#### OHIO STATE UNIVERSITY EXTENSION

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### **Good Nutrition Vital for Pregnant Cows**

Decisions a cattle producer makes about pregnant cow nutrition now can have major impacts on calf health in the spring and cow fertility during the next breeding season. "The great majority of fetal growth (from 75 to more than 90 percent, depending on the source) occurs during the last three months of pregnancy, and nutrient needs and recommended feeding strategies for the cows also are changing accordingly," says Carl Dahlen, North Dakota State University Extension Service beef cattle specialist.

"To make sure you are on track with your winter feeding, have a good look at your anticipated calving dates, cow body condition scores and the diet the cows are receiving," he advises. "Current protein and energy content of native pastures and/or crop residues likely are not suitable for cows calving in early to midspring. Supplement cattle accordingly, and remember the increased plane of nutrient needs the cows are experiencing."

As mature cows move from mid to late gestation, they need a 20 percent increase in crude protein intake and 16 percent increase in total digestible nutrient intake to keep up with increasing fetal growth. This need for additional nutrients is magnified once a cow calves and must produce milk for a calf. Although some producers argue that providing fewer nutrients during gestation will lead to lighter birthweights and, therefore, fewer calving difficulties, that isn't always the result, according to Dahlen. "Unfortunately, the smaller calves were the only potential benefit of the low feeding level in several studies," he says. "Cows fed the high level of nutrition actually had less calving difficulty, even with slightly bigger calves.

"In addition, while calf survival at birth was similar between the groups, calf survival at weaning was much greater in cows fed the high levels of nutrition," he adds. "Calves from dams fed the low levels of nutrition had more issues with scours and scours-related mortality, compared with calves from dams fed high levels of nutrition."

A separate study found cows with inadequate body condition produced poorer-quality colostrum, compared with cows in good body condition. Poor body condition resulted in a reduced ability to transfer immunity through colostrum to calves of underfed cows. Newborn calves need adequate colostrum because it contains antibodies and other proteins that protect calves from disease until their own immune system is totally functional. Studies also show that the need for good nutrition during pregnancy carries over to fertility the following breeding season. Cows that are thin at calving have a greater chance of not becoming pregnant the following breeding season, compared with cows that calve in good body condition. Therefore, thin cows and heifers need to be on a greater plane of nutrition than older cows in good condition.

Dahlen recommends producers consider sorting heifers and thin cows into their own group for feeding if possible. If not, producers should try to spread feed out over a larger area to reduce the incidence of thin cows being pushed away from feed by older cows or cows in better condition. If facilities are available to feed different groups of cows, heifers and thin cows should be fed separately from mature cows.

Producers also should keep temperature in mind and protect cattle from wind and moisture to the extent possible. Even with heavy winter coats, nutrient requirements for cows begin to increase when the temperature is below the "lower critical temperature" of about 18 F. That lower critical temperature is much greater if cattle are wet or exposed to the wind.

For every degree below that lower critical temperature, energy requirements can increase by 1 to 2 percentage units of total digestible nutrients (TDN). This means the same 1,300-pound cow that needed 12.5 pounds of TDN per day at a temperature of 18 F may need up to 14.8 pounds of TDN per day at a temperature of 0 F. However, cows have a limit on how much they can eat, so producers may have to increase the quality of the feed in addition to the quantity to ensure cows are meeting their requirements.

"Evaluating the nutritional status of cows now and taking appropriate action will allow you to provide appropriate nutrients to get cows into good body condition at calving while encouraging the fetus to do exactly what it needs to do: grow, baby, grow!" Dahlen says.

This appeared in a recent Beef Blog and with our recent weather conditions just seemed timely for those with cows in the final months of pregnancy. Hopefully the weather improves soon.

# **GAP Training Opportunities**

As I have announced earlier, the first GAP session for 2016 Tobacco Producers will be held on Feb. 25 at 1:00 in West Union at Frisch's. You need to call Barbie at the Adams Co. Extension Office to register at 544-2339. There will also be a session in Maysville at the Maysville Community and Technical College in the evening of Feb. 25 at 6:00 p.m.

The new dates are March 7 at the Southern Hills Career Center Board Office at 2:00 p.m.; at North Adams High School at 6:30 p.m. and then on March 8 at Southern Hills Career Center Board Office at 10:00 a.m. Please call to reserve your spot.

## **Small Farm Conference in Wilmington**

The 2016 Southwest Ohio Small Farm Conference and Trade Show will be held on March 11 and 12. There will be sessions on Friday March 11 from 1:00 p.m. until 5:00 p.m. covering Meat Goat Management and Micro Irrigation Essentials and Management. Saturday will begin with the trade show and registration at 7:45 a.m. with the programs beginning at 9:30. There are several sessions to choose from throughout the day. The tracks, with several sessions geared toward these subjects, include: Marketing, Livestock Production, Business Management, Women in Agriculture, Crop Management, Thinking Ahead, and Miscellaneous.

Registration deadline is March 4. For registration information and a complete list of the sessions go to your local OSU Extension Office or log onto <a href="http://agnr.osu.edu/small-farm-programs">http://agnr.osu.edu/small-farm-programs</a>

### **Dates to Remember**

- Feb. 22 Two hour Fertilizer and 3 hour Private Pesticide Re-certification at Southern Hills Board Office in Georgetown on Hamer Road beginning at 10:00 a.m. Preregistration required by Feb. 16 at 378-6716. Ask for Cindy.
- Feb. 25 GAP for tobacco producers will be held at Frisch's in West Union at 1:00 p.m. Pre-registration required and seating is limited. Call Barbie at 544-2339. There will be additional GAP sessions in Adams and Brown Counties on March 7 and 8. To see the entire list go to <a href="https://www.gapconnections.com">www.gapconnections.com</a>
- Mar. 8 Farm and Family Night at Maysville Community and Technical College beginning at 5 p.m. Tickets are available at your local OSU Extension Office.
- Mar. 11 Three hour Fertilizer Certification for those without a pesticide license at Wilmington College in Boyd Cultural Arts Center. To register contact Tony Nye at Clinton Co. Extension Office at 937-382-0901 or go to <a href="http://pested.osu.edu">http://pested.osu.edu</a>