

Agriculture Newsletter- Winter 2009

Cost Share Opportunities for 2009

Producers wishing to participate in another round of Phase I cost share programs may do so by filling out a new application at the County Extension Office through the month of January.

Lime, fertilizer, seeds, water systems, fencing and several other items will be cost shared with qualified applicants. Funds are limited and applications will be scored according to state guidelines. A few examples of eligible cost share items appear below:



Using Manure May Help Reduce Fertilizer Bill

With the high costs of fertilizer, farmers with access to animal manure either from their own livestock or from a nearby farm may want to consider using it as a means of providing nutrients to their crops while reducing their overall fertilizer bill. Use of animal waste not only adds nutrients to the soil but also helps build up organic materials and increases yields. Poultry litter is being used by an increasing number of Cumberland County farmers due to its local availability.

Correctly applying poultry litter to the land requires a farmer to know the manure's nutrient content, best application times and methods, availability of nutrients to crops and how to balance crop nutrient needs whether using litter, manures, or fertilizers and other nutrient sources.

Testing is a key component. The first step is a soil test to know what nutrients the crop field needs. The next step is to have the manure or litter tested for its nutrient content. Nutrient content of manures and litter varies depending on the type of animal, type and amount of bedding used, moisture content and time and method of storage.

It is important to note that some manure nutrients are not as readily available to crops as are commercial fertilizers, especially nitrogen. Its availability depends on the crop being grown, type of manure or litter used and when and how s applied. A general rule of thumb is half of the nitrogen in the poultry litter will be available to the crop.

Growing crops have the greatest ability to take up nitrogen, so manures applied during crop growth will have the least risk of nitrogen loss. The availability of phosphate from manure or litter in the first year's crop after application is somewhat less than with commercial fertilizers while potash in manure is comparable in availability.

The Cooperative Extension Service can help producers navigate through the ins and outs of using manure and poultry litter as fertilizer. Soil and manure or litter testing are both available through the Extension Office. Soil samples are currently \$7 each and manure and litter samples are \$20 each. Several publications are also available to assist

producers. Extension publication, "Using Animal Manures as Nutrient Sources" (AGR-146) and a computer spreadsheet (<http://soils.rs.uky.edu/manureprogram.htm>) are available to help determine application rates and fertilizer credits.

Body Condition Scores good indicators of herd health

Early winter is an optimum time to prepare your spring-calving herd for reproductive success. Adequate nutrition from about 50 to 80 days prior to calving is critical to maximizing a cow's ability to rebreed and maintain a 365-day calving interval. If a cow gets inadequate nutrition or is thin at calving and breeding, she will take longer to come into heat and will require more services to conceive.

The best method to evaluate the nutritional status of your herd is to do body condition scores. A body condition score is an estimate of the degree of body fatness of an animal, which gives us an estimate of the amount of body energy reserves available to the cow. **Scores range from 1 to 9, with 1 meaning a cow is emaciated or extremely thin, while a 9 is an animal that is extremely obese.** Beef producers should train themselves to identify cows that are too thin, cows that are marginal and cows that have an optimal body condition score for rebreeding. Body condition scoring is a tool to help plan your supplemental feeding program so you can maintain adequate productivity in your herd.

Cows that are too thin, scores of 3 or less, have easily identifiable fore and rear ribs, sharpness across the backbone, sharpness over the hook and pin bones near the tailhead and sharpness across the shoulders. These cows need to gain approximately 150-200 pounds before calving if you want them to rebreed in a timely fashion.

Cows that are borderline have a body condition score of 4. These cows have easily identifiable 12th and 13th ribs, but their fore ribs are covered. The backbone and hooks and pins are still prominent but are not sharp in appearance. The shoulders are less defined. These cows need to gain about 75 to 100 pounds before breeding season.

Cows that are in optimal body condition have scores of 5 or 6 and have a good overall appearance. No ribs are visible unless the animal has been off feed and water. The backbone, hooks and pins appear rounded and not easily seen and the area around the tailhead is filled in but not mounded. These cows simply need to maintain their weight until calving.

Research has shown that cows with scores less than 5 at calving have lower pregnancy rates and take longer to rebreed than cows with scores of 5 or higher. **The optimum body condition score for mature cows is a 5 or 6.** Heifers that are calving their first calf need to have a score of at least 6 to maximize rebreeding success.

Condition Score 3 - Thin



Visible Bone structure - Foreribs remain noticeable; Backbone visible; Spinous process - Palpate w/little pressure; Less pronounced intervening space
Muscling - Muscling apparent
Fat Deposits - Beginning cover Loin, back, foreribs

Condition Score 5 - Moderate



Visible Bone structure - 12th and 13th rib not visible except shrunk cattle; Transverse processes felt w/firm pressure
Muscling - Full
Fat Deposits - Area around tail head filled out but not mounded

Condition Score 6 - Good



Visible Bone structure - No distinct structure; Transverse processes felt w/firm pressure
Muscling - Hindquarters plump and full
Fat Deposits - Sponginess over foreribs; Sponginess around tail head.

Condition Score 7 - Very Good



Visible Bone structure - No distinct structure; Ends of spinous process felt w/very firm pressure
Muscling - Hindquarters plump and full
Fat Deposits - Abundant fat around tail head w/some patchiness.

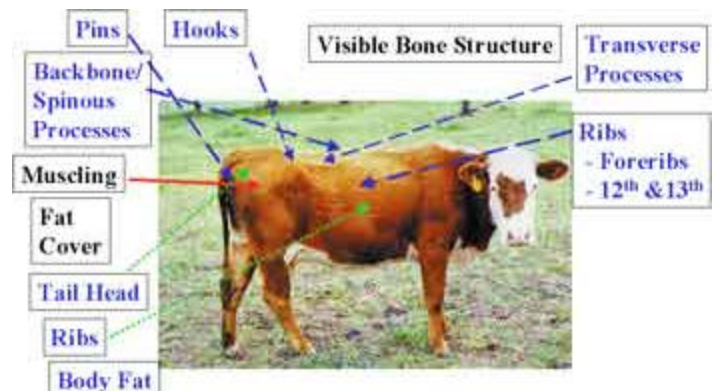
Condition Score 8 - Fat



Visible Bone structure - No distinct structure to none
Muscling - Hindquarters plump and full
Fat Deposits - Thick and spongy; Animal appears smooth and blocky

Body Condition Scoring

What do I look for? Where do I look?



Fruit Tree Grafting Workshop January 12th

Do you have a neighbor, friend or relative that has a really wonderful fruit tree variety that you would love to have in your yard? Maybe it produces fruit earlier or later than your tree; or it is really good for pies or preserves or has a better munching quality. Whatever the reason, you wish you had some of your own. But possibly you don't have room for another tree or you don't want to start from scratch with a new tree? Or perhaps you aren't really sure what the variety is, but you would like to have a few of those fruit every year.



I have scheduled a grafting workshop for January 12th beginning at 5:00 PM at the Cumberland County Middle School.

Please refer to the enclosed flier for our program which will not only cover grafting but also a variety of interesting topics for everyone.

Got any old tractors in the barn or in the fence row? I have recently discovered there's opportunity to turn one man's junk into another man's prize. This is a 1951 Farmall C I restored this past summer. Bring back any memories?



Gregory Tompkins

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& Natural Resources**