

2001 American Oystercatcher Monitoring-Cape Lookout National Seashore

Introduction

American Oystercatchers are common nesters throughout the park, primarily on the ocean beach. Their choice of nesting habitat makes them particularly vulnerable to disturbance by park visitors and off-road vehicles.

Monitoring of American Oystercatcher nesting success at Cape Lookout National Seashore (CALO) began in 1995. A researcher from Duke University studied nesting on South Core Banks and found low reproductive success. She also documented chick mortality caused by off-road vehicles. Since 1997 researchers from N. C. State University and park staff have conducted censuses, monitored nesting success and banded birds on North and South Core Banks.

Methods

Surveys of nesting habitat were conducted 2-6 times a week from early April to mid-July. When nests were located they were marked with a wood stake and given a number. The stakes were usually placed about 10 feet to the seaward side of the nest. The area around the nest was closed with "Bird Sanctuary" signs if the nest was in danger of being run over by off-road vehicles. Generally, nests found in the dunes were not posted. There was concern that predators might learn to associate posts with nests. Locations of the nests were recorded using a GPS and the park's mile marker system. Information about the habitat type was also noted.

Nests were checked every few days to monitor the number of eggs present and hatch date. Chicks were monitored until they fledged or were lost.

Results

Nesting

A park-wide census was conducted in May. 59 nesting pairs were counted (Table 1). Counts were for pairs on or near the ocean beach and did not include marsh islands or soundside habitat.

Table 1. American Oystercatcher Census- May 2001

North Core Banks	22 pairs
Middle Core Banks	5 pairs
South Core Banks	24 pairs
Shackleford Banks	8 pairs

Nesting pairs were spread throughout most of the ocean beach habitat in the park (Figures 1& 2). The birds did not use areas adjacent to buildings and concentrations of people.

Hatch Success

109 nests were found of which 19 hatched at least one egg. Only 1 chick was known to survive to fledge (Table 2). The average clutch size was 1.5 eggs. Of the nests that failed, 50 were lost to predation, two were flooded, one was run over by a vehicle and two were abandoned. One nest was lost after one of the adults was killed by a Marsh Hawk. 53 nests failed due to unknown causes. Raccoons were found to be the main predator but ghost crabs, feral cats, fish crows and gulls also depredated nests. Individual nest data are found in Appendix 1a and 1b.

Table 2. Oystercatcher Nesting by Island 2001

Island	# pairs	#Nests	# Nests Hatched	# Chicks Fledged
North Core Banks	27	52	11	0
South Core Banks	24	57	8	1
Shackleford Banks	8	Unknown	Unknown	Unknown

Table 3. Summary of Oystercatcher Reproductive Success Data

Year	Island	#Nests	#Nests Hatched	#Chicks fledged
1995	SCB	36	10 (28%)	7
1997	SCB	34	4 (12%)	2
1998	NCB & SCB	98	12 (12%)	6
1999	NCB & SCB	114	16 (14%)	6
2000	NCB & SCB	75	25 (33%)	9
2001	NCB & SCB	109	19 (17%)	1

Banding

12 adult birds were trapped on the nest and banded. A green band or flag and a USFWS metal band were placed on the lower left leg. This was used as a unique marker of birds that nest in the park. One or two color bands were used in various combinations on the lower right leg to identify individuals. Banded adults were measured and weighed.

Six chicks were also captured and banded. Unfortunately none of these chicks are believed to have survived to fledge. A list of band combinations used is found in Appendix 2.

Discussion

The hatch success of oystercatcher nests this year (17% of the nests had at least one egg hatch) was the almost same as the average of previous seasons (18%) (Table 3). Productivity also continued to be poor with 51 pairs only known to fledge one chick. Predators continued to be the biggest threat to nesting success, with flooding only a minor factor this season.

Direct human impacts on nesting success included a nest run over by a vehicle and a nest abandoned when a campsite was located too close to the nest. Oystercatcher chicks were regularly found in vehicle tracks, although chick mortality was not observed this season.

The monitoring at Cape Lookout National seashore seems to confirm that American Oystercatchers have inherently low reproductive productivity. Despite this, the number of nesting pairs in the park has remained stable over the past five years.

Management Recommendations

Monitoring should continue to document factors limiting nesting success of American Oystercatchers at CALO. It is unknown what level of productivity is necessary to maintain the population in the park. Observations of banded birds could provide vital information on survival rates and site fidelity of nesting birds. Efforts should continue to limit the impacts of off-road vehicles on nests and chicks.

Figure 1.

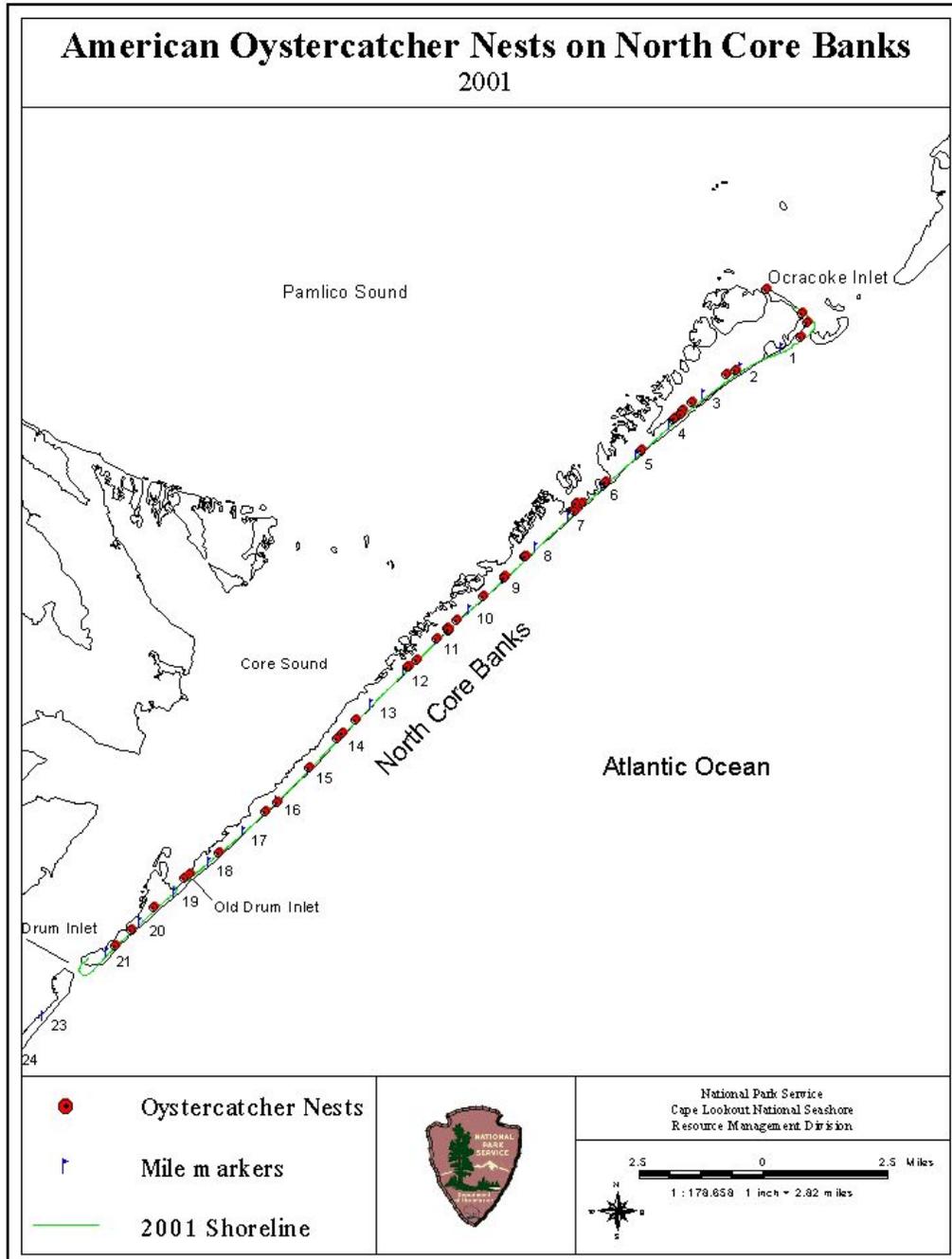


Figure 2.

