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Changes in Range Vegetation After Five Years of Grazing

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In 1988 an experimental range at the Range Cattle Station at Ona was roller chopped and cross fenced to begin a series of grazing studies in which dry, pregnant cows (one cow per 13 acres) graze range for 150 days each year from October until late February. Half of the range is alternately burned each year, cows are excluded for about 60 days while grass regrows, and then burned range is grazed in conjunction with unburned range. One of the important aspects of the research is to follow changes that occur in range vegetation. Before cows are turned into each range unit, we list all the plants and measure yield of shrubs, desirable grasses, and undesirable grasses, which are those that tend to take over range that is overgrazed. All of the vegetative components are surveyed at permanent sample locations year after year.

Year to year changes in yields of all forages occur because of differences in weather, but over five years, yields of those grasses that are most palatable and are therefore important for cattle production (like the bluestems, indiangrasses, maidencane, etc.) remained in balance with yields of less desirable grasses such as wiregrass and broomsedge. Each group of grasses consistently produced a total of 600 to 800 lb/A of dry matter annually.

Shrub yield did increase by about 40 percent over the five year period due mostly to an increase in saw-palmetto and gallberry. This is something that has happened independently of cows on the range. In fact, burning to improve forage quality should have helped to keep these shrubs in check. The increase in yield of shrubs was due largely to the expansion of the shrub canopy since the time that range was last chopped. Incidentally, there is still about another five years to go before range may require retreatment for brush control, because shrub cover has not reached the point where it has negatively affected forage yield.
Range at Ona has been remarkably stable with respect to number of different kinds of plants and their distribution. By going back to the same places year after year, we found that populations of all the different kinds of plants are almost identical in number and location today as they were five years ago. Plants die naturally, but the range is being grazed in a manner that allows plants to be maintained and/or replaced. There may be more saw-palmetto yield now than five years ago, but that is not due to more plants, just bigger ones.

The point is that the range resource can be grazed by cattle and sustained by good management. The fact is that cattle have seasonally grazed range and have had no negative impact on that vegetation. Portions of the range also produce longleaf and slash pine, and wildlife is abundant throughout the area. These are all compatible resources, and they can be managed together to produce income and pleasure with responsible grazing.