"The mission of the CRLRC is to enhance the understanding of woody brush invasion, hydrology, livestock production, wildlife management and discover innovative solutions to improve economic development in rangeland bound communities."

CRLRC is a collaborative effort between animal, range and wildlife scientists, economists, land and wildlife agency personnel and ranchers.

Southwest Grazing Land Innovations
CORONA
Range and Livestock Research Center

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## Ranch Update

Shad Cox
CRLRC Superintendent

I hope that this mailing finds you in good spirits with green, growing grass and ample rainfall. It has been very sporadic thus far here on the CRLRC. Our far east end has had some good rain to benefit it's growth potential. Whereas, the western end of the ranch has had very little rainfall and shows the effects of heavy grazing and drought toll. Talking to many of our friends across the state, it seems that this is the case statewide, with many still not catching much rain at all. It looks like the monsoonal flow is still impending with forecasts of good rains later in the season. I do wish you well throughout the next two months and hope you have to fix all your water gaps twice this season.

Here at the CRLRC, we are still running our cow herd at reduced stocking levels and to compensate for additional grazing of forage produced last season, we partnered with the Clayton Livestock Research Center in adding value to stocker heifers that they were selling at the start of the year. They retained ownership on 160 black heifers yearlings that we brought to Corona in January and implemented a development study, then synchronized and artificially inseminated in May. We continue to monitor these cattle based on development regimen and will offer them for sale this fall as bred heifers. This is a great opportunity for us to earn a little income without a great investment in yearlings or cows, and will provide added income to Clayton as well.

This spring we completed our first ram performance test on SAMM (South African Meat Marino) cross ram lambs and have them offered for sale at this time. All data thus far indicate a slight advantage in crossing SAMM with traditional Western Whiteface ewes for added value in lamb weights, without compromising wool clip character.

We further continue with long-term fetal development research with our mature cows and at this time are only restricted by low cow numbers and reduced forage availability. Initial data on this project show great promise for future development of supplemental strategies.

Other research projects are being conducted or have completed in the last couple of years and will be the highlight of our 4th Triennial Research Field Day on Saturday July 19th. Please join us for our poster session and visit with our scientists about their work and questions for future research ideas.

In closing, the staff at the CRLRC hopes to see you soon at either or both of our summer events. If you would like further information about the CRLRC or SWCRS, please feel free to contact me at (505)849-1015 or shadcox@nmsu.edu.

Shad

## USE OF IRRIGATED FORAGES FOR GROWING HEIFERS

LEAH SCHMITZ
Masters Candidate
Ruminant Nutrition

Raising heifers is widely considered to be one of the most expensive and challenging aspect of any cow/calf operation. This is especially true in areas, where heifers are raised on native rangeland and supplemented to attain adequate growth prior to breeding.

The use of irrigated annual forages could serve as a strategy to grow heifers prior to and after breeding. Irrigated forages can be highly nutritious, and may help alleviate the cost and labor of supplementation. However, planting, fertilizing, and irrigating may be cost prohibitive if heifer performance is not adequate.

In an effort to assess the value of irrigated pasture for growing beef heifers at different stages of production, two preliminary experiments were conducted at the Tucumcari Agriculture Science Center. In the first experiment, 28 Angus crossbred heifers from the Corona Range and Livestock Research Center were transported to Tucumcari in December 2013 and assigned to one of two treatments. Treatments included: 1) Native pasture plus 3 lbs of 20% cake **(Native)**; or 2) heifers were allowed to graze triticale pastures that were planted in late fall **(Triticale)**. Both treatment groups had access to trace mineralized salt. Heifers were weighed every 84 days to evaluate animal performance. In this experiment, heifers consuming Native gained 0.9 lbs/day whereas Triticale gained, 1.7 lbs/day.

The second experiment evaluated the use of annual forages in the post-breeding phase. In this experiment, twenty-four bred Angus crossbred heifers from the Corona Range and Livestock Research Center were transported to Tucumcari approximately 45 days after the end of the breeding and assigned to one of two annual forages: 1) Haygrazer or 2) millet. Both groups of heifers had free-choice access to trace mineralized salt. In this experiment, heifers grazing haygrazer gained 2.5 lbs/day, while, heifers on millet gained 2.6 lbs/day.

These preliminary results would indicate that the use of irrigated annual forages might be beneficial in the post-weaning as well as during the post-breeding period, especially in situations where native rangeland quantity and quality is limited due to drought. Before deciding on the best system to use for raising heifers, producers must determine the cost associated with each system as well as performance differences. For example, let's take the performance differences between triticale and native pastures in our first experiment. If we conservatively estimate that planting of triticale costs $150/ac and heifers gain 1.7 lbs/d and compare this to native pasture rented at $15/AUM plus 3 lbs of a 20% cake ($0.21/lb) with heifers gaining 0.9 lb/d over the 84 day grazing period, we can assess cost differences. Total gain for the grazing period was 142 and 63 lbs for triticale and native range plus supplement, respectively. At a current price of $2.2/lb we have gained approximately $312 and $139 in value. The cost over the 84 day feeding period for triticale was $168.75 and $99.96 for native range. This means that even though triticale was more expensive the value of the additional gain easily covered cost. However, ranking could change with cost of planting and quality of native range. And, to further complicate this strategy, a close look at the cost of transportation may hinder any forage use not close to home. So, with this in mind, this experiment will be conducted for the next several years in order to obtain a clear idea of how using irrigated annual forages can fit into a heifer development program.

*For more information contact your county extension office or Leah Schmitz directly at email: schmitzl@nmsu.edu or Dr. Eric Scholljegerdes at (575)646-1750 or ejs@nmsu.edu.*

# Research Field Day

Southwest Grazing Land Innovations
CORONA
Range and Livestock Research Center

**Saturday, July 19th**
Registration at 9:00 am
Introductions at 10:00 am

## Research Poster Session

**Visit with our Research Scientists and Graduate Students as you browse the results of their research results conducted over the past three years on the CRLRC. See the results, discuss the possible impacts to your operation, decide what is important to you!**

Please join us at the Southwest Center for Rangeland Sustainability for our fourth Triennial Research Field Day. This is the year we present the past three years of research results; with research scientists and graduate students on hand to present information and answer your questions in a poster presentation format. Posters are presented for your browsing so that you may choose what is important to you — stop to discuss them all or only the one's that peak your interest. Registration begins at 9:00 a.m.; introductions at 10:00 a.m. with a keynote address. The poster session will begin at 11:00 a.m. with lunch provided at noon. A continuation of the poster session will follow lunch. There will be plenty of time to visit with neighbors, specialists and research staff. Come join us for an educational and informative day!


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*Directions to SWCRS: Two miles* north of Corona on Hwy 54 turn east (bottom of overpass) on University Road (CO20) and travel 8 miles to ranch entrance. Then follow signs to SWCRS.

**Our Next SWCRS RR August 20th At 10 a.m.**

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**SWCRS Rancher's Roundtable**
**Ranch Nutrition Planning**

More information at www.corona.nmsu.edu and www.facebook.com/NMSUcorona


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