



American
Farmers & Ranchers

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**Written Testimony of Ray L. Wulf
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**Submitted for the Record to the
House Energy and Commerce Committee
Subcommittee on Oversight and Investigations**

May 22, 2008

Mr. Chairman, Ranking Member Shimkus, and Members of the Subcommittee, my name is Ray L. Wulf, and I am President and CEO of American Farmers & Ranchers (AFR) based in Oklahoma City. I have held this position since 2000. In addition I have a background as a small farmer/rancher, agriculture loan officer, and farm and ranch management instructor. AFR is a general farm organization that has been representing family farmers, ranchers and rural Americans since 1905. Our organization has recently expanded and is now doing business as AFR Insurance Group in 24 states.

On behalf of American Farmers & Ranchers we thank you for the opportunity to testify on the Department of Homeland Security's recent proposal to close the Plum Island Animal Disease Center and move its biological research laboratory, including, but not limited to, research on foot-and-mouth disease, to a new location on the mainland United States. This is an issue that is of particular interest and concern to our organization and companies.

At the committees request I will address the following questions:

- Does your organization support moving foot-and-mouth disease from Plum Island to a research facility on the mainland United States?
- What would be the estimated cost to your membership of an outbreak of foot-and-mouth disease in the United States?
- Does your organization believe modern technology is adequate to prevent the accidental release of foot-and-mouth disease – or other contagious diseases affecting livestock – from a research facility located on the mainland United States?
- If an outbreak of foot-and-mouth disease were to occur on the mainland United States, does your organization believe that Federal, State, and local authorities are prepared to identify, isolate, and halt the spread of such an outbreak before it caused significant damage?

Does your organization support moving foot-and-mouth disease from Plum Island to a research facility on the mainland United States?

NO, AFR is *opposed* to the movement of the Plum Island Animal Disease Center to a research facility on the mainland U.S. The Plum Island Animal Disease Center is the only place in the country where certain highly infectious foreign animal diseases are studied, such as foot-and-mouth disease. Foot-and-mouth disease is a highly contagious virus that affects cloven-hoofed animals such as cattle, sheep, pigs, goats and deer.

Foot-and-mouth disease can be carried by the wind, on clothing, footwear, skin, through nasal passages, and on equipment. The current location or one with similar natural barriers should continue to be the site for research and diagnostic activities that protect our nation's food supply. There are simply too many possibilities for error, either by negligence, or accident, that could pose extreme economic impacts on U.S. agriculture producers and consumers.

Specifically foot-and-mouth disease creates a serious threat to the U.S. livestock industry, the overall agriculture economy, as well as the U.S. economy. A GAO report released December of 2005 stated that nationally recognized animal disease experts were interviewed and agreed that foot-and-mouth disease constitutes the greatest threat to American livestock. Furthermore

GAO provided a letter on December 17, 2007 stating that some of the pathogens maintained at Plum Island, such as foot-and-mouth disease, are highly contagious to livestock and could cause catastrophic economic losses in the agricultural sector if it was released outside of the facility.

Infrastructure

The results of a possible outbreak on the mainland are magnified and accelerated by the efficiencies of the U.S. infrastructure and the transportation industry. The U.S. infrastructure for moving livestock is second to none, allowing livestock to move rapidly across the U.S. As seen in figure 1, in five days cattle were trucked from the Oklahoma City National Livestock Market to 39 states. In addition, other animals that carry foot-and-mouth disease, such as swine, sheep, and goats are also rapidly distributed. Within a matter of days livestock can be transported hundreds to thousands of miles away and intermingled with other livestock. Amplifying the situation is the fact that foot-and-mouth disease is expelled over four to five days after an animal has been infected and may occur several days before the onset of clinical signs. In a matter of a couple of weeks the entire country could be infected.

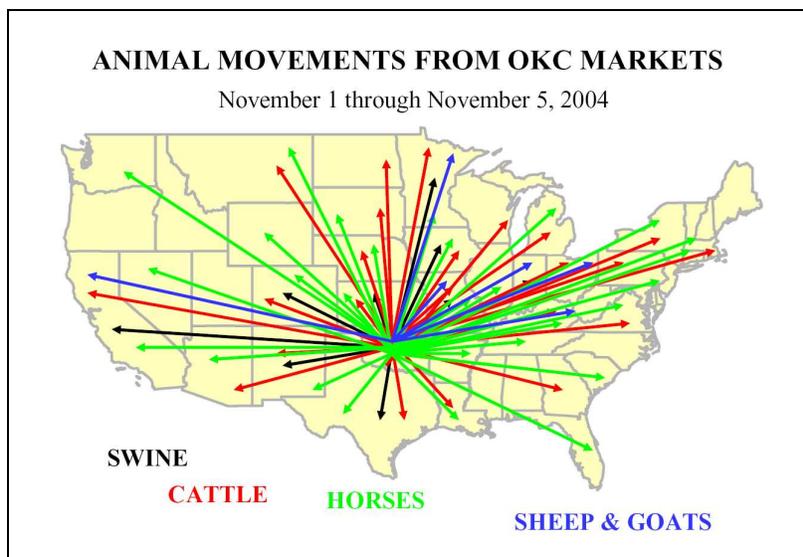


Figure 1 - Source: Oklahoma Department of Agriculture Food & Forestry

What would be the estimated cost to your membership of an outbreak of foot-and-mouth disease in the United States?

The economic impacts to AFR members would no doubt be severe and devastating and reach far beyond the livestock industry. Quarantines affecting large areas would be established stopping all incoming and outgoing commerce in the quarantined area. Depending on the time of year, a quarantine could halt grain harvest, a major economic impact to many areas. Trucks and equipment would not be allowed in or out for harvesting, milk trucks would not be allowed in or out and, in addition, travel to and from school, for business or leisure would be halted. The impact would not only be felt by the producer, but also the local community, region, nation and could cause irreparable damage to the financial community. In addition the U.S. could expect severe economic consequences in the global market.

Many studies have attempted to assess the economic implications of an outbreak of foot and mouth disease in the U.S. Results can vary, but at the same time all point out the significant economic losses as a result of a foot and mouth outbreak. Direct economic losses would result from lost production, the cost of destroying disease-ridden livestock, indemnification and the cost of disease containment measures, such as drugs, diagnostics, vaccines, and veterinary services. Indirect costs and multiplier effects from dislocations in agriculture sectors would include the feed and inputs industry, transportation, retail and the loss of export markets.

A foot-and-mouth outbreak would not only be a problem for agriculture. In Britain the outbreak of foot-and-mouth disease resulted in postponing a general election for a month, the cancellation of many sporting events and leisure activities, the cancellation of large events likely to be attended by those from infected areas.

Research at Oklahoma State University

Dr. Clem Ward of Oklahoma State University outlines how estimating the effects is difficult to gauge:

- First, the effects would depend upon how isolated or widespread the incidence was and how quickly it was contained.
- Second, the effects would depend upon the type of livestock operations that were infected and how frequently or recently animals have moved from the sites.
- Third, impacts would depend on how the media handles the news reporting of the outbreak.
- And fourth, markets would likely react immediately to the news, and how long it would take them to rebound to a more normal level would depend on the first three factors mentioned.

Dr. Ward also looked at two studies that estimate the economic impacts of a foot-and-mouth outbreak based on a given set of wide ranging scenarios.

- 1) A 1979 study with impacts adjusted to 2000; estimated economic impacts from \$2.4 billion to \$27.6 billion (McCauley, et al.).
- 2) A 1999 study estimated the impacts for California alone at \$8.5 billion to \$13.5 billion (Ekboir).

Kansas Research

An article in ScienceDaily (Nov. 29, 2007); Foot-and-mouth Disease Could Cost Kansas Nearly A Billion Dollars, referenced research by Dustin L. Pendell, John Leatherman, Ted C. Schroeder, and Gregory S. Alward -THE ECONOMIC IMPACTS OF A FOOT-AND-MOUTH DISEASE OUTBREAK: A REGIONAL ANALYSIS. The team of researchers analyzed a 14-county region in southwest Kansas that has a high concentration of large cattle feeding operations, as well as other livestock enterprises and beef processing plants. They considered three scenarios:

- one where the disease was introduced at a single cow-calf operation;
- one where a medium-sized feedlot, 10,000 to 20,000 head of cattle, was initially infected;
- one where five large feedlots, each with more than 40,000 head of cattle, were simultaneously exposed.

Schroeder said the first two scenarios were used to predict what could happen if the disease were introduced accidentally, while the larger scenario shows what could happen were there an intentional release.

Generally, researchers found that the greater the number of animals infected in an operation, the longer an outbreak would last and the more it would likely spread -- all directly correlating to the level of economic ruin.

- Under the small cow-calf scenario, researchers predicted that 126,000 head of livestock would have to be destroyed and that a foot-and-mouth disease outbreak would last 29 days.
- In the medium-sized operation, those numbers went up to 407,000 animals and 39 days.
- In the scenario where five large feedlots were exposed at the same time, researchers predicted that 1.7 million head of livestock would have to be destroyed and that an outbreak would last nearly three months.

From smallest to largest operation, that translated into regional economic losses of \$23 million, \$140 million and \$685 million, respectively. For the state of Kansas as a whole, those numbers climb to \$36 million, \$199 million and \$945 million.

"Kansas produces about 1.5 million calves, markets 5.5 million head of fed cattle, and slaughters 7.5 million head of cattle annually. The large commercial cattle feedlot and beef packing industries together bring more than 100,000 head of cattle per week on average into the state for feeding or processing," Schroeder said. "Such large volumes of livestock movement provide avenues for contagious animal disease to spread."

Leatherman estimated the statewide impacts of foot-and-mouth for this study and said the effects of an outbreak would go way beyond producers. "This study tells us what the overall stake of the region and state has in preventing such an occurrence," he said. "It isn't just farmers, ranchers, feed lots and packers who would suffer -- it's all of us, in some measure."

Other Research

Another report titled “Potential Revenue Impact of an Outbreak of foot-and-mouth disease in the United States” by Paarlberg, Lee, and Seitzinger was published in the Journal of American Veterinary Medical Association in April of 2002. The report stated an outbreak similar to that which occurred in the U.K. during 2001, would cause an estimated U.S. farm income losses of \$14 billion. Losses in gross revenue for each sector were estimated to be the following: live swine, -34%; pork, -24%; live cattle -17%; beef, -20%; milk, -16%; live lambs and sheep, -14%; lamb and sheep meat, -10%; forage, -15%; and soybean meal, -7%.

Other Agriculture Markets Impacted:

Livestock markets are not the only markets impacted by an outbreak. Feed grains and protein meal feeds would also be impacted. A CRS Report titled “Agroterrorism: Options in Congress,” December 19, 2001 states - According to industry officials, every other bushel of U.S. grain goes to animal feed. In addition, information from the U.S. Meat Export Federation states that:

- One milk cow will eat 3 tons of hay and 1,460 lbs of distiller’s grain over the course of a year
- It takes 150 lbs of soybean meal to feed a pig to its finished weight
- Every pound of U.S. pork exported utilizes 1.5 pounds of U.S. Soybeans
- More than 54 million bushels of soybeans were exported through U.S. red meat in 2006
- More than 300 million bushels of corn were exported through U.S. red meat in 2006
- While direct corn exports have increased by 25% since 1990, indirect exports of corn through the value added process of exporting red meat has increased by 196%

Trade Impact

Ninety four to ninety six percent of the world’s consumers live outside the U.S. making trade a critical part of U.S. Agriculture. Examples from the pork industry are as follows:

- Source: USDA
 - U.S. has 27% share of the world pork exports

- Source: U.S. Meat Export Federation
 - 2007 Pork Exports add \$22.00 per hog
 - The net benefit of U.S. pork exports to the pork industry in 2007 equates to \$22 added dollars per market hog
 - Japan, Mexico, Canada and Korea account for 75% of all U.S. pork exports – 10% of total production
 - One in every four pounds of pork traded in the world originates from the U.S.
 - The U.S. exports the equivalent of 49,500 market hogs daily

Foot-and-mouth disease is a “*Trade Disease.*” To avoid foot-and-mouth disease it is common practice among foot-and-mouth disease-free countries to allow imports only from other foot-and-mouth disease-free countries. This action by countries that are foot-and-mouth disease free is consistent with the provisions of the World Trade Organization’s “Agreement on Application of Sanitary and Phytosanitary Measures,” which allows countries to adopt and enforce measures necessary to protect human, animal, or plant health. The World Organization of Animal Health (OIE), an independent international organization founded in 1924, monitors and disseminates information about animal diseases throughout the world, and provides a list of countries declared free of foot-and-mouth disease.

Global competition is fierce and in the event a foot-and-mouth outbreak occurred in the U.S., life as we know would no longer exist. Operating as a foot-and-mouth positive country would exclude the U.S. from premium meat markets.

While a foot-and-mouth disease vaccine is available it is used only in emergencies, to create a “disease-free” buffer zone around an infected area. Because vaccinated animals will test positive, they cannot be shipped internationally and protocols require the animals to be destroyed as soon as the disease is eradicated.

Consumer Issues

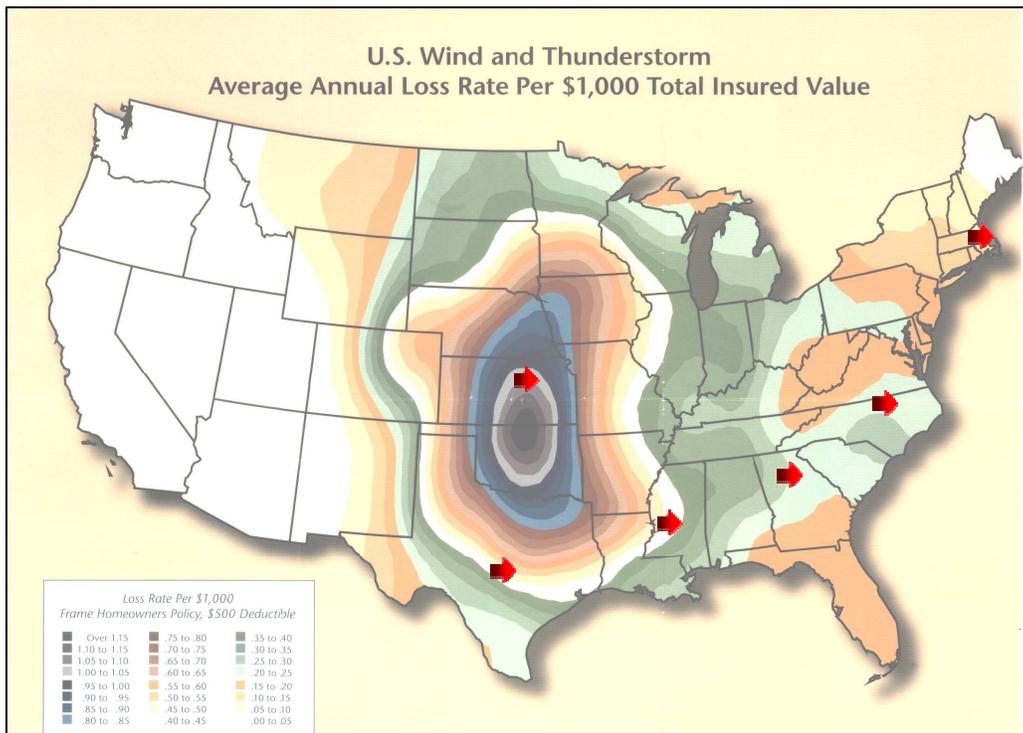
Foot-and-mouth is not readily transmissible to humans. Only a few cases of human infections, none requiring hospitalization, occurring as a result of direct contact with infected

animals have been documented. Even though foot-and-mouth disease does not pose a health risk to humans, consumer fear would occur. Because the average consumer has a lack of knowledge about the disease, more than likely there would be a drop in meat consumption.

Insurance Issues

American Farmers & Ranchers is no stranger to managing risk. Our membership is already a bulls-eye for weather disasters. If an outbreak were to occur, weather could play a major role in furthering the spread of an infectious disease. Currently the following sites have been chosen to advance to the next phase in the National Environmental Policy Act (NEPA) process to determine if and where the proposed National Bio and Agro-Defense Facility (NBAF) would be built and operated:

- South Milledge Avenue Site, Athens Georgia
- Manhattan Campus Site, Manhattan Kansas
- Flora Industrial Park Site, Flora Mississippi
- Plum Island Site, Plum Island, New York
- Umstead Research Farm Site, Butner, North Carolina
- Texas Research Park Site, San Antonio, Texas



Does your organization believe modern technology is adequate to prevent the accidental release of foot-and-mouth disease – or other contagious diseases affecting livestock – from a research facility located on the mainland United States?

NO, AFR does not believe that there are adequate technologies and safety precautions that can assure U.S. producers and consumers that there would not be an accidental or intentional release of foot-and mouth disease or for that fact any other contagious disease affecting livestock from a research facility located on the mainland U.S. Regardless of how much technology has improved, it does not safeguard from human error, harmful intentions or lack of preparedness.

Plum Island’s research and diagnostic activities work to accomplish an important mission to protect U.S. animal industries and exports from deliberate or accidental introductions of foreign animal diseases. Although steps have been taken to implement better security measures at Plum Island, an outbreak is not out of the question. The U.S. should take note of the most recent U.K. outbreak in August of 2007. Investigations determined that the U.K. outbreak was caused by a strain of virus used for vaccine research at laboratories associated with the institute for Animal Health at Pirbright.

If an outbreak of foot-and-mouth disease were to occur on the mainland United States, does your organization believe that Federal, State, and local authorities are prepared to identify, isolate, and halt the spread of such an outbreak before it caused significant damage?

NO, Although Federal, State and local authorities continue to try to prepare themselves for a foreign animal disease outbreak, AFR believes there are entirely too many unknown variables that would hinder a successful containment of the disease. A U.S. Government simulated outbreak in 2002 called “Crimson Sky” ended with fictional riots in the streets after the simulation’s National Guardsmen were ordered to kill tens of millions of farm animals, so many that troops ran out of bullets. In the exercise, the government said it would have been

forced to dig a ditch in Kansas 25 mile long to bury carcasses. In the simulation, protests broke out in some cities amid food shortages.

In addition, AFR has concerns about the transportation of infectious disease samples that may need to come into or out of the facility and travel through populated areas. Furthermore AFR has concerns about the number of employees that would be traveling in and out of the facility. The Department of Homeland Security states that a new proposed National Bio and Agro-Defense Facility would generally include between 250 and 350 employees.

Traceability Is Critical

AFR believes that a critical part of being able to control the spread of foot-and-mouth or any animal disease is a national animal identification system. The capacity to trace livestock and product movements is critical for the early control of an outbreak. USDA has been pursuing implementation of an effective animal identification system since the BSE discovery in a U.S. cow in 2003. The U.S. has yet to establish a workable I.D. program. Until traceability is mandatory and in place moving the Plum Island Animal Disease Center to the mainland should ***not*** be considered and even then it should be reviewed carefully and any consideration should be focused on a remote area with little or no livestock or wild game habitation.

Conclusion

In conclusion, AFR strongly supports full funding for the research performed at Plum Island, including research on foot-and-mouth disease. In addition AFR fully supports funding to update research facilities to the highest standards.

However, AFR believes the U.S. should not risk bringing highly contagious animal disease research to the mainland with so many variables that could wreak havoc on the U.S. livestock industry, communities, the U.S. and global economy.

AFR believes further activities are needed to prepare for an animal disease outbreak.

Activities should include:

- An analysis of communication between all stakeholders.
- A full economic study that includes control and compensation including businesses reliant on livestock and global trade impacts.
- How to adequately establish a quarantine area around an outbreak
- How movement restrictions will be handled
- Procedures in regard to slaughtering all infected herds and other herds that have been in contact with them
- Disposing of animals - Environmental impacts – burial contamination of ground water by leakages from a disposal pit
- Disinfecting properties
- Compensating stock owners for the livestock slaughtered
- Carrying out clinical inspection a surveillance to ensure the disease has not spread

We applaud the committee in your efforts to investigate this important issue and appreciate the opportunity to be here today. Thank you.