FIELD & FEEDLOT



ISU EXTENSION—NORTHWEST REGIONS APRIL 2011 ISSUE

Extension Web Sites

Ag Decision Maker
http://www.extension.iastate.edu/agdm/
Beef Center
http://www.iowabeefcenter.org/
Manure Management
http://www.agronext.iastate.edu/immag/
Pork Center
http://www.ipic.iastate.edu/
ISU Extension Dairy Team
http://www.extension.iastate.edu/DairyTeam/

Highlights from the 6th Annual I29 Dairy Conference—Sioux Falls, SD

By Chris Mondak, ISU Extension Dairy Program Specialist

The I29 Dairy Extension Consortium is a group of Extension dairy specialists serving Iowa, Minnesota, Nebraska, North Dakota, and South Dakota. The mission of this multi-state Extension group is to promote and support a sustainable dairy industry. Each year the group hosts a conference to look at different aspects of sustaining dairy families, farms, and rural communities. This year the focus was on animal welfare and its connection to dairy sustainability. Here are highlights from some of this year's presenters:

Temple Grandin A professor at Colorado State University, Dr. Grandin has done extensive work in designing livestock facilities, and has been published on the topics of safe, correct animal handling. Her presentation at the conference emphasized these points:

- Successful handling of dairy cows is not only about having proper facilities designed with cow welfare and behavior in mind. **It is also about good management and good stockmanship**.

- Dairy owners and managers need to take time to **provide stockmanship training** to their employees so that they develop an understanding of cow behavior and welfare, and apply that knowledge in good animal handling and treatment skills. Here are some practical applications of good stockmanship on dairies:
  - Gradual, safe, and calm introduction of cows and heifers to feedbunk headlocks.
  - Slow, gradual, calm introduction of springing heifers to the milking area.
  - Calm handling of calves.
  - Calm handling of cows in the milking area, and avoidance of doing vaccinations or other injections in the milking area.

Dr. Grandin provided this "Rule" for dairy farm owners to consider as the foundation of their training message to employees or family members who work at their farm:

"*The RULE to be observed in this stable at all times, towards the cattle, young and old, is that of patience and kindness. A man's usefulness in a herd ceases at once when he loses his temper and bestows rough usage. Men must be patient. Cattle are not reasoning beings. Remember that this is the Home of Mothers. Treat each cow as a Mother should be treated. The giving of milk is a function of Motherhood; rough treatment lessens the flow. This injures me as well as the cow. Always keep those ideas in mind in dealing with my cattle*."—*Temple Grandin*

Scott Higgens As president and CEO of American Dairy Association – Mideast based in Columbus, Ohio, Scott was involved the Ohio dairy industry's response to the negative video taken at an Ohio dairy farm and circulated widely in the media/social media. Mr. Higgen's story about successful concerted efforts made in Ohio to counter a negative media situation should give all members of dairy organizations hope and encouragement. The actions taken in Ohio demonstrate that by working together within and between organizations, dairy producers can be very effective in delivering positive, accurate information about their industry and livelihood. Additionally, he advised that dairy organizations should be **proactive** in giving positive messages to media, promoting good animal welfare practices within their industry, and giving consumers ways to learn about and understand dairy farming.

Jan Shearer Dr. Shearer, professor and Extension veterinarian at Iowa State University, gave an informative, interesting, and inspirational message about dairy cow lameness and the connection to cow welfare.

Plant Trees, Pull Weeds, Sow Seeds

By Melissa O'Rourke – ISU Extension Farm & Agribusiness Management Program Specialist

Recently I had an opportunity to spend time with a group of other Extension professionals. We were sharing some personal philosophies, talking about individual vision statements. One of my colleagues shared this succinct declaration of personal mission: "Plant trees. Pull weeds." I like it.

That statement has stayed with me. Some of you may know that I've been writing a column for the past year, which is now being passed on to a new horticulture educator, as I focus on farm and agribusiness management programming and projects. But if you've been reading these columns, you know that from time to time you'll find me ruminating on philosophical lessons from the field and garden. As you may have experienced, time in the field, time on the tractor, and time in the garden gives us time to think about life. And occasionally I impart a few of my own little lessons to live by.

But to my colleague's concise directive to "plant trees, pull weeds," I find myself wanting to add just another little tidbit – "sow seeds."

Okay, so what am I really talking about here? In terms of a little wisdom from the garden or the field, what does this phrase really mean to me, and what might it mean to you?

I'll break it down.

Plant trees: We plant trees for many reasons – for beauty, to protect our soil, to enrich our environment. Above all, we plant trees because we believe in the future. Remember the Chinese proverb: "The best time to plant a tree was 20 years ago. The next best time is now." When we plant a tree, we're saying that we should invest in something strong, with deep roots, because we believe that somebody, sometime in the future is going to benefit from that tree and all that it provides. That may very well be somebody that we'll never know, who may not have yet been born. Likewise, in our life choices – as in our landscapes – we need to make deep, long-term investments in people, in relationships, in friends and family. You know the value of deep roots. So don't just plant annual flowers, don't plant fast-growing trees with shallow roots. Take actions that will have positive, long-term impact in the world, even if you might not be around to enjoy it. The tree you enjoy this summer may very well be one that was planted a hundred years ago. Somebody back then believed in the future, and we should too.

Pull weeds: The basic definition of a weed is a plant that is out of place. Unfortunately, that weed isn't needed in its present location, and it may be causing harm to desirable plants around it. Pull those weeds – or otherwise do what's necessary to get rid of them so that more beneficial plants can grow and thrive. Similarly, in life, weeds will appear. Those weeds can be trials and difficulties, distractions or temptations. Don't let those weeds get away from you, overwhelming you and dragging you down. Identify the weeds, distinguish them from the desired plants in your fields and gardens of life, and do what you must to rid the landscape of those weeds. It's a constant battle, but if we regularly tend our garden, we keep the weeds under control and the flowers and vegetables of life can thrive.

Sow seeds: I believe that whenever we interact with another person, we have the opportunity to sow seeds. Hopefully, we're sowing good seed. As we move through life -- similar to what we read in the parable of the sower – we never know for sure where the seed falls, and where it may take root, sprout, and grow. The good seed may be something as simple as a smile or friendly greeting to a stranger, a word of encouragement to someone who needs it, an act of assistance or generosity. In everything we do or say, we are setting some sort of example, being some kind of a witness. We always have a choice to make – good seed, or not so good. We all fail sometimes. But if we see all of our words and deeds as an opportunity to sow good seed, we're more likely to make a positive difference.

Application: It's been in fairly recent months that I've moved into a new role with Iowa State University Extension, serving as the Farm & Agribusiness Management Specialist for this region. This pulls together my background in agriculture and horticulture, education and law. I've been busy making contacts and working on projects. But it's important to me to listen and learn the needs of this region for Extension programming. As I do this work for Iowans, I'm focusing on that mission statement – **Plant trees, pull weeds, sow seeds.** Let me hear from you! Contact me at: morourke@iastate.edu or 712-737-4230 or through your local ISU Extension office. In the meantime, have a safe planting season.

Beef News

By Beth Doran, ISU Extension Beef Program Specialist

2011 Animal Industry Report Available

Each year, the Animal Science Department at ISU publishes an Animal Industry Report. The 2011 report, available on-line at http://www.ans.iastate.edu/report/air/, features more than 90 articles and is dedicated to Daryl Strohbehn, who retired after 36 years as ISU Extension Beef Cattle Specialist. Dr. Strohbehn is noted for his service and dedication to the cow-calf industry.

The report includes research conducted both at ISU and out in the state and contains nine different categories - beef, dairy, poultry, sheep, swine, animal products, companion animals, environment, and teaching. One of the beef reports, "Environmental Conditions in Beef Deep-Bedded Mono-Slope Facilities", is a final summary of research conducted with the USDA Meat Animal Research Center at two barns in NW Iowa. Preliminary results of this research were presented at the Feedlot Forum meetings in 2010. Dairy reports of interest focus on use of the Corn Picker computer program to evaluate corn silage hybrids, research study evaluation of a hydrogen peroxide teat dip, and the connection of lameness to dairy cow welfare.

Be Prepared – With the arrival of spring comes the melting of snow and spring showers, which also increases the chance of feedlot runoff. However, there are measures you can take to

reduce the risk of runoff. If you still have snow remaining in the lot, remove as much as possible. If rain is forecasted, try to remove manure prior to the rainfall event. Frequent scraping of both the concrete and the earthen surface is the most important management task.

If scraped solids can't be land applied immediately, stack them on an impermeable, well-drained surface. Avoid stacking in drainage ways and keep them as far from water resources as practical. If you have a runoff catch basin, locate the stack so that any drainage enters the basin. Stacks should be removed, and the manure land-applied as soon as weather and conditions permit. If you must apply manure, wait until after the snow has melted or follow best management practices to avoid surface runoff of manure nutrients.

Last spring, EPA Region 7 took a series of civil enforcement actions against beef feedlot operations in NW Iowa. I'm encouraging all feedlots to be prepared and avoid a similar scenario this spring. Be proactive and have your feedlots and manure management in order!

Air Quality in Mono-Slope Beef Barns
A tri-state team of researchers and university specialists is engaged in a three-year study looking at gases emitted from deep-bedded mono-slope beef barns and how building management impacts the emissions. The study involves a total of four barns in NW Iowa and South Dakota.

The team is composed of researchers from the USDA's Meat Animal Research Center (USMARC) at Clay Center, NE; agricultural engineering specialists from South Dakota State University (SDSU) at Brookings, SD; and Iowa State University Extension specialists – Beth Doran, Kris Kohl, Angie Rieck-Hinz and Steve Hoff. Funding for this much-needed research comes from a USDA grant and is one of 11 projects across the U.S. that addresses air quality issues.

Currently, beef producers report estimated air emissions from their concentrated animal feeding operation (CAFO) based on data from open beef feedlots in the summer. These values may be too high for mono-slope beef barns. Data from this study will be useful in providing more accurate values for air emissions.

The study will also evaluate two different manure-handling systems to determine which system emits lower levels of gases in the air. One barn system contains a manure pack which remains in the barn until the cattle are removed. The other barn system involves the weekly removal and storage of manure from around the bedded pack until it can be field applied.

A third objective is to help beef producers learn how they can reduce the emissions from their mono-slope beef barns. Producers are trying different things to increase animal comfort, some of which may impact air quality. The study will monitor the effects of season over a two-year period.

Estrus Synchronization Planner – This spreadsheet provides up-to-date breeding and scheduling information for cows and heifers. To download this free software, you must first register on-line at http://www.iowabeefcenter.org/estrus_synch.html

Crop Planning

By Paul Kassel, ISU Extension Field Agronomist

Crop planning is a good activity for this time of year. The idea is to make a plan for each field and write down everything you ***plan*** to do in that field.

Crop planning may seem like some extra work now. However, this pre-season planning can help confirm plans made earlier in the year. Additionally, it will serve as a handy reference that can be useful when making crop decisions during a busy time of the year.

Think through each input and activity for each field. A written plan will force you to double check things like herbicide selection, seed and herbicide quantities, refuge acres and placement of hybrids and varieties.

The intent of this plan is to get all the info recorded for each field on one page of paper. This plan can be electronic or written on paper. It is important to get a copy of this in each family member/employees hands and/or each tractor or pickup.

These are some basic things for each field.

- Field name/nickname and legal description
- FSA field acres and FSA number
- Previous crop and yields
- Fertilizer/manure – amount and analysis
- Fall tillage and intended spring tillage
- Hybrids/varieties – include maturity, traits, SCN, seed treatments
- Planting rate
- Pre-plant and post-emergence herbicides
- Insecticides and or fungicides
- A field map (like an FSA map) for each field
- Restricted use pesticide (RUP) applications
- Plans for RUP record keeping

Some other items for your field plan that are optional.

- Crop insurance and/or hail insurance details
- Quantities of grain that can be sold before harvest based on crop insurance
- Corn Suitability Ratings (CSR)
- Weed, insect, disease or nematode problems

Field planning like this will force you to double check the kind and quantity of your seed, fertilizer and crop protection products. It will also make you double check the inputs you prepaid last fall against your actual field acres.

This is also a good way to double check your refuge requirements for your rootworm resistant corn hybrids, corn borer resistant hybrids or multi stack hybrids. See http://www.ncga.com/insect-resistance-management-fact-sheet-bt-corn for more info.

Seed products that offer refuge in a bag, 5% adjacent refuge and 20% adjacent refuge can make managing refuge acres complicated. A downloadable refuge acre calculator can be found under 'IRM calculator' at the National Corn Growers Association website at http://www.ncga.com/irm-calculator.