

## JULY 2012

*Ron Meyer*  
Area Agronomy Extension Agent  
Burlington Office  
(719)346-5571 ext. 302

*Joel Schneekloth*  
Northeast Region Water  
Resource Specialist, Central  
Great Plains Research Station,  
Akron (970)345-0508

*Dennis Kaan*  
Golden Plains Area Director, Regional  
Agricultural & Business Management  
Economist, Akron Office (970)345-2287

*Assefa Gebre-Amlak*  
Regional Crop Protection, Pest Management  
Specialist  
Greeley Office (970)304-6535

*John Deering*  
Regional Agricultural & Business  
Management Specialist  
Akron Office (970)345-2287

*Alan Helm*  
Area Agronomy/Weed  
Management Agent  
Julesburg Office (970)474-3479

*Casey Matney*  
Rangeland Management Extension  
Specialist  
Regional Engagement Center  
Sterling Office (970)522-7207

*Linda Langelo*  
Horticulture Program Associate  
Holyoke Office (970)854-3616

  
*Michael Fisher*  
Area Livestock Extension Agent  
Wray Office (970)332-4151

**July 11 - Webinar:** "So You Want to be a Cottage Food Producer?" 6:00 – 7:15 p.m. Learn the basics of Colorado's Cottage Food Act and how to start a home-based food business, including:

- eligible products • potential markets
- food safety training requirements • licensing and registrations
- insurance information • potential costs

To join this webinar, click on

<http://connect.extension.inastate.edu/colofood> 5 minutes prior to webinar. Click on "Enter as a guest," type your name, then click "ok" to enter the webinar. Audio will be over the internet. The webinar will be recorded and the link will be posted several days following the webinar at: <http://cofarmtomarket.com/value-added-products/cottage-foods/>

**July 31 – 2012 Eastern Colorado Range and Drought Clinic.**  
[www.range.colostate.edu](http://www.range.colostate.edu) (970)518-0903 (970)491-4423

**Recent Colorado Emergency Designations**  
*Michael Fisher, Golden Plains Area Livestock Specialist*

**Emergency Grazing of CRP Acres** – Announced June 29, 2012. Counties included: Kiowa, Kit Carson, Logan, Moffat, Phillips, Weld, Yuma, & Routt. Effective June 29, 2012 – September 30, 2012. Visit with your local FSA office for more information.

**Presidential Federal Disaster Designation (High Park & Waldo Canyon Wildfires)** – Announced June 29, 2012. Counties included: El Paso & Larimer counties. Contact FEMA for more information.

**Emergency Grazing of CRP Acres** – Announced July 2, 2012. Counties included: Washington. Effective July 2, 2012 – September 30, 2012. Visit with the Washington County FSA office for more information.

**Secretarial Federal Disaster Designation (Colorado Drought)** – Announced July 3, 2012. Sixty-two Colorado counties are included in the designation. The two that are **not** included are Delta & San Juan counties. Visit with your local FSA office for more information.

Washington County  
181 Birch, Courthouse Annex  
Akon CO 80720  
(970)345-2287  
[coopext\\_washington@mail.colostate.edu](mailto:coopext_washington@mail.colostate.edu)

Kit Carson County  
251 16<sup>th</sup> St., Suite 101  
Burlington CO 80807  
(719)346-5571 x 302  
[coopext\\_kit\\_carson@mail.colostate.edu](mailto:coopext_kit_carson@mail.colostate.edu)

Phillips County  
127 E. Denver, P.O. Box 328  
Holyoke CO 80734  
(970)854-3616  
[coopext\\_phillips@mail.colostate.edu](mailto:coopext_phillips@mail.colostate.edu)

Yuma County  
301 Ash, Suite B, County Courthouse  
Wray CO 80758  
(970)332-4151  
[coopext\\_yuma@mail.colostate.edu](mailto:coopext_yuma@mail.colostate.edu)

Sedgwick County  
315 Cedar County Courthouse  
Julesburg CO 80737  
(970)474-3479  
[coopext\\_sedgwick@mail.colostate.edu](mailto:coopext_sedgwick@mail.colostate.edu)

# LIVESTOCK

## Consider What to Cull Ahead of Time

*Michael Fisher, Golden Plains Area Livestock Specialist*

Many cattle producers do not like the idea of culling cows. Certainly, as animals age and may not be raising a calf anymore, it becomes a reality that every rancher faces. However, the idea of culling deep into a productive herd is an unwelcomed prospect.

As I write this, the entire state of Colorado is experiencing some level of drought. Precipitation has been slim for most of us. Additionally, evapotranspiration (ET) has been significantly higher than normal thus far in 2012. The loss of moisture through plant ET can be seriously detrimental to forage if soil moisture is not adequate. The combination of abnormally high temperatures, high winds, and low humidity; along with abundant solar radiation is magnifying the drought's affect on plant production. If relief does not arrive soon, many ranchers are going to have to either begin supplemental feeding or look at removing cattle from the operation. It can be a very difficult decision to make. So I have to ask, "Have you thought about culling cows from your herd?"

Range management is a balancing act between grass production and grazing consumption. If we severely overgraze during drought, we can do long term damage to the grasslands that we rely on for a sustainable ranching operation. It may take five, ten, or even twenty years to heal this type of rangeland damage. A drought influenced herd reduction should be approached with a certain degree of strategy and planning. I'm talking about serious culling that may reach deep into the productive herd. This is a case where the ranch is sacrificing current herd/cattle resources that are replaceable to protect the fragile rangeland resources that are responsive, not replaceable. It is best to consider how you would approach a herd reduction before you actually reach that point. (As you read the through the levels of culling listed below, please remember that

*different ranches utilize different management strategies. Some readers may feel that certain animals described should have been culled prior to the arrival of the drought, but I have to write this article from the perspective of visiting with the least management intensive of operations.)*

The obvious cull is the cow that didn't have a calf or lost her calf. This cow is only costing the ranch this year, so she should be the first on the trailer.

Next, the animal that is going to require the most nutrition through the drought period with the least return should be culled. In most cases this is going to be virgin heifers. This group of animals has a requirement for the highest level of nutrition within the cow herd. They are growing and will be for the next two years. Replacement heifers are typically the hardest cattle in the herd to get bred and often have the lightest calves at weaning time. In other words, they carry some of the greatest expenses with some of the least returns. The ranch can worry about replacement heifers after the drought, when there is active forage growth taking place.

Now take a serious look at what you have left in the herd and score the cows. Many people will disagree with me, but I say that this is a great time to get rid of any mean cows or those that have a tendency to ignore fences. Current pregnancy status can be a useful decision tool, depending on how your calving/breeding cycle lines up with your culling time. Cattle that are not pregnant or are dramatically short bred compared to others may be candidates for culling. Score structure of the cattle. How are the legs and feet? You may consider walking them along an ally way one at a time to evaluate how they walk. Do they have all or most of their teeth? How do their udders look?

Cow's that are no longer able to perform and produce at the herd average should be considered potential culls. Remember, we sometimes get emotionally connected to the herd we have built and taken care of for years. It can be helpful to ask a couple of your trusted friends or neighbors to spend an afternoon with you scoring the herd.

Hopefully, this can get you to a point that available forage, supplemental feed, and/or hay can get you through the drought. However, we are not always that fortunate. If culling needs to continue, the ranch needs to evaluate their herd records at this point. On paper split out the cattle that have outperformed others and plan to keep this group. Likewise, sort out those that have performed poorly and add them to the cull list. Records that are good to use for these decisions can be pounds of calf weaned (205 day adjusted), cost of production per cow, and dollars per cow returned. If your ranch does not currently have a strong record program, body condition score (BCS) can be used instead. Cull all cows that are at a BCS 3 or lower. Then come back and cull those old cows and young cows that are at a BCS of 4.

The next step in a deep cull can be very difficult. At this point you are likely far into a productive set of cows. The standing recommendation, if you get this far into a culling situation, is to remove those cows that are 8 years old and older. Next, look at those cows younger than 4 years of age. In theory, what remain should be the most productive cows in your original herd.

Nobody wants to get this extreme in their culling of a cow herd. Ranchers spend years building a herd, increasing genetic potential, and developing a set of animals that provide the necessary cash flow for the operation. An established herd also has the advantage of cattle that know the terrain and local plant communities, allowing established cows to coach calves and new heifers. It can be devastating to disassemble that in the manner that I have laid out in the preceding paragraphs. However, in a drought emergency drastic measures may be necessary; especially when you consider the current cost of hay and supplemental feeds. Plus, today's price of cull cows is more favorable than typical cow markets have been in the past. If you are concerned that continued drought may force you to sell part of your cow herd; sit down with your records and develop a strategy for how you may face that. Utilize some of the strategies that I have laid out here. Also consider visiting with your banker and/or accountant about how selling cows would affect your financial and tax situation. Watch for state or federal declarations to be made as a result of the drought. Sometimes these can allow for limited options that can help with the financial aspects of having to sell many cows unexpectedly. (Capital gains tax deferrals, low interest replacement loans, etc.) A drought influenced herd reduction may not be a pleasant thing to face, but developing a plan can help take some of the emotion and stress out of the decisions that have to be made when a deep culling is required.

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## Assessing Cattle Injuries & Health Following Wildfires

*Michael Fisher, Golden Plains Area Livestock Specialist*

Colorado is known for our impressive and damaging wildfires, whether they occur on forested lands or on the wind-swept plains. Often, livestock are caught up in these disasters and may suffer severe burns, injuries received in an attempt to escape the flames, smoke inhalation, or even death. If you find yourself in the position of assessing cattle that have gone through a wildfire, there are steps that you should consider taking. First and foremost is take care for your safety and the safety of other people in the area. Many hazards may be found within a fire seen. (i.e. down power lines, unstable trees and structures, tin from lost structures, injured animals that are scared, hazardous materials that are no longer secured within their original containers, etc.)

The cattle need to be located and secured. Keep in mind that they have gone through a traumatic event and may have tried to escape it. It is possible that a cattle herd may have separated and traveled long distances in different directions from where they were originally located. Many may have joined neighboring herds and will have to be sorted out of those herds. Cattle that remain on the burned area should be removed, if possible, and located on unburned ground. Provide them with fresh, clean water as soon as possible. You will also want to provide a feed source that is not contaminated from the fire. Rotate the location where you feed these surviving cattle to prevent the buildup of pathogens in one location. Ensure that these cattle receive adequate water and forage to help mitigate stress and maintain their immune system.



Closely check the surviving animals for signs of whether they were exposed to flames, heat, or smoke. Consult your veterinarian early in this process to ensure the highest levels of welfare and well being for the affected animals. Serious burns may be obvious. You will also want to examine the cattle for injuries that are not immediately obvious. Some things to take notice of are:

*\*\*Nursing cows have the potential for suffering a scorched udder. In this situation, the cow likely will not allow her calf to nurse. You will need to monitor calves closely to be certain that they are receiving their necessary nutrients. A scorched udder may transition into a mastitis problem for the cow.*

*\*\*Secondary infections can set in as a result of burns received in the fire. This can happen at any injury point, but places to pay extra attention to are the udders, testicles, sheath, eyes, and feet. It may take 10 days to two weeks for these types of injuries to become obvious. Cattle with burnt feet may have their hoof walls slough off, crippling the animal.*

*\*\*Smoke inhalation can damage the lining of the nasal passages, trachea, and lungs. The resulting inflammation can lead to edema, emphysema, and pneumonia. The longer the animal is in the smoke plume, the greater the chance of respiratory problems. This type of damage may not be as noticeable immediately following the fire but become a problem at a later point, such as a hot period during the summer. It is important to note that cattle do not have to be within the fire to experience problems from smoke inhalation. They can be located miles from the fire, yet within the smoke plume for an extended period and have complications as a result.*

*\*\*Whether burned in the fire or irritated by smoke, the eyes of affected cattle need to be monitored closely. Due to their close proximity to the brain, infections of eyelids and eyeballs as a result of wildfires can be fatal to cattle.*

*\*\*It is important to remember that these animals may have tried to escape the fire and could have suffered injuries during that process. These cattle should be monitored for broken bones, cuts, and abrasions.*

Cattle that are determined to be injured beyond a reasonable treatment protocol should be alleviated from their suffering as soon as possible. In some cases the animal may still be eligible for human consumption. If this is the case, slaughter needs to be conducted immediately, prior to the onset of secondary complications. These animals need to have a veterinary meat inspector's antemortem inspection before harvest to determine that the product will meet safety and wholesomeness requirements for human consumption. Cattle that are injured beyond treatment, that will not be harvested, should be euthanized and the carcass disposed of following local, state, and federal regulations.

Surviving cattle should be closely monitored for several weeks after the wildfire. Consistent coughing, nasal drainage, lameness, cloudy eyes, poor gains or a loss of weight, and general lethargy could all be signs of secondary complications that may arise in the weeks to follow.

For more information on assessing and caring for your livestock following a wildfire, contact your local Colorado State University Extension office or consult with your veterinarian.

## AGRONOMY

### On-Farm Test Plots

Area producers have been busy this spring planting test plots on their farms. Pictured is local producer Rick Davis adding corn test plot seed to his planter. Testing the latest varieties on-farm allow producers a first-hand look at the new hybrids companies are selling. At the end of the growing season, both producers and agronomists know which hybrids work locally and which do not. Colorado State University has assisted with 25 on-farm test plots in the region.



### Replanting Options After Hail

*Ron F. Meyer, Area Extension Agent (Agronomy)*

Summer hail storms 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 government farm programs 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.

In addition, federal farm program benefits and requirements can be affected by hail storms. A weather variance can be obtained for weather-damaged fields, which releases a damaged field from compliance requirements. Documentation is the Key! District Soil Conservationists will need anything including pictures, videos, testimonials from neighbors, a farm diary, or even a newspaper clipping to apply for a weather variance for a particular event on your farm. The greater the detail the better; (4 inches of rain fell in ½ hour accompanied with hail). And report the weather incident to your local NRCS office and crop insurance agent as soon as possible.

When hail damage occurs after June 1, re-crop 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, 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.

For more information regarding replant crop options, contact Ron Meyer (719-346-5571) or (719-349-1101) at the Golden Plains Area Extension office in Burlington.

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## Saving Wheat Seed

*Ron F. Meyer, Area Extension Agent (Agronomy)*

Throughout the ages, farmers have planted seed saved from their wheat previous crop. When making seed wheat decisions, they selected the best quality seed from the highest yielding varieties.

With the advent of hybrid crops like corn, farmers discovered that they did not get the advantage of hybrid vigor when they saved their seed, the ensuing crop was not uniform, and yields were poor. It was quickly learned they needed to buy new seed each year of these hybrid crops to maximize yields. This annual purchase of hybrid seed commercialized the corn seed business and resulted in enormous investment into research and development for improved corn hybrids. Consequently, technology in corn has benefitted farmers. When it comes to hybrid corn, it just didn't make sense to save your corn seed any more.

With the passage of the US Plant Variety

Protection Act in 1970, congress encouraged private investment into development of new plant varieties. An important component of this act was the farmer's right to save seed. Section 113 of the act states, "It shall not infringe any right hereunder for a person to save seed produced by the person from seed obtained, or descended from seed obtained, by authority of the owner of the variety for seeding purposes and use such saved seed in the production of a crop for use on the farm of the person ..." Simply stated, if a farmer purchases Certified wheat seed they may keep seed grown from that seed for planting on his farm. However, if a farmer buys non-certified wheat seed of a PVPA protected variety from someone else, it is likely that not only is the purchase of that seed in violation of the Act, but saving seed of subsequent production is also a violation.

The most recent restrictions to saving seed are those imposed by patented traits and sales

contracts. In most cases, farmers are prohibited by patent laws from saving seed of varieties with patented traits like Roundup® resistance in soybean and Clearfield ® in wheat. This is usually reinforced through a contract that is signed at the point of purchase. Even if traits are not patented, saving seed may be prohibited as part of the sales contract.

The consequences of planting illegal seed can be substantial. The owner of the variety could go as far as filing a lawsuit asking for the destruction of the crop. There could also be monetary awards and attorney fees. If state or federal officials get involved, fines could range from \$50-\$500 per occurrence.

Ignorance of the law is no excuse. As a best management practice, farmers should know what variety they are planting. If they can't show that they purchased Certified seed, they

will need to investigate further before they save any production for planting. If they did purchase Certified seed, they should read the label and sales contracts to see if there are any restrictions on saving seed.

With the recent private investment and inclusion of proprietary genetic traits into wheat variety development, it is going to be less likely a farmer will be able to save and replant his own seed in the future. On the bright side, the value that seed Certification brings to seed wheat performance and convenience along with the improvements in yield and quality offered by new varieties may make saving your own seed an economically unattractive choice.

*Source: Daryl Strouts, president, Kansas Wheat Alliance – December 2010 Wheat Farmer Newsletter*

## WATER MANAGEMENT

### How Dry Is It?

*Joel P. Schneekloth, Regional Water Resource Specialist*

At the beginning of May, many areas were near normal on precipitation for the year but conditions of crops and lawns appeared dry. Some regions were very dry precipitation wise such as areas closer to the Front Range.

Drought is not just the lack of or reduced precipitation but the deficit of a combination of precipitation and the amount of water use (ET, evapotranspiration) of plants. ET is the combination of evaporation (water loss from soil and other surfaces) and transpiration (water moving through the plant). Evapotranspiration is calculated by a combination of temperature, humidity, solar radiation, and wind speed. Most times this is a potential rather than an actual since under dryland conditions water is limited and many times the soil surface is not wet. Conditions such as this year have been warmer than average with lower humidity in many locations and thus, ET has been greater

than average. Combine this with the lower precipitation that many locations have had, conditions appear drier than if we had average ET rates.

Rather than looking at precipitation as the indicator of drought, comparing the difference between ET and precipitation is a better indicator of the moisture deficit. Typically, eastern Colorado is at a deficit when comparing the difference between precipitation and ET, however, the greater the difference between these two shows the greater amount of water needs that are not met by precipitation and the moisture stressed plants would be. Indicators such as the National Drought Monitor (<http://droughtmonitor.unl.edu/>), typically utilize precipitation as their major indicator of drought as well as some other lesser indicators.

However, those do not always tell the entire story.

Using the Colorado Climate Center weather station network ([www.coagmet.com](http://www.coagmet.com)), four locations scattered around Northeast Colorado were utilized to document the ET and precipitation for 120 days prior to June 5; Yuma, Kirk, Holyoke and Fort Collins. The greatest difference between precipitation and ET has occurred in 2012, 2006 and 2002 with 2012 having the greatest difference on average. In many locations, 2002 is still considered the greatest drought but 2012 is shaping up to be even drier due to the increased ET demand even though precipitation is greater in 2012 than 2002. When comparing each of these years, 2002 and 2006 were drier years for precipitation but the ET demand was not as great as compared to 2012. According to the Colorado Climate Center, ET rates at most locations in Colorado are near or above historic high levels.

If current conditions continue or worsen, many producers will have to begin to make decisions such as culling of livestock or abandonment of irrigated acres with smaller capacity wells. Sometimes those decisions are made better earlier than later.

Average reference evapotranspiration (ET) and precipitation (Precip) for Holyoke, Kirk, Yuma and Fort Collins, CO for 2002 to 2012.

Year	Ref ET	Precip	Precip-Ref ET
2012	24.35	3.25	-21.10
2011	19.98	7.03	-12.95
2010	19.33	3.93	-15.40
2009	18.93	6.84	-12.09
2008	20.09	4.60	-15.49
2007	19.39	3.98	-15.41
2006	22.48	2.07	-20.41
2005	18.94	4.92	-14.02
2004	20.47	3.42	-17.05
2003	19.09	6.74	-12.35
2002	20.45	2.21	-18.24
Average	20.32	4.45	-15.86

## ENTOMOLOGY

### It Is Time To Scout For Sunflower Stem Weevils

Assefa Gebre-Amlak, Pest Management Specialist

Last week our pest alert newsletter covered a number of insect and mite problems including banks grass mites, European corn borer, grasshoppers, thrips and western corn rootworms and details on plant damage, economic thresholds and management options for each of the pests. Continue monitoring for these pests in your area.

In addition, it is time to scout your sunflower fields for sunflower stem weevil which infests sunflower plants 8-14 leaf stage.

According to degree day (DD) prediction models, more than 75% sunflower adult weevils have emerged from old stalks this week in

northeastern Colorado.

To determine the proportion of predicted adult weevils emerged from stalks in your locations using heat units, check summary of degree day prediction models for sunflower stem weevil development and emergence at [www.nocopestalert.org](http://www.nocopestalert.org).

Degree days for your specific location can be calculated starting from 1<sup>st</sup> of January by taking average of daily maximum and minimum temperatures and subtracting 41 Degree F. (threshold for this species) and summing that up.

Colorado State University pest management

studies show that sunflower fields planted before June first are much more likely to be infested. Special attention should be given to sunflowers 8 -14 leaf stage which seems to be more attractive for adult weevils to lay eggs.

Adult stem weevils are gray-brown in color with white spots on their upper body and are only one eighth of an inch long. Adult feeding injury is considered insignificant. However, since the pathogen *Phoma macdonaldii* Boerma has been isolated from adults they are highly suspected of vectoring *Phoma* black stem disease in sunflower fields.

Stem weevil larvae can cause serious stalk breakage. Considerably weakening of the stem can occur when larval infestations reach 25 or more per stalk. Breakage is most likely to occur when plants are under drought stress and/or during periods of high wind. Breakage due to stem weevil typically occurs at or slightly above the soil line.

When scouting, sample sites should be 75 to 100 feet from the edge of the field. Use an X-pattern and examine five plants per sampling site for a total of 25 plants at the eight to 14 leaf stage (developmental stages V-8 to R-1) in late June to early July. Determine the average number of adult weevils per plant. Keep in mind that the adults are difficult to see, and they have the habit of dropping to the ground and playing dead when disturbed. Insecticide applications are made to prevent the adults from depositing their eggs in the stalk. A treatment is probably justified when one or more adults are found per three plants from stage V-8 through R-1.

*For more pest management information including effective products on each pest problems check the High Plains IPM Guide (<http://highplainsipm.org>) and [www.Nocopestalert.org](http://www.Nocopestalert.org) or contact your county Extension office.*

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## Does 2012 Have More Pest Problems in Colorado?

*Assefa Gebre-Amlak, Regional Extension Specialist*

We are seeing more and early infestations of some pests including banks grass mites, European corn borer, grasshoppers, thrips and western corn rootworms.

**European corn borer:** European corn borer moths continue to fly in some pheromone trap locations in northeastern Colorado. To determine infestation levels, check 50 plants in 4-5 locations in the field. Be sure to move into the field at least 100 feet from the border to sample. To determine the number of live larvae, pull the whorl from each symptomatic plant, and carefully unwrap the leaves.

Chemical control of first generation is justified when 25% of the plants have feeding damage and live larvae. Control measures must be taken before the larvae bore into the stalk. A more

complex formula which incorporates the number of borers per plant, control cost, expected percent control, and the value of the crop is available in the High Plains Pest Management Guide or can be obtained from the cooperative extension service.

Timely and accurate scouting is the key to managing European corn borer in standard (non-Bt) corn hybrids. Remember that conditions are localized and each field should be scouted to make accurate decisions of its management.

**Grasshoppers:** We are seeing hatching of grasshoppers in the Front Range areas as well as northeastern Colorado.

Landowners in high risk areas should start monitoring grasshopper populations in

rangeland soon after grasshoppers hatch, primarily until end of June. Early scouting is important because treatments are most effective when grasshoppers are small. The goal of scouting is to get an estimate of grasshoppers per square yard, as well as their stage of development.

The simple economic threshold for grasshoppers in rangeland is 15-20 grasshopper nymphs per square yard. This number is equivalent eight to ten adult grasshoppers per square yard.

Treatment options for grasshopper management are based on the Reduced Agent and Area Treatment (RAAT) strategy, which results in untreated swaths and swaths treated with reduced chemical rates. Using lower rates and leaving untreated areas reduces treatment costs by as much as 50% and preserves biological control. Grasshoppers move constantly, insuring that they will enter a treated swath and that levels of control will be similar to complete coverage applications.

**Western corn rootworm:** We have reports that western corn rootworm larvae have hatched in many fields of northeastern Colorado. The larvae feed on the underground root systems of corn plants. Early scouting of corn fields for this insect is advised in your area. Peak feeding usually occurs from late June to mid July. Lodging (goose necking) of corn plants due to larval root feeding is a typical symptom of damage. Early planted fields will have relatively larger root systems when rootworm feeding starts and this makes them somewhat more tolerant to rootworm damage.

Damage from corn rootworm larvae is most likely in continuous corn. Chemical applications to first year corn are not recommended.

**Thrips:** Onion thrips are currently reported from various crops including alfalfa, onions, dry beans and corn in Colorado. Large populations are often associated with hot, dry conditions.

Onion thrips and western flower thrips are known to damage alfalfa regionally. Reliable scouting methods have not been developed for thrips in alfalfa. A combination of sweep net sampling and visual inspections for leaf damage is a good way to determine the presence of thrips in an alfalfa crop.

Research based economic thresholds are not available. If a thrips treatment is contemplated, it is best to cut as soon as possible and treat the regrowth if the infestation persists. Thrips are very difficult to control in alfalfa, excellent coverage is important and two applications may be required for satisfactory results.

In dry beans, onion thrips feed by puncturing the bean leaf and sucking up the plant juices that 'bleed' from the plant. A yellow spotting of the leaves will occur at the feeding sites. Extensive thrips feeding results in leaf cupping and distortion that is made more severe by plant stress (low moisture and high temperature). Non-stressed crops often outgrow the damage with little loss in yield. Western flower thrips feed in developing flowers and can cause flower and pod abortion. Pod abortion is worsened by increased plant stress. Both of these thrips can transmit tobacco streak virus (Red Node).

In onions, onion thrips populations can be best determined by counting all the thrips on the plants. The great majority of the thrips are present at the base of the youngest pair of leaves. Thrips nymphs are pale yellow and the winged adults vary from light brown to dark brown.

Knowledge of the relative susceptibility of a variety can be used to modify action thresholds. Since higher numbers of thrips are needed on tolerant varieties to benefit from insecticide treatment the action thresholds will be raised. As an interim recommendation an action threshold of 30 or more thrips/plant or higher is suggested for more thrips tolerant varieties. Action thresholds for varieties that are susceptible would be lower, perhaps in the

range of 15-30 thrips.

**Banks Grass mites:** Early infestations of banks grass mite in corn have been observed in south and northeastern Colorado. Banks grass mites (BGM) are minute, greenish colored arthropods with eight legs and a rounded body. Webbing on leaves and discoloration are often the first signs of an infestation. Initially, BGM are most abundant on the lower third of the plant and density declines as the infestation moves up in the plant. Mites damage corn and small grains by piercing plant cells with their mouthparts and sucking the plant juices.

Banks grass mite builds up on the plant from the bottom up. Treat when there is visible damage in the lower third of the plant and small colonies are present in the middle third of the plant before hard dough stage.

*For more pest management information including effective products on each pest problems check the High Plains IPM Guide (<http://highplainsipm.org>) and [www.NoCopestaalert.org](http://www.NoCopestaalert.org) or contact your county Extension office.*

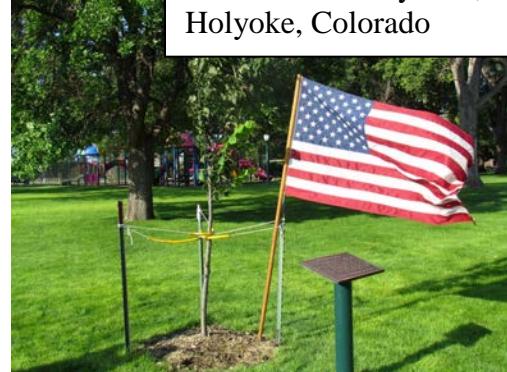
## HORTICULTURE

### Elm Fungicide

*Linda Langelo, Horticulture Program Associate*

For all those with American Elms, you know that in 1983 DuPont Company appointed Elm Research Institute the sole distributor of Elm Fungicide. This fungicide is said to be 95% effective when used as an annual treatment. This chemical is the same as Lignasan BLP or methyl 2-benzimidazolecarbamate phosphate. The Elm Research Institute states that the phosphate portion of this chemical is a source of nutrient for the elms. They also state that this chemical is non-toxic.

Since 1975, there are over 100,000 American Elms doing well in this country because of annual treatments with Elm Fungicide. If you recently purchased an American Liberty Elm, the Elm Research Institute recommends that you treat the tree annually. It already is highly resistant to Dutch Elm Disease. The Institute states this will further insure the tree against infection. They recommend doing so when the tree reaches a 5 to 6 inch diameter at a one foot distance above ground. The best time to apply the fungicide is immediately after it leafs out each Spring.



American Liberty Elm,  
Holyoke, Colorado

### Cottonwood Shoot Blight

*Linda Langelo, Horticulture Program Associate*

If you see new shoots which are blackened and curled to resemble a shepard's crook, these are the signs of shoot blight of cottonwoods, aspens and poplars. The new leaves will develop irregular brown to black areas before they curl. After the leaves are affected, then the fungus spreads down the new shoot causing cankers to create the shepard's crook. The death of these new shoots causes distorted new growth. Continued annual infections will continue to distort the growth and create a shrubby growth.

The spores of this fungus overwinters in fallen leaves. Sometimes the spores can be blown in or

during extended wet periods secondary infections can reach other parts of the tree because the rain. High humidity is a favorable condition for this to take hold in limbs below 6 to 8 feet from ground level.

**Control:**

The best control is to rake leaves in the fall away from the cottonwood, aspen or poplar. The uninfected growth becomes more resistant to the disease as the season progresses. Prune infected shoots in dry, warm weather. Apply sulfur in wet weather and with temperature < 60 degrees F.



## Squash Bugs Are Here Again

*Linda Langelo, Horticulture Program Associate*



It does not seem to matter whether the temperatures are 95 degrees Fahrenheit or 115 degrees Fahrenheit since these pests hide under the base of the plant where it is shaded and cool. Squash bugs do make their appearance as the warm temperatures of summer begin.

The adults are grayish in color. The top picture is an adult squash bug measuring 11/16 of an inch. The picture of the underside of the leaf is showing squash bug nymphs which are pale green. Both suck sap from the stems and leaves. This feeding leaves injuries which kill and

collapse the tissues. At first, this feeding causes a yellowing on the foliage which later turns brown. Then the wilts and dies.

These squash bugs are a member of the leaffooted bug family or Coreidae. The members are moderate to large sized with a prominent head possessing piercing-sucking mouthparts. Most of the members have a pronounced flattening of the hind legs. With the exception of the squash bug, most members of this family feed on seeds primarily. Squash bugs feed on curcurbit crops.

How do you control these pests? Any pyrethroid insecticide should help control them. If you do not have pets, then you can place Diatomaceous earth at the base of the plant. Remove any debris that is under the plants.

# Burlington Community Garden

Linda Langelo, Horticulture Program Associate



Come and visit. Raised beds are a great way to start early and continue late into the season

Buckets and used tires can also be raised beds. A great way to recycle



Here is a way to really conserve water



Join us. Contact Linda Langelo at (970)854-3616 at Phillips County Extension.

# AG MARKET PRICES

*John Deering, Agriculture and Business Management  
Dennis Kaan, Agriculture and Business Management*

<b>LIVESTOCK CASH PRICES</b>			<b>Week Ending 6/1/12</b>		
			<b>Current<sup>1</sup></b>	<b>One Month Ago<sup>2</sup></b>	<b>One Year Ago<sup>2</sup></b>
<b><u>Colorado Auction Feeder Cattle</u>, Medium &amp; Large Frame #1</b>					
Steers,	500-550 lbs	/cwt	None Reported	\$190.00 - 202.00	None Reported
Steers,	650-700 lbs	/cwt	None Reported	\$148.00 - 165.00	None Reported
Heifers,	500-550 lbs	/cwt	None Reported	\$165.00 - 171.00	None Reported
Heifers,	600-650 lbs	/cwt	None Reported	\$147.00 - 165.00	None Reported
<b><u>Colorado Weekly Weighted Average Direct Slaughter Cattle</u>, FOB the Feedyard After 3-4% Shrink</b>					
<u>Live Basis Steer Sales</u>	Hd Count	Wt Range	/cwt	/cwt	/cwt
Over 80% Choice				\$121.00	\$110.00 - 112.00
65-80% Choice	358	1,275-1,355	\$122.00	\$120.00 - 121.00	\$107.00 - 112.00
35-65% Choice	1,694	1,200-1,350	\$121.00 - 122.00	\$120.00 - 121.00	\$108.00 - 112.00
1-35% Choice					
<u>Live Basis Heifer Sales</u>	Hd Count	Wt Range	/cwt		
Over 80% Choice	40	1,275	122.00	\$121.00	\$110.00 - 112.00
65-80% Choice	898	1,133-1,233	\$121.00 - 122.50	\$120.00 - 121.00	\$108.00 - 112.00
35-65% Choice	2,510	1,050-1,275	\$121.00 - 122.00	\$120.00 - 121.00	\$112.00
1-35% Choice				\$121.00	
<b><u>Western Weekly Lamb Report</u>, Formula Contract Purchases, Sales FOB with 4% Shrink,</b>					
	Hd Count	Wt Range	/cwt	/cwt	/cwt
Domestic	N/A	75-85	None Reported	None Reported	None Reported
Imported					
<b><u>Hogs, As of 6/4/12</u></b>					
Base Market Hog, 185 lb. Carcass Basis, Plant Delivered					
0.9-1.1" Back-Fat, 6.0/2.0 Loin Area/Depth	/cwt	\$77.00 - 87.99	\$70.00 - 79.97	\$91.00 - 100.00	
Iowa – Southern Minnesota Daily Negotiated Purchases	185 lb Carcass Basis				
1.0" Back-Fat, 6.0/2.0 Loin Area/Depth	/cwt	None Reported	None Reported	\$91.00 - 100.00	
Western Cornbelt Daily Negotiated Purchases	185 lb Carcass Basis				
1.0" Back-Fat, 6.0/2.0 Loin Area/Depth	/cwt	None Reported	\$70.00 - 78.00	\$91.00 - 100.00	
<b>LIVESTOCK FUTURES PRICES</b>					
<b><u>Live Cattle – CME</u></b>			<b>Current<sup>1</sup></b>	<b>One Month Ago<sup>2</sup></b>	<b>One Year Ago<sup>2</sup></b>
Jun	/cwt	\$117.68	\$112.60	\$112.38	
Aug	/cwt	\$120.23	\$115.50	\$112.55	
Oct	/cwt	\$124.63	\$121.13	\$118.60	
Dec	/cwt	\$127.65	\$124.40	\$121.83	
<b><u>Feeder Cattle – CME</u></b>					
Aug	/cwt	\$158.48	\$154.08	\$136.10	
Sep	/cwt	\$159.68	\$155.33	\$137.00	
Oct	/cwt	\$160.70	\$156.55	\$137.25	
Nov	/cwt	\$161.85	\$157.63	\$137.93	

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

<sup>2</sup> 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

<http://www.ams.usda.gov>

Chicago Board of Trade

<http://www.cbot.com/cbot/pub/page>

Kansas City Board of Trade

[http://www.kcbt.com/futures\\_quotes.asp](http://www.kcbt.com/futures_quotes.asp)

Chicago Mercantile Exchange

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

<b>CASH GRAIN PRICES</b>		<b>6/4/12</b>		
		<b>Current<sup>1</sup></b>	<b>One Month Ago<sup>2</sup></b>	<b>One Year Ago<sup>2</sup></b>
<b>#1 HRW Wheat</b>				
Fleming, Haxtun, Julesburg, Holyoke, Paoli, Amherst	/bu	\$5.69 - 5.75	\$5.38 - 5.41	\$6.86 - 7.93
Yuma, Wray, Brush, Akron, Otis, Anton	/bu	\$5.69 - 5.83	\$5.36 - 5.44	\$6.75 - 7.00
Burlington, Seibert, Flagler, Arriba, Genoa, Hugo	/bu	\$5.75 - 5.91	\$5.41 - 5.52	\$6.76 - 7.11
<b>#2 Yellow Corn</b>				
Haxtun, Julesburg, Fleming, Holyoke, Paoli, Amherst	/bu	\$5.70 - 5.88	\$5.94 - 6.01	\$6.86 - 7.00
Yuma, Wray, Brush, Otis, Anton	/bu	\$5.70 - 5.88	\$5.93 - 6.22	\$6.71 - 7.10
Seibert, Arriba, Burlington, Flagler, Bethune, Stratton	/bu	\$5.35 - 5.78	\$5.79 - 5.92	\$6.60 - 6.71
<b>Northeast Colorado, Western Nebraska Beans</b>				
Pinto Beans	/cwt	\$50.00	\$50.00	\$30.00
Great Northern Beans	/cwt	\$42.00	\$42.00	\$35.00
Light Red Kidney Beans	/cwt	\$55.00 - 57.00	\$55.00 - 57.00	\$38.00
<b>White Millet</b>				
E Colorado / SW Nebraska	/cwt	\$12.00 - 14.50 Mostly \$14.00 - 14.50	\$11.50 - 12.50	\$10.75 - 12.00
<b>Sunflowers</b>				
E Colorado / SW Nebraska	/cwt	\$25.00 - 26.25	\$25.00 - 26.25	\$27.50 - 32.00
<b>GRAIN FUTURES PRICES</b>		<b>6/4/12</b>		
		<b>Current<sup>1</sup></b>	<b>One Month Ago<sup>2</sup></b>	<b>One Year Ago<sup>2</sup></b>
<b>Wheat, Kansas City Board of Trade</b>				
Jul	/bu	\$6.55	\$6.31	\$8.09
Sep	/bu	\$6.71	\$6.46	\$8.20
Dec	/bu	\$6.95	\$6.70	\$8.43
Mar	/bu	\$7.10	\$6.86	\$8.58
<b>Corn, Chicago Board of Trade</b>				
Jul	/bu	\$5.68	\$6.12	\$7.00
Sep	/bu	\$5.27	\$5.39	\$6.88
Dec	/bu	\$5.24	\$5.31	\$6.60
Mar	/bu	\$5.35	\$5.43	\$6.73
<b>CASH HAY PRICES</b>		<b>Week Ending 5/31/12</b>		
		<b>Current<sup>1</sup></b>	<b>One Month Ago<sup>2</sup></b>	<b>One Year Ago<sup>2</sup></b>
<b>Colorado Hay Report, Northeastern Areas</b>				
Large Square Bales, FOB Stack				
Supreme Alfalfa, 180+ RFV (On Contract)	/ton		\$255.00 - 270.00	\$190.00 - 210.00
Premium Alfalfa, 150-180 RFV	/ton	\$220.00 - 250.00	\$240.00 - 250.00	\$180.00 - 190.00
Good Alfalfa, 125-150 RFV	/ton	\$200.00 - 220.00	\$220.00 - 240.00	\$150.00 - 165.00
Fair Alfalfa	/ton		\$180.00 - 220.00	\$140.00 - 150.00
Utility Alfalfa	/ton		\$185.00 - 200.00	\$130.00 - 140.00
Premium Grass (Small Squares)	/ton		\$280.00 - 350.00	\$215.00 - 240.00
Premium Grass (Small Squares)	/bale		\$8.00 - 10.00	\$6.50 - 7.25
Sorghum (Large Squares)	/ton		\$100.00 - 130.00	
Millet (Large Squares)	/ton		\$120.00 - 135.00	
Corn Stalks (Large Squares)	/ton		\$70.00 - 80.00	

## **GOLDEN PLAINS AREA AGRICULTURAL NEWSLETTER**

July 11, 2012 Webinar

Recent Colorado Emergency Designations

Consider What to Cull Ahead of Time

Assessing Cattle Injuries & Health Following Wildfires

On-Farm Test Plots

Replanting Options After Hail

Saving Wheat Seed

How Dry Is It?

It Is Time To Scout For Sunflower Stem Weevils

Does 2012 Have More Pest Problems in Colorado?

Elm Fungicide

Cottonwood Shoot Blight

Squash Bugs Are Here Again

Burlington Community Garden

AG Market Prices

