# University of Idaho Extension Owyhee County JULY 2023

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## Cattlemen's Corner Beef Newsletter



#### Moldy Forage Concerns

- K. Scott Jensen

I have been out of the country for the last two weeks but have heard reports of almost daily rain showers at home. Repeated rain showers coupled with cool temperatures and high humidity have likely forced many producers to leave cut hay lying in the field for extended periods of time before it could be baled. These conditions allow for growth of mold on the hay. Here are some frequently asked questions and answers on the subject of moldy hay.

#### What is the "black dust" on the hay in the windrow, and coming out of the baler or forage harvester?

The dust is partially fungal spores which have been produced at any point prior to harvest and spores that were produced in the windrow after cutting, due to high moisture levels. Another source of the dust is pulverized and decomposed plant material after repeated drying.

#### You can prevent further mold growth in harvested hay and silage!

Hay preservatives such as propionic acid products and other mold inhibitors can reduce or stop further mold growth in hay and silage, at least temporarily, when applied during baling or chopping. These products will not reduce the damage done before harvest, they merely stop new growth.

#### What effects do molds have on animals?

The spores can produce undesirable physical responses from humans and livestock from the physical dust and an allergic response in the animals. Horses and other non-ruminants are generally more susceptible to this problem than cattle. Feed intake is reduced. The spores also indicate a possibility of mycotoxin producing organisms. A mycotoxin is a toxic secondary metabolite produced by an organism of the fungus kingdom, including mushrooms, molds, and yeasts.

Molds commonly found in hay include Alternaria, Aspergillus, Cladosporum, Fusarium, Mucor, Penicillium, and Rhizopus. These molds **can produce spores that cause respiratory problems**, especially in horses or other animals fed in poorly ventilated areas and, **under certain conditions**, **produce mycotoxins**. There is much confusion about mycotoxins in forages because several mycotoxins may be present, diagnostic methods are not consistent, and treatment and control recommendations lack needed research.

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For While most molds do not produce mycotoxins, the presence of mold indicates the possibility of mycotoxin presence. Animals being fed moldy hay should be watched carefully for mycotoxin symptoms such as reduced feed intake, reproduction issues, and high somatic cell counts in lactating animals. If you suspect the hay has mycotoxins consult your veterinarian or nutritionist.

#### Strategies for the utilization of moldy hay:

If hay is dusty (from mold spores) avoid feeding it to sensitive animals and those in areas with poor ventilation. If mycotoxin symptoms are observed, check with a nutritionist to make sure the ration is properly balanced and possibly with a veterinarian to eliminate other disease/health problems. Some forage testing laboratories will provide mycotoxin tests.

Often, the best strategy is to remove a suspected mycotoxin-contaminated feedstuff from the diet and see if symptoms disappear. If mycotoxins are present, the feedstuff can often be fed at a diluted rate and/or with approved feed additives. Dilute the suspected feed by starting with a small amount, gradually increase the proportion, and observe animal behavior and health closely. Allow animals to sort through the hay and reject molded forage, and then remove the rejected forage.

#### In summary:

Most molds are harmless - not producing known mycotoxins. Many of the commonly diagnosed mycotoxins are produced in the field prior to harvest. The physical dust problem associated with moldy forage can be reduced by ensiling, mixing with a high moisture feed or wetting the hay, but these actions will not reduce mycotoxins if present.

K. Scott Jensen - UI Extension Educator County Chair Owyhee County, ID

#### Phenotypic Selection Traits for Replacement Heifers

- Tyler O'Donnell

With much of the Western United States coming out of a severe drought, many of you are likely thinking of replenishing a herd that was destocked when feed was hard to come by. These decisions should not be made lightly. Expanding herds is not cheap, and poses a certain amount of risk, however it does provide the opportunity to make genetic progress quickly and efficiently. Generally, the first decision is to retain or buy. This decision is largely dependent on available cash, and both approaches have pros and cons. If retaining, you know what that heifers background is, and you are familiar with

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her lineage. Buying can bring in new genetics that may be superior to what you have on the ranch, and allowing more genetic diversity, but again there is more upfront cash cost associated with this option. In either decision tree, we are looking for similar heifers, females that will produce a live calf, unassisted, every year, early in our calving season, that she raises to weaning with the least amount of cost.

When selecting these heifers, there are many things to consider, but for the purposes of this article I want to focus on phenotypic selection from the ground up. Feet and legs are a common problem in the Western United States cattle herd, so it is important to assess cattle before you buy them, as structural problems are only exacerbated by age and size. Foot scores are assigned on a 1-9 scale, one being a 90-degree angle with the ground and short toes, and a 9 being too extreme of an angle with long toes. We want cattle who fit into a 5 score, with a near 45-degree angle to the ground and normal toe length. Claw scores are also on a 1-9 score, 1 being claws to spread apart, 9 being misshapen with toes overlapping. We want our females to be a 5, with symmetrical claws and an appropriate gap between them. The Angus Association has a great video on Youtube (AngusTV) demonstrating how to evaluate feet and claw angle called- HOW-TO: FOOT SCORING CATTLE. Or feel free to reach out to your local Extension Office where they can get you more information.

Once we have determined that our replacements have good feet and claw angles, move to the leg structure. Cattle should have an angle to their rear hock that is not too extreme, and all toes pointed forward, to their head. Front knees should be straight, avoiding common problems like cow or sickle hock. When they walk, legs should move in a straight line, rather than swing in and out of their skeleton. Also look for heifers that pop in their joints or touch their feet together, all these can contribute to problems down the road. There are many resources on the internet that demonstrate proper cattle structure, as well as your local extension office. Structural correctness is imperative to ensuring that heifers will stay in the herd longer and produce more calves for the operation. Decisions made now can help set your operation up for success in the future and beyond.

> Tyler O'Donnell - UI Extension Instructor Washington County, ID

#### Surveys Indicate Extent of Pregnancy Diagnosis on Beef Operations

- J. Benton Glaze

Feed represents the largest portion of a beef cattle operation's variable costs. According to a University of Idaho Extension Livestock Cow-Calf Budget, feed accounts for approximately 60% of those annual variable costs. The cost of feed to maintain the cow herd through the winter represents approximately 65% of the total annual feed costs. Considering the magnitude of winter feed costs, or feed costs in general, it is easy to see advantages exist for producers that implement technologies that allow the herd to be fed in the most efficient way possible. One such technology is pregnancy diagnosis/testing.

Pregnancy diagnosis can be accomplished in beef females using rectal palpation, ultrasound evaluation, or via blood tests. Each of these evaluations/tests can effectively diagnose the beef female's pregnancy status when implemented properly. Pregnancy diagnosis is relatively inexpensive when the potential savings are considered. The ultimate goal is for each and every female in the herd to be pregnant. However, when testing indicates otherwise, open females should be culled from the herd prior to the winter-feeding period. Open cows and heifers carried through the winter generate costs but do not generate any income to help pay the bills.

To gain some perspective on the level of pregnancy diagnosis on beef operations, consider the results of the 2017 USDA National Animal Health Monitoring System (NAHMS-Beef 2017) survey and the 2017 Western Canadian Cow-Calf Survey (WCCCS). In 2017, NAHMS initiated a study to examine the cattle health and management practices on cow-calf operations in the U.S. The study was conducted in the 24 states with the largest beef cow populations and represented approximately 87% of all U.S. beef cows and approximately 80% of all U.S. beef operations. Similarly, in 2017, the WCCCS surveyed approximately 260 producers, representing approximately 35,000 breeding cows. The survey was conducted to assess the management and marketing practices on beef operations in western Canada.

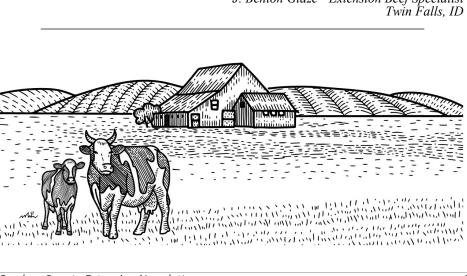
Results from the NAHMS-Beef 2017 study showed that only 30.6% of surveyed producers used pregnancy diagnosis of one form or another (palpation, 19.3%; blood test, 3.5%; ultrasound, 8.8%). Large herd-sized operations were found to be more apt to implement the tool compared to medium herd-sized operations and small herd-sized operations. Generally, beef operations in the central region of the U.S. used pregnancy diagnosis to a greater extent than operations in the western and eastern regions. Reasons for not pregnancy testing were not reported in the most recent study. However, in the

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NAHMS-Beef 2007 study, beef producers were asked why they did not use pregnancy testing on their operations. The top three reasons given were the amount of labor and time required, the cost, and the difficulty and complexity of the process.

In the WCCCS survey, results from 2014 and 2017 were included. In 2014, 60% of producers indicated they pregnancy tested their cows at least two times in the last three years and 66% of producers indicated they pregnancy tested their heifers at least two times in the last three years. The 2017 results showed an increase in both categories with 62% of producers pregnancy testing their cows in two of the last three years and 71% of producers pregnancy testing their heifers in two of the last three years. The WCCCS asked producers to share why they were not using pregnancy testing. The top reasons included being able to market open females after calving when prices are higher, the ability to visually tell which females are open, and the expense compared to the financial benefit.

The results of the NAHMS and WCCCS surveys show there is plenty of room for more producers to implement pregnancy diagnosis in their beef cattle herds. Pregnancy diagnosis is relatively inexpensive and can be implemented in most farm/ranch situations. Survey results seem to indicate that producers have some difficulty in recognizing the value of the technology. Producers wishing to learn more about pregnancy diagnosis and how to strategically implement it into their herd's routine management practices, can seek information from a variety of sources including University of Idaho Extension faculty and local veterinarians.



J. Benton Glaze - Extension Beef Specialist

## Owyhee County Family Issues

- Suriñe Greenway

As we embrace the warmer temperatures of summer, a lot of us are going to be out and about and it is important that we consider many key factors. Just

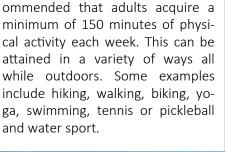


as we should always be working to take care of our bodies, it is especially crucial that we are mindful of our body's signals as we are outside.

Some of these key factors that we need to consider include:



As you are outside, please don't forget to use your sunscreen and insect repellent. Not only should it be applied prior to heading outdoors, but be mindful of reapplication needs as your day goes on. Sunscreen use should be at least Sun Protection Factor (SPF) 15. In addition to the use of sunscreen, also consider the use of wide-brimmed hats and clothing that covers your skin well.



Move more by sitting less. It is rec-





Keep Cool in the Heat – While many of us enjoy being outdoors and enjoying the sunshine, that enjoyable heat can become a safety issue for any one of us, especially those who may have a chronic medical condition. Reduce the risk of issues by staying cool whenever possible, staying hydrated by drinking adequate water, and staying informed of

the temperatures and trying to limit your outdoors time, and that sun exposure during the hottest times which take place between 10 AM and 4 PM.

#### Owyhee County

Family Issues

Eat Healthy Foods – Fruits and vegetables can be easier to acquire in the summer months when they are in season and many times can be eaten fresh. As you are looking at ways to be out and about, they may also help provide the nutrition you need to fuel your fun activities.





Choose Drinks Wisely – It is so important that you remember the role that hydration plays for your body's most basic functioning needs. When you are moving more, or outside in warmer temperatures more, this increased temperature range can increase your hydration needs above your regular levels. Drink water (fluoridated tap or unsweetened bottled or sparkling) instead of sugary or alcoholic drinks to reduce calories and stay safe.

Suriñe Greenway - UI Extension Educator Owyhee County, ID



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## Owyhee County

Family Issues

# FREE CLASSES!





**University** of Idaho Extension

## FREE CLASS VIA ZOOM

## AIR FRYING FUN

Learn the basics of air frying & how simple it can be to air fry a quick meal!

THURSDAY, JULY 20TH CLASS STARTS AT 12PM MT 11AM PT

Register at: bit.ly/airfry23

Other course offerings available at uidaho.edu/food-safety

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## FREE CLASS VIA ZOOM FERMENTATION BASICS

Learn the basics of fermenting foods and enhancing the nutritional value and digestibility of foods!

THURSDAY, AUGUST 24TH CLASS STARTS AT 12PM MT 11AM PT

Register at: bit.ly/fermentation2023 Other course offerings available at uidaho.edu/food-safety

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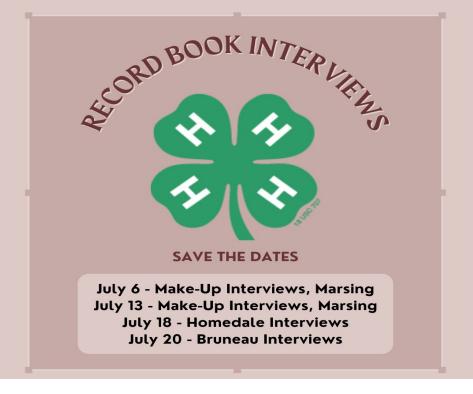
Website Updates:

Our website is updated with important documents including updated project checklists, 4-H Requirements to Exhibit at Fair, Exhibitor & Sale Rules, Buyer Certificates & the Buyer Flyer.

Record Book documents, including outlines, guides, & rubrics, along with ZSuite Tip Sheets & a tutorial are also available on our website.

The link to the website is www.uidaho.edu/extension/county/ owyhee/4-h.

If you have questions, or need assistance finding any of these documents, contact Madi at madisona@uidaho.edu.





Message from AmeriCorps Member, Taryn Packer:

"We have had a great start to the summer day camp season and have several more exciting day camps planned for the coming weeks!

On July 12th we are having a Small Animal camp, see flyer below, where you will learn how to show small animals. Experienced small animal showman from Keepen' It Country 4-H Club will be teaching!

On July 21st we are doing a "Survivor" themed day camp, complete with your own tribe. You will learn how to be a survivor with water purification, what plants you can eat, and how to build a shelter. You will also practice teamwork and other skills while working through the fun challenges.

On July 26th we are doing Plants and Their Uses, from aloe vera to lavender. Do you ever wonder where your aloe gel comes from and why it helps with sunburns, or why lavender helps you relax? We will be covering all of that! You will also learn how to use these plants to make soap and gels.

Don't forget to look for us at the Owyhee County Fair where we have many fun STEAM-based activities planned!"

Be on the lookout for flyers & sign-up information coming soon!

To contact Taryn, email pack5776@vandals.uidaho.edu or call the office!

## LEARN HOW TO SHOW YOUR

## SMALL ANIMALS!

Do you need help learning how to show your small animal projects or want to brush up on your skills before Fair?

We are here to help!



We encourage you to bring your own small animal to practice, but it is not required.

JULY 12TH 6-7:30 PM

ALL AGES WELCOME! NO COST TO ATTEND! REGISTER ON ZSUITE





Owyhee County Extension Office 238 8th Ave W Marsing, ID 83639





208-896-4104 pack5776@vandals.uidaho.edu



Fizzy Foamy Fun - Try this fun science experiment with your kids to learn about chemical reactions!

Chemical reactions are happening all around us! Wood burning, food cooking, cars using gas, and metal rusting are all examples of chemical reactions.

This activity will introduce your kids to chemical reactions and help them recognize when they occur, plus you can have some foamy, messy fun! The reaction in this experiment is an exothermic reaction, a reaction that produces heat!

For this activity you will need:

One 20oz ounce bottle (rinsed out and dry)

Dish soap

Food coloring

¼ cup warm water

Small bowl

Funnel

Large rectangular baking pan (this keeps the mess minimal)

½ cup hydrogen peroxide, 3% or 6% solution

1 packet active dry yeast

Step 1: Combine the warm water and yeast in a bowl and set aside.

Step 2: Place the bottle in the baking pan. Use the funnel to add hydrogen peroxide to the bottle.

Step 3: Add a few drops of food coloring & a few squirts of dish soap to the bottle.

Step 4: Use the funnel to pour the water/yeast mixture into the bottle. Take the funnel out quickly, stand back, and watch the reaction!

Touch the bottle or foam after the reaction has started (careful, it might stain your hands!) and you will notice that it is very warm! Explain to your children that this is caused by the hydrogen peroxide breaking down, which creates the heat! Most of the time, chemical reactions occur rather slowly, but by adding the yeast, the reaction is sped up and the affects are increased! The oxygen released by the breakdown of the hydrogen peroxide combines with the soap to create the foam! Reflect on the activity by asking your children the following questions: What did you observe before adding the water and yeast mixture to the bottle? What changed when you added the water and yeast mixture? What do you notice if you touch the bubbles?

Activity adapted from: https://4-h.org/clover/activities/fizzy-foam-fun/

Visit CLOVER, https://4-h.org/clover/about/, for additional curriculum and activities like this! CLOVER offers free interactive, exciting activities for ages 5-18, created and compiled by the USDA and Cooperative Extension.



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Champion Junior - Jaci Gould Reserve Champion Junior - Jess Riley

Dresentation Contest Res

Champion Intermediate - Bailey Moos Reserve Champion Intermediate - Liam Aquiso

Champion Senior - Llee Loucks Reserve Champion Senior - Hayden Higgins

Champion Junior - Colt Hipwell Reserve Champion Junior - Carson Montenegro

Champion Intermediate - Garrett Hubler Reserve Champion Intermediate - Emeline Hipwell

Champion Senior - Trinity Neeser Reserve Champion Senior - Kate Hipwell



1st Place Junior - Bobbie Watkins<br/>3rd Place Junior - Treyvn Freelove<br/>5th Place Junior - Trey Larsen<br/>6th Place Junior - Kip Corder<br/>6th Place Intermediate - Sawyer Watkins<br/>9th Place Intermediate - Cohen Larsen<br/>1st Place Senior - Robert Renteria<br/>10th Place Senior - Bobbie Renteria

2nd Place Junior - Bobbie Watkins<br/>3rd Place Junior - Trevyn Freelove<br/>4th Place Junior - Trey LarsenSporting Clays6th Place Junior - Kip Corder<br/>2nd Place Intermediate - Sawyer Watkins<br/>8th Place Intermediate - Cohen Larsen<br/>1st Place Senior - Robert Renteria<br/>9th Place Senior - Bobbie Freelove

Ind Place Junior - Bobbie Watkins<br/>3rd Place Junior - Trevyn Freelove<br/>4th Place Junior - Trey Larsen<br/>6th Place Junior - Kip Corder<br/>4th Place Intermediate - Sawyer Watkins<br/>8th Place Intermediate - Cohen Larsen<br/>1st Place Senior - Robert Renteria<br/>7th Place Senior - Bobbie Freelove

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