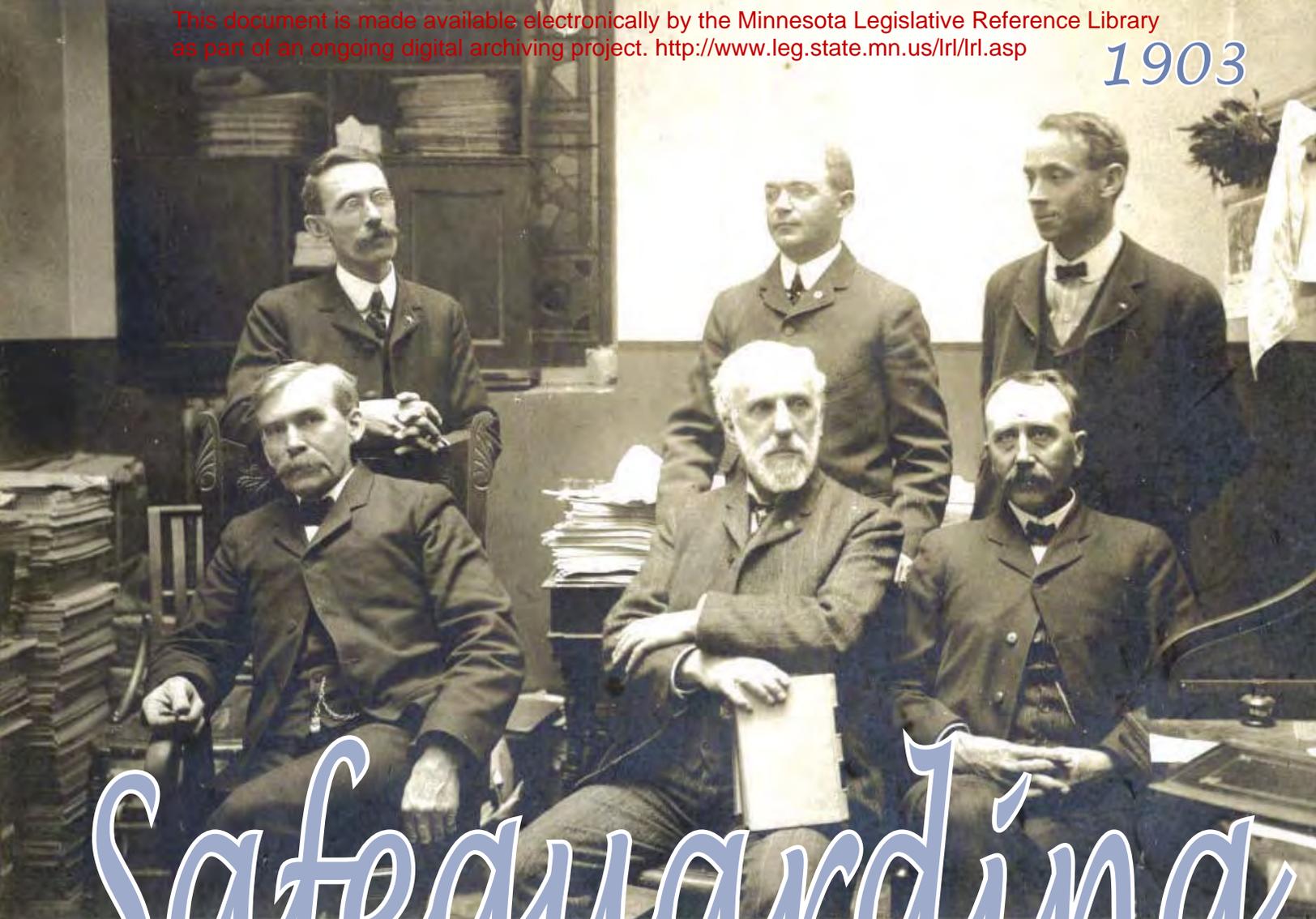
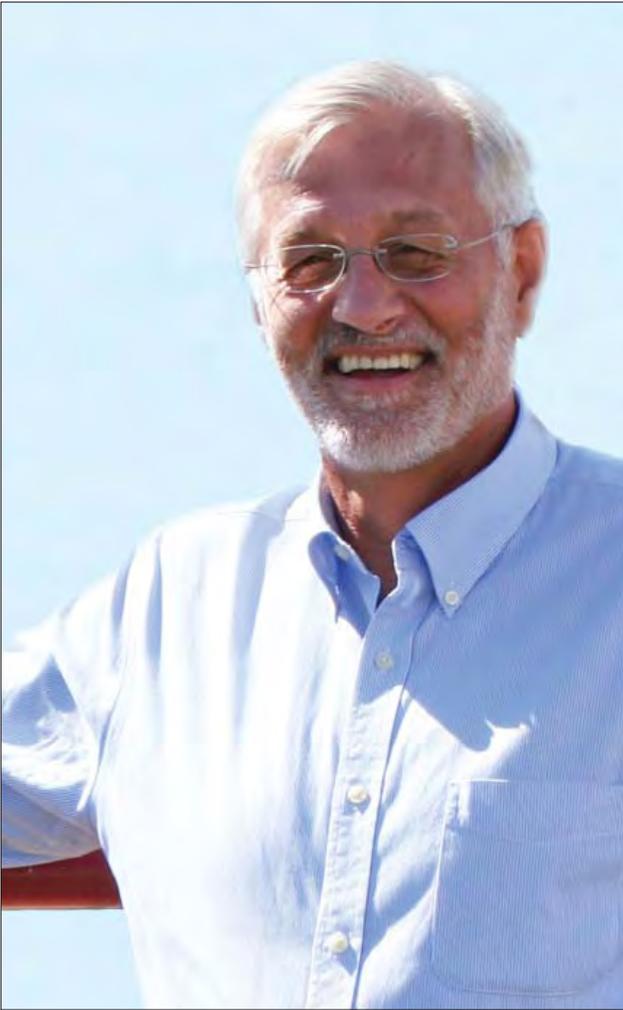


1903



Safeguarding

Animal health in Minnesota since 1903



In 1883 the Minnesota State Board of Health became involved in animal diseases for the first time, when two horses in Red Wing were quarantined with glanders. Over the next 20 years, both the population of livestock and concern for public health in Minnesota continued to grow. In 1903, a bill to create the 'Live Stock Sanitary Board' was passed.

"To protect the health of domestic animals of the state, to determine and employ the most efficient and practical means of prevention, suppression, control and eradication of dangerous, contagious and infectious diseases among domestic animals of the State of Minnesota, and for these purposes it is hereby authorized and empowered to make all such rules and regulations for the conduct of business of said Live Stock Sanitary Board as it may deem necessary."

Over a century later, the Minnesota Board of Animal Health's mission remains the same. Livestock producers, veterinarians, and industry stakeholders have shown their support of the Board for the past 100 years, and it is because of this cooperation that diseases such as hog cholera, pseudorabies, and brucellosis have been eradicated from Minnesota. In the more recent past, the Board has worked alongside many partners to eliminate Chronic Wasting Disease, bovine tuberculosis, and avian influenza.

It is my pleasure to continue a sound working relationship with those concerned for the health of livestock, the livelihood of Minnesota producers, and the safety of our food supply. I hope you enjoy this year's Annual Report, as we reflect on the past and bring you into the present.

Sincerely,
Bill Hartmann
State Veterinarian

The Minnesota Board of Animal Health Annual Report is published in accordance with the provisions of Minnesota Statutes.

To receive additional copies, please send a request to:
Malissa Fritz, BAH Communications Director at
malissa.fritz@state.mn.us

Past State Veterinarians

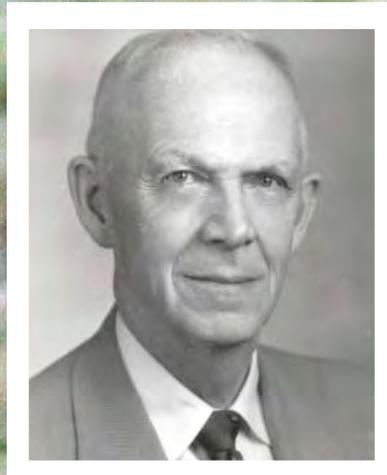


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Board Members

Dr. John Whitten, President
Alexandria

Dr. Holly Neaton, Vice
President, Watertown

Steven Brake, Board Member
Wilmont

Paul FitzSimmons, Board
Member, Good Thunder

Paul Hanowski, Board Member
Swanville

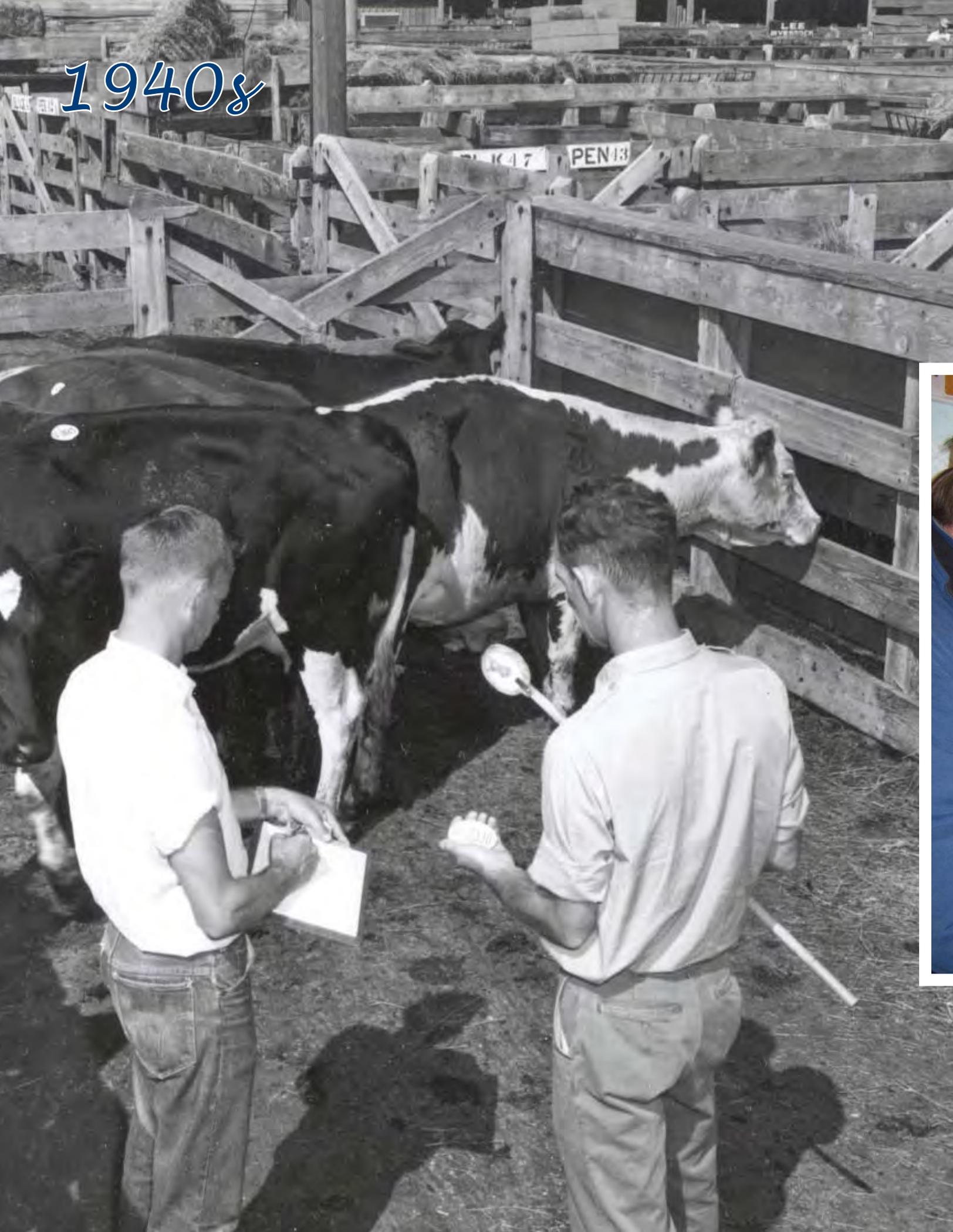
Board Meetings

September 2, 2009
December 2, 2009
February 10, 2010
April 14, 2010

The Board minutes are recorded in the Official Minute Book of the Board of Animal Health and are kept on file at the Board's office in St. Paul, MN.



1940s



In 1949, **cattle** producers started using a new test for brucellosis, or Bang's disease. Ten years later, the disease was nearly eliminated from the United States.

Just as cattlemen and veterinarians worked to eliminate brucellosis in the past, battles against diseases that threaten Minnesota's cattle industry continue today. Bovine tuberculosis (TB) remains at the forefront, and the state's cattlemen, veterinarians, and stakeholders, together with the Board of Animal Health, have made tremendous strides in TB eradication in the last year.

2009



In 2008, Minnesota was granted Split State Status for TB by the United States Department of Agriculture (USDA). While this breakthrough provided some relief for the majority of Minnesota cattle producers, the work was far from complete. In the last year, producers in northwest Minnesota's Modified Accredited (MA) Zone continued to play the most important part in

eradication by testing their herds and providing the Board with vital inventory and movement records. In the last 12 months, every cattle herd in the MA Zone tested negative for TB. Cattle movements within, out of, and into the MA Zone were captured through Animal Movement Certificates, which contain vital information such as animal identification numbers, breed, sex, age, premises of origin, and premises of destination. The Roseau County Sheriff and State Patrol also monitored livestock movement by stopping livestock trailers in the MA Zone to ensure animals were moving with the proper paperwork. In addition, Board staff worked with producers to reconcile current herd inventories to account for all cattle within the MA Zone.

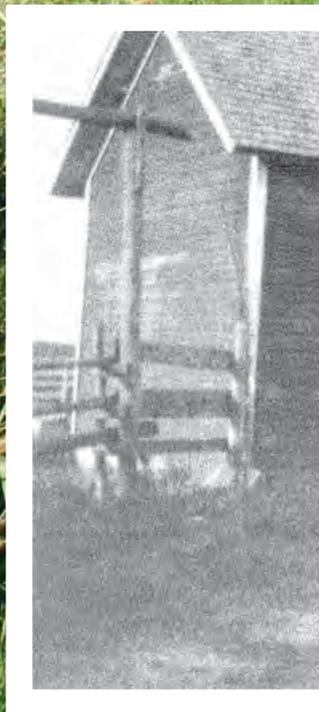
Additional safeguards in the MA Zone ensured cattle and feed were better protected from possible disease transmission. Approximately 73,000 linear feet of fencing was installed on premises in the Management Zone to reduce deer and cattle interaction and potential spread of the disease, and Board staff conducted 84 wildlife/livestock interaction risk assessments to help producers find ways to protect livestock and feed.

Meanwhile, producers in Minnesota's Modified Accredited Advanced (MAA) Zone continued to show their support of TB eradication. In 2009, over \$900,000 was collected for TB eradication activities through an assessment paid by MAA Zone producers for sales of Minnesota-raised cattle. Over 450 herds in the MAA Zone also tested negative for TB, proving once again that the disease is not present in greater Minnesota.

In November 2009 a USDA TB review team visited Minnesota. The Board, Minnesota Department of Agriculture, and Department of Natural Resources presented information on the eradication activities and progress made in the last year, and received positive feedback for a job well done. After a successful year, Minnesota applied to the USDA for an upgrade in status for both zones. Once approved, most of Minnesota will return to TB-Free status. The area of northwest Minnesota where TB used to exist will become MAA.

Until the entire state is TB-Free, the Board will continue to work alongside producers, stakeholders, veterinarians, and other state and federal agencies to maintain Minnesota's position as a leader in animal agriculture.

2008



In 2000 B.C. **horses** were domesticated and used as a primary source of transportation. In the 1930s horses were commonly used around the farm to assist in farm production.

Over the years, horses have become a major source of recreation and more like a member of the family. Owners of these gentle giants are proactive in protecting them from diseases that can cause sickness or death.

West Nile Virus (WNV) was first detected in Minnesota horses in 2002. Often causing extreme fatigue, convulsions, and paralysis, this disease is one of major concern to horse owners. No positive cases of WNV in horses were reported in the last year. The Board commends producers and veterinarians for vaccinating their horses and implementing mosquito control techniques, making this the second year in a row with no positive cases.

An on-going battle with Equine Infectious Anemia (EIA) remains a concern for the Board and Minnesota horse owners. Animals infected with EIA develop weakened immune systems, much like the human immunodeficiency virus. A horse, once infected, remains infected for life and must be permanently isolated from other horses. Over 10,000 premises in the state have horses, and the Board works to ensure that healthy animals are kept from contracting the EIA virus. Premises that house EIA-infected horses are quarantined; there are currently four infected horses and five farms under quarantine. In the last year over 36,000 Minnesota

horses were tested for EIA and no new positives were found.

In 2009, 32 Minnesota horses were linked to a Contagious Equine Metritis (CEM) investigation. CEM is considered a foreign animal disease and can cause infertility and abortion. Board and USDA staff quickly responded by quarantining exposed horses and worked with the horse owners to have their animals tested and treated. Only two stallions and four mares remain under quarantine.

Continued cooperation between Minnesota horse owners and the Board will ensure that existing and emerging equine diseases will be contained and eradicated quickly as these animals carry on providing recreation and companionship.



Minnesota began requiring **cervidae** producers to register and test cervids for Chronic Wasting Disease (CWD) in 2003.

As part of the disease surveillance program, captive cervids that are over 16 months of age that die or are slaughtered must be tested for CWD. In the last 12 months, 2,800 animals have been tested for the disease.

CWD has since been classified as a transmissible spongiform encephalopathy (TSE), which is a family of neurological diseases caused by abnormal proteins called prions. CWD has been found in both captive and wild cervids in North America. The State's mandatory program was started in 2003 due to producer requests to ensure CWD was not established in Minnesota.

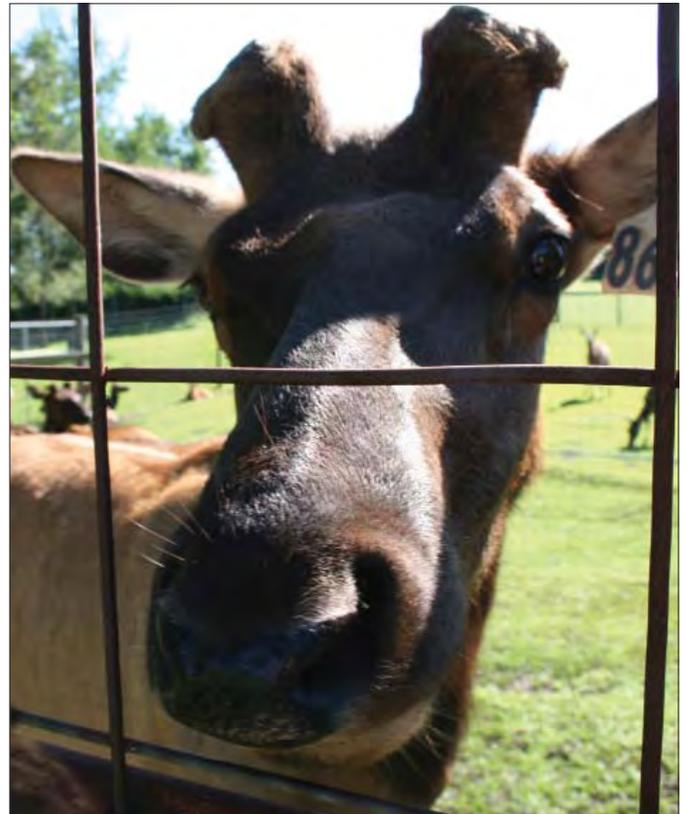
The program's testing resulted in the detection of three positive captive elk from the same herd. Following the discovery of the first infected animal in January 2009, the farm was quarantined while Board staff worked with the USDA to develop a plan for the herd's future. The elk herd owners agreed to indemnity and depopulation of the 558 animals, and USDA Wildlife Services worked with the Board, DNR, and USDA to complete the herd depopulation in September 2009.

Meanwhile, Board and USDA staff continued visiting cervidae farms in Minnesota as part the CWD surveillance program. Over the last year, 675 premises inspections were completed and staff had the opportunity to talk one-on-one with producers about the importance of testing animals, registering with the Board, and keeping complete and accurate records. There are 644 captive cervid herds in the state with 20,000 animals, and producers continue to be proactive about protecting their herds. Minnesota producers filed hundreds of movement certificates and herd inventories with the Board in the last year. Providing these important documents to the Board better equips animal health officials to conduct thorough disease investigations in a shorter amount of time.

In addition to participating in CWD surveillance, cervid producers who market their animals out of state also test for other diseases. In Minnesota, 76 deer and elk herds are brucellosis-certified and 207 are TB-accredited. Achieving this level of status requires multiple herd tests and compliance with a strict set of herd management guidelines, but it usually means more options for interstate marketing.

Thanks to the hard work and cooperation of Minnesota's

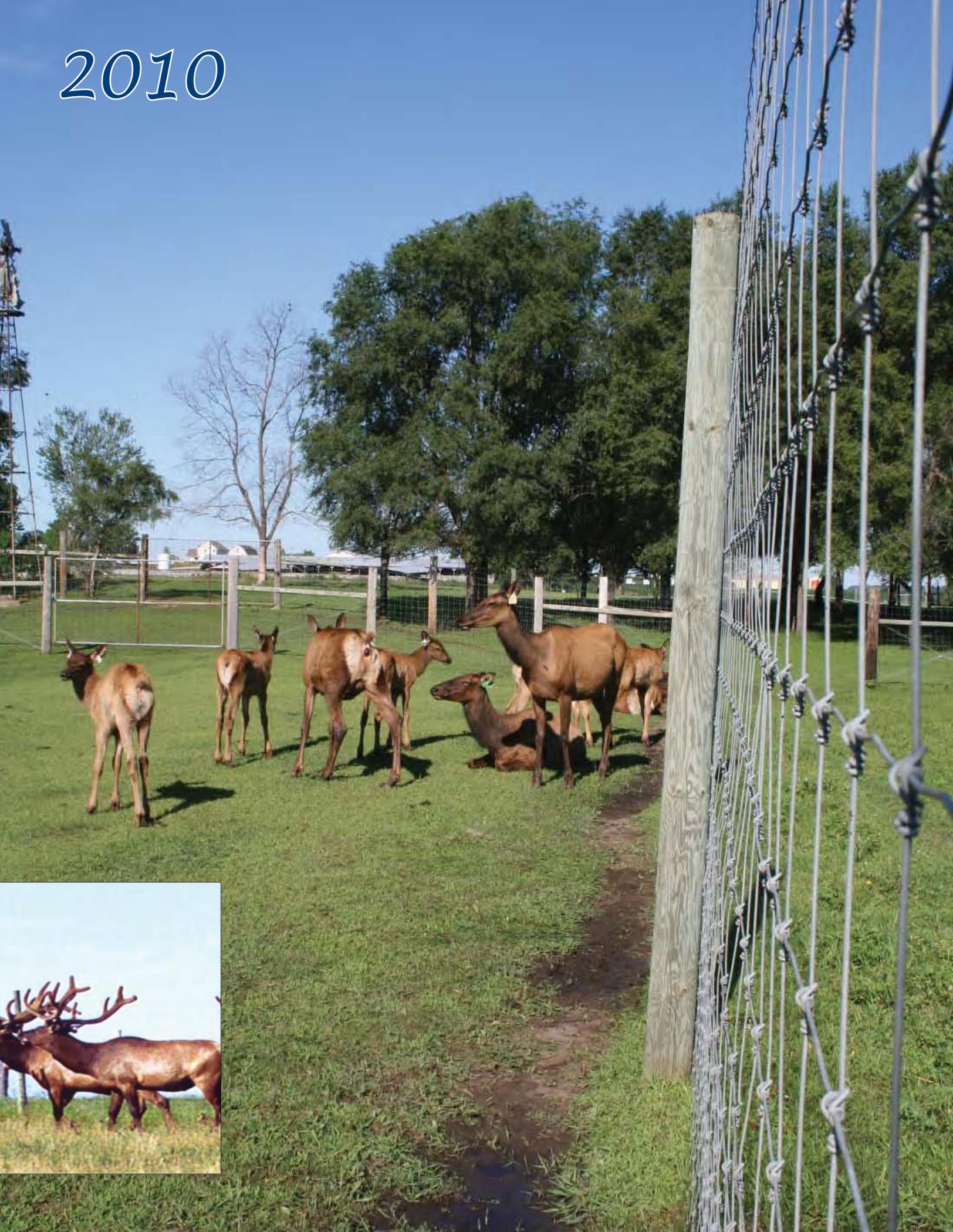
cervidae producers, the State was able to identify a disease and successfully execute an eradication plan. With continued partnership between stakeholders and the Board of Animal Health, farmed cervidae in Minnesota will continue to provide both a wholesome food source and a beautiful part of the state's diverse livestock backdrop.



2003



2010



2010



1930s

The Board of Animal Health began **poultry** testing programs in the 1930s to fight the spread of Salmonella Pullorum, an egg-transmitted disease. Pullorum disease was a widespread and devastating disease killing up to 80 percent of baby poultry in affected flocks.

Thanks to the development of new tests, Salmonella Pullorum and other deadly diseases can be easily detected and eradicated from flocks.

In the summer of 2009 low pathogenic avian influenza was detected in commercial turkey flocks in Meeker County. Acting in accordance with a response plan previously created with input of the poultry industry, the Board worked alongside the USDA and poultry industry to quarantine and depopulate the flocks using controlled marketing. Surveillance zones, as defined in the State's Low Pathogenic Avian Influenza Response Plan, were established and flocks located in those areas were tested. Upon completion of the field response activities, Board and USDA staff collected samples from 502 flocks, and

80 of those were confirmed as positive or exposed to positive flocks.

Much of the poultry testing in the state takes place at the Minnesota Poultry Testing Laboratory in Willmar. However, Board and USDA staff work to train interested producers and industry stakeholders to conduct official tests for their own and others' flocks. Twice each year the Board offers a poultry testing agent training course. After completing the course work and field testing, authorized testing agents can perform Pullorum-typhoid tests which are needed before most poultry can be exhibited, sold, or moved across state lines. There are currently 614 authorized poultry testing agents in Minnesota.

2008



After nearly three decades of work, Minnesota **swine** herds were declared Pseudorabies-Free by the U.S. Department of Agriculture (USDA) in 2003.

Obtaining Pseudorabies-Free status was an enormous victory for the Board of Animal Health and Minnesota hog producers. The state ranks third in the nation for the numbers of hogs raised and second in the value of hogs sold for processing into meat products, so it is imperative that Minnesota's swine are kept healthy.

Surveillance for diseases affecting swine is ongoing. Though pseudorabies and swine brucellosis have been eradicated from Minnesota, monitoring for these diseases continues. Nearly 23,000 hogs tested negative for pseudorabies and 24,000 tested negative for brucellosis in the last 12 months.

For over 20 years, Porcine Reproductive and Respiratory Syndrome (PRRS) has negatively impacted the production of hogs. PRRS causes reproductive problems in sows, poor piglet health and possible devastating losses in growing pigs. Control and elimination of this disease is the focus of the swine producers and veterinarians who are working on a regional control project in Minnesota, in conjunction with the University of Minnesota. Elimination efforts continue in the Stevens County area where the project began. This effort is a further example of both the collaborative nature of Minnesota's producers and the responsibility producers take for the health and well-being of their animals.

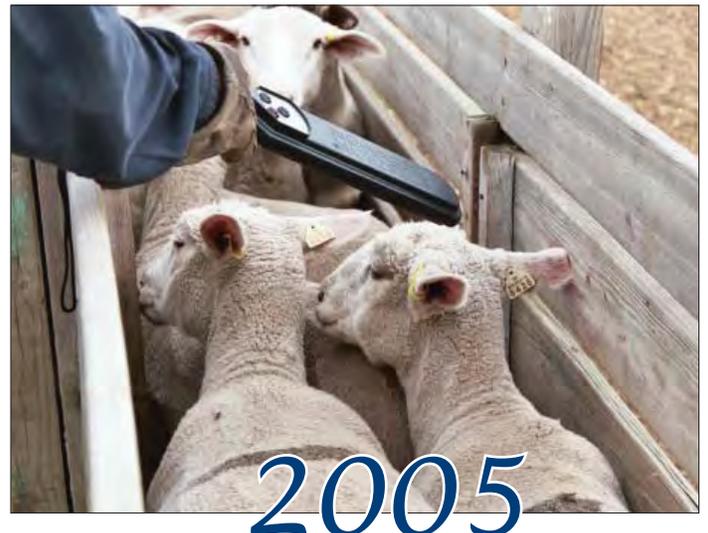
Sheep and goats have been part of farm life since the mid-1800s. In 1940, there were about 950,000 sheep in Minnesota.

Agriculture in Minnesota has changed significantly over the last several decades. Today, sheep and goats live on 5,000 farms throughout the state with a total of 180,000 animals. In order to protect their livelihood, sheep and goat producers work with the Board to help control and eradicate disease.

The scrapie eradication program was implemented in Minnesota in 2001 as part of a national program working to eradicate the disease. Since that time a total of 68 flocks have been identified with scrapie. The Board and the USDA have worked with producers to eliminate the disease from these flocks. Over the last 12 months,

19 scrapie investigations have been completed by Board and USDA staff and, for the first time since the implementation of program, no new infected flocks were found.

The success of the scrapie program stems from the registration of sheep and goat farms with the state and the distribution of official scrapie identification tags. These two things allow infected or exposed animals to be traced so that disease control measures can be implemented when necessary. To date, the Board has registered 3,490 sheep flocks and 1,968 goat herds and has assisted these producers in acquiring official tags for their animals.



2010



-Thursday, October 15, 1987-Supplement To The Sentinel

State program aims to wipe out pseudorabies

By KATIE CROWLEY
Sentinel Writer

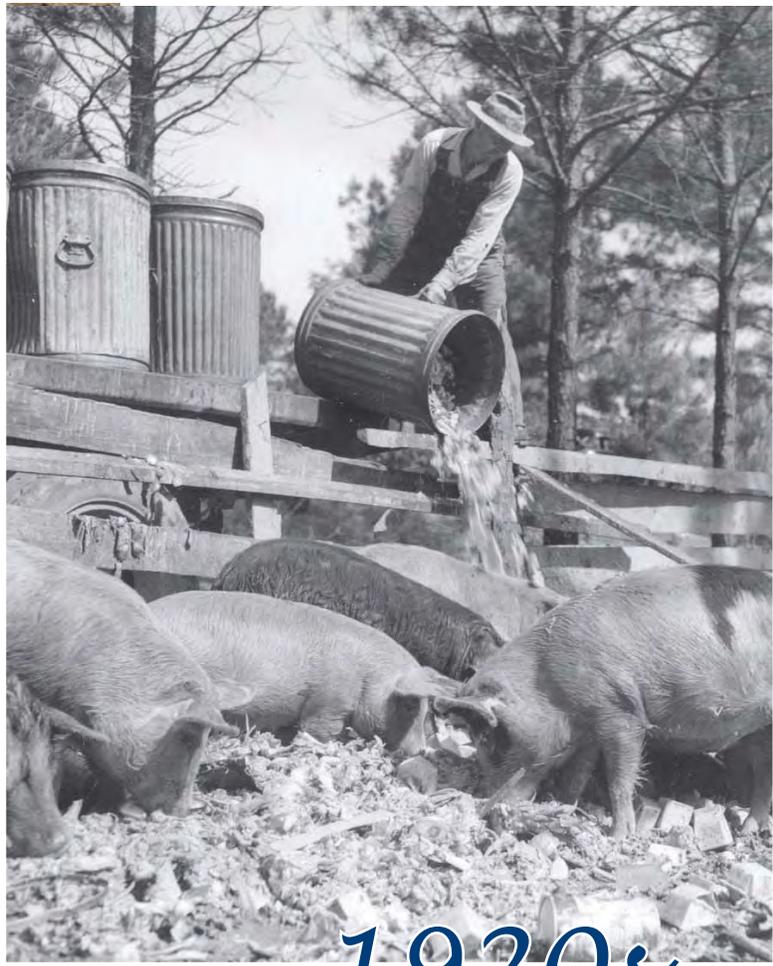
ST. PAUL — Martin County swine herds are under siege from the virus pseudorabies, but a new state-wide eradication program may eliminate the disease in as little as two

“I would venture to say most people in Martin County know about this. What they don't know is how bad it is.”

1987



2010



1920s



Garbage Feeding

In 1953, the Board of Animal Health issued regulations for the collection and cooking of garbage that was fed to hogs. The guidelines were intended to prevent the spread of trichinosis and to reduce the spread of hog cholera. In 1966 the number of garbage feeding permits in Minnesota peaked at 42.

There are currently eight livestock producers in Minnesota permitted to feed garbage. Although the number of garbage feeding permits in Minnesota has decreased over the last 50 years, the importance of lawful garbage feeding is just as great today.

Feeding garbage to livestock, particularly swine, is a practice that has been in place for many years around the globe because it allows unused food waste to be recycled in the form of animal feed. However, precautions must be taken to ensure it is done correctly. Garbage must be cooked to 212 degrees Fahrenheit for 30 minutes, a process that kills potentially dangerous organisms.

Food waste that does not contain meat or meat by-products, such as bread, cereal, candy, and pasta, may also be fed to livestock. Known as “exempt materials”, non-meat food waste does not require cooking prior to feeding. Premises are inspected twice a year to ensure garbage is being fed legally. Twenty-seven Minnesota producers are permitted to feed exempt materials to livestock.

By complying with Board rules to feed garbage and exempt materials to livestock, producers help safeguard Minnesota agriculture against devastating diseases such as foot and mouth disease and hog cholera.

Emergency Planning

The outbreak of Foot and Mouth Disease (FMD) in the United Kingdom in 2001 caused catastrophic loss of livestock and was a tragedy for many.

Although the Incident Command System (ICS) was originally developed in the 1970s for the purpose of managing wild fires, it wasn't until the 2001 FMD outbreak in the United Kingdom that the system gained international attention. Years later, the Board of Animal Health is using the ICS to train staff to be better prepared to respond to animal agriculture-related emergencies, and is helping to educate stakeholders on the value of biosecurity and emergency preparedness.

Last year, the Board worked with the Minnesota Department of Agriculture (MDA) and the USDA to

develop guidelines for how a county should respond to a foreign animal disease (FAD) introduction.

Finalized in July 2009, the guidelines were tested in an FMD tabletop discussion held in Steele County in August. At the tabletop exercise, animal health and county officials refined the FAD guidelines based on discussion during the exercise, then distributed final guidelines to all counties in Minnesota.

In June 2010 Minnesota veterinary professionals attended FAD responder training. Board staff was present and helped provide instruction on recognition of FADs in livestock, and discussed the state's response plan should an FAD be identified in Minnesota. Another component of the training discussed the enhanced biosecurity needed during an FAD event to prevent spreading a highly contagious disease.

Board and USDA staff work to train others in emergency response while being trained at the same time. In October 2009, several staff members completed ICS 200 course and select staff completed ICS 300 course, an agriculture-focused module involving multiple agencies and private-practicing veterinarians. In addition, the Board's designated emergency planner was trained in November 2009 to be part of a state agriculture incident management team. It is crucial for the Board to be part of this group to ensure Minnesota's livestock welfare and producer livelihood in an emergency situation.

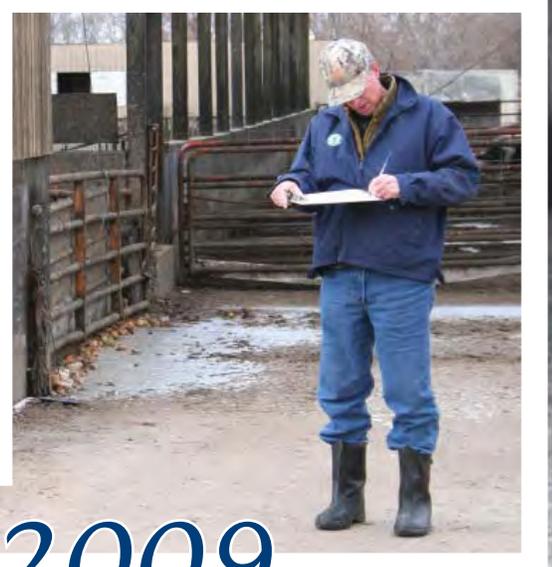
The Board had an opportunity to exercise FAD response plans when two rabbits in Pine County tested positive for rabbit hemorrhagic disease (RHD). Though people and wild rabbits in Minnesota cannot contract RHD, it is deadly to European rabbit species which includes most pet, show, and research rabbits. Board staff worked with the rabbit owners to thoroughly clean and disinfect the premises, and no additional cases of RHD were reported.

Emergency planning remains at the top of the Board's list of priorities. Minnesota ranks among the top 10 states for turkey, pork, red meat and milk production, and ranks sixth for overall agriculture exports. With such valuable resources at stake, the Board is dedicated to protecting these industries by preparing.

1930s



2010



2009

Rabies

Rabies surveillance began in 1903 when the Minnesota Live Stock Sanitary Board was established. During the first year 153 rabies cases, including dogs, horses, sheep, hogs and cattle, were recorded.

Rabies is fatal without treatment. The Board and the Minnesota Department of Health (MDH) work together to prevent disease in people and their animals.

In 2010, a total of 2,423 animals were tested for rabies. Sixty-four animals were positive for rabies including 27 bats, 22 skunks, seven cats, five dogs, and three cattle. The distribution of animals affected by this disease has changed, mostly due to the advent and use of rabies vaccination. The most common carrier in Minnesota is the skunk, with 46 percent testing positive.

The University of Minnesota Veterinary Diagnostic Laboratory receives specimens for rabies testing. The samples are prepared and forwarded to the MDH Public Health Lab for testing. The Board continues to work with these two laboratories and the MDH to prevent and diagnose rabies and educate people about the disease.

Information Technology

The Board began using its first computer in 1985. The Harris “mini-computer” was four feet wide by four feet tall and housed at the USDA office in St. Paul.

A short 25 years later, each of the Board’s 51 employees use personal computers. The technology age has provided an easier, more efficient way of record keeping. In the last year, a large portion of the responsibility for livestock traceability has shifted from the federal to the state level of government. This shift has generated the need to capture individual animal identification as livestock move through the state, and the Board is ready for the challenge.

To begin capturing animal identification numbers, the Board began using Radio Frequency Identification (RFID) tags for placement in cattle in Minnesota’s Modified Accredited (MA) Zone. Handheld computers and wands accurately capture animal ID and automate the data entry into the Board’s livestock database. The Board recently expanded the electronic capture of animal ID numbers by installing an RFID panel reader in a livestock auction market in northwest Minnesota. These panels capture individual animal ID and link it to the individual buyer of the livestock. As the Board continues to develop livestock traceability, the electronic capture of individual animal ID will greatly increase the speed and accuracy of livestock traceability.

As more information is captured, the Board remains sensitive to the privacy concerns of Minnesota’s producers. As stated in Minnesota law, the names and addresses of producers, locations of farms, and livestock identification numbers are kept private and are used only to protect the health of the state’s livestock.

Communications

The Board has existed for over a century, but prior to 2003 a Board communications division did not exist. The primary methods of communication between the Board and Minnesota livestock producers and stakeholders were letters and phone calls.

Today, the Board employs a communications staff to be informed on animal health related news and activities, and to prepare news releases, letters, exhibits, and presentations which are shared with the state’s livestock stakeholders.

Livestock producer groups hold meetings and conferences throughout the year. The Board has a presence at many of these meetings by providing a guest speaker or exhibiting in trade shows. In the last 12 months the Board has exhibited at six livestock-related conferences, which has provided an opportunity to speak to producers face to face. This is one of the most valuable aspects of attending stakeholder meetings, as the Board becomes more easily accessible and familiar to producers. Board staff were also asked to speak at 15 meetings in the past year. Bovine TB, biosecurity, and carcass disposal were among the most requested presentations, and communications staff worked to provide up-to-date materials and presentations.

In addition to being present at numerous events, communications staff stayed connected with Minnesota’s livestock producers and veterinarians through print and email. The Board sent out five news releases, seven TB newsletters, and nine editions of Animal Bytes in the last 12 months. Through these publications the communications division shared valuable information on disease control programs, Board activities, and pertinent animal health-related news stories. The Board has received positive feedback from stakeholders for the frequency and content of publications.

Producers, veterinarians and stakeholders are familiar with not only the functions of the Board, but several staff members as well. By maintaining this relationship through consistent communication and face-to-face interaction, the Board is better prepared to respond to an animal health emergency.

1960s



Veterinary Diagnostic Laboratory

The Veterinary Diagnostic Laboratory has been part of the University of Minnesota since 1904, when it opened with a staff of four people and a mission to serve as the state's major diagnostic facility for health and disease in livestock, poultry, and companion animals.

Today, 110 staff conduct the laboratory's activities, including providing animal health support to livestock and poultry producers, practicing veterinarians, and other animal health consultants. In-depth investigative reports generated by the laboratory help determine why a herd, flock, or individual animal is not performing to its potential. The Veterinary Diagnostic Laboratory is the only lab in Minnesota that offers full service animal health diagnostic testing and is fully accredited by the American

2008



Association of Veterinary Laboratory Diagnosticians.

Diagnostic services at the laboratory cover all animal species and a wide range of animal diseases. During the last year, the diagnostic laboratory evaluated 60,044 submissions and conducted 1.3 million laboratory tests. In addition, the electron microscopy facility at the laboratory has been strengthened to more quickly detect emerging pathogens in wild and domestic animals.

The Veterinary Diagnostic Laboratory plays critical roles in surveillance and rapid response to the outbreaks of animal diseases, including highly pathogenic strains of avian influenza, swine influenza, and other zoonotic diseases.

Minnesota Poultry Testing Laboratory

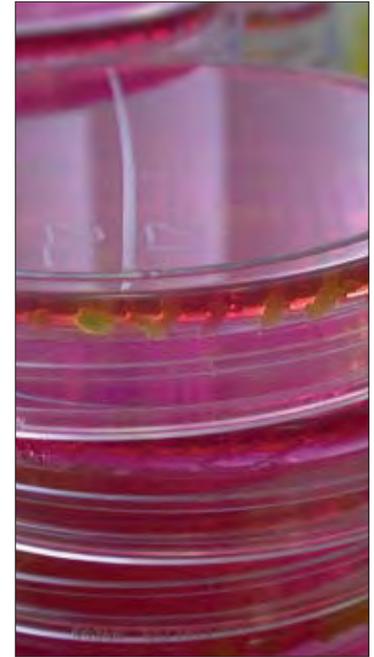
To centralize testing, the Minnesota Poultry Testing Laboratory was established in Willmar in 1968 to serve the state's poultry industry.

The Minnesota Poultry Testing Laboratory is a cooperative venture of the Minnesota Board of Animal Health and the University of Minnesota Veterinary Diagnostic Laboratory. The director of the poultry laboratory also serves as an assistant director of the Board who oversees the poultry disease surveillance programs. Over the years, the poultry laboratory has successfully detected and helped eliminate diseases that could have severely impacted the state's poultry industry.

Last year the laboratory ran over 70,000 tests to look for the possible presence of avian influenza viruses in flocks across the state. The presence of low pathogenic avian influenza in a Minnesota turkey flock in 2009 was initially detected at the Minnesota Poultry Testing Laboratory. Other poultry diseases including avian Metapneumovirus, Salmonella, and Mycoplasma accounted for over 207,000 total tests conducted at the poultry laboratory in the last 12 months.

Much of the disease testing at the Minnesota Poultry Testing Laboratory is conducted under the guidelines of the National Poultry Improvement Plan (NPIP), a state-federal-industry cooperative program. The poultry laboratory is the only laboratory in the state authorized to test samples under NPIP guidelines. The program certifies states, flocks, hatcheries, processing plants and dealers that meet specific disease control standards so that customers can be certain that they are buying poultry that has tested disease-free or has been monitored for particular diseases.

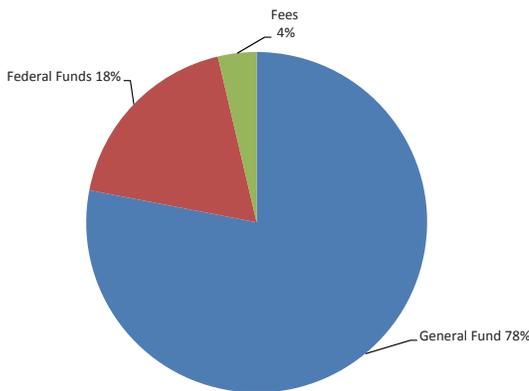
Minnesota remains the national leader in turkey production and is among the top states for egg and poultry meat production. Working together with the state's poultry producers and stakeholders will ensure a healthy and thriving poultry industry in Minnesota.



Board of Animal Health Budget

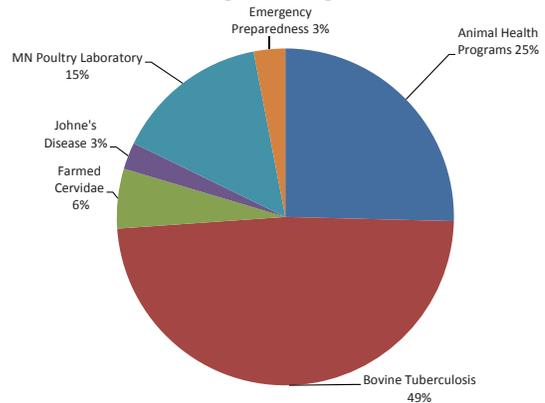
The Minnesota Board of Animal Health's budget for the fiscal year 2010 is comprised of state funds, federal funds, and fees collected from two programs. Those dollars are spent on a variety of programs, which are detailed below.

Board Funds



State Funds - \$5,152,462
 Federal Funds - \$1,209,032
 Fees - \$242,311

Program Budgets



Animal Health Programs - \$1,662,866
 Farmed Cervidae - \$375,133
 Bovine Tuberculosis - \$3,174,661
 MN Poultry Testing Laboratory - \$967,724
 Emergency Preparedness - \$254,766
 Johne's Disease - \$168,654

2010



Safeguarding

Animal health in Minnesota since 1903

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*In accordance with the Americans with Disability Act,
an alternative form of communication is available upon request.*