Boulder County Small Acreage Management Newsletter

Fall 2009

In this edition:

http://www.extension.colostate.edu/boulder/AG/smallacreage.shtml

From the SAM Coordinator

With the rains and cool weather this year, the grass and the weeds have both done well. If you haven't been able to do much weed control this year, start planning now for 2010 weed control. Our winter annuals will soon be germinating. The first year biennial rosettes are out there and easy to undercut at this time. If you need help identifying your weeds and the best controls for them, please bring in a sample and the SAM volunteers will be happy to identify your weed.

The Weed ID and Management Workshops were well attended this year. If you were unable to attend a workshop this year, we will be offering them again next year. Watch for their announcement in this newsletter, on the Small Acreage website and brochures.

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We will once again be offering our Small Acreage Management Volunteer (SAM) training. This year the training will be held on Mondays in March. Please stop by the Extension office for a brochure, download one from the website, apply online or one can be mailed to you by calling 303-678-6238.

Sharon Bokan
Small Acreage Coordinator

SAM Newsletters Online

View previous newsletters via the SAM link above.

SAM Email Listserv

If you are receiving this newsletter for the first time and are not subscribed to the boco_small_acreage@colostate.edu listserv, you may request subscription on the SAM website (linked in header above). This quarterly e-newsletter and other timely info will be distributed via this email listserv. Subscribers may use the listserv also as a SAM info gathering mechanism. For example, you may inquire about who is available in the area supply hay, to perform swathing/baling, etc. The listserv is not a marketplace, however. Because it is hosted on the CSU server, NO COMMERCIAL EMAILS ARE ALLOWED. DO NOT ATTEMPT TO SELL ANYTHING VIA THE LISTSERV – THANKS. Use the newsletter ad section for these purposes.

Currently, there are 190 subscribers to the listserv (up from 171 last quarter).

Leafy Spurge *Euphorbia esula L.*

A Colorado Noxious Weed
By Jennifer Cook, Regional Small Acreage Coordinator

Leafy spurge is a non-native creeping perennial, which reproduces by seed and extensive wide-spreading roots. It is one of the earliest plants to emerge in the spring. Leafy spurge can be identified by its small yellow-green flowers, which are enclosed by a pair of yellowish-green, heart-shaped bracts. The bracts have the appearance of flowers.

Shoots can grow 1 to 3 feet high. Leaves are alternate, narrow, linear with smooth margins, about ¼ inch wide, and 1 to 4 inches long. The roots can extend as deep as 30 feet!

Another key identifying characteristic is the entire plant, including the roots, has milky white latex. Be aware, the sap is damaging to eyes and to sensitive skin. Although horses and cattle will not generally eat leafy spurge as forage, if eaten the weed can increase photosensitivity to light or cause colic and burns.

One large leafy spurge plant can produce up to 130,000 seeds, which are projected up to 15 feet from the parent plant. Leafy spurge is extremely difficult to control because of its extensive root system. It is adapted to a wide variety of habitats and is very competitive with other plant species. If it becomes established in rangeland, pasture, and riparian sites, it may exclude all other vegetation due to its competitive nature.

Your best bet for controlling leafy spurge is to develop a management plan using a combination of control methods. For example graze the infestation in the spring, release insects in the summer, and use herbicides in the fall.

Mechanical methods include grazing and mowing. Graze sheep and goats in spring, but prevent overgrazing, as bare ground is prime habitat for leafy spurge. If leafy spurge has set seed, quarantine animals in a corral for 7 days after grazing before releasing them into a non-infested pasture. Mow to reduce seed production, every 2 to 4 weeks during the growing season.

Flea beetles can be released for biological control of leafy spurge. The flea beetles *Apthona nigriscutis, A. lacertosa, and A. cyparissiae* are especially effective when combined with grazing and/or herbicides. Flea beetles feed on the leaves in the summer and the insect larvae feed on leafy spurge roots underground. Visit Weedbusters Biocontrol to order beetles http://www.weedbustersbiocontrol.com/

The following are recommendations for herbicides: Tordon, Plateau, dicambia, and 2-4-D. For rates and application timing refer to the CSU Extension Leafy Spurge Factsheet or call your local weed district. Always read the label instructions before spraying.

For more information, refer to:
CSU Extension Leafy Spurge Factsheet at http://www.ext.colostate.edu/pubs/natres/03107.html

Colorado Department of Agriculture Leafy Spurge Fact Sheet at http://www.colorado.gov/cs/Satellite?c=Page&cid=1178305507391&pagename=Agriculture-Main%2FCDAGLayout

Other biological controls available through Colorado Department of Agriculture (CDA) "Request a Bug" website

If you are interested in other biological controls, please visit the CDA's Request a Bug website at http://www.colorado.gov/cs/Satellite?c=Page&cid=1167928215164&pagename=Agriculture-Main%2FCDAGLayout . In Boulder County, we have distributed, usually in July, bindweed mites for the CDA. The bindweed mites are quite successful in controlling bindweed but they do take 5-7 years to establish a sufficient population. This year their effectiveness was limited due to all the rain as they like stressed bindweed. If you are interested in the mites, please order them through the CDA and not the Extension office. The other insects are sent from the Insectary directly to the person ordering them and Extension is not involved.

Colorado Department of Agriculture

By Sharon Bokan, Small Acreage Coordinator

Whether you are producing forage, livestock, or eggs or have a couple of horses or no animals at all and just the vegetation on your small acreage, the Colorado Department of Agriculture (CDA) can be a good information resource for anything to do with agriculture. Agriculture is still a large industry in the state contributing $16 billion to the economy along with food production or processing jobs.

The mission of the Colorado Department of Agriculture is to strengthen and advance Colorado's agriculture industry: ensure a safe, high quality, and sustainable food supply: and protect consumers, the environment, and natural resources.

The Colorado Department of Agriculture is made up of 8 divisions.

- Animal Industry Division deals with animal welfare, rodent and predator control, pet welfare
- Brands Division handles livestock ownership, brand issuing and inspections
- Colorado State Fair
- Commissioner's Office oversees all the CDA operations
- Conservation Services Division works with the conservation districts preserving Colorado's lands and waters
- Inspection & Consumer Services Division inspects animal feed, fertilizer, egg producers and meat packing facilities, weights and measures for agricultural commodities, even door to door food sales
- Markets Divisions help producers market and promote their crops, the "Colorado Proud" campaign is part of this division
- Plant Industry Division provides inspections for organic certification, nursery inspections, seed inspections, and pesticide applicator licenses and inspections

Whether you are a consumer or a producer, the CDA's website is a wealth of information. If you are a producer, you can find information on:

- Best management practices to protect the ground water
- Livestock diseases
- Laws and regulations
- Frequently asked questions
- Calendar of Ag related events
- Laboratory services
- Online forms
- Agritourism help

As a consumer, the information goes from:

- The yearly hay directory
- Weed information
- Animal diseases
- Biosecurity
- Pet and animal welfare
- Where to find Colorado grown products
- Biocontrol insects available from the Insectary
- Information about Colorado Agriculture for children
- The State Fair
- Lists of farmer's markets, corn mazes, pumpkin patches, etc.

- Recipes using Colorado grown produce, meat and dairy
- "Colorado Proud" restaurant guide

You can subscribe to "Inside Ag" newsletter for monthly information on what's going on in Colorado Agriculture. The newsletter contains disease and insect information, upcoming events, changes in laws and regulations and of course the monthly recipe. For example, you can read about the changes to the Colorado Egg Law in the July 2009 edition, which can affect those selling eggs at farmer's markets.

If you are a photographer, you can enter their photo contest to capture Colorado Agriculture at its best.

So whether you are looking for information on getting rid of you noxious weed, listing your hay in the Hay Directory, are seeking information on the latest livestock disease or just needing a new recipe for the tomatoes out of your garden, check out the CDA website.
http://www.colorado.gov/ag

Manure Happens - Methods for Managing Horse Manure

By Chris Masters, SAM Volunteer

Anyone who spends time around horses has first hand knowledge about the need for manure management. A single horse, averaging 1000 pounds, will produce about 50 pounds of manure a day. To save you from doing the math, that's 9 tons of manure a year…..PER HORSE. You can imagine how that piles up at stables and riding facilities where there are many horses.

Why worry about it? Bacteria grow well in a combination of manure and urine and are destructive to hooves. Parasites live where manure exists, so removing manure breaks the cycle of horses ingesting the eggs of parasites from manure-contaminated ground. Fresh manure is also a breeding ground for flies.

For horse owners who have the necessary acres of pasture, horses can graze full time. This means the manure doesn't have to be collected and can simply be spread with a harrow and left to decompose. This is best done in the spring, just prior to new growth. Harrowing will break up manure piles and also loosen old grasses and leaf debris.

For horse owners and stables that are "land poor" and don't have the needed pasture to graze all horses all the time, horses are usually kept in stalls or runs, making some type of manure management mandatory. In addition, manure in these settings is usually accompanied by the necessary bedding used in stalls. Three to six cubic feet of bedding per week can be added to the amount of manure you're collecting. Daily collection of manure and soiled bedding is important, for the health of the animals and reduction of flies and other pests.

There are some options available for manure management and varying degrees of effort and cost associated with each.

<u>Stockpiling</u>
If you are planning to use the manure on the land, you may wish to stockpile it until you have enough for an application. Or you may stockpile it while you wait for someone to pick it up, such as a business specializing in compost (landscapers, gardeners). Manure piles should be placed at least 150 feet away from surface water, such as creeks, irrigation ditches, wells, and ponds. Encircle the pile with a berm or a ditch to control water runoff. Whether the runoff is from the pile, after a rain, or toward the pile, during flood irrigation or creek flooding, it's important to not contaminate the water. It's recommended that you have a buffer area of grass between any close body of water and the stockpile itself, to further help prevent water contamination. In addition, if rainfall is heavy or frequent, it's wise to cover the pile

with a tarp, to prevent runoff from rainwater.

Composting

Composting is the process of turning the organic component of solid manure into a decomposed state, using controlled conditions. The decomposed state can be stored, used or spread on the land without negatively impacting the environment. There are many methods of composting, each requiring time and money. How much depends on the type of composting you choose. The end result of composting is a product that is 40 to 65% lighter in weight and smaller in volume than the stockpile you start with. You need microbes to drive the composting process and the right mix of oxygen, temperature and moisture for the microbes to do their work. You may also need to add sources of nitrogen to ensure the right balance with the carbon, to facilitate the composting process.

What do you do with manure after it's composted? It can be used to increase the amount of organic materials in the soil of gardens or sandy agricultural soils. This will increase the soil's ability to hold water and nutrients. It can also be used as potting soil and plant nurseries may be interested in obtaining it from you.

If you are interested in composting, there's a lot to learn about the different methods, to determine which is right for you. Vermicomposting uses worms. Windrowing is another method and can be further defined by either dynamic or static methods of windrowing. Check with your local Extension Office to get specific information.

Daily Land Application

The most direct management, if you are able, might be to remove the manure from the animals' area and spread it while fresh on the cropland. You can apply the manure directly or apply the composted material. You'll want to apply the manure uniformly and track how much was applied and when. You might want to analyze the manure or compost periodically and use that information in calculating future land fertilization needs. In particular, manure tends to have high levels of salts.

When spreading manure on the land, avoid doing it when the land is frozen or saturated with moisture. As well, don't spread manure on land that has erosion problems, as the manure will erode with the soil. Don't spread manure within 150 feet of bodies of water, to avoid contamination. Spread it thinly and harrow it to promote rapid drying. It's ideal to spread fresh manure on land other than that which horses will graze on in the same year the manure is spread. The best time to spread manure on row crops is during tilling in the spring, before planting.

For information on how to calculate manure applications and calibrate a spreader, contact your local Extension Office.

If you don't have the capability to manage the manure yourself, try and find someone who can use it, whether you give it away or sell it. Horse manure is a resource worth using. Manage it wisely and reap the benefits.

For more information and links to some Factsheets below visit:
http://www.extension.colostate.edu/boulder/AG/smallacreagemanuremanagement.shtml

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Field crops, fruit, vegetables, herbs and novelties Fair Superintendent needed

If you enjoy the Boulder County Fair and Rodeo and would like to be a part of it, consider becoming the Superintendent of the Field crops, fruit, vegetables, herbs and novelties. For full details of what is involved in this volunteer position, please contact the Boulder County Fair at this website.
http://www.bouldercountyfair.org/Contact.htm

90 day Weather Outlook

According to NOAA (National Oceanic and Atmospheric Administration), Colorado is predicted to have normal temperatures for the next 90 days. Most of Colorado will have average moisture with the exception of the west/southwest part of the state. That part of the state will have above normal precipitation.

2010 Events

The National Western Stock Show and Rodeo will be Jan. 9th to the 24th, 2010. The Show is a great place to connect with people raising unique livestock such as yaks, bison, llamas, etc. It is also a great educational opportunity for children to learn where their food comes from and who is raising food.
http://www.nationalwestern.com/nwss/home/home.php

The week after the Stock Show, is the Colorado Farm Show that runs from Jan. 26- Jan. 28, 2010. The Farm Show showcases farm equipment suppliers, seed dealers and others that support the area's farmers and ranchers. They also have speakers on timely issues for the Ag community.
http://www.coloradofarmshow.com/controller/home?_load=default

February 25-27, 2010 is the Colorado Agriculture Big and Small conference. This year it will be held in Adams County (a change from Greeley). The first two days will be production agriculture both organic and conventional with the last day concentrated on small acreages.
http://coloradoagriculturebigandsmall.com/