

HIGH DESERT RANCH & FAMILY

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A NOTE FROM THE AGENT

You know...I've racked my brain trying to come up with a cutesy title for this section of the newsletter. Some of my extension colleagues that maintain newsletters have columns similar to this one called "Cory's Corner...", "Patty's Ponderings...", "Jed's Journal..." "Jimmy's Jive", etc...just plain cutesy, and some would even say catchy. Okay, I have to admit that I just now made up "Jimmy's Jive," but I like it. For the life of me I can't come up with anything nearly as cutesy that goes with "Dustin." Some ideas I've had include "Dustin's Delirium", "Dustin's Doldrums", and "Dustin's Deranged Delusions." Hardly titles that inspire confidence in the reader; I certainly wouldn't read such a column. Well, I guess I'll keep to the safe road and carry on with the prudent, albeit boring, title: "A Note From the Agent." Any suggestions that you may have would be more than welcome...please remember though that this newsletter is rated "PG."

There are a couple of things I'd like to quickly mention about the OSU Extension Service. First, we're very excited to announce that OSU approved the Extension Beef Specialist position. This person will take the lead in beef extension programming in the State of Oregon. We interviewed candidates for the position on October 6th, 7th and 9th and the person that is selected will start sometime after the first of the year. Probably the most exciting thing for me is that the person that is ultimately selected will be located at the Eastern Oregon Agricultural Research Center here in Burns. I'm very much looking forward to having this resource right out my backdoor; and I'm guessing you might be as well. I'm also guessing the person that is hired will also want to meet all of you and we'll keep you posted on opportunities to do so.

I'd also like to make a quick announcement that we will be holding a follow-up session to the Winter Feeding Forum that was held in Prineville and Burns back in July. The follow-up session will begin at 6 pm on November 13th at the Eastern Oregon Agricultural Research Center (Section 5) on Hwy 205 just outside of Burns. Attendance at the first session is not required to attend the November session. We plan to leave the agenda wide open to cover any winter nutrition questions that you might have. Please bring along your feed information, including lab reports if you have them. We'll devote quite a bit of one-on-one time to developing rations for your cowherd that fits your winter feeding program and production goals.

The last thing I'd like to mention is a reminder (or maybe it's a request). As some of you may recall, Kirk Davies and I sent a survey during early August asking a variety of questions about management of sagebrush steppe rangeland in Harney County. We would ask that you please fill this survey out and send it back to us in the self-addressed, postage paid envelope that was included in the packet. Our ultimate goal is to use the results of the survey to identify extension and research programs that are better tailored to meet your management needs. I know I've been known to misplace things before (just talk to my wife; she likely has a few stories), so if you have misplaced the survey and need another to fill out, please drop me a line and I'll get another mailed out to you A.S.A.P. Thanks so much to those of you have already returned the survey; we really appreciate your support!

Have a great fall and I look forward to hearing from and seeing you soon.

Dustin Johnson

Harney County Rangeland/Livestock Extension Agent



*Happy Holidays
From the Extension
Office
Dustin, Shana,
Georgia & Crystal*

Fall and winter feeding

by Dr. Mike Mehren, Livestock Nutritionist, Hermiston, OR

(this article was previously published in Cascade Cattleman and Agri-Times 2008.)

In this column I'll introduce you to the OSU Cowculator. It is a very simple tool that can really help you get a handle on winter-feeding costs for cows. It was developed by Dr. David Lalman from Oklahoma State University and revised by Dr. Dave Bohnert, Oregon State University, Burns, OR. It has four parts. Each part has a name and tab at the bottom of the page. I was able to use this program, so I know you can! The first part is called:

CONDITIONS

1. How many cows do you want information for?
Use your cowherd size or do it for one cow.
2. What date do you turn the bulls in? The program will calculate calving date for you.
3. How many days old are your calves at weaning?
4. What stage of production are the cows in when you start feeding? There is a table shown that lets you choose from one to four: #1 is mid pregnancy dry, #2 is late pregnancy dry, #3 is early milking, #4 is late milking. For instance, if your cows are in the middle of calving on Mar. 15, and you plan to check what you should feed Dec. 1, the table tells us that the cows will be in Stage #2 until Feb. 22. The cows are due to begin calving on Feb. 22. At that time you should change their ration to account for the extra nutrition needed to nurse a calf and maintain body condition until turn out in the spring.



To get your free copy contact:

Dr. Bohnert

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5. Cow weight when in normal body condition.
6. Breed of cows. You can use percentages such as 50 percent Angus, 50 percent Hereford or any mix that adds up to 100 percent. The list has a large number of breeds.
7. Your estimate of calf birth weight.
8. Your estimate of cow milking ability: 1, low (400-pound weaners), 2, medium (500-pound weaners) and 3, high (600-pound weaners).

FEED LIST

1. The feed list already has many different straws, hays, corn stalks, and fall range as well as winter range. It has a section for different supplements, and a section for grain and grain byproducts. It is best to use analysis of your feed. (See Mehren on handbox saying "Test your feed"). You enter figures into the table directly from your feed analysis, or use those already in place. You also enter the amount you will have to pay, or the amount for which you could sell your hay. If you feed your own hay it has the same value as that you sell. You will enter the feeds into the program in the next section.

BALANCE

1. Enter the feed number(s) you plan to feed and enter the amount you plan to feed. (#6 bluegrass straw 23 pound, #12 good alfalfa hay 5 pound). Do not enter your protein supplement yet. The program allows you to compare many different protein supplements, their cost, and the amount needed to meet the needs of the cow. When you enter your feed, the program tells you if your feed meets the needs for protein, TDN, calcium, and phosphorus. It also tells you if your cows will gain or lose weight on that amount of feed.

PROTEIN COST CALCULATOR

1. In this section you can add the protein sources you have selected, or use those from the list. It tells you what the cost per cow per day will be, how much you need to feed to provide enough protein.

2. If it shows you need to feed the selected protein at 3 pounds per cow per day and you know, from experience, the cows only eat 1 pound daily; this tells you that this particular protein supplement does not fit with your roughage.
3. Go back to the **BALANCE** section and put in the number of the protein supplement that you plan to use. Enter the number of pounds that need to be fed. This will tell you daily cost and check to see that your program will meet the needs of your cows and whether they will gain or lose weight.

TDN COST CALCULATOR

1. This section can be used if the cows will be short of TDN and you need to provide them with extra energy. For instance, you're forced to feed nothing but straw. A protein supplement can be fed to meet the cow's protein needs, but they may be quite short of energy, so they will lose quite a bit of weight. You might have to limit feed corn, a range cube, dried distillers grain or some other source of energy. This tells how much to feed and what the cost will be.
2. You should then go back to **BALANCE** and enter the number of this feed and the pounds you will feed to check the total cost and whether the cows will hold their own, gain, or lose weight.

TOTAL COST SUMMARY

1. This section shows the total cost per head per day.
2. The number of pounds fed per day for the number of cows chosen.
3. The number of tons fed during that feeding period.
4. The total cost during that feeding period.
5. Whether the cow will maintain, gain, or lose body condition.

An example. Let's check the feed needs and costs for 100 cows. We turn the bulls in May 1. Average calving date is Feb. 22. We wean Oct. 22 (230 days) and begin feeding Dec. 1. These cows are in Stage 2 of production (late gestation). The cows weigh 1,200 pounds. They are 50 percent Angus, 50 percent Hereford. When feeding begins they are still in moderate flesh (score 5). The cows are average milkers; they wean 500-pound calves. They will be fed meadow hay at that time and we believe they will eat 2 percent of their bodyweight. $(1,200 \times 0.02 \div 0.88 ((0.88 \text{ is the dry matter})) = 27 \text{ pounds as fed})$.

When 27 pounds of meadow hay is entered in the **BALANCE** section, it becomes instantly apparent that the cows will lose a lot of weight and body condition. We need some kind of supplement. Right now, the least expensive source of protein is a 32 percent protein liquid supplement. The table shows the amount to feed is 0.87 pound. That can be rounded to 1 pound/cow/day. The table shows that we are very slightly low in protein and TDN. The cows will lose less than $\frac{1}{4}$ pound daily. This should be okay if we are able to feed a better ration once the cows begin calving and if they are in moderate flesh. The cost summary shows that between Dec 1 and Feb 22 the 100 cows will eat about 4 tons of liquid supplement and 113 tons of meadow hay.

When the cows start calving you would need to go through this exercise again. There is a huge difference in the feed needs of the cows after they calve. If you fail to meet their needs, they won't come into heat and breed back to calve at the same time next year.

It takes much less time to use this tool than it does to read about it. You can get a free copy from Dr. Bohnert at dave.bohnert@oregonstate.edu. He can also help you work through it the first time. Your county livestock agent should also be able to help...and if you get desperate, I can help too. You need to have the program Microsoft Excel to use this tool. Since it's a tool, it isn't perfect. You still have to look at your cows to see how they are doing. The program doesn't account for wasted feed or cold weather.

This program does exactly the same thing that a good nutritionist would do when trying to assist you with your winter-feeding. It allows you to compare costs of different roughages, concentrates, and supplements. I was fortunate enough to participate in winter-feeding seminars by Barbi Riggs and Dustin Johnson of OSU extension service. At one of the sessions, a rancher from Lakeview described his change from winter hay feeding to winter grazing on high desert range. His cost went from \$75,000 to \$18,000 after he made this change. That difference certainly made me sit up and take notice. You might not be able to do that, but you'll never know what you can do until you sit down and compare costs for every option that you can think of.

Mehren's politically incorrect dictionary defines an **ECOCENTRIC** as one who is an expert in ecology without ever being on the site under question.

Evaluating BLM Grazing Allotments

By Rob Sharp, Rangeland Management Specialist-Burns BLM

Background

All Bureau of Land Management grazing allotments are periodically evaluated to assess rangeland health and evaluate the trend in rangeland condition and the influence grazing management has on the multiple rangeland resources associated with these allotments. Presently, the Burns District employs two methods of evaluating grazing allotments. The first strategy involves a one-time field assessment by an Interdisciplinary Team composed of various BLM resource specialists. This team completes an assessment based on observations of vegetation and soil conditions. The second, and most commonly used strategy, involves a formal allotment evaluation process. During this process, an Interdisciplinary Team composed of various resource specialists evaluates resource conditions and creates management recommendations for the allotment. The end product of this process is an allotment evaluation document which summarizes resource conditions and trend and makes recommendations for future grazing management and range improvements on the allotment. Typically, allotment evaluations occur every five to ten years depending on the resource concerns for a given allotment.

It is important to understand, an allotment evaluation differs from an Allotment Management Plan (AMP) because it is not a publicly reviewed National Environmental Policy Act (NEPA) document, therefore it cannot be used to directly implement changes to grazing management or range improvements. The evaluation process can identify if specific resources are in need of improvement and precipitates changes to grazing management through a new AMP. The purpose of this article is to provide insight into the allotment evaluation process and how it's used to manage your BLM grazing allotments.

What is evaluated during this process?

The evaluation process incorporates all available monitoring data pertaining to the allotment. Typically, such data include upland and riparian transect and photo monitoring, water quality monitoring, utilization studies, actual use reports, precipitation records, wildlife and plant habitat surveys, noxious weed monitoring, cultural resource inventories, soil stability, special status plant and wildlife surveys, and wild horse use (if applicable).

Monitoring data (photos and transect) from key areas¹ collected at the same spot overtime are compared to assess resource trend during the evaluation period. When viewed individually, these data provide little insight into the resources response to management. However, when all available data is compiled and analyzed together, these data begin to paint a picture of how management, climatic factors and disturbance are influencing rangeland resources on a given allotment.

In addition to analyzing condition and trend of these different rangeland attributes, grazing management is assessed to determine whether or not it's achieving the Standards for Rangeland Health (Standards) and conforming to the Guidelines for Livestock Grazing Management (Guidelines) mandated in the 1996 Revised Grazing Regulations. This set of Standards and Guidelines were developed to address the physical and biological conditions necessary to sustain healthy rangeland ecosystems. In general, these Standards consider rangeland function related to water capture and storage, nutrient cycling, energy flow, riparian health and water quality, and wildlife habitat. The Guidelines provide recommendations for grazing management geared towards achieving rangeland health standards.

Livestock carrying capacity (AUMs) and stocking rate are also calculated for each pasture within an allotment, using climate and utilization data and actual use records. Recommendations are then made to maintain or adjust Permitted Use (increase or decrease AUMs) based on these calculations and in conjunction with rangeland trend studies.

Why are allotment evaluations important?

Allotment evaluations provide a means for assessing whether current grazing management is achieving the Standards for Rangeland Health and conforming to the Guidelines for Livestock Grazing Management. Whether or not grazing management is achieving these Standards and Guidelines dictates the level of NEPA analysis required when it comes time to renew your term grazing permit. For example, if grazing management is achieving all Standards and Guidelines, the BLM has Categorical Exclusion (CX) authority to process a permit renewal without further environmental analysis (excludes permit renewal from further NEPA analysis and is a much simpler process).

¹Key Area: An area that is representative of the use, resource, or attributes being measured for a pasture, stream, allotment, etc.

Likewise, if grazing management is a causal factor for failing to achieve the Standards and Guidelines, additional environmental analysis (NEPA) is required which allows for public review and potential protest.

More importantly, an allotment evaluation serves as a tool to periodically summarize all monitoring data and assess whether or not allotment-specific resource objectives are being met. The evaluation process can identify areas where resource objectives are not being met and incorporate changes in grazing management or range improvements to move towards meeting such objectives. Furthermore, the evaluation process allows for periodic interdisciplinary review and alteration to existing allotment objectives based on resource conditions.

What role can permittees play in the allotment evaluation process?

Permittees can and should be involved in the allotment evaluation process in a variety of ways. Typically, the livestock operator has first hand knowledge of how their stock graze the allotment, know the areas of good feed and water, and hold sole responsibility for incorporating their BLM allotment into their overall ranch management. This information is critical when recommending changes to grazing management or identifying locations for new range improvements (i.e. water developments, fences, etc.).

Permittees should also keep accurate actual grazing use reports and are required to submit such reports to the BLM each year. This information is extremely valuable when analyzing pasture use (grazing dates and AUMs) and calculating pasture carrying capacity. Any additional monitoring (i.e. photo, horse counts, etc.) should be submitted with actual use records each year.

Permittees are encouraged to discuss (with their Range Con) how their allotment is doing, any changes that may be needed, and should participate in rangeland monitoring as time allows. At the very least, permittees should review the allotment evaluation with their respective Range Con to become familiar with allotment resource objectives and management actions needed to achieve such objectives.

If you have any questions regarding your grazing allotment, please feel free to contact us here at the Burns BLM.

Western Cow-Calf Management Guide Can Help Producers with Management Decisions

Adapted from an article by: Shannon Williams, Extension Educator, Lemhi County, Jason Ahola, University of Idaho Beef Specialist

Cow-calf producers make decisions every day about their operations. In an industry that is constantly changing, trustworthy, science-based information can assist producers in decision-making. The "Cow-Calf Management Guide and Cattle Producer's Library" contains this type of information.

Published as a three-ring binder filled with more than 230 researched-based fact sheets on all facets of beef-cattle production, the guide is one of the most comprehensive collections of current information available in the beef industry. It covers topics such as reproduction, nutrition, management, finance, genetics, drought, quality assurance, health and range and pasture. The unique characteristic about this guide is that it remains current. Every year, livestock specialists and extension agents from 12 Western states review each and every fact sheet. If a fact sheet is out-dated and not relevant, it is either revised or removed. New fact sheets are also added annually as new information emerges. Producers who own one of the guides receive the updated information each year.

As producers look forward to fall and winter management decisions, they can review fact sheets on how to calculate breakeven selling price for overwintering calves and the costs and returns of custom-feeding cattle. There are also fact sheets that compare the advantages and disadvantages of retained ownership and a checklist on selecting a custom feedlot. The fact sheets on feeding and marketing culls cow address's the amount of price seasonality that is typically present in the marketplace and provides several tables to help producers estimate the financial gains they may generate by feeding out cull cows.

The manual also includes several fact sheets on weaning management, rations for newly-weaned calves and the pros and cons of five different weaning times, as well as more than 50 fact sheets on cattle health, including calf vaccination protocols and parasite-control options.

In addition to the fact sheets in the Library section, a Management Guide is also included.

The Management Guide portion helps to remind beef producers of critical times where attention to more intense management practices can return big dividends. The Management Guide portion provides producers with a list of the specific fact sheets that contain information related to the biological cycle of the cow, including specific events that occur in a beef cow's life (e.g. the last trimester of pregnancy, calving, breeding, grazing, weaning, etc.) Readers are also provided with a list of specific fact sheets that contain information to help them address specific problems they may be experiencing (e.g., a high incidence of calving difficulty, weak calves, cows not becoming pregnant, etc.). Overall, this publication suggests management strategies that beef cattle operations can adopt in order to improve profitability. Selected fact sheets can be previewed at <http://www.avs.uidaho.edu/wbrc/samples.html>. To order the printed book in a 3-ring binder or CD-ROM version, producers may contact their local Extension office.



A note to our readers

If you would like your name & address added to our mailing list, taken off, or just have any suggestions of what you would like to see in our newsletter please contact Dustin or Crystal at the Extension Office 573-2506



Country of Origin Labeling and Livestock Producers

Source: Idaho Beef Producer's "COOL" Fact Sheet and Guidelines by Danielle Gunn, UI Ag Extension Educator and Wilson Gray, UI Livestock Extension Economist

COOL in Brief:

Country of Origin Labeling or "COOL" will become mandatory September 30, 2008. COOL law addresses meat products including muscle cuts of beef, veal, lamb, chicken, goat and pork as well as ground beef, lamb, chicken, goat and pork. COOL also covers fish, shellfish, fresh and frozen fruits and vegetables, peanuts, pecans, ginseng and macadamia nuts. COOL law excludes processed (cured, cooked, smoked or restructured) meat products such as ham, sausage, breaded products, frozen pizza and frozen dinners and meat products purchased at restaurants, delis and institutions. Beef products will be labeled a product of the U.S. if they are born, raised and slaughtered in the U.S. Beef products shall be designated as a "product of the U.S. and Country X" if they are imported as feeder animals and are fed before slaughter. Beef products from cattle imported for immediate slaughter from Country X will be designated as "product of Country X and the U.S."

- COOL applies to products packaged on or after September 30, 2008.
- Animals present in the U.S. on or before July 15, 2008 will be considered U.S. origin.
- Labeling rules for ground meat products require listing all countries of origin that may be reasonably included in the product.
- To determine "reasonably included status" on these products, if a raw material from a specific origin is not in a processor's inventory for more than 60 days, the country shall no longer be included as a possible country of origin.
- Producer and packer records should be maintained for one year from date of livestock delivery.
- Slaughter facilities should possess or have legal access to records to prove origin claims.
- Producer affidavits will be accepted as sufficient evidence if it is written by someone having first-hand knowledge of the animals' origin.

- Animals identified as part of the National Animal Identification System with an official ear tag or marking will substantiate origin claims.

The USDA's Agricultural Marketing Service and livestock industry representatives agreed to three universal "Country of Origin Affidavit/Declaration statements that establish and document origin claims on cattle, swine, sheep and goats. It will be beneficial to your operation to use these statements. The three affidavit components and language are as follows:

1. *Continuous Country of Origin Affidavit/Declaration.*
Allows producers to develop a continuous affidavit to be kept on file by buyers, stockers, feeders and packers until the affidavit is revoked by the affidavit's signer.
2. *Supporting Declaration of Origin for Specific Transactions.* Involves livestock from producers with a continuous affidavit on file, or as a stand-alone affidavit/declaration related to a specific transaction. This particular language can be included on check-in sheets, invoices, billings, etc.
3. *Appended declaration statement for immediate/direct supplier transaction to packers.* This statement covers direct transactions to packers from producers, marketing businesses and feeders. Packers must be able to obtain records from their immediate suppliers within that period to substantiate country of origin claims.

COOL and the Livestock Producer:

As a livestock producer you will be requested to provide definitive information to document animal origin. Action and documentation includes:

- Maintenance of auditable farm/ranch records
- Product must be origin declared with a signed affidavit to a buyer
- *Inventory records* including the following information are sufficient:
 - ◇ Annual beginning and ending inventory (cows, bulls, bred/virgin heifers, calves)
 - ◇ Purchases, births, leased cattle
 - ◇ Sales, deaths
- *Production records* including the following information are sufficient:
 - ◇ Identification system (tag numbering system, brands, etc.)
 - ◇ Beef Quality Assurance Certification

- ◇ Number, type and sex of animals involved in the transaction
- ◇ Date of transaction
- ◇ Name of buyer
- ◇ Seller contact information

Additional information that can be used includes:

- Balance sheets and income statements
- Purchase and sales receipts
- Feed bills
- Shipping records
- Calving books
- Health papers, vaccination records, treatment records and receipts

Producers may also want to prepare a brief written statement of recordkeeping procedures and animal identification methods, such as tagging or branding systems.

Conclusion:

Producers will need to maintain adequate inventory and production records. Animals will be sold with a signed affidavit stating country of origin, i.e., "I certify these animals were born in Oregon in the United States." Your records will be utilized to substantiate country of origin declaration.

Helpful Websites:

<http://www.countryoforiginlabel.org/>

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

<http://www.oznet.ksu.edu/ansi/cool/>

<http://www.iowabeefcenter.org/content/COOL>

http://agecon.unl.edu/mark/country_of_origin.html

\$33,000.00 to Initiate Biosecurity Education and BVD Control

By Barbi Riggs Crook County Livestock Agent

I am so pleased to report that we have received funding to initiate an Oregon Bovine Viral Diarrhea (BVD) control program. Funding has come from OSU, Agricultural Research Foundation and the Oregon Beef Council. The money will be spent to educate ranchers on how to create written biosecurity plans and to provide financial support to test their herds for BVD PI (persistently infected). The program will be in place over the next 2 years and funds are available now. This project will not only give us a better idea of how BVD is distributed over the state but will also give us tools to control many different kinds of diseases by implementing management practices. Every beef cattle producer in the state of Oregon is eligible for participation

Why Biosecurity?

Implementation of sound biosecurity practices on Oregon ranches will decrease the risk of exposure and spread of economically detrimental diseases. Written biosecurity plans will not only improve herd health on the ranch and in the feedlot, they will also increase consumer confidence that Oregon produced beef is reared to ensure a wholesome product and animal well being. Creating a BVD control program in the state of Oregon to demonstrate the benefit of biosecurity will recruit producer participation resulting in increased marketability and potential premiums for cattle sold as BVD PI free.

Biosecurity education is a key component to this study. Educational seminars and one-on-one producer meetings will result in written biosecurity plans that will reduce the incidence of disease exposure and transmission within and across Oregon cattle ranches. Demonstration of biosecurity will be accomplished using BVD PI as a model. Written biosecurity plans will address this specific disease. However, biosecurity education and plans will give an opportunity to open discussion of other diseases of concern for a particular area, such as trichomoniasis. BVD PI testing will establish the prevalence of BVD in the state of Oregon and lead to BVD control. Incidentally monetary gain and marketability may be realized by participants as a direct benefit of participation in a BVD control program.

Why BVD?

Economics! Although it is difficult to establish the economic impact BVD PI animals have on the cattle industry. Impacts including performance loss, reproductive efficiency loss, and carcass effects that BVD induced secondary diseases may have. Studies indicate that in herds with at least one PI animal present, the cost of BVD was reported to be \$14.85-\$24.84 per cow/year. The feedlot segment reports the cost of BVD per head is around \$30-\$47.00. The economic impact of BVD has driven the interest for control programs around the country. There is early data that has shown cattle marketed as BVD PI free through Montana State University BVD control program received a \$4.00/cwt premium over other cattle. We speculate that this trend will continue as feedlots tighten their belts and begin to limit the risk of purchasing cattle that may pose significant health concerns.

The prevalence of BVD in the state of Oregon is undocumented. Studies show that prevalence of BVD in the U.S. beef cattle population is between 0.13%-2.0%. The prevalence of herds that have at least one PI is around 4%. While most herds are BVD PI free; of the herds that have BVD PI animals, it is likely that there will be more than one PI animal in the herd. It will be our intention that the prevalence of BVD PI in the state of Oregon be documented as a result of this study. The project will be designed to accommodate possible annual renewal to develop into a strong BVD control program.

What is BVD?

Bovine Viral Diarrhea virus is a complex disease that causes beef cattle to have a range of symptoms from completely sub-clinical manifestations to death; including acute infections with respiratory tract disease, digestive tract disease, and conditions associated with the immunosuppressive effects which favor secondary infections. Fetal infections are the most important manifestation of BVD, particularly when susceptible pregnant heifers/cows develop a viremia after the initial acute infection. There are several possible outcomes of fetal infection, depending on gestational stage when the fetus is exposed: abortions, congenital abnormalities, and newborn calves born immunotolerant to the BVD and are persistently infected (PI) throughout their lifetime. The PI animal is the most important animal in regards to transmission of BVD to susceptible cattle as the PI animal has a very high persistent viremia and BVD is shed throughout life.

How do I participate?

Contact Barbi Riggs or Randy Mills for your application and information/enrollment package. You will be asked to complete an application, a questionnaire and encouraged to write a biosecurity plan.

Questions?

Visit our website <http://ans.oregonstate.edu/bvd>

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2008 Harney County 4-H/FFA Livestock Auction

The 2008 Harney County Fair marked another successful year for our 4-H and FFA youth involved in market animal projects. A total of 134 market animals were sold through the 2008 Harney County 4-H/FFA Livestock Auction. Of those 134 market animals, 41 were steers, 56 were swine, 33 were lambs, 3 were market rabbits and 1 was a market goat. The auction brought in nearly \$172,000, which is really a testament to the continued support by the Harney County Community for our youth.

A market animal project takes a 4-Her/FFAer through the entire process of raising an animal that is to become food for consumers. Each September, during our Harney County Fair, youth involved in the market animal program take one final opportunity to show off their projects as they enter the sale barn. Representing the culmination of a year's worth of hard work, these market animals embody a wide variety of lessons learned. The youth who have cared for the animals have a deep personal understanding of how many resources and how much effort goes into raising them. They also know that they are living creatures who are now on their way to someone's dinner table.

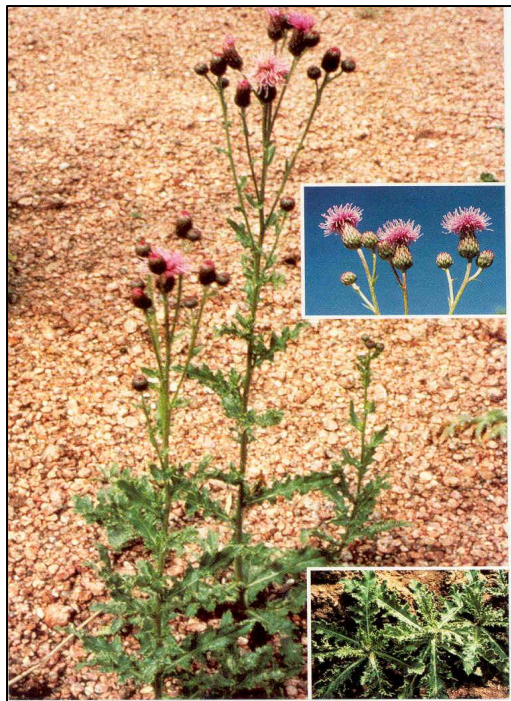
Obviously, this is a very intense project. It is perhaps one of the most powerful ones we have in our current 4-H and FFA Programs. Unlike many, however, these kids know exactly where their steaks, bacon, and lamb chops come from (and no the answer is not the grocery store). They gain a deep appreciation for agriculture and the farmers and ranchers that are working extremely hard, often under substantial financial pressures, to keep food on our tables. They accept that there are ethical standards that are non-negotiable when dealing with animals and our environment - and that raising livestock is not just about the bottom line, but is also about quality of life for all elements involved. We feel a market animal project touches on the idea of community, responsibility, youth development, rural life, food security and quality, locally raised meat, healthy lifestyles, and agricultural and environmental sustainability.

The Harney County Stockgrowers' Association, Shana Withee, and Dustin Johnson would like to join our youth in thanking the Harney County Community for its continued support for the Harney County 4-H/FFA Livestock Auction. Your support allows us to provide an extremely important educational experience for our youth.



WEED WATCH:**A QUARTERLY COLUMN FOCUSED ON WEED PREVENTION AND CONTROL IN HARNEY COUNTY**

Compiled by: Dustin Johnson, OSU Extension & Kirk Davies, USDA-Agricultural Research Service

Canada Thistle

Growth Habit: Perennial forb. Reproduces by seed and vegetatively (roots). Canada thistle often invades new areas by small, wind-blown seeds. Although seed dispersal is important to colonization of new areas, vegetative reproduction may be more important in established colonies.

Leaves: Leaves are spiny, alternate, oblong or lance-shaped, with the basal leaves stalkless and clasping, or extended down along the stem.

Stems: Mature plants range from 2-4 feet in height.

Flowers: Flower heads are white to purple and borne in clusters of 1-5 per branch, with a strong vanilla scent. Heads are only about 1cm in diameter.

Roots: Canada thistle has two types of roots, horizontal and vertical. The horizontal roots produce numerous shoots, while vertical roots store water and nutrients in their many small branches.

Seeds: One-seeded fruits (achenes) are straw or light brown in color, straight or slightly curved.

Other: The floral bracts of Canada thistle are spineless.

Chemical

- clopyralid + triclopyramine (Redeem)
 - Rate: 2 qts/acre
 - Time: Apply in spring when actively growing in the prebloom stage or in fall when in the rosette stage.
 - Remarks: Add a nonionic surfactant at manufacturer's recommended rate. Apply in at least 10 gal/acre water by ground.
- clopyralid + 2,4-D amine (Curtail)
 - Rate: 2 qts/acre
 - Time: Apply in spring when actively growing in the prebud stage or in late summer when in the rosette stage.
 - Remarks: For best results, wait at least 20 days after application before disturbing treated areas (cultivation, mowing, fertilization with shank-type applicators) to allow thorough translocation.
 - Caution: Consult label for crop rotation restrictions before using this product. Several crops may be injured up to 4 years after application.
- chlorsulfuron (Telar)
 - Rate: 1.5 oz/acre
 - Time: Apply post-emergence. For best results, apply to thistles in the bud-bloom stage or to fall rosettes.
 - Remarks: Do not apply to frozen ground. Constantly agitate while mixing spray solution. Add 0.25% v/v nonionic surfactant to the spray mixture.

Caution: Chlosulfuron can persist in soil; if land is to return to cropland, allow sufficient time for product to dissipate. Powdery, dry soils and light, sandy soils should not be treated if rain is not likely after treatment.

Mechanical

- Mowing pastures and hay meadows can be an effective control Canada thistle if it is repeated at about one-month intervals throughout the growing season. Combining mowing with herbicides will further enhance control of Canada thistle.
- Hand pulling is not effective for controlling established stands of Canada thistle because root reserves allow survival if the plant is not completely removed.

Grazing

- Goats, sheep, and cattle can damage Canada thistle with repeated grazing to prevent flowering. Goats are the preferred grazing animal, followed by sheep and cattle. Sheep and cattle prefer to graze this plant when it is young before spines develop. Grazing is most effective when repeated during the season and for multiple seasons to prevent seed production and to deplete root reserves. Plants are smaller and weaker in successive years after repeated grazing. Begin grazing when rosettes are green and begin to sprout. Remove animals when grazing shifts to desirable species and then regraze new sprouts. Graze during the seedling through late vegetative stage, with regular removal of top growth throughout the season. Graze often enough to prevent flowering. Grazing treatment will need to be repeated at least three years. Goats will graze older plants. Most information suggests best results are achieved when grazing is combined with herbicide treatments.

Biological

- Canada thistle has no known natural enemies in its native habitat and relatively few organisms have the potential to act as biological control agents in its nonnative habitats. Most organisms that would prey upon or utilize Canada thistle are not adequately synchronized with its life cycle to have a large impact. Four approved bio-control agents, a stem weevil, a seed head weevil, a crown weevil, and a stem gall fly are established in Oregon. Their effectiveness for controlling Canada thistle has not been quantified. Anecdotal evidence suggests bio-controls have had minimal effects on the weed but may be more effective when combined with other strategies

Fire

- Prescribed burning has had mixed results in controlling Canada thistle in rangeland. Early summer burning has tended to increase shoot and seed production in some studies while late spring (May and June) burns tended to reduce thistle abundance after several annual burns. Care must be taken with prescribed burning to avoid damaging desirable vegetation and to limit the potential for further invasion into burned areas.

Integrated Management Summary

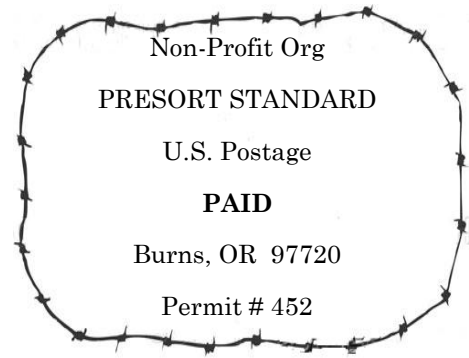
- Good vegetative cover considerably reduces the chance of infestation. Canada thistle seedlings are not particularly competitive and require full sun for normal development and may not survive under dense canopies. Canada thistle seedlings will not establish at less than 20% of full sunlight. Reduce the spread of Canada thistle seeds by always purchasing “weed free” seeds. Quickly eliminate new seedlings before they have a chance to form a well-developed root system. The tendency of this species to grow in wet areas may restrict the use of certain herbicides. Priority might be given to small infestations that threaten much larger areas. Management strategies should be adjusted to reflect weather conditions. For example, drought stress reduces the effectiveness of most herbicides, but increases the effectiveness of mechanical controls (e.g., mowing or burning). It takes at least two years of control to determine whether a particular method is effective. Several studies have recorded a temporary decline in Canada thistle in the first year of control followed by a return to the pre-treatment conditions the second growing season.

References

- Beck, K. G. 2003. *Canada thistle*. Colorado State University Cooperative Extension Natural Resources Series, No. 3. 108. <http://www.ext.colostate.edu/pubs/natres/03108.html> [20 Aug 2008].
- Launchbaugh, K. and J. Walker (eds.). 2006. Targeted Grazing: A natural approach to vegetation management and landscape enhancement. American Sheep Industry Association. 199 pp.
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CALENDAR:

- NOVEMBER** – 6 OCA Cattlemen’s College -For registration info go to www.orcattle.com/ or call 503-361-8941
 6-8 OCA Annual Convention -For registration info go to www.orcattle.com/ or call 503-361-8941
- 13 Follow –up to Winter Feeding Forum that was held in Burns in July—6:00 p.m. At the Eastern Oregon Agriculture Research Center.
- 20 Malheur County “Using Ration Balancing, Management Flexibility, and Past Experience to Minimize Winter Feed Costs” - Anna—Marie Chamberlain, Malheur County Livestock Extension Agent, David Bohnert, O SU Beef Specialist, Barbi Riggs, Crook County Livestock Extension Agent and Dustin Johnson, Harney County Range Extension Agent. Time and place to be announced. Contact Anna –Marie Chamberlain (541-881-1417) or Dustin Johnson (541-573-2506) for more information
- 22 Harney County Stock Growers Meeting—1: 00 p.m. Harney County Courthouse Basement Meeting Room. Dinner to follow at the Burns Elks Lodge at 6:00p.m.
- 27-28 Extension Office is closed in observance of the Thanksgiving Holiday
- DECEMBER** - 24, 25, & 26TH Extension office closed in observance of the Christmas Holiday