

One Winning Combination

Al Brothers

The Ranch

The H.B. Zachry Randado Ranch, 7,700 acres in size, is located in Jim Hogg and Zapata Counties on the Rio Grande Plains in southwest Texas. This area, under good range management, has been noted for its beef cattle production capabilities and for the production of large-antlered whitetailed deer. Prior to 1965, the Zachry Randado Ranch had suffered many years of neglect and range and wildlife abuse by various leasees and oil field activities. In 1965, we initiated an intensive range and wildlife management program.

When I first inspected the ranch in 1965, the ground was bare. The ranch hands had been burning pricklypear cactus for cattle feed for 14 months. The local Soil Conservation Service technician who was making the inspection with me expressed concern that even with a complete rest recovery might be severely impaired due to a possible lack of the better native grass seeds in the soil. Nevertheless, the ranch was vacated for 14 months, then restocked 1 year later with 100 head of cattle.

A number of improvements were needed and initiated. The boundary fences around the entire perimeter were in extremely poor shape. A new perimeter fence was needed. The largest, and without a doubt the most valuable project in terms of economic value and potential net return was the construction of an 8-foot high, deer-proof, net-wire fence around the entire ranch. Taking into consideration the value at that time, plus future increases in deer hunting values, we thought it well worth the doubling of cost over that of a conventional fence. This project was started in March 1966, and completed that September, at a cost of \$45,000 or a little less than \$3,000 per mile. It gave us control over the management of the deer herd and eliminated the loss of deer to adjacent properties. Prior to the high fence, there were 29 deer hunting stands built on the boundary fence by neighboring hunters to shoot deer as they left the Randado Ranch.

Other improvements through the years included the construction of three new stock ponds; cleaning out the five original ponds which had silted up to the point of not having a bar pit any



Mature whitetailed deer buck.

longer; drilling of one new water well; the construction of concrete storage reservoirs of 10,000 to 30,000 gallons at all but one of the existing eight water wells, and the addition of four new watering troughs.

Interior fences were, on the whole, in fair to good shape. However, to accommodate our pasture rotation system, approximately 5 miles of new fence were erected. Some of the older fences were reworked, and all fencelines were sprayed with a mixture of 2,4,5-T, diesel, and water to control brush growth in the fencelines. Brush control in fencelines was accomplished by ranch personnel utilizing an old John Bean cattle sprayer. In addition, a total of 634 acres were rootplowed in various strip and/or block patterns to control brush and stimulate grass growth. Approximately 2,000 acres were aerially sprayed with either 2,4-D or 2,4,5-T for control of mesquite and goldenweed (*Isocoma* sp.), a perennial shrublike plant.

The Cattle

With regards to our cattle operation we have a one-herd four-pasture rotation system. This herd fluctuates in number from 350 to 400 mother cows, and is composed primarily of F-1 Brangus cows, a few F-1 Braford, and the remainder are just plain crossbred cows that exhibit from 1/8 to 1/2 Brahman influence. Bulls, all Charolais, are turned out the first of February and taken up the first of June. Our replacement heifers are F-1 Brangus taken from our other ranch where we run a herd of Angus cows and Brahman bulls. Heifers are bred on the same schedule as the main herd, but are bred to Angus bulls.

We pregnancy test our cow herd, and as a result average

The author is general manager for the H.B. Zachry's Ranches (two). This article was first presented by the author as a slide talk at the SRM Annual Meeting held in San Antonio, Texas, February, 1978.

between 85 to 90% weaned calf crop. Heifers are pregnancy tested 90 days after the bulls are taken up and all that are not pregnant are shipped to the market at that time. Additionally, their first calves are pulled off and sold at about 200 to 250 pounds. Then the mothers are turned out with the main herd. By running the heifers separately until their first calf is weaned, we can supplemental feed them as needed to insure a high percentage of initial breeding and rebreeding.

The Deer

Our management of the deer herd, which in some respects is quite contrary to conventional thinking and practice, has been uniquely successful. Once the high fence was completed and a controlled harvest initiated, total deer numbers rapidly increased due to improved range conditions as well as a controlled harvest. By 1969 deer numbers had equalled or exceeded estimated range carrying capacity. From 1969 to the present, a major

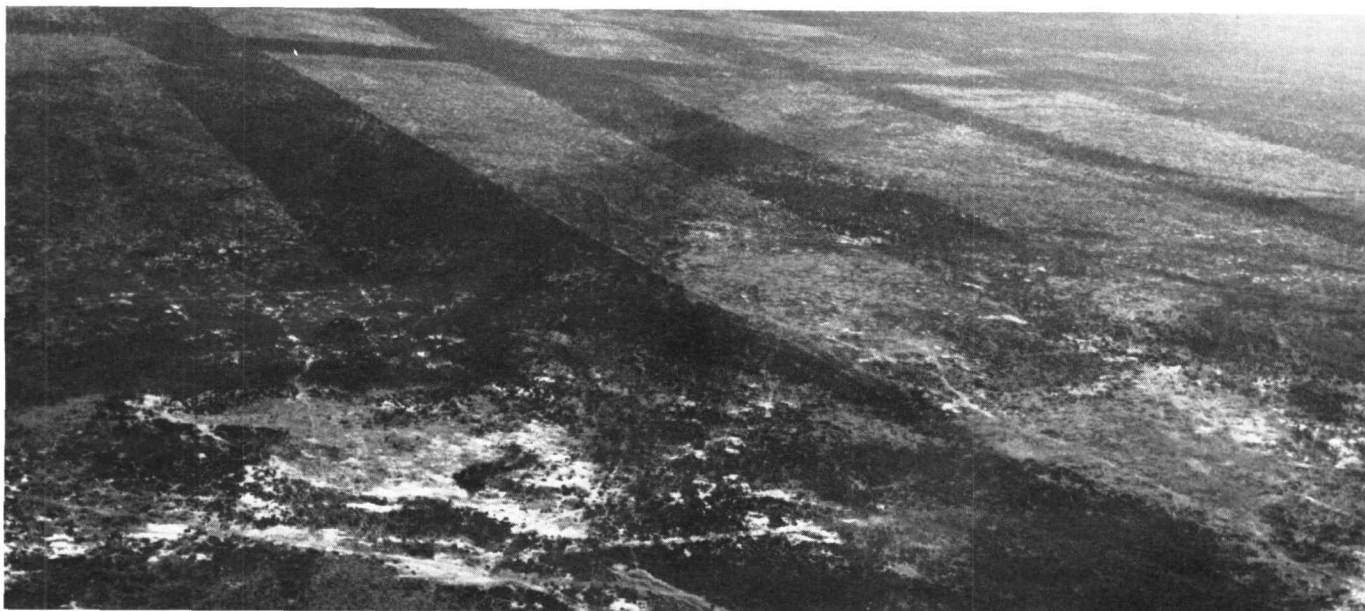
problem has been to harvest adequate numbers of deer so as to maintain total adult deer numbers at 400, which we consider to be the optimum for our range management goals.

From the beginning of our deer management program, spike bucks were considered inferior as breeding animals, and every effort was made to harvest all spikes each year that they were a legal animal in the bag limit. Antlerless deer were taken at random with no attempt at selection. Harvest quotas were adjusted to achieve and maintain a one to one buck/doe ratio. It was felt that by maintaining a one to one ratio, the annual harvest of mature bucks could be substantial, and reproductive success of the female segment of the herd would be adequate to replace numbers of deer removed by harvest and natural mortality.

As deer densities increased, average field-dressed body weights initially declined, but weights have stabilized over the last 4 years at about a 125 pound field-dressed average for bucks. The average age of bucks harvested increased for the



Eight-foot high deer-proof net-wire boundary fence with posts on 20 foot centers.



Aerial view of brush control in a pattern to allow increased forage production yet retaining a wildlife habitat

first 5 years, but has remained basically the same since. Overall antler measurements initially increased, mainly as a result of an increased number of older age-class bucks in the harvest, but since 1973 have remained basically the same within age-classes. Reproductive success has been consistently better than figures compiled by Texas Parks and Wildlife personnel for the entire county. Supplemental feeding of deer is not done, but randomly scattered fields are developed and planted in oats each winter. These oat fields total about 100 acres, and are quite useful in helping us realize our spike, buck, and antlerless harvest.

From 1967 through 1976, a 10-year period, we harvested a total of 775 deer—443 antlerless and 332 bucks. The ranch is not commercially leased out for hunting, but the value of the deer herd is realized by family and guest hunting. If a conservative value of \$30 per doe and \$500 per buck were placed on the 10-year harvest, the total gross income would have been \$179,290, which is \$17,929 each year or \$2.33 per acre per year for whitetail deer alone. (Other economically valuable game species such as quail, dove, javelina, and waterfowl are present and hunted but are not included in this discussion.) No attempt at keeping records of overhead expense on the wildlife was made, but other than the initial cost of the high fence, the annual cost of planting oats, and the cost of an annual deer census, there is

little, if any overhead. My estimate would be that, of the \$2.33 per acre figure, at least \$1.90 would be net profit before taxes. From our experience, it is evident that the management of a controlled whitetailed deer herd for the production of mature whitetail bucks in quantity can be achieved by manipulating the buck/doe ratio and yet maintaining an adequate harvest of both sexes. Quality of bucks produced in excellent, and no adverse effects to the range or deer herd have been experienced.

In conclusion, I would like to point out that, industry-wide, significant progress in the art and science of range management and livestock production has been made in recent years, but have we and are we neglecting or failing to manage and develop our wildlife and recreational resources to their full potential? It seems to me that the production and harvest of mature whitetailed bucks is an economically practical option available to landowners who have whitetailed deer, either as a supplementary or primary source of income. Implications are that greater net profit per acre may be realized from a well-managed deer herd than from a domestic livestock operation in many areas of Texas. In this day and time of widely fluctuating prices for agricultural products, and continually rising cost of producing that product, there stands alone one product from the land that has steadily risen in value with no decline in sight—RENEWABLE and HARVESTABLE WILDLIFE RESOURCES! ●

