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Thoughts for 2019

Scott Jensen, University of Idaho-OWYHEE County Extension

A new year with new opportunities! What will the New Year bring? Following are some things to think about.

1. **Identify improvements that will have the most impact on your operation.** Often, we spend significant amounts of time and resources on things that have little impact on ranch profitability. In what areas do you spend most of your time and resources? Are you getting a reasonable return on that investment? Sometimes improved profitability comes in the form of reduced input costs because of improved resource management. For example, feed costs typically represent more than 50% of annual production costs. Are there improved grazing/management practices that can help reduce this cost? See thought number 7.

2. **Build more flexibility into your operation.** What are you doing differently to survive and thrive in the cattle business? What can you do to add value to the beef that you are producing? How is your beef different from anybody else’s?

3. **Better understand how to market your cattle timely and wisely.** Volatility in the cattle market has been a frequent topic of discussion. Predictions are for increased supply in 2019 which may negatively affect cattle prices. How are you going to survive and even thrive in the current market conditions?

4. **Improve your recordkeeping skills and organize documentation.** Management thinker Peter Drucker is quoted as saying “you can’t manage what you can’t measure”. We can measure most of what we do however we often don’t take the time. Good record keeping is crucial to measuring so that we can manage better. Redbooks, notebooks, computers, smart phones, etc. are all tools to help us keep records to help us manage better. Take the time to improve your record keeping and documentation. This will give you the necessary information to improve decision-making and profitability.

5. **Become a better steward of the land.** What is your impact on the land? Are you actively monitoring your rangelands and pastures? Educate yourself on improved management practices and implement them.

Continued on page 2

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Email: owyhee@uidaho.edu or
Phone: 208-896-4104

Past editions of the newsletter are available on our website at https://www.uidaho.edu/extension/county/owyhee

Owyhee County Extension December 2018
6. **Better understand your cattle’s health needs.** Work with your veterinarian to develop a comprehensive herd health plan. Remember the important role that mineral nutrition plays in animal health. Proper vaccination coupled with adequate nutrition and mineral supplementation can significantly reduce health problems.

7. **Further reduce your feed costs by managing feed losses.** Reducing feed losses during storage and feeding can impact the bottom line. Take a good look at feeding practices, bunks, equipment, and storage methods to identify where losses are occurring and where improvements can be made. Feed resources can be stretched when grazing pastures and corn stalks or other crop aftermath by strip-grazing.

8. **Develop cheaper feed rations that still meet nutritional needs.** Take a good look at your feed ration. Are there less expensive alternatives available? Remember that “cheaper” feed rations must still meet animal’s nutritional needs. I recently helped an individual calculate the cost of protein supplementation comparing a molasses tub versus supplementing with alfalfa. Alfalfa was a little over $2.00/lb. of protein cheaper than the tub.

9. **Better manage manure to get the most value from it.** Manure is a highly valuable resource. Make plans to capture it where possible and use it where needed most. Additionally, each ton of hay contains approximately 50 lbs. of N, 13 lbs. of P, and 50 lbs. of K. This will add to soil nutrients and improve pasture fertility if you are able to feed in the pasture.

10. **Improve cattle handling for more productive animals.** Cattle that are handled properly in a low-stress environment will perform better and yield a higher quality end product for consumers. You might also take a critical look at your facilities. Sometimes a few small improvements can make a significant difference for cattle and humans.

I wish each of you a happy and prosperous 2019. If you have any questions or would just like to talk cows, please don’t hesitate to call.
Monitoring and assessing vegetation and ground cover to detect shifts in plant community diversity, structure, and function is the basis for planning regional and local vegetation management actions. In order to effectively and efficiently monitor and assess ecosystems, data collection methods that are economically feasible, as well as accurate, must be selected. There are multiple methods that are used on the ground to collect these types of data ranging from photo monitoring (https://www.cals.uidaho.edu/edcomm/pdf/PNW/PNW671.pdf), to more quantitative measurements such as line-point intercept (https://www.landscapetoolbox.org/training/resources/line-point-intercept-method/). Additionally, remote-sensing technologies and platforms are continually being developed and evaluated to improve our ability to monitor, inventory, and assess large and diverse landscape, and to reduce or complement costly field data.

No matter the method selected when monitoring rangelands, each has tradeoffs. For example, ground-measured data is often limited across space and time. Rangelands are heterogeneous in nature so collecting ground-measured data on 1-2 locations within a pasture will not always represent and/or capture plant community shifts over time. On the other hand, collecting ground-measured data provides detailed information to account for specific site anomalies, such as the early detection of a noxious weeds that may be missed when using more course, remotely-sensed data. Remotely-sensed data allows for a rapid assessment over large landscapes and is often cost-effective, however, site specific details (e.g., plant species) may be missed. Additionally, remotely-sensed data using satellite or aerial photography only captures the top vegetation layer (or overhead view) of the plant community which often underestimates smaller vegetation that are found within or underneath tree and/or shrub species.

To maximize the strengths of ground-measured and remotely-sensed data when making land management decisions, a combination of data is often necessary to work through complex rangeland challenges. A combination of such data provides a foundation to access past management or natural event impacts on a landscape scale, as well as aid in prioritizing where management activities would be most ecologically and economically feasible under current conditions.

Remotely-sensed data that complements ground-data is becoming more readily available. One such tool is the Rangeland Analysis Platform (RAP; https://rangelands.app/). This is a FREE online tool “that was developed to provide landowners, resource managers, conservationists, and scientists access to data that can inform land management planning, decision making, and the evaluation of outcomes” (Rangeland Analysis Platform User Guide; https://rangelands.app/about/rapUserGuide.pdf). This tool provides vegetation cover by functional groups (i.e., plants that respond similarly to environmental conditions and have similar effects on ecosystem processes such as water availability; Figure 1) and bare ground cover on a yearly basis starting in 1984 and going through 2017. It also provides fire perimeters and annual precipitation/temperature to better understand plant community change over time (Figures 2 and 3).

Figure 1. Example of functional groups (A = Perennial cover; B = Annual cover; C = Shrub; D = Tree) cover estimates in 2017 within the Soda Fire (red boundary). Lighter colors represent lower percent cover for each functional group.
Figure 2. Example of perennial, annual, and shrub cover one-year pre- (2014) and one-year post-Soda Fire (2016) on a pasture east of Rockville, OR. Rangeland Analysis Platform estimates for perennial cover in 2014 and 2016 are 29% and 21%, respectively. Estimates for annual cover are 24% in 2014 and 36% in 2016. Shrub cover is estimated at 13.5% in 2014 and 10% in 2016 for the pasture.

Figure 3. Annual precipitation (inches) generated for a pasture east of Rockville, OR (Figure 2) using the Rangeland Analysis Platform. Red line is the 30-year average annual precipitation for the pasture.

Although there are tradeoffs with all monitoring methods, the combination of data that provides detailed information for a particular pasture (ground-measured data), and more course, landscape scale information (remotely-sensed data) should be considered when making management decisions. As technologies continue to increase, data will not be limited. Hence, exploring new data options and assessing the utility of these data in your management decisions is worthwhile. For more information on the Rangeland Analysis Platform (including a recorded webinar and demonstration) visit https://rangelands.app/, or contact April Hulet (aprilh@uidaho.edu; 208-364-4073).
Ruminants are born with limited antibodies and even though their innate immune system is functional, it requires stimulation and time (10 or more days) to respond to pathogen exposure. Thus mother nature provided a mechanism to improve survival opportunities—COLOSTRUM!

**COLOSTRUM**, the first milk, is unique in several properties: high fat especially vitamin A, proteins (caseins and albumins), immune cells and concentrated immunoglobulins (antibodies). Fat is an important source of energy for the newborn calf; vitamin A is important in the function of the GI system as the immune system. Proteins are building blocks for gastrointestinal (GI) function and integrity and production of immunoglobulins. Colostral immune cells are thought to populate the GI and lymphoid systems to facilitate early antibody production. The high levels of antibodies in colostrum afford protection to the new born until its own immune system becomes fully functional. Concurrently, the calf’s GI system is designed to readily adsorb the immunoglobulins, albeit only for up to 24 hours postpartum. Although GI uptake of immunoglobulins continues for up to 24 hours after birth, the efficacy of uptake decreases dramatically within the first 6-8 hours and is affected by environmental conditions, birthing conditions and maternal factors.

Because of this rapid and variable decrease in colostral absorption, it is important that calves receive colostrum within the first 2 hours of life!

**THE CHALLENGE: How much?** Calves need 100-150 grams of colostrum to have adequate antibody protection. Good quality fresh colostrum ranges from 35-50gm/liter; therefore, a calf should receive 3-4 liters of colostrum within the first 6-8 hours of birth. Nursing fosters more robust immunoglobulin adsorption than via intubation. If the calf is not nursing, give at least 50 grams of immunoglobulin within 2hrs and 100-150 grams within the 6-8-hour window (see graph above).

**REPLACEMENTS AND SUPPLEMENTS.** Colostral replacements contain at least 100 grams of immunoglobulin per dose. These products are made from dried colostrum and contain everything that fresh colostrum contains except viable immune cells. Replacement products also contain higher fat content than supplements. Supplements contain <50 grams of immunoglobulin per dose. Supplements are made from whey or serum and do not contain minimal fat, vitamins or proteins other than immunoglobulins.

**HANDLING COLOSTRUM, REPLACEMENTS AND SUPPLEMENTS.** Colostrum is of paramount importance to the early protection and survival of calves, and it has been shown that adequate colostrum at birth is necessary to assure lifelong productivity. Colostrum can be stored frozen and is stable for up to two years. Freezing of colostrum destroys the immune cells but does not affect the immunoglobulins or fat content. Reheating/thawing of colostrum can be done rapidly in microwave ovens with repeated mixing and at no more than 80% power in a 1000w oven (don’t let it boil or be too hot to handle—bare handed)!

Replacement or supplement doses consists of the entire “packet” dissolved in 1-2 quarts of 140 degree water. Colostral replacements are not as good as the “natural stuff,” but they are beneficial to the survival and growth of newborn calves. Colostral supplements are just that! They only provide a lesser quantity of antibodies but can be of value in calves that did not nurse well, nursed after 2+ hours or mama had inadequate milk/colostrum. Supplemental collostral products appear to be beneficial in inhibiting pathogen activity in the gut after the GI system has ceased immunoglobulin uptake; gut immunoglobulins are also metabolized by the gut and are rapidly transported through the gut further limiting their benefit.

**SUMMARY.** Colostrum within the first two hours of birth and 100+ grams of immunoglobulins within 6-8 hours.
The University of Idaho Vandal Brand Meats Lab opened over 40 years ago with the ability to provide faculty with the resources needed to teach, research, and provide opportunities for students. Vandal Brand Meats is managed by two University of Idaho employees and employed by approximately ten students attending the University of Idaho. These students come from all types of backgrounds and majors from English majors to animal science students. Vandal Brand Meats also includes a retail store on campus at the Meats Lab, a cooler of snack sticks and jerky at the Bookstore, as well as at the Vandal Store in Boise.

Vandal Brand Meats is home of the Vandal Dog. A sausage that is famously served at all University of Idaho Vandal home football games. These sausages along with many others can be purchased year-round at the Meat’s Lab. Vandal Brand Meats also has many student developed snack sticks, jerkies, and other sausages. Each year the Meats Lab smokes turkeys for many family Thanksgivings, hams for Christmas and Easter celebrations, and creates Christmas gift packs that include snack sticks, jerky, and cheese or for the grill lover a variety of hand cut steaks.

Each Fall students at the University of Idaho have the opportunity to take a course that gives them hands on learning experiences at the Meats Lab. This course is Live Animal Evaluation. During the course students are shown how to judge live cattle, sheep, and hogs. These animals are then slaughtered by Vandal Brand Meats. Students are then allowed to judge the livestock carcasses. This gives students a chance to learn how to judge live animals and determine what their carcass will yield and grade.

During Spring semester Animal Products for Human Consumption is offered as a course for students attending the University of Idaho. This course allows students hands on learning of what a day in a slaughter house and processing floor look like. There they have the opportunity to watch hogs, sheep, and beef slaughters. Throughout the course they also cut up their own quarters of beef, their own lamb and hog, as well as learn how to further process products like hot dogs, snack sticks, and cured meats such as ham.

Students working at Vandal Brand Meats learn all of these hands-on skills along with many more. They work alongside a USDA Inspector who helps teach them the importance of quality and safety of the products they have. Students develop experience working with and helping customers who come to have their livestock slaughtered as well as customers who stop by looking for some great grilling steaks.

Student employees are given many opportunities to learn more about the meat industry by traveling around the world to experience meat competitions, conferences, and conventions. These trips provide many resources, contacts, and awesome college experiences. Some of the places students have traveled in the past include California, Montana, Oregon, Wisconsin, and Germany.

Currently the University of Idaho College of Agriculture and Life Sciences is raising money to build a new Vandal Brand Meats Lab. The new facility will provide more opportunities with its up to date kill floor, large processing floor with areas of fresh and processed meats, larger classroom to accommodate more students, and a location more accessible for customers. To learn more about Vandal Brand Meats or to order yourself some quality meat visit: https://www.uidaho.edu/cals/vandal-brand-meats.

Cattlemen’s Corner Beef Newsletter

University of Idaho Vandal Brand Meats Lab

Samantha Roberts, UI Extension Educator, Canyon County

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Idaho Range Livestock Symposium

January 2019

In several IDAHO locations:

January 7th: American Legion Hall, Marsing
January 8th: CSI Herrett Center, Twin Falls
January 9th: Liberty Hall Event Center, Pocatello
January 10th: BYU Idaho Ag Science Center, Rexburg

Program:
9:00 am Registration
9:30 am Dr. John Ritten-Value and Economics of Range Improvements. Do They Pencil Out?
10:30 am Break
10:45 am Ben Eborn-Capturing Value through Preconditioning
11:10 am Benton Glaze and John Hall-Preconditioning Programs
11:30 am Les Nunn and Rebecca Mills-Preconditioning Survey
11:45 am Les Nunn and Rebecca Mills-Producers and Their Opinions and Use of Preconditioning (Video)
12:00 pm Lunch and Sponsor Speaker
12:45 pm Dr. Phil Bass-Capturing Value through Beef Carcass Quality
1:35 pm Dustin Johnson-Value and Practical Application of the Threat-Based Rangeland Model for Livestock Producers
2:15 pm Dr. John Ritten-The True Cost of Replacement Heifers: Raising vs. Buying
3:00 pm Adjourn

This Event is FREE of Charge (Including Lunch)

Thanks to Our Generous Sponsors

Partners:
- University of Idaho Extension, Department of Animal and Veterinary Science, and Rangeland Center
- Idaho Rangeland Resources Commission
- Idaho Cattle Association
- Natural Resources Conservation Service
- Idaho Department of Lands
- Idaho State Department of Agriculture

For More Information Contact:
Scott Jensen
University of Idaho Extension
208-896-4104
scottj@uidaho.edu

REGISTRATION: https://www.uidaho.edu/cnr/rangeland-center/events/irls-rsvp

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Well Connected Communities Volunteer Program:  
Be an Advocate for Health and Wellness

_Surine Greenway, Extension Educator, Family & Consumer Sciences_

University of Idaho Extension is piloting a new health and wellness volunteer program in 2019, starting February 5. Volunteers will be trained on how to address community health issues and priorities and will receive education on the social determinants of health, basic nutrition, physical activity recommendations, diabetes, chronic disease prevention, public speaking, and much more!

There are so many opportunities to take an active role in Owyhee County communities and here is a great chance!

- **WHO**: Youth who are 12 years or older and adults are welcome to participate! Both youth and adults will be participating in the same program and will be delivered the same materials. Families are welcome to join! This could be a great parent-child volunteer experience!

- **FORMAT**: The program is offered in an in-person and online dual learning experience. In-person dates are on Tuesdays: February 5, 12, 19, 26 and March 5, 12, 19 from 5:30-7:30 pm. Online modules will be provided for an additional two more hours of learning during the week at your own pace. The program will have office hours for the online program on Thursdays from 5:30-7:30 pm, so online modules may want to be completed during that time if you anticipate having any questions.

- **WHERE**: The Tuesday in-person classes will be held at the Owyhee County Extension Office (238, 8th Avenue West, Marsing, Idaho, 83639).

- **COST**: $10.00 per person. This is a pilot program, so we are keeping costs low!

- **EXPECTATIONS**: There are no required volunteer hour expectations once you have completed the program during the pilot year. We are looking to see what volunteer opportunities may come from this program and will offer these opportunities during the year to volunteers who have completed their training as they come.

- **QUESTIONS?** Contact the Owyhee County Extension Office at 208-896-4104 or email Surine Greenway at surineg@uidaho.edu.
Well-Connected Communities

A new volunteer-program that trains youth and adults on how to be advocates for health and wellness. Volunteers will then bring their new knowledge & skills into their communities. Volunteers will receive in person and online training.

Trainings Hosted At:

Canyon County Extension
501 Main St. Caldwell
208-459-6003

Owyhee County Extension
238 8th Ave W, Marsing
208-896-4104

Cassia County Extension
1459 Overland Ave, Room 4, Burley
208-878-9461

Ada County Extension
5880 N Glenwood St., Boise
208-287-5900

Course Cost:
$10.00/person

Youth (12+) and adults are welcome to participate

In Person Dates
Tuesdays, February
5, 12, 19, 26 as well as
March 5, 12, & 19
From 5:30-7:30pm

Save the Dates-
online at your own pace
Thursdays, February
7, 14, 21, 28 as well as
March 7 & 14

For more information or to register contact your local Extension Office

The University of Idaho has a policy of nondiscrimination on the basis of race, color, religion, national origin, sex, age, sexual orientation, gender identity/expression, disability, genetic information, or status as any protected veterans or military status.

Persons with disabilities who require alternative means for communication or program information or reasonable accommodations need to contact the Jackie Ameide by at least two weeks prior to the event at 208-459-6003 or jamande@uidaho.edu.
Owyhee County Extension Office
Holiday Closures
December 24 thru January 1 — Christmas/New Years
January 21— Martin Luther King Jr. Day
February 18—President’s Day

Owyhee County Horse Leaders Meeting
January 7, 2019 at the Owyhee County Extension Office at 7pm.
Meetings are held the first Monday of the month unless it falls on a holiday.

2019 Owyhee County Livestock Weigh-In dates
Beef—March 2, 2019
Swine—April 8, 2019
Sheep & Goat—May 17, 2019

For more information about Owyhee County 4-H and other programs & events offered through the University of Idaho, check out our website at https://www.uidaho.edu/extension/county/owyhee/4-h

4-H enrollment is now OPEN!
For all new and returning 4-H families, the deadline for enrollment is March 1, 2019. Please make sure you have updated information entered as well as your club, project(s) selected and dues paid by the deadline.

If you have any questions please call the Owyhee County Extension Office.

Dues cost:
- Cloverbud (ages 5-7 as of Jan 1) $4 per youth
- Regular Member (ages 8-18 as of Jan 1) $11 per youth
- Horse Project Members (ages 8-18 as of Jan 1) $14 per youth

Janelle would like to visit one meeting for each 4-H club in the coming year.
Please send an email to jmthompson@uidaho.edu with information on your club meeting schedule to set up a date that will work.
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