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CHRONIC WASTING DISEASE MANAGEMENT IN NEBRASKA

INTRODUCTION

The presence of Chronic Wasting Disease (CWD) in free-roaming and domesticated cervine animal populations of deer and elk in the state of Nebraska presents a threat to the natural resources of the state. The presence of this disease could drastically restrict the successful achievement of the goals and objectives of the Nebraska Game and Parks Commission (NGPC) as set forth in their long range plan "Focusing on the Future...A Plan for Nebraska's Fish, Wildlife and Parkland Resources". Objective 3 in the Big Game section of this plan is to "Monitor the status and health of deer, so reasonable assumptions may be made annually regarding population levels." Strategy 2 of this objective is "Collect and maintain biological information representative of herd health". Any successful deer and/or elk management program maintains an up-to-date knowledge of herd health to assist in making management decisions regarding harvest recommendations to control population levels. Additionally, the practice of maintaining private herds of cervids (deer and elk) for economic gain by individuals has become a common practice of the alternative agriculture community. The monitoring of these operations for herd health status is vital in protecting both the free-roaming populations of cervids and the financial investment of private individuals in their agricultural operations. Questions of environmental contamination from wildlife disease issues and perceived or real human health issues require the involvement of agencies not routinely involved with issues of NGPC and require multi-agency collaboration and consensus.

CWD is one of a family of diseases known as Transmissible Spongiform Encephalopathies (TSEs). Other diseases in this group include bovine spongiform encephalopathy (commonly called mad cow disease or BSE), scrapie in sheep, transmissible mink encephalopathy (TME), feline spongiform encephalopathy (FSE) in both domesticated and zoo cats and Creutzfeldt-Jakob Disease (CJD) in humans.

The occurrence of CWD in free-roaming and domesticated cervine animals in Nebraska has the potential to cause severe economic impacts to the state and to individual citizens that depend on this resource for part or all of their annual income. Maintaining the physical separation of free-roaming and captive cervids is necessary for disease prevention on both sides of the fence. If public concern becomes severe enough, the sale of deer permits could decrease to a point that will drastically impact the annual budget of NGPC. Private individuals that operate business concerns in areas where hunters contribute a significant amount to their annual income would feel an even greater impact. The 2002 National Survey of Hunting, Fishing and Wildlife Related Recreation indicates that the big game hunting related income to Nebraska is \$250,000,000. The restrictions placed on commercial breeders of cervids would cause a total loss of their investments and income potential if movement of their product is prevented.

BACKGROUND

CWD has been present in the neighboring states of Colorado and Wyoming since at least 1975 but was only confirmed in Nebraska in 1999 when a hunter harvested mule deer from Kimball County tested positive. Since that time, concern over this disease has increased due to the finding of CWD in free-roaming white-tail and mule deer in Cheyenne, Kimball, Scotts Bluff and Sioux counties as well as in domesticated elk herds in Cherry, Cheyenne and Sioux counties. The positive test of a whitetail deer, taken in a penned situation in northern Sioux County in 2001, demonstrates the need for quick and aggressive action to control this disease. Since the finding of the first free-roaming positive in Kimball County, the Commission has confirmed CWD in two additional mule deer from Kimball County, one from Cheyenne County, one from Scotts Bluff County and ten from northern Sioux County. Additionally, CWD has been confirmed in four domesticated elk herds in Nebraska, one in Cherry County, one in Cheyenne County and two in Sioux County. Three of these facilities have been depopulated while the Cherry County herd was released from quarantine after extensive testing of additional animals over a three-year period. The northern Sioux County free-roaming positives were in close proximity to the infected penned whitetail herd which, when depopulated, had a 52% infection rate among 169 penned deer.

In Nebraska the Game and Parks Commission has responsibility for management and protection of the free-roaming cervid populations while the Nebraska Department of Agriculture (NDA) has been charged with the regulation of the domesticated cervine animal industry. With the finding of CWD in Wisconsin and Illinois, the local and national media have elevated the public's interest in this disease and perceived human health implications to a level that requires action by various state agencies. Questions have arisen over the proper disposal of cervid carcasses used for testing for CWD and also over the potential, though scientifically unproven, threat to human health. The Department of Environmental Quality (NDEQ) has regulatory authority over the use of landfills; the disposal of carcasses of wild animals used for testing for the presence and prevalence of CWD is the responsibility of the Game and Parks Commission. The Nebraska Health and Human Services System (HHSS) is responsible for tracking similar diseases that may infect the human population of our state. Therefore, any response to CWD in Nebraska must, by necessity, involve several agencies at various levels and a coordinated response is the only way to properly address the multitude of challenges presented by the presence of CWD in Nebraska.

STATE OF NEBRASKA CHRONIC WASTING DISEASE ACTION PLAN

The following sections of this document delineate actions that various agencies of the State of Nebraska will undertake to monitor and manage Chronic Wasting Disease in the state. Each agency action item will be a priority for that agency in the realm of animal disease management, research and public information. Additionally, the questions of human health impacts are addressed with specific objectives for monitoring that aspect of the disease. Each agency commits to these items to the extent that resources, both fiscal and staffing, permit and will diligently seek to obtain funding from outside sources, both federal and private, as well as dedicating available state funds to this effort. To the extent practicable, this effort will not detract from ongoing programs of the agencies in meeting their legislatively mandated responsibilities.

RESEARCH

The scientific understanding of CWD is growing on a daily basis. Research is being conducted in several states, by numerous federal agencies and by the federal government. All research is aimed towards a better understanding of the disease, its pathology, epidemiology and transmission. Additionally, research is underway at several laboratories to determine the transmissibility of this disease to humans. This human factor research is being conducted on primates and with genetically altered animals to mirror the human genetic make-up. Other research is looking at the environmental contamination issue and how long the infectious agent survives in the environment. In Nebraska, the Game and Parks Commission is cooperating with Colorado State University and the University of Wyoming and both the Nebraska Department of Agriculture and the Commission are cooperating with the U. S. Department of Agriculture-Agriculture Research Service on several research programs aimed towards a better understanding of the disease. These projects include genetic predisposition of animals to CWD, rate of spread in natural populations and impacts of various management actions on disease presence and prevalence. Other research projects will be supported as resources become available. Research needs not being addressed in Nebraska include the transmission of CWD across fences from domesticated to wild and/or from wild to domesticated, impacts of deer density on CWD prevalence, predisposition difference between species of cervids and prevalence of CJD in Nebraska.

- The Nebraska Game and Parks Commission (NGPC) will support on a priority basis, scientific research that will facilitate the continued expansion of knowledge of CWD, including research that provides a more thorough understanding of the method of transmission, route of infection in individual animals, environmental contamination, cross-species transmission, impact of management actions, disease and species density dependent factors, relationship to other TSEs and human dimensions research.
- The Nebraska Department of Agriculture (NDA) will support, on a priority basis, scientific research, as resources and authority permit, that will facilitate the understanding of the relationships between domesticated and free-roaming cervids as pertains to efficiency of fence design, disease introduction and transmission.

- The Nebraska Department of Environmental Quality (NDEQ) will support, on a priority basis, and as resources permit, scientific research that will add to the knowledge base in reference to CWD environmental contamination issues and the role different disposal methods play in the perpetuation of the disease. The NDEQ, in cooperation with the NDA, continue to develop its Homeland Security related Catastrophic Animal Morality Management Planning. Such planning has an element of research that is likely to be applicable to CWD disposal issues.
- The Nebraska Health and Human Services System (HHSS) will support, on a priority basis, scientific research that adds to the knowledge base on the occurrence and prevalence of human TSEs in Nebraska and any relationship between human TSEs and CWD.

DISEASE MANANGEMENT

The management of any disease in wild mammals is, at best, an effort to prevent the introduction and/or spread of the disease of concern. While most diseases have a known pathogen that is the causative agent, CWD presents a unique situation in that the causative agent is suspected of being a misshapen protein called a prion, however it still lacks solid scientific evidence that it actually causes the disease. The vast body of scientific knowledge leads one to suspect that the prion theory is, in fact, true and all knowledgeable scientists are working on that premise. With this in mind, any management actions must also address the possible transmission of the disease, in addition to addressing the impacts of CWD on free-roaming and domesticated cervid populations. Management actions for free-roaming ungulates include population reductions to slow and/or prevent the spread of the disease, collection of statistically valid sample numbers to determine the presence and prevalence of CWD and assessment of the impact of CWD on cervid population dynamics and social behavior. In domesticated cervine animals, management is aimed at surveillance and monitoring to detect the presence of CWD, restrictions on importation from known endemic areas to prevent the introduction of the disease and depopulation of infected premises. Management actions for both free-roaming and domestic cervids are aimed at preventing contact between the two classes of animals. At the present time, possible environmental contamination is managed by insuring that samples taken for testing are either buried in a licensed landfill after being double bagged in heavy-duty garbage bags or incinerated. Research conducted and/or supported as outlined in the research section of this document will facilitate changing management actions to apply the best science to all management decisions. All management actions and decisions must be aimed at the prevention of CWD spreading into new areas and the containment and, if possible, elimination of the disease in areas where it currently occurs.

- The NGPC will continue to utilize agency staff, hunter harvest and targeted surveillance to obtain samples for the surveillance and monitoring of Nebraska's free-roaming cervid herds for CWD. Management actions undertaken will utilize the most current and scientifically acceptable tools that have a chance in reducing the presence and/or prevalence of CWD.

- The NDA will continue to monitor the domesticated cervid herds of Nebraska for CWD through its mandatory death reporting and testing program. Depopulation of herds with CWD positive animals will remain a first priority of NDA. However, such depopulation requires indemnification of taken animals and can only be accomplished with assistance from the U. S. Department of Agriculture, Animal and Plant Health inspection service (USDA-APHIS). Additionally, NDA will review its emergency orders reference the importation of cervids and adopt permanent regulations that reflect the restrictions contained in the emergency orders.
- NGPC and NDA will establish protocol for the disposition of otherwise free-ranging cervidae contained within a captive cervidae facility licensed by NDA (see attachment A).
- NDEQ will periodically review its policy statements in reference the disposal of carcasses and carcass parts to determine if they can be relaxed without undue harm to the environment. NDEQ will study the feasibility of revising current regulations to address disposal of cervids destroyed for testing purposes, hunter harvested carcasses and carcass parts and biological tissues used during the disease testing process.

SURVEILLANCE AND MONITORING

The proper management of any animal disease requires accurate information on the presence and prevalence of the disease in the population in question. For CWD, the only practicable method to determine if an animal is infected is *post mortem*. The *ante mortem* test available requires the capture of the animal, the removal of a very specific portion of its tonsil tissue and the marking of the animal in such a manner that it can be readily relocated and removed from the population if the test is positive. *Post mortem* testing requires the removal of either the brain stem or retropharyngeal lymph node, or both. The tissue is then either subjected to an immunohistochemistry (ICH) test or an enzyme-linked immunosorbent assay (ELISA) test. Both of these tests require specialized equipment and the laboratory conducting the tests must be certified to do so by the USDA-National Veterinary Services Laboratory.

Three types of surveillance are conducted to detect CWD in free-roaming cervids. They are: 1) agency surveillance during which NGPC staff collects a specified number of cervids from a specific location to determine disease parameters; 2) targeted surveillance during which NGPC staff collect specific animals that exhibit the clinical signs of the disease and 3) hunter harvest surveillance during which hunters are asked to submit the heads of cervids harvested to NGPC for testing purposes. Surveillance in domesticated cervine animal populations consists of mandatory testing of all animals, over 16 months of age, that die for any reason within the domesticated cervine animal facility, testing of any animal exhibiting clinical signs of CWD, and testing of any animals sacrificed during a depopulation effort.

- NGPC will continue to conduct agency, targeted and hunter harvest surveillance throughout Nebraska to determine the presence and prevalence of CWD in the

cervid populations. In areas where CWD is endemic, NGPC will make a special effort to obtain samples for CWD testing each year from hunter harvested animals. If the need arises, NGPC will utilize agency personnel to reduce population densities in CWD endemic areas.

- NDA will continue to require mandatory testing of all cervids over 16 months of age that: a) die, for any reason, in domesticated cervine animal facilities, b) that exhibit the clinical signs of CWD, and/or c) are sacrificed during a depopulation effort.
- All agencies will request assistance from veterinary experts for wild animal sample collection.

TRANSLOCATION OF CERVIDS

One of the most common methods of disease introduction in previously uninfected populations is through the translocation of animals from one location to another. The successful management of CWD dictates that introduction of cervids into the state be prevented if there is any chance that they will introduce CWD and/or other diseases. Actions addressing the prevention of the spread of CWD in Nebraska will be in vain if purposeful introductions are not curtailed until more is known about the disease.

- The NGPC will not translocate any free-roaming cervids into or out of the State of Nebraska until scientific research and methodology is available to insure that the animals proposed for movement are free of CWD and/or any additional diseases of concern.
- The NGPC will evaluate the current 5-year ban on the private importation and ownership of mule deer in 2006 to determine if the ban should be continued or modified.
- Cervids from known CWD endemic areas will not be permitted into the state except for peer reviewed scientific research in tightly controlled situations. The current regulations banning private importation and ownership of whitetail and mule deer will remain in place indefinitely and be reexamined when scientific research and methodology is available to insure that animals proposed for movement are free from CWD and other diseases of concern.
- NDA will not approve the importation of domesticated cervine animals from known CWD endemic areas. New applicants for domesticated cervine animal facilities in the Nebraska endemic areas will be advised of the necessity of preventing disease introduction and such applications will not be approved.

FEEDING AND BAITING OF WILDLIFE

It is accepted scientific knowledge that the artificial concentration of any species of wildlife increases the risk of disease transmission. With CWD, the majority of experts agree that some transmission is via body fluids such as saliva, feces and, possibly urine. The concentration of cervids around artificially developed feeding and baiting sites greatly increases the potential for the ingestion of contaminated food. Even in the endemic area, CWD could spread faster through artificial concentrations of deer and/or

elk. Wildlife disease experts believe that artificial baiting and feeding is responsible for bovine tuberculosis sustaining itself in Michigan's deer herds. Additionally, brucellosis in Wyoming and Montana elk herds in the Greater Yellowstone Area (GYA) have acted as a reservoir for reinfection of domestic livestock in the area. Elk in the GYA have been artificially fed for decades and this practice is continuing, further exacerbating the problem. Artificial feeding is an unnatural activity, due to the repeated replacement of food in the same location and it results in much more direct contact among deer and contact with potentially contaminated feed and ground. The concern with unnatural concentrations extends to the use of mineral blocks, salt blocks, protein blocks and other similar blocks or supplements. Since baiting and feeding is one risk factor that can be controlled, prudent management calls for a prohibition on this practice where disease risks are of a significant concern. Food sources from normal agricultural practices such as grain waste fields and other activities do not pose the same risk factor due to the fact that they are not usually concentrated in a small area and are not replaced after consumption by wildlife.

- NGPC will continue to evaluate the current ban on hunting free-roaming cervids over bait and research the desirability to extend the ban to a statewide regulation to prevent artificial concentration of wildlife species.

CARCASS DISPOSAL

Due to the unknowns reference the life of the infectious agent for CWD in the environment, the proper disposal methods for potentially infected and confirmed deer and elk carcasses have been debated for several months. A thorough evaluation of disposal techniques, conducted by the Wisconsin Department of Natural Resources with assistance from the Wisconsin Department of Health and Family services, indicates that burial in licensed landfills, incineration, and tissue digestion are acceptable methods of disposal. Tissue digestion equipment is cost prohibitive at this time. Incineration is a possibility with the acquisition of proper equipment. Although initially expensive, the long-term costs are not as high as tissue digestion equipment. Burial in an approved landfill is the most practicable and least expensive method of disposal. Currently, in Nebraska, landfill disposal is the method of choice.

- NGPC, in consultation with NDEQ and NDA, will investigate alternative methods of disposing cervid carcasses that may have been exposed to CWD, including the use of mobile air curtain incinerators. If deemed feasible and appropriate, said equipment will be purchased as funds are available and locations for operating said incinerators will be selected after consultation with NDEQ.
- NDA, in consultation with NDEQ and NGPC, will investigate alternative methods of disposing cervid carcasses that may have been exposed to CWD, including the use of mobile air curtain incinerators. If deemed feasible and appropriate, said equipment will be purchased as funds are available and locations for operating said incinerator will be selected after consultation with NDEQ.
- NDEQ will provide technical expertise to NGPC and NDA to assist in selecting sites for use of mobile air curtain incinerators, if used. NDEQ will continue to

approve the use of approved landfills for carcass disposal until such time as acceptable scientific knowledge indicates otherwise.

- NGPC, NDA and NDEQ will work together to determine the best carcass disposal method and to research alternative methods.

HUMAN HEALTH ISSUES

At this time, there is no scientific evidence of transmission of TSE from cervids to humans. Extensive investigations by the Centers for Disease Control (CDC) and the World Health Organization (WHO) have led both entities to issue statements that they do not believe that CWD poses a human health risk. The human form of TSE, Creutzfeldt-Jakob disease, occurs in approximately one in a million individuals worldwide. CJD occurs in Nebraska at or below the worldwide average. The Health and Human Services System has identified CJD as a reportable disease and keeps records of its occurrence in Nebraska. Although there is no identifiable risk to humans from consuming animals infected with CWD, it cannot be said with 100% certainty that CWD will not transmit from cervids to humans. Therefore, it is only prudent that those citizens participating in the sport of hunting cervids be fully informed to enable them to make an intelligent decision on consuming meat from harvested animals. The fact that BSE has caused human health problems in the United Kingdom has caused some citizens to assume that CWD will do the same. The infection of humans with the BSE organism in England is suspected to be related to the consumption of brain and central nervous system tissue. It would be prudent for individuals choosing to include cervids in their diet to avoid consumption of the brain and central nervous system tissues.

- NGPC will remain informed of current scientific knowledge concerning the possible risk to human health posed by CWD. Additionally, NGPC will continue to keep hunters and the general public informed reference the latest scientific evidence concerning human health and CWD.
- HHSS will maintain CJD as a reportable disease and maintain records on the occurrence of this human TSE in Nebraska. Additionally, HHSS will research the history of CJD in Nebraska and identify any changes in the mortality and morbidity related to TSE.

INFORMATION SHARING

CWD is of interest locally, nationally and internationally. Participation in state, regional, national and international work groups and conferences reference CWD in particular and TSEs in general is an important part of maintaining a knowledge base reference all aspects of CWD surveillance and management. Any action undertaken by an individual state agency in respect to CWD will impact the programs and activities of the other agencies involved with TSE monitoring and management in Nebraska. It is imperative that full and complete sharing of all information regarding the occurrence, prevalence and management actions taken occurs. Without such cooperation, all programs concerning human and animal TSE will suffer.

- NGPC, NDA, NDEQ and HHSS will share all information they maintain or obtain reference CWD and other TSEs in Nebraska, to the extent allowed by law. This information sharing will be conducted in an expedited and complete manner to insure that all entities are fully informed of happenings concerning any TSE.
- NGPC, NDA, NDEQ and HHSS will participate in state, regional, national and international work groups and conferences to the extent practicable. This participation shall include, but is not limited to, exchange of information, presentation of technical and popular papers, discussion of management actions and research activities.
- NGPC, NDA, NDEQ and HHSS will assist each other in the possible publication of scientific information reference TSEs in Nebraska in appropriate scientific journals and other outlets. The publication of scientific information will be based upon resource and trained staff availability between the various state agencies.

PUBLIC INFORMATION

It is an obligation of each state agency involved to fully inform the citizens of the State of Nebraska of their actions and information sources reference TSEs. Without an informed citizenry, misrepresentations by some of the media and speculation will rule public thought and reaction. Additionally, each citizen must make their own decision in regard to the use of the natural resources that may be impacted by CWD or other TSEs.

- NGPC will provide information to the public that utilizes the cervid resource of Nebraska to enable them to make informed decisions on that use. This will be done through targeted mailings, general news releases, inclusion of information in hunt guides and other agency publications, internet postings, participation in multimedia productions, response to individual citizen inquires and through other methods as they become available.
- NDA will provide the public information on the alternative livestock industry and impacts of disease actions on that industry. This will be done through targeted mailings, general news releases, inclusion of information in agency publications as appropriate, internet postings, participation in multimedia productions, response to individual citizen inquires and through other methods as they become available
- NDEQ will provide information to the public and to landfill operators on proper disposal techniques for cervid carcasses and carcass parts. This will be done through targeted mailings, general news releases, inclusion of information in agency publications, internet postings, participation in multimedia productions, response to individual citizen inquires and through other methods as they become available
- HHSS will provide confirmed information on the occurrence of CJD and other human TSEs in Nebraska. This will be done through targeted mailings, general news releases, inclusion of information in agency publications, internet postings, participation in multimedia productions, response to individual citizen inquires and through other methods as they become available.

ESTABLISHMENT OF NEBRASKA TSE TASK FORCE

To properly address this, and other disease issues in Nebraska, it is imperative that state agencies work together to insure coordination and sharing of information and resources occurs. Additionally, the citizens of Nebraska expect their state agencies to work together to avoid duplication of efforts and/or contradicting policy and regulations. Without such coordination and communication, all efforts aimed at controlling CWD and/or other TSEs, both animal and human, become much more difficult.

- NGPC, NDA, DEQ and HHSS agree to form a joint state-agency working group that will work together to achieve the objectives and action items contained in this plan. Each agency director will designate a primary CWD/TSE contact and these individuals will meet at least quarterly (or more often if necessary) to share or discuss new information and plan joint efforts.

The undersigned agencies agree to, in principal, the action items and concepts contained in this plan and will, to the utmost of their respective agency's ability, carry out this action plan to address the issue of CWD and other TSEs in the State of Nebraska.

/s/ Rex Amack
Rex Amack, Director
Game and Parks Commission
Date 11/21/03

/s/ Merlyn Carlson
Merlyn Carlson, Director
Department of Agriculture
Date 8/29/03

/s/ Mike Linder
Mike Linder, Director
Department of Environmental Quality
Date 9/25/03

/s/ Dick Nelson
Dick Nelson, Director
Health and Human Services
Date 11/20/03

Attachment A: DISPOSITION OF CONFINED WILD CERVIDAE PROTOCOL NEBRASKA GAME AND PARKS COMMISSION

Purpose

The purpose of this protocol is to provide uniform guidelines regarding the disposition of wild cervidae confined within Domesticated Cervine Animal Facilities (DCAF) in Nebraska.

Definitions

The following definitions are provided to lend clarity to this protocol:

1. Commission – Commission means the Game and Parks Commission or its authorized agent.
2. Department – Department means the Nebraska Department of Agriculture or its authorized agent.
3. Captive – Captive, as it pertains to captive wildlife, captive wild birds, or captive wild mammals, means the condition of captivity.
4. Captivity – Captivity means a condition, which limits or restricts the free egress or free range of wild birds, wild mammals, or wildlife by the use of fences, barriers, or restraints.
5. Wild mammals – Wild mammals means the species of mammals native to, migrating to or through, or having established free-ranging populations in the State of Nebraska except the fallow deer, the house mouse, the Norway rat, the black rat, the feral domestic dog, and the feral domestic cat.
6. Domesticated cervine animal – Domesticated cervine animal means any elk, deer, or other member of the family cervidae legally obtained from a facility which has a license, permit, or registration authorizing domesticated cervine animals which has been issued by the state where the facility is located and such animal is raised in a confined area.
7. Domesticated Cervine Animal Facilities – Domesticated Cervine Animal Facility means a premises where one or more domesticated cervine animals are kept or reared for any purpose, or two or more premises under common ownership or supervision geographically separated but has an interchange of domesticated cervine animals, without regard to whether the domesticated cervine animals are infected or exposed to disease, as long as the premises are located within a county or adjacent county.

Legal Authority

The following is a brief summarization of statutes and regulations found in Nebraska's Revised Statutes and Nebraska's Administrative Code (NAC) pertaining to wild cervidae confined within DCAFs and outlines the Department and Commission role in handling these situations.

- Game Law states that the Commission shall adopt and promulgate rules and regulations governing the purchase, possession, propagation, sale, and barter of wild mammals, and wildlife in captivity (§37-477). Under authority of the Game Law, regulations (Title 163, NAC, Chapter 4, Nebraska Game and Parks Commission – Wildlife Regulations) were drafted to aid in administering its contents.

According to Chapter 4, Wildlife Regulations, it is unlawful for any person or persons to retain white-tailed deer (*Odocoileus virginianus*) or mule deer (*Odocoileus hemionus*) in captivity, as they constitute both economic and ecologic threat (008.07A). However, persons who possess mule deer, registered with the Nebraska Department of Agriculture on July 24, 2002, may retain these animals and their progeny in captivity provided said animals are held only upon the property where they were legally held captive prior to July 24, 2002 and upon immediately adjacent additions which total no more than 25% of the original property acreage, and only as long as said animals are owned by the person or persons holding title to said original animals on July 24, 2002 (008.07B2). It also states that the Commission may formulate plans for the disposition of wild cervidae found within a captive cervine facility in consultation with the Department as provided for in §54-2317 (008.01A).

- The Domesticated Cervine Animal Act allows DCAF permitholders 24 hours to notify the Commission and the Department after discovery of wild cervidae in a DCAF (§54-2317). Upon notification, the Commission shall have access to any premises where domesticated cervine animals may be for the purpose of assessing or removing populations of wild cervidae (§54-2322).

The resulting regulations (Title 23, NAC, Chapter 16, Nebraska Department of Agriculture – Domesticated Cervine Animal Regulations) affirm in Section 010.06 that DCAF permitholders have 24 hours to report the discovery of wild cervidae in a DCAF to the Commission and the Department. However, it appends that the Commission shall consult with the Department before removal of such animals from the facility.

- The provisions of the Animal Importation Act (§§54-784.01 to 54-796) do not reference the Commission or cervidae in the statutes. Nonetheless, a regulation has been promulgated under this statute that contains language pertaining to the Commission and cervidae. On May 8, 2002 the “Cervid Order Interstate and Intrastate Movement” was issued in addition to the requirements found in Title 23

- NAC, Chapter 2, Nebraska Department of Agriculture - Animal Importation Regulation. Section IIB, Sub-section 4a of this Order states that DCAFs which have wild cervidae within the enclosure must notify the Commission immediately and remove such animals in accordance with the Commission and the Department.

Procedures

At any time when Commission personnel meet with a DCAF permit holder to discuss disposition options, at least one member of Commission Wildlife Division and at least one member of Commission Law Enforcement Division must be present. An accurate log will be maintained regarding all contacts with permit holders.

Commission Wildlife Division Management Section will contact all DCAF permit holders by phone prior to sending written notice. The phone call will alert permit holders to the written notice that will be mailed and to answer preliminary questions. The written notice (signed by appropriate personnel within the Commission and the Department) will serve as a reminder to permit holders of the illegality of possessing wild cervidae in Nebraska, and ask if any wild cervidae are within the perimeter of the DCAF. The written notice will contain three essential items:

1. Summary of statutes and regulations that pertain to confined wild cervidae in Nebraska;
2. Summary of potential disciplinary actions including probation, suspension and revocation;
3. Deadline (30 days from postmark) for response from permit holder.

The subsequent procedures will be followed when addressing the disposition of wild cervidae confined within a DCAF in Nebraska.

- If a DCAF reports wild cervidae within its enclosure, Commission personnel will meet with the permit holder within 30 days of initial notification, to assess the situation and discuss disposition options. Once a disposition plan is developed, it will be forwarded to the Department.
- If wild cervidae are suspected to exist within a DCAF that has not reported them to the Commission or the Department, Commission personnel will meet with the permit holder, to assess the situation. If wild cervidae are present, a disposition plan will be developed and forwarded to the Department.
- If wild cervidae are known to exist within a DCAF that has failed to report them to the Commission or the Department, Commission personnel will meet with the permit holder to assess the situation and discuss disposition options. A letter will be sent to the Department requesting immediate suspension of DCAF permit until the situation is absolved.

All disposition plans must address the following items:

1. *Goal.* The goal of all disposition plans will be to completely depopulate the free-roaming cervids contained within the captive cervid facility. It is understood that meeting this goal would sometimes require sustained efforts over several years.
2. *Compliance deadline.* DCAFs will be given a maximum of two (2) years to comply with the plan. The Commission may grant an extension to the deadline.
3. *Disposition method.* Commission approved methods of disposition include:
 - DCAF could corral the wild cervidae and Commission personnel would remove the animals.
 - DCAF could host a youth mentor hunt.
 - Commission could issue scientific collection permits for the wild cervidae.
 - Commission personnel could depopulate the wild cervidae
4. *Tissue collection.* Blood and appropriate tissue samples will need to be collected in a timely manner, as required by the Commission.
5. *Ingress/Egress prevention strategy.* The Commission and Department, with the permitholder, will inspect perimeter fencing in attempt to determine mode of entry. Appropriate modifications need to be completed by the permitholder, within 60 days of initial fence inspection to prevent future ingress and/or egress.
6. *Post-disposition inspection.* When the disposition plan is fulfilled or when the deadline is reached, Commission and Department personnel will inspect the facility to determine compliance.

The following are not Commission approved methods of disposition:

1. *Release.* Release of wild cervidae outside of the enclosure is not permissible due to genetic and disease threats.
2. *Relocation.* Relocation of the wild cervidae is not permissible as state law mandates that they cannot be sold, bartered, or donated to another facility.
3. *Killing without Permission.* The killing of free-roaming wildlife, even behind high fences, is illegal in Nebraska except during established seasons and with the proper permit.

If a DCAF permitholder fails to cooperate in the development of a disposition plan or fails to comply with the disposition plan, then the Department and the Commission will explore legal avenues, including but not limited to probation, permit suspension or permit revocation as described in Domesticated Cervine Animal Act (§54-2310).