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PORK



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**Meet New Board
Member:
Jeff Russcher**

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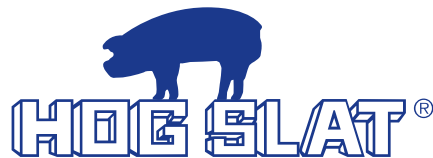
**MSU Extension hosts
Livestock Accident
Training**

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**House Approves
2018 Farm Bill**

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Michigan Pork Producers Association
3515 West Road, Suite B
East Lansing, Michigan 48823
(517) 853-3782
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MPPA Staff:

Mary Kelpinski

Chief Executive Officer
Managing Editor
kelpinski@mipork.org

Emily Schmitt

Program Director
Editor
schmitt@mipork.org

On the cover: New MPPA board member Jeff Russcher with his wife, Lisa, and daughters, Hannah, Leah, Rebecca and Abigail.

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By: Emily Schmitt

Meet New Board Member: Jeff Russcher

The Michigan Pork Producers Association would like to welcome one of three new board members, Jeff Russcher.

Jeff partners with his parents Denny and Julie and brothers Lewie and Jeremy in the family farrow-to-finish farm Precision Pork in Zeeland, MI. The farm began in 1980 with 200 sows and has continued to grow to 1350 sows. Jeff also partners with his brother Jeremy on a finishing farm called J & J Russcher Farm, which is a 6000-head finishing facility.

Jeff graduated from MSU in 2004 with an ag-tech degree and returned home to the family farm in the fall of 2005.

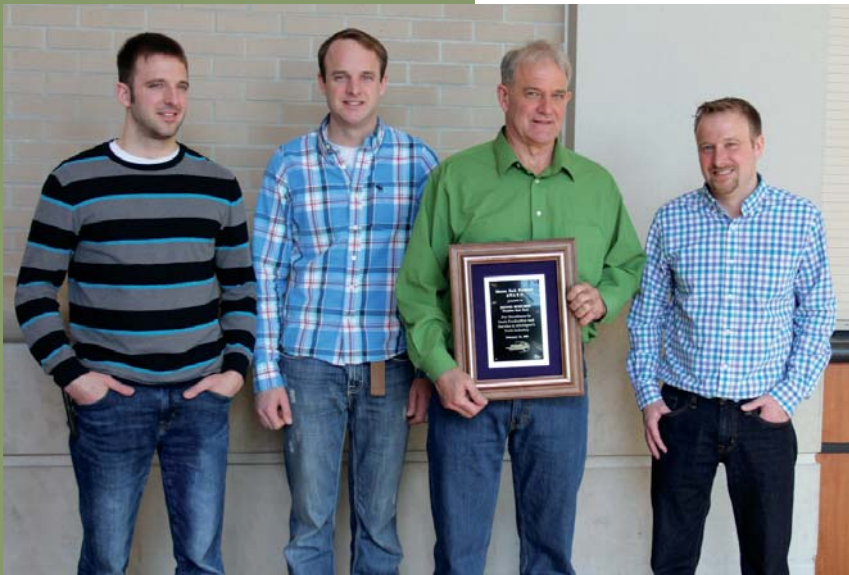
Jeff began working on the farm at a young age and knew he wanted to be part of the family business. "I grew up on the farm," he said. "My father never pushed us to come back to the farm, but he told us to find something we enjoy doing. I've always known that I liked pig farming, so I wanted to come back."

When considering to join the MPPA board of directors, Jeff said he thinks it is important to stay involved in the decision-making process of the industry. "I see the importance of playing an active role in the legislative process," he said. "If you aren't involved, you can't change what is happening in the industry. If we want to prevent new unnecessary legislation, we need to become active at our local level and work our way up to the state and national levels."

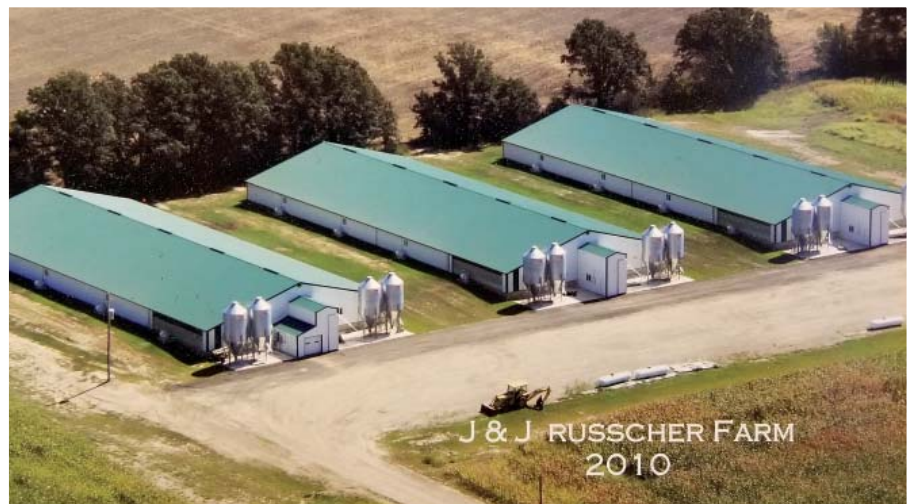
Jeff said he would encourage other pork producers to become active in the association as well. "It's a great way to meet other pork producers and to help determine the future of the pork industry," he said.

In addition to his roles on the farm, Jeff and his wife, Lisa, are involved in Michigan Farm Bureau and in their local church.

When Jeff is not working on the farm, he enjoys spending time with Lisa, and their daughters, Hannah, Leah, Rebecca and Abigail. He also likes to snowmobile and spend time outdoors. 🐷



Pictured above, Lewie, Jeremy, Denny and Jeff Russcher at the 2018 Pork Symposium, where Jeff's father, Denny was awarded the Master Pork Producer Award.



Pictured at top, Jeff Russcher with his family. Above, Jeff and his wife, Lisa. Above right, an overhead shot of J & J Russcher Farm from 2010.



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"Seasonal Updates"



By: Bob Dykhuis
MPPA PRESIDENT

As I prepared to write this article, I looked back on the articles I did the past year. I am pleased at the progress we are making as a board. We had elections for Board Members at our June Annual Meeting. We have elected some new, young, energetic leadership. I am excited about that. I know Emily will have articles about them so I will not go into detail but my sense is they will broaden our thinking as a board and add new energy to our work. I wrote about the need for generational transfer on the farm and on our Board. This will be a process that takes time. It is good to see our progress already. We will be in discussion about the need to add to our board to meet the future needs we may have.

I have missed some of the MPPA activities this past year because of National meetings or travel that I have been involved with. I am impressed and appreciate how others have stepped up to help. We have a willingness to help that is very important. I am sure our staff could use more help at time but I am thankful for the efforts the Board makes. It is difficult to make time to be away from work.

I attended World Pork Expo last month. It was a very good event again this year. I did not allow enough time to talk to people. It is fun to catch up with others and try to get a feel for what is going on in the Pork industry. A few things I learned. The pig numbers will continue to increase. I am writing this the day after the June Hog and Pig report came out and that increase was confirmed (see page 12). This confirms my experience of years ending in eight that I wrote about previously. Electronic sow feeding is gravitating to the walk in, back out feeding stall. There were a number of brands selling them. The show was bigger because of all the booths from manufacturers from China that want to sell us hog equipment. That was interesting to see and if you look, there is equipment from China sold already, such as cast iron farrowing floors. There were displays of large drag hose manure applicators built from forward folding corn planter frames. It looks like an interesting concept. The Crystal Springs Feeder company makes a premium gas grill that also can be fired with wood pellets. You have heat and smoke in a premium unit. If your significant other needs a gift, you may look into purchasing one of them. The electronic ventilation-barn controllers keep getting more sophisticated. It is amazing the current and future potential they have. Expo is a worthwhile event to attend.

I started out by writing about the new Board members and the future. As I write this I think about the Board members that served in the past. Many made a huge commitment of time and effort for our industry. We are hearing of the passage of some of them (see page 18). Take time to reflect on their contribution and have it help shape your thinking. We are truly blessed by the leaders that paved the way for us.

Thanks, Bob 

Please Join Us for the 28th Annual



Same Event, New Date, New Location

October 16, 2018, Novi, MI



The Taste of Elegance will be held during the Michigan Restaurant Show. Visit michiganrestaurantshow.org/taste-of-elegance for more information or to register.





By: Mary Kelpinski

MPPA CHIEF
EXECUTIVE
OFFICER

“Are you prepared?”

Recently I had the opportunity to participate in a Foot and Mouth Disease (FMD) response training session hosted by the Michigan Department of Agriculture and Rural Development (MDARD). Farmers, livestock associations, and processors in Michigan and 14 other states participated in this exercise along with the United States Department of Agriculture.

While this isn't the first time I have gone through a training like this, each time brings a new awareness to how venerable our industry is to not only FMD but other diseases like classical swine fever (CSF), or African swine fever (ASF). FMD, CSF, and ASF are not public health or food safety concerns but could still be devastating to the livestock industry.

The U.S. pork industry currently exports over 25 percent of the pork that is raised here making the export market essential to the strength of the industry. We have been hearing a lot about trade agreements and possible tariffs associated with them. Any disruption in trade would be very detrimental to hog prices. If the U.S. were to break with FMD or another highly contagious disease it would not only completely shut down our exports to other countries, it would shut down our ability to do everyday business.

Similar to the Avian Influenza outbreak in 2015, all movement on and off a farm would be stopped until the disease was under control or a plan was put in place to prevent the spread of the disease. That means no feed or hogs could be moved on or off your farm. The movement of employees will need to be tightly managed. When you stop to think about all the activity that takes place around a farm every day, what would you do?

“An exercise like this helps us to think through different scenarios and plan as best we can for a day we hope never comes.”

”

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Michigan Pork Producers Association

An exercise like this helps us to think through different scenarios and plan as best we can for a day we hope never comes. One tool we have available now to help with that planning is the *U.S. Pork Industry Guide to the Secure Pork Supply Plan (SPS)* available at www.securepork.org. The SPS involved collaboration between the swine industry, state and federal government officials, USDA Centers of Excellence, Iowa State University, the University of Minnesota and others.

In the past few years, MPPA and Michigan State University Extension (MSUE) have been working together to enhance the preparedness of the Michigan pork industry. Some of you have or may participate in two studies that MPPA and the Pork Checkoff funded. The first one was completion of a comprehensive 'mock' audit or producer questionnaire with MSUE (Rozeboom, Ferry and others) intended to understand producers concerns regarding adoption of potential practices in the secure pork program. The second is a request for producer participation in a future discussion (tentatively scheduled to precede the September 19th MPPA Board Meeting) entitled a "Just in Time" questionnaire that would be used as a just-in-time biosecurity audit tool to assist officials in making regulatory decisions.

Preparing a SPS Continuity of Business (COB) Plan now, will help

you prepare before an outbreak occurs. With this plan if your farm premise has no evidence of infection you will be in a better position to:

- Move animals to processing or another pork production premises under a movement permit issued by Regulatory Officials, and
- Maintain business continuity for the swine industry, including producers, haulers, and packers during an FMD, CSF, and ASF outbreak.

Having the SPS Plan implemented prior to a Foreign Animal Disease (FAD) outbreak enhances coordination and communication between all stakeholders. It is intended to speed up a successful FAD response, and eventually enable the issuance of animal movement permits after the extent of the outbreak is understood. This will support the

continuation of business for pork producers and allied industries who choose to participate. The SPS Plan provides guidance only. In an actual outbreak, decisions will need to be made by the Responsible Regulatory Officials and the industry based on the unique characteristics of each outbreak.

Pork producers have made great strides increasing their biosecurity and hopefully we won't ever have to deal with a disease of this magnitude. In addition to the SPS, the National Pork Producers Council is also working with the legislature to get funding in the new Farm Bill to build a vaccine bank for FMD. For over a year we have been visiting with our legislators to let them know the need for this bank. Just like the Secure Pork Plan, the vaccine bank is another layer of security in the event of an outbreak. 🐷

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Secure Pork Supply Plan

In the Event of a Foreign Animal Disease Outbreak



What is the Secure Pork Supply (SPS) Plan?

- Provides a workable business continuity plan for sites that are under movement restrictions but **not infected** with foot and mouth disease (FMD), classical swine fever (CSF), or African swine fever (ASF)
- Offers movement guidance for producers and officials managing the outbreak
- Provides biosecurity and surveillance tools for producers

Business Continuity

Movement Guidance

Biosecurity

Surveillance

Why is the Secure Pork Supply Plan needed?

- Help sites in Control Areas whose pigs have no signs of FMD, CSF, or ASF continue to move animals
- Limit carcass disposal problems and lost income for sites, haulers, processors, and grocers
- Maintain the supply of pork and pork products to consumers because FMD, CSF, or ASF are not a public health or food safety concern

How can you voluntarily participate in the Secure Pork Supply Plan?

- Contact your State Animal Health Official to request a Premises Identification Number (PIN)
- Visit the Secure Pork Supply website www.securepork.org
- Develop your site's SPS Plan using the materials available in English and Spanish

The Secure Pork Supply Plan is primarily funded by USDA. Additional funding is provided by the Pork Checkoff.



Michigan 4-H Swine Science State Award Winners Announced

4-H state awards were presented to youth from across the state of Michigan during 4-H Exploration Days at Michigan State University June 21, 2018. The presenter of the 4-H Swine Science awards was Emily Schmitt, Michigan Pork Producers Association Program Director.

The 2018 Junior Swine Science award winner is Jaycie Brown.



Jaycie is 16 years old and will be a junior at Pinckney High School in the fall. She resides with her parents, Jay and Susie Brown, in Pinckney on their small hobby farm where they raise Crossbred Pigs, Angus cattle, and Cheviot sheep. Jaycie has been showing pigs, cattle and sheep since she was six in open and junior shows

all across the state and several years in 4-H. Jaycie enjoys showing her pigs, heifers, and steers along with her Cheviot sheep and club lambs, as well as judging livestock. Jaycie also enjoys quilting and sewing. In 2016 Jaycie and a 4-H friend started their own small pig operation. Jaycie now is showing them at the state and national level. At the 2017 Michigan State Fair, Jaycie received one of the prestigious scholarships in the swine area.

Besides her animal projects, Jaycie stays active playing softball for her school and on a travel softball team. She is currently Secretary of the Michigan Junior Angus Association, Vice President of the Michigan State Fair youth advisory committee and on the State 4-H Awards Committee. Jaycie's future plans are to attend an agriculture college to pursue a degree in animal nutrition. Congratulations, Jaycie!

The 2018 Senior Swine Science award winner is Carley VanNorman.

Carley VanNorman is the daughter of Jeremy and Sheila VanNorman. She was raised in the rural community of Deckerville, which is in the thumb of Michigan. Carley lives on a small farm run by her father. Their farm is mainly a crop farm, but more recently they added livestock. While in school, Carley participated in the National Honor Society, the English Academic Team, the varsity track team, and Deckerville



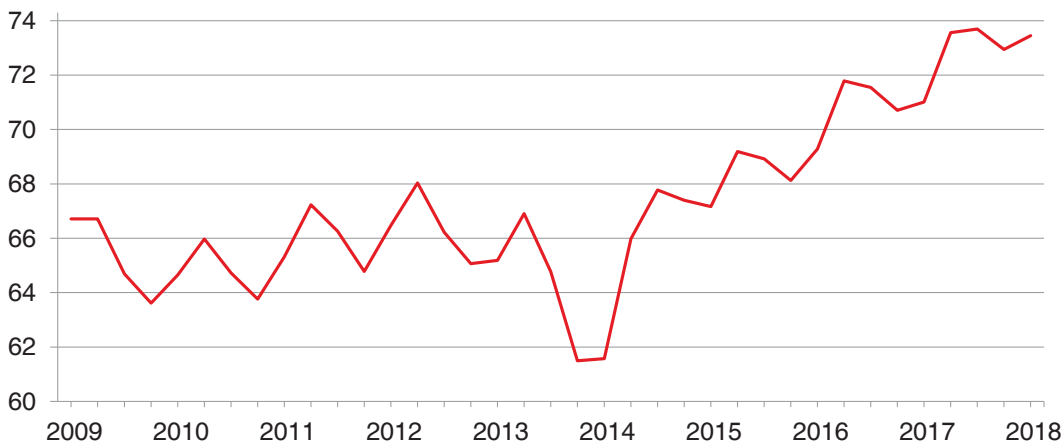
High School student government. She graduated high school in 2017 and is currently attending Purdue University.

Carley's involvement in 4-H began when her father got pigs for her to raise. As soon as she saw the pigs it was love at first sight. Jeremy suggested to his daughter that she take her pigs to the local fair. The next year when she brought pigs to the fair, she had the time of her life. Year after year, Carley brought pigs to show at the Sanilac County Fair. That experience sparked her interest in the swine industry. Carley eventually began to buy her own breeding stock. She began to breed her own pigs and bring them to the fair to showcase her hard work. Congratulations, Carley! 🐷

United States Hog Inventory up 3 Percent

Quarterly Hogs and Pigs Inventory – United States: June 1

Million head



This report was released June 28, 2018, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

United States inventory of all hogs and pigs on June 1, 2018 was 73.5 million head. This was up 3 percent from June 1, 2017, and up 1 percent from March 1, 2018. This is the highest June 1 inventory of all hogs and pigs since estimates began in 1964.

Breeding inventory, at 6.32 million head, was up 3 percent from last year, and up 2 percent from the previous quarter.

Market hog inventory, at 67.1 million head, was up 3 percent from last year, and up 1 percent from last quarter. This is the highest June 1 market hog inventory since estimates began in 1964.

The March-May 2018 pig crop, at 33.2 million head, was up 4 percent from 2017. This is the largest March-May pig crop since estimates began in 1970. Sows farrowed during this period totaled 3.12 million head, up 4 percent from 2017.

The sows farrowed during this quarter represented 50 percent of the breeding herd. The average pigs saved per litter was a record high 10.63 for the March-May period, compared to 10.55 last year. Michigan's hog inventory increased 8 percent from 2017. 🐷

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150 - 160° F
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pork

MSU Extension hosts livestock accident training for first responders and emergency personnel

Responding to accidents is never an easy task. Responding to an accident that involves large trucks, people and animals can quickly turn into a chaotic event if the local response team is not prepared or trained to handle such an occurrence. With the amount of livestock raised in and around Michigan, along with large processors for poultry, sheep, beef and swine in the area, how to best handle accidents involving livestock is a question that has caused some concern.

Following several livestock truck rollovers over the last few years in Michigan and adjacent states, Michigan State University Extension formed a task force including representatives from Michigan Department of Agriculture, Michigan Pork Producer Association, Michigan Farm Bureau, Michigan Department of Transportation, law enforcement officials and livestock producers to address this concern. This task force recognized the need to have a network of trained people across the state to respond to these situations in order to help local police, fire crews, ambulances, veterinarians and other officials prepare for rollovers of semis pulling livestock trailers. MSU Extension worked to coordinate a specialize training for livestock transportation rollover accident response.

This event was held May 11-12 at the Calhoun County Fairgrounds in Marshall, Michigan, an area chosen because of its proximity to I-94, I-69 and the I80-/90 corridors. This training brought in industry experts to discuss animal behavior, the proper tools to assist in a rollover accident situation with animals, what past accidents have entailed, along with different plans and resources that would allow people and crews to best respond to such events. Pulling from a diverse audience, stakeholders from various entities including large production farms, transportation companies, first responders, processors, truckers, law officers from local county and state levels and veterinarians, that represented several different states completed this training. Participants heard from responders with firsthand experience in accident scenes, what the crucial tasks are when managing a scene that involves vehicles, traffic, people and animals all while doing this while working an accident scene and ensuring public safety and animal welfare. Hands-on, interactive demonstrations also complimented the training as participants learned about extrication of trapped



animals, animal behavior and handling techniques, how to respond to injured animals, and humane euthanasia techniques. This intensive training will help responders be prepared for these situations, properly contain the animals and correctly manage the accident scene.

Participants involved in this training indicated that because of their participation in this event, they have developed or refined a skill and they now feel better suited to responding to a livestock transportation accident. This training also gave attendees an excellent opportunity to network with local law enforcement groups, as well as formulate key questions for continuous improvement of the different systems that they are each involved with. Each and every participant from this diverse audience specified that they are better prepared to address livestock transportation accidents and would be able to share critical information with their teams. These trained people will build a network of responders and act as advisers to assist first responders and emergency response personnel when these events occur and livestock need to be rescued from overturned trailers.

Financial assistance was supported by Michigan Department of Agriculture and Rural Development, Michigan Pork Producers Association, Jackson County Farm Bureau, Calhoun County Farm Bureau, Branch County Farm Bureau. Contributing to the demonstration portion of the training were Blight Farms, Hickory Knoll Farm, Cooper Farms, Ron Wollpert Transportation and Tim Dunn Livestock Hauling. More information on responding to livestock transportation accidents can be found by visiting the Michigan State University Extension website. 🐷



Information for an Industry on the Move

June 2018

Vol. 23 No.2

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Awareness by making
sure all on the farm aware
of whats in the feed and
water

Pg. 3 Transport of pigs in spring
and summer months

Pg. 8 Take care of humans in the
“hog days of summer”



This newsletter is edited by:

Dr. Madonna Benjamin, MSU Extension Swine
Veterinarian, 517-614-8875,
gemus@cvm.msu.edu
& Emily Schmitt MPPA, Program Director

Quality assurance –
Awareness by making
all on the farm aware of
what’s in the feed and
water

Dale W. Rozeboom, Department of Animal
Science, Michigan State University
rozeboom@msu.edu

Introduction

In a presentation at the 2011 Michgian Pork Producers Symposium, entitled *Feed Quality Assurance: Should Standard Operating Procedures (SOP) for on-farm feed manufacturing be developed and implemented?* I made the statement that contract growers and all farm animal caretakers should be aware of every time there is a pharmacologic in the feed and (or) water. I was convinced then, and with the growing trend in Food and Drug Administration (FDA)-led and industry accountability, I am further convinced of its importance.

Since 2011, we’ve learned more about residues, impacts upon humans, and antibiotic resistance. The Food Safety Modernization Act’s (FSMA, 2011) preventive control provisions for animal feed were released by the FDA in September of 2015, establishing the requirements for current good manufacturing practice, hazard analysis, and risk-based preventive controls for feed. The FDA manages safety of animal feed under its Animal Feed Safety System (AFSS) and states that “the AFSS includes regulations and guidance pertaining to the...

- manufacture
- labeling
- storage
- distribution and
- use

...of all feed at all stages of production and use, whether at commercial or non-commercial feed manufacturing establishments, farms where animals are raised, or homes where pet animals are kept.” Within this system, the FDA regulates the Veterinary Feed Directive which went into full effect on January 1, 2017. We’ve updated the Michigan Commercial Feed Law (P.A. 120 of 1975, as amended 2015). Lastly, we’ve engaged in the Common Swine Industry Audit verifying “that a pork production site is in compliance with established standards for swine care and pre-harvest pork safety” (National Pork Board, 2018). Without a doubt, accountability by government, by food distributors, by packers, by our fellow citizens, and by countries importing our pork, is being increasingly passed onto the farmer.

Under the *We Care* Principles and within the Common Swine Industry Audit (CSIA), best management practices (BMP) are developed to protect everyone in the pork food chain and provide pork that is safe and nutritious, including through awareness and observation at ground zero -- the farmers and on-farm stockpersons.

Reasoning

So how is it implied in federal and state regulations and guidance that all animal caretakers be aware of pharmaceuticals provided to pigs on the farm?

To reiterate, FDA-AFSS’s stated purpose is to regulate and guide the manufacture, labeling, storage, distribution and use of all feed at all stages of production - it is not doing so. Clearly, commercial feed plants are subject to the FSMA Preventive Controls for Animal Food rule. FDA has responsibility for enforcement of the FSMA Preventive Controls for Animal Food rule. Use of Current Good Management Practices (CGMPs) are for commercial feed mills under this rule (FDA - CFR 21CFR225.1). Every feed delivery to the farm or farms (including those under contract) must be delivered with the correct paperwork (lot number, ingredient description, drug concentrations, directions for feeding, and caution statements). Record keeping must be adequate to facilitate the recall of specific batches of medicated feed that have been distributed and retained on the premises for one year following the date of last distribution. While

commercial manufacturers of medicated feed must follow Current Good Management Practices (FDA - CFR 21CFR225.1), feed mills that are part of individual farms and integrated farming systems are currently not subject to the FSMA Preventive Controls for Animal Food rule. These farms have been excluded from the enforcement of the FSMA Preventive Controls for Animal Food rule for now. However, FDA mentions that it does have plans to include them, at least with Guidance information in the future. At a state level, the amended Michigan Commercial Feed Law (2015) has similar content regarding CGMPs in commercial feed manufacturing and distribution. The state law also does not pertain to individual farms and integrated farming systems.

Farms are required by law (21 CFR part 558 subpart B) to use medicated feed in accordance with its approved uses by following product labeling regarding intended animals, indications for use, all precautions and instructions on how to handle, store, and use the feed, and limitations for use and withdrawal times. Nonbinding recommendations are provided by the FDA in their Guidance for Industry #203 entitled “Ensuring Safety of Animal Feed Maintained and Fed On-Farm.” Released in March of 2015, the guidance is given to help persons who feed animals develop and implement on-farm practices to ensure the safety of animal feed. In this document ‘persons who feed animals’ are encouraged to store, distribute, and use feed, to observe biosecurity measures to prevent or significantly minimize the introduction of contaminants, and to read and follow labeling for use, storage, and disposal of all pesticides, fertilizers, and other agricultural chemicals.

These laws and recommendations suggest that it may be prudent to think in terms of an effective residue avoidance program for the entire pork production system. It may be wise to make sure those records are kept at each production site where pigs are fed. It seems that there would be wisdom in informing the animal caretakers about food and water treatments for pigs so that they can help minimize the unintended cross-contamination.

Stronger support for making notification of contract growers and all farm employees that care for pigs about feed and water treatments is apparent in the questions

asked in the Common Swine Industry Audit (2018). These questions imply that all animal caretakers should be aware of animal treatments, protocols for treatment, and records of treatment. Although the term contract grower is not stated explicitly, their responsibilities for caring for the animals is undeniable. Below are the most relative questions:

36. Can caretakers articulate their method for tracking what treatments have been administered and how long each animal has been receiving treatment?

38. Are caretakers able to articulate the training they received specific to their daily duties?

57. Does the site have documentation of annual caretaker training specific to their daily duties?

65. Does the site have a written SOP for feeding and watering protocols?

67. Does the site have a written SOP for caretaker training?

68. Does the site have a written SOP for treatment management?


86. Are medication and treatment records retained for

12 months?

One final reason supporting greater awareness of pharmaceutical and chemical use on the farm is that it will provide direct protection of all people that work with the animals. The Occupational Safety and Health Administration requires that workers must be provided protection and that would include protection from feed dust which may contain antimicrobials.

Decision

My encouragement is that standard operating procedures for on-farm notification of pharmaceutical and chemical use should be developed and implemented throughout the pork production operation including all sites and all animal caretakers in the multiple-site system. I would suspect that there are few farms that have these standard operating procedures. Each farm will have to write specific statements describing “how to do each step”. The implementation of directive and specific standard operating procedures will enhance food safety, increase consumer confidence in pork, protect employees, and enhance the long-term profitability of the pork production enterprise.

References (available upon request) 

Transport of Pigs in Spring and Summer Months

By Scott A. Kramer, Michigan State University Large Animal Clinical Sciences, Guest Columnist
MSU Extension Swine Veterinarian: Madonna Benjamin

As the warmer months approach, it is important to review transport conditions of pigs in spring and summer months particularly to reduce “in-transit loss”. Haley et al. (2008) define “in-transit loss” as a term to describe pig loss during transport from farm to slaughterhouse, also known as an abattoir, it is also important to remember that while we tend to focus on transport of market pigs (including culls); weaners and feeders are also at risk (1,2). American Association of Swine Veterinarians President Dr. Ron Brodersen stated that the United States produced approximately

120 million market pigs in 2015 which equated to approximately 1 million pigs on the road every day—that’s a lot of pigs (3). While the actual percentage of pigs lost during transport is less than 1 percent; this does not discount the fact that poor transportation can have adverse effects on the welfare of pigs, leading to significant loss of quality and result in a negative financial impact on producers (4,5,6). Notably, a greater percentage of “in-transit loss” is believed to be due to shipping pigs under environmentally adverse conditions and was determined to reach a peak during the summer

months (4,7,8).

Today the National Pork Board's Transport Quality Assurance™ (TQA™) program is recognized as the swine industry's best practices for handling and transportation. The program was designed to help swine producers, transporters, and handlers understand the best practices

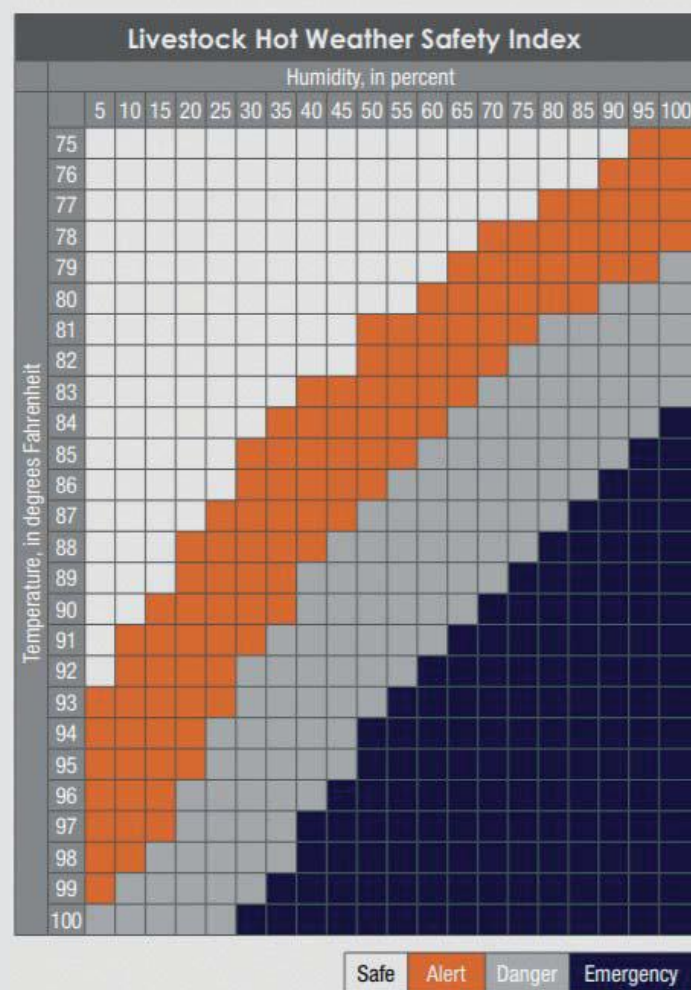


Figure 1: The Livestock Hot Weather Safety Index can be found in the current TQA™ manual v.6 (9). This image graphically plots outdoor humidity and temperature to illustrate distinct hazard levels to pigs in transport.

Hazard Level: Suggested Actions

Alert Level: Deliver by late morning

Danger Level: Haul hogs at night

Emergency Level: Avoid hottest parts of the day

for not only handling, moving and transporting pigs but also in understanding the impacts their actions may have on pig welfare and pork quality (9). The latest version of the TQA™ program is available on the National Pork Board's web-page in English and Spanish (9). The manual contains valuable information regarding transportation in extreme weather conditions. Particularly relevant is the Livestock Hot Weather Safety Index presented in Chapter 4 of the manual. The index is provided graphically allowing the user to find the intersection of humidity percentage and outdoor temperature as it relates to distinct hazard levels including SAFE, ALERT, DANGER, and EMERGENCY (Figure 1, at left) (9,10).

Some Other Factors to Consider May Include:

Distance to Travel:

- Consider scheduling loading and transporting in cooler weather conditions like early morning or evening for pigs being shipped longer distances.

Loading Density:

- Over stocking livestock trailers increases stress and death loss of pigs (11,12).

Grandin (2014) suggests increasing space allowances 15 to 20% in warmer conditions and allowing pigs sufficient area to lie down on longer trips (13).

Recommended truck space allowances are presented in Table 1 (page 5) (14).

The type of trailer used to transport pigs may also influence pig losses as the environment of distinct compartments may be more susceptible to extreme weather conditions (15,16) (Figure 2, page 5).

- You may consider pre-sorting pigs, weighing and stocking individual pens in the barn the day prior to loading so that each pen represents a truck compartment on the day of loading. This will dramatically reduce stress of both employees and pigs on the day of loading (17).

Size of Pig:

- Be sure to respect the size of pig that the establishment accepts prior to shipping.
- Most abattoirs tend to handle more uniform

market weight pigs appropriate for the scale of their equipment.

- Younger pigs not transported to an abattoir; weaned pigs typically have higher mortality rates than feeder pigs, especially under warm/hot conditions (18).

Compromised Animals:

- While it is the transporter's responsibility to protect pigs during all weather conditions, responsible producers should not load pigs unfit for transport (9). Dead and non-ambulatory disabled pigs at the packing plants cost the U.S. swine industry approximately 46 million dollars

annually (17).

The fitness of pigs intended for transport should be assessed prior to loading (18, 19).

Pigs which are compromised or unfit for transport should not be loaded and either treated or humanely euthanized.

Keeping Pigs Cool:

- Considering the fact that pigs lack effective sweat glands, they are inherently challenged to manage body temperature (21).
- Wide variations in temperature and relative humidity are major factors affecting stress and

Small Pigs				Market Swine		Winter (cold weather)		Summer (hot weather)	
Weight Kg	Lbs.	m ²	ft ²	Weight Kg	Lbs.	m ²	ft ²	m ²	ft ²
4.54	10	0.06	0.70	45	100	0.22	2.4	0.30	3.0
9.07	20	0.084	0.90	91	200	0.32	3.5	0.37	4.0
13.60	30	0.093	1.00	114	250	0.40	4.3	0.46	5.0
22.70	50	0.139	1.50	136	300	0.46	5.0	0.55	6.0
31.20	70	0.167	1.80	182	400	0.61	6.6	0.65	7.0
36.30	80	0.177	1.90						
40.80	90	0.195	2.10						

Table 1: Recommended Space Allowances on Trucks

The Federation of Animal Science Societies (FASS) has published a table of Recommended Space Allowances on Trucks for variable weight and season (14). The table provides an easy method calculating the stocking density of a particular compartment as a function of pigs/square foot or meter.

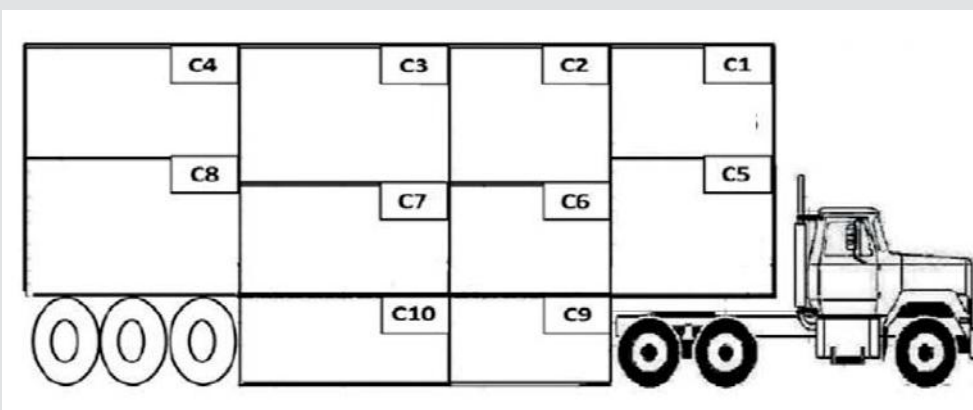


Figure 2: Trailer

The type of trailer and weather conditions may affect pig welfare. The compartments labeled C1, C4, C5 and C10 have been reported to have the most negative influence on pig welfare and pork quality. Somnavilla (2017) reported that temperature was typically higher in C10 during the summer. Similarly, relative humidity was also higher in C1 and C4 in summer (16).

welfare of pigs during transport (21).

- It's advisable to practice low-stress handling techniques to reduce excitement at loading and unloading to take advantage of behavioral principles including flight zone and point of balance (22-25).
- "Wet" pigs to cool them although not in excessively as too much water may increase humidity in the trailer (26).
- Have a contingency plan in the event that transportation is delayed (27).

Ensuring the safety and welfare of pigs in transport during the warmer spring and summer months is our duty as responsible swine producers and is essential in preventing unnecessary losses. Strategies to reduce pig loss are, not surprisingly, multi-factorial and may include consideration of weather conditions, time of day, distance traveled, stocking density as well as fitness of pigs for transport. Thoughtful consideration of the strategies presented may improve pig welfare, pork quality and have a positive financial impact for producers.

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Take Care of Humans in the “Hog Days of Summer!”

Guest Author - Kristine Ranger, Agri-food Systems Consultant

As farmers, we understand the extra efforts required to keep our animals content in hot and cold weather conditions, but sometimes we overlook the same needs for ourselves. According to the Centers for Disease Control and Prevention, farmworkers die from heat-related illness at a rate 20 times greater than that of the entire U.S. civilian workforce. Yet, with appropriate steps, heat-related illness is preventable, and fatalities are easily avoided.

Under Occupational Safety and Health Association(OSHA) law, employers are responsible for providing workplaces free of known safety hazards. This includes protecting workers from extreme heat. An employer with workers exposed to high temperatures should establish a complete heat illness prevention program that includes:

- Providing workers with water, rest and shade. At the minimum, employees should be allowed one 15-minute break for each four hours worked, plus a half hour lunch break after five hours of work. This rest is especially important when working long hours without shade.
- Allowing new or returning workers to gradually increase workloads and take more frequent breaks as they build a tolerance for working in the heat.
- A plan for emergencies and for training workers on prevention.
- Monitoring workers for signs of illness.

Additionally, you may want to consider cultivating a culture of safety. Clearly communicate to your family and employees that their safety is important to the overall success of the farm. Safety concerns include taking extra precautions in extreme heat to keep all people productive and comfortable. If your employees aren't bringing water bottles to work, have some readily accessible or ensure that they have access to a water source and have permission to replenish as necessary.

You may want to save the information in the table on



the next page to ensure that everyone is aware of heat emergencies and is watching for signs of over exertion, which includes heat rash.

Water, rest and shade can prevent many emergencies,

for more information, visit https://www.osha.gov/SLTC/heatstress/heat_illnesses.html. Communicate your concern for the safety and well-being of all staff by provide resources for prevention, and adjusting schedules when possible to avoid the heat this summer.



**Hog Days of summer
festival in Kewanee,
Illinois**

For more information, call Kristine at 517.974.5697. Emails inquiries are also welcome at kristine@knowledge Navigators.com.


Editor's Note: Kristine Ranger is a lifelong educator and advocate for agriculture. She has degrees in Animal Husbandry and A.N.R.E. from Michigan State University and a Masters in Adult Education from South Dakota State University. While at MSU, she worked at the MSU Swine Barns and has delivered lessons in classrooms, board rooms, arenas, and barns for over 27 years. She consults with farm owners to increase their leadership, team and organizational effectiveness.

	Heat Rash	Heat Cramps	Heat Exhaustion	Heat Stroke
Symptoms	Red or pink rash found on body areas covered by clothing. A fine, bumpy, itchy rash, skin burning, and a "prickly" feeling, thus also known as prickly heat.	Muscle pain and tightness, especially in the elderly, small children, overweight people, or those who have been drinking alcohol.	Heavy sweating, accompanied by cold, clammy skin. Fast, weak pulse. Nausea or vomiting. Muscle cramps. Tired/weakness. Dizziness. Headache Pale/flushed face. Muscle cramps.	All the symptoms of heat exhaustion, plus: Body temperature over 104°F, confusion, irrational behavior or hallucinations, rapid, shallow breathing, seizures or loss of consciousness, and dry skin.
Cause	Skin irritation caused by sweat that does not evaporate from the skin. Friction on the surface of the skin	Loss of body salts and fluid during sweating.	Too much physical activity in hot weather when the body cannot cool itself adequately. Being confined or trapped in a place that heats up. Dehydration with water loss from excessive sweating	
Treatment	Apply a small amount of talcum powder or corn starch to the affected areas. Keep apple cider vinegar, hydrocortisone cream, or an antihistamine like Benadryl on hand for the itch. Avoid greasy ointments.	Rehydrate with water or Tonic Water, which contains Quinine.	Stop the activity and allow the affected person to rest in a cool place, get in front of a fan, into an air-conditioned building or to shade. Drink cool fluids (water or sports drinks only). Loosen clothing and cool worker with cold compresses/ice packs. Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes. Do not require worker to return to work that day.	Call 911. This is a life-threatening condition and emergency medical attention is needed immediately. While waiting for help, place worker in shady, cool area, remove unnecessary clothing, Blow fan air on worker; place cold packs in armpits, wet worker with cool water or apply ice packs, if available Provide fluids (preferably water) as soon as possible. Stay with worker until help arrives.

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All comments and suggestions should be directed to the:

MSU Pork Team

Dale Rozeboom: Extension Specialist
(517) 355-8398, rozeboom@msu.edu

Madonna Benjamin: Extension Swine Vet
(517) 614-8875, gemus@cvm.msu.edu

Melissa Millerick-May: MSU, Division of Occupational and Environmental Medicine
(517) 432-0707, melissa.may@hc.msu.edu

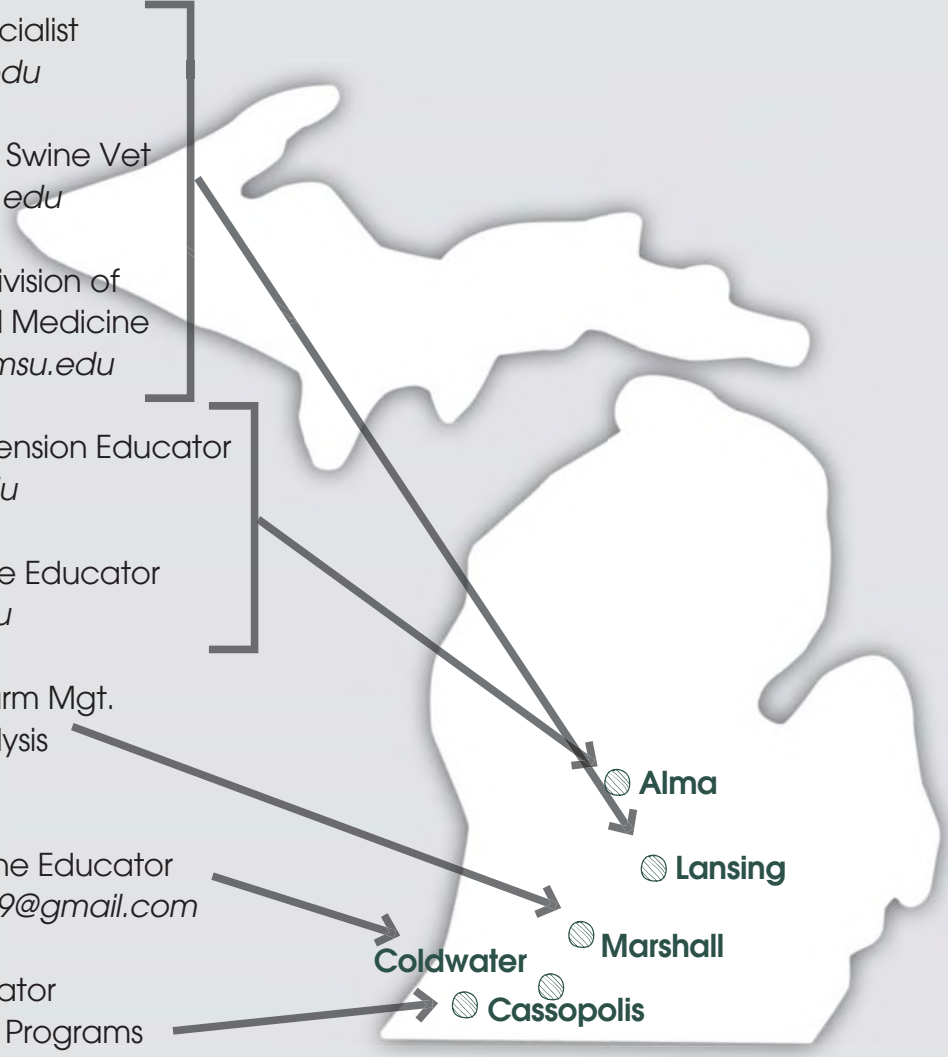
Erica Rogers: Environmental Extension Educator
(989) 875-5296, roger392@msu.edu

Casey Zangaro: Extension Swine Educator
(989) 875-5292, zangaro@msu.edu

Roger Betz: Southwest District Farm Mgt.
Finance, Cash Flow, Business Analysis
(269) 781-0784, betz@msu.edu

Dave Thompson: Extension Swine Educator
(269) 832-8403, davethompson729@gmail.com

Beth Ferry: Southwest Pork Educator
Management, Quality Assurance Programs
(269) 445-4438, franzeli@msu.edu



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Capital Update

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NPPC'S GIORDANO SAYS PORK PRODUCERS NEED RELIEF FROM EFFECTS OF TRADE DISPUTES

Pork producers need relief soon from the economic pain they are suffering because of ongoing trade disputes between the United States and China and Mexico, NPPC's Nick Giordano, vice president and counsel, global government affairs, recently told attendees at a Global Business Dialogue event: What's in a Name? The Tariffs, National Security, and the WTO. Giordano was on a panel with Scott Paul, Alliance for American Manufacturing; Rufus Yerxa, National Foreign Trade Council; Jennifer Hillman, Georgetown University Law School and former member of the World Trade Organization's dispute settlement Appellate Body; and moderator John Magnus, TradeWins LLC. As a result of retaliatory tariffs put on U.S. pork by China and, more recently, by Mexico, American pork producers are facing severe financial challenges, said Giordano. According to Iowa State University economist Dermot Hayes, hog futures have dropped by \$18 per animal, amounting to a \$2.2 billion loss on an annualized basis, since March 1 when speculation began about U.S. pork access to the Chinese market. The market disruptions, said Giordano, come at a time when U.S. pork is expanding production to record levels. Last year, the U.S. pork industry shipped more than half of its \$6.5 billion in exports to Canada (\$792 million), China (\$1.1 billion) and Mexico (\$1.5 billion). He urged the Trump administration to provide producers some relief as soon as possible. Also, six members of the Iowa congressional delegation asked President Trump to quickly resolve the trade disputes with China and Mexico. They pointed out that farmers are experiencing a five-year, 52 percent downturn in the agricultural economy.

VIETNAM, EU TRADE DEAL TO ENTER INTO FORCE IN 2019

A free trade agreement between Vietnam and the European Union is expected to become effective in late 2019 after the countries complete their ratification processes, according to an announcement from Vietnam. The southeast Asian country and the 28-nation EU economic bloc concluded trade talks in December 2015, just after the United States finished negotiations on the Trans-Pacific Partnership. Just days after taking office, President Trump withdrew the United States from that multilateral deal, which includes Vietnam and 10 other Pacific Rim countries and was renamed the Comprehensive and Progressive Trans-Pacific Partnership. With trade disputes ongoing for the United States, NPPC continues to urge the Trump administration to establish bilateral agreements with countries, beginning with ones in the Asia-Pacific region.

COMPREHENSIVE AND PROGRESSIVE AGREEMENT FOR TRANS-PACIFIC PARTNERSHIP MOVES FORWARD

Legislatures of the countries in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) have begun their respective ratifications of the trade deal, with Japan's Diet expected to approve it soon. The multilateral agreement was signed by Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam on March 8. Mexico ratified the agreement in April, and several of the other countries likely will ratify the CPTPP over the next few months. The ratification process is expected to conclude by early 2019. The agreement will enter into force 60 days after at least six of the 11 countries complete their

ratification procedures. The CPTPP threatens to reduce U.S. pork's global market share, warned NPPC. It is urging the Trump administration to preserve and expand U.S. pork export opportunities in the Asia-Pacific region and around the world. The council has identified free trade agreements with Japan, the Philippines and Vietnam as top priorities

EPA MOVES TO REPLACE WOTUS

The U.S. Environmental Protection Agency (EPA) recently moved to replace the Clean Water Act regulation issued in 2015 under the Obama administration. Known as the Waters of the U.S. rule (WOTUS), the regulation expanded the EPA's jurisdiction over U.S. waters to include, among other water bodies, upstream waters and intermittent and ephemeral streams, such as the kind farmers use for drainage and irrigation. Last year, in litigation supported by NPPC, a federal court of appeals put a nationwide stay on WOTUS. Subsequently, the Supreme Court said authority over WOTUS belonged to a federal district court, slowing the process to block implementation of the rule. Currently, two different federal district courts, in cases covering 24 separate states, have issued injunctions against its enforcement. The Trump administration has consistently expressed its intent to repeal and replace WOTUS and recently sent a new rule for review by the Office of Management and Budget.

GROUPS URGE U.S. HOUSE TO INCLUDE VISA REFORM IN IMMIGRATION AND BORDER SECURITY LEGISLATION

The National Pork Producers Council recently was one of five agricultural organization signatories on a letter addressed to U.S. House of Representatives leadership. The letter urged Congress to include the agricultural guestworker visa program, as introduced by House Judiciary Committee Chairman Bob Goodlatte's, R-Va., Securing America's Future Act of 2018 (H.R. 4760), in all

legislative packages to address immigration and border security issues considered by the House. The U.S. pork industry is suffering from a serious labor shortage that undermines its commitment to the highest standards of animal care. Current visa programs widely used by pork producers are not effectively addressing the issue. Without visa reform to support a viable workforce for U.S. agriculture, animal welfare is jeopardized and production costs will increase, leading to higher food prices for consumers.

CALIFORNIA TO VOTE ON INITIATIVE DICTATING PRODUCTION PRACTICES IN OTHER STATES

A California initiative that would require egg-laying hens to be "cage-free" and that would prohibit the sale of pork and veal from animals raised in housing the state banned in 2008 was approved for the November ballot. Animal-rights groups, including the Humane Society of the United States, collected more than 660,000 signatures for the measure – only about 366,000 were required to get it on the ballot. In 2008, California voters approved an initiative that banned so-called battery cages for egg-laying hens, gestation stalls for sows and crates for veal calves. The state legislature in 2010 outlawed the sale of eggs from hens housed in battery cages regardless of where they were raised. The 2018 initiative would extend the sales ban to pork from hogs born to sows housed in gestation stalls, beginning Jan. 1, 2022, and to veal from calves housed in crates, starting Jan. 1, 2019, anywhere in the country. (Egg farmers in the state would need to comply with the cage-free mandate by Jan. 1, 2022.) NPPC strongly opposes the initiative, which would raise food prices for consumers and restrain interstate trade, a violation of the U.S. Constitution's Commerce Clause. The clause gives Congress absolute power to regulate trade among the states. The organization is backing a provision in the House Farm Bill that would prohibit states from regulating agricultural practices outside their borders.



Pork Checkoff

Reports on checkoff-funded promotion, research and consumer information programs.

NATIONAL PORK BOARD ELECTS NEW OFFICERS

Steve Rommereim, a pork producer from Alcester, South Dakota, was elected president of the National Pork Board at the organization's June board meeting in Des Moines, Iowa. The National Pork Board's 15 farmer-directors represent America's pig farmers.

"This is an exciting time to raise pigs, and I am honored to be elected to serve America's pig farmers," Rommereim said. "A decade ago, the We CareSM initiative was introduced during World Pork Expo to allow producers to demonstrate the care they take every day on their farms. Today, We Care continues to show pig farmers' focus on doing what's best for people, pigs and the planet. I look forward to continuing the great work already underway through many Pork Checkoff efforts."

Serving with Rommereim on Pork Checkoff's executive officer team are David Newman, a pork producer from Jonesboro, Arkansas, as vice president and Mike Skahill, from Williamsburg, Virginia, as treasurer. Terry O'Neel, a pork producer from Friend, Nebraska, will serve as immediate past president. The four executive officers will serve one-year terms in their positions effective at the close of the June board meeting.

"In the year ahead, the Pork Checkoff will focus on driving consumer demand through sustainability," Rommereim said. "We will do this through programs that build the Secure Pork Supply plan and work to move fresh pork domestically and to market U.S. pork beyond our borders."

Steve Rommereim is the owner, manager and operator of Highland Swine in South Dakota. Highland Swine markets 10,000 pigs annually. He also grows corn

and soybeans, and has a cow/calf operation. In March, Rommereim was elected to serve a second term on the National Pork Board. He served as the 2017-2018 vice president and interim treasurer. During his tenure on the National Pork Board, he has served on numerous committees. The Operation Main Street speaker has served as a South Dakota delegate to the Pork Industry Forum since 2003. Rommereim was on the National Pork Board's Plan of Work Task Force in 2009. He is past president of the South Dakota Pork Producers Association, serving on its board from 2001 to 2011. He also is past president of Agriculture United for South Dakota and serves on the South Dakota Animal Industry Board.

David Newman of Jonesboro, Arkansas, owns and operates a farrow-to-finish Berkshire farm in Myrtle, Missouri, that markets pork directly to consumers throughout the U.S. Newman is also an associate professor of Animal Sciences at Arkansas State University where he teaches and conducts research, with an emphasis in meat science.

Newman serves on the Swine Health committee and previously chaired the Domestic Marketing committee and served on the Producer Services committee. He also participated in the Pork Leadership Academy.

Michael Skahill of Williamsburg, Virginia, is a vice president for Smithfield Foods. Smithfield Foods is a vertically integrated operation from production to retail marketing. The company markets 16 million pigs annually.

Skahill serves on the National Pork Board Trade Committee, the U.S. Meat Export Federation Pork and Allied Industries Committee and chairs the trade committee for the North American Meat Institute. Skahill also served on the National Pork Board 2015-2020 Strategic Plan committee.

Terry O'Neel, was elected to his second board term in 2016, most recently serving as president of the board. He served as the 2016-2017 vice president and as the 2015-2016 treasurer. O'Neel also served on the Domestic Marketing, Producer Services and Pork Quality, Safety and Human Nutrition committees. He has hosted farm tours for the Alliance for the Future of Agriculture in Nebraska, the International Water for Food Project and various service, student and youth groups. He served as president of the Nebraska Pork Producers Board in 2007.

MINNESOTA PIG FARMER SHARES PERSPECTIVE ON GENE EDITING IN ANIMAL AGRICULTURE

Pork producer Randy Spronk represented the farm perspective during an ethics panel at CRISPRcon, June 4-5, in Boston. Through speakers, panels and interactive discussions, CRISPRcon offered a forum for gene editing stakeholders to share ideas, ask and answer questions, and explore the future of the technology. Spronk will join researchers, academics, human health experts, agriculture professionals, non-profit leaders and regulators at this conference organized by the Broad Institute of MIT and Harvard and the McGovern Institute for Brain Research at MIT.

The future potential benefits of gene editing spans many aspects of life – from human and animal health to agriculture and conservation. Gene editing makes precise, intentional and beneficial changes in the genetic material of living things. As one of the tools used for gene editing, CRISPR technology shows tremendous promise for improvements in human health and food production.

“Gene editing will give us, as farmers, more options in how we produce pork in a way that is responsible for people, pigs and the planet,” said Spronk, a third-generation farmer from Edgerton, Minn. Spronk

is a former president of the National Pork Producers Council who, along with his son, raises pigs, soybeans and corn.

Spronk participated in the CRISPRcon closing panel, “Infinity and Beyond? Exploring and Determining Limits for Gene Editing.” Other panelists included Nnimmo Bassey, Health of Mother Earth Foundation; George Church, Wyss Institute at Harvard Medical School, and Rev. Kevin Fitzgerald, Georgetown University. The panel was moderated by Tamar Haspel, Washington Post columnist. Spronk’s participation at CRISPRcon is supported by the Pork Checkoff and National Pork Producers Council.

One of the most devastating diseases to pigs is Porcine Reproductive and Respiratory Syndrome (PRRS). Before gene editing, there has not been an effective cure for the PRRS virus, which results in tremendous suffering and often premature death of affected pigs. Through gene editing, genetic resistance to PRRS can be created through a process that mirrors what could happen naturally or through traditional genetic selection. Decreasing PRRS cases would alleviate pigs’ suffering, reduce the use of medically important antibiotics, and help farmers keep pace with the growing demand for more and better food, while using fewer natural resources.

The agriculture community is keenly aware of uses for gene editing that can bring benefit to people through improved health and food, to pigs through enhanced animal welfare, and to the planet by producing more food with reduced natural resources.

“As a farmer and pork producer, I believe we should openly and transparently communicate the potential benefits and responsible use of gene editing,” Spronk said. “I welcome every chance I get to talk to people about how I farm, and the CRISPRcon event will provide a national platform to visit with many others about how we can use gene editing to improve food production.”

Remembering Past Michigan Porkette President Judy See

Judith S. See, 76, of Carleton, died peacefully May 23, 2018 at Wellsprings Lutheran Home under the care of Promedica Hospice.

Judy was born January 1, 1942, in Wayne, MI to the late Cletus and Evelyn Smith. She married her lifetime sweetheart and confidant, Larry, on June 24, 1961 who preceded her in death on November 4, 2013. Her passing was also preceded by her two brothers, Gerald of Canton and John (Jack) Smith of Sparta, Tn.

She is survived by her two sons, Larry Jr. of Monroe and Miles Todd of Raleigh, N.C. A daughter in law, Leslie See of Raleigh, grandson, Garrett and his wife, Marisa Linton See of Lincoln, Neb., granddaughter, Emma Elizabeth See of Raleigh, her sisters-in-law (Carol and Linda Smith, Janice Stever and Audrey Kocsis), brother-in-law (Bob Kocsis), numerous nieces and nephews and her very large, extended and cherished 4-H family.

Judy, longtime Monroe County 4-H Agent retired in 2014 after 30 plus years on the job and having spent five decades pouring herself into Monroe County 4-H. Judy embodied volunteerism not only as a volunteer herself but also in her gift in organizing and leading large groups of adult and youth volunteers. Prior to becoming 4-H Agent, she and her husband were

the community leaders of the largest and most well respected 4-H club in the state, the Carleton Go-Getters. She was a past general 4-H superintendent for the Monroe County Fair and currently was assistant general superintendent for awards, a program she started and nurtured.

She was recently made an honorary member of the Monroe County 4-H Fair Advisory Board. Through her roles in 4-H, she valued her relationship with the county fair board and fair managers. During the fair each year she was always among the first to arrive and the last to leave the fairgrounds. In addition, she was active in statewide 4-H programs working closely with the Michigan 4-H State Awards Program and Exploration Days where Judy and Larry always celebrated their wedding anniversary. Judy also served on the Board of Trustees of the Monroe County Library System for twenty years including service as chair of the board.


She was also passionate about pigs and loved raising them on the farm in Carleton. She assisted her husband in the swine department at the Michigan State Fair, Detroit, during his many years as superintendent. Judy and Larry were recognized with the 2001 Distinguished Service Award from



the Michigan Pork Producers Association and Judy was active nationally serving, sixteen years, on the board of directors of the National Pork Council Women followed by service on the board of the National Pork Producers Council when those two associations merged.

Judy most loved spending time with her grandchildren. She was an active supporter of the Farmdale Friends 4-H Club. She never missed an opportunity to attend and support her grandchildren and their friends at their local 4-H livestock show, the North Carolina State Fair, the North American International Livestock Exposition and National Junior Swine Shows across the country. When not traveling to visit fairs throughout the state and nation, her vehicle never met an antique store or outlet mall it did not like and could always be counted on to stop and spend a few hours.

The family is establishing a scholarship endowment for Monroe County 4-Hers in Judy's memory. Memorial contributions may be made out to Community Foundation of Monroe County and note Judy See in the memo line. Community Foundation of Monroe County, 28 S. Macomb Street, Monroe, MI 48161.

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BREAKFAST ON THE FARM

Join us for Breakfast on the Farm this summer

Educational farm tours are providing the consumer an opportunity to see how modern farms work and to interact with producers and agribusiness professionals.

For the past several years, MPPA has joined Breakfast on the Farm (BOTF) in their mission to engage with consumers by bringing the “little pig barn” to the BOTF events.

These events offer producers an opportunity to talk with attendees about how pigs are raised. The barn also gives visitors a mini visual to help them better understand the farming process.

We would love to have more pig farmers join us at the event to help share the story of pig farming with the public. Please contact Emily Schmitt to sign up at schmitt@mipork.org or 517-853-3782. This year's events will be held:

August 25: Van Buren County Breakfast on the Farm hosted by Hood Farms Family Dairy, Paw Paw, Mich.

September 15: Ingham County Breakfast on the Farm hosted by the MSU Beef Research Center, Lansing, Mich.

Since 2009, more than 80,000 children and adults have attended Breakfast on the Farm events

throughout Michigan to learn about where food comes from. At these events, attendees had a chance to learn how cows are milked, pet a calf, take wagon rides, see tractors and eat ice cream. Questions about farming and food production are encouraged.

BOTF gives consumers and farm neighbors a first-hand look at modern food production, and the farm families who work hard to produce a safe, wholesome food supply for Michigan communities and the world.



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NPPC Statement on North Carolina Hog Farm Verdict

A recent jury verdict against a North Carolina hog farm in favor of plaintiffs who lodged unwarranted nuisance claims sets a dangerous precedent for American livestock agriculture, according to Jim Heimerl, president of the National Pork Producers Council and a hog farmer from Johnstown, Ohio. The following statement can be

attributed to Heimerl:

“For the second time in as many months, a North Carolina verdict has come back in favor of plaintiffs after a jury was prevented from visiting the farm subjected to baseless claims. We are deeply troubled by this decision against a farm that has operated responsibly and in compliance with state laws since 1985 and that maintains the highest standards of environmental and

community stewardship.

“American hog farmers already face serious headwinds, including export market uncertainty caused by ongoing trade disputes. We can’t allow trial-lawyer abuse of our legal system to continue as it threatens the livelihood of livestock farming families, undermines the rural economy and unnecessarily increases food prices for consumers.” 

House Approves 2018 Farm Bill, With FMD Language

The National Pork Producers Council praised the recent passage by the House of the “Agriculture and Nutrition Act of 2018,” which includes several provisions important to U.S. pork producers, and urged the Senate to quickly pass its version of the 2018 Farm Bill.

Chief among the important provisions is language establishing and funding a Foot-and-Mouth Disease vaccine bank. FMD is an infectious viral disease that affects cloven-hooved animals, including cattle, pigs and sheep; it is not a food safety or human health threat. Although it was last detected in the United States in 1929, the disease is endemic in many parts of the world and would be financially devastating to U.S. agriculture if an outbreak were to occur here.


“Pork producers are pleased that the House approved its 2018 Farm

Bill,” said Jim Heimerl, president of NPPC, which has been the leading advocate for an FMD vaccine bank. “But we need adequate funding in it to protect the livestock industry and the American economy.”

NPPC is asking lawmakers for funding in each year of the next Farm Bill of \$250 million – \$150 million for the vaccine bank, \$70 million for state block grants for disease prevention and \$30 million for the network of laboratories that provide disease diagnostic support.

The House version of the five-year agricultural blueprint includes those amounts only for the first year; for each of the other years, it has \$30 million for state block grants and \$20 million to be used at the Agriculture secretary’s discretion for the grants, labs and the vaccine bank. While the Senate legislation calls for an FMD vaccine bank, it includes money only for the labs.

“The United States is not prepared for an FMD outbreak, so we really need to have the full five-year mandatory funding,” said Heimerl. “We hope the Senate heeds our plea. We can’t afford the financial devastation this disease would wreak on farmers and the U.S. economy.”

The House bill also includes funding for the NPPC-supported Market Access Program and the Foreign Market Development Program, both of which help support exports markets for U.S. goods. The programs are consolidated as the International Market Development Program. Additionally, the measure has money for feral swine eradication. According to the U.S. Department of Agriculture, there are an estimated 5 million feral swine in at least 39 states; the cost of controlling them and the amount of damage they do is about \$1.5 billion annually. 

Good hygiene is important for exhibitors and the public when working with swine exhibits

Written by Beth Ferry, MSU Extension

Good hygiene is important for exhibitors and the public when working with swine exhibits.

It is important for youth involved in fair exhibitions at the local level to understand how to protect the health of their animals, safeguard their personal health, look after the public that attend exhibitions and protect the fair from the consequences of disease. County fairs and jackpot shows bring together pigs from many areas and health status and at times disease can spread quickly when pigs from different areas are comingled at events like these. If illness is a result of the comingling of pigs, people can also be at risk for infection from zoonotic diseases. Michigan State University Extension recommends taking proper precautions so that your pigs will be unaffected or less affected when they come into contact with a disease like swine influenza. These precautions can decrease the clinical signs (coughing and sneezing) that pigs express, therefore better protecting exhibitors and the public from different zoonotic illnesses.

As with any zoonotic disease there is a concern that people may become sick from exposure to pigs that are carrying virus and may be contagious. Taking simple precautions such as washing your hands and being vigilant when you observe your animals can help protect the health of pigs and people. When you come into contact with animals, it is important to practice good hygiene and wash your hands

using soap and water. If access to soap and water is limited, using hand sanitizer can also be beneficial. Many times, viruses are transmitted via oral and nasal mucosa and expelled when the animal coughs or sneezes. Eliminating food and drink consumption by humans around animals is a known method to reduce the transfer virus. When you see others eating or drinking in the exhibition area, be an advocate of your industry and politely ask them to remove food from the area, as this will help keep the pigs and people from getting sick.

Swine influenza (SIV) is a respiratory disease caused by type A influenza virus. This zoonotic disease is contagious among pigs and according to the Centers for Disease Control and Prevention, some strains have been reported to infect the human population, specifically in Michigan during the summer exhibition season the last few years. Influenza can be characterized in swine by clinical signs such as coughing, fever, sneezing and lethargic acting animals. Swine can also be asymptomatic, which means that you may not notice that your pig is sick. This disease typically runs its course in approximately three to seven days.

This is why daily observation of changes in health status of the swine exhibited is also important. If you do notice your animal express signs of illness while you are at the county fair or exhibition, it is important to talk to the event leadership. Working with the fair veterinarian if an animal becomes sick and taking the appropriate steps



to isolate or remove that animal from exhibit can help decrease the spread of disease in the swine area and stop exposure to people. If you become sick and have signs of respiratory illness it is important to notify your doctor that you have had close proximity to swine so that the correct diagnoses can be made.

It is also important to understand that influenza virus, including H3N2 is not a food safety threat and swine influenza is not transmissible by consuming pork or pork products. Properly prepared pork is safe to consume and people should not be concerned with contracting influenza caused by the influenza virus.

Safeguarding your health and the public is an important role for swine exhibitors, as they are ambassadors of the agriculture industry and should lead by example when working with animals. 🐷

How do I dispose of my mortalities?

Written by Erica Rogers and Shelby Burlew, Michigan State University Extension

There are several different ways to dispose of mortalities in a timely manner. Some methods are completed on the farm and some are accomplished by moving dead animals off the farm. Which method you chose depends on the suitability to your production system and should consider the timeliness, biosecurity and potential impact on the environment.

According to the Bodies of Dead Animals Act (BODA) Brochure from the Michigan Department of Agriculture and Rural Development (MDARD), any mortality must be disposed of within 24 hours unless you have a cold storage option. If a cold storage option is available, you may temporarily store a dead animal for a maximum of seven days at a temperature of 40°F or less or you can freeze a dead animal up to 30 days if the temperature of storage is below 9°F. After temporary storage, the carcasses will need to be disposed of using one of the options below.

The first option is burial, which has been commonly used in the past and more recently by small livestock operations. When considering the timeliness of this mortality option, be aware of the weather. Frozen and muddy ground can be difficult to construct a proper grave, so if possible, it is best to plan your burial during warm and dry weather. The biosecurity risks for burial are relatively low, but should take into account the distance from production barns. Environmentally, BODA parameters for burial require that the entire animal carcass is buried at least two feet below the surface of the ground

and can only be buried with the landowner's permission. Furthermore, the carcasses should not come into contact with any bodies of water, which should be assessed if there is a high water table since for every 1,000 lbs of carcass there is about 22 lbs of nitrogen. It is also required that burial sites are located at least 200 feet from any well. Two types of burial are allowed in the state of Michigan, individual graves and common graves.

Individual grave standards: there is no more than 100 individual graves per acre allowed with a combined total of five tons per acre. These graves must be separated by at least two and a half feet

Common grave standards: the weight of all animal carcasses in a common grave may not exceed 5,000 lbs per acre and if there is more than one common grave per acre, they must be separated by at least 100 feet

The second option for mortality disposal is composting. The articles, Carcass composting - a mortality management option for Michigan equine owners (E3168, available from MSU) and Carcass composting - a guide to mortality management on Michigan cattle farms (E3197, available from MSU) explain the details of properly composting mortalities on farm. Bin and windrow composting are two constructed methods for mortality composting. It is important to realize that timeliness of this option can be dependent on the capacity of the pile or bin you are using, so creating a windrow compost pile can help alleviate space concerns (more information on the differences between

bin and windrow composting can be found in the On-Farm Mortality Composting of Livestock Carcasses from Oklahoma State University Cooperative Extension). Composting can aid in destroying pathogens that cause disease if the compost pile reaches an internal temperature of greater than 130°F for three days, which allows for an additional measure of biosecurity. In order to achieve this temperature, the proper carbon to nitrogen ratio is needed and the pile must be turned to allow the outer edges of the pile to be effectively composted. It is ideal to protect the pile from clean water (ex. rain water) by covering the pile so as to divert the water away. To lessen the impact of surface water runoff and leachates reaching groundwater, a concrete platform can be utilized.

A third option for mortality disposal is incineration or burning of the carcass. Similar to composting, if more mortalities occur than an incinerator can handle, this could delay the process of proper mortality disposal, so consideration may need to be given to composting the carcass/carcasses or having a licensed dead animal dealer come in to dispose of it at a rendering plant. Because of the heat associated with incineration, the biosecurity risk of pathogens decreases, but if the incinerator is overloaded, the operating temperature may not reach the desired level and can allow for pathogen escape. It is also important to choose a location in which the burning does not cause a public nuisance and follows local ordinances. Additionally, an air use permit is required from the Air Quality Division

of the Michigan Department of Environmental Quality (MDEQ). Furthermore, any residue left from burning the carcass must be either buried according to the BODA standards previously outlined, land-applied at agronomic rates, or disposed of in a landfill licensed by MDEQ.

A fourth option is rendering. If a mortality is to be sent for rendering, the rendering services being utilized must be a licensed dead animal dealer. Rendering availability is based on volume and, therefore, used more often by large farms. Proximity to the rendering plant should also be considered. If a small farm has a temporary cold storage, rendering may be economically justifiable. Biosecurity can become a concern, in some cases, as these trucks move from farm to farm. This makes keeping rendering trucks away from production/livestock barns important. Other than possible odor complaints near the rendering plant, there is very little concern with this option environmentally.

The last option for disposal of an animal carcass is sending it to a landfill. You must call the landfill you intend to bring the carcass/carcasses to and see if they accept dead animals as some do not. Distance to the landfill will be an economic factor to consider as well. Care should be taken when transporting the carcass off the farm and to the landfill due to the biosecurity risk. Although quite convenient, this option is more prohibitive when considering possible breaches in biosecurity.

Michigan State University Extension recognizes and understands that the method of mortality disposal will differ between farm operations and encourages the use of sound practices with all of these disposal options. Whether you bury, incinerate, compost, render, or landfill your mortalities, having a set of standard operating procedures in place will help your farm to properly dispose of a dead animal when the time comes. It is also important to remember that records of farm mortality are required in BODA and any increase in mortality that is not normal must be reported immediately to MDARD. This is for the greater good of all animal industries in the state in the event of a highly-contagious disease outbreak. 🐮



Calendar of Events

Aug.:

- 25 Breakfast on the Farm**
Paw Paw, Mich.

Sept.:

- 12-13 NPPC Legislative Conference**
Washington, D.C.
- 15 Breakfast on the Farm**
Lansing, Mich.
- 19 MPPA Board Meeting**
East Lansing, Mich.

Oct.:

- 16 MPPA Taste of Elegance**
Michigan Restaurant Show,
Novi Mich.

Dec.:

- 12 MPPA Board Meeting**
East Lansing, Mich.

We're Listening

Dear MPPA,

Thank you so much for your donation to the Michigan FFA Endowment. Your contribution to the Michigan FFA will help to grow members for the future of agriculture. On behalf of all members, I would like to thank you again for your generous donation!

Hanna Dutcher, Michigan FFA State Vice President

Dear MPPA,

I would like to thank you for supporting the FARM Science Lab for the 2017-2018 school year. I have been able to witness this amazing program in action, promote the FARM Science Lab with local and state interest groups and teach in the lab. In 2017-18, we have traveled throughout the lower peninsula bringing programming to many schools with a focus on Kindergarten through fifth grade. In 2018, we will be expanding our program impact to the upper peninsula schools. With your support this year, the lab has reached 16,159 students and 593 educators. We will be working to update our programming and train regional educators to better serve our community schools. Once again, thank you for your generous support of the FARM Science Lab. Our program would not be where it is today without your support for our future generation.

Michelle Blodgett, FARM Science Lab Manager

Dear MPPA,

Thank you for donating the coloring books for our project RED. The kids loved them. The books were greatly appreciated!

Addison Pamey, Maple Valley FFA Secretary

Dear MPPA,

I would like to express my sincere appreciation for the donation you have made for the swine 4-H State Awards this year. This award would not have been possible without people like you who support the youth interested in the swine industry. Thank you for your support!

Carly VanNorman, Senior 4-H Swine Science State Award Winner, Carsonville, MI



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ASIAN PORK AND PINEAPPLE KABOBS

TOTAL TIME: 30 mins

Serves 4

INGREDIENTS

1 lb. boneless pork loin roas (cut into cubes)

3/4 cup teriyaki marinade

2 cups pineapple chunks

1 red bell pepper

4 green onions

1/2 cup peanut sauce

steamed rice



INSTRUCTIONS: Place pork in self-sealing plastic bad and add 1/2 cup teriyaki marinade. Seal bag and refrigerate 2 to 4 hours.

Prepare medium-hot fire in charcoal or preheat gas grill to medium high. Remove pork from marinade. Thread pork, pineapple, red peppers and green onions onto skewers. Grill kabobs directly over fire, turning to brown evenly, for about 10-12 minutes or until internal temperature reaches 145 degrees F., brushing kabobs with reserved marinade. Let rest 3 minutes before serving. Serve kabobs with peanut sauce on a bed of steamed ice if desired.