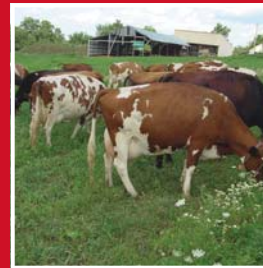


FIELD & FEEDLOT



NORTHWEST AREA EXTENSION

APRIL 2007 ISSUE

Beef News

By Beth Ellen Doran, ISU Extension Beef Field Specialist

Artificial Insemination (AI) Training – There is a training tentatively scheduled at ISU for beef producers who want to learn how to AI or improve their technique. The three-day training is scheduled for May 7 through May 9, from 9 a.m. to 5 p.m. daily, at the ISU Beef Teaching Farm, south of Ames.

The training, sponsored by ISU and Genex, involves both lecture and practice on cull cows. All of the training is under-roof. Cost is \$200 with an up-front, non-refundable registration of \$100. There is no age limit for participants, but older youth and adults are suggested.

To enroll, phone Marshall Ruble, ISU Beef Teaching Farm Manager, at 515-292-2735 or 515-460-2384. You may also e-mail Marshall at mruble@iastate.edu for further information.

Breeding Season Management for Yearling Bulls – There are some management tips that will help your yearling bulls survive the upcoming breeding season and improve the conception rates of your cows and heifers. Bulls need to have passed a breeding soundness exam, have a body condition score of 6-7 and be skeletally sound.

The yearling bull should be at least 13 months old and weigh a minimum of 1100 pounds before turnout. The older and larger he is, the better his chances of coming through the first breeding season without problems.

A number of variables, such as age, size, condition, sex drive, size of breeding pastures, type of terrain, climate and length of breeding season – affect the cow-to-bull ratio. However, as a rough guideline, the working range is approximately 10 to 25 females per yearling bull during a 45 to 60 day breeding season.

Research shows that when bulls are run together in a breeding pasture, they should be close to the same size and age. Larger, stronger, older bulls tend to dominate smaller, younger bulls. This may prevent the younger bull from performing satisfactorily.

Continuing Challenges for the Swine Industry

By Dave Stender, ISU Extension Swine Field Specialist

Porcine Circovirus Type 2 or PCV2 is impacting several herds in NW Iowa and is a huge problem to those operations that can't obtain enough vaccine. Death losses in non-vaccinated herd have been moderate to severe. The vaccine works well, but a lack of availability of the product has frustrated local producers. Some description of the disease can be found at a web site from the ISU College of Veterinary Medicine:

<http://www.vetmed.iastate.edu/departments/vdpam/swine/diseases/pcv2/geninfo.asp>

Highlights from the web are included as follows: PCV2 is a very small circular-arranged DNA virus. PCV2-infection is widespread and essentially all pig herds are infected with PCV2 but this year numerous herds have PCV2-associated disease (PCVAD), which includes severe systemic PCV2 infection. PCVAD is a serious manifestation of PCV2 infection characterized by severe loss of weight (wasting) and generalized lymph node enlargement. Today we know that there are several PCV2 associated diseases (PCVAD) and severe systemic PCV2 infection remains as the most important manifestation. PCV2-infection is widespread and essentially all pig herds are infected with PCV2 but more have developed PCVAD. In many cases, PCV2 infection requires a trigger such as coinfection with other pathogens (PRRSV, *Mycoplasma hyopneumoniae*), immune stimulation of the host, or other stressors to trigger PCV2 infection to progress to PCVAD. Host genetics may also markedly affect the outcome of PCV2 infection and there is increasing evidence of differences in virulence among PCV2 isolates.

New Circovirus publication from AASV

American Association of Swine Veterinarians and National Pork Board announced the jointly sponsored creation of a publication about circovirus, "A producer's guide to managing PCVAD (porcine circovirus associated disease)." The piece describes porcine circovirus-associated disease, explains the role of herd veterinarians, including the need for laboratory diagnosis, and lists steps for each stage of production following a PCVAD diagnosis. Download the 18-page publication (in pdf format) from the AASV Web site at this URL <http://www.aasv.org/aasv/documents/PCVADBrochure.pdf>

Updated Yields

By Kris Kohl, ISU Extension Ag Engineer Field Specialist

Livestock producers with manure management plans can now use the updated yields from crop years 2002 – 2006. Despite drought problems in 2006, most of the counties posted gains in the five year yield averages plus 10%.

The following table presents the ag statistics, five year average yields plus 10% that can be used in DNR Manure Management Plans for the spring and fall applications.

County	Corn	Soybeans
Buena Vista	184.9	51.1
Calhoun	189.0	51.0
Carroll	187.9	53.1
Cherokee	185.7	57.9
Clay	182.6	49.1
Crawford	177.5	52.4
Dickinson	181.1	49.0
Emmet	187.0	49.3
Ida	180.3	52.5
Kossuth	193.0	51.2
Lyon	186.2	54.2
Monona	157.5	46.1
O'Brien	187.9	55.4
Osceola	185.4	52.7
Palo Alto	188.4	49.3
Plymouth	179.7	51.9
Pocahontas	193.8	50.7
Sac	181.7	51.7
Sioux	191.7	57.7
Woodbury	169.5	48.8

Producers can amend their plans to the new numbers by filling out page two of their manure management plan. This form can be found on the DNR web site, www.iowadnr.com/afo/forms.html. Once you have updated the form it should be printed and kept in the producers own records only. Nothing needs to be submitted to the county or DNR.

I would also encourage producers to sample their manure this spring because changes in feed ingredients due to the high prices for corn and soybean meal can really change the NP&K content of the manure.

Fever—To Treat or not to Treat? A Fresh Outlook on Dairy Fresh Cow Treatment Protocols

By Chris Mondak, ISU Extension Dairy Field Specialist

On well-managed dairies, part of the daily routine includes close monitoring of cows and heifers in the Fresh Pen. We know that early identification and response to fresh cow problems helps those cows get a better start on their lactation period. For the last 10-12 years, standard dairy treatment protocols commonly recommended doing a brief physical exam of every fresh cow for the first two weeks post-calving. Taking the cow's temperature to check for an abnormally high or abnormally low temperature has been part of the fresh cow physical exam process.

All of these practices are good and still recommended. HOWEVER, we are now taking a closer look at how we respond to the situation when we find a cow with a fever. At the Central Plains Dairy Expo in Sioux Falls, March 21-22, Dr. Gordon Brumbaugh, formerly with Texas A& M, and now with Pfizer Animal Health, led a good discussion about better understanding and responding to fever in dairy cows. Here are the main points of that discussion:

- **Continue Fresh Cow exams:** Take her temperature, assess rumen activity, manure characteristics and breathing rate. Check for udder swelling and check of evidence of uterus problems. Check for ketosis. Assess her appearance and appetite.
- **If you find a fever (temp 103+):** Look for the cause of the fever. Does she have a disease condition going on that is causing the fever, such as mastitis, uterus infection, or respiratory infection?
- **Recognize that fever is part of the healing process:** As the immune system responds to a viral or bacterial infection, it may release chemicals that stimulate a rise in body temperature. The rise in temperature is part of the immune response, part of the healing process. Therefore, simply suppressing the fever may not be the best response.
- **Instead of treating the fever, treat the CAUSE of the fever:** If the physical exam findings indicate an infection process going on (i.e., mastitis, uterine infection, pneumonia), we can better help the cow return to health by helping her clear the disease agent. In most bacterial infections, antibiotics are appropriate, plus supportive care, to counteract the bacteria. In many viral infections, supportive care is often recommended.

How does this new, more refined approach to fever response impact the Treatment Protocols that are in place on many dairies? The recommended change is this: Instead of immediately reaching for the aspirin when you find a fever in a cow, look closer. Find what might be causing the fever, make the

diagnosis or work with your vet to make the diagnosis, then treat her according to the plan you and your vet have worked out for your herd. Re-check and monitor her for several days. As the disease condition resolves, the fever should also resolve. A persistent fever, plus no signs of improvement in condition several days post the start of treatment warrants a discussion with your veterinarian for possible re-evaluation of the cow and treatment plan. Healing takes time, and cows have variations in immune response capabilities, so the task of caring for sick cows requires a combination of monitoring, adhering to treatment plan (proper dose, proper length of time), patience, and re-evaluating. If a fever is found, but no disease symptoms are found, KEEP A CLOSE WATCH on her. Mark her down as a "Re-check" for later that day and the next several days.

Overall, this new approach to responding to fever in dairy cows will require a more thoughtful, watchful approach, but in the end could lead to economic benefits of some savings in drug costs as we get better at target treating the conditions, rather than blanket treating the symptoms.

Iowa State University Animal Industry Report

By Jerry Weiss, ISU Extension Swine Field Specialist

It is with great pleasure that we at Iowa State University bring you this annual report of the research activities that relate to the animal agriculture industries. This report combines research reports from faculty associated with various departments on campus, including Agricultural and Biosystems Engineering, Animal Science, Natural Resource Ecology and Management, Economics, Veterinary Diagnostic, and Production Animal Medicine. In addition, research as it relates to the Beef, Dairy, Equine, Poultry, Sheep, and Swine industries in the state of Iowa is included. The research reported here is supported by the Iowa Agriculture and Home Economics Experiment Station.

As you read through the research reports you will find a variety of research as it relates to the animal agriculture industries in Iowa. Some research relates to improving production efficiencies while other research relates to improving environmental quality and animal product food safety. These all are important aspects of keeping animal agriculture strong and viable and contributing to the economy and quality of life in Iowa. I hope that you read the research reports and feel free to contact the authors of any report if you need further information. If you would like a copy of this report, please contact the Pocahontas County Extension Office and we will mail one to you. The only cost to you will be the postage.

The Iowa State University Animal Industry Report 2007 is dedicated to Professor Emeritus Allen Trenkle. For more than 40 years, Allen Trenkle has been the man with the answers to ruminant nutrition questions at Iowa State University. Since joining the ISU animal science faculty in 1962, his "scientific

curiosity" has helped him become an internationally recognized expert in the research areas of factors regulating growth in ruminants, improving the composition of beef and efficiency of ruminant production. His quiet-spoken demeanor and quest for sustainable and environmentally appropriate agricultural production and processing have earned this Charles F. Curtiss Distinguished Professor of Agriculture the admiration and respect of students, colleagues, livestock producers, lawmakers, and industry folks worldwide.

Pricing Corn or Distillers Dry Grain Solubles

By Jerry Weiss, ISU Extension Swine Field Specialist

Anyone interested in checking on the price of corn or distillers dry grain solubles from an ethanol plant in NE or NW Iowa can go on the following website for some general information. However for more exact pricing, you need to call the plant direct. His bid is put out on a daily basis. The website address is: http://www.ams.usda.gov/mnreports/nw_gr111.txt The source of this information is from USDA Market News, Des Moines, IA. The phone number for this marketing service is (515) 284-4460.

Anaerobic Digester System on Dairy Farms

By Chris Mondak, ISU Extension Dairy Field Specialist

Dairy producers and consultants are invited to a meeting on May 24, 2007 to learn about the economic and environmental impacts of on-farm anaerobic digester systems, as well as the currently known pros and cons of these systems. The meeting location is the Sioux County Extension office, 400 Central Ave NW, Orange City (note that this is a new address and new location for this office.) The program will run 12 noon until 2:30, starting with a light lunch. Please RSVP to reserve your space – 712-737-4230.

Dairy Hoof-Trimmer Schools Offered

By Chris Mondak, ISU Extension Dairy Field Specialist

ISU Extension is hosting Karl Burgi, renowned hoof-trimmer and instructor, to present two on-farm Hoof Trimming Schools in NW Iowa. One school will be held at Dutchland Dairy on June 11-13, and the other at a farm in the Sioux-Lyon county area on June 14-15. Each school runs for 3 days, and includes instruction on hoof anatomy, common hoof disorders, and correct hoof-trimming for the dairy cow. Because the school involves one-on-one instruction, each school enrollment is limited to 6 persons. The instructor's goal is that upon completion of the intense 3-day hands-on training and practice, each student will be competent to perform basic hoof-trimming and hoof-care work on his/her dairy.