



United States
Department of
Agriculture

Animal and Plant
Health Inspection
Service

Wildlife Services

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Dear Britta:

The winter session of the 2007 predator damage management project to help protect Threatened and Endangered species along Cape Hatteras National Seashore (CAHA) was completed during March 8th-17th. USDA-Wildlife Services removed 8 red fox (*Vulpes vulpes*), 31 raccoons (*Procyon lotor*), 25 Virginia opossums (*Didelphis virginiana*), 4 free ranging cats (*Felis domesticus*), and a river otter (*Lontra canadensis*). In addition to these predators, 52 nutrias (*Myocastor coypus*) were removed from the marshy areas near the beach. In total, 121 target animals were taken from both Hatteras and Bodie Islands (See Table 1).

Table 1. Fox removed from Cape Hatteras National Seashore, March 2007.

	Species	Age/Sex	GPS Location	Island
1	Red Fox	Adult Male	N 35.79217 W 75.53785	Bodie
2	Red Fox	Adult Male	N 35.79714 W 75.54033	Bodie
3	Red Fox	Adult Female	N 35.78027 W 75.53416	Bodie
4	Red Fox	Adult Male	N 35.22552 W 75.53490	Hatteras
5	Red Fox	Adult Male	N 35.83853 W 75.56116	Bodie
6	Red Fox	Adult Male	N 35.77999 W 75.53433	Bodie
7	Red Fox	Adult Male	N 35.77999 W 75.53433	Bodie
8	Red Fox	Adult Female	N 35.83852 W 75.56117	Bodie

Table 2. Fox dens located at Cape Hatteras National Seashore during the predator damage management project in 2007.

Site	Den Status	GPS Coordinates	Location
1	Active	N 35.79712 W 75.54033	Bodie Island

Trapping during the winter has proved to be extremely productive at Cape Hatteras National Seashore, as seen in the March 2005 and 2007 trapping session data (See Table 3). Reasons for increased catch totals during the winter may be attributed to the limited number of natural food resources, reduced human activity along the beaches, cooler temperatures, and because that time of the year coincides with the period of time when predator species are typically more active. The lower temperatures help to reduce trap site contamination that is often unavoidable during the summer months. Even after considering the success from the winter visit, we recommend a second visit be planned for the summer during the peak of the nesting period. We continue to recommend that predator damage management sessions include at least two wildlife specialists and last for a minimum of 10 days each.

Table 3. Animals removed on Cape Hatteras National Seashore, 2002 - 2007. Trapping data, for 2005 and 2007 is separated into the winter (w) and summer (s) sessions. The winter sessions were conducted during the month of March. The summer sessions took place during May, June, July, and August.

Year	Red Fox	Gray Fox	Raccoon	Opossum	Feral Cat	Nutria	Feral Dog	Muskrat	Otter
2002s	28	0	2	0	0	0	0	0	0
2003s	15	0	4	6	1	0	0	0	0
2004s	9	6	18	0	0	2	0	0	0
2005w	2	15	41	1	4	5	1	0	0
2005s	0	3	13	6	0	2	0	1	0
2006s	4	3	21	8	2	0	0	0	0
2007w	8	0	31	25	4	52	0	0	1
Totals	64	27	130	46	11	61	1	1	1

USDA-Wildlife Services continues to use cage traps to remove raccoons, free ranging cats, and opossums. However, during our visits, we have encountered raccoons and feral cats that avoided entering cage traps. Past trapping experiences at Cape Hatteras National Seashore, as well as findings in scientific literature, indicate that cage traps are not always the most effective tool in wildlife damage management; especially, when pursuing animals that are cage trap shy, or otherwise educated to cage traps. In addition to cage trap shy animals, considerations must be given to the natural behaviors of certain animals; for example, most adult red foxes will not approach or enter cage traps. Data from the March 2007 trapping session indicates that the following animals were removed using traps other than cages: 52 nutria (100%), 8 foxes (100%), 1 river otter (100%), 17 raccoons (55%), 10 opossums (40%), and 1 feral cat (25%) (See Table 4). We recommend that all methods, including cage traps, foothold traps, conibears, and snares continue to be used during the predator damage management project.

Feral cats have been a topic of interest for residents living in the proximity of the Cape Hatteras National Seashore. USDA-Wildlife Services has agreed to take all captured feral cats to an authorized animal shelter. In March, we removed three feral cats using cage traps and one feral cat with a foothold trap (See Table 4). There was no sign of damage to the feral cat caught in the foothold trap. Three cats were taken to the Dare County Animal Shelter in Manteo, on March 12th. One cat was caught on March 17th and was taken to the Wake County Animal Adoption Center because the Dare County Animal Shelter was closed.

Table 4. Methods used during the March 2007 predator management project at Cape Hatteras National Seashore.

Species	Methods Used			
	Cage	Foothold	Conibear	Snare
Red Fox	0	5	0	3
Raccoon	14	3	13	1
Opossum	15	2	8	0
Feral Cats	3	1	0	0
Nutria	0	0	52	0
Otter	0	0	1	0

As you are aware, Cape Hatteras National Seashore is a large area and due to time constraints, work hours, and available funds we were unable to address the predation concerns on Ocracoke Island. To meet the demands and to be able to cover the entire area additional funds will be needed. A history of the funding for the predator management project is below.

Table 5. History of funding from 2002-2007.

Fiscal Year	Dates Worked	Amount of Funding		
		USFWS	NPS	USDA
2002	June 17 – 21 July 18 – 22	\$2,500	\$5,000	\$0
2003	June 2 – 14 August 20 – 29	\$0	\$7,927	\$4,370
2004	May 25 – June 3 July 20 – 30	\$0	\$4,500	\$7,791
2005	March 16 – 26 July 25 – August 5	\$0	\$9,000	\$3,507
2006	June 19 – 30	\$0	\$18,000	\$2,950
2007	March 8 – 17			

USDA-Wildlife Services has contributed funds to cover equipment, some travel, per diem, and salary in past years to help the NPS (See Table 5). Due to funding cuts, USDA-Wildlife Services will not have funds available to assist with the project this year or likely in future years. We will be sending an invoice for \$9,000 to cover costs during the March 8-17, 2007 activities under FY 2006 Interagency Agreement #: 06-7237-336-9. There is \$1,022 left from the \$18,000 funded in FY 2006. This will reduce the amount needed for work this summer. We recommend a new interagency agreement be initiated for FY 2007 to add an additional \$8,000 for a 10 day trip this summer. Attached you will find the draft interagency agreement for your review.

To cover increased costs (e.g. gas, vehicle, equipment etc.), we are estimating it will cost approximately \$9,500 in FY 2008 for 2 full-time wildlife specialists or 200 hours for each 10 day visit assuming housing will still be available. Budgeting \$19,000 in FY 2008 will help ensure adequate funding will be available for predator damage management including a 10 day trip in March 2008 and another during the peak nesting season. Any unused funds will be carried over to help offset funds needed in FY 2009.

We enjoyed working with the NPS staff and hope that our efforts met your expectations. Feel free to contact us with any questions and we look forward to assisting you in the future.

Best regards,

Josh Biesecker
Wildlife Specialist

Todd Menke
Assistant State Director

