Poor forage quality (low protein and digestibility) and low forage intake are two big problems with Florida range, especially during the winter. From September to November, when dry, pregnant cows move from pasture to range, the problem is not as severe as in December to March. Then, frost, age and weathering further reduce range quality. In addition, cows calve, which greatly increases their nutritional requirements.

Burning is the cheapest and most practical tool ranchers can use to improve range forage quality. There is nothing new about that. Florida cattlemen have been doing this for generations. However, I think we have lost touch with some of the practical things that we need to consider in order to provide balance between protection of the range resource and benefit to the cow.

Burning range after cow-calf pairs rotate back onto improved pasture in spring, deferring range through summer and rotating cows back onto range in the fall does little to improve forage quality because the nutritional improvement is short-lived.

When range was burned in late February at the Ona Research Center, there was no difference in crude protein of burned versus unburned range by June (4 months) and no difference in TDN of forage after August (5 months). In another study, no difference was found in diet protein and TDN of winter range that had, versus had not, been burned the previous February.

Granted, other benefits of burning, such as myrtle and gallberry suppression and fuel reduction had been accomplished, but there was no improvement in forage quality. Burning and allowing a full growing season for grasses to regrow before grazing is considerate of the needs of the plant, but there is little nutritional benefit to the cow.
Range conservationists of the Soil Conservation Service are quick to point out (and rightly so) that burning and uncontrolled grazing leads to reduction in vigor and eventual loss of more desirable grasses such as creeping bluestem, while other grasses less desirable for cattle production (wiregrass) may increase. Burning and allowing cattle to concentrate on burned areas without benefit of rest after burning represents the other extreme.

One way to strike a balance is through rotational burning coupled with rotational grazing. Dr. Gordon Kirk, one of the early scientists at Ona, did this in the early 1940's. He burned half the range (one quarter in November, one quarter in January) and left the other half unburned. The halves that were burned were alternated with years. When the system of rotational burning was compared to grazing unburned range only, weaned calf crop went from 53 percent (unburned only) to 69 percent (rotational burning).

Allowing 60 days regrowth before grazing after burning and burning in alternate or every three years is considerate of the range. Keep dry cows on unburned range through the fall and after calving let them have access to both burned and unburned range.