

2000 American Oystercatcher Monitoring

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 stake and given a number. 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. 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 Pairs

A park-wide census was conducted the week of May 8. 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 2000

North Core Banks	22 pairs		
"Mid Core Banks"	7 pairs	1 nest	2 broods
South Core Banks	22 pairs	10 nests	5 broods
Shackleford Banks	8 pairs		

Hatch Success

75 nests were found of which 25 hatched at least one egg. A total of nine chicks survived to fledge (Table 2). The average clutch size was 2.5 eggs. Of the nests that failed, 9 were lost to predation, 2 were flooded, one was run over by a vehicle and one was abandoned after vehicles repeatedly drove near it. 22 nests failed due to unknown causes. Raccoons were found to be the main predator but ghost crabs cracked eggs in at least one nest.

Table 2. Oystercatcher Nesting by Island 2000

Island	# pairs	#Nests	# Nests Hatched	# Chicks Fledged
North Core Banks	29	36	7	1
South Core Banks	22	39	18	8
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	72	5 (7%)	4
1998	SCB	26	7 (27%)	2
1999	NCB	62	11 (18%)	5
1999	SCB	52	5 (10%)	1
2000	NCB	36	7 (19%)	1
2000	SCB	39	18 (46%)	8

Banding

Eight adult birds were trapped on the nest and banded. A USFWS band was placed on the left leg and two color combinations on the right leg for ID. Four chicks got a UFWS band on the left, and color 'cohort' band (00=Green) above it, also on the left. Chicks did not get an individual code. Banded adults were measured and weighed.

Table 4. Adult Oystercatchers Banded in 2000 on NCB

USFWS Band	Color Band	Location	Nest #
805-60038	Blue 7 / green 5	Mile 5	5A
805-60039	Gold 6 / red 5	Mile 18	18A
805-60041	Gold 9 / green 7	Mile 6	6C
805-60042	Green 8 / red 7	Mile 10	10A
805-60043	Blue 9 / gold 7	Mile 4	4B
805-60044	Gold 8 / blue 10	Mile 2	2D
805-60049	Red 8 / green 10	Mile 8	8C
805-60050	Green 14 / gold 10	Mile 1	1

Table 5. Oystercatcher Chicks banded in 2000

USFWS Band	Color Band	Location	Nest #
805-60045	Green 9	Mile 18	18A
805-60046	Green 11	Mile 32.2	10
805-60047	Green 12	Mile 25.7	11
805-60048	Green 13	Mile 38.5	15

Discussion

The average hatch success rate for nests from 1995-2000 was 19%. This year nests on South Core Banks were over twice as successful (46%) and fledged more chicks than any previous year. No major storms occurred and none of the nests on the island were lost to flooding. Nesting success on North Core Banks was very low for the third consecutive year.

Off-road vehicle impacts on nests and chicks continues to be a concern. One nest was run over after a vehicle drove around signs and through the dunes. Another nest was abandoned after a vehicle repeatedly passed within feet of the nest after driving around a no vehicle sign. Chicks were also found in vehicle tracks, although chick mortality was not observed this season.

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 on nests and chicks.