Preparing for the Farm Visit

• Welcome to Session V of AG 101.
• You should be able to hear music – and can control the MP3 Player shown in your view.
• Program will begin at 1:00 PM.
• Kristen Saacke Blunk, Penn State, Moderating
The Winter “Burst” focuses on Intro to Pennsylvania Farms and Livestock Operations

Session I
- Intro to PA Farms
- Intro to PA Farm Partners

Session II
- The Farmer: Social Influences
- The Farmer: Economic Influences

Session III
- Intro to PA Livestock Operations
- Cows, chicken, and pigs
The Winter “Burst” focuses on Intro to Pennsylvania Farms and Livestock Operations

Session IV
- Equine
- Specialized Species

Session V – 2/17/11 Pre-farm visit preparation, Biosecurity & other important info

FARM & FIELD VISITS
http://guest.cvent.com/d/vdqt1f
Session V – 2/17/11, Pre-farm visit preparation; Biosecurity & other important info

FARM & FIELD VISITS
http://guest.cvent.com/d/vdqt1f

Session VI – 3/16/11 Post-farm visit. Lessons learned and site-by-site review.

The Winter “Burst” focuses on Intro to Pennsylvania Farms and Livestock Operations
Your Perspectives about Equine & Specialty Species in PA

When you consider what might constitute "specialty species" in Pennsylvania, please check all that you believe the industry may include:

- Veal
- Llama
- Sheep
- Goat
- Deer
- Bison
- Emu
- Iguana
- Agouti
• **Program Focus of Session V**
  – *Biosecurity* Jerry Martin, Penn State Crops Management Extension Group
  – *Farm Visits* Kristen Saacke Blunk, including information on visits to Plain Sect farms, based on information provided by Mr. Don McNutt, Lancaster Co Conservation District
REMINDER:
For more in-depth training about livestock production in PA

- **Introduction to Livestock Production Systems:** February 23, 2011 in Centre County
- In-depth, face-to-face workshop provides an overview of the typical production systems in Pennsylvania for dairy, swine and poultry.
- Manure handling, contracts, marketing, economics, biosecurity issues, and dead animal disposal are also addressed.

REGISTRATION INFO:
http://panutrientmgmt.cas.psu.edu/ct_training_list.htm
Biosecurity Issues

Concerns & Strategies For On-Farm Visitors

Jerry Martin, Senior Extension Associate, Penn State Crop & Soil Sciences
771-783-9704  jmartin@psu.edu
What is Biosecurity?

- **Strategies for disease prevention**
  - Raise the level of resistance to infectious disease
  - Prevent the introduction of infectious disease
  - Minimize the spread of infectious disease

- Implemented through a series of management practices
## Disease Sources

- Infectious bacteria and viruses can be present in:
  - Manure
  - Urine
  - Exhaled air
  - Eye discharges
  - Nasal discharges
  - Milk
  - Blood
  - Saliva
  - Semen
  - Uterine fluids
  - Fetal tissue
  - Fetal membranes
  - Tissues and discharges from live or dead animals
Disease Spread

- Infectious bacteria and viruses can be spread by:
  - Direct contact with the sources
  - Contaminated carriers
    - Animals
    - People
    - Equipment
    - Feed
    - Water
    - Birds & Rodents
Industry Background

- Poultry and swine industries have been very aggressive
  - Poultry
    - Avian Flu
  - Swine
    - Pork Quality Assurance Program (NPPC)

- Dairy industry historically has been somewhat lax
  - Currently much more focus and attention on biosecurity management
“Professional” Visitors

- Agricultural professionals have several key biosecurity responsibilities
  - Educator
    - Need to be knowledgeable about livestock disease and prevention procedures
    - Serve as an information resource
  - Model
    - Must be role models in practicing biosecurity protocols
  - Supporters
    - Take the initiative in learning each farm’s biosecurity expectations and guidelines
    - Willingly follow each farm’s guidelines
On-Farm Visitor Practices

- **Adopt a proactive approach**
  - Develop personal biosecurity plan outlining procedures and protocol

- **Overall farm visit strategy**
  - Consider and plan farm visits on a daily basis
    - Think “Clean to Dirty”
  - Ideal
    - Schedule only one farm visit per day
  - Multiple farm visits in one day
    - Sequence from low risk to high risk
      - Low Risk: no animal or manure contact, healthy animals
      - High Risk: animal and manure contact; health issues
    - Mix species
On-Farm Visitor Practices

- **Plan the farm visit**
  - Obtain permission to visit the farm
    - Make an appointment
  - Inquire about and follow farmer guidelines
    - Specific biosecurity procedures
      - Example: Some swine operations require that visitors have not been on another swine operation in the last 24 hours.
        - Parking
        - Entering facilities
        - Where to meet the farmer
        - Clothing and footwear
  - Explain your biosecurity protocol
On-Farm Visitor Practices

- Develop and follow a clothing and footwear protocol

- Carry adequate supplies
  - **Clothing**
    - Clean clothing each day
    - Coveralls
    - Disposable coveralls
  - **Foot Wear**
    - Rubber boots
    - Disposable plastic boots (4 mil minimum)
  - **Foot Wash**
    - Bucket and/or large tub
    - Boot brush
    - Disinfectant and soap
    - Water supply
  - **Trash bags**
  - **Hand Care**
    - Disposable gloves
    - Hand sanitizer
On-Farm Visitor Practices

- **Arriving at the farm**
  - Make sure vehicle is adequately cleaned
    - Particularly mud and manure from previous farm visits
  - Be aware of where you park
    - Designated area
    - As clean a site as possible
    - Consider safety
  - Don’t drive through facilities or livestock traffic areas
  - Respect all warning signs

- **Meet the farmer in a low risk area**
  - Office
On-Farm Visitor Practices

- Put on clothing and footwear
  - Wear rubber boots or disposable plastic boots
  - Rubber boots
    - Wash in disinfectant solution upon arriving
  - Plastic boots
    - Heavy (at least 4 mil)
  - Clean or disposable coveralls

- Materials carried onto the farm
  - Paper, notepads, computer, sampling equipment, etc.
    - Clean and free of organic matter
  - Equipment used on animals or feed
    - Disinfected before and after use
On-Farm Visitor Practices

- **During the visit**
  - Don’t enter facilities and livestock areas unless necessary
  - Minimize animal contact unless absolutely necessary
  - Avoid walking through high risk areas
    - Manure and other organic material
    - Feed areas
  - If observing or working with multiple animal groups
    - Start with young animals and move on to adults
    - Start with healthy animals and move to sick animals
On-Farm Visitor Practices

- **Departure**
  - Rubber boots
    - Wash in disinfectant solution
    - Most important
      - Thoroughly remove all organic material
  - Plastic boots
    - Place in small trash bag and leave at farm
      - If agreeable to the farmer
    - Or take with you
      - Avoid contaminating vehicle and equipment
  - Wash hands
    - Hand sanitizer

- **Clean vehicle for next farm visit if necessary**
Choose a Disinfectant

- There is no perfect disinfectant

- Use the following criteria when selecting a disinfectant:
  - Effectiveness against pathogens
  - Effectiveness in organic matter (dirt and manure)
  - Potential damage to clothing and equipment
  - Expense

- Challenge
  - Many of the disinfectants are inactivated by organic material
  - Many of the commercial products require an extended time of exposure (10 minutes) which is not very practical

- Research has shown that “...the most important thing is to get boots clean.”
Disinfectants

- Chlorhexadine
  - Maintain their effectiveness in the presence of some organic material
    - May precipitate out in hard water
  - Not very effective against some viruses and bacteria
  - Relatively non-corrosive and non-irritating
  - Require a longer contact time (up to 5 minutes) to be effective

- Examples
  - Nolvasan®
  - Virosan®
Disinfectants

- **Hypochlorite**
  - Effective against a broad range of pathogens
  - Quickly inactivated in the presence of organic material
  - Readily available and inexpensive
  - Can be irritating and damaging to clothing and equipment

- **Examples**
  - Clorox®
  - Other brands of bleach
Disinfectants

- Phenols
  - Maintain their activity in organic material
  - Not as effective against some disease causing organisms
  - Relatively non-toxic
    - Prolonged skin exposure can be irritating
  - Somewhat expensive
  - Examples
    - Lysol®
    - Environ®
    - One-Stroke®
Disinfectants

◆ Iodophors
  • Iodine disinfectants
  • Share most of the characteristics of chlorine products
    ▪ Low cost
    ▪ Inactivation in organic material
  • Can stain clothes and other surfaces

◆ Examples
  ▪ Betadyne®
  ▪ Povidone®
Biosecurity Resources

- Penn State Veterinary Biosecurity
  - [http://vbs.psu.edu/extension/focus-areas/biosecurity](http://vbs.psu.edu/extension/focus-areas/biosecurity)

- National Biosecurity Center
  - [http://www.biosecuritycenter.org/](http://www.biosecuritycenter.org/)

- University of Vermont – Healthy Farms-Healthy Agriculture
  - [http://www.uvm.edu/~ascibios/](http://www.uvm.edu/~ascibios/)

- Ohio State University
Conclusion

- Most biosecurity measures are fairly basic, common sense
- The key is to make them a routine part of your farm visits
- They should become habit just like washing your hands for dinner
Farm and Field Visits

• Protocol for our visits to the four sponsoring farms
  – Meeting Dates
  – Meeting Locations
  – Meeting Times
Meet the Producers That We’ll Be Visiting
We are Visitors to the Farms

• Remembering our role as students (not wearing our official hats).
  – If you have regulatory responsibilities as a part of your job, please leave that role at the farm gate.

• Seek to understand.
  – Learn what the farmer’s goals are.
  – Learn what the farmer values about their operation.
Visiting Plain Sect Farms

• Lancaster County Conservation District has developed some pointers for agencies that have recently visited farms – particularly in conjunction with the compliance related activities with Watson Run Watershed.
• The LCCD guidance is based on a long history of working with Plain Sect farmers, increasing sensitivities for their culture, preferences, and beliefs.
• Is it a “Lutheran” farm, “Catholic” farm, or “Amish” farm?
  – Plain Sect farm or English farm.
LCCD Guidance for Visits to Plain Sect Farms Titled “Lancaster 101”

• Park vehicle carefully – so you can pull out without backing up
  – Protecting small children and family pets.
  – Don’t block: Barn door, milk house entry, drives
• Don’t enter barn – go first to the house.
• Handshakes may or may not be offered, dependent upon the custom.
• Identifiers – monogrammed clothing and nametags.
LCCD Guidance for Visits to Plain Sect Farms Titled “Lancaster 101”, cont’d

• Quiet, slow demeanor as opposed to assertive and fast talking.
• Recognize that pre-school children do not speak English.
• Have men and women on your team.
• Dress appropriately – business casual and jeans are fine.
• Don’t smoke on the farm property – outdoors or in your car.
LCCD Guidance for Visits to Plain Sect Farms Titled “Lancaster 101”, cont’d

• Demonstrate good livestock awareness skills – not entering a barn or livestock facility without the owner or operator in the lead.
  – Don’t approach draft horse or mules from the front or rear.

• Appointments should be made no earlier than 8:30 AM and conclude by 11:30 AM. 1:30 to 3:30 PM

• Professional language should not include slang.
LCCD Guidance for Visits to Plain Sect Farms Titled “Lancaster 101”, cont’d

• Photographs of children and adults are NOT appropriate.
  – Ask for permission to take a photo as needed of the landscape question.
• Recording of this session will be posted in the “AG DIALOGUE” box, along with a pdf of today’s powerpoint AFTER the live session at http://breeze.psu.edu/AG101

• Registered participants will receive post program/pre-program assessment survey following each live session. To register – visit http://guest.cvent.come/d/vdqt1f
NEXT on AG 101: *Post Farm Dialogue* After the farm and field tours, AG101 participants are invited to participate in a collective debriefing to look at the different farm operations.

- March 16– 1:00 to 2:30 PM at [http://breeze.psu.edu/AG101](http://breeze.psu.edu/AG101)
- Register for AG101 at [http://guest.cvent.com/d/vdqt1f](http://guest.cvent.com/d/vdqt1f)