New Pig Virus Presents a Challenge for Manure Pumping This Fall
Dave Stender, ISU Extension and Outreach Swine Specialist

A new swine disease called Porcine Epidemic Diarrhea Virus (PEDv) has come to the US swine herd. Fortunately, PEDv only infects pigs and there are no other known hosts for this virus. It does not impact humans or pork meat and therefore has not disrupted our vital pork export trade. There are no other known hosts for this virus. PEDv poses no known public health threat. However, PEDv is causing severe economic hardship to infected swine herds – over 500 herds in 17 states according to recent reports.

The PEDv virus causes severe diarrhea that is fatal to most pigs under three weeks of age. The mortality rate in suckling and early-weaned pigs in a naïve herd can range from 30 to 100 percent. Older pigs get sick but most recover.

PEDv is highly contagious and is spread by a fecal-oral route. The most common sources of infected feces are pigs, trucks, boots, clothing, or other fomites. Because the virus is highly contagious and spreads fecal-oral, any object with pig manure is a potential source of infection to a swine herd. The virus survives for weeks in swine manure, thus giving manure pumping a new challenge.

Before emptying pits this fall, swine producers and manure haulers should review a new fact sheet published by the Pork Board called “Bio-secure Manure Pumping Protocols for PEDv Control: Recommendations for Commercial Manure Haulers.” This publication can be found at: [http://pork.org](http://pork.org) – or open directly here: Biosecure Manure Pumping Protocols for PED Control: Recommendations for Commercial Manure Haulers

Some of the highlights included in the Pork Board fact sheet include:

- Making sure communication happens between the producer and the manure hauler before the manure is hauled. The date to haul manure should be known in advance, along with awareness of previous site locations (especially sites with clinical signs of PEDv).

- A bio-security plan should be discussed in order to reduce the risk of spreading the virus. A line should be established to separate manure hauling equipment and people away from the path used by those that take care of the pigs. This line should not be crossed by any employee. According to the fact sheet, this means that “manure haulers are not to enter the barns, office areas or walk over areas used by farm personnel and should never come in direct contact with the pigs.” Manure haulers should also avoid any direct contact with farm personnel and not allow pumping equipment access by farm personnel. Additionally, always use clean coveralls, boots and gloves at each site.

- Between pumping jobs, the manure hauler should inform the farm contact person when pumping is done, identify and discuss any problems such as biosecurity breaches or manure spills. Then a proper cleaning, disinfecting and drying of equipment should happen at a location away from the caretakers’ traffic path, on site if possible. It is also very important to change outer clothing and boots between farms and make sure to clean the cab of trucks, tractors and contaminated equipment before going to next site.

Producers and manure haulers are encouraged to download the Pork Board fact sheet for more information.
Drought and Cow-Calf Operations  
Beth Doran, ISU Extension and Outreach Beef Specialist

While crops are significantly better this year, pastures are looking tough. Some producers have early weaned calves and are supplementing cows with additional feed.

History reveals a bit about how producers cope with drought. A survey conducted a year ago by two Dordt College students, Holly Enerson and Dallas Van Gelder, asked cow-calf producers what they planned to do with bred heifers, open females and calves born in 2012. All reported percentages are based on the 110 producers who replied to the survey.

Ninety-three percent planned to keep their bred heifers; 10% indicated they were reducing herd size. Some planned to do both, which accounts for total percentages greater than 100%. For example, some planned to keep their heifers, but cull older cows to reduce herd size.

Producers planned to retain more open females than expected. Eighty-nine percent planned to sell open livestock; whereas, 11% planned to retain their open livestock.

As for the 2012 calf crop, there was a mixture of things producers planned on implementing. Eleven percent planned to sell calves off the cow. Fifty percent were going to background and sell the calves; 49% planned to retain and feed out the calves. Eighteen percent had some other plan for their calves. (Percentages total more than 100% as some producers planned to implement more than one protocol.)

What should a producer do this year? With dry conditions and recent heat, producers are advised to pregnancy check their cows and heifers. Although feed prices are lower than a year ago, pencil out whether you can afford to keep an open female. As for calves, feeder calf numbers are low again this year, and calf prices look to be very strong. Northwest Iowa will have a number of special pre-conditioned feeder cattle sales offering the opportunity to add value to the feeder calf.

Beef Facilities Conference
Circle Nov. 21 and plan to attend the Beef Facilities Conference in Sioux Falls, South Dakota. The conference will be from 9:45 a.m. to 3:30 p.m. at the Best Western Plus Ramkota Hotel.

The Beef Facilities Conference features the following speakers and topics:

- Results of the Air Emission Research Study – Mindy Spihls, research animal scientist at United States Department of Agriculture—Agriculture Research Service and Erin Cortus, assistant professor in Agricultural and Biosystems Engineering at South Dakota State University (SDSU)
- Air Quality Regulations and How the Research Study Relates to Air Quality Reporting—Rick Stowell, associate professor and extension engineer, University Nebraska—Lincoln (UN-L)
- Capturing Nutrients from the Barn – Kris Kohl, extension agricultural engineering program specialist with Iowa State University (ISU), and Angie Rieck-Hinz, extension program specialist, ISU
- Building Management in Four Different Barns – producer panel featuring a wide mono-slope barn, narrow mono-slope barn; slatted floor with deep pit barn; and hoop barn
- Cattle Performance with Four Different Systems
  Robbi Pritchard, distinguished professor at SDSU; Dan Loy, Iowa Beef Center Director at ISU, and Shawn Shouse, extension agricultural engineering program specialist with ISU; and Russ Euker, extension livestock program specialist with ISU addressing performance in mono-slope, hoop, slatted floor barns and open lots.

Registration information will be included in the next Field and Feedlot newsletter.

For more information, contact Beth Doran at 712-737-4230 or e-mail doranb@iastate.edu

Upcoming Beef Programs:

Nov. 1 • Cover Crops (Radishes, Turnips and Rye) Field Day – Storm Lake
Nov. 5 • Margin Maker Computer Workshop for Beef Feedlot Producers
  Dordt College, Sioux Center
Nov. 21 • Beef Facilities Conference
  Best Western Ramkota Hotel, Sioux Falls
Jan. 21 • Feedlot Forum 2014
  Terrace View Event Center, Sioux Center

Best Practices for Helping You Communicate Your Agriculture Story with Adult Consumers
Kaye Strohbehn, Agriculture Producer & Consumer Education Specialist

The United States Department of Agriculture Census of 2007 shows the number and size of farms in Iowa has continued to decrease, while the average age of farmers continues to increase. Additionally, the Food and Agriculture Organization of the United Nations indicates the world population will reach a record breaking nine billion people by the year 2050 - an
increase of close to two billion people worldwide.

With our world population set to reach this record-breaking number, it brings to light the need for our agriculture community to have more individuals engaged in telling the story of agriculture in Iowa. Who better to tell the story of Iowa agriculture than the many agriculturalists who work to provide a safe, wholesome, economical and desirable food product?

To help you prepare your agriculture story and message, I recommend trying the following research-based best practices:

**Identify your audience.** Ask yourself the following question: Who am I trying to reach with my message? By defining as much as you can about your target audience, you will be better equipped to tailor your message to the needs of your audience.

**Determine your purpose and goals.** Ask yourself: What impact do I want to make on my targeted audience? For example, is your intent for the audience to increase their awareness and knowledge about your product?

**Describe specifically what you want the audience to know** about the agriculture industry or the product you represent.

**Tailor your message to the audience.** Stick to the facts! Use trusted and unbiased research-based information from universities, commodity organizations or governmental agencies. Incorporate consumer preferred language as much as possible into your message. For example, instead of using the word “slaughter” to describe animal processing use the word “harvest”.

**Listen and learn from consumers and neighbors.** By listening to consumers and neighbors in earnest, your message will be received showing the value you bring not only to the agriculture community, but to the product you represent.

Remember to keep your message clear, concise and purposeful. Convey to your audience first the value they gain from your message or from consuming your product. For more information on programs, resources or guidance on educating and communicating your agriculture story to consumers and neighbors, contact me at 712-737-4230 or kestroh@iastate.edu.

**Crop Management after Prevented Plant Acres**
*Paul Kassel, ISU Extension and Outreach Crop Specialist*

Many farmers planted cover crops on prevented plant acres earlier this summer and now have questions about managing those acres during the fall and winter seasons.

**Nitrogen management**

The corn following soybean nitrogen rate can be used when corn follows prevented plant acres. The soybean crop does not leave behind extra nitrogen. Nitrogen rates are typically increased when corn follows corn.

Soybean as a cover crop will have some direct nitrogen contribution from the soybean vegetation and grain. The amount depends on the vegetative biomass and seed production level. An estimate of 30 lb/acre of nitrogen is possible with a uniform stand and growth.

Cover crops that include forage legumes may contribute nitrogen to the next year's corn crop. However, if these forages are summer-seeded, their nitrogen contribution will be small because of limited growth. Small grain cover crops may be expected to use and sequester some nitrogen for next year's crop. However, research has shown little reduction in nitrogen needs for next year's corn crop.

Nitrogen fertilizer applied for the 2013 corn crop – and then enrolled as prevent plant acres – may have some nitrogen carryover for the 2014 corn crop. Spring nitrate soil tests can measure this residual nitrogen.

**Corn rootworm (CRW) management for 2014**

**Scenario 1:** The 2012 crop was soybeans, the field was in prevented plant in 2013 and the 2014 crop will be corn. There is no need for corn rootworm insecticide/CRW trait.

**Scenario 2:** The 2012 crop was corn and the field was in prevented plant in 2013. Insecticide/traits for CRW may not be needed. Rootworm damage from northern corn rootworm that has extended diapause is possible. (Extended diapause is where some of the northern corn rootworm eggs diapause or rest for an extra season. This creates the potential for rootworm damage to the corn crop in a corn soybean rotation.) Use CRW insecticide/traits if extended diapause is a concern.

**Fallow syndrome**

Fallow syndrome can occur when fields have little or no vegetative growth the previous year. Phosphorus deficiency symptoms may occur in corn. Consider a fall seeded cover crop to reduce the potential for fallow syndrome. Starter fertilizer may also help prevent this syndrome.

**Cover Crops**

Oats are an inexpensive and easily-managed cover crop. Winter rye can be seeded now until mid-October. Winter Rye will function as a traditional cover crop. Spring management is essential to prevent crop competition. Radishes are an option where fall grazing is desired. Radish, kale or turnip crops will tolerate some frost or freeze conditions and remain productive well into November.
CLIPPINGS – Pumpkins

By: Karina Fast, Agriculture and Natural Resources Intern for Lyon, O’Brien, Osceola and Sioux Counties

One of my favorite on-campus events at college is a pumpkin carving contest. Each year, the students gather around with their pumpkins and knives to see who can carve the most creative or original pumpkin. My carvings are never among the best, but the event is a lot of fun and a great way to reach out and meet people on campus.

If selecting a pumpkin for carving, choose a pumpkin with a stem at least 1 to 2 inches long. If the pumpkin has a shorter stem, or is missing the stem completely, the pumpkin will decay faster. It is also important to choose a heavy pumpkin that does not have any cuts or soft spots. The larger pumpkins are typically used for Jack-O-Lanterns and the smaller pumpkins, which tend to be sweeter, are used for cooking and eating; however, both types of pumpkins can be used for either purpose.

As much as I love using pumpkins for carving Jack-O-Lanterns and to give color to my fall decorations, a pumpkin is also good to eat. The first food involving pumpkins that usually comes to mind is pumpkin pie, though there are many great recipes that incorporate pumpkin puree. Although pumpkin pie can include a lot of additional sugar; pumpkin puree in and of itself is healthy. Pumpkin contains fiber and is a good source of potassium and vitamin A plus it is low in calories. Pumpkin puree is relatively easy to prepare, and can be a great addition to a variety of different foods.

The University of Illinois Extension website called Pumpkins and More describes three ways to make pumpkin puree: on the stove, in the microwave or in the oven. To cook pumpkin on the stove, cut the pumpkin into large chunks, rinse in cold water, and boil with one cup of water for 20 to 30 minutes. The pumpkin does not need to be submerged in the water. If you choose to steam the pumpkin on the stove, the process should only take about 10 to 12 minutes. The second way to prepare pumpkin puree is in the oven. Start by cutting the pumpkin in half and clean out the stringy mass and seeds. Rinse the halves under cold water and place the pumpkin cut-side down on a cookie sheet. Bake at 350 degrees F for one hour or until tender. The third way to prepare pumpkin puree is in the microwave. Cut the pumpkin in the same manner as you would when making puree on the stove. Place the cut-side facing down on a microwave safe plate and microwave for 15 minutes. After 15 minutes, check to make sure that the pumpkin is tender. If not, repeat with 1 to 2 minute intervals until the pumpkin is tender.

After the pumpkin is cooked and cooled scoop out the tender flesh and place in a food processor and puree. You can freeze the pumpkin puree for up to one year and use it whenever you feel like adding a little pumpkin flavor to your cooking. While researching information about pumpkins, I stumbled across a list of 50 recipes online that include using pumpkin puree in salsa, cornbread, pancakes, pumpkin pie milkshakes, brownies, and many other great ideas. Be creative and see what you can add your pumpkin puree to.

Another great way to use a pumpkin is to roast the seeds. Lori Wuellner of the Kansas State University Research and Extension outlined the steps to preparing pumpkin seeds in her article, Drying and Roasting Pumpkin and Sunflower Seeds. If you carve Jack-O-Lanterns, simply save the seeds when you clean out the inside of the pumpkin. After removing the seeds wash off the fibrous pumpkin tissue with water. To dry the seeds place them in a dehydrator for 1 to 2 hours at 115 to 120 degrees F or put in an oven on warm for 3 to 4 hours. Remember to stir frequently so that the moisture will evaporate and the seeds will not burn. After the moisture has been removed, take the dried seeds and mix them with a little oil and salt (optional) and roast them in a preheated oven at 250 degrees F for 10 to 15 minutes.

If you have you ever wondered where the word Jack-O-Lantern comes from or you just want to learn more about pumpkins, be sure to check out the University of Illinois Extension website, Pumpkins and More, at http://urbanext.illinois.edu/pumpkins. If you are wondering what varieties of pumpkins to plant in your garden, see Iowa State University Extension and Outreach publication, Suggested Vegetable Varieties for the Home Garden, revised February, 2013. For any questions feel free to contact me at email kfast@iastate.edu, or contact Horticulture Educator, Margaret Murphy at mmurphy@iastate.edu or contact your local County Extension office.
Events at ISU Extension-Lyon County

UPCOMING PROGRAMS - Call 712-472-2576 to confirm dates and times. Thanks!

Commercial Pesticide Applicators Training - 2013
  Oct 16 - 9:00 am - Roadside, Forest & Aquatic Pest Mgmt
  Oct 24 - 9:00 am - Mosquito & Public Health Pest Mgmt
  Nov 6 - 1:30 pm - Ornamental & Turfgrass
  Nov 13 - 9:00 am - Commercial Pesticide Applicator
  Dec 4 - 9:00 am - Pest Control Operators
  TBA - Aerial Applicators

Private Pesticide Applicator Training - 2013-2014
  coming soon...

Pesticide Applicator Testing - 2013
  10:00 am - 2:00 pm  Pesticide Bureau - (515) 281-8591
  http://www.iowaagriculture.gov/Pesticide/pesticidetesting.asp
  Oct 14 - O'Brien County Extension, Primghar - 712-957-5045
  Oct 14 - Woodbury County Extension, Sioux City - 712-276-2157
  Nov 4 - O'Brien County Extension, Primghar - 712-957-5045
  Nov 12 - Woodbury County Extension, Sioux City - 712-276-2157
  Dec 2 - O'Brien County Extension, Primghar - 712-957-5045
  Dec 9 - Woodbury County Extension, Sioux City - 712-276-2157

Commercial Manure Applicator Training - 2013 - RESHOW
  Oct 10 - 9:00 am - Extension Office, Rock Rapids
  Nov 14 - 9:00 am - Extension Office, Rock Rapids
  Dec 12 - 9:00 am - Extension Office, Rock Rapids

Confinement Site Manure Applicator Training - 2013
  Oct 10 - 1:30 pm - Extension Office, Rock Rapids
  Nov 14 - 1:30 pm - Extension Office, Rock Rapids
  Dec 12 - 1:30 pm - Extension Office, Rock Rapids

Manure Applicator Testing
  DNR Field Office #3, Spencer - (712) 262-4711
  http://www.iowadnr.gov/

PUBLICATIONS

Cash Rental Rate Survey - 2013
  http://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-10.pdf

Custom Rate Survey - 2013
  http://www.extension.iastate.edu/agdm/crops/pdf/a3-10.pdf

Farmer's Tax Guides - 2012

4-H/Youth Important Dates:
  Dec 1, 2013 - 4-H Enrollments Due
  May 15, 2014 - 4-H Livestock ID's Due (beef, sheep, goat, swine, horse, pets, dairy, bucket calf, poultry)
  June 1 - 4-H Rabbit ID's Due
  June 25 - Livestock Fair Entry Form Due (beef, sheep, goat, swine, horses, pets, dairy, bucket calf, poultry, rabbit)
  June 25 - Communications / Clothing Event Fair Entry Forms Due
  July 15 - Communications / Clothing Event Judging
  July 17 - Static Judging
  July 21-24, 2014 - Lyon County Fair

Nature Explore Program
  Apr 10, 2014 - 6:30 pm - AB Room: Forster Community Center, Rock Rapids
Hotlines Available For All
Iowa Concern (800-447-1985)
Farm On (877-BFC-1999)
Teen Line (800-443-8336)
BETS OFF (800-BETS-OFF) (800-238-7633)

Hotlines Available to Iowa Residents Only
Families Answer Line (800-262-3804)
Hortline (515) 294-3108
Iowa Healthy Families (800-369-2229)
PORKLine (800-808-7675)

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