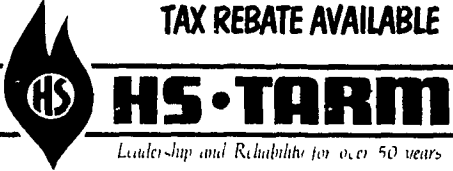


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Cattlemen

(Continued from Page D4)

feels the beef cow/calf programs are basically inefficient.

He said his reasons for this statement are that about 80 percent of the forage consumed by the beef animals goes for the maintenance of cows and bulls, with only 20 percent going to the calves which are the saleable product.

Stringer noted that a pasture contains a mixture of feed that at any one time range in value from corn grain to barley straw, with every value in between.

He added that all forages will give their best production under a cut and rest or graze and rest cycle, allowing the plants to regrow and restore energy. This can be accomplished, he said, through rotational grazing of pastures.

Stringer pointed out to the cattlemen to be aware of the forage availability of their pastures, or the forage present divided by the number of animals grazing it.

"Dry cows grazing a high FA pasture are getting higher quality than they need and will get fat, whereas yearling steers grazing in a low forage availability situation will gain slowly or lose weight," he said.

What causes low FA—overstocking, slow forage regrowth during drought, and rotational grazing where the animals choose the highest quality forages first.

Stringer's advice on the cow/calf low FA

management problem is to creep-feed high quality forage to the calves. This can be done by putting a creep gate between an adjoining high FA pasture and the low FA one where the cows will be grazing.

"Creep grazing accomplishes the same goal that a grain does, without the expense of feeding grain," he added.

Good forage management depends on the soils available, along with labor, equipment, and finances. Stringer stressed the need to link the forages with the proper soil types, and a good lime and fertilizer program. He pointed out the problem nationwide of magnesium deficiencies in the soil and forage, with resulting losses in cattle.

Lowell Wilson, of Penn State's animal industries department, concluded the day's program and informed the cattlemen of some ongoing research projects dealing with beef production and forages.

The research, going on at the Southwest Field Lab at Rector, is comparing production efficiency on cool season and warm season forages.

The animal management program will involve a cow/calf herd along with "stockers", or feeder cattle. In the program, the stockers will graze first, and the calves will be creep-grazed.

The cattlemen were in for a treat the next day. John Spitzer, who travelled to Pennsylvania all the way from Texas where he works for the Extension Service, provided the conference attendees with a thought-provoking, spell-binding talk.

He told the group the only reason for a top purbred cattlemen to be in business is for the commercial cattlemen. And, he said, the producers need to take a long, hard look at where they make their money—percent calf crop and weaning weight, not keeping their annual cow costs low.

Spitzer pointed out the reproductive performance of the cow will determine the

birth time of her calf, which will ultimately influence the calf's weaning weight. "Sixty percent of the calf's weaning weight will depend on the cow's ability to produce milk, with forty percent depending on genetics," he said.

From statistics he has gotten through research in Texas, Spitzer told the group it can cost a Texas cattlemen 60 pounds per calf to have the cow calve in the wrong season. Heat stress and short grass during the dry time of year were some of the reasons he referred to.

Spitzer recommended the cattlemen work with Mother Nature, and limit calving periods to 60 days. He stressed the fact they should not put up with late calving cows, and should cull them out of the herd.

He also stressed each cow should have a calf every year. "Get the cow back in heat within 80 to 90 days after she calves, and she'll keep to her 365 day calving interval."

A cow's normal gestation period is from 280 to 285 days. Cows that milk heavily after calving usually cycle between 85 to 90 days, whereas "tea cup" milkers tend to come back into heat sooner.

It usually takes first calf heifers about 12 days longer than a mature cow to recycle, therefore, Spitzer suggested to start their pregnancy 15 to 20 days earlier so that they have the extra days after calving.

The Texas researcher noted the cow's nutrition plays an important part in whether she conceives on the first service after calving. He noted Vitamin A, which is available in green forage; minerals, especially phosphorus which should be available in a 1:1 ratio with calcium; protein, at the rates of 6.5 to 7 percent for a dry cow and 10 to 12 percent for a lactating cow; and, the most limiting factor—energy.

"Energy before and after calving determines whether that cow will be pregnant in 85 to 90 days," said Spitzer.

"Her body condition is a measure of her stored energy. If you drop the stored body fat in a cow, she will quit cycling."

Spitzer cited studies where the body condition of the cows were compared to their conception rates. There was no measurable difference between cows that were fat and those with moderate flesh, but thin cows were 10 to 15 percent lower in conception percentages. Even three months after the moderate and fat cows had 100 percent conception rates, some of the thin cows were still not bred.

What also helps to conceive on their first service, Spitzer added, is if they can gain between ¼ to ½ pound per day from the day they calve for 90 days. First service conception rates and puberty are highly heritable, according to Spitzer.

He emphasized the need for proper phosphorus in the cow's diet. "By adding 6 pounds of phosphorus per year to the Texas herd's ration, we jumped calving 14 to 15 percent and increased weaning weight. Otherwise, without the mineral, the cows would pull the calcium and phosphorus out of their bones for their milk production."

The mineral deficiency could lead to calf scours, weak calves and calving problems, he said, and recommended a free-choice supplement be added to the feeding program.

Breeding and feeding management for replacement heifers is the same as that outlined for mature cows, Spitzer said, except the calving season is shortened to 40 days. He noted that where heifers are bred early to calve early, the producer will realize 33 pounds per calf more than if heifers are bred with the cows over a 90 day period.

Although age, weight and breed are factors influencing whether a heifer will be bred and calve by the time she is 22 to 24 months old, Spitzer said the important factor is feed.

He suggested a management system where the actual weaning weight of the heifers is recorded along with the date, and then the animals are divided up into weight groups where they will get the feed they need to reach puberty by the selected breeding date. If possible, he said, the heifers should be weighed once a month.

After Spitzer concluded his challenge to the producer to control what happens with the calving program rather than just hope everything turns out well, the cattlemen were taken on a tour of the university's facilities.

The tour visited Penn State examples of beef cattle handling facilities, along with an informative talk on the bull testing station.

The cattlemen witnessed demonstrations on cattle castration, dehorning, ear tagging, tattooing, implanting, vaccinating, inserting a stomach tube, injections, eye medication administration, freeze branding, and estrus detection.

Reproduction management highlighted the final day of the conference, with an informative talk by a representative of Upjohn on the estrus regulator, Lutalyse.

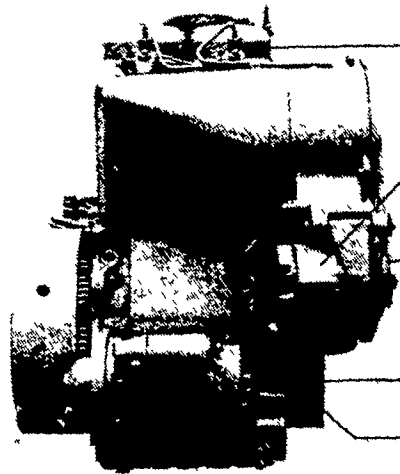
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