



Boulder County Small Acreage Management Newsletter

Fall 2015

<http://www.extension.colostate.edu/boulder/acrage.shtml>

In this Issue:

Weather outlook – p. 2
Coming events and workshops – p. 2
Boulder County Small Acreage Program – p. 2
Over Grazing and its Effect on Plant Health – p. 3
Winter Small Acreage Activities – p. 4

From the SAM Coordinator

We are still waiting for the final hard freeze to hit and kill off everything. Some areas have had some freezing temperatures but not the 20^os to do everything in.

Weeds were prolific this year and I hope that you either have taken care of them or have a plan in place for spring.

Hopefully, you are also not allowing your animals on your pastures right now. You need to give your forage plants the opportunity to get ready for winter. Grasses are like the bears that have been around lately, they need to store energy now to make it through the winter.

Thank you,
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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_acrage@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 212 subscribers to the listserv



Weather Outlook

The NOAA forecasts for the next 30 and 90 days predict that the temperature has equal chances of being colder or warmer than usual. The precipitation forecast indicates that the next 30 and 90 days will be above normal.

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



Coming events and workshops

Upcoming events that may be of interest.

The annual Conservation District Seedling Tree Order will start soon. I will send out the information as soon as it is made available.

Watch for information about an 8 week small acreage workshop to be held Tuesdays starting in January 2016 at The Ranch in Loveland.

Boulder County Extension Small Acreage Program

While most of the people receiving this newsletter know about the Extension Small Acreage Program, I'm guessing a few don't know all the services we offer.

The Small Acreage Management (SAM) Volunteer Program trains volunteers about the more common issues found on small acreages, weed management, grazing management and plant identification. The volunteers are

available via a voice mailbox. They assist the Small Acreage Coordinator in handling the phone calls and plants that come into the office.

Training for the Small Acreage Management Volunteer Program takes place on Mondays in March. Applications are taken around the beginning of the year and are available on the small acreage webpage <http://www.extension.colostate.edu/boulder/acreage.shtml>.

We offer plant identification and weed management assistance to small acreage landowners. When bringing in plants for identification, it is best to bring in as much of the plant as possible with flowers and roots if possible, photos are helpful too. The service is free for the first two plants brought in on a specific date. We do charge \$3 per plant beyond the first two brought in at the same time.

The Small Acreage Coordinator is available to make site visits for a \$55 fee. The site visit normally takes between 1 and 2 hours during which the Coordinator and the landowner walk the property. The Coordinator identifies plants and provides management advice based on the landowners plans for the property. Site visits are best made during the growing season but can be made at other times of the year depending on the nature of the visit. If you are considering purchasing a property, a site visit can be made to identify any potential issues with the property and if it will fit the purchasers needs. The Coordinator provides a full site visit report and any additional information as needed for the site. To schedule a site visit, please contact the Small Acreage Coordinator at 303-678-6176 or sbokan@bouldercounty.org.

Landowners are always welcome to contact the Small Acreage Coordinator either by phone or e-mail listed above.

We also have the following items for use by the public. It is always best to call ahead to reserve these items to make sure they are available. This is especially true for the honey extractors in the fall. Contact the main desk to reserve these items 303-678-6238.

Hay probe for sampling bales for analysis. There is a \$10 fee for its use and a \$50 refundable deposit.

Soil probe to check for compaction issues.

There is no charge for its use but a \$25 refundable deposit.

Two honey extractors with a \$20 use fee and \$50 refundable deposit.

Refractometer for checking honey quality a \$5 use fee and \$50 refundable deposit.

Over grazing and its effect on plant health

Boulder County Extension and Natural Resources Conservation Service (NRCS) personnel make site visits and consult with landowners on their grazing management. Far too often the landowners bring us in after they or a previous owner have severely overgrazed and the property needs significant weed management and sometimes reseeding. In 2013, several of us attended the “Pasture Management Professional Development Workshop” sponsored by Western SARE, University of Idaho Extension (UI), Oregon State University, Washington State University (WSU) and Colorado State University (CSU). This workshop altered our thinking on grass growth and its response to grazing. As a result of the workshop, we decided to work with one landowner and set-up some exclusion plots, and clipping plots and do a similar workshop for private landowners.

In April 2014, we set up exclusion plots every week for six weeks in an area where the landowner’s cattle were grazing. We clipped areas at 1”, 2” and 4” heights either every other week (bi-weekly) or monthly at another area of

the property that is hayed. At the end of the six weeks, we conducted a workshop with presentations by Joe Brummer, CSU, Glen Shewmaker, UI, and Steve Fransen, WSU, the presenters from the 2013 workshop. In the morning, they gave presentations on pasture health and grazing. The afternoon session in the field proved to be the eye opener for the participants. The early exclusion plots were no longer 4’X4’ as the grass inside the plots was long and green and the cows bent the enclosure fencing and posts to get to the grass. Grass plants were dug up in the enclosure plots. The plot set up last had very little vegetation and few roots while the first exclusion plot had lots of growth, many roots and many new roots. During the workshop, we also dug up grasses in the areas that were clipped. Within just six weeks, there was a difference in the overall density and appearance of the grasses and the root systems. The 1” plots had fewer roots and fewer new roots, less dense and healthy looking plants than the plot that was clipped at 4”. The 4” plot had more roots and more new roots and was very dense and healthy in appearance.



What was once a 4’X4’ exclusion plot, 2014

As a follow-up to this work, in 2015 we clipped plots at five locations located in Jefferson, Boulder and Larimer Counties. The properties ranged from rangeland native grasses to limited irrigation to full irrigation. The plots were 3’ by 3’ and clipped at 1”, 2” or 4” either bi-weekly or monthly. The plots in Larimer County were only

clipped once a month due to anticipated lower growth rate (one of these plots was native rangeland). This work was continued from April until September. In September, three pasture walks were held, one in each county. Again grass plants in were dug up to see what the root systems looked like. All plots were mostly made up of cool season grasses.

As expected, initially the 1" clipping plots were out producing the other plots. However, as the growing season progressed, the 1" plots drastically thinned and invasive weeds began to appear. In September while at some sites, the 1" and 2" plots were still out producing the 4" plots, the gap was closing and overall the 4" monthly plots out produced the other plots. We are interested in seeing what the "overgrazing" that we did in 2015 affects the health of the grasses in 2016. We also took soil temperature measurements. There was a 20°F difference between the 1" bi-weekly and the 4" monthly with the 4" monthly having more cover and being cooler.

Clipping Interval	Harvested Production #/ac (Total all sites)
Bi-monthly 1"	2140
Bi-monthly 2"	2090
Bi-monthly 4"	1933
Monthly 1"	2512
Monthly 2"	2937
Monthly 4"	3568

Root health was affected with the 1" bi-weekly showing few roots in the top 6" of soil and the 4" monthly showing many more roots. The soil in the 1" clipping area was also more compacted while the 4" monthly was blockier and looser. With the damage to the root systems, we are very interested to see what the plots will look like next spring. We suspect that next year we will really begin to see the damage we did to the 1" plots.

While all the production rates were not fully what we expected, we suspect that the plots

will show more in the spring. Our plan is to revisit the plots in the spring and possibly continue the project next year. Most of the landowners involved in the work are eager for us to continue the work next year. We will also be looking at soil health and soil organisms to determine overall pasture health.

So if you need additional incentive to not graze your pastures lower than 3 – 4" stubble height, we can show you the reason why.



Left 4" monthly plot, Right 1" bi-weekly plot



From front to back
1" bi-weekly, 2" bi-weekly, 4" bi-weekly, 1" monthly, 2" monthly, 4" monthly

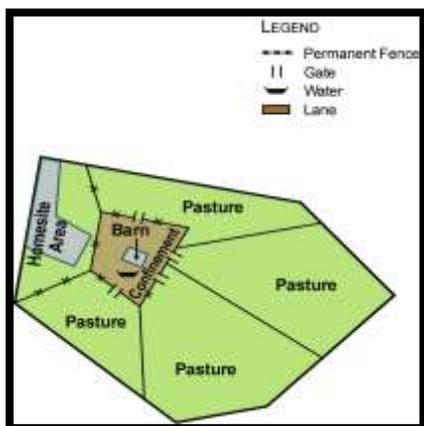
Winter Small Acreage Activities

In addition to all the other activities you have going on in your life, winter is a good time to take care of some items on your acreage.

Take some time and think long term what you want to do with your property. Identify specific projects to get to your goal. Identify resources needed to complete projects. Where do you need help and advice?

Develop a weed management plan – figure out what weeds you have on your property, identify the order in which you want to address them and what methods you want to use to manage them.

Develop a grazing management plan – start laying out grazing cells and planning how you will use them to maximize forage production and use. With Google Earth and other satellite imaging available you can start this in the comfort of the house before going out to install the fencing. Don't forget how to get the animals to and from water.



Get your tractor and other equipment repaired and serviced.

Repair fences as needed.

Reseed areas as needed. You might consider trying to add some plant diversity to your pasture. Consider planting some legumes or other grass species. More diverse pastures provide more variety in grazing and nutrition and better overall plant health.

Develop a biosecurity and emergency preparedness plan for your property. When we

have a disease outbreak, a natural disaster or you have a fire on your property, how will you respond? How will you evacuate your livestock if required? Do you have a trailer? Do you know how to hitch it up? Are your animals easily loaded on a trailer? How will you stop disease spread onto your property? Are your fire extinguishers fully charged? Take some time to think about and prepare a plan, communication plan and evacuation kit for your family, pets and livestock.

The Extension Office can help you plan and be ready for whatever next year might bring.

