



ANIMAL INDUSTRY DIVISION

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LETTER FROM THE DIRECTOR

In 2020, the Animal Industry Division (AID) of the Michigan Department of Agriculture and Rural Development (MDARD) faced unique and unprecedented challenges. Employees of AID were able to effectively adapt to their new telework stations and utilize technology to find innovative methods that allowed the Division to continue its core functions of protecting, regulating, and promoting animal health. Below are three highlights of our efforts this year:

- ***Disease Response:*** The Division collaborated with multiple agencies in a true One Health fashion to respond to both suspected and confirmed cases of SARS-CoV-2 in animals and a second consecutive year of high Eastern Equine Encephalitis (EEE) cases. Also, we implemented an expansion of bovine tuberculosis (TB) testing beyond the routine four-county area of the Modified Accredited Zone to seven additional counties to more thoroughly monitor the disease and meet the requirements to maintain Michigan's split-state status.
- ***Virtual Animal Control Officer Ride-Along Training:*** The Animal Control Program continued to support a critical community need by developing and implementing virtual Animal Control Officer Ride-Along Trainings. This training is an essential part of the course of study prescribed by MDARD to prepare county and municipal animal control officers for the field. By offering this training virtually, the program was able to not only deliver a consistent, meaningful educational experience but also increase the reach of these instructional opportunities.
- ***Completion of the Enhanced Wildlife Biosecurity (EWB) Program:*** The EWB Program was designed to assist producers with protecting herds that were most at risk of being infected with bovine TB. All 99 herd owners who have enrolled in this specialized program have fully implemented their personalized biosecurity plans. The measures taken will mitigate the risks caused by wildlife pressures and decrease the possibility of a herd becoming infected with bovine TB in the future.

Throughout the following pages, you will find summaries of how our various programs work to protect, regulate, and promote animal health as well as a selection of their accomplishments in 2020. I am proud to share our story with you.

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ANIMAL CONTROL

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The Animal Control Program works with local animal control agencies to provide support, education, and guidance on animal health issues and state regulations.

Animal control, along with local law enforcement entities, enforces animal laws that address public safety and animal welfare. This includes dog licensing, local kennel licensing, stray dogs, and animals running at large. Additionally, they are responsible for investigating claims of neglect and cruelty against animals, situations of animal hoarding, and complaints involving exotic or dangerous animals.

IMPACT FOR MICHIGAN:

Animal control agencies and animal control officers play a critical role in ensuring animal welfare, which leads to the greater health and safety of the public. This sector provides resources for the housing and care of lost, stray, and unwanted animals. Also, animal control plays an especially important role in protecting people from animals running at large and animal bites. This keeps the public safe from diseases such as rabies.

ACCOMPLISHMENTS:

- Developed and implemented a virtual Animal Control Officer Ride-Along Training, which is an essential part of the course of study prescribed by MDARD to prepare county and municipal animal control officers for the field. By offering this training virtually, the program was able to not only deliver a consistent, meaningful educational experience but also increase the reach of these instructional opportunities.
- Collaborated with the Michigan Association of Animal Control Officers to update the educational curriculum for animal control officers to include more virtual opportunities when in-person training was canceled due to COVID-19.
- Helped to ensure there were appropriate virtual training opportunities for animal control officers to learn about humane euthanasia and field tranquilization of animals, as required by the Public Health Code.

Metric	2019	2020
Ride-along requests with field staff completed (including virtual)	28	14
Animal control officer training reviews completed	44	34

PROGRAM GOALS:

- Provide at least two virtual trainings in cooperation with the Michigan Association of Animal Control Officers for animal care and enforcement agencies and their partners in 2021.
- Enhance the program’s online presence and create new resources for animal control officers and agencies regarding animal health programs, available trainings, and state animal laws by 2022.
- Use virtual platforms to resume quarterly discussions with stakeholders regarding Michigan animal control officer training in 2021.



KEY STAKEHOLDERS:

- Michigan Association of Animal Control Officers
- Michigan’s counties, cities, villages, townships, and other local units of government
- Michigan law enforcement agencies
- Michigan Veterinary Medical Association

LEGAL AUTHORITY:

- Act 287, PA 1969 as amended
- Regulation 151
- Act 339, PA 1919 Dog Law of 1919
- Act 309, PA 1939



ANIMAL DISEASE TRACEABILITY

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The Animal Disease Traceability (ADT) Program educates others on the requirements for animals moving into, within, and out of Michigan and enforces these standards. Overall, these requirements provide assurance of animal health and traceability.

The ADT Program also gathers and stores searchable data on animal identification and movement in order to enable a rapid response when there is an outbreak of a reportable animal disease.

IMPACT FOR MICHIGAN:

By facilitating the prompt identification and tracking of animals, the ADT Program safeguards Michigan's residents from the potential effects of an animal health crisis. Animal disease outbreaks can affect the continuity of agricultural business, the strength Michigan's economy, and/or the health of the public. By identifying and tracking animals, this program ensures the viability of Michigan's livestock industry and protects public health.

ACCOMPLISHMENTS:

- Implemented facility-specific plans to improve the radio frequency identification (RFID) infrastructure at Michigan livestock markets and processing plants, resulting in an overall increase in RFID read rates and the ability to read ultra-high frequency (UHF) RFID tags at one facility.
- Increased the national traceability of Michigan cattle by transitioning livestock markets to record their RFID tag distributions into the USDA AIMS database.
- Proposed the creation of a USAHerds database analyst position whose responsibilities would include developing and enforcing data standards and procedures, providing user training, and exploring ways to increase efficiencies.
- Provided Michigan-specific orientation training to 101 veterinarians and veterinary students pursuing USDA accreditation through the National Veterinary Accreditation Program.

Metric	2019	2020
Interstate certificates of veterinary inspection issued electronically in Michigan versus paper-based certificates, which helps to make traceability efforts more effective	44%	41%

PROGRAM GOALS:

- Integrate UHF RFID readers into existing low frequency (LF) RFID infrastructure to create dual-frequency RFID reader systems in additional facilities.
- Increase the collection of electronic data by automating third-party data transmission directly into USAHerds, implementing and promoting the use of a new electronic certificate of veterinary inspection, and converting more paper forms into searchable electronic documents.
- Educate stakeholders on the importance of traceability in effectively and efficiently responding to animal disease outbreaks.



KEY STAKEHOLDERS:

- U.S. Department of Agriculture
- Michigan Farm Bureau
- Michigan Milk Producers Association
- Michigan Cattlemen’s Association
- Accredited Veterinarians

LEGAL AUTHORITY:

- Public Act 466 of 1988, as amended, the Animal Industry Act
- Cooperative agreement with U.S. Department of Agriculture



ANIMAL SHELTERS

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The Shelter Program is responsible for registering animal shelters. This includes both municipal open-admission animal control shelters and animal protection shelters, which are closed-admission facilities typically operated by private (mostly non-profit) organizations. Also, Animal Shelter Program staff work with shelters to provide guidance and education on animal health issues and state regulations.

IMPACT FOR MICHIGAN:

Animal shelters care for animals needing protection, serve as a place for lost pets to be reunited with their families, and help to home surrendered or abandoned animals. Situated in the communities they serve, animal shelters partner with law enforcement agencies, animal advocacy groups, veterinarians, and animal behavior specialists to ensure the safety of both animals and the community at large. Shelters also play a key role in preventing unwanted animals by encouraging and offering low-cost spay neuter programs.

ACCOMPLISHMENTS:

- Helped to ensure there were appropriate virtual training opportunities for animal shelter employees regarding the humane euthanasia of shelter animals, as required by the Public Health Code.
- Developed and maintained the State of Michigan [COVID-19 Guidance for Animal Shelters](#) and other COVID-related materials that were needed by the animal shelter community to continue their services during the pandemic.

Metric	2019	2020
Registered shelters not requiring a follow-up for corrections or improvements (target 70%)	78%	97%
Registered shelters inspected annually (target 100%)	96%	86%
Shelter reporting their annual statistics	96%	95%

PROGRAM GOALS:

- Administer a successful Animal Welfare Fund Grant Program in 2021 to increase the number of shelter animals being spayed/neutered prior to adoption, facilitate education and training opportunities regarding proper animal care, and offer funding for animals ordered to be held at a shelter as evidence for court cases.
- Improve animal shelter-related outreach through updating the program’s online presence and creating new resources for shelters and for those looking to adopt a shelter animal in 2021.



KEY STAKEHOLDERS:

- Michigan Association of Animal Control Officers
- Michigan’s counties, cities, villages, townships, and other local units of government
- Michigan Partnership for Animal Welfare
- Michigan Veterinary Medical Association

LEGAL AUTHORITY:

- Act 287, PA 1969 as amended
- Regulation 151
- Act 339, PA 1919 Dog Law of 1919
- Act 309, PA 1939
- Act 132, PA 2007 Animal Welfare Fund Act



AQUACULTURE

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The Aquaculture Program manages the registration and regulation of aquaculture facilities. It also serves to protect and promote the aquaculture industry through addressing issues related to fish health, environmental protection, and industry concerns. Activities include pre-licensing inspections, routine annual inspections, and reportable disease or escapement responses. Further, in collaboration with the Michigan Department of Natural Resources, the program oversees the issuance of all prior-entry import permits, including permits for baitfish and other aquaculture intended for stocking public waters. Lastly, the program works with other state agencies to prevent and control aquatic invasive species in the Great Lakes area.

IMPACT FOR MICHIGAN:

Within the next 35 years, estimates show that twice as much food will be needed to sustain the world's growing population. The U.S. currently imports more than 90 percent of the seafood consumed in America. This offers a considerable opportunity for domestically-raised fish. Michigan's abundant water resources and diverse agricultural base uniquely positions the state to capitalize on this prospect and help meet the protein needs of the world.

ACCOMPLISHMENTS:

- Coordinated with Quality of Life agencies to register two new aquaculture facilities.
- Completed 33 annual inspections of registered facilities.
- Participated in Michigan's PFAS Action Response Team to investigate and respond to multiple surface, groundwater, and drinking water contamination sites throughout the state.

Metric	2019	2020
Number of registered facilities inspected	38	33
Number of new facilities registered	2	2
Number of import permits issued	118	119

PROGRAM GOALS:

- Promote the expansion of the aquaculture industry by working with other state agencies to facilitate the registration of new aquaculture facilities.
- Protect the aquatic health of public and private waters and meet the importation needs of the industry by issuing prior-entry import permits.
- Respond to reports of reportable aquatic disease in commercial aquaculture facilities.
- Collaborate with other state agencies to meet the goals outlined in the Invasive Species State Management Plans, including the Michigan Invasive Species Grant Program.



KEY STAKEHOLDERS:

- Michigan Aquaculture Association
- Quality of Life Agencies (Departments of Environment, Great Lakes, and Energy; Agriculture and Rural Development; and Natural Resources)
- Michigan State University
- Michigan Farm Bureau
- Michigan Aquaculture Producers

LEGAL AUTHORITY:

- Michigan Aquaculture Development Act, 1996 PA 199
- Animal Industry Act, 1988 PA 466 as amended



BOVINE TUBERCULOSIS

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The goal of the Bovine Tuberculosis (TB) Program is to prevent, control, and ultimately eradicate the disease in cattle. The activities of the TB Program are critical in order to ensure Michigan's cattle industry has access to national and international markets. Within the state, there are currently two TB zones: a four-county area in northern lower Michigan called the Modified Accredited Zone (MAZ) and the remainder of the state is referred to as the Accredited Free Zone (AFZ). In the MAZ and its adjacent counties, the TB Program works daily on disease surveillance, animal traceability, and prevention of bovine TB transmission from deer-to-cattle. These efforts are complimented by a variety of communication strategies intended to increase awareness and engagement.

IMPACT FOR MICHIGAN:

The Bovine TB Program protects cattle markets as well as public health in Michigan. Bovine TB is a disease that can affect people, making control of the disease in cattle even more essential. Additionally, bovine TB has economic implications for farmers, producer groups, hunters, and the federal government. With more than 12,000 cattle producers in the state who maintain more than 1.2 million cattle, the Bovine TB Program plays a crucial role in maintaining market access for Michigan cattle, meat, and milk products. For example, dairy producers located in the MAZ require the activities of our program to sell Grade A milk.

ACCOMPLISHMENTS:

- Responded successfully to the occurrence of three TB-infected herds in the MAZ. Promptly identified two herds in the AFZ (one in Saginaw County and one in Allegan County) that had received TB-infected animals and depopulated the infected and exposed animals, preventing further spread.
- Conducted program activities safely throughout the COVID-19 pandemic, ensuring ongoing control of the disease, stability of the Michigan cattle industry, and the continued marketing of cattle as well as meat and milk products.
- Implemented TB surveillance for cattle herds within the seven counties bordering the MAZ (requiring a 50% increase in total surveillance testing), allowing the continuation of TB-Free Status in 95% of Michigan.

Metric	2019	2020
Percentage of Michigan counties at TB-Free status	95%	95%
Percentage of active commercial herds with Wildlife Risk Mitigation (WRM) verified status	89%	89%

PROGRAM GOALS:

- Continue to maintain the current TB split-state status in Michigan.
- Use available resources to assist farmers outside of the Enhanced Wildlife Biosecurity (EWB) area in the MAZ, the highest risk area for TB, with implementing improvements to on-farm infrastructure and management.
- Keep expanding deer surveillance efforts in order to identify cattle herds outside of the EWB area that have high deer pressure; and subsequently, a high risk of getting TB. Work in partnership with USDA Wildlife Services and the owners of these herds to protect feed, cattle, and cattle areas as well as to remove deer that have become habituated to living on the farm.



KEY STAKEHOLDERS:

- Michigan Farm Bureau
- Michigan’s Dairy Industry Associations
- Michigan Cattlemen’s Association
- Michigan Department of Natural Resources
- USDA APHIS, Wildlife Services
- USDA APHIS, Veterinary Services

LEGAL AUTHORITY:

- Public Act 466, as Amended
- CFR 9, Part 77
- Uniform Methods & Rules 2005



COMPANION AND EXOTIC ANIMALS

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The Companion and Exotic Animals Program investigates reports relating to the more than 30 reportable diseases in companion and exotic animals, which include dogs, cats, ferrets, and birds. Commonly reported diseases include rabies, leptospirosis, brucellosis, canine influenza, tuberculosis, and poisonings.

In addition, the program serves as a subject matter expert in state laws related to companion and exotic animals, oversees the importation of these animals into Michigan, licenses zoos to breed large carnivores (such as exotic cats and bears), and reviews and approves euthanasia and chemical capture training programs for animal shelters and class B dealer staff.

IMPACT FOR MICHIGAN:

Many reportable diseases not only have the potential to cause serious disease in animals but also could affect the health of the people who interact with those animals. By identifying and rapidly addressing these disease concerns, the health of Michigan's domestic animals and overall public health is protected. By overseeing the importation of these animals, the program helps to further protect public health by ensuring healthy animals are brought into Michigan and their movement can be traced. In addition, licensing large carnivores to breed helps threatened and endangered species to survive. Lastly, approving specific training programs ensures that there are adequate euthanasia and chemical immobilization curriculums.

ACCOMPLISHMENTS:

- Responded to 218 suspected or confirmed cases of reportable disease in companion and exotic animals; 134 of which were found to be actual cases.
- Issued five breeding licenses for exhibitors to breed designated lion, polar bear, and snow leopard pairs.
- Listed SARS-CoV-2, the virus that causes COVID-19, on the reportable disease list and required state approval for testing. Of the 12 animals that were tested for the virus in Michigan, only two mink from the same farm were confirmed positive. MDARD formed an Incident Management Team to handle the case.
- Answered numerous public inquiries regarding SARS-CoV-2 in animals as well as what activities were "essential."

Metric	2019	2020
Percentage of investigations conducted timely* by field staff (target 100%)	60%	60%
Percentage of large carnivore breeding applicants alerted to incompleteness within 14 business days of receipt.	100% (1/1)	50% (2/4)
Percentage of complete large carnivore breeding applications approved or denied within 90 business days of receiving.	100% (1/1)	100% (5/5)

**In this context, "timely" refers to an inspection or investigation being completed by its due date and all related paperwork is submitted within the following seven business days.*

PROGRAM GOALS:

- Respond in a timely and effective manner to complaints of reportable diseases, animals illegally imported, and ferrets and turtles sold without the proper advisory sheet on the risk of salmonella.
- Minimize cases of reportable diseases through effective response.
- Review and process large carnivore breeding license applications timely and thoroughly.
- Thoroughly and promptly review euthanasia and chemical immobilization training programs for shelter and class B staff, and likewise, communicate information of approved programs to stakeholders.



KEY STAKEHOLDERS:

- Michigan Department of Health and Human Services
- Michigan State University
- United States Department of Agriculture
- Michigan Veterinary Medical Association
- Michigan Association of Animal Control Officers

LEGAL AUTHORITY:

- Act 466, PA 1988, as amended, The Animal Industry Act
- Act 358, PA 1994, Ferrets
- Act 424, PA 1988, Turtles
- Act 368 of 1978, as amended, Public Health Code
- Act 274, PA 2000, as amended, Large Carnivore Act



COMPLIANCE INVESTIGATIVE UNIT

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The Compliance Investigative Unit's (CIU) purpose is to conduct investigations on reported allegations of violations to the laws, regulations, and program standards that the Animal Industry Division (AID) is responsible for carrying out under Chapter 286 and 287 of the Michigan Compiled Laws. The CIU is also tasked with fairly and uniformly utilizing progressive enforcement measures to obtain compliance with these laws, regulations, and program standards.

IMPACT FOR MICHIGAN:

The CIU is important to Michigan residents because it supports AID's programs in protecting animal health and public health. Enforcement of the laws, regulations, and program standards helps to ensure a safe and high-quality food supply. Additionally, the CIU helps to safeguard the state from unwanted animal pests and diseases, which could substantially devastate segments of Michigan's economy. During 2020, the unit conducted 126 investigations of alleged violations.

ACCOMPLISHMENTS:

- Closed investigations within 40 days over 76 percent of the time.
- Proposed and started a review of the roles and responsibilities of AID staff as it relates to field activities (inspection, reportable disease, investigation, and service response).

Metric	2019	2020
First-time offenders who did not repeat (target 90%)	95%	95%
Average time to complete investigations (target 40 days)	29 days	31 days
Average time to issue out investigations (target less than 7 days)	4 days	5 days

PROGRAM GOALS:

- Have 90 percent or greater of first-time offenders not repeat the same violation of laws, regulations, or program standards.
- Complete investigations within 40 days on average from when an allegation is reported to the CIU.
- Develop clear compliance enforcement processes within four AID programs to help identify the specific role that the Compliance Investigative Unit provides to each program.



KEY STAKEHOLDERS:

- Michigan Farm Bureau
- Michigan State Police, Commercial Vehicle Enforcement Division
- Michigan County Sheriff’s Offices

LEGAL AUTHORITY:

- Laws identified in Chapter 286 and 287 of the Michigan Compiled Laws
- Regulations identified under the Michigan Administrative Code



DEAD ANIMAL TRANSPORT AND DISPOSAL

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In Michigan, dead animals can be buried, composted, burned, or rendered, including being made into animal feed. The Animal Industry Division (AID) licenses and regulates businesses that produce animal feed and other products from dead animals. Additionally, AID regulates restaurant grease as well as businesses that transport and/or transfer dead animals and restaurant grease for further processing. There are currently 18 such businesses licensed.

As a part of this program, AID assists other agencies investigating improper animal disposal at non-licensed facilities by providing education on proper disposal.

IMPACT FOR MICHIGAN:

If not properly transported or disposed, dead animals can attract predators, spread disease to other animals and people, and be malodorous and unsightly. Dead animals also have the potential of negatively affecting the environment.

The Dead Animal Transport and Disposal Program ensures dead animals and grease are properly transported, processed, and disposed. The program also looks for new alternatives to animal disposal to reduce the impact on the environment, allowing more disposal choices for animal owners.

ACCOMPLISHMENTS:

- Conducted 13 routine inspections of licensed dead animal and restaurant grease businesses. However, some inspections were delayed due to pandemic restrictions.
- No complaints were received against licensed businesses.
- Conducted four inspections and issued 21 new licenses, including 21 new vehicle licenses.

Metrics	2019	2020
Timely* inspections conducted by field staff (target 85% or greater)	73% (24/33)	70% (14/20)
Facilities found to be in compliance at annual inspection (target 70% or greater)	78% (7/9)	77% (10/13)

**In this context, "timely" refers to an inspection or investigation being completed by its due date and all related paperwork is submitted within the following seven business days.*

PROGRAM GOALS:

- Improve the public’s awareness of the proper disposal of animals.
- Conduct timely inspections (annual and pre-licensing) and complaint investigations of dead animal facilities and vehicles.
- Conduct yearly routine inspections of licensed facilities in conjunction with the Michigan Department of Agriculture and Rural Development's Pesticide and Plant Pest Management Division.
- Revise the current animal disposal brochure and potentially create additional brochures for different audiences by December 31, 2021.
- Work with the Central Licensing Unit to implement a new renewal application by September 1, 2021, which will have more pre-filled fields to make renewing not only faster and more convenient for our customers but also increase the likelihood of receiving applications that are fully complete.



KEY STAKEHOLDERS:

- MDARD’s Pesticide and Plant Pest Management Division
- Michigan Department of Environment, Great Lakes, and Energy
- Michigan State University, Extension
- National Renderers Association
- Law Enforcement

LEGAL AUTHORITY:

- Act 239, PA 1982, Bodies of Dead Animals and Regulations (BODA)



EMERGENCY MANAGEMENT

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The Emergency Management Program plans and facilitates activities that prepare the state to respond quickly and effectively to animal-related emergencies. This preparedness helps to protect livestock industries. For example, following thorough biosecurity protocols helps to prevent the introduction and spread of disease to other animals and to other farms. Overall, these actions maintain a healthy livestock industry, reduce animal suffering, protect human health, and provide for a safe and viable food supply.

IMPACT FOR MICHIGAN:

Thousands of livestock and livestock products are involved in Michigan's daily economic activity. The Emergency Management Program works to maintain the continuity for livestock business entities during emergency situations. These efforts protect the state's livestock economy and Michigan jobs. Also, the program assists Michigan's residents with planning for and responding to disasters or emergencies that impact both livestock and companion animals. Examples of these types disasters or emergencies include foreign animal disease outbreaks and natural disasters such as flooding and tornados.

ACCOMPLISHMENTS:

- Assigned a permanent Emergency Management Program Manager. The position had been vacant since December 2017 and was covered through additional duties being assigned to other AID Program Managers.
- Helped to transition all MDARD staff to their new telework stations through serving on the department's Incident Management Team.
- Participated in daily calls with multiple state and federal agencies, state and federal industry and commodity groups, and state animal health officials on contingency planning for mass carcass management due to packing plant disruption. Fortunately, implementation of these plans was not required.
- Deployed staff for Incident Management Teams at an emergency field hospital in Novi for COVID-19 pandemic response.
- Collaborated with industry and MSU Extension partners for African Swine Fever response planning.

Metric	2019	2020
Division staff trained in Incident Command System	96%	98%
Emergency exercises held/total days	3/6	0/0

PROGRAM GOALS:

- Reestablish an Incident Management Team within the Animal Industry Division.
- Complete National Incident Management System training requirements for all AID staff.
- Hold one emergency animal disease response exercise quarterly.
- Continue to work on response plans for each species.
- Maintain adequate inventories of emergency response supplies and equipment.
- Support companion animal emergency response planning efforts with key partners.



KEY STAKEHOLDERS:

- Livestock and companion animal industries within Michigan
- Michigan State Police Emergency Management and Homeland Security Division
- Michigan Department of Environment, Great Lakes, and Energy
- Michigan Department of Natural Resources
- County Emergency Management Offices
- Michigan State Animal Response Team

LEGAL AUTHORITY:

- Act 466, P.A. 1988, as amended, the Animal Industry Act
- Act 390, P.A. 1990, Emergency Management Act
- Michigan Emergency Management Plan Animal Annex



EQUINE

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With 28 reportable equine diseases, one of the main goals of the Equine Program is to investigate any reports of these diseases in Michigan. Common reportable diseases include Eastern Equine Encephalitis (EEE), West Nile virus (WNV), herpesvirus-1, and strangles. In a typical year, the program receives about 40 reports of potential disease. Also, the program oversees the importation and intrastate movement of equine in Michigan and serves as a subject matter expert in state laws related to equine.

IMPACT FOR MICHIGAN:

Reportable diseases have the potential to cause serious disease in equids and economic losses to the equine industry. Some equine diseases also pose a risk to humans, and equine can serve as a sentinel species for risk to humans. By promptly reporting cases to national industry platforms, it alerts other agencies and organizations to potential disease threats, so they can take additional actions to control and prevent the disease. Also, with overseeing the importation of equine into Michigan, the program helps to protect the health of animals and people by ensuring healthy animals are brought into Michigan and their movement can be traced.

ACCOMPLISHMENTS:

- Partnered with other divisions and agencies to promptly deliver a true One Health response to a major outbreak of EEE. Provided timely, detailed messaging about each of the 37 Michigan equine that were confirmed to have the disease and the preventative actions that could be taken to prevent additional cases.
- Replied to numerous public inquiries regarding essential work in relation to the care and welfare of equine.
- Messaged Industry regarding the major federal changes in equine infectious anemia (EIA) testing.
- Responded to 109 reports of equid disease, of which 63 were confirmed to be Michigan cases.
- Received and approved requests to test 55 suspect equine for WNV and EEE through federal grant money. This year, 32 of the 37 total cases of EEE were identified through this testing.

Metric	2019	2020
Percent of investigations (both reportable disease and animal movement) completed in a timely* manner by field staff (Goal is 100%)	80% (11/14)	57% (4/7)
Percent of confirmed cases (regulated, monitored) reported to the Equine Disease Communication Center within five business days of reporting to MDARD	100% (47/47)	100% (56/56)

**In this context, "timely" refers to an inspection or investigation being completed by its due date and all related paperwork is submitted within the following seven business days.*

PROGRAM GOALS:

- Respond in a timely and effective manner to cases of reportable diseases and complaints of equine being moved without required testing.
- Minimize cases of reportable diseases through effective response.
- Report 100 percent of confirmed reportable diseases to the Equine Disease Communication Center.



KEY STAKEHOLDERS:

- Michigan Veterinary Medical Association
- Michigan State University
- United States Department of Agriculture, Veterinary Services
- Michigan Department of Health and Human Services
- Michigan Gaming Control Board
- Michigan Farm Bureau

LEGAL AUTHORITY:

- Act 466, PA 1988, as amended, The Animal Industry Act
- Act 93, PA 1974, Horse Riding Stables and Sales Barns



FAIRS AND EXHIBITIONS

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The Fairs and Exhibitions Program protects, regulates, and promotes animal health through inspections and educational outreach to fairs and exhibitions. The program and field staff work with these events to ensure all livestock not only appear healthy and have proper care but also have the appropriate form of official identification, all necessary test charts, and (if needed) interstate certificates of veterinary inspection. Also, when notified, all reportable disease cases are investigated to assist with diagnostics and control of the disease. Additionally, the program emphasizes the role of biosecurity at these events to protect animals and humans from disease.

IMPACT FOR MICHIGAN:

This program regulates fairs and exhibitions where livestock are shown. Both the commingling of animals from several different premises and the overall stress caused by unfamiliar housing, ambient heat, and/or interaction with the public can contribute to disease. Also, with these animals having more direct public contact at these events, the risk of potential disease transmission is high. By implementing proper biosecurity and addressing disease issues, this program protects both animal and public health.

ACCOMPLISHMENTS:

- Had one county fair visited and inspected by an AID field staff veterinarian due to the cancellation of most county and state fairs.
- Conducted no avian influenza surveillance testing because of the cancellation of many fairs and exhibitions.
- Received no notifications of potential reportable diseases occurring at a fair or exhibition. This was mainly due to the cancellation of the majority of these events.

Metric	2019	2020
Local, county, community, and state fairs and exhibitions inspected	68	1
Reportable disease responses conducted by AID field veterinarians	7	0
Avian influenza surveillance testing performed (number of fairs)	12	0
Number of fairs with one or more violations	6	0

PROGRAM GOALS:

- Inspect as many county and state fairs as possible and update the MDARD Exhibitions website.
- Present the current edition of the Fairs and Exhibitions Requirements at the annual Michigan Association of Fairs and Exhibitions (MAFE) convention and give other presentations as requested by MAFE or fair boards.
- Respond to, and investigate, any notification of a potential reportable disease occurring at a fair or exhibition.
- Conduct avian influenza surveillance testing at any fair wishing to participate.
- Continue to develop the existing relationships with key stakeholders (listed below) in order to provide education, outreach, and resources that will help to further protect, regulate, and promote animal health in Michigan.



KEY STAKEHOLDERS:

- Michigan Association of Fairs and Exhibitions
- MSU College of Veterinary Medicine
- MSU Extension
- MSU Veterinary Diagnostic Laboratory
- Michigan Department of Health and Human Services
- Local Public Health Departments

LEGAL AUTHORITY:

- Act 466, P.A. 1988 as amended, the Animal Industry Act



FARMED CERVID

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Raising deer and elk (farmed cervids) in captivity is jointly regulated by the Michigan Department of Natural Resources (DNR) and the Michigan Department of Agriculture and Rural Development's (MDARD) Animal Industry Division (AID). AID manages the animal health components of farmed deer and elk, including programs for chronic wasting disease (CWD), bovine tuberculosis (TB), and movement.

IMPACT FOR MICHIGAN:

Deer and elk are raised for breeding, meat production, private hunting, animal watching, and specialty products. Maintaining healthy farmed deer and elk is critical to protecting the health status of the free-ranging population of white-tailed deer and elk in Michigan. Disease surveillance programs provide for early detection of infected individuals, which reduces the spread of disease. Herd certification and accreditation programs minimize the risk of introduction, transmission, and spread of disease in captive cervid populations.

ACCOMPLISHMENTS:

- Continued to manage the CWD-positive deer farm identified in December 2019.
- Maintained and even exceeded response efforts and program responsibilities to farmed cervid producers after the transition to telework in March 2020.
- Worked on an implementation plan to launch the changes needed after the approval of the updated Animal Industry Act by Governor Whitmer in November 2019.
- Made further progress on program review efforts with the DNR to enhance the efficiency and management of the Farmed Cervid Program.

Metric	2019	2020
Percent of herds where CWD Certification was completed within 42 days	59%	60%
Percent of herds where TB Accreditation was completed within 42 days	58%	58%
Number of deer and elk imported into Michigan	6	5
Number of herds involved in special surveillance zones around CWD positive free-ranging deer	84	84

PROGRAM GOALS:

- Work cooperatively with the DNR to mitigate the impact of CWD in both free-ranging and farmed cervids in Michigan.
- Implement the changes outlined in the revised Animal Industry Act for farmed cervids successfully.
- Maintain Approved State Status for the United States Department of Agriculture (USDA) CWD Herd Certification Program.
- Provide excellent customer service in farmed cervid regulatory disease programs by processing CWD Certifications and TB Accreditations within 42 days.



KEY STAKEHOLDERS:

- Michigan deer and elk farmers
- Cervid Advisory Committee
- USDA Animal and Plant Health Inspection Service
- Michigan Department of Natural Resources
- United Deer Farmers of Michigan

LEGAL AUTHORITY:

- Act 466, P.A. 1988, as amended, the Animal Industry Act
- Act 190, P.A. 2000, the Privately-Owned Cervidae Producers Marketing Act Memorandum of Understanding with Department of Natural Resources
- Nine Code of Federal Regulations (CFR) Part 55 9 CFR Part 77
- Bovine Tuberculosis Eradication: Uniform Methods and Rules, Effective January 22, 1999
- Chronic Wasting Disease Program Standards, USDA, May 2014



LARGE-SCALE DOG BREEDING KENNELS

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The Large-scale Dog Breeding Kennel (LDBK) Program provides state regulatory oversight on dog kennels with more than 15 qualifying females that are in the business of selling puppies. The LDBK Program ensures specific standards are met in order to make certain that dogs are healthy, have safe housing, and receive adequate care. In addition, puppies are required to be accompanied with a current pet health certificate. Further, it is crucial to note these kennels may also require local kennel licensing or licensing by the U.S. Department of Agriculture.

IMPACT FOR MICHIGAN:

Companion animals play an increasingly important role in Michigander’s lives. Breeding kennels are a resource for specific types of dogs, which can help people find a dog that is compatible with their lifestyle or service need. Breeding kennels also provide dogs to people who enjoy participating in expositions and sporting activities. This program offers a relatively new opportunity to work with this segment of the companion animal industry as well as our local animal care partners.

ACCOMPLISHMENTS:

- Refined the annual inspection process for kennels in their second year of MDARD registration.
- Reviewed and updated kennel outreach and educational materials, emphasizing enhanced biosecurity protocols in light of the pandemic.

Metric	2019	2020
Follow-up on registration assessments for requesting kennels (target 95%)	100%	100%
Number of registered large-scale dog breeding kennels	13	12

PROGRAM GOALS:

- Partner with key stakeholders to determine best practices for identifying and resolving issues with non-compliant large-scale dog breeding kennels in 2021.
- Continue to inform animal control agencies about emergent issues in animal health/animal care and key updates within the Large-scale Dog Breeding Kennel Program. Also, gather feedback and recommendations for further development from animal law enforcement agencies and the Michigan Association of Animal Control Officers in 2021.
- Take full advantage of the database for the program by providing system-generated registrations and allowing central licensing staff, field staff, and program staff to input and view information in a more integrated way by 2022.



KEY STAKEHOLDERS:

- Michigan Association of Animal Control Officers
- Michigan’s counties, cities, villages, townships, and other local units of government
- Michigan dog breeders
- Michigan Veterinary Medical Association
- Michigan companion animal veterinarians
- Michigan pet shops

LEGAL AUTHORITY:

- Act 287, PA 1969, as amended
- Regulation 151
- Act 339, PA 1919, Dog Law of 1919



LIVESTOCK DEPREDATION

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The Livestock Depredation Program provides for fair and timely compensation to livestock owners for animals killed, injured to the extent requiring euthanasia, or missing as a result of wolves, coyotes, and cougars. Some areas of the state, and certain species of livestock and young animals, experience greater than average depredation.

IMPACT FOR MICHIGAN:

The Livestock Depredation Program supports local businesses, communities, and economies by protecting livestock producers in areas of the state with high populations of predators.

ACCOMPLISHMENTS:

- Collaborated with the Michigan Department of Natural Resources (DNR) to outline a way to have DNR and United States Department of Agriculture staff perform depredation investigations safely through using photos and/or videos to verify claims.
- Processed and issued all livestock depredation claims within 45 days of receipt, as described in the Memorandum of Understanding with DNR and in statute.

Metric	2019	2020
Number of livestock killed by wolves, coyotes, or cougars	48	58
Number of livestock reported missing	1	0
Number of livestock producers submitting claims	19	18
Total of payments made for depredation or missing livestock	\$7,570.47	\$13,601.94
Average number of days between depredation claim and payment	29	12

PROGRAM GOALS:

- Process all livestock depredation claims within 45 days of receiving approved and completed forms from both DNR and the producers.
- Continue communication efforts to livestock producers in high-risk areas on mortality management best practices in order to reduce livestock depredation claims.
- Keep assisting new producers with registering to collect their reimbursement through SIGMA (the State accounting system), thereby reducing the average number of days between the depredation claim and payment.



KEY STAKEHOLDERS:

- Michigan Department of Natural Resources
- United States Department of Agriculture Animal and Plant Health Inspection Service, Wildlife Services
- Michigan Livestock Producers

LEGAL AUTHORITY:

- Wildlife Depredations Indemnification Act, Public Act 487 of 2012



LIVESTOCK MARKETS

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The Livestock Markets Program provides regulatory oversight on animal welfare, disease control, and traceability issues as they pertain to livestock marketing activities. Entities engaged in the business of buying, selling, transporting, or negotiating the sale and transfer of livestock are required to be licensed, bonded when appropriate, and maintaining records. Additionally, licensed livestock facilities and transport vehicles are required to be well-maintained to ensure animal welfare and human safety as well as to prevent the spread of disease.

IMPACT FOR MICHIGAN:

The Livestock Markets Program protects, regulates, and promotes animal health and traceability by enforcing the Licensing Livestock Dealers Act. Keeping these businesses in compliance mitigates the risk of animal disease spread and ensures the economic success of this sector of the agricultural industry.

ACCOMPLISHMENTS:

- Assisted with the development of a GIS map that will help producers locate livestock markets approved to sell and apply official radio frequency identification (RFID) ear tags.

Metric	2019	2020
Licensed livestock markets and buying stations inspected	100%	100%
Licensed livestock dealers and truckers inspected (target 40%)	44%	0%*

**No inspections were assigned in 2020 due to an increased workload in the TB Program.*

PROGRAM GOALS:

- Implement inspection standards for increased transparency and consistency.
- Transition from using multiple databases and filing systems to using one shared database for improved internal communications and increased efficiency.



KEY STAKEHOLDERS:

- U.S. Department of Agriculture
- Michigan Farm Bureau
- Livestock Marketing Association
- United Producers, Inc.

LEGAL AUTHORITY:

- Public Act 284 of 1937, as amended, the Licensing Livestock Dealers Act
- Public Act 466 of 1988, as amended, the Animal Industry Act



POULTRY

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The Poultry Program is responsible for responding to reported cases of avian diseases, maintaining an active and passive surveillance program for avian influenza in compliance with the National Poultry Improvement Plan, and collaborating with Michigan's commercial poultry industry and other stakeholders on emergency avian disease response planning. In addition, the program works with Michigan State University (MSU) Extension and Michigan Allied Poultry Industries, Inc. (MAPI) to maintain a statewide group of certified pullorum testers to meet the needs of poultry exhibitors at Michigan fairs.

IMPACT FOR MICHIGAN:

Michigan's egg and turkey industries contribute a combined \$725 million to the state's economy, and the industries continue to grow. Michigan's poultry industry includes broiler, table-egg, and turkey flocks as well as breeding flocks of exhibition birds, table-egg hens, and upland game birds. In addition to the commercial industry, there are many small flocks throughout the state that are kept for exhibition, food, or simply as a hobby. The Poultry Program aims to protect all of Michigan's poultry flocks from reportable diseases and to respond quickly and effectively when such a disease is detected. By protecting flocks, the program helps to safeguard Michigan's economy, food availability, and public health.

ACCOMPLISHMENTS:

- Responded to eight cases of reportable disease events in backyard or commercial poultry operations.
- Updated and submitted Michigan's Initial State Response and Containment Plan for Low Pathogenic Avian Influenza (LPAI) to United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS).
- Conducted a Certified Pullorum Tester school with more than 65 attendees, bringing the total number of certified testers in Michigan to 358.

Metric	2019	2020
County fairs participating in avian influenza surveillance	12	0*
Birds tested as part of the active avian influenza surveillance program for the National Poultry Improvement Plan Subpart E flocks	695	570

* Due to the COVID-19 pandemic, the majority of the state's fairs were cancelled.

PROGRAM GOALS:

- Perform avian influenza surveillance at county fairs.
- Conduct a Certified Pullorum Tester school.
- Assist industry in compliance with the National Poultry Improvement Plan's H5/H7 avian influenza monitored and clean programs.
- Maintain Michigan's Initial State Response and Containment Plan for LPAI in accordance with USDA requirements.
- Continue to plan and prepare for an emergency poultry disease response.



KEY STAKEHOLDERS:

- Michigan Allied Poultry Industries
- Michigan State University Veterinary Diagnostic Laboratory
- Michigan State University Extension and 4H
- United States Department of Agriculture Animal and Plant Health Inspection Service, Veterinary Services
- Michigan Farm Bureau

LEGAL AUTHORITY:

- Act 466, PA 1988, as amended, The Animal Industry Act
- Code of Federal Regulations (CFR) parts 145, 146 and 147, The National Poultry Improvement Plan (NPIP)



SHEEP AND GOATS

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The Sheep and Goats Program focuses on ensuring these animals have proper official identification and providing educational information to producers on scrapie and other animal health concerns. Scrapie is a transmissible spongiform encephalopathy affecting sheep and goats. The presence of scrapie in the U.S. sheep and goat population can have an economic impact through production losses, lost exports, and disease costs.

Sheep and goat reportable diseases, such as scrapie, are tracked and investigated by the Michigan Department of Agriculture and Rural Development's (MDARD) Animal Industry Division (AID) when appropriate.

IMPACT FOR MICHIGAN:

Producers of sheep and goats in Michigan can participate in interstate and international trade because of a maintained scrapie-free status. Monitoring for official identification on sheep and goats at livestock markets provides animal disease traceability and minimizes the use of resources in disease investigations.

ACCOMPLISHMENTS:

- Conducted broader outreach to sheep and goat producers through the Michigan Sheep Producer's Association's annual conference and local auction markets.
- Investigated and responded to reportable diseases.
- Continued education and outreach efforts to sheep and goat producers on the importance of scrapie ID requirements and recordkeeping.

Metric	2019	2020
Compliance actions for inadequate official identification observed at livestock markets	51	30
Scrapie identification compliance at livestock markets for sheep	98%	96%
Scrapie identification compliance at livestock markets for goats	94%	93%

PROGRAM GOALS:

- Maintain state status for United States Department of Agriculture Scrapie Eradication Program.
- Continue efforts to ensure all sheep and goats leaving a Michigan premises have official identification.
- Investigate sheep and goat reportable diseases when the situations arise.



KEY STAKEHOLDERS:

- Michigan sheep and goat farmers
- Michigan livestock markets
- United States Department of Agriculture Animal and Plant Health Inspection Service, Veterinary Services
- Michigan Sheep Producers Association
- American Goat Federation

LEGAL AUTHORITY:

- Act 466, P.A. 1988, as amended, the Animal Industry Act
- CFR 54-Control of Scrapie
- Scrapie Eradication Uniform Methods and Rules, effective June 1, 2005



SWINE

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The Swine Program supports the statewide swine industry through implementing, maintaining, and coordinating animal health programs. These programs focus on preventing the introduction of foreign animal diseases into the state, specifically African Swine Fever (ASF), Classical Swine Fever (CSF), and Foot and Mouth Disease (FMD). Michigan Department of Agriculture and Rural Development creates emergency plans and participates in exercises to be ready to respond to the presence of one of these diseases. Also, the program manages swine importation requirements and Swine Health Plan agreements with other states.

IMPACT FOR MICHIGAN:

The swine industry in Michigan is a growing and significant part of the state’s agricultural economy. In order to keep this industry vibrant, pigs and pork products must have access to both U.S. and international markets. To keep these channels open, it is vitally important that the U.S. remains free of foreign animal diseases. In addition, other emerging diseases could cause significant economic impacts to the industry while zoonotic diseases could affect both swine and human health.

ACCOMPLISHMENTS:

- Planned out various contingencies with industry partners and sister agencies for the back-up of hogs resulting from slow downs at packing plants due to COVID-19.
- Participated in an ASF workgroup (consisting of regulatory staff from the 15 top swine producing states, USDA, and industry representatives) to develop consistent response plans.
- Worked with the Michigan Pork Producers Association and Michigan State University Extension to advance Secure Pork Supply planning and readiness.

Metric	2019	2020
USDA pseudorabies and brucellosis Free, Stage 5 status	Maintained	Maintained
Swine identification tags distributed to county fairs	11,127	7,749
Seneca Valley Virus investigations/number of positive pigs	108/418	101/424

PROGRAM GOALS:

- Work with external stakeholders to create Secure Pork Supply Plans in order to be prepared for a foreign animal disease (FAD) outbreak.
- Increase producer awareness of biosecurity protocols and other mitigation practices to prevent the introduction of an FAD into production facilities.
- Maintain Michigan’s pseudorabies and brucellosis free status.



KEY STAKEHOLDERS:

- Michigan Pork Producers Association
- Michigan State University Extension
- Michigan State University College of Veterinary Medicine
- Michigan Swine Health Committee
- Michigan State University Veterinary Diagnostic Laboratory
- Michigan Department of Natural Resources

LEGAL AUTHORITY:

- Animal Industry Act, 1988 PA 466, as amended
- Pseudorabies and Swine Brucellosis Control and Eradication Act, 1992 PA 239



VETERINARY BIOLOGICALS

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Companies and manufacturers selling or distributing veterinary biologics in Michigan are regulated by the state and federal government. Veterinary biologics are regulated federally through Title 9, subchapter E, Part 101-123 of the Code of Federal Regulations. The Michigan Department of Agriculture and Rural Development Director has the authority to restrict sale and distribution when necessary for the protection of domestic animals or public health, interest, or safety through the Animal Industry Act, 1988 PA 466, MCL 287.743. Sale and distribution requests are submitted to MDARD through the State Veterinarian's office. Approvals or denials are based on requirements outlined in the statute and rules.

IMPACT FOR MICHIGAN:

Michigan's 3,000 licensed veterinarians and 35 million domestic animals rely on veterinary biologics. These products help ensure animal health, create a safe food supply, and protect the general public from zoonotic diseases.

ACCOMPLISHMENTS:

- Assisted with 17 studies exploring new products/uses for veterinary biologics.

Metric	2019	2020
Approvals for veterinary biologicals	169	175
Approvals for autogenous vaccine/bacterin	152	158
Doses of autogenous vaccine/bacterin	32,381,300	26,633,100
Approved veterinary biological studies	11	17

PROGRAM GOALS:

- Ensure veterinary biologicals are safe, effective, and available for the diagnosis, prevention, and treatment of animal diseases.
- Have an efficient and effective approval/denial process for veterinary biologicals.
- Ability to measure the impact of the Veterinary Biological Program.



KEY STAKEHOLDERS:

- Private Veterinarians
- Pharmaceutical Companies
- Livestock Producers

LEGAL AUTHORITY:

- Act 466, P.A. 1988, as amended, the Animal Industry Act R 287.703 Importation, distribution, and use of veterinary biologicals

APPENDIX A: 2020 REPORTABLE DISEASES

Livestock Diseases:

Disease	Species	Number of Animals
Whirling Disease	Aquaculture	1 Premises/2 Lots
Bovine Leukemia Virus	Bovine	252
Johnes	Bovine	94
Listeriosis	Bovine	1
Toxic Substance Contamination	Bovine	1
Tuberculosis	Bovine	4 Herds, 1 Feedlot
CAE (Caprine Arthritis Encephalitis)	Caprine	34
Johnes	Caprine	6
Listeriosis	Caprine	3
Q Fever	Caprine	1
CWD (Chronic Wasting Disease)	Cervid	46
Johnes	Cervid	1
Brucellosis	Ovine	1
Listeriosis	Ovine	1
Q Fever	Ovine	1
Seneca Valley Virus	Porcine	409
ILT (Infectious Laryngotracheitis)	Poultry	1 Flock
Mycoplasma gallisepticum	Poultry	1 Flock
Mycoplasma synoviae	Poultry	6 Flocks

Small Animal, Equine and Exotic Diseases:

Disease	Species	Number of Animals
Tuberculosis	Avian	4
Rabies	Bat	52
Brucellosis	Canine	4
Leishmaniases	Canine	1
Leptospirosis	Canine	66
EEE (Eastern Equine Encephalomyelitis)	Equine	37
EHM (Equine herpesvirus myeloencephalopathy)	Equine	1
EIV (Equine Influenza Virus)	Equine	2
Equine Piroplasmosis	Equine	1

Equine rhinopneumonitis (EHV-1 non-EHM)	Equine	1
Strangles	Equine	21
SARS-CoV-2	Mustelid	2
Rabies	Skunk	4

APPENDIX B: 2020 DEPREDAATION REPORT

Vendor Name	# Animals	Species	Reason	Amount
Bartlett, Benjamin	2	Ovine	Coyote - Kill	\$283.50
Buckham Farms	17	Ovine	Coyote - Kill	\$3,556.80
Campbell Burnt Land Farms	3	Ovine	Coyote - Kill	\$818.75
Crawford, Jonathan	1	Bovine	Coyote - Kill	\$169.00
DeHaan, Richard	2	Bovine	Wolf - Kill	\$445.00
DeMatio, Brian	2	Ovine	Coyote - Kill	\$213.25
Doster, Millard	3	Ovine	Coyote - Kill	\$547.00
Dykstra, Terry	1	Bovine	Wolf – Kill	\$640.00
Dykstra, Tom	1	Bovine	Wolf – Kill	\$350.00
Jalkanen, Jack	1	Bovine	Coyote – Kill	\$171.00
Jolliff, Bethany	1	Bovine	Wolf - Kill	\$525.00
Kempker, James	2	Bovine	Coyote - Kill	\$1,475.00
Mayer, Joshua	1	Bovine	Wolf - Kill	\$225.00
McKulsky, Tana	1	Ovine	Coyote - Kill	\$96.50
Mieske Farm Inc	1	Bovine	Coyote - Kill	\$200.00
Millin, Jeff	1	Bovine	Coyote - Kill	\$756.88
Shimp, Norman	1	Bovine	Wolf - Kill	\$770.00
Wernette, Anthony	17	Ovine	Coyote - Kill	\$2,359.26
TOTAL	58			\$13,601.94