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Shorebird Ecology Studies

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PERFORMANCE REPORT

STATE: VIRGINIA

PROJECT TITLE: NONGAME AND ENDANGERED
SPECIES INVESTIGATION

PROJECT NO.: W-77-R-3

STUDY TITLE: SHOREBIRD INVESTIGATIONS

STUDY NO.: VIII

JOB TITLE: SHOREBIRD STUDIES

JOB NO.: VIII-A, B, C

JOB VIII-A
OBJECTIVE: To determine and monitor the size of the breeding population
of oystercatchers on the Eastern Shore of Virginia.

JOB VIII-B
OBJECTIVE: To determine and monitor plover (Piping and Wilson's)
populations along the barrier islands in order to detect
population trends and shifts.

JOB VIII-C
OBJECTIVE: To determine habitat requirements of Piping and Wilson's
Plovers on the barrier island beaches.

SUMMARY:

Virginia's beach-nesting shorebirds were surveyed with a total of 84 Piping Plover pairs, 26 Wilson Plover pairs, and 1136 oystercatcher pairs recorded for the 86 breeding season. The Piping Plover was listed as threatened on January 10, 1986 and an intensive survey was conducted along Virginia's coast. Critical areas (Grandview Beach and Cedar Island) were signed and posted for protection. The oystercatcher foraging and habitat study was completed.

FINDINGS:

A Piping Plover survey was conducted to determine the number of breeding pairs, an estimate of reproductive success, and nesting habitat parameters. Two visits were made to all barrier islands and Grandview Beach. The first visit was conducted during the peak of incubation and the second was conducted just prior to fledging in order to minimize disturbance. Teams of observers remained constant for each site as numbers of nesting pairs, young, eggs, habitat parameters and general site conditions were recorded (Form A attached). Analysis of these data is ongoing and results will be reported in next years report. Preliminary results show a total of 84 nesting pairs, 56 nests located, 14 single birds and 50 young (Table 1). Estimates of reproductive success are considered to be gross underestimates. Due to the asynchronous season (multiple renest attempts caused by high tides the first two weeks in May), the difficulty of finding the cryptic plovers, and the manpower, time and accessibility restraints, it is recommended that for accurate reproduction success data a more intensive study will be required.

The oystercatcher study was completed as further data on habitats and foraging was collected. Results clearly indicate a preference for nesting closer to mudflats than to beaches. Nesting densities were higher around mudflats and nesting was initiated earlier there and less significant differences in time budgets and foraging strategies reflected the productivity of the mudflats and availability of the oystercatchers preferred food, the stout razor clam.

Table 1.

ISLAND	PAIRS	SINGLES	YOUNG	NESTS	NEST LOCATIONS		
					WASHOVER/FORE/BACK		
Fishermans		4					
Smith	6	1	9	3	1	2	0
Hog	6	3	10	2	0	1	1
Cobb	10	1	9	9	5	1	3
Myrtle	6	0	4	5	3	2	0
Parramore	1	0	0	1	1	0	0
Assawoman	3	0	2	3	1	1	1
Wallops	2	0	0	2	1	0	1
Grandview	4	1	4	4	0	0	4
Assateague	9	1	3	6			
Cedar	7	3	4	2	1	1	0
Metomkin	30	0	5	19	14	5	0
Total	84	14	50	56	27	13	10

RECOMMENDATIONS:

A more intensive study of the reproductive success of the Piping Plover in Virginia would help determine the spectrum of success along the Atlantic Coast and would provide the Recovery Team with important data on possible "optimum or undisturbed" values for this species.

PREPARED BY: K. Terwilliger, Dr. Mitchell A. Byrd with assistance from Cashwell, Bradshaw, Beck and Via

LOCATION: Tidewater

COST THIS SEGMENT:

Federal: \$7,944.00 State: \$1,986.00 Total: \$5,958.00

