Although South Florida winters are mild, grass growth is diminished from October through April or May, and severely restricted from December through March.

Florida ranchers try to go into the winter with stockpiled grass from the lush summer growth to winter the brood cow herd. But, stockpiled grass is lower in quality than summer grass because it is mature and weathered by the cool temperatures and occasional frost. For example, the digestibility of bahiagrass is 50 to 55 percent in the summer and drops to 40 percent in December.

From the animal side, the breed cow has her greatest demand for energy during the winter. This is because most South Florida producers calve their cows during October through January and breed their cows from January through April. When bred, cows are in peak milk production with a nursing calf. Thus, they must not only consume energy for milking, but energy to recover from calving and begin cycling for breeding.

The low energy supply and high energy demand is the reason energy supplementation is needed during the winter, and why cattle will respond if an energy supplement is provided. The challenge is to supply this energy at a cost that will be profitable. The supplement which best fits this bill in Florida is molasses. Molasses is produced in Florida as a by-product of the sugarcane and citrus industries, and is available at affordable prices.

Two four-year studies were conducted at the Everglades Research Center which evaluated molasses strictly as an energy supplement since grass grown on the muck soils around Lake Okeechobee contains adequate protein. Brood cows fed five pounds of millrun blackstrap molasses per head daily during the winter for 125 days in study one, and 145 days in study two, produced 42 and 52 pounds, respectively, more calf for each
brood cow exposed to a bull than cows not fed molasses. The benefit was from increased weaning percent (4.5 to 5.7 more calves per 100 cows) and increased calf weaning weight (24 to 30 pounds heavier calf at weaning).

It is believed the response to molasses feeding by brood cows grazing sandland bahiagrass pasture will be even better than that observed for cows in the above studies. Winter appears to have a more severe effect on sandland bahiagrass pastures than on muck soil St. Augustine grass pastures. Molasses can also be used as a carrier to provide supplemental protein which will also be needed by young cows grazing sandland pastures.

Recent research at Ona indicates that molasses alone (6 percent crude protein) is sufficient winter supplement for brood cows that are five years old or older. These cows, which grazed bahiagrass, did not respond to the addition of crude protein as non-protein nitrogen (urea) or natural protein (cottonseed meal).

It is recommended that molasses feeding to brood cows be started at the beginning of the calving season and continued through most of the breeding season, adjusting the amount of molasses fed (3 to 5 pounds per head daily) during the winter, or discontinue molasses feeding in the spring as conditions of cows and pastures dictate. Do not wait until pastures are overgrazed before feeding molasses because forage is needed for the efficient utilization of molasses. Molasses with 20 percent or less crude protein equivalent can be fed twice weekly in an open trough with good results.