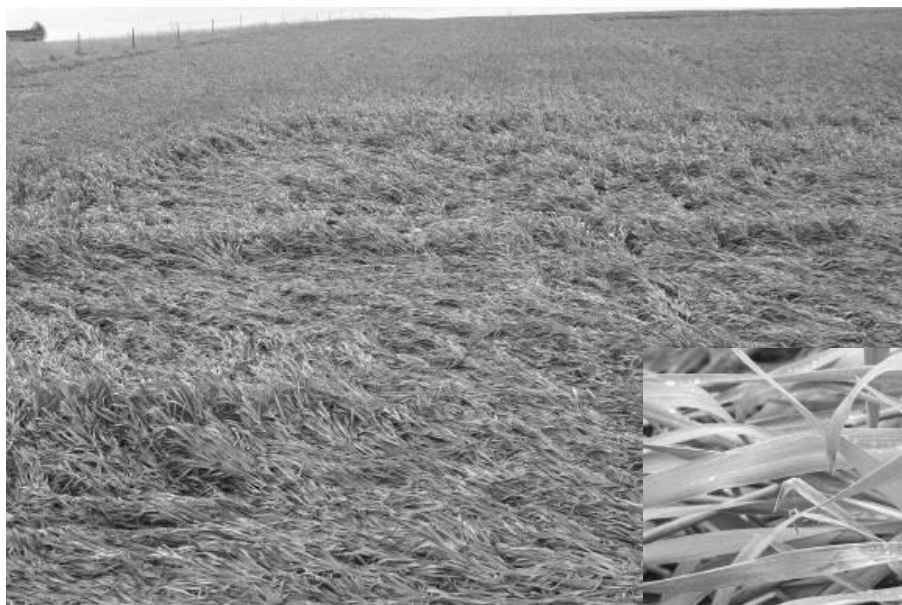
Tillers damaged during early jointing may stop growing, so the head will never emerge. In the boot stage, the heads will go ahead and emerge even if they are severely freeze damaged. However, that head may be partially damaged or completely dead. If the freeze damage is light to severe, heads may “back out of the boot.” Exhibiting a twisting appearance.

If the lower stems are damaged by freeze injury, the wheat plants will likely lodge at some point. Lodging could also be caused by other factors, however, so it will be important for producers to examine the lower stems on lodged plants to determine the cause. Plants may have simply leaned over due to environmental factors, such as a hard rain or high winds, after a freeze and will eventually come back up if the lower stem isn't damaged.



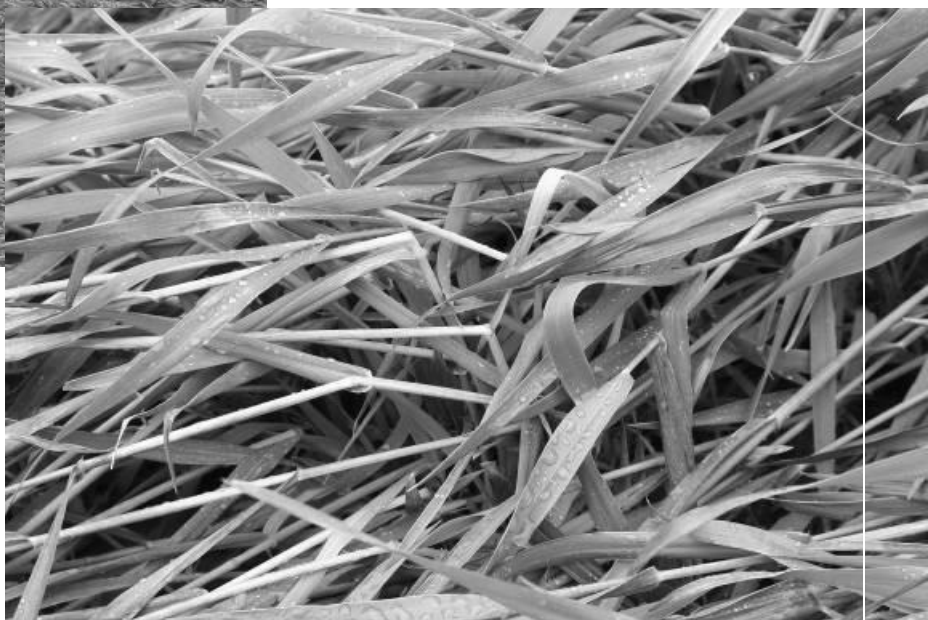
Leaf burn from freeze damage. By itself, this is cosmetic damage only. Photos by Jim Shroyer, K-State Research and Extension.

The yellowing at the base of the new leaf emerging is not a good sign. This means that the tiller is probably dead from freeze injury.



Freeze injury to the lower stem caused significant lodging in 2007.

Closeup of stem damage from freeze injury, resulting in lodging in 2007.



More information on freeze damage to wheat is available in “Spring Freeze Injury to Kansas Wheat,” K-State Research and Extension publication C646, available at county and district Extension offices and on the Web at: <http://www.ksre.ksu.edu/library/crpsl2/c646.pdf>.

Source: Jim Shroyer, Extension Crop Production Specialist, Number 397, April 10, 2013

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Replanting Options After Hail

R.F. Meyer, Golden Plains Area Agronomy Agent (rf.meyer@colostate.edu)

Summer hailstorms can cause considerable damage to area crops. Management decisions for severely hail-damaged fields will include the following; abandon cropping for this summer and fallow, or, replant with a crop that will mature before the first fall frost. Available soil moisture, previous herbicides applied, and crop insurance can all influence replanting decisions.

For dryland crop production, soil moisture is a critical factor when deciding to replant. A general rule of thumb (not scientific) is; 2 feet of available soil moisture is the minimum needed to begin a crop, with 4 feet being ideal. But, even with a 2 foot soil profile near saturation, adequate rainfall is essential for the remainder of the growing season to provide average yields. Soil samples from 4-foot profiles throughout fields in question will determine whether adequate soil moisture exists for replanting success.

Previously applied herbicides also are important to consider. Fields with some sulfonylurea herbicides such as Ally have strict crop rotation restrictions. These restrictions are printed on the label and must be followed.

When hail damage occurs after June 1, recrop options become somewhat limited due to a limited growing season, however, there are a few acceptable crops that will mature. Irrigated fields can be replanted with dry-beans, sunflower, millet, early corn or a feed crop. If corn is the crop desired for replanting before June 15, consider varieties of 85 days or less in maturity. Corn is not an option later than mid-June. For dryland fields replanted after mid-June, millet, sunflower, or a feed crop, become the best options. Millet has been grown in the High Plains for quite some time and its short maturity makes it a viable option using existing wheat equipment. Sunflower has also shown promise in University testing. Current Colorado State University Extension studies suggest sunflower planted as late as July 6 has matured satisfactory (Meyer, Pilcher, and Peairs). Although somewhat lower in yield and quality, late-planted sunflowers can still produce quite well, offering a salvage crop to a farm with weather-destroyed crops. If a feed crop is the choice, have markets in place or be able to use the production in your own operation.

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10 Things To Do To Manage Resistant Kochia

R.F. Meyer, Golden Plains Area Agronomy Agent (rf.meyer@colostate.edu)

1. Use tank mixes. Efficacy on kochia will increase.
2. Use full labeled herbicide rates.
3. Apply post-emergent tank mixes to kochia before the weed is 6 inches tall.
4. Actively growing kochia is easier to control than weeds that are under moisture stress.
5. Apply herbicides with 3 to 10 gallons per acre water.
6. Use recommended additives and adjuvants.
7. Flat fan nozzles are recommended. Other types can work effectively also.
8. Re-apply herbicides as later kochia flushes emerge.
9. Rotate crops along with herbicides.
10. Follow all manufacturer recommendations to enhance coverage and minimize drift risk.

Source: Monsanto Company



General Spray Mixing Order

R.F. Meyer, Golden Plains Area Agronomy Agent (rf.meyer@colostate.edu)

Pesticide spraying season is upon us. Below are general guidelines for pesticide mixing orders:

- Start with tank at least 1/2 full of water
- Maintain constant agitation while loading and between each step.
- Always add each ingredient separately to spray mix, never allow any products to mix together prior to adding to tank

Mixing Order:

1. Half full water
2. Compatibility agent if you know issues exist

3. Water dispersible products (DF, WP) – pre slurry
4. Soluble concentrates
5. Pre slurry with water
6. Ammonium sulphate
7. Micro nutrient products
8. Soluble liquids
9. Emulsifiable concentrates
10. Add glyphosate if needed
11. Add adjuvants (NIS, COC, MSO, HSOC)

Source: BASF Company

RANGELAND

Cool Temperatures And Moisture Yields Lush Green Grass

Casey Matney Regional Rangeland Management Specialist (casey.matney@colostate.edu)

Thanks to continued rain this spring in northeast Colorado the cool season, pasture grasses are staying leafy and green. However, with this lush growth you might be noticing some potential downsides: grass tetany and an abundance of cheatgrass and Japanese brome.

Grass Tetany

Grass tetany occurs when cattle feed on young leaves of rapidly growing grasses. Grass tetany is also called grass staggers, hypomagnesemia, winter tetany, and wheat pasture poisoning. Caution periods are in spring when perennial grasses begin growth or in the fall/winter when grasses are initiating regrowth. The germination and new growth of winter annual grasses are also a factor in the fall/winter caution period. Consumption of grasses having low fiber and high moisture content with low magnesium (Mg) levels results in cattle having diminished Mg levels in the blood. Mg is important in many enzymatic reactions in the body. Stress, extreme weather, and forages high in nitrogen/crude protein and potassium can exacerbate the Mg deficiency in the forage. Pastures fertilized with ammonia or having soils with high nitrogen and potassium levels can also increase the risk of grass tetany in spring and fall/winter. Lactating cows have a greater risk for grass tetany. Forages having more than 0.2% Mg, on a dry matter basis, are generally considered safe. Acute cases of grass tetany can result in death within one hour of the onset of symptoms. Symptoms may develop within a few hours. Animals suffering from acute poisoning may show symptoms prior to death including excitability, aggressiveness, abnormal walk, vocalization, convulsions, and frothing at the mouth. Chronic or sub-acute symptoms of grass tetany can develop over a period of days and include staggering and abnormal walk, excessive blinking, lack of appetite, weight loss, and decreased milk production. Treatment of animals suffering from grass tetany consists primarily of an injection of solution containing Mg, calcium, and dextrose. Contact a veterinarian if you suspect your cattle are showing signs of grass tetany.

Grass tetany is preventable. Providing cattle with a Mg supplement can prevent and reduce the risk of grass tetany. Examples of Mg supplement include licks, capsules, and a powder that can be added to forage dry or as a liquid mix. Supplementation of Mg should occur before releasing animals into pastures with a suspected risk for grass tetany. Cattle will need to remain supplemented with Mg as long as they are consuming deficient forage.

Abundance of Cheatgrass and Japanese Brome

You might be noticing a surprising carpet of very tall cheatgrass this spring. Cheatgrass and Japanese brome are growing rapidly in this spring moisture, growing taller than normal, and producing a multitude of seeds. Unfortunately, much of the growth from these bromes will provide little forage for cattle since they are now entering the seed maturation period. With the growing conditions for cool season grasses this spring, we could be looking at expanding amounts of cheatgrass germinating this fall that could be competing for water, nutrients, and space with desirable perennial grasses. To make the situation worse, the large amount of cheatgrass this year could increase the risk and severity of wildfire, if the rain stops and conditions becomes drier. It is a little late this spring to control the cheatgrass, but for information on how to control annual bromes this fall and understand the wildfire risk they pose, please visit <http://www.ext.colostate.edu/pubs/natres/06310.html>

HORTICULTURE

FireWise Plants

Linda Langelo, CSU Horticulture Program Associate (linda.langelo@colostate.edu)

What are FireWise plants? These are plants which are more fire resistant than others. Keep in mind fire resistant does not mean a plant is fireproof. What makes a plant more fire resistant? There are several characteristics of fire resistant plants, which are listed as follows:

- leaves are moist and supple
- sap or resin is low

- there is little dead wood within the plant

On the other hand plants which are extremely flammable have the following characteristics which are listed as follows:

- Leaves, twigs and stems containing volatile waxes, terpenes or oils.
- Leaves which are aromatic.
- Plants which contain dead material within the plant.
- Plants with loose or papery bark.
- Sap is gummy, resinous and has a strong odor.

The day of foundation plantings of the 1950's is gone. Whether a plant is fire resistant or highly flammable the further away from the house the better. A five foot area is recommended for a defensible space around your home before placing a planting. Once the plants ignite, this space is enough of an area to keep the heat of the burning plants away from other flammable materials on your home. The radiant heat from burning plant material can break windows. The heat of these burning plants can also ignite pine needles and other flammable debris near the house.

There are many wonderful plants to use in a FireWise landscape. Some of these plants are already commonly used in your landscape while others are underused. Here are some groundcovers listed as follows for the plains:

- | | |
|---------------------------|---------------------------|
| • Ajuga reptans | Carpet bugleweed |
| • Antennaria rosea | Pink pussytoes |
| • Arctostaphylos uva-ursi | Kinnikinnick |
| • Cerastium tomentosum | Snow-in-summer |
| • Dianthus species | Garden carnation or Pinks |
| • Fragaria species | Wild strawberry |
| • Lamium species | Dead nettle |
| • Phlox subulata | Creeping phlox |
| • Sedum species | Sedum |
| • Semperivum species | Hens and Chicks |
| • Achillea species | Yarrow |
| • Aquilegia species | Columbine |
| • Armeria maritima | Sea thrift |
| • Veronica species | Speedwell |

The following is a list of FireWise perennials which you may have in your landscape:

- | | |
|----------------------------|-----------------------|
| • Aurinia saxatilis | Basket-of-gold |
| • Bergenia cordifolia | Heartleaf bergenia |
| • Carex species | Sedges |
| • Campsis radicans | Trumpet Vine |
| • Coreopsis species | Coreopsis or Tickseed |
| • Delphinium varieties | Delphinium |
| • Echinacea purpurea | Coneflower |
| • Epilobium angustifolium | Fireweed |
| • Gaillardia varieties | Blanket flower |
| • Geranium cinereum | Grayleaf cranesbill |
| • Helianthemum mummularium | Sunrose |

- Hemerocallis species Daylily
- Heuchera sanguinea Coralbells
- Hosta species Hosta lily
- Iris hybrids Tall bearded
- Kniphofia uvaria Torch lily or Red-hot poker
- Lavandula species Lavender
- Linum perenne Flax, blue
- Lonicera species Honeysuckle
- Lupinus varieties Lupine
- Oenothera species Evening primrose
- Papaver orientale Oriental poppy
- Penstemon species Penstemon or Beardtongue
- Ratibida columnifera Prairie coneflower
- Salvia species Salvia or Sage
- Stachys byzantine Lamb's ear
- Yucca species Yucca

The following is a list of FireWise broadleaf evergreen shrubs:

- Mahonia aquifolium Oregon grapeholly
- Mahonia repens Creeping holly
- Amelanchier species Serviceberry
- Cornus sericea Redosier dogwood
- Euonymus alatus 'Compactus' Dwarf Burning Bush
- Perovskia atriplicifolia Russian Sage
- Philadelphus species Mockorange
- Prunus besseyi Western sandcherry
- Ribes species Flowering currant
- Rhus species Sumac
- Rosa species Hardy Shrub rose
- Rosa woodsia Wood's Rose
- Spiraea x bumalda Bumald spirea
- Spiraea douglasii Western spirea
- Symphoricarpus albus Snowberry
- Syringa species Lilac
- Viburnum trilobum 'Compactum' Compact American Cranberry

The following is a list of FireWise Conifer trees:

- Pinus ponderosa Ponderosa pine

The following is a list of FireWise Deciduous trees:

- Acer ginnala Amur Maple
- Acer rubrum Red Maple
- Aesculus hippocastanum Horsechestnut
- Catalpa speciosa Western Catalpa
- Celtis occidentalis Common Hackberry
- Crataegus species Hawthorn
- Fraxinus pennsylvanica Green Ash
- Fraxinus americana Gymnocladus dioicus

- Gleditsia triacanthos var. inermis Thornless honeylocust
- Juglans species Walnut
- Malus species Crabapple
- Prunus virginiana Chokecherry
- Prunus virginiana ‘Schubert’ Canada red chokecherry
- Robinia pseudoacacia Purple Robe locust

For a complete list of plants go to <http://www.ext.colostate.edu/pubs/natres/06305.html>



Eco-Garden Friendly Certificate

Linda Langelo, CSU Horticulture Program Associate (linda.langelo@colostate.edu)

The Golden Plains Area Extension is giving gardeners the opportunity to have their gardens certified as an eco-friendly garden. What is an eco-friendly garden? This type of a garden embraces sustainable gardening techniques. . Eco-friendly gardens use xeriscape principles, or water conservation techniques, and embrace pollinator friendly plants. The use of native plants is strongly encouraged for the reduction in applied herbicides, pesticides and fertilizers. The use of host and nectar plants is also strongly encouraged for feeding and shelter for pollinators.

If you have a garden that embraces both xeric principles and pollinator friendly plants, then come into your local Extension Office and pick-up an application. If your garden becomes certified as an “Eco-Friendly Garden,” you will receive, for a small cost, a sign to post in your garden, a certificate and support the local work of Colorado Master Gardeners.

Once you return your application back to the local Extension Office, we will review your application. If you have your landscape designed with native plants and/or demonstrate the principles of xeric gardening, we want to know. We ask in the application for you to take photos of your garden. Please follow the instructions in the application. We hope that you will share. We hope that you will support the Colorado Master Gardeners.

If you have any questions, please call Linda Langelo, CSU Golden Plains Horticulture Associate, at (970) 474-3479. We hope that you join this effort. If your garden doesn’t have any native plants or xeric principles come in and find out. There are some small changes you can make which have a great impact in our world.

BUSINESS MANAGEMENT

Five Common Mistakes In Grain Marketing

Brent Young, Regional Agriculture & Business Management Specialist (brent.young@colostate.edu)

Professional tennis players make 80% of their shots while amateur tennis players miss 80% of their shots. Given this fact the best way for an amateur tennis player to improve their game would be to eliminate their mistakes.

Many farmers consider themselves to be amateurs when it comes to marketing their grain. If you believe the tennis analogy, then it would stand to reason that the best way for farmers to improve their grain marketing ability would be to eliminate their marketing mistakes.

Edward Usset, Grain Marketing Specialist for the Center for Farm Financial Management, University of Minnesota compared tennis players to farmers as an introduction to his presentation titled “Five Common Mistakes in Grain Marketing”. This presentation was delivered as part of the Extension Risk Management Education National Conference held recently at Minneapolis, MN.

The first mistake listed by Mr. Usset was reluctance by farmers to pre-harvest price their crops. In most years the market will provide opportunities to price the crop that will result in a return greater than pricing only at harvest time. Producers can utilize forward contracts, futures and options contracts to accomplish this task.

Mistake number two is the failure to understand and track local basis. Basis is the difference between the local cash price and the nearby futures price. While futures prices can vary year to year and season to season, basis tends to follow similar patterns year to year. In many cases grain pricing opportunities are the result of changes in basis and not upward movement in the futures market.

If you are interested in tracking local corn and wheat basis, I would suggest that you purchase a copy of the Golden Plains Area Handbook. Six local corn and wheat markets are tracked and charts are provided for 5 year averages.

Failure to have an exit strategy is mistake number three. How many of us have missed an

opportunity to sell our grain at a profit because we thought the market would go up a nickel and then we would sell only to watch the market go down 15 cents. An exit strategy allows us to take some of the emotion out of marketing and make decisions based on our cost of production. Exit strategies can be either price or timing driven.

Some grain market analysis like to quote what they call the 11th commandment of grain marketing, “Thou shall not hold un-priced grain in the bin past July 1st”. This commandment relates to the fourth common mistake in grain marketing, that being holding grain in storage too long. The most egregious example would be selling last year’s grain crop just in time to place this year’s crop in the bin. Not only have you sold last year’s crop at the typical market year low, you have the expense of storing the crop for an entire year.

The final mistake is thinking you avoid storage costs by selling grain at harvest then re owning with the grain with a call option. While it is true that you don’t have to play the cost of storage in many years you will forfeit carrying charges. A carrying charge is when the nearby futures contract is trading lower than contracts two to six months out. In years where carry charges are substantial the market is telling you that it pays to store your crop.

If you’re like many grain producers and feel that when it comes to marketing you are more of an amateur than a professional limiting your grain marketing mistakes could pay big dividends.

AG MARKET PRICES

Dennis Kaan, Golden Plains Area Director

LIVESTOCK CASH PRICES			Week Ending 5/22/15		
			Current ¹	One Month Ago ²	One Year Ago ²
Colorado Auction Feeder Cattle, Medium & Large Frame #1					
Steers,	500-550 lbs	/cwt	\$281.00-288.00	\$301.00-310.00	No Reports
Steers,	600-700 lbs	/cwt	\$259.00-265.00	\$242.00-264.00	due to light
Heifers,	500-550 lbs	/cwt	\$233.00-241.00	\$263.00	receipts

Heifers, 600-650 lbs		/cwt	\$207.50-217.50	\$241.00	
Colorado Weekly Weighted Average Direct Slaughter Cattle, FOB the Feedyard After 3-4% Shrink					
<u>Live Basis Steer Sales</u>	Hd Count	Wt Range	/cwt	/cwt	/cwt
Over 80% Choice					
65-80% Choice				\$160.00	\$147.00
35-65% Choice	383	1,433-1,433	\$162.00		\$145.00-147.00
0-35% Choice					
<u>Live Basis Heifer Sales</u>	Hd Count	Wt Range	/cwt	/cwt	/cwt
Over 80% Choice				\$160.00	
65-80% Choice	113	1,200-1,200	\$162.00	\$160.00	\$144.00-147.00
35-65% Choice					\$147.00
0-35% Choice					
Mountain Area and Western U.S. Direct Sheep Report, Medium and Large 1-2					
	Hd Count	Wt Range	/cwt	/cwt	/cwt
Feeder Lambs			No Report	\$127.00	\$150.00
Hogs, As of 11/18/13					
Base Market Hog, 200 lb. Carcass Basis, Plant Delivered					
0.9-1.1" Back-Fat, 6.0/2.0 Loin Area/Depth		/cwt	\$70.50-79.98	\$56.00-63.86	\$101.00-109.48
Iowa -Minnesota Daily Negotiated Purchases 200 lb Carcass Basis					
1.0" Back-Fat, 6.0/2.0 Loin Area/Depth		/cwt	\$77.00-80.00	\$59.00-64.25	\$106.50-112.50
Western Cornbelt Daily Negotiated Purchases 200 lb Carcass Basis					
1.0" Back-Fat, 6.0/2.0 Loin Area/Depth		/cwt	\$70.50-80.00	\$59.00-63.50	\$101.00-112.50
LIVESTOCK FUTURES PRICES				5/22/15	
Live Cattle - CME			Current¹	One Month Ago²	One Year Ago²
Jun		/cwt	\$152.12	\$151.20	\$137.65
Aug		/cwt	\$150.70	\$149.72	\$138.80
Oct		/cwt	\$152.60	\$151.22	\$142.67
Dec		/cwt	\$154.15	\$152.00	\$145.50
Feeder Cattle - CME					
Aug		/cwt	\$219.00	\$215.67	\$195.55
Sep		/cwt	\$218.00	\$214.70	\$196.60
Oct		/cwt	\$217.00	\$213.87	\$195.47
Nov		/cwt	\$216.30	\$212.95	\$195.32

¹ Commodity specifications apply to the current period only. Specifications may have been different for prior period listings.

² Prices reported for the one month ago and one year ago periods are taken from previous issues of this publication.

Source: U.S.D.A. Agricultural Marketing Service
Chicago Mercantile Exchange

<http://www.ams.usda.gov/AMSV1.0/lsmnpubs>
<http://www.cmegroup.com/>

CASH GRAIN PRICES		5/22/15		
		Current¹	One Month Ago²	One Year Ago²
#1 HRW Wheat				
Fleming, Haxtun, Julesburg, Holyoke, Paoli, Amherst	/bu	\$4.99-5.00	\$4.55-4.60	\$7.00-7.12
Yuma, Wray, Brush, Akron, Otis, Anton	/bu	\$4.93-5.01	\$4.55-4.60	\$7.01-7.09
Burlington, Seibert, Flagler, Arriba, Genoa, Hugo	/bu	\$4.97-5.07	\$4.52-4.72	\$7.32
#2 Yellow Corn				

Haxtun, Julesburg, Fleming, Holyoke, Paoli, Amherst	/bu	\$3.40-3.65	\$3.42-3.50	\$4.40-4.65
Yuma, Wray, Brush, Otis, Anton	/bu	\$3.38-3.65	\$3.35-3.65	\$4.50-4.70
Seibert, Arriba, Burlington, Flagler, Bethune, Stratton	/bu	\$3.25-3.35	\$3.30-3.40	\$4.55-4.65

Northeast Colorado, Western Nebraska Beans

Pinto Beans	/cwt	\$23.00	\$24.00	\$31.00
Great Northern Beans	/cwt	Not Established	Not Established	Ask
Light Red Kidney Beans	/cwt	\$48.00	\$48.00	\$53.00

White Millet

E Colorado / SW Nebraska	/cwt	\$6.50-7.50	\$6.50-7.50	\$8.00-8.75
		Mostly \$7.00	Mostly \$7.00	Mostly \$8.25

Sunflowers

E Colorado / SW Nebraska	/cwt	\$20.00-21.00	\$20.00-21.00	\$17.50-19.25
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GRAIN FUTURES PRICES

5/22/15

		Current ¹	One Month Ago ²	One Year Ago ²
<u>Wheat, Kansas City Board of Trade</u>				
Jul	/bu	\$5.15	\$4.88	\$6.59
Sep	/bu	\$5.23	\$4.98	\$6.70
Dec	/bu	\$5.37	\$5.15	\$6.88
Mar	/bu	\$5.51	\$5.30	\$7.05
<u>Corn, Chicago Board of Trade</u>				
Jul	/bu	\$3.60	\$3.69	\$4.76
Sep	/bu	\$3.66	\$3.77	\$4.74
Dec	/bu	\$3.77	\$3.88	\$4.73
Mar	/bu	\$3.88	\$3.99	\$4.82

CASH HAY PRICES

Week Ending 5/22/15

		Current ¹	One Month Ago ²	One Year Ago ²
<u>Colorado Hay Report, Northeastern Areas</u>				
Large Square Bales, FOB Stack				
Supreme Alfalfa, 180+ RFV (On Contract)	/ton			
Premium Alfalfa, 150-180 RFV	/ton			
Good Alfalfa, 125-150 RFV Delivered	/ton	\$100.00	\$170.00	
Fair Alfalfa Delivered	/ton			\$150.00
Utility Alfalfa	/ton			\$150.00
Premium Grass (Small Squares)	/ton	\$175.00	\$280.00	
Premium Grass (Small Squares)	/bale	\$5.00	\$8.00	
Straw (Large Squares)	/ton			
Corn Stalks (Large Squares)	/ton			
Oats (Large Squares)	/ton			
Cane Hay (Large Rounds)	/ton			
Millet Hay (Large Squares)	/ton			

GOLDEN PLAINS AREA AGRICULTURAL NEWSLETTER

Upcoming Events

Area County Fair Dates

Get to Know Your Agriculture Extension Team

CSU Extension Rates High With Commissioners

2015 Livestock Disease Update
Freeze Damage to Wheat
Freeze Injury On Wheat
Replanting Options After Hail
10 Things To Do To Manage Resistant Kochia
General Spray Mixing Order
Colorado Wheat Field Days 2015 Flyer
Cool Temperatures and Moisture Yields Lush Green Grass
FireWise Plants
Eco-Garden Friendly Certificate
Five Common Mistakes In Grain Marketing
Ag Market Prices