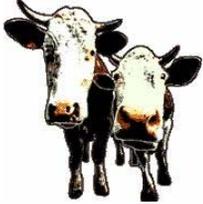




# University of California Cooperative Extension - Solano, Yolo & Napa Counties

Fairfield office:  
501 Texas Street, Fairfield, CA 94533  
Phone (707) 435-2459  
Fax (707) 429-5532

Woodland office:  
70 Cottonwood Street, Woodland, CA 95695-2593  
Phone (530) 666-8739  
Fax (530) 666-8736



## Local Fodder

### December 2003

#### *Inside this issue*

- ◆ Holiday Wishes PAGE 1
- ◆ Ranching and Biodiversity PAGE 2
- ◆ Treating Calf Scours PAGE 2
- ◆ Weed Workshop PAGE 4
- ◆ Request for Donations PAGE 5
- ◆ Local Fodder Subscription Renewal PAGE 7

#### HOLIDAY WISHES

With Christmas just around the corner I want to use this special issue to send you my best wishes this holiday season. As the pace of work sometimes slows, maybe just a little, around the holidays, it gives us some time to reflect on the past year. As I think back through 2003 of events that have affected livestock production in the area, a few things stand out in my mind.

After two years of very dry spring weather, we not only had a wet spring in 2003, but the rains occurred in very advantageous intervals that allowed great forage production.

Another positive aspect comes in the way of long overdue price increases for lamb and cattle. Much of the increase in cattle prices are a direct result of the one Canadian cow detected with BSE. This just happened to occur at a time when prices were already on a gradual upward trend. As a result, American beef is substituting for Canadian beef that

is now excluded from many export markets. The downside to the BSE problem in Canada is that Canadian beef producers are suffering heavy losses.

Beef and lamb producers alike may receive an additional price boost from the recent devaluing of the U.S. dollar against foreign currencies, namely the Euro. As the dollar becomes cheaper in foreign markets, imported American goods also become cheaper relative to goods from other countries. This may result in higher demand for U.S. lamb and beef in foreign markets, which could push up prices here at home or, at least, keep prices at current levels for a while longer.

Closer to home, some may remember the bull health and selection workshop we held at the Tomlinson Ranch this past September. The workshop was well attended by over fifty people and we received a lot of positive comments. In fact, the workshop went so well, we are planning to hold another workshop next year, but focused on cow health and management. Many thanks go out to several people involved with the organization of the program including Dr. Nancy Martin (Berryessa Vet. Services), Glenn & JoAnn Tomlinson (Tomlinson Beefmasters), John & Sue Pierson (Cherry Glen Beefmasters), Dr. Jim Oltjen (UC Davis), and Bill Traylor (RL Angus). Thanks for your help and we look forward to another successful event next year.

Also on a positive note, you still have a livestock advisor serving the local counties, despite the budget crises faced by the University of California and the State. UC Cooperative Extension was hit with a 25% budget cut on top of a 5% cut the previous year. So far all cuts were made without layoffs to county-based advisors, depending instead on retirements, resignations, and layoffs at administrative levels. While the budget situation has been doom and gloom, and will be for the coming year, I'm trying to real hard to remain positive. We'll see what this next year of budget cuts brings.

## RANCHING AND BIODIVERSITY

*Below is an article sent to me by a friend who subscribes to on-line environmental news. Now before you pass this up as another attack against ranching, read on and you may be as surprised as I was to find that ranching is beginning to be viewed, by environmentalist, as a tool to preserving native habitat.*

### Rocky Mountain Conservation Bolstered by Ranches

FORT COLLINS, Colorado, September 24, 2003 (ENS) - New research indicates that preserving ranches from development helps protect biodiversity. A study of ranches near Fort Collins, Colorado, finds that these ranches have more ground nesting birds and native plants than rural developments and have more native plants than nearby reserves. "Our results support the notion that ranches are important for protecting biodiversity and suggest that future conservation efforts may require less reliance on reserves and a greater focus on private lands," said Jeremy Maestas, who did this work while at Colorado State University in Fort Collins and is now at the U.S. Natural Resource Conservation Service in Provo, Utah.

The study, published in the October issue of "Conservation Biology," is coauthored by Richard Knight of Colorado State University in Fort Collins and Wendell Gilgert of the U.S. Natural Resource Conservation Service in Fort Collins.

To see if ranches do help protect biodiversity in the rural West, the researchers surveyed birds and plants in cattle ranches, rural residential developments and nature reserves near Fort Collins, Colorado. The average lot size in the rural developments was 40 acres.

Ranches had higher densities of the ground and shrub nesting birds – in contrast, rural developments had higher densities of nest predators and of birds that are usually uncommon to the area, such as Bullock's oriole, a tree-nester that is presumably attracted by the landscaping trees.

Moreover, ranches had more native plant species and fewer non-native plant species than rural developments and reserves.

"Ranches can be more effective than reserves at maintaining native biotic communities," the researchers write.

They explain that reserves may be inadequate because most are in harsher environments with higher elevations and poorer soil. Moreover, the reserves studied have extensive trail systems that could facilitate the spread of non native plants.

About 30 million acres of U.S. ranch and farmland were converted to rural residential developments during the 1990s. This trend has increased the popularity of preserving ranches with conservation easements, which restrict development but often allow livestock production.

So far more than 1,200 land trusts have used conservation easements to preserve about 2.5 million acres of land in the United States.



### TREATING CALF SCOURS

*Reprinted from the December 2003 issue of California Cattlemen's Association Magazine*

**What causes calf scours?** As new calves arrive, so does the threat of the common condition known as "calf scours" or neonatal calf diarrhea. Infectious agents such as viruses and bacteria cause this condition. These agents have the common property of causing a **net loss** of water and electrolytes from the calf's body via the gut. This causes potentially life-threatening dehydration and electrolyte imbalances that can result in death. The main infectious organisms that can cause diarrhea in beef calves are:

- Rota virus
- Corona virus
- Cryptosporidium parvum*
- E. coli* (K99 enterotoxigenic form)

The first 3 on the list usually cause diarrhea at 7 to 21 days of age, while the common *E. coli* strains cause diarrhea within the first few days of life. The diarrhea is the result of a combination of factors including: (1) dose (number) of organisms the calf is exposed to, (2) calf immunity (colostrum), and (3) stress on the calf. The number of organisms in the calf's environment is a result of sanitation or the lack of sanitation, i.e., mud, manure, and other cattle. The immunity of the calf is dependent on the quality and quantity of colostrum that the calf received from the cow. Calves that do not receive adequate colostrum are much more susceptible to disease and are at much

(Continued from page 2)

greater risk of dying from the resulting diarrhea that occurs. Stressful conditions (low milk production by underfed cows, bad weather, crowding) further increase the risk of diarrhea in young calves. The balance of all these factors determine if disease occurs and the severity of disease.

**When should I treat the calf?** Calves running around the pasture with their tails in the air, bucking and kicking with yellow or white diarrhea may not need treatment. If you can't catch them they probably don't need to be treated. The main indications for treatment are (1) general attitude, (2) appetite, (3) dehydration, and (4) body temperature. If the calf is weak, depressed, or reluctant to move these are all indications that something is wrong. If the calf is not eating, the cow's udder will be distended and this is a sign of trouble also. Dehydration can be evaluated easily by pulling up the skin on the side of the neck or shoulder. In a normal calf, the skin snaps back into position quickly. In a dehydrated calf, the skin remains "tented" for a period of time—the longer it remains "tented" the worse the dehydration. Also, as dehydration worsens, the eyeballs sink back away from the eyelids—this is a bad sign and fluids are indicated immediately. Normal body temperature (measured with a rectal thermometer) is 100.5° F to 102.5° F. Body temperatures less than 100° F and greater than 102.5° F is a sign of problems and treatment should be started.

**What are the recommended treatments?** The main treatment is fluid therapy. Secondary treatments are antibiotics and nursing care. Because the main problem in scouring calves is the loss of body fluids (water) and electrolytes, the primary treatment must be aimed at restoring the water balance. The calves are thirsty, but they are too sick to drink. Therefore, the first line of treatment is **oral electrolyte solutions**. There are a number of excellent commercial products on the market for treatment of calf scours. All of these products contain glucose or a similar material, sodium chloride (table salt), and other electrolytes. The glucose and sodium allow the animal to absorb the water they need from their digestive tract. **Giving straight water does not work. The calf needs the glucose and salt to be able to adsorb the water.** Usually 2 liters (just over 2 quarts) of the oral fluid solution is given 1 to 3 times per day to the sick calf. Consult with your veterinarian regarding the appropriate oral electrolyte product for your operation. **Always follow the label mixing instructions**—do not add too much powder to the solution as this may kill the calf and even if you don't kill the calf, this unnecessarily adds to the cost of treatment. Calves that are depressed, dehydrated but still standing can usually be treated successfully with oral fluids alone. Calves that cannot stand or lay in a normal resting position on their own usually need to be treated with I.V. (intravenous) fluids to have a chance to survive. These calves that are "flat out" on the ground are 10-13% dehydrated, usually have a below normal body temperature and are very near death.

**What about giving antibiotics?** Antibiotics are often given to scouring calves even though antibiotics do not kill most of the calf scours agents. Due to damage in the gut of scouring calves, bacteria will "leak" into the blood stream of these calves and cause further problems. Antibiotics are of value for this reason. Again, consult with your veterinarian regarding the correct choice of antibiotics to give. Many of the antibiotics are not labeled for calf scours and thus require a prescription from your veterinarian and an extended withdrawal time. Avoid the use of injectable gentamicin, spectinomycin, or kanamycin. Tissue residues from these drugs can persist for up to 18 months and this can cause drug residue problems at the packing plant. Long acting tetracyclines can cause some kidney damage in dehydrated calves and should be avoided. Baytril® is not labeled for scouring calves and should not be used. In addition to fluids and antibiotics, nursing care may be essential for the calves to recover. Wind shelters, heat lamps, etc can be very helpful. However, this usually requires some type of facility and may result in a contaminated environment and increase the spread of the germs that cause calf scours. Additionally, the problem of separating the cow and calf has to be solved. **When treating sick calves, always treat the sick calves after you have attended to all the normal calves.** This will decrease the spread of germs from the sick calves to the younger healthy calves. Also, keep all your treatment equipment clean—including your hands and clothes, as you can easily transmit these agents.

**When do I need additional help?** If your treatment methods are not working, contact your veterinarian immediately for additional help. If more than 5% of your calves are scouring and require treatment, you need help. If death loss is greater than 2% due to calf scours contact your veterinarian. Many advances have made the diagnosis and treatment of these conditions. Your veterinarian can submit refrigerated (not frozen) stool samples to the University of California's Animal Health and Food Safety (CAHFS) Laboratory and receive answers in as little as a few days. Freshly dead calves can also be examined to determine the cause of the diarrhea and to aid in determining those factors needed for prevention and treatment in your herd.

John Maas, DVM, MS  
Diplomate, ACVN & ACVIM  
Extension Veterinarian  
School of Veterinary Medicine  
University of California-Davis



**Solano  
County**



**Weed Management Area**



# Third Annual Weed Identification & Management Workshop

Thursday, January 8th, 2004  
9:00 am – 12:30 pm  
Dixon Fairgrounds

## Speakers

**Joe DiTomaso**, *UC Davis*  
**Morgan Doran**, *UCCE*  
**Hudson Glimp**, *University of Nevada, Reno*  
**Dave Singh**, *Solano Co. Dept. of Agriculture*  
**Jim Schneider**, *NRCS*  
**Guy Kyser**, *UC Davis, Vegetable Crops*  
**Dustin Robinson**, *Solano Co. Dept. of Agriculture*  
**Tim Barnett**, *John Taylor Fertilizer*

## Discussion Topics

- Updates on weed control research:  
Perennial Pepperweed & Medusahead
- Grazing for vegetation management:  
grazing to control Perennial Pepperweed
- Cost-sharing programs for weed control
- Weed control issues for small land  
owners

## Continuing Education Credits (pending)

*Qualified Applicators earn 1.5 units through DPR*

This workshop is sponsored by the Solano County Department of Agriculture, the Solano County Weed Management Area (a consortium of agencies and organizations), Solano Resource Conservation District, and the Community Alliance with Family Farmers (through a grant from the CALFED Ecosystem Restoration Program).

For more information, contact Tacv Currev (707) 678-1655 or Marcia Gibbs (530) 756-8518 x 34

## REQUEST FOR DONATIONS

As you are well aware, UC Cooperative Extension has faced budget cuts over the past two years with more expected next year. Cuts to UCCE have come from both the State and from the counties. The budget cuts have not yet led to layoffs of county-based advisors and staff, but most of the money normally used to support our activities have been greatly reduced. Given the budgetary situation I am soliciting donations to support the UCCE Livestock & Natural Resources program serving Napa, Solano, Yolo and Sacramento Counties. If you wish to make a donation to my program, I will use your contributions to further support my research and extension activities.

Financial support for UC Cooperative Extension offices normally comes from county budgets for office space, office supplies, vehicle use, and support staff, while the University of California provides salary and benefits, and some travel money. All research and most travel must be supported by grants and donations. Larger research projects requiring several thousand dollars are typically funded through specific grants that address statewide issues. Smaller projects that address local issues are almost entirely dependent on local donations since their impacts are often too localized to attract competitive grant funding.

If you would like to make a donation of any size to support my program, you can use the letter on the reverse side of this page to submit your donation. It is necessary to use the wording in the donation letter when making a donation to a specific program within the University of California. You can write your own letter using the same wording or use the provided letter.

Remember that this is tax-deductible donation. In order for any donation to be used for a 2003 deduction, your donation must be postmarked by December 31, 2003.

Thank you for your support, financial and otherwise.

Sincerely,

Morgan Doran  
Livestock & Natural Resources Advisor  
University of California Cooperative Extension



UNIVERSITY of CALIFORNIA  
*Agriculture & Natural Resources*

COOPERATIVE EXTENSION • YOLO COUNTY

70 Cottonwood Street, Woodland, CA 95695 Tel. (530) 666-8143 Fax (530) 666-8736



Morgan Doran  
Livestock & Natural Resources  
UC Cooperative Extension  
70 Cottonwood Street  
Woodland, CA 95695

Dear Morgan,

Enclosed is my check for \$\_\_\_\_\_. This is an unrestricted gift in support of the Livestock & Natural Resources program in Yolo, Solano, Napa and Sacramento Counties. I understand that this donation is tax deductible and will be handled through the University of California accounting system. The University will acknowledge my donation with written documentation for my tax records.

My check is made payments to the **Regents of the University of California.**

Sincerely,

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (W) \_\_\_\_\_ (H) \_\_\_\_\_





CALENDAR OF EVENTS

3rd Annual Weed Identification & Management Workshop

Location: Dixon Fairgrounds, 9 AM—12 PM

Free; Continuing Education Credits; Cost-Share Program

For more info, contact Tacy Currey 707-678-1655

American Sheep Industry Association National Convention

Location: Sacramento - Hyatt Hotel and Conference Center

Call ASI to register and for more information

Phone (303) 771-3500, Fax (303) 771-8200, Email [info@sheepusa.org](mailto:info@sheepusa.org)

January 21-24

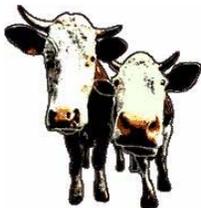
January 8

Commercial companies are mentioned in this publication solely for the purpose of providing specific information. Mention of a company does not constitute a guarantee or warranty of its products or an endorsement over products of other companies not mentioned.

The University of California prohibits discrimination against or harassment of any person on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities or with respect to any of its employment policies. (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities or with respect to any of its employment policies. practices, or procedures. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6<sup>th</sup> Floor, Oakland, CA 94612-3550, (510) 987-0096. (April 2003)



University of California  
Agriculture & Natural Resources  
Cooperative Extension  
501 Texas Street  
Fairfield, CA 94533



Local Fodder  
Happy Holidays  
December 2003

Si desea folletos en Español, llámame a teléfono 707-435-2459 o 530-666-8739, informame de su nombre y dirección de correo.