The John E. Rouse - Colorado State University
Beef Improvement Center

James S. Brinks

The John E. Rouse - Colorado State University Beef Improvement Center, formerly known as the One Bar Eleven Ranch is located nine miles east of Riverside and twenty-six miles southeast of Saratoga, Wyoming along the North Platte River. The ranch consists of 6,415 acres which includes 800 acres of state lease and 880 acres of BLM land. There are 740 acres of irrigated hay meadows, 200 acres of irrigated alfalfa (pivot sprinkler), 860 acres of irrigated pasture and the remainder is dry land, sage brush, homestead and buildings. Average elevation is about 7,200 feet and annual precipitation averages 9 to 13 inches. The ranch handles about 500 cows along with replacement heifers. Purebred but nonregistered Angus cattle are owned by the Department of Animal Sciences and ranch management is supervised by personnel of the department. Personnel at the Center are Jack Moon, Manager, along with his wife Kate, son Mike, George Hooker and Sandy Hotovy.

In May 1986, Mr. Rouse donated the ranch to Colorado State University along with 150 mature cows (7 yr +) and their calves and 125 yearling replacement heifers. Mr. A. D. Davis, owner of Bighorn Ranch, Walden, donated 100 One Bar Eleven cows and their heifer calves (45). These cows were a portion of the cows purchased by Mr. Davis from Mr. Rouse before donation of the ranch.

Mr. Rouse began a career in the cattle business after retiring from an executive position with Standard Oil of Indiana with the purchase of 376 Angus females from Mr. Andrew Anderson, Wyoming, in 1953. Mr. Rouse ran the cows on a neighboring ranch until purchasing the One Bar Eleven in 1955. He was a strong believer in performance cattle, kept accurate records and used records in selecting replacement bulls and females. He also used top performance sires through the use of AI. In a recent study, we estimated that genetic change per year from 1958 through 1985 (27 yrs) was .20 lb for birth weight, .58 lbs for weaning weight due to growth, .21 lbs of weaning weight due to increased milk and 1.48 lbs in yearling weight. The herd has a long standing reputation for superior reproduction, maternal abilities and early growth. Ranch raised bulls at several test sites in the region have been among the top gaining individuals over all breeds for many years.

Cattle Management and Research

Cows are run on grass or meadows year round with hay being fed in winter months. Hay is put up in round bales and is fed as chopped hay. All cows are synchronized for AI breeding each year with Syncro-Mate-B implants and bred on June 22 and 23 each year. Semen from ranch raised bulls and two or three outside bulls are used each year. Cows are then pasture bred in single sire herds with cleanup bulls. Conception rate to AI breeding in two days averages from 55 to 65% over the years with a pregnancy rate of over 91% over the total breeding season. Cows are palpated for pregnancy at the end of the breeding season and at weaning.
Birth date, birth weight and calving ease score are taken at birth and gestation length is calculated for all calves resulting from AI. Weaning weights are taken October 1 each year. Bull calves are selected, nonselected bull calves are castrated, all calves are given shots and returned to grass with their dams until weaning in late October. After weaning, heifer calves are fed a ration of chopped hay, one-half alfalfa and one-half grass, on the wintering grounds. No other supplement other than mineral is fed. Yearling weights, pelvic areas, condition scores and reproductive tract scores are taken at yearling ages. Heifers are bred June 1 each year via AI after synchronization with Syncro-Mate-B. Semen from easy calving ranch raised bulls and one or two outside sires are used each year. Conception rate to AI breeding in one day has averaged 58 to 65% over the years.

Bull calves are placed on a 70% TDN ration after a two week warmup period for a 120-day performance test. Home grown chopped alfalfa and grass hay makes up 50% of the ration with corn and supplement making up the remaining 50%. A grinder-mixer is used to ensure a completely mixed ration for all bulls. The bulls are group fed. The top performing 6 to 8 bulls are retained for ranch use and semen is collected for use in the herd. The remainder of the bulls are sold at auction after culling. Data on the bulls includes gestation length; birth, weaning and yearling weights; average daily gain on test; scrotal circumference; pelvic area; and hip height. In addition, all bulls undergo a pulmonary arterial pressure (PAP) for brisket disease and all bulls are given a complete breeding soundness examination. Also, Expected Progeny Difference (EPD) values are provided on all bulls. Approximately 60 bulls are sold at auction in mid April at the Center each year. Bulls are classified as to their best use by calving ease expectations. Four classifications are used including Very Low Risk (for heifers), Low Risk (for medium to larger sized heifers), Medium Risk (for large heifers, small cows) and All Purpose (for cows). Bulls must excel in birth weight, calving ease score and gestation length, both in their own performance values and their EPD values for these traits to be placed in the very low or low risk categories.

The Center and the cattle will aid in producing relevant and practical information for cattle producers. Much research is being conducted on the genetics of reproduction and growth and in developing optimisation models for cattle breeding and ranch operations. Fertilization trials on the meadows and alfalfa variety and establishment trials are being conducted. Stop by the Center anytime as Jack Moon and his crew will be happy to visit with you (307-327-5339).