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Livestock and Natural Resources

Preg Check Your Cows

There are many reasons to preg check your cows, but this year add to the list, high hay costs. Early detection of non-pregnant cows is the main benefit from pregnancy testing, but there are others.

In many cases, the age of the calf and the likely calving date can be estimated during rectal palpation. Cows expected to calve early can then be separated from cows expected to calve late. This can provide a useful basis on which to cull cows if it is necessary to reduce herd size, perhaps in times of feed shortage. The calving spread can also be quickly reduced if late-calving cows are replaced with heifers that conceived early.

Various abnormalities responsible for infertility in cows can also be identified. The more common of these include cystic ovaries and uterine infection. The occasional freemartin heifer and other abnormalities of the reproductive organs may also be detected during rectal palpation. Diseases and management problems affecting the whole herd can also be identified much earlier if cattle are pregnancy tested. Low pregnancy rates in one particular mob, for example, might indicate problems with an individual bull. Poor fertility throughout the whole herd might be caused by an infectious disease, or perhaps inadequate nutrition prior to mating. There are three ways to pregnancy test cows.

Rectal palpation. At 45 to 60 days post-breeding, this method allows producers to have immediate results while the cow is standing in the chute. The biggest drawback, is human error can come into play based on the skill level of the technician.

Ultrasound. Another option for producers wanting immediate results is ultrasound. This method offers high accuracy readings at 28 to 35 days-post breeding. Technicians can also determine the sex of the calf based off the ultrasound. There is some additional cost for the technician and technology.

Blood tests are highly accurate, a 99% detection of open females and 95% detection of bred females. Tests must be taken at least 28 days post-breeding, and at least 75 days post-calving. Females can't be sorted out right from the chute because the tests often take at least a couple of days to be processed. However, collecting samples requires little training and can be done by producers themselves. This process works best if producers use an adequate individual identification system for females, so open cows can accurately be found and sorted out from the group when the test results are returned.

Whichever method you choose to use, afterwards you can make an informed decision on the future of that cow.

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Does Soil pH Matter?

There are a number of reasons why plants don't perform as we expect. Weather is a huge factor. Our cultural practices are sometimes more harmful than helpful. Soil fertility can be a factor as well. Often overlooked, soil pH can play a huge role in plant response to fertilizer.

When we say pH, we are actually referencing 'potential Hydrogen'. This potential Hydrogen is measured on a scale ranging from one to fourteen. Seven is considered neutral. Measurements below seven indicate increasing levels of acidity as you approach one. Measurements above seven indicate increasing levels of alkalinity as you approach fourteen. Most (not all) of our agronomic crops, turfgrass stands, and even garden plants prefer soil pH's that range from around six on up to seven or a little higher.

The numbers are important, but what they indicate is of particular importance, since a soil's pH influences the ability of that soil to take in nutrients. For example, yellow leaves with green veins are typical of iron deficiency. In most cases, iron is not a limiting nutrient in your soil. Pin oak trees, for example, best take up iron from the soil when pH's are in the five to six and a half range. At these levels, iron is soluble and easily taken up by plant roots. Get above a pH of seven, and iron becomes more insoluble. At that point, the tree can't use the iron in the soil and iron deficiency symptoms rear their ugly head. It's a pretty visual example of the often unseen effects caused by very acidic or very alkaline soils.

The best way to determine if soil pH is an issue is with a soil test. Soil tests should be taken from multiple locations in the area in question from the surface down to a depth of four to six inches. After taking at least a dozen subsamples, mix them well in a plastic bucket and submit for testing through a Meadowlark Extension District Office (to send to the K-State Soil Testing Lab) or by sending to a lab of your choice. Once an accurate pH level is determined, you can either rule out pH as a concern, or start to manage accordingly to avoid further issues.

For information on soil testing, contact a District Office or e-mail dhallaue@ksu.edu.

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FACS

It's Salsa Time....Use Safe Canning Methods

Fresh tomatoes, peppers and onions equal.... what else? Salsa of course!! Summer vegetables are arriving by the armload in kitchens across the country. And plenty of those tomatoes, peppers, onions and herbs are going into homemade salsa. Not all salsas are created equal, however, to Kansas State University's Karen Blakeslee.

Recipes created in home kitchens for salsa are suitable for eating fresh or freezing, but if you're planning to preserve the popular condiment for later by canning, stick to USDA tested recipes that keep ingredients at a safe pH levels.

"No one wants to end a party with everyone getting sick from the salsa," said Blakeslee, who is the Rapid Response Center Coordinator with K-State Research and Extension in food science.

Salsas include high-acid and low-acid ingredients and are considered acidified food, appropriate for boiling water bath canning if the final pH is less than 4.6, she said. The safety of home canned salsa depends on the combination of ingredients, procedures used in preparation, the acidity, and consistency of the final product.

"Using a process time from another recipe is only a guess for homemade recipe and can cause spoilage and potential foodborne illness," she said.

Blakeslee, who is an avid home canner herself and a proponent of making the most of your (or your neighbor's) vegetable garden, says to start with high-quality, disease-free produce. She adds, "Be smart about food preservation. Look for reliable recipe sources to increase your chances for safe food. It is a waste of good food if safety is ignored from beginning to end."

If you have any food safety or food preservation, be sure to contact your local extension office. In the Meadowlark Extension District, we can be reached at the following offices: Oskaloosa—785-863-2212; Holton—785-364-4125; Seneca—785-336-2184.

K-State Research and Extension has publications free for viewing and downloading, including "Preserving Tomatoes". Also available is "Preserving It Fresh, Preserve It Safe", "Sassy Safe Salsa at Home. A video of Blakeslee offering tips on home canning and preserving is available on YouTube.

Nancy C. Nelson
Meadowlark Extension District
Family Life

Understanding Your Child's Development

It was fun to help with my grandson's recent birthday party when he turned two. It's important that adults, including parents, grandparents, aunts, uncles, and other caregivers understand that every child develops at his or her own pace.

The ages and stages below indicate the average ages and typical skills during early childhood. As children develop, parents and others tend to focus on the expected language, social, mental, and physical milestones.

Bear in mind that the ages below are approximate, and that some children will have skills usually occurring in older children, and others will have skills usually occurring in younger children. If a child's development seems to be lagging behind in certain areas, share your concerns with an early childhood professional to schedule developmental screenings.

At age 2, your child might have mastered these skills:

Language skills. Speaks at least 50 words. Links two words together, such as "my cup" or "no juice." Speaks clearly enough for parents to understand about half of the words the child says.

Social skills. Shows more independence. Becomes defiant. Mimics others (including animals, children, and adults). Gets excited when with other children, and engages with them.

Mental skills. Plays simple make-believe games. Begins to sort objects by shape and color. Finds hidden objects.

Physical skills. Stands on tiptoes. Begins to run. Kicks a ball. Jumps a short distance.

At age 3, your child might have mastered these skills:

Language skills. Speaks 250 to 500 words or more. Speaks in three- and four-word sentences. Correctly uses pronouns (I, you, me, mine). States his or her first name. Speaks clearly enough for strangers to understand about 75 percent of the time.

Social skills. Takes turns. Expresses affection openly. Easily separates from parents. Gets upset with major changes in routine.

Mental skills. Turns book pages one at a time. Copies a circle. Does puzzles with three or four pieces.

Physical skills. Walks up and down stairs, alternating feet. Climbs, runs, and pedals a tricycle.