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LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES BEFORE THE

SUBCOMMITTEE ON WATER AND WILDLIFE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

December 3, 2009

Thank you Chairman Cardin, Ranking Member Crapo, and Members of the Subcommittee for the opportunity to submit this testimony in support of S. 1519; the "Nutria Eradication and Control Act of 2009" and S. 1965; the "Feral Swine Eradication and Control Pilot Program Act of 2009". Enactment of this legislation will be central to the Department's longstanding efforts to mitigate and restore damage to our precious wetlands from these invasive non-native species. We are very grateful to you and the sponsors of this legislation for keeping these issues and important programs on the forefront of the Subcommittee's wildlife legislative agenda.

Since 2001, annual coast wide aerial surveys assessing herbivory in Louisiana have documented approximately 26,273 acres of marsh converted to open water due to nutria vegetative damage. (This acreage is actual observed acreage multiplied by a constant to account for land not seen from the transects.) This loss of marsh in Louisiana is devastating to the people that depend on it for their livelihood as well as people that use it for recreation. It is vital to the people of Louisiana to protect the wetlands from destruction whenever possible. In order to remove the threat of land loss due to nutria, the Coastwide Nutria Control Program was developed.

The nutria (<u>Myocastor coypus</u>) is a large semi-aquatic rodent indigenous to South America. The first introduction of nutria to North America occurred in California in 1899; however it was not until the 1930's that additional animals were introduced in seven other states. These importations, primarily for fur farming, failed during the Second World War as a result of poor pelt prices and poor reproductive success. After the failures of these fur farms, nutria were released into the wild. Sixteen states now have feral populations of nutria.

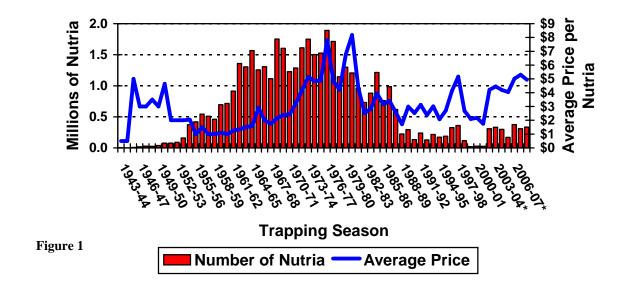
The Gulf Coast nutria population originated in Louisiana in the 1930's from escapes and possible releases from nutria farms. Populations first became established in the western coastal portion of the state and then later spread to the east through natural expansion coupled with stocking. During the mid-1950s muskrat populations were declining, nutria had little fur value, and serious damage was occurring in rice fields in southwestern Louisiana and sugarcane fields in southeastern Louisiana; farmers complained about damage to crops and levee systems, while muskrat trappers

blamed the nutria for declining numbers of muskrats. In 1958, the Louisiana Legislature placed the nutria on the list of unprotected wildlife and created a \$0.25 bounty on every nutria killed in 16 south Louisiana parishes, but funds were never appropriated.

Historically nutria populations were controlled by fur trapping, especially from the early 1960's when markets for the fur were developed to the late 1980's until the price held. The harvest peaked in 1976 at 1.8 million pelts worth \$15.7 million to coastal trappers (Figure 1).

During the strong market period for nutria pelts, there were no reports of wetland damage caused by nutria. However, before the market developed and after the market declined, reports of marsh vegetation damage from land managers became common. Such complaints began in 1987 and became more frequent during the early 1990's. In response, the Fur and Refuge Division of the Louisiana Department of Wildlife and Fisheries (LDWF) initiated limited aerial survey flights, particularly in southeastern Louisiana. Survey flights of Barataria and Terrebonne basins were conducted during the 1990's, with initial support from Barataria-Terrebonne National Estuary Program (BTNEP) and later support from Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). From 1993 to 1996 these flights showed acres of damage increasing from approximately 45,000 to 80,000 acres within the basins. The first CWPPRA funded coast wide survey, conducted in 1998, showed herbivory damage areas totaling approximately 90,000 acres. By 1999 this coast wide damage had increased to nearly 105,000 acres. This rapid and dramatic increase in damaged acres prompted LDWF to pursue funding for the Coastwide Nutria Control Program (CNCP) in January 2002.

By the close of the decade, nutria was added to the U.S. Council in Invasive Species' list. In addition, nutria was also listed by the Invasive Species Specialist Group of the International Union for the Conservation of Nature as being of the top 100 worst invasive species in the world.



A Solution

After analyzing a number of programs, one rose to the top as having the best potential to reduce nutria populations and the resulting degradation of coastal marshes. An incentive program designed to encourage trappers to trap nutria would increase the harvest of these rodents to a level that will decrease the population and damage to marshes and crops. The project is funded by the CWPPRA through the Natural Resources Conservation Service (NRCS) and the Louisiana Department of Natural Resources (LDNR) with the LDWF as the lead implementing agency. Task number 1 requires LDWF to conduct an annual aerial survey to evaluate the herbivory damage caused by nutria. Task number 2 of the LDNR and LDWF Interagency Agreement No. 2511-02-29 for the CNCP requires LDWF to conduct general project operation and administration. LDWF is required to 1) conduct and review the registration of participants in the CNCP: 2) establish collection stations across coastal Louisiana: 3) count valid nutria tails and present participants with a receipt/voucher; 4) deliver tails to an approved disposal facility and receive documentation that ensures the nutria will be properly disposed of and shall not leave the facility; and 5) process and maintain records regarding participants, number and location where tails were collected. Task 3 requires LDWF to provide incentive payments to program participants and task 4 requires LDWF to provide a report regarding the distribution of the harvest by township, section and lease.

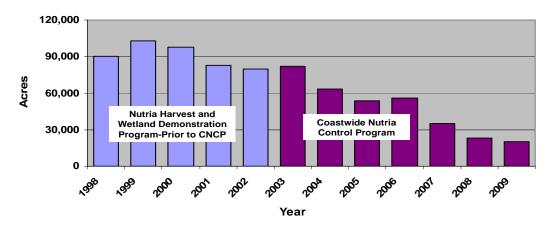
The program area is coastal Louisiana bounded to the north by Interstate-10 from the Texas state line to Baton Rouge, Interstate-12 from Baton Rouge to Slidell, and Interstate-10 from Slidell to the Mississippi state line. The project goal is to significantly reduce damage to coastal wetlands attributable to nutria herbivory by removing 400,000 nutria annually. This project goal is consistent with the Coast 2050 common strategy of controlling herbivory damage to wetlands. The method chosen for the program is an incentive payment to registered trappers/hunters for each nutria tail delivered to established collection centers. Initially, registered participants were given \$4.00 per nutria tail. To encourage participation, the payment was increased to \$5.00 per tail in the 2006-2007 season.

Wetland Damage

Five years prior to the implementation of the "Coastwide Nutria Control Program" (CNCP) damage to coastal wetlands in Louisiana due to nutria herbivory averaged approximately 90,000 acres per year. Since the implementation of the CNCP the damage to coastal wetlands caused by nutria herbivory was reduced to aproximately 20,000 acres coastwide. Also, the severity of the majority of the damaged acreage presently is ranked as minor damage, indicating those acres may soon recover with the continued level of harvest without any additional detrimental impacts.

These efforts have addressed the goals of the "Nutria Eradication and Control Act of 2003" in reducing nutria populations and restoring wetlands damaged by nutria. The continuance of this program by re-authorizing the "Nutria Eradication and Control Act" would provide funding for this very positive and successful program in coastal Louisiana and allow the Department to further pursue these problems. The concern now is the increased populations of non-native invasive feral swine along the coast which are impacting these recovered acres of nutria damage. This problem needs to be addressed by collecting baseline data on population densities and documenting areas of damage. Subsequent to this assessment methodologies on control techniques can be determined and implemented similar to the strategies utilized for the control of nutria.

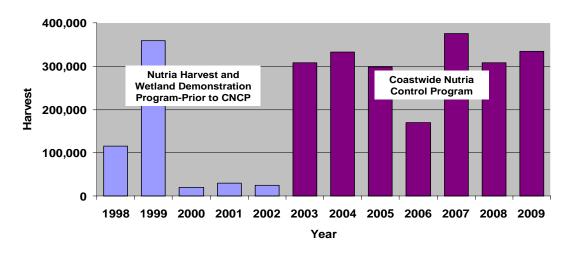
Coastwide Nutria Damage

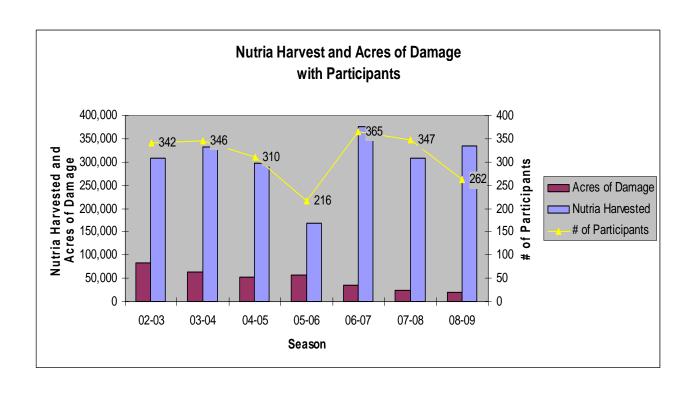


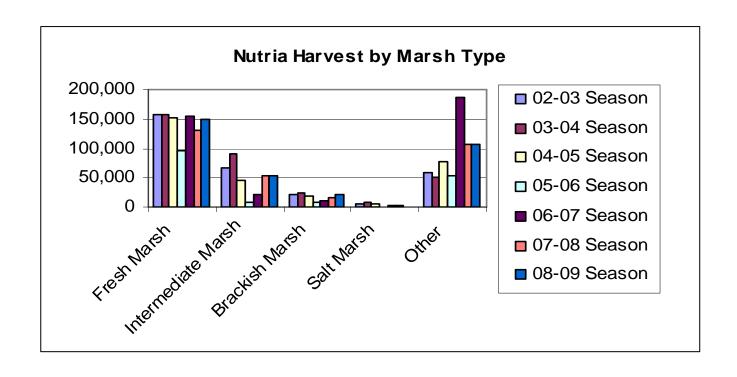
Harvest Results for the CNCP

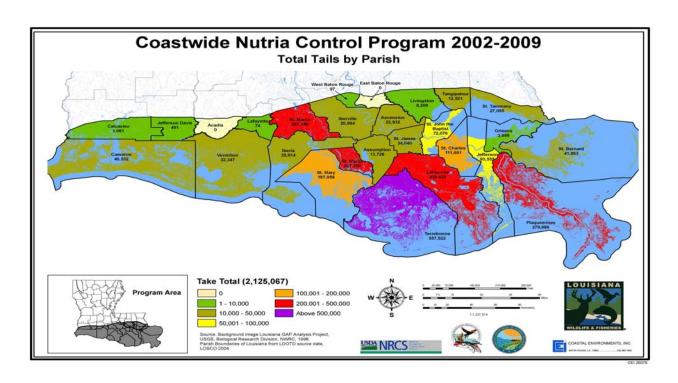
Louisiana's open trapping season begins each year on November 20th and runs through March 31st. Trapping efforts normally peak between January and March. It is at this time that the nutria are most active and most visible to hunters and trappers, this is primarily due to die back in vegetation that occurs in late winter. This die back of vegetation makes access to the nutria's preferred habitats easier for trappers and hunters and the increased visibility exposes the nutria to hunters utilizing rifles and shotguns. Over the past seven years of the program, annual nutria harvest has averaged approximately 300,000 nutria per year. To date almost 2.5 million nutria have been harvested through this program and incentive payments of over 9.5 million dollars have paid to the participants. The CNCP has averaged approximately 300 active participants annually. Of these participants, approximately one-third of them harvest over 800 nutria annually per hunter, with some participants harvesting over 5,000. During most years approximately half of the participants' preferred method of take is shooting nutria with a rifle while slightly less than half of the participants prefer to set traps, with the reminder of the participants using shotguns. Most of the nutria harvested are from fresh marshes in the southeastern half of the state, with Terrebonne Parish having the highest harvest. Terrebonne parish and the Barataria-Terrebonne estuary are experiencing some of the most rapid land loss rates in the state and removal of nutria from these areas is critical.

Nutria Harvest









Non-native Invasive Feral Swine in Coastal Louisiana

In 1999, Executive Order (EO) 13112 established the National Invasive Species Council (NISC), co-chaired by the Secretaries of the Interior, Agriculture, and Commerce. NISC members include

the Secretaries of Transportation, State, Defense, Homeland Security, Treasury, and Health and Human Services; the Administrators of the Environmental Protection Agency and the National Aeronautics and Space Administration; as well as the Director of the U.S. Agency for International Development and the U.S. Trade Representative. NISC was charged with providing coordination, planning and overall leadership for federal invasive species programs and reaching out to state, tribal, local and private partners.

Invasive Species introduced into the United States from around the globe are affecting plant and animal communities on our farms, ranches and coasts; and in our parks, waters, forests, and backyards. As global climate patterns shift, the distribution of species will change, and so will the susceptibility of particular habitats to the impacts of new species introductions. Human activity such as trade, travel and tourism have all increased substantially, increasing the speed and volume of species movement to unprecedented levels. Invasive species are often unintended hitchhikers on cargo and other trade conveyances. Still more species are deliberately introduced as pets, ornamental plants, crops, food, or for recreation, pest control or other purposes. Most nonnative species, including most of our sources of food and fiber, are not harmful; and many are highly beneficial. A small percentage of nonnative species cause great harm to the environment, the economy or human health. Nonnative species that cause harm are collectively known as invasive species.

Invasive species (such as kudzu, snakehead fish, zebra mussels, emerald ash borers, sea lamprey, tree of heaven, hydrilla, nutria, West Nile virus, and Sudden Oak Death pathogen) may prey upon, displace or otherwise harm native species. Some invasive species also alter ecosystem processes, transport disease, interfere with crop production, or cause illnesses in animals and humans; affecting both aquatic and terrestrial habitats. For these reasons, invasive species are of national and global concern.

Feral swine are an introduced species that pose a number of threats to humans, livestock and wildlife. Among these threats is the ability of feral swine to harbor a variety of zoonotic pathogens that are federally regulated and whose presence would result in severe economic loss to livestock industries. Estimates of economic losses to agriculture and the environment average \$800 million annually. Feral swine have established populations in 38 states and are spreading rapidly. United States Department of Agriculture / Wildlife Services (USDA/WS) removed 28,472 swine in 29 states in FY 2008. (The National Invasive Species Council / NISC)

Non-native Invasive Feral swine populations in "Coastal Louisiana" are severely impacting wetlands especially acreages recovering from the negative impacts of nutria herbivory. Submergence of coastal wetlands in Louisiana is currently rapid and widespread. Recent studies on the "Effects of vertebrate herbivores on soil processes, plant biomass, litter accumulation and soil elevation changes in a coastal marsh" indicate that feral swine can have a negative effect on soil building processes, primarily by reducing below-ground production and expansion of the root zone. These negative impacts may lead to destruction of habitat and can further exacerbate the coastal erosion processes.

These animals severely impact alligator nests and alligator nesting habitat. Recently, coastal landowners were voicing their concern to the department on the monetary losses they have encountered from feral swine destroying numerous alligator nests. Along with other wetland resources feral swine can be detrimental to levee systems which protect people and communities from coastal flooding. Aerial coastal surveys conducted for the "Coastwide Nutria Control Program" and the "Coastwide Alligator Nest Survey" have documented an increase in feral swine population's coastwide especially throughout the Deltaic Plain (southeastern coastal Louisiana).

The damage feral swine cause to coastal wetlands is becoming more and more evident as these populations expand throughout the coastal landscape. If this problem is left unchecked negative impacts to coastal wetlands may increase to 90,000 or more acres experienced prior to the implementation of the "Coastwide Nutria Control Program". Louisiana State University researchers have determined that feral swine damage to coastal wetlands is very similar to nutria damage, however, is more severe.

The "Feral Swine Eradication and Control Pilot Program Act of 2009" would provide funding for Louisiana to develop measures to eradicate or control feral swine and to assess and restore wetlands damaged by feral swine. Knowledge and expertise developed in the existing nutria control programs would be utilized to carry out the activities of this beneficial program to Louisiana and allow the Department to address this problem.

The feral swine problem is similar to the nutria problem. A potential solution is to follow the same methodologies in the development of a control program. The goals of the Feral Swine Eradication and Control Pilot Program would be as follows; (1) study and assess the nature and extent of damage to wetlands in Louisiana caused by feral swine, (2) determine population densities and distributions of feral swine along coastal Louisiana, (3) develop methods to eradicate or control feral swine in Louisiana that may also be used in other States, and (4) develop methods to restore wetlands damaged by feral swine. Given the proper resources the Department can take a proactive approach and address this issue before it becomes a major threat to coastal wetlands as previously caused by nutria.



For more information on the "Coastwide Nutria Control Program" please visit www.nutria.com or contact Edmond Mouton, Biologist Program Manager @ (337) 373-0032.