



Did You Know?

With breeding season approaching, now is a good time to conduct a breeding soundness exam.

Theresa

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Bull Sale Season is Here – Reminders for Checking Bulls before Breeding

With breeding season approaching, now is a good time to conduct a breeding soundness exam. A basic breeding soundness evaluation consists of:

- Physical examination of the animal
- Examination of reproductive organs
- Measurement of scrotal size
- Semen evaluation

The physical exam should ensure that the bull is able to see, eat, smell, and move freely to successfully breed cows. Structural soundness is important if the bull is expected to travel across a range of conditions and mount a cow. Also, many structural defects are hereditary and may be passed on to the calves. Body condition should also be examined to ensure the bull has enough condition to breed the cows, with a score of 7 recommended for range bulls entering the breeding season.

Internal reproductive organs should be examined for any inflammation, adhesions, or fibrosis. The spermatic cord, scrotum, testicles, and epididymides are examined for evidence of abscess, injury, frost bite damage, or tumors. The testicles are the factory where sperm cells are produced, and they should be firm, resilient, equal in size, and adequate to large for the bull's age. Degenerative changes in any of these organs is a frequent cause of reduced fertility. Testicular hypoplasia (underdevelopment) is also evaluated at this time. Hypoplasia reduces fertility and is highly heritable. With this condition, one or both testicles are one-third of normal size.

The penis and sheath should be examined for any sores, lacerations, abscesses, scar tissue, or adhesions. On erection with the electro-ejaculator, the penis should come from the sheath in a straight line with the body of the bull. Persistent penile frenulum (tied back penis) is occasionally found during this part of the examination. Injuries to the penis usually occur during the active breeding season but may be resolved enough to be missed until the breeding soundness exam. Old lacerations and adhesions usually prevent the penis from being fully extended or cause pain during breeding. Bulls with any type of painful lesion will usually quit trying to breed cows. Warts on the tip of the penis are a relatively common finding in young bulls.

Because scrotal size correlates well with daily sperm production and is highly repeatable, scrotal circumference is a valuable indicator of semen production. Bulls with bigger testicles produce more semen and sire sons with bigger testicles. Bulls with larger testicles will reach puberty at an earlier age and will sire heifers that reach puberty at an earlier age also.

continued on page 2

Bull Breeding Health Reminder	1
Water Measurement and Report Course	2
Temple Grandin at MJC	2
Healthy Animals, Healthy People.....	3

A bull can be normal on a general physical and reproductive organ examination and still have low fertility due to poor semen quality. Sperm cell concentration (number of normal sperm cells), motility (vigorous, active sperm), and morphology (shape of the sperm cells) evaluations are the basis for the scoring system developed by the Society of Theriogenology. This scoring system has become the standard across the country and is used by almost all veterinary practitioners.

In addition, the following tests or procedures may be included in a breeding soundness evaluation:

- Mating ability. Some assessment of the bull's desire (libido) and ability to breed a female in heat (termed **servicing capacity**).
- Pelvic measurement. Believed to be a heritable trait and predictor of early maturity in heifers as well as reducing calving problems.
- Trichomonosis testing.

One final thing to consider for your breeding soundness program is the nutritional plane of your cows. Make sure cows have access to minerals and a high enough crude protein diet to meet their requirements to cycle back after calving. This is the time of their highest nutritional demand with a nursing calf on the ground and any shortage in nutrition she will sacrifice herself before sacrificing her calf. In other words – she won't cycle so more energy can go into producing milk for the calf beside her.

Water Measurement and Reporting Course Offered

Senate Bill 88 requires that all water right holders who have previously diverted or intend to divert more than 10 acre-feet per year (riparian and pre-1914 claims) or who are authorized to divert more than 10 acre-feet per year under a permit, license, or registration, to *measure and report the water they divert*. Detailed information on the regulatory requirements for measurement and reporting is available on the State Water Resources Control Board [Reporting and Measurement Regulation](http://bit.ly/Waterdivert) webpage (<http://bit.ly/Waterdivert>). The legislation, as written, requires for diversion (or storage) greater than or equal to 100-acre feet annually that **installation and certification** of measurement methods be approved by an **Engineer/Contractor/Professional**. Diverters across California were concerned about this requirement.

California Cattlemen's Association heard from their membership and worked with Assemblyman Bigelow on a bill that would result in a self-certification option. Assembly Bill 589 was passed and became law on

January 1, 2018. This bill, until January 1, 2023, allows **any diverter**, as defined, *who has completed this instructional course on measurement devices and methods administered by the University of California Cooperative Extension*, including passage of a proficiency test, to be considered a qualified individual when installing and maintaining devices or implementing methods of measurement. **The bill requires the University of California Cooperative Extension and the board to jointly develop the curriculum for the course and the proficiency test.**

At the workshop you will:

- Clarify reporting requirements for ranches.
- Understand what meters are appropriate for different situations.
- Learn how to determine measurement equipment accuracy.
- Develop an understanding of measurement weirs.
- Learn how to calculate and report volume from flow data.

This training will be held on **Monday, October 22, 2018, from 1:00–4:30 p.m. at the Stanislaus County Harvest Hall, 3800 Cornucopia Way, Modesto.** Sign in begins at 12:30 p.m.

Pre-registration is required: Cost is \$25 per ranch. **Register by October 15.** No refunds offered after October 15. The registration fee after October 15 is \$30.

Register on-line with a credit card at: http://ucanr.edu/water_diversion or mail a check and the registration form included below. **Mail-in registration with payments must be received by October 15.** Contact us by October 15 if you need special accommodations at 209-525-6800.

Continued on page 3

Temple Grandin At MJC

Modesto Junior College is hosting a free evening with Temple Grandin, **November 6 at 7:00 p.m.** at the Ag Center for Education Pavilion on the West Campus. Her talk, titled "Understanding Animal Behavior," is open to everyone, and there is no charge for parking. A variety of Dr. Grandin's books will be available for purchase, and book signing. For more information, contact Ryan Amaral at MJC Ag Department at 209-575-6194.



Water Measurement/Reporting MAIL IN Registration Form

Mail-in registration with payments must be received by October 15. Contact us by October 15 if you need special accommodations. **Mail to: UCCE, Attn: T. Becchetti, 3800 Cornucopia Way, Suite A, Modesto, CA 95358.**

Please Print:

1. Name: _____

Ranch: _____ Phone: _____

Email Address: _____

Total people from ranch attending: _____

2. Name: _____

Ranch: _____ Phone: _____

Email Address: _____

Total people from ranch attending: _____

3. Name: _____

Ranch: _____ Phone: _____

Email Address: _____

Total people from ranch attending: _____

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Use this form to pay by check. No refunds after October 15. Pre-register by returning this form, with check for \$25 per ranch made payable to **UC Regents**. Each ranch will receive a binder of resources and a certificate of completion of the course. Please register under the person's name who is listed on the ranch's permit. If anyone else would like a binder and certificate, please register separately (line 2 or 3).



Healthy Animals, Healthy People

An informational workshop hosted by the University of California providing an opportunity to meet and learn from other backyard livestock owners/producers and animal health professionals.

In an effort to provide backyard livestock owners with the latest disease prevention and treatment information, the University of California is hosting a series of workshops in Northern California titled "Healthy

Animals and Healthy People." The workshops will feature talks given by some of California's top veterinary professionals. Small-scale livestock owners, producers, and 4-H/FFA project leaders are encouraged to attend to receive valuable information and practical tools regarding animal health, biosecurity, and antibiotic use under Senate Bill 27. These workshops will provide an ideal opportunity for livestock owners to ask questions, raise concerns, and connect with each other, local veterinarians, and county farm advisors.

If you are interested in learning how to keep your animals healthy and safe, please register for the Healthy Animals and Healthy People workshop online at <http://ucanr.edu/backyardlivestock> because healthy people need healthy animals.

Harvest Hall, 3800 Cornucopia Way, Modesto, CA

October 13, 9:00am-2:00pm, sign-in starts at 8:30 a.m.

Lunch included.

Registration is \$10 per person by October 4

No refunds offered after October 4

Agenda

General Biosecurity, Antimicrobial Use and Regulations – Drs. Alda Pires and Richard Pereira
Facilitator: Theresa Becchetti

Beef Cattle Herd Health/ Quality Assurance – Dr. Gaby Maier

An overview of best practices for beef cattle herd health and production.

Small Ruminant Herd Health – Dr. Alda Pires
Learn how to keep your sheep and goats healthy, happy, and productive.

Biosecurity and Avian Diseases – Dr. Rodrigo Gallardo/ Gallardo Lab
Focusing on disease prevention and common disease recognition in avian species.

Pastured Poultry – Dr. Maurice Pitesky/ Pitesky Lab.

A look into UC Davis' Pasture Poultry Farm and the techniques you can implement in your own backyard flock, such as mobile coop design, biosecurity practices, and more.



Livestock Lines

Stanislaus & San Joaquin Counties



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Advisor

Look What's Inside:

- ◆ **Bull Breeding Reminders**
- ◆ **Water Measurement Course**
- ◆ **Upcoming Events**

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