

The Corner Post



The Wyoming Department of Agriculture
Natural Resources & Policy Division
Newsletter



WY. Dept. of Agriculture
Natural Resources & Policy Division
2219 Carey Avenue
Cheyenne, WY 82002-0100

Healthy Livestock... *Means Profitable Livestock!*

Jessica Crowder, Senior Policy Analyst

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Quotable Quotes

“Knowing trees, I understand the meaning of patience. Knowing grass, I can appreciate persistence.”
-Hal Borland

Healthy livestock are one of the key elements to having a successful and profitable livestock operation. In order to raise healthy livestock capable of reproducing and providing meat products, it is necessary to understand nutrient requirements including when to provide supplements to help reach those requirements. Energy, protein, phosphorus and vitamin A are generally the most limiting nutrients to livestock production on rangelands. This article focuses on energy and protein.

Energy comes in the form of carbohydrates and can include supplements such as alfalfa hay and cracked corn. Energy is necessary to livestock production because it is responsible for animal maintenance, growth and generation of heat. Energy is often the limiting nutrient when rangeland forages are high in quality. Although energy supplements will improve livestock performance, they are usually used when forage quantity is low, such as during severe drought or after a large snow. Using energy supplements on a regular basis is uneconomical in most situations.

Protein is responsible for helping animals grow tissues and improves digestion. Protein supplementation is a common

practice when forage quality is low. Forage quality decreases with increasing plant maturity. There are two types of protein supplements. The first, non-protein nitrogen in the form of urea and biuret, is typically used in feedlot situations. Livestock grazing rangelands utilize this type of protein if it is fed with a high energy supplement. The second type of protein supplement is high-protein natural feeds such as cottonseed meal, soybean meal and alfalfa hay. Each of these have high levels of crude protein that improve livestock performance.



When evaluating the nutritional needs of livestock and the necessity of supplementation, it is important to evaluate economics. Livestock producers can benefit from careful range management that maximizes natural nutrients first and foremost and considers supplementation when necessary. †

Technical Review Teams

Another Tool for Resolving Conflicts

George is a permittee on the Blue Sky National Forest. He runs cow/calf pairs on the grazing allotment from July through October. His family ranch has owned the grazing permit for several decades. Last summer, he had a couple of heated conversations out on the allotment with Blue Sky staff who felt that his cattle were grazing certain pastures too heavily and spending too much time in the riparian areas. During their annual review over the winter, Blue Sky staff explained some changes in pasture management would be needed in the future. George, who has a degree in animal science, feels that the condition of the pastures is just fine. He also thinks that wildlife and not the cows are the culprits in the riparian areas but he knows the Blue Sky staff can make him leave early if they feel the resource is being negatively impacted. As the summer grazing season nears, George wants to find a way to prevent last summer's conflict from happening again and he wants to do what he can to stay on the allotment for the full length of the permit. The Blue Sky staff are equally willing to prevent this issue from getting any more heated.

Lucy Pauley, Mediation Program Coordinator

Technical Review Teams, also known as TRT, are another tool for resolving agricultural and natural resource conflicts. In cases like this one, both parties will benefit from bringing in neutral scientific experts to help them look at the resource and develop mutually-agreed upon solutions for future management.

Technical Review Teams are usually made up of three or four scientists who specialize in that specific issue. In George's case, the TRT members will probably include:

- Two range scientists from the local university or another agency to take a look at the health of the resource.
- A livestock management expert to analyze pasture rotation and herd behavior.
- A riparian expert to review the condition of the small stream running through the allotment.

These neutral scientists will spend a couple of days touring the entire allotment, along with George and the Blue Sky staff. After the tour, the TRT will write a report that will be given to both parties. The report will include recommendations for future management. The information will give George and the Blue Sky staff the opportunity to sit down together and develop innovative ways to manage the resource, which work for everyone. ✦



TRTs can be used for a variety of issues where there is a scientific question at the heart of the conflict. If you are interested in learning more about TRTs, contact Lucy Pauley at (307) 777-8788.



Chris Wichmann, Senior Policy Analyst

As wind energy and transmission lines continue to be developed in the state, the argument over eminent domain or condemnation versus private landowner rights are brought to the forefront once again.

Eminent Domain is the legal authority to take a person's private property through condemnation for public benefit or necessity. Wyoming State Statutes 1-26-801 through 1-26-815 grants the right of eminent domain to both public and private entities.

The concern by a portion of the state's private land owners is that electrical transmission lines will cut across their property without their approval or just compensation.

However, Article 1, Section 32 of Wyoming State Constitution states: *"Private property shall not be taken for private use unless by consent of the owner, except for private ways of necessity, and for reservoirs, drains, flumes or ditches on or across the lands of others for agricultural, mining, milling, domestic sanitary purposes, nor in any case without due compensation."* In Article 1, Section 33 of the Wyoming State Constitution states: *"Private property shall not be taken or damaged for public or private use without just compensation."* This means that the entity pursuing condemnation must provide good faith negotiation and "market value" compensation. This still does not satisfy those on the receiving end of an unwanted transmission line on their property.

With this in mind, reform of the Eminent Domain Act will not occur any time soon, however, the Legislative

Task Force on Wind Energy is considering reforming eminent domain as it pertains to electrical "collector" lines, or the transmission lines connecting wind farms to the major intrastate and interstate transmission lines. The Task Force on Wind Energy will be meeting several times to gather public and wind industry thoughts and concern and will present its findings prior to the next legislative session.

The debate over eminent domain and private landowner's rights will continue for as long as entities are allowed to "take" private property from the state's private landowners. †



Americans with Disabilities Act

To obtain this publication in an alternative format, contact the Wyoming Department of Agriculture at (307) 777-7323.

WLCI - 2009 Accomplishments

Justin Caudill, WLCI Program Coordinator

As the Wyoming Department of Agriculture's Program Coordinator to the Wyoming Landscape Conservation Initiative (WLCI), it is my pleasure to share the initiatives, objectives and accomplishments for 2009.

The WLCI focuses on 5 priority habitat types – aspen, mountain shrub, sagebrush, riparian and aquatic. The WLCI mission is to maintain or restore the ecological function and health within these habitats at the landscape scale.

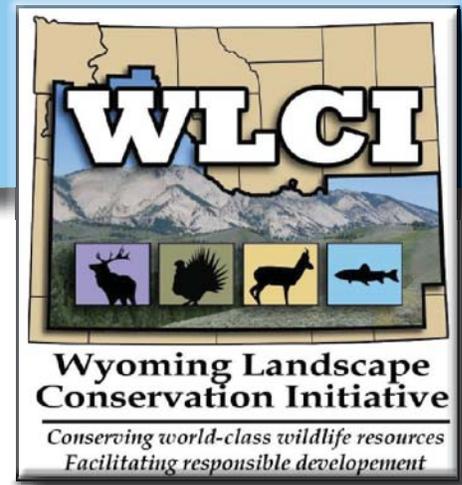
Priority objectives within these 5 habitats:

- ◇ Fragmented Habitats
 - Migration corridors
 - Maintenance and/or restoration of habitats associated with WLCI identified communities
 - Consequences of development
- ◇ Invasive Species
 - Changes/disturbances in cycles
 - Loss of historic vegetation
 - Loss of crucial forage
- ◇ Water Quality and Quantity
 - Livestock and wildlife accessibility
 - Effects of changes on the landscape
 - Indigenous species concerns

FRAGMENTED HABITATS

Projects that address fragmentation include conifer removal from aspen stands, prescribed burns, fence conversions, animal access crossings, shrub and grassland treatments and conservation easements. Fragmentations in aquatic habitats were

address through fish barrier removals and protection of remnant native fish habitat.



- 1364 acres of conifers removed through mechanical treatment and burns
- 27 miles of fence converted to wildlife friendly standards
- Completion of 1 wildlife underpass
- 270 acres of grassland and shrub treatments
- 6219 acres of habitat in conservation easements
- 57 miles of native fish habitat protected

INVASIVE SPECIES

Invasive plant species have the potential to alter the environments they invade and can completely replace native vegetation. Projects target tamarix, cheatgrass, dalmation toadflax, dyer's woad, Russian knapweed and olive and many others noxious weeds.

- 3630 acres treated
- 1200 acres assessed for effectiveness

WATER QUALITY & QUANTITY

Stream and wetland projects aid in stabilization of water conveyance, decrease sedimentation and soil erosion and provide necessary habitat for wildlife and livestock. Actions include plantings, riparian exclosures, dike and irrigation improvements.

- 4.5 miles of stream restoration/enhancement
- 816 acres of wetland enhanced or established
- 1 irrigation improvement project
- 1 riparian exclosure constructed

OTHER WLCI NEWS

The WLCI is also participating with the Wyoming Basin Native Plant Development Program which is operated by the Wyoming Bureau of Land Management. The program's intent is to collect local native seeds and plant materials, which will be used in future restoration and reclamation projects in Wyoming. ✦



Exciting New Website!

www.realranchers.com

Ryan Anderson, NR&P Intern

Looking for a great opportunity to share stories and foster communication with the community and other ranchers? Realranchers.com is an exciting new website which allows you to do exactly that. Through the use of blogs, realranchers.com gives Wyoming farmers, ranchers, and community leaders a voice to the public. The site works to educate community members about day to day ranching and to tell the agriculture and rural story from the mouths of the people who live it every day. Based in the Wyoming communities of Baggs, Boulder, Shoshone, Kaycee, and Lusk, it teaches community members who may not be familiar with agriculture what is done on a daily basis and allows other ranchers to see how work may be done differently on other operations.

Interested in getting involved? The process is simple! Anyone who is interested in telling a story is highly encouraged to participate. First, check out the website at www.realranchers.com. Then, using the contact information found at the bottom of this article, begin by calling Liz LeSatz to discuss getting an article posted. From there,

you will email her your article and a few pictures and she will do the rest to ensure it is posted on the site. Nearly any topic is acceptable and feel free to incorporate humor or drama to help convey your message. Articles can be essentially any length and stories aim to “entertain while educating.” Visit the site yourself to see examples of past blogs.

If you would like to help create clarity and expand the network and communication between ranchers, local communities, and consumers, please consider becoming involved in Realranchers.com! Whether it be writing your own article, spreading the word, or simply visiting the website, every bit helps! ✦ *If you would like to contribute an article or have any additional questions, feel free to contact Liz LeSatz at: 307-638-3942 or Liz@wysga.org.*



Questions, Concerns, Complaints?

Wyoming Department of Agriculture
Hotline:
1-888-413-0114
Your Voice is Valued!



Grass Management Before Grazing Strategies

Larry Bentley, Natural Resources & Policy Consultant

A comprehensive grass management plan must be in place before grazing strategies can be developed. Understanding the morphology (structure) and requirements of grass during its life cycle is one step in identifying a management plan. It does not matter if the grass is native range or non-native pasture, a manager must know how grass responds to grazing pressure, season-of-use, and weather.

All grass plants have the same basic parts to provide for food, moisture, and reproduction. These parts and their functions are:

- **The Crown:** located at or just below the surface of the ground, contains growing points producing tillers and serving as the connecting base for roots.
- **The Roots:** supply and collect moisture and nutrients the plant needs. A healthy perennial grass plant replaces 25% to 50% of its root mass each growing season.
- **The Tillers:** there are two types of tillers found in grasses; one is a leaf producing tiller and the other is a stem or seed stalk producing tiller. Some grasses have only one type of tiller and it produces both leaves and seed stalk.



- **Glumes:** appear at the base of the spikelet (flower) on the seed stalk.
- **Awns:** short or long bristles attached to the glumes of some grasses and are used in the identification of grasses.
- **Floret:** reproductive part of the grass flower, it has both the female part that is the seed and the male part called the stamen, which produces pollen. Pollination of grasses is usually done by the wind, eliminating the need for a showy type of flower.
- **Specialized Stems:** two types of specialized stems are found in grasses, one is a “rhizome” a creeping underground stem that stores food and reproduces from joints along the stem, a second is a “stolon” an above ground horizontal stem (commonly called a runner) which stores food and reproduces new plants from joints along the stem.

Tillers produce both the leaf and seed stalk and are considered a very important part of the grass plant. Tillers are produced by the growing points located in or near the crown. In some cool-season grasses the growing points are slightly elevated above the crown, while in warm-season grasses the growing points are slightly below surface level.

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Reclamation

Similarities and Differences

Leanne Stevenson, Manager

Reclamation is the restoration of productivity to lands made barren through processes such as erosion, mining or land clearing.

Reclamation is one of today's most discussed topics in the state. Whether discussing energy development, the installation of a water pipeline, road construction, transmission line construction, or subdivision development, some level of reclamation guidelines are negotiated in the process. All too many times, careful consideration is not given in advance of negotiating the specifics of the reclamation process. There are many factors to consider when laying out a reclamation plan. Issues surface during the implementation of the reclamation plan. The similarities and differences of reclamation can have long-term impacts on the resource and are worth taking into consideration in the negotiation stage.

Don't be afraid to ask for "successful" reclamation in the contract negotiation process for any type of surface disturbance. Most reclamation plans are prescription-based. Do this, this and this and reclamation is

complete. Contrast this approach with a qualitative evaluation process of determining reclamation is complete when the reclamation objectives are met. Big difference!

You don't have to reinvent the wheel in designing a reclamation plan. There are many reclamation methods.



Rancher Pat O'Toole has realized success with livestock in reclamation on several projects. The University of Wyoming, in conjunction with several energy development companies, is continuing to conduct research in using livestock for the reclamation process. Other tools used in the reclamation process may include fencing the reclamation area or using limited irrigation for initial forage establishment.

Another difference is interim versus final reclamation. The objective of interim reclamation is to achieve healthy, biologically active topsoil; control erosion; and restore some habitat, visual, and forage function. In contrast, the objective of final reclamation is to achieve

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“I’m From the Government.... and I’m Here to Help!”

Taking Advantage of Financial Opportunities

Justin Williams, Ag Program Coordinator

Every time I hear the saying “I’m from the government and I’m here to help” I laugh...and I’m a government employee. It is understandable why farmers and ranchers have skepticism and fear of the government at times. Not everyone in government comes from a rural background and has the long-term knowledge of the land like most landowners. The knowledge you have is invaluable to those of us working in state and federal government who design and implement many programs to financially support projects on farms and ranches.

There are many resources, including staff and grant money, available to help implement on-the-ground projects. Some of these projects may include installation of pivots, pipelines, solar water pumps, removal of corrals on streams to improve water quality, wildlife habitat enhancement projects such as wetlands and more. While some of the funds provide primary benefits to agriculture, some are secondary, but create overall benefits to the resource.



If you have not already taken advantage of these funds, it can be a daunting task of knowing who to talk to and where to go. Establishing a relationship with your local conservation district, Natural Resources Conservation Service office or Farm Service Agency office is a good start. The people in these offices are genuinely there to offer guidance and help you. Beyond those local agencies and offices, check into the state agencies such as the Wyoming Department of Agriculture and Wyoming Business Council as well as Weed and Pest offices, or organizations such as the Natural Resources Wildlife and Natural Resources Trust Fund.

You can find many of the applications available online or at your local offices. If you have a creative idea such as planting specialty crops, marketing natural grass fed beef, or want to reduce soil erosion on a stream running through your ranch, chances are, there are thousands of dollars just waiting to support a project like yours. Take advantage of the money specifically designed to help your operation. ✦

Reclamation (continued from page 7)

habitat, forage, and hydrologic function comparable to the functions that existed prior to disturbance.

Objectives vary and are determined by the land owner (manager). Example objectives include:

- reclaim with same predisturbance rangeland species diversity;
- reclaim with the primary focus on improving the site for livestock grazing;

- reclaim with the primary focus on sage-grouse habitat;
- reclaim with native species;
- reclaim with introduced species;
- and the list goes on....

Methods may differ and objectives may differ, but ultimately the goal remains the same - stabilize the soil and reclaim for beneficial use. ✦

Grass Management (continued from page 6)

Bunchgrasses, produce many leafy tillers before producing a seed stalk, are more desirable to grazing animals than rhizomatous grasses which produce few leaves and a seed stalk.

The early part of the growing season is when most leafy tiller growth occurs. Plants can be grazed but as the growing season lengthens and leafy tiller growth slows, grazing pressure must be reduced to allow some of the plants to mature and form seed heads. A reduction in grazing also allows plants to complete below ground development of new roots and store enough energy for the crown and roots to survive winter and start plant re-growth next spring.

A very good rule of thumb is to take 50% and leave 50% of the plants yearly production (take half, leave half). Studies show root production halts for up to three weeks when more than 50% of the plant's production is grazed, resulting in a weakened or unhealthy plant. Grass plants in a weakened position may allow for the invasion of annual grasses, such as cheatgrass, and/or noxious weeds.

Another rule of thumb: 50% use of most up-land native range grasses in Wyoming is when about four inches of stubble height remains. Taking as little as an additional

5% or 10% of the plant will greatly reduce its ability to produce the leaves and roots needed to stay healthy.

However, once the grass has reached maturity and the dormant stage it may be grazed heavier, with little damage to the plant. Keep in mind that enough residual leaf is still needed to protect the crown and provide litter aids in water filtration, prevents rapid evaporation of water and provides organic matter.

Taking all issues involved in the use and protection of healthy grass plants, a good land (grass) manager can develop a plan using grazing strategies to maintain or improve grass production over time.

Good grazing strategies must be flexible enough to allow for reductions in grazing use during drought and to increase grazing use in wet years of high production. Good grazing strategies also consider the impact to the grass from wildlife, insects and other environmental conditions that may affect plant health.

In summary, once a grass manager has learned what their grass and livestock need to remain healthy, the manager can develop a strategy to maximize production of both the grass and the livestock. ✦



To receive an electronic or printed copy of The Cornerpost Newsletter please contact Michelle MacDonald at: 307-777-7323 or mmacdo@state.wy.us.

Our newsletter is also posted on the Wyoming Department of Agriculture website: <http://agriculture.wy.gov/divisions/nrp/news-a-information>



Upcoming Events



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|-----------------------------|--|-----------------|---|
| July 14: | Board of Agriculture Conference Call | September 10: | Area IV CD Meeting - Duboise-Crowheart CD |
| August 14-21: | Wyoming State Fair, Douglas | September 14: | Area I CD Meeting - Powder River CD |
| August 20: | WY Board of Agriculture Meeting, Douglas | September 16: | Area II CD Meeting - Converse County CD |
| August 30 - September 2: | NASCA Annual Meeting, Durango CO | October 13: | WY Board of Agriculture Conference Call |
| September 1: | Area V CD Meeting - Sweetwater County CD | November 10: | WY Board of Agriculture Conference Call |
| September 8: | Area III CD Meeting - Cody CD | November 16-18: | WACD State Convention, Worland |
| September 8: | WY Board of Agriculture Conference Call | December 8: | WY Board of Agriculture Conference Call |
| September 9-11: | WY Game and Fish Expo, Casper | December 12-15: | WSGA/WWGA Convention, Casper |

If you have questions or comments about the information in this newsletter, please contact Michelle MacDonald, WY Department of Agriculture, Natural Resources & Policy Division at 307.777.7323 or mmacdo@state.wy.us

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