Chronic Wasting Disease Surveillance and Detection Response Plan for Cervids in Florida



November 2017

Implementing Partners:

Florida Fish and Wildlife Conservation Commission
Florida Department of Agriculture and Consumer Services
Captive Cervid Technical Assistance Group
Deer Management Technical Assistance Group

EXECUTIVE SUMMARY

The Florida Fish and Wildlife Conservation Commission (FWC) is responsible for managing the state's fish and wildlife resources for their long-term well-being and benefit of people. Of the species managed by the agency, white-tailed deer (*Odocoileus virginianus*) is the most soughtafter game in Florida. Florida's estimated 187,000 deer hunters average approximately 4 million days in the field annually, while contributing to the nearly \$715 million in expenditures generated by the hunting industry as a whole.

Florida has a strong and active captive cervid industry including game farms and hunting preserves. These facilities are located throughout the state, and they are an important economic presence in many rural areas that supports local communities through significant expenditures as well as promoting hunting.

In addition to monitoring and managing cervid populations, the FWC manages white-tailed deer hunting opportunities on more than 130 wildlife management areas throughout the state and works with private landowners to promote habitat management and white-tailed deer management practices to benefit both deer herds and people. The FWC also monitors cervids for diseases that could have a significant impact on this valuable wildlife resource. Chronic wasting disease (CWD) is believed to be the greatest disease risk to cervids in Florida and throughout the United States because of its high fatality rate, persistence in the environment once an area is contaminated, and the current lack of knowledge about prion diseases in general.

In an effort to minimize the spread of CWD, the FWC developed regulations to prohibit importation of live cervids into the state and to only allow the importation of deboned meat, skins, clean skullcaps and antlers, and finished mounts from cervid carcasses from states with documented cases of CWD. Additionally, the FWC annually obtains samples from free-ranging cervids for CWD testing. Since 2002, over 9,000 samples tested resulted in no confirmed positives.

The Florida Department of Agriculture and Consumer Services (FDACS) is responsible for enforcing animal health regulations in Florida and protecting the state from animal pests and diseases to prevent major economic and public health consequences. Owners of captive cervid facilities are permitted by FWC to be in possession of cervids, and FDACS is responsible for preventing the spread of disease in captive cervids. Currently, it is not known whether CWD can infect humans or livestock, and there have been no documented cases of CWD affecting either.

Should CWD be found in Florida, a well-coordinated and timely response is vital to minimize the spread of the disease. FWC, FDACS and the captive cervid industry would have significant responsibilities in responding to this disease. This CWD Surveillance and Response Plan is intended to guide both agencies and ensure that, if CWD is detected, key stakeholders in the captive cervid industry and the hunting community are fully informed and prepared to engage constructively.

INTRODUCTION

Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy of cervids caused by an abnormal protein called a prion. The disease was first recognized in captive mule deer in the late 1960s (Williams and Young, 1980) and was subsequently identified in free-ranging cervids (Miller et al. 2000). CWD has been diagnosed in mule deer, white-tailed deer, moose, elk, reindeer, and sika deer; the susceptibility of other cervids is unknown. The disease is always fatal with death occurring weeks to months after clinical signs become evident. CWD has been detected in free-ranging and captive cervids in a number of western, midwestern, and eastern states, Canada, Norway, and South Korea (see the CWD Alliance website for the most recent list http://www.cwd-info.org/). In recent years, several new cases have been detected in the eastern U.S. as far south as Virginia. Currently, CWD has not been detected in Florida or in adjoining states.

PURPOSE

Florida Fish and Wildlife Conservation Commission (FWC) and Florida Department of Agriculture and Consumer Services (FDACS) are tasked with monitoring and managing CWD. A Captive Cervid Technical Assistance Group (CTAG) and Deer Management Technical Assistance Group (DMTAG) comprised of key stakeholders is part of this plan to assist FWC and FDACS as described. The Plan is intended to provide guidance to both agencies and the captive cervid industry for conducting a coordinated and timely response should a true positive CWD sample occur in Florida or outside of Florida within 20 miles of the state line. The plan outlines ongoing surveillance efforts designed to detect CWD and the response actions to be employed if CWD is discovered in Florida's free-ranging or captive cervids.

PARTNER RESPONSIBILITIES AND KEY PERSONS

FWC

Responsibilities. –

- Conduct active and passive surveillance for CWD in free-ranging cervids.
- Support current interstate importation rules and regulations of cervids in cooperation with the FDACS-Office of Agricultural Law Enforcement.
- Perform intensive surveillance and, if CWD is detected in free-ranging or captive cervids, conduct population reduction activities in the free-ranging herd, if warranted.
- Implement emergency rules regarding free-ranging and captive cervids, if warranted.
- Respond cooperatively with FDACS and the CTAG/DMTAG to any true positive detection of CWD in Florida cervids.
- Work cooperatively with FDACS and the CTAG/DMTAG to implement this plan and update and maintain it, as needed.

Key Persons. -

Executive Director: Responsible for high-level notifications.

Director, Hunting and Game Management: Responsible for keeping executive leadership informed.

- Director, Law Enforcement: Responsible for helping to provide enforcement and field resources as needed.
- Deer Management Program Coordinator: Responsible for helping with notifications (FWC leadership, DMTAG, CTAG) and assisting with coordination efforts as needed.
- FWC Wildlife Veterinarian: Lead on initial notifications, responsible for helping to assemble and lead the CWD response management team.
- Director, Community Relations: Responsible for establishing Joint Information Center HGM Communications Coordinator: Responsible for coordinating all messaging and media support.

FDACS

Responsibilities. -

- Coordinate surveillance for CWD in captive cervids.
- Oversee CWD testing of captive cervids.
- Support current interstate importation rules and regulations of cervids through the FDACS-Office of Agricultural Law Enforcement.
- Establish quarantines and develop Cervidae Herd CWD Management Plans in consultation with FWC for facilities that hold cervids exposed to, or suspected to have, CWD.
- Respond cooperatively with FWC and the CTAG to any true positive detection of CWD in Florida cervids.
- Work cooperatively with FWC and the CTAG to implement this plan and update and maintain it, as needed.

Key Persons. -

- State Veterinarian: Responsible for all captive cervid herd disease issues and help to assemble and lead the CWD response management team.
- FDACS Bureau Chief of Animal Disease Control and Bovine Program Manager: Responsible for the coordination of CWD testing within captive herds. Coordination will include sample collection and testing protocols. FDACS may include CWD certified collectors from outside of the Department (USDA, FWC, or accredited veterinarians).
- FDACS Bureau Chief/Laboratory Director of the Bronson Animal Disease Diagnostic Laboratory (BADDL) may be included in the coordinated sampling and testing protocol.
- FDACS Communications Director: Jointly responsible with FWC to establish the JIC for media relations and co-agency lead for media contacts.

CTAG

Responsibilities. -

- Assist with/cooperate on CWD surveillance efforts on free-ranging and captive herds.
- Help stakeholders understand and support rules and regulations of cervids through direct communications.
- Respond cooperatively, as detailed in this plan, with FWC and FDACS to any true positive detection of CWD in Florida cervids.

• Work cooperatively with FWC and FDACS to implement this plan and update and maintain it, as needed.

Key Persons. -

Member of Florida Deer Association Member of the National Association of Deer Farmers Game Farm Operator (2 members) Hunting Preserve Operator (2 members)

DMTAG

Responsibilities. -

- Assist with/cooperate on CWD surveillance efforts on free-ranging cervids.
- Help stakeholders understand and support rules and regulations related to freeranging cervids through direct communications.
- Respond cooperatively, as detailed in this plan, with FWC and FDACS to any true positive detection of CWD in Florida cervids.
- Work cooperatively with FWC and FDACS to implement this plan and update and maintain it, as needed.

Key Persons. -

Representatives of large landowner (2) Representatives of small landowner or nonaffiliated hunters (2) Representative of public land hunters (2)

CWD SURVEILLANCE

Any cervid suspected of, or testing positive for CWD, must be reported to the FDACS State Veterinarian in accordance with § 585, Fla. Stat. and Rule 5C-20, F.A.C (see Appendix I). This includes any cervid showing clinical signs of neurological disease.

Free-Ranging Cervids

Strategy. – CWD is not equally prevalent among individual animals within a population, nor is it randomly distributed across the landscape. Therefore, to increase the likelihood of detecting CWD, sampling strategies should be stratified, focusing on animals and areas with increased risk. The surveillance strategy encompasses two primary sampling methods: active and passive. The current goal is to test 800 free-ranging cervids per year throughout the state with a minimum of 200 cervids needed every 10 years within a county for that county to achieve a "low priority" status for surveillance.

Methods: Active. – The FWC Wildlife Veterinarian, or designees, oversees an annual review of county-specific sampling status to ensure adequate samples in each county are obtained. The FWC Wildlife Veterinarian, or designees, coordinates with FWC Wildlife and Habitat Management Regional Biologists for assistance with sample collections in each FWC administrative region and ensures that collections are distributed across the landscape while

focusing on high priority counties. Appropriate tissue samples for CWD testing purposes shall be obtained from:

- 1. Hunter-harvested adult cervid (≥1.5 years-old) from public and private lands, especially males (Grear et al. 2006);
- 2. Road-killed cervids (Krumm et al. 2005); and
- 3. Cervids in the vicinity of game farms and hunting preserves (http://www.cwd-info.org/2015).

Methods: Passive. – Any apparently sick, weak, disoriented, or otherwise unhealthy cervid ≥6 months of age is considered a clinically-suspect animal and a target for sampling. If the animal is harvested by a hunter or euthanized and the whole carcass is available, a complete necropsy is performed by the FWC Wildlife Veterinarian, or designees, or a Florida state diagnostic lab with the objective to determine the cause of the cervid's condition. By doing this, other potentially serious domestic and wild animal diseases in addition to CWD may be detected.

Captive Cervids

Strategy. – Reports involving captive cervids will result in a disease investigation and, if warranted, sample collection and testing for CWD coordinated by FDACS.

CWD DETECTION RESPONSE

Strategy

The overall strategy upon a confirmed, positive CWD test result is to determine the prevalence and geographic extent of a CWD infection and limit or halt further transmission of the disease if it is detected in Florida or within 20 miles of the Florida border. The primary objectives of the management actions are to eradicate, contain, or slow the spread of the disease. To date, with the exception of New York (see Appendix II), CWD management actions in other states have been unsuccessful at eradicating CWD from free-ranging cervid populations.

In-State Detection

Notifications. – Upon notification of an initial positive CWD test result from a United States Department of Agriculture (USDA) approved laboratory, the FWC Wildlife Veterinarian and FDACS State Veterinarian will confer to ensure accuracy of the notification. Upon concurrence, the FWC Wildlife Veterinarian will notify the FWC Executive Director and the Deer Management Program Coordinator and the FDACS State Veterinarian will notify the FDACS Commissioner. The Deer Management Program Coordinator will notify all other key FWC staff identified in this plan. The FWC Wildlife Veterinarian will initiate confirmatory testing for free-ranging cervids by the USDA National Veterinary Services Laboratory. The FDACS State Veterinarian will initiate confirmatory testing for captive cervids by the USDA National Veterinary Services Laboratory. Confirmation may take a week or more from the initial positive CWD case notification. If backup samples for confirmatory testing are not available, the originating notification will be treated as a positive.

Upon determination/declaration of a confirmed positive CWD test result, the FWC Wildlife Veterinarian will notify the FWC Executive Director who shall then notify the Governor's Office, and if the confirmed, positive sample was collected within 20 miles of the Florida state line, the executive leader of the wildlife resources agency of the adjacent state(s) will be notified.

The FDACS State Veterinarian will notify the FDACS Commissioner, USDA-APHIS-Veterinary Services, and USDA-APHIS-Wildlife Services officials in Florida, and the Florida Department of Health, and if the confirmed positive sample was collected within 20 miles of the Florida state line, the executive leader of the agriculture agency of the adjacent state(s) will be notified. The Deer Management Program Coordinator will notify all other key FWC staff identified in this plan, along with the CTAG and DMTAG. The CTAG members will help notify game farm and hunting preserve owners. The DMTAG will help notify general white-tailed deer hunting stakeholders.

Messaging and Media Support. – A Joint Information Center (JIC) will be established within 72 hours of a true positive by FWC Community Relations and FDACS for all participating response agencies' media support personnel to manage media inquiries and direct public inquiries to appropriate subject matter experts. The FWC and FDACS media relations coordinators will be the lead media contacts through which all CWD-related questions from the media will be routed. These public information officers will parse the media requests to the appropriate subject matter experts. They will coordinate communications to reach the public and stakeholders, including but not limited to, the use of social media and press releases.

Within 48 hours, the media will be advised through a FWC/FDACS joint statement. The press release will include media packets providing background information on CWD, a synopsis of Florida's CWD surveillance efforts, an outline of CWD response management actions, and any other CWD-related materials deemed needed or appropriate. Other media releases will be prepared as necessary. Media packets will be reviewed and updated annually, coordinated by the Deer Management Program Coordinator.

Within a month of the CWD true positive case, FWC/FDACS will conduct public information meetings in the area of the initial positive case, as necessary.

Team Formations and Functions. -

The Incident Command System (ICS) will be followed throughout all phases of the response. The Florida Incident Field Operations Guide for ICS can be used as a reference guide for ICS information. This guide can be found at: http://www.floridadisaster.org/FOG/FLFOG.pdf.

CWD Response Management Team (CWDRMT): Assembled under the direction of FWC's Wildlife Veterinarian and FDACS' State Veterinarian or their designees, this Incident Management Team will include representatives from FWC, FDACS, USDA, Southeastern Cooperative Wildlife Disease Study (SCWDS), outside experts as needed, and the CTAG/DMTAG leaders. This team will be led by FWC's Wildlife Veterinarian and FDACS' State Veterinarian or their designees to guide the operational response and will determine the research and data needs necessary to effectively manage the outbreak.

The CWDRMT will coordinate field activities performed by each agency's field personnel, working within the limits of their statutory and constitutional authorities. Primary CWDRMT functions include:

- Situation Assessment information needed will be collected, processed and displayed.
- Incident Priority Determination priorities will be established among ongoing incidents within the defined area of responsibility.
- Critical Resources will be acquired, if possible, from the involved agencies or jurisdictions and allocated as needed.
- Interagency Activities policy-level decisions and interagency activities relevant to incident management activities, policies, priorities, and strategies will be coordinated, supported, and assisted by the CWDRMT.
- Information Exchange and Integration elected and appointed officials at all levels of government will be informed. DMTAG, CTAG and other key stakeholders will be informed.

Management Actions. -

<u>Free-Ranging Cervids</u>: Actions are directed at determining the prevalence and geographic extent of CWD infection in the free-ranging cervid population and the most effective measures for reducing or eliminating further transmission of the disease. The following management actions will be implemented as rapidly as possible:

- FWC and FDACS will implement emergency regulations as warranted regarding harvest/hunting of free-ranging cervids and captive cervid facilities. These may include temporary restrictions or prohibition of any intrastate movement of cervids, cervid carcasses or cervid parts.
- Three circular management zones with 1-mile (Zone 1), 5-mile (Zone 2), and 15-mile (Zone 3) radii centered on the initial positive case will be established to determine CWD infection prevalence and geographic extent. All three zones shall be collectively known as the Containment Zone (CZ). Zone boundaries may be realigned to correspond with political boundaries or predominant landscape features such as roads and rivers for enforcement purposes. Individual zone objectives and management actions are outlined in the tables below:

	Containment Zone (CZ)		
Zone Objectives	Zone 1 (1-mile radius)	Zone 2 (5-mile radius)	Zone 3 (15-mile radius)
Reduce cervid density	X	X	
Estimate cervid population	X	X	
Determine prevalence through increased surveillance	X	X	X

Management Actions (Lead Agency)	Zone 1 (1-mile radius)	Zone 2 (5-mile radius)	Zone 3 (15-mile radius)
Reduce cervid density through sharpshooting (FWC)	X		
Reduce cervid density through liberalized hunting seasons and bag limits (FWC)	X	X	
Estimate cervid population (FWC)	X	X	
Test as many road-killed or hunter-harvested cervids as possible (≥6 months old preferred) (FWC/FDACS)	X	X	X

Set up sampling check stations and require that all cervids killed within the CZ should be tested and any sick or dead cervids be reported (FWC)	X	X	X
All cervid carcasses should either be incinerated or disposed of in an approved Class 1 landfill (FWC)	X		
Adopt emergency regulations or administrative order prohibiting feeding wildlife (with the exception of songbirds) and rehabilitation of injured/orphaned cervids, in counties that fall, in whole or part, within the CZ (FWC)	X	X	X
Adopt emergency regulations or administrative order prohibiting the movement of live cervids and cervid carcasses (except boned-out meat or processed meat cuts, a hide with no head attached, antlers with a clean skull plate, finished taxidermy products, and upper canines) within the CZ (FWC/FDACS)	X	X	X

- Identify and quarantine, under FDACS authorities (see Appendix I), all captive cervid facilities within the CZ. FWC and FDACS personnel will inspect these facilities immediately, and then every 3-6 months thereafter. The goals of inspections are to:
 - Seek approval of captive cervid owners included in the CZ to identify, remove, and test any sick or dead cervids.
 - Check facility fence integrity.
 - o Evaluate herd inventory practices.
 - o Identify practices that may contribute to CWD spread.
- FDACS will consider emergency regulations that captive cervid facilities within the CZ enter a CWD monitoring program. The duration of the program will be based on epidemiology and a risk assessment. Risk factors would include evidence of exposure beyond the index farm, positive findings in free-ranging cervids, number of cervids historically tested for CWD on a premises and other factors including facility owner compliance and preferences.
- Removing CWD positive cervids and reducing cervid density in Zones 1 and 2 is critical
 to reducing the possibility of disease transmission to uninfected cervids. Due to
 environmental persistence of CWD, cervid densities in reduction zones must remain low
 for a prolonged period of time. If within five years from the initial positive case, CWD
 continues to persist or spread, an adaptive management approach will be developed to
 determine what additional management efforts are warranted.
- FWC, FDACS, Florida Department of Health and the CTAG/DMTAG will initiate an
 educational program. If additional infected animals are identified, the FWC will initiate a
 comprehensive program to educate citizens on how to adapt to having CWD in the
 environment.

<u>Captive Cervids</u>: The primary objectives of the initial CWD response efforts will be to identify disease prevalence within the captive herd and determine if CWD is present in the free-ranging cervids surrounding the facility. The following management actions will be implemented as rapidly as possible:

- The FDACS State Veterinarian will place the captive cervid facility under quarantine.
- FDACS will conduct epidemiological studies to determine the likely source of CWD.
 FDACS will attempt to trace-back and trace-forward all cervids in contact with the CWD-infected animal(s) to determine the origin and prevent further spread. If needed, the FDACS State Veterinarian will place additional captive cervid facilities under quarantine.
- If trace results indicate that CWD-infected animal(s) may be present at a facility, the FDACS State Veterinarian may request that the captive cervid facility owner voluntarily depopulate the facility, and FDACS will test all cervids euthanized at owner's expense. The goal would be to accomplish this task within 60 days of CWD detection.

Choice by Facility Owner to Depopulate Herd. –

- o If indemnity funds are available from USDA, FWC or other sources, the facility owner will be offered compensation for depopulation.
- O Any depopulation activities will be initiated, overseen, and verified by the FDACS State Veterinarian and FWC with any needed support from the CTAG. A complete inventory of cervids on premises pre- and post-depopulation will be obtained by FDACS for game farms. A population estimate will be completed by FDACS, FWC or a private, certified wildlife biologist for hunting preserves using remote trail cameras or other approved methods. At the discretion of the FDACS State Veterinarian/FWC Wildlife Veterinarian, client-based hunts may continue on hunting preserves prior to depopulation so long as all harvested cervids are tested for CWD. A CWD testing plan will be developed by the FDACS State Veterinarian and must be agreed upon by the hunting preserve owner.
- Areas outside the fenced facility where cervid carcasses or offal originating from within the fenced facility is disposed of shall be quarantined and made inaccessible to free-ranging cervids by the facility owner.
- Following depopulation and under the guidance of FDACS and FWC, the premises should remain free of cervids for five years and equipment should be decontaminated following USDA guidelines and regulations, by the captive cervid facility owner.
- Risk analysis of the captive cervid facility will be conducted by FDACS in consultation with FWC to determine the possibility of environmental transmission of CWD contributing to a new outbreak. If environmental transmission is likely, the permit authorizing possession of captive cervids at the facility may be suspended or revoked by FWC.

Choice by Facility Owner to Maintain Herd. -

- o If the facility owner decides against depopulation, the herd will remain under FDACS quarantine for 60 months (5 years) from the last CWD true positive notification or for a period of time determined by a risk evaluation at the discretion of the FDACS State Veterinarian. All cervids that die within the facility during the quarantine period shall be tested for CWD by FDACS, at owner's expense. A CWD testing plan will be developed by the FDACS State Veterinarian in consultation with FWC, and must be agreed upon by the hunting preserve or game farm owner. Detailed inventory records must be maintained by the facility owner as described in F.A.C 5C-26.
- o If a live-animal CWD test is certified by USDA as validated and official, a strategy to use this test may be developed at the discretion of the FDACS State Veterinarian in consultation with FWC and USDA-APHIS-Veterinary Services to determine the minimum level of CWD prevalence.
 - The facility would remain under quarantine for 36 months (3three years). All cervids that die during the 36-month period shall be tested for CWD by FDACS, at owner's expense. All live cervids would be required to be live tested during the first 12 months of quarantine and retested after 24 months, at owner's expense.
 - If no additional cervid tests are positive within 36 months from the initial positive animal, the quarantine may be removed at the discretion of the FDACS State Veterinarian. All cervids that die within the facility shall continue to be tested for CWD by FDACS for an additional 24 months (2 years) beyond the initial 36month quarantine.
- The fence surrounding the quarantined facility shall be augmented or modified if needed by the facility owner to eliminate direct contact with free-ranging cervids. Areas outside the fenced facility where cervid carcasses and offal are disposed of from within the fenced facility shall be quarantined and made inaccessible to free-ranging cervids by the facility owner.
- At the discretion of the FDACS State Veterinarian/FWC Wildlife Veterinarian, cervids may be transported from a CWD-positive game farm or hunting preserve to a CWD-positive hunting preserve, and client-based hunts may continue on hunting preserves so long as all harvested cervids, and all natural mortalities, are tested for CWD by FDACS. Only de-boned deboned meat, clean hides, and antlers with a clean skullcap may be removed from any CWD-positive facility and all carcasses and offal shall be incinerated or disposed of at a Class 1 landfill jointly approved by FDACS, FWC, and Florida Department of Environmental Protection.
- FWC will implement the management actions detailed under the Free-Ranging Cervid Management Actions section of this plan, using the captive cervid facility as the initial positive case location to establish the CZ.

 All cervids testing positive for CWD shall be incinerated, digested via alkaline digestion, or disposed of at a Class 1 landfill jointly approved by FDACS, FWC, and Florida Department of Environmental Protection.

Out-Of-State Detection (within 20 miles of the Florida state line)

Notifications. – Upon either FWC or FDACS receiving notice from an adjacent state of a true positive CWD test result from a sample taken from a free-ranging or captive cervids within 20 miles of the Florida state line, the FWC Wildlife Veterinarian and FDACS State Veterinarian will confer to ensure each is aware of the notice, and then the notification process detailed in the In-State Detection section will be followed.

Messaging and Media Support. – The messaging and media support process detailed in the In-State Detection section will be followed.

Team Formations and Functions. – The team formation and functions process detailed in the In-State Detection section will be followed, inclusive appropriate personnel from the neighboring CWD positive state.

Management Actions. – The FWC will implement the management actions detailed under the Free-Ranging Cervid Management Actions section of this plan, using the bordering state location as the initial positive case location to establish the CZ.

Approved By:	
<i>[3]</i>	Der 17
ERIC SUTTON, Executive Director	Date
Florida Fish and Wildlife Conservation Commission	
alter	
Adam Putnam, Commissioner of Agriculture	Date
Florida Department of Agriculture and Consumer Services	

REFERENCES

- Georgia Department of Natural Resources. 2012. Georgia Surveillance and Response Strategies for Chronic Wasting Disease of Free-Ranging and Captive Cervids. 13 pp.
- Grear, D.A., M.D. Samuel, J.A. Langenberg, and D. Keane. 2006. Demographic patterns and harvest vulnerability of chronic wasting disease infected white-tailed deer in Wisconsin. Journal of Wildlife Management 70: 546-553.
- Krumm, C. E., M. M. Conner, and M. W. Miller. 2005. Relative vulnerability of chronic wasting disease infected mule deer to vehicle collisions. Journal of Wildlife Diseases 41: 503-511.
- Maryland Department of Natural Resources. 2011. Chronic wasting disease response plan 2011. 10 pp. http://www.dnr.state.md.us/wildlife/Hunt Trap/pdfs/2012 CWDResponsePlan.pdf
- Michigan Department of Natural Resources, Wildlife Division, and Michigan Department of Agriculture, Animal Industry Division. 2002. Michigan surveillance and response plan for chronic wasting disease of free-ranging and privately-owned/captive cervids. 19 pp. http://www.michigan.gov/documents/CWD ContingencyPlan 41755 7.pdf
- Miller, M. W., T. J. Kreeger, C. T. Larsen, and E. T. Thorne. 2000. Epizootiology of chronic wasting disease in free-ranging cervids in Colorado and Wyoming. Journal of Wildlife Diseases 36: 676-690.
- United States Geological Survey, National Wildlife Health Center. 2002. Surveillance strategies for detecting chronic wasting disease in free-ranging deer and elk. 43 pp. http://www.nwhc.usgs.gov/publications/fact_sheets/pdfs/cwd/CWD_Surveillance_Strategies.pdf
- Virginia Department of Game and Inland Fisheries, Bureau of Wildlife Resources, Wildlife Division. 2009. Chronic wasting disease response plan. 9 pp. http://www.dgif.virginia.gov/wildlife/diseases/cwd/cwd-response-plan.pdf
- Walsh, D.P. and M.W. Miller. 2010. A weighted surveillance approach for detecting chronic wasting disease foci. *Journal of Wildlife Diseases* 46: 118-135.
- Williams, E. S. and M. W. Miller. 2002. Chronic wasting disease in deer and elk in North America. Revue Scientifique et Technique 21: 305-316.
- Williams, E. S., and S. Young. 1980. Chronic wasting disease of captive mule deer: A spongiform encephalopathy. Journal of Wildlife Diseases 16: 89-98.

http://www.dec.ny.gov/animals/33220.html

http://www.dec.ny.gov/regs/3926.html

http://www.agriculture.ny.gov/AD/2005AnnualReport.pdf

http://www.rense.com/general64/detail.htm

http://www.cwd-

info.org/index.php/fuseaction/news.detail/ID/bdfc6f8c04b775a78267288af9cd903c

http://www.cwd-

info.org/index.php/fuseaction/news.detail/ID/697cc99a61aeabc4211b88a3afb79d1b

http://www.cwd-

nfo.org/index.php/fuseaction/news.detail/ID/df90d84053a8b791b851be9c21fdae29

http://www.cwd-info.org/index.php/fuseaction/news.current/cID/36/year/2005

APPENDIX I AGENCY AUTHORITY TO ACT

FWC

- 1. Florida Constitution Article IV, Section 9, provides FWC Constitutional Authority for regulation and management of all fish and wildlife in the state of Florida.
- 2. Chapter 379.231, Florida Statutes, prohibits the import for sale or use, or release within this state, any species of the animal kingdom not native to Florida unless authorized by the Florida Fish and Wildlife Conservation Commission.
- 3. Rule 68A-1.002, Florida Administrative Code, provides that all wild animal life within the jurisdiction of the state of Florida, whether such wild animal life is privately owned or otherwise, is subject to the regulation of the Commission.
- 4. Rule 68A-4.005, Florida Administrative Code, prohibits the release or introduction in the state of any wildlife or any other organism that might reasonably be expected to transmit any disease to wildlife.
- 5. Rule 68A-4.0051, Florida Administrative Code, prohibits the receipt, possession, transport or carrying into the state by any means any live deer, elk or other species of the family Cervidae originating from out-of-state unless permitted pursuant to Chapter 68A-6 and as provided in this rule. Cervids being moved shall not be commingled with cervids from other sources during transfer. Furthermore, violation of the Florida Department of Agriculture and Consumer Services' Chapter 5C-26, Florida Administrative Code, is prohibited.
- 6. Rule 68A-4.0053, Florida Administrative Code, prohibits the importation or possession of any deer, elk or other species of the family Cervidae from any state or province where Chronic Wasting Disease has been documented on a list maintained by the U. S. Department of Agriculture, Animal and Plant Health Inspection Service, except boned-out meat or processed meat cuts, a hide with no head attached, antlers with a clean skull plate, finished taxidermy products, and upper canines. Requires any carcass, regardless of origin, of any cervid testing positive for Chronic Wasting Disease to be surrendered to FWC personnel.
- 7. Rule 68A-9.002, Florida Administrative Code, provides that the executive director may issue permits authorizing the taking or possession of wildlife or freshwater fish or their nests or eggs for scientific, educational, exhibition, propagation, management or other justifiable purposes. Employees of the Commission may take wildlife or freshwater fish or their nests or eggs for scientific, educational, propagation, exhibition or other justifiable purposes when authorized by the executive director or is essential to the performance of their assigned duties. Commission volunteers may take wildlife or freshwater fish or their nests or eggs for scientific, educational, propagation, exhibition or other justifiable purposes as provided in this rule.

- 8. Rule 68A-12.010, Florida Administrative Code, authorizes the executive director to issue a license as provided by Section 379.3712, Florida Statutes, for the establishment and operation of a private hunting preserve to allow the release and taking of captive-raised native and non-native game animals, as specified in this rule. Furthermore, it provides that no hunting preserve license will be issued until the premises of such preserve has been inspected by a representative of the Commission and the requirements of this rule have been met.
- 9. Rule 68A-12.011, Florida Administrative Code, provides that any person may establish, maintain, or operate a game farm within Florida for the protection, propagation, raising or production of native or non-native game for private or commercial purposes. A license is required before the establishment of a game farm and game farms are subject at any time to inspection by Commission personnel, for compliance with Commission rules and other applicable laws. No game farm license will be issued until the premises of such game farm has been inspected and approved by Commission personnel.

Game farms acquiring, possessing, selling or otherwise disposing of deer, elk or other members of the family *Cervidae* must comply with Rules 68A-4.005, 68A-4.0051 and 68A-4.0053, Florida Administrative Code, concerning introduction, importation, movement, and transportation requirements. Any person holding a game farm license who imports or conducts intrastate movement of deer, elk, or other members of the family *Cervidae* must keep and maintain copies of all records of compliance with Rule 68A-4.0051 and Chapter 5C-26, Florida Administrative Code, regarding the importation or intrastate movement of such deer, elk, or other members of the family *Cervidae*.

- 10. Rule 68A-13.001, Florida Administrative Code, provides that the Commission will establish annual seasons during which game may lawfully be taken and the daily bag and possession limits of such game.
- 11. Rule 68A-13.006, Florida Administrative Code, provides that hunting on National Wildlife Refuges shall be permitted in accordance with regulations established by the Secretary of the Interior.
- 12. Rule 68A-14.0011, Florida Administrative Code, provides that the Commission may establish wildlife refuges, wildlife management areas, critical wildlife areas, fish management areas, wildlife and environmental areas and miscellaneous areas and regulate and manage the lands or water therein in the best interest of the state; and in furtherance thereof:

Open or close such area for the taking of wildilfe for the purpose of establishing/protecting/managing the wildlife, and prohibit the hunting or trapping within such area.

Open or close such area for the taking of wildlife or freshwater fish when it is found or believed that an emergency exists where, absent such action on the part of the Commission, harm or disaster to the wildlife or fish population within the area under consideration might occur. Such opening or closing action shall become effective immediately as prescribed by emergency order adopted by the Commission.

- 13. Rule 68A-15.004, Florida Administrative Code, regarding wildlife management areas provides that areas may be closed by posting because of resource protection, construction, management activities, public health or safety, agricultural disease, or contractual agreement. Public access in areas posted as "Closed to Public Access" is prohibited.
- 14. Rule 68A-27.0011, Florida Administrative Code, prohibits the intentional killing, attempting to kill, or wounding any species designated in Rule 68A-27.003, Florida Administrative Code, and in 50 C.F.R. 17.11 as endangered.
- 15. Rule 68A-27.003, Florida Administrative Code, prohibits the take, possession, or selling of any endangered or threatened species or parts thereof except as allowed by specific federal or state permit or authorization. This includes the Key deer which is designated as an endangered species pursuant to this rule.
- 16. Rule 68A-27.007, Florida Administrative Code, provides that activities that result in the take or incidental take of Federally Designated Endangered and Threatened Species do not require a permit from the Commission when authorized by the U.S. Fish and Wildlife Service, or other authorizations provided by 16 U.S.C. Section 1536. It further provides that Commission permit or other authorization will only be issued to take or incidental take of federally designated endangered and threatened species if specifically authorized under a written agreement or regulatory delegation by the U.S. Fish and Wildlife Service and the issuance will not be inconsistent with federal law.

FDACS

- 1. Chapter 585.08, Florida Statutes, authorizes FDACS to establish, maintain, and enforce quarantine areas within the state, or the entire state. FDACS may restrict, regulate, or prohibit the movement or transportation of animals found, determined, or suspected to be carriers of any contagious, infectious, or communicable disease, or of the vectors of such disease, into, from and within such quarantine areas, when necessary for the prevention, control, or eradication of any contagious, infectious, or communicable disease among domestic or wild animals, or for carrying out any of the purposes of this Chapter.
- 2. Chapter 570.07, Florida Statutes, gives the Commissioner of Agriculture the authority to declare an emergency when one exists in any manner pertaining to agriculture; to make, adopt, and promulgate rules and issue orders which will be effective during the duration of the emergency; and to issue or require to be issued food safety

- information pertaining to the emergency that is based on reliable scientific facts and data.
- 3. Chapter 570.036, Florida Statutes, states that the Director of the Division of Animal Industry, who is also the State Veterinarian, shall be responsible for protecting the animal and livestock interests of the state and shall, under the direction of the Commissioner, direct, coordinate, and enforce the applicable provisions of Chapters 534 and 585.
- 4. Chapter 585.145, Florida Statutes, gives state officials the authority to impose quarantines restricting movement of cervids from or into a premises for a given period of time when CWD is suspected or confirmed.
- 5. Chapter 585.18, Florida Statutes, and Rule 5C-20, Florida Administrative Code, state that any person who has knowledge of the existence in or among animals of any contagious, infectious, or communicable disease which is included on the department's dangerous transmissible disease list shall, immediately upon gaining such knowledge, report the same to the State Veterinarian. No person who has knowledge that any animal is afflicted with or suffering from any such disease shall conceal or attempt to conceal such animal, or knowledge or evidence that such animal is afflicted with or suffering from any such disease, from the division or its agents and employees, or shall remove or attempt to remove such animal from the reach, care, or control of the department or its agents and employees.
- 6. Rule 5C-26.007, Florida Administrative Code, states that immediate quarantine shall be imposed on all herds diagnosed positive, exposed, or suspect for CWD. A Cervidae Herd CWD management plan is required for any herds found to have a positive, exposed, or suspect animal.

APPENDIX II NEW YORK CASE STUDY

Proactive regulatory precautions initiated by New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Agriculture & Markets (NYSDAM) prior to CWD detection in New York:

NYSDEC

• 2003 - Initiated Part 189: Chronic Wasting Disease regulations to reduce the risk of bringing CWD into New York.

NYSDAM

• 2004 - Required owners of cervids to maintain an inventory and sample every animal over 16 months that died, or submit samples from 10% of their herd up to 30 animals per year.

CWD Time Line for New York:

- March 31, 2005 First confirmed positive CWD detection from a captive herd.
- April 2, 2005 Second confirmed positive CWD detection from a captive herd. This herd was directly linked to the index herd.
- April 5, 2005 The two captive herds where CWD was detected were depopulated. A total of five captive cervids were CWD positive.
- April 27, 2005 The first CWD positive wild cervid was detected.
- May 4, 2005 The second CWD positive wild cervid was detected.
- August 22, 2005 Before the fall hunting season, statewide meetings were announced to inform public and relevant stakeholders about CWD surveillance and management efforts.

Management Actions:

- Captive herds were depopulated quickly after initial detection.
- A containment zone was established with mandatory check stations for harvested cervids.
- Sampling of free-ranging cervids within the containment zone took place within two weeks of initial detection.
- Movement of intact carcasses outside the containment zone, possession and use of cervid urine from the containment zone, cervid rehabilitation, feeding wild cervids, release of wild or captive cervids, and possession of cervids killed by motor vehicle were prohibited.
- Importation of whole hunter-harvested carcasses from states where CWD had been detected was prohibited.
- Reporting requirements were imposed on taxidermists that handled cervids.
- Measures to prevent live cervids from coming into contact with any materials, including taxidermy materials, that may contain prions were required.

- An intensive sampling effort resulted in 317 samples being tested from the containment area by the end of April 2005. Two free-ranging white-tailed deer were confirmed to have CWD in the infected area.
- Increased public awareness through media outlets.

Follow-up Disease Management:

- 2009 No new positive CWD cases detected since index case; mandatory testing
 of cervids from the containment zone was discontinued, but sample collection
 continued for the area.
- 2010 In July, the containment zone was lifted as no new cases had been detected since index case, but additional sample collection continued for the area.
- 2011 Increased effort by DEC field staff to collect sick cervids and cervids behaving abnormally.
- 2012 Risk-based survey initiated to determine possible routes of CWD entry into New York and exposure to wild cervids.
- 2013 Implemented statewide, weighted surveillance system to increase the
 number of older age-class cervids sampled, and increase sampling in counties that
 have higher cervid densities with potential risk factors. Developed program to
 partner with taxidermists to collect samples from older age bucks. Initiated an
 educational campaign to stakeholders and the public on current CWD science and
 measures they can take to keep CWD out of New York.