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Cow Culling

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Most south Florida producers with a winter/spring breeding season have just recently or are now considering their cull cow options. Reducing herd size by culling non-pregnant and poor-performing cows is an important management consideration that often is not given proper attention. The salvage value of cull cows may constitute as much as 20% of the annual ranch revenue; therefore, careful consideration should be made as to the criteria used to make culling decisions.

All producers should pregnancy check their cows on an annual basis. Typically, producers use pregnancy status as criteria for culling. Culling open cows would be the first consideration for optimizing efficiency within a cow/calf system. These cows will not produce a sellable product next year, so allocating our limited funds toward their care would be unreasonable. Nevertheless, young cows that have previously weaned a calf but are detected non-pregnant in the current year may deserve further consideration. Often these females are not pregnant simply because their previous nutrition was inadequate to support lactation, reproduction, and their own continued growth. Allowing her to remain non-pregnant for a single year may give her the chance to become a long-term productive asset to the herd. Consider segregating young, non-pregnant cows away from the lactating cows in the herd. These cows will likely not require the level of winter supplementation or forage resource needed by the lactating cows. Since you are carrying her over without the opportunity for a saleable calf, always attempt to minimize any added investment. Monitoring her body condition is essential. If she is left with the lactating cows, consuming their nutritional resources, she will likely become obese (body condition score > 7; <http://edis.ifas.ufl.edu> , Document SP144). This is a waste of nutritional resources as she should be reproductively sound at a more moderate body

condition score of 5 to 6.

Another primary culling consideration should include eye problems. Our opportunity to sell cows that have advanced cancerous eye lesions is now greatly limited resulting in a condemned carcass. Producers should establish a management system to identify these cows early when only small growths are noticeable in the eye. These very early-stage cows can usually be culled and marketed normally, thus saving the producer an entire loss of cow salvage value.

Cows with poor mobility should also be considered in the culling process. If mobility problems persist, cows are unable to forage adequately leading to pronounced loss of body weight and subsequent body condition. This loss in body weight is an obvious loss in salvage value; however, if the mobility condition worsens, the producer may find that the cow is unacceptable for normal sale resulting in a condemned carcass and full loss of the cow's salvage value.

After older non-pregnant cows are culled a producer may still need to need to reduce cow herd size through culling. This may be needed due to reduced available forage as a result of drought or flooding, or may simply be a loss of grazable acreage due to a change in land use. Under these herd-reducing situations, a producer may wish to identify the poor performing cows. These cows are not always easy to recognize. Research from the University of Arkansas reported on an evaluation of individual cow performance. In their study, 4,379 records were examined over two consecutive years from 18 cow/calf herds (Table 1). Their results show that cows that produce calves in the heaviest 1/3 of the total calf crop in one year are likely to produce the heaviest calves in subsequent years. The same is true for cows producing calves in the lightest 1/3 of the total calf crop. From these data, we can find further support for culling poor performing cows and then focusing our limited resources on the better producing cows within a herd.

Table 1. Percentage of cows that ranked in the top, middle, and bottom thirds of the herd based on adjusted 205-d calf weight ratios in year 1 compared with rankings in year 2.^a			
	Year 2		
Item	Top 1/3	Middle 1/3	Bottom 1/3
	----- % -----		
Top 1/3, Year 1	50.9	31.5	17.6
Middle 1/3, Year 1	32.8	36.9	30.3

Bottom 1/3, Year 1	19.5	30.6	49.9
^a Table taken from: Troxel et al. (2004). Using adjusted 205-d weight ratios to predict cow-calf performance. Prof. Anim. Sci. 20:377-383.			

It is often difficult for Florida producers to identify cow/calf pairs on large extensive production systems, especially on an annual basis. An alternative may be for producers to ride their herd prior to gathering at weaning. At this time, try to identify the dams of poor-performing calves. These calves are easy to identify as they are the small, thin-muscled calves often weighing 150 to 200 pounds less than the average. As the research from Arkansas suggests, these cows are very likely to produce more of these calves in future years. Mark and cull these females at the time of weaning.

A final cow culling criteria may be mature cow size. Typically, commercial cow/calf producers are drawn to the larger, fleshier heifer calves in the herd. We can all agree that it is difficult to part with these attractive heifers; however, if kept as replacements these large heifer calves often grow to be our largest cows in the herd. Are these females the most productive? Usually, they are not. A cow will consume approximately 2.5 to 3.0% of her body weight daily in feed dry matter (forage and supplement); therefore large cows may consume considerably more forage and supplement than average sized cows. This is an increased cost to the system that must be overcome by weaning more pounds of calf. When comparing cow productivity as measured by the pounds of calf weaned per pound of cow, the largest cows of the herd is sometimes the most unproductive (<http://edis.ifas.ufl.edu>; Document AN129).