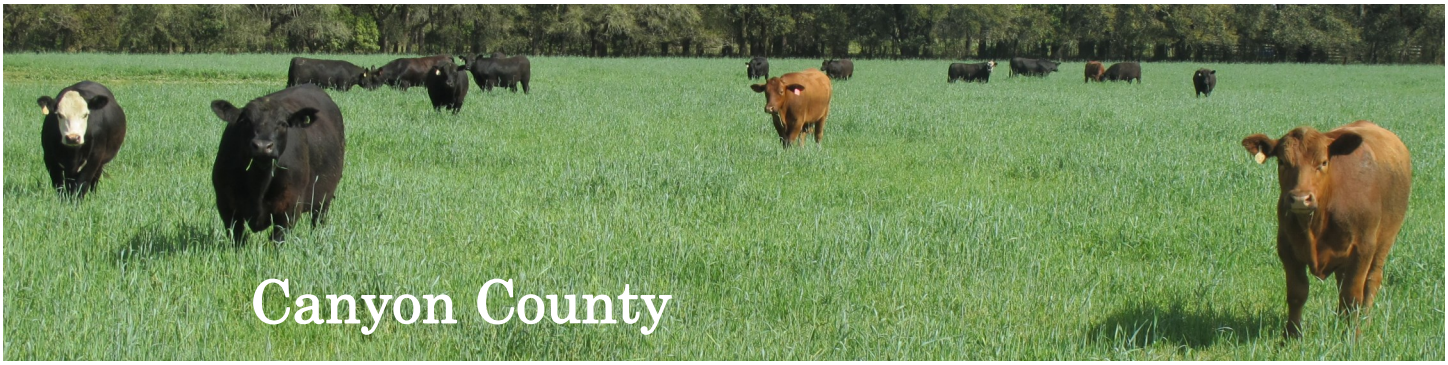


Cattlemen's Corner Beef Newsletter

Inside this issue:

Breeding Soundness Evaluations

K. Scott Jensen, Owyhee County Extension

For many ranchers, breeding season is just around the corner. Bull fertility is not constant and can change due to physical, environmental, and health issues. To help ensure breeding success, each bull should receive a breeding soundness evaluation within 30 to 60 days prior to the beginning of each breeding season.

A breeding soundness evaluation should consist of the following:

- Physical examination
- Examination of reproductive organs
- Scrotal circumference measurement
- Semen evaluation
- Trichomoniasis testing

A physical examination should look at a bull's eyes, teeth and mouth, body condition, and feet and legs. Bulls must be able to see, eat, smell, and move around in order to breed cows. Bulls with poor vision can be dangerous to work and are often dominated by other bulls thus becoming less effective. Good teeth are necessary for the bull to consume sufficient nutrients in order to maintain condition/energy levels necessary for breeding. Good feet and legs are crucial for a bull to be able to travel and breed in rough country. Be sure to examine all four legs and all joints for swelling or injury.

Each bull's reproductive organs should be thoroughly examined. Internally the vesicular glands, ampullae, and prostate should be examined by rectal palpation for inflammation, adhesions, and other abnormalities. The scrotum, testicles, and epididymis should be checked for any injuries or abnormalities. The scrotum and penis should be examined for any sores, lacerations, or abscesses. During electro-ejaculation, the penis should be examined for any abnormalities or injuries. Any

Continued on page 2

University of Idaho Extension, Canyon County

Jerry Neufeld	Samantha Ball	Nic Usabel	Carrie Johnson Clarich	Jackie Amende Lewis
Extension Educator	Extension Educator	Extension Educator	Extension Educator	Extension Educator
Agriculture	Livestock/Small Acreage	Horticulture	4-H Youth Development	Family & Consumer Sciences

Continued from page 1

abnormalities may prevent the full extension of the penis or cause associated pain/discomfort that might cause associated pain/discomfort that might cause a bull to lose his desire or ability to breed cows.

Scrotal circumference one of the best indicators of daily sperm production. Bulls with larger testicles not only produce more semen but also produce offspring that reach puberty at an earlier age. Acceptable minimums are 30 cm for yearling bulls, 32 cm for 18-month-old bulls, and 34 cm for mature bulls.

Semen is typically collected for evaluation using an electro-ejaculator. Semen quality is then determined by looking at concentration, motility, and morphology. Concentration is a comparison of the number of normal sperm cells in each ml of semen. Motility is the percentage of live, active sperm cells in a sample. Desired motility is >70%. Morphology is the percentage of normal-shaped sperm cells. Abnormal sperm cells with bent or coiled tails, misshapen heads, and other defects are unlikely to fertilize an egg. Minimum acceptable level of normal sperm cells is 70%.

Trichomoniasis is a venereal disease in cattle that is transmitted during mating. Trichomoniasis causes cows to abort in the first 3-4 months of gestation. Cows with trichomoniasis can clear up and breed back however it is extremely difficult to clear up an infected bull. Bulls should be tested for Trichomoniasis each year prior to the breeding season with any positives being culled.

In summary, conducting a thorough breeding soundness evaluation on each bull prior to the beginning of each breeding season can help identify problem animals and help ensure a successful breeding season. Your herd veterinarian will design an appropriate program for your operation. For additional details, please refer to Article 425-Identifying the Functional Bull: Bull Soundness and Management in the *"Western Beef Resource Committee's Cattle Producer's Handbook".*

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

Assessing Drought

Jim Sprinkle, Ph.D.

Introduction

Recently, an article in USA Today and other online magazines predicted that a megadrought may be in store for the western US that may equal long term droughts that occurred over the past 1,200 years. We hope that this prove to be an overstatement, but things have not been looking good, particularly in the American Southwest.

The Pacific Northwest is considered to be more drought resistant than some other areas of the West. The preponderance of winter/spring moisture and the dominance of cool season grasses aid in this resilience. In some winters, our climate is influenced by El Niño (warmer and drier) or La Niña (cooler and wetter). When we experience increased winter moisture, the effects of increased snowpack can assist in maintaining more abundant forage through the summer.

Continued on page 4

UNIVERSITY OF IDAHO EXTENSION,
CANYON COUNTY

Goat Artificial Insemination Clinic

DATE: FRIDAY JUNE 4 & SATURDAY JUNE 5
TIME: 9AM-6PM EACH DAY
LOCATION: CANYON COUNTY FAIR GROUNDS
111 S. 22ND AVE. S.
CALDWELL, ID 83605

CALL CANYON COUNTY EXTENSION
AT 208.459.6003 TO SIGN UP AND PAY
BY DEBIT/CREDIT CARD.
LIMITED SEATING AVAILABLE
COST IS $250/PERSON

Continued from page 2

Unfortunately, more of our winter moisture has been shifting to rainfall instead of snowfall over the last 20 or 30 years https://www.uidaho.edu/cnr/rangeland-center/resources.

We experience drought about 13% of the time, or about once every 7.7 years. When drought occurs, cattle management on rangeland pastures can be challenged by both water and forage availability. The tools below may be helpful for helping assess drought and in planning ahead for the summer grazing period.

Drought Assessment Tools

The West Wide Drought Tracker https://wrcc.dri.edu/wwdt/index.php will let you assess what the current drought state is for Idaho or any other western state (**Figure 1**).

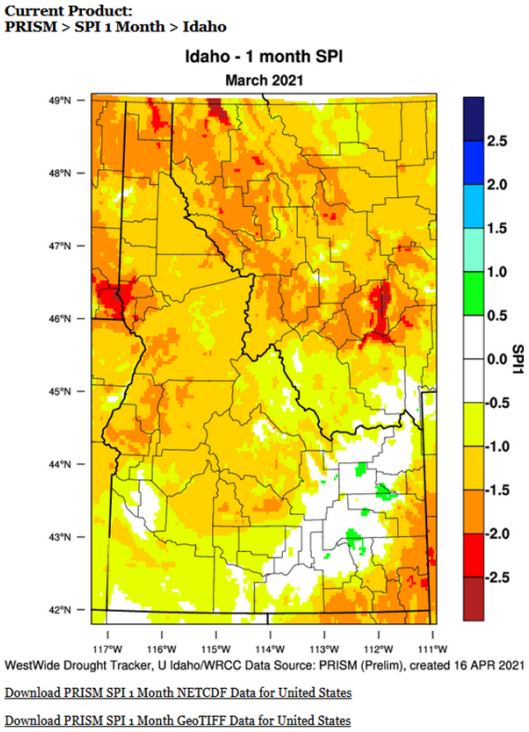


***Figure 1**. March 2021 SPI for one month compared to the long term average. Much of SW Idaho is approaching either a "dry" or "moderately dry" status.*

One of the most useful maps for comparison is to choose the Standardized Precipitation Index (SPI). The map produced will affix a SPI value that compares the precipitation for the current period specified to the historical average. The values are expressed as statistical standard deviations, positive or negative, from the long-term average. The standard deviation is related to the difference between a measurement (such as one person's height) and the average for a population (such as the height for all people sampled in a contemporary population). Standard deviation can be obtained with a scientific calculator or a spreadsheet program. Whenever we measure individuals in a population, we can always estimate the variation among samples using standard deviation. Normally distributed sampling populations will have observations follow a bell curve, with most (68%) of the population being within one standard deviation of the mean (or average) and almost all (95%) of the individual observations being within two standard deviations of the mean. To compare the probability of a climate event, a SPI that considered to be wet (positive value) or dry (negative value) is from 1 to 1.5 standard deviations from the long-term average and happens 9% of the time. A moderately wet or moderately dry event is from 1.5 to 2.0 standard deviations and occurs 4% of the time. A SPI with a standard deviation of extremely wet or extremely dry exceeds 2.0 standard deviations and only occurs 2% of the time.

To monitor the climate with satellite imagery on a more real time basis, the University of Arizona Droughtview website https://droughtview.arizona.edu is an excellent resource (**Figure 2**). Every 8 days, satellite imagery is uploaded to allow a comparison of land surface greenness. Using the Normalized Difference Vegetation Index (NDVI) imagery, one can compare the current greenness to the average greenness of the vegetation since the year 2000. You can also use dual panes to compare two different

Continued on page 4

Continued from page 4

streams of data or two different time periods. Figure 2 shows that the NDVI difference from the 20-year average for vegetation greenness between Jordon Valley Oregon and Murphy Idaho is trending drier for early spring.

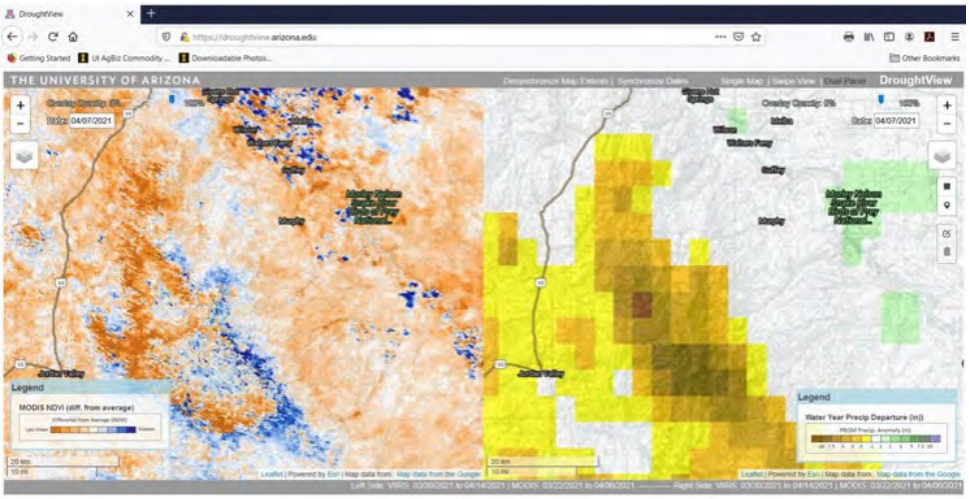


Figure 2. NDVI satellite imagery for the difference in greenness from the 20-year average for April 7, 2021 (left hand panel) and the water year precip departure in inches (right hand panel). Some of the blue shown in the left hand map can be snow that hasn't melted yet.

The yearly precipitation departure is more extreme and so we can anticipate that conditions could get worse. You can zoom in on the Droughtview maps and apply a layer to include either BLM or USFS allotments. Rainfall events can sometimes be localized and using this tool may help you determine more optimal areas to graze in the pasture rotation.

Jim Sprinkle, Ph.D.—Extension Beef Specialist
UI Nancy M. Cummings Research, Extension & Education Center
Carmen, ID

Creating a Land Management Plan

April Hulet

When considering the best way to manage rangelands, I often start by asking five questions.

1. What is the goal for the rangeland? A goal should be a general outcome you intend to achieve, be broadly encompassing and provide overall direction for the management plan. For example, a goal may be to "Manage healthy, sustainable rangeland that supports livestock and wildlife."

2. Where are we currently? This involves conducting baseline inventory and assessment of current land conditions and infrastructure. Things to consider include the size of pastures, infrastructure such as fences, soil information, climate data, fire history, and plant information. Although getting in the field is often the best way to collect much of this information, there are also many tools that can provide historical information, landscape scale perspectives, and context. Some of these tools are described below.

3. Where do we want to be? Identify objectives that define desired land conditions (these can be to maintain current conditions or objectives to achieve a desired condition if change is needed). Examples may be to "increase perennial bunchgrasses to 3 plants/m2" or, "reduce cheatgrass cover to less than 10% of the plant community".

Continued on page 7

Continued from page 6

U and I TOGETHER

An activity series where all ages can learn!

4-4:30 PM MST | WEEKLY

TUESDAYS JUNE 1ST-AUGUST 17TH

Free and virtual on zoom!
See back for series schedule

University of Idaho Extension

Click here or scan the QR code to register!

It is U of I policy to prohibit and eliminate discrimination on the basis of race, color, national origin, religion, sex, sexual orientation and gender identity/expression, age, disability, or status as a Vietnam-era veteran. This policy applies to all programs, services, and facilities, and includes, but is not limited to, applications, admissions, access to programs and services, and employment. Persons with disabilities who require alternative means for communication or program information or reasonable accommodations need to contact the Canyon County Extension by at least two weeks prior to the event at 501 Main Street, Caldwell, 208-459-6003 or canyon@uidaho.edu.

Continued from page 5

4. How can we get there? This includes selecting strategies and management actions that will achieve the objectives. When selecting strategies and actions, identify a logical starting point but also leave flexibility in the plan to make adjustments as needed along the way to make sure we are headed toward achieving the objectives.

5. How will we know we've gotten there? Or, if adjustments are needed? This often includes year-to-year and within year indicators. For example, we will want to evaluate annual and trend monitoring information, determine potential causes of observed trends (positive or negative), and determine if longer term adjustments are needed in the management to make sure progress is being made.

These are not new questions or concepts, but they do provide a framework to address challenges and opportunities on the land, and provide a structure that allows us to better communicate our land management decisions.

The tools presented below represent only a small portion of the tools that are freely available to help you create a land management plan and aid in year-to-year decisions. When using online tools and resources, we have to recognize that they all have limitations and assumptions may not be appropriate for all land. Also, tools should be used alongside local knowledge and on-the-ground data!

Rangeland Analysis Platform (RAP). This is an interactive web application designed to assist in managing and monitoring rangeland. The RAP uses remote sensing data from 1984-2020 that allows users to monitor trends and changes in different types of rangeland vegetation. Website: https://rangelands.app.

PRISM Climate Group. The website provides short-term and long-term climate patterns. The data explorer allows the user to choose a location, a time period of interest, and multiple climate variables of interest. Website: https://prism.oregonstate.edu.

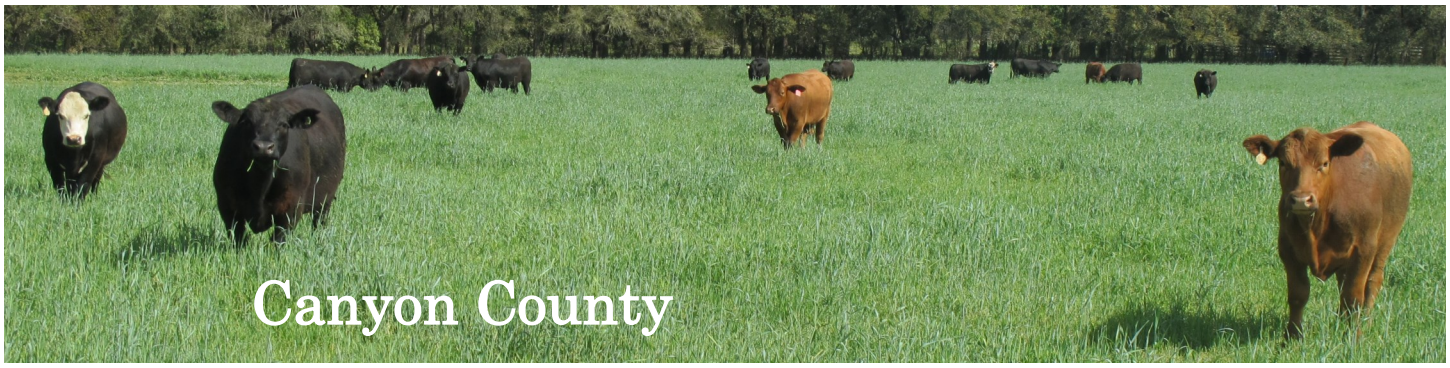
Web Soil Survey (WSS). The web soil survey provides soil data, annual forage production estimates for different plant communities, and lists of common plant species. Website: https://websoilsurvey.sc.egov.usda.gov/app.

Ecosystem Dynamics Interpretive Tool (EDIT). EDIT is the primary repository of Ecological Site Descriptions produced by the NRCS. It provides information about how ecosystems respond to different land uses, management practices, and natural phenomena. Website: https://edit.jornada.nmsu.edu.

April Hulet - UI Extension Rangeland Specialist
College of Natural Resources Boise, ID

University of Idaho Extension
Canyon County
501 Main Street
Caldwell, ID 83605

RETURN SERVICE REQUESTED



Cattlemen's Corner Beef Newsletter

This newsletter is provided as a public service. If you do not have an interest in receiving the Canyon County Extension Newsletter in the future, please contact the Extension Office and we will remove your name from our mailing list. Or, if you know of someone who would like to receive the newsletter, please let us know at:
Email: ***canyon@uidaho.edu*** ***or Phone: 208-459-6003.*** Past editions of the newsletter are available on our website at https://www.uidaho.edu/extension/county/canyon/small-acreage.