

Good the effect of nutria in louisiana literature review example

[Environment](#), [Animals](#)



The Threat to Marshland Habitat and Wildlife

INTRODUCTION

- Introduced in Louisiana over 100 years ago.
- Native of South America
- Introduced for fur farming in 1900.
- Populations out of control for past 30 years in Louisiana marsh wetlands.

(Daily Herald, 2009, p. 1; U. S. Dept. of the Interior, 2013)

INTRODUCTION (CONT.)

Literature Review

- Nutria in Louisiana 1930s - 1980s
- Nutria Characteristics
- Marsh Wetlands
- Population Expansion
- Numbers reaching nearly 1 million by 1957
- Nutria Fur Farming
- Impact on Wetlands
- Nutria adds to the

list of grazing animals

affecting the plant communities of wetlands

NUTRIA CHARACTERISTICS

- Weigh as much as 13 lbs.
- Reach sexual maturity 4-8 months
- 2-3 litters per year

- Average 13. 1 pups a year
- Front teeth continue growing throughout its life.
- Nutria chewing keeps these front teeth sharpened and honed.

CHARACTERISTICS (CONT.)

- Nutrias prefer freshwater as well as intermediate march.
- This provides most palatable foraging.
- Consume anything green eating up to 25 percent of their body weight per day.
- Is an opportunist feeder devouring as many as 60 varieties of marsh plants.
- Burrow into the marsh soil to make their dens
- Odum et al, (1984) report, the nesting habit of the nutria results in digging underground passages (as cited by Mitsch & Gosselink, 2000, p. 326).

MARSH WETLANDS PLANTS

- Negative effects of nutria on marsh wetland plants:
- destroying large amounts of vegetation as the prefer eating the succulent rhizome stops marsh development
- uproot many others of the marshland plants as they dig for their favorites
- Individual nutria eats nearly 57. 5 lbs. of dry biomass.

MARSH WETLANDS PLANTS (CONT.)

- On nearly 2. 5 acres of marsh 40 nutria potentially cause " permanent loss of 50% of the biomass produced" during a 20-year growth
- " Within 20 years, a high density of nutria could result in the permanent

loss of one-half of all the potential organic matter produced in a marsh (Morris, 2012, p. 176).

- Nutria grazing idamage to the biomass limits regeneration of its swamp forests.
- Nutria consumption of the bald cypress seedlings contributes to the inability of regeneration of cypress-tupelo forests

POPULATION EXPANSION

- Population explosion numbering nearly 20 million over the next 20 years.
- Introduction of the nutria by state officials as agents to control hyacinth contributed to rapid populations adding nearly 1 million by 1957.
- Some of the reasons for the proliferation of the nutria directly connect to the overhunting of the state's alligator populations - a natural predator to the nutria (Morris, 2012, p. 176).
- With the trapping seasons continuing harvesting less nutria every year, the increase in the numbers of nutria continues at alarming rate.
- The outcome of the population explosion brought the first of the damage to wetland habitats to the public in the late 1980s (Baroch et al., 2002).

POPULATION EXPANSION (CONT.)

WETLAND PLANT LIFE

- Carbon removal by nutria consumption of marsh biomass by example assumes a 2 million population in coastal Louisiana estimates the equivalent of nearly 45, 000 lbs. of coal " or 12. 5 million gallons of gas" according to Holm et al. (2011. p. 49).
- The one consistent scientific finding establishes the nutria effect on

Louisiana marsh habitats show their grazing patterns continue damaging marsh vegetation, thus, contributing to acceleration of wetlands deterioration.

WETLAND PLANT LIFE (CONT.)

- Nutria adds to the list of grazing animals affecting the plant communities of wetlands.
- The rapacious eating habits of millions of these animals shows the urgency of the issue emerges.
- It is no surprise the human decision bringing nutria into Louisiana adds another factor to the human effect shaping wetlands (Tiner, 2005, p. 53).

LOUISIANA MUSKRAT POPULATION

- Louisiana muskrat populations in 1900 coastal marshlands remained managed for their fur.
- With the introduction of the nutria during this time, reveal by the 1960s, the exponential increase of nutria harvesting matched the decline of trapped muskrats.

History reveals the market demand for the two different types of pelts for commercial use played a part in the muskrat decline during the fur harvest

ROLE OF BOUNTIES

- Eestablishing the 2002 Coast wide Nutria Control Program (CNCP) focusing on abating the existing populations with the goal set a managing the rodent, set a \$4 per nutria tail bounty paid to registered participants.
- The U. S. Geological Survey Wetlands Research Center in Lafayette, La,

determines purging the numbers of these nutria populations is either beast or man hunt, them (Daily Herald, 2009, p 1). (Louisiana nutria populations Attachment A, p. 9).

ROLE OF BOUNTIES (CONT.)

- Morris (2012) reports, " In recent times, a resurgent alligator population in lower valley swamps has promised to keep the nutria population in check (p. 176)."
- It is this type of human proactive measures, addressing the nutria problem that remains one of the best alternatives, to stopping their destruction of the Louisiana marsh wetlands.

CONCLUSION (CONT.)

- The voracious appetite of the nutria rodent effect on Louisiana wetlands over the past 100 years shows the infestation out of control and endangering the state marshlands in particular.
- Research continues showing the nutria over population remains a major contributing factor in the demise of these habitats.
- This is at a critical level in some areas of the coastal wetlands, and state officials remain focused on further determinations of how to alleviate and control the nutria population as part of the ongoing efforts in this ecological travesty

CONCLUSION (CONT.)

- Western Louisiana marshes alligator increased populations show their presence greatly reduces the nutria population.

- Controlling nutria populations as another option to save Louisiana marsh wetlands cannot go untried.