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The continued spread of noxious weeds across the nation's rangeland is reaching a crisis level. Rangelands account for about 40% of the lands in the U. S. It is estimated that Federal Lands alone have a noxious weed infestation rate of 4,600 acres/day or 1.67 million acres/year. Currently about 133 million acres of Western U.S. Rangeland is infested with noxious weeds. In California there is about 40 million acres of rangeland that is subject to non-native invasive weeds. The vast majority of land on the Central Coast is Rangeland.

There are several reasons the spread of noxious weeds into rangeland is undesirable:

- they seriously reduce livestock and wildlife carrying capacities by physically restricting access to forage and/or limiting forage production;
- they can change species composition from high cover, soil binding native vegetation to low cover, high bare ground non-native vegetation. Which leads to increased runoff and erosion;
- they often alter the soil chemistry and nutrient cycles which reduces overall productivity and ecological health;

- they can serve as abundant fine fuel which can alter the normal fire regime increasing both ecological and economic risks.

Noxious invasive weeds are a national problem that is affecting every citizen either directly or indirectly. It is a major threat to the nation's rangelands and the economic well-being of associated industries relating to animal production, wildlife, recreation and open space experiences. (Excerpts taken from Rangelands Volume 23, No. 3).

Noxious invasive weeds are also a major concern in San Luis Obispo and Monterey Counties. There are over 30 species of noxious weeds of concern in the Central Coast of California. The San Luis Obispo County Weed Management Area (SLO WMA) group and the Monterey County Weed Management Area (MO WMA) group is working on identifying problem areas, mapping them and developing plans to control these noxious weeds. There is a new brochure from the SLO WMA that is available to the public to help identify and list the noxious weeds of concern.

Three of the invasive weed species of concern on the Central Coast rangelands are yellow starthistle, medusahead and barbed goatgrass. Yellow Star thistle has been in the area for a long time, but the full extent of its invasion is not known. Two other species, medusahead and barbed goatgrass, are relatively new invasive species on the Central Coast. These annual grasses are invading our rangelands causing significant ecological and economical concerns. Both the SLO WMA and WO WMA groups are interested in identifying and mapping these noxious weeds, along with many others. These groups are also developing plans to control and eradicate noxious weeds. To obtain information about noxious weeds, or to report suspicious populations, or to learn how to identify and control them, please contact the weed management area for your county. If you would be interested in participating in your local WMA group please contact them.

In Monterey County contact Henry Gonzales, Deputy Agricultural Commissioner, (831) 385-5266. In San Luis Obispo County contact Marc Lea, Biologist, (805) 781-5907. For more information on identification and control of noxious weeds contact Royce Larsen, Watershed/Natural Resource Advisor, UC Cooperative Extension (805) 237-3101.

Another Approach to Weaning your Calves

Wayne Jensen

At some point in a calf's life, it will be permanently removed from its mother and begin another phase of its productive life. This practice involves the total separation of the calf from its mother (weaning) and traditionally in corrals or on a truck at time of sale. This typically is a stressful period and can result in incessant vocalization (bawling), walking or pacing in the corral, and a reduction of feed intake by the calves during this time.

The following is a brief summary of the work done by Dr. Ed Price and others in the Animal Science Department at UC Davis. They are looking at alternative methods of weaning that have the potential of reducing the negative effects of the traditional method used to wean.

The objective of the study was to determine if fence line contact of beef calves and dams at weaning would reduce the distress experienced by calves and thus the negative effects of separation on behavior and growth.

Dr. Price's work involved 100 heifer calves in each of the three years. There were five treatments with two groups of 10 calves each for each treatment in each year. The treatments were: 1) non-weaned control calves on pasture; 2) fence line contact with dams (on pasture) for 1 week following weaning; 3) calves totally separated from dams and left on pasture; 4) calves totally separated from dams and maintained in a drylot for 1 week following weaning - preconditioned to feed on hay for one week prior to weaning; 5) same as treatment 4 except not preconditioned to feed on hay. Seven days after weaning in each year, the calves were combined into two groups of 50 animals on pasture. Three weeks later they were all placed together in a single group, still on pasture. Body weights were obtained weekly for 10 weeks.

The following is a brief summary of Dr. Price's work to date:

1. Calves totally separated from their dams showed signs of distress (excessive vocalizations, pacing fence lines, reduction in time spent grazing and lying down) for about 3 days whether on pasture or in drylot.
2. Fence line-contact calves showed relatively few behavioral signs of distress even in the first 48 hours following weaning. In the first 3-6 days following weaning, the cows and calves in the fence-line group would spend a significant amount of time along the fence line separating them from each other and then make occasional

grazing forays out into their respective adjacent pastures, usually as groups. By the end of the first week, the calves and cows in this treatment were largely living independently. Time spent grazing by the fence line calves was similar to that of the calves in the non-weaning control treatment from day one. This was reflected in the fact that weight gains of the fence line calves did not take the dip that was seen in the three totally separated treatments. Eventually, the cumulative weight gains of the calves in the non-weaned control treatment exceeded that of the fence line calves. However, after 10 weeks the cumulative weight gains of the fence line calves were still greater than those of the three totally separated calves. At 10 weeks post-weaning, the weight-gains of the fence line calves were intermediate between the non-weaned control animals and the totally separated groups.

3. The fence line separating the calves and cows in this treatment does not need to be excessively fortified. In five days of observation after weaning (in each year), we did not see any animal making a concerted attempt to jump the fence or go through it. The fence should include woven-wire fencing with mesh small enough to prevent the calves from getting their heads through the openings.

I would be interested in working on a weaning project with someone interested in the fence line procedure. If you would like to participate, let me know.

The California Trichomoniasis Control Program

Wayne Jensen

I just received the following information from Dr. John Maas, Extension Veterinarian, regarding the draft trichomoniasis control program for California. This draft program is the product of over four years of work by the California Cattleman's Association Trichomoniasis Working Group. The state legislation necessary to enable this program was passed last year and signed in law (AB 1782).

This legislation was sponsored by CCA. It not only included the provisions for a Trichomoniasis control program but also established a cattle health advisory board that will directly advise the Secretary of the California Department of Food and Agriculture on matters of importance to cattlemen and their livestock. Please take the opportunity to review the draft program and make comments to your local association, the CCA, or through other appropriate channels.

The draft document has the following general features:

1. The routine testing of California bulls will continue to be on a voluntary basis.
2. Education of veterinarians and producers will be an important feature of the program.
3. Veterinarians will be certified for purposes of taking samples from bulls. This will help standardize this procedure on a statewide basis.
4. All laboratories processing the samples and reading the tests will be certified.
5. All positive samples will be confirmed at the state veterinary diagnostic laboratory (CAHFS). The confirmatory test costs will be funded by the CDFA.
6. Confirmed positive herds will be notified and the CDFA Animal Health Branch will also be notified. Additionally, CDFA veterinarians will notify owners of neighboring herds. Test positive bulls will be individually identified.
7. The disposition of test positive bulls will be standardized, and the working group has identified two possible options. Note: Only one option will eventually be part of the rule.

A. Bulls sold at public auction must have an official negative test report or must be sold for slaughter only.

B. Bulls sold at public auction must have an official negative test report or must be sold as "Maximum Potential Risk" of having Trichomoniasis.

8. Bulls imported into California must be tested negative for Trichomoniasis prior to entering the state. There will be a few exemptions for this rule (commuter bulls in pasture-to-pasture permit herds, bulls for AI studs, rodeo or exhibition bulls). The cattle industry will review the entire program on a yearly basis and make recommendations for revising or eliminating the program.

The workgroup focused on developing coordinated options for the control of Trichomoniasis that are based on sound scientific information, that will have the possibility for widespread producer support, will have identifiable benefits, and when implemented, will reduce Trichomoniasis in beef cattle in California. Several interesting facts were brought out during the discussions that are listed below.

Transmission of Trichomoniasis

1. In a 1990 survey of beef herds in California, approximately 16% of the herds were found to be infected, and larger herds were more likely to be infected than smaller herds. Current levels of Trichomoniasis in California herds are not known.
2. Bulls can become infected within as little as 24 hours of breeding an infected cow.
3. Leasing, buying, and/or borrowing mature bulls of unknown Trichomoniasis history is very risky in terms of introducing Trichomoniasis into a herd.

Diagnosis of Trichomoniasis

1. Current methods of sampling and culturing bulls for Trichomoniasis identify about 90% of the positive bulls on the first test.
2. Bulls should be sexually rested before testing; otherwise, false negative tests (test is negative when the bull is a positive carrier) are likely. Breeding removes most of the organisms from the bull's reproductive tract,

and the test is negative. It is recommended that bulls be sexually rested at least 10 days before testing.

3. False positive test results do occur, particularly important in young bulls or virgin bulls. Therefore, confirmation of positive test results is necessary.

Prevention of Trichomoniasis

1. The current Trichomoniasis vaccines do not prevent infection of the bull, the cows, or the herd. The vaccines cause the cow to clear the infection much faster after they have become infected with the Trichomoniasis organism. The vaccine is helpful in reducing economic losses in infected herds or at-risk herds.
2. Prevention requires a coordinated program to be successful. There is no single easy answer.

A large number of options for Trichomoniasis control programs were discussed at the workgroup meetings. There was little support for mandatory testing of all bulls in the state on a yearly basis, as is done in the Idaho control program. Some of the advantages and disadvantages of the draft program are listed below.

EDUCATION

An educational effort aimed at cow-calf producers, purebred producers, veterinarians, and bull sales organizations will be initiated. This program will be patterned after the CCA Quality Assurance Program. Current factual information will be organized into a standardized educational program. When a local association wishes to put on a Trichomoniasis educational program, this material will be available.

Advantages: Relatively inexpensive, voluntary program, no regulations involved.

Disadvantage: The people whose cattle may be spreading the disease may not show up for the educational programs.

VOLUNTARY TESTING REPORTABLE DISEASE

Confirmed positive test results would be reported to the owner, the veterinarian, the CDFA, and neighboring herds.

Advantages: Relatively inexpensive, voluntary program with the exception of reporting and notification of neighbors. Data could be used to prioritize Trichomoniasis disease research. Data could be used to track the progress of preventive programs on a statewide or local basis. Neighbors would be notified of positive results so they could consider testing to identify Trichomoniasis in their herds at a much earlier time than would occur normally. This would be an economic advantage for neighboring herds.

Disadvantages: Veterinarians or laboratories would have to report positive results. CDFA would take action to notify neighbors of positive herds, and this could have a negative impact on herds with Trichomoniasis.

MANDATORY TESTING OF IMPORTED BULLS

Bulls coming into California would have to be tested for Tricho-moniasis. There would be some exemptions to the testing requirements, i.e., young bulls (<18 months old), rodeo bulls, bulls for studs, commuter bulls.

Advantages: Keep positive bulls from coming into state.

Disadvantages: Mandatory testing of bulls. Possible problems with certification of testing methods and laboratories in other states.

Please take the opportunity to review this draft program and make comments to your local association, the CCA, or through other appropriate channels. Your comments and suggestions are very important. Contact Susan LaGrande at CCA headquarters, 916/444-0845, local association officers, or

me, with your ideas, comments, and suggestions for improvement.

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