

AN INVENTORY OF THE BREEDING BIRDS OF MONOMOY  
NATIONAL WILDLIFE REFUGE, CHATHAM, MASSACHUSETTS, 1984

by Denver W. Holt, Waltham, John P. Lortie, Portland, Maine,  
and Robert C. Humphrey, Wenham

As part of a continuing cooperative ecological research project of the Massachusetts Audubon Society and the U. S. Fish and Wildlife Service, the authors again inventoried the breeding birds of Monomoy National Wildlife Refuge. The results were similar to those of the 1983 inventory, but there were additional breeding records and a few population changes in 1984. The inventory methods and the habitat types are described in the 1983 inventory report (BOEM, 12: 53-59, February 1984).

Sixty-one species are listed on the 1984 inventory. Each species is given a status based upon sighting frequencies as follows:

- A - abundant (difficult to miss)
- C - common (easy to locate)
- U - uncommon (present in small numbers, often overlooked)
- R - rare (not present in all years, difficult to locate)

Seven of the sixty-one species - Pied-billed Grebe, Northern Harrier, Piping Plover, American Oystercatcher, Willet, Black Skimmer, and Short-eared Owl - are included in the 1984 Massachusetts Rare Breeding Bird Inventory. This inventory system, established by the Massachusetts Division of Fisheries and Wildlife, lists twenty-six species for 1984. A few inventory highlights, including the first U. S. breeding record for Common Black-headed Gull and the puzzling evidence of the presence of Leach's Storm-Petrels on South Monomoy, are described below:

Leach's Storm-Petrel. Since 1982, skulls and other remains of carcasses of this species have been found in the pellets of the Short-eared Owl. A total of twenty-two storm-petrels has been tallied. The majority of these finds come from the Powder Hole area of South Monomoy. Searches during both day and night in 1983 and 1984 failed to uncover any nesting activity. It has been suggested that these individuals may represent prospecting young adults. When does a prospector become a breeder? Meanwhile, the Penikese Island population in Buzzards Bay is estimated at less than ten breeding pairs (Jeremy Hatch, personal communication). This represents the only known breeding population south of Maine. The authors welcome any information concerning this species on Monomoy.

Black-crowned Night-Heron. The night-heron population increased by forty-two pairs in 1984 to eighty-two pairs. We believe this may be due to better censusing as well as a substantial increase in birds. Worthy of mention is the shift of nearly the entire night-heron colony from a shrub- and tree-nesting coexistence with Snowy Egrets in 1983 to a spaced-out ground-nesting preference within scattered patches of Salt Spray Rose (*Rosa rugosa*) in 1984.

1984 Breeding Bird Census of Monomoy National Wildlife Refuge

	Morris Island	North Monomoy	South Monomoy	North	South	# Nests	Young Observed	Status	Probable Breeding	Comments
Pied-billed Grebe							+ U			one pair
*Leach's Storm-Petrel							? ?			needs further investigation
Snowy Egret						85	+ A			
Black-crowned Night-Heron						82	+ A			increase of 42 nests over 1983
*Glossy Ibis							U			1-2 adults present since 1983
Canada Goose				4		12	+ C			25-30 prs. on South Monomoy
Green-winged Teal						3	+ A			15-20 prs. on South Monomoy
American Black Duck				1		9	+ A			20-25 prs. on South Monomoy
Mallard							+ U			5-10 prs. on South Monomoy
Northern Pintail						2	U			4-5 prs. on South Monomoy
Blue-winged Teal							U			status uncertain
Northern Shoveler							U			4-5 prs. on South Monomoy
Gadwall						1	+ C			8-12 prs. on South Monomoy
American Wigeon							+ U			2 prs. on South Monomoy
Red-breasted Merganser							+ R			1 pair with young observed
Ruddy Duck							U			8-12 prs. on South Monomoy
Northern Harrier						1	+ U			a second territory suspected
Virginia Rail							U	?		no evidence in 1984
Sora							U	+		calling during breeding season
Piping Plover				1		2	+ U			needs better coverage
American Oystercatcher				9		2	+ A			25-30 individuals thr. summer
Willet				13			+ A			35-40 individuals thr. summer
Spotted Sandpiper				2			U			at least 1 pair on S. Monomoy
Laughing Gull				800			+ A			100 prs. less than 1983
*Common Black-headed Gull				1			R			first U.S. breeding record
Herring Gull				1082		13749	+ A			largest colony in N. America
Great Black-backed Gull				72		5134	+ A			largest colony in N. America
Common Tern				1199		6	+ A			about 85 prs. less than 1983
Arctic Tern				3			+ U			
*Least Tern				2			U			nests washed out
*Black Skimmer				1			+ U			1st state record since 1976
Mourning Dove							C	+		
Short-eared Owl				1		3	+ C			at least 5 prs. for Monomoy
Belted Kingfisher							U	+		3 adults in area
Eastern Kingbird							C	+		
Horned Lark				2			A			
Tree Swallow							U	+		1 pair observed
No. Rough-winged Swallow							U	+		2-3 prs. observed
Barn Swallow						19	+ C			
Blue Jay							C	+		
*American Crow						2	+ C			
Black-capped Chickadee							A	+		
Tufted Titmouse							C	+		
American Robin				?			+ A			
Gray Catbird							C	+		
Northern Mockingbird							+ C			+
Brown Thrasher							U	+		
European Starling							+ U			
Yellow Warbler							C	+		
Common Yellowthroat							A	+		
Northern Cardinal							C	+		
Rufous-sided Towhee							C	+		
Savannah Sparrow				4			A			
Sharp-tailed Sparrow							+ C			
Song Sparrow							C	+		
Red-winged Blackbird							+ A			
Common Grackle							+ C			
Brown-headed Cowbird							+ U			
House Finch							C	+		
American Goldfinch							C	+		
House Sparrow							C	+		

\*Additions in 1984.

Status code: A = abundant; C = common; U = uncommon; R = rare.

Glossy Ibis. In 1983 two birds established themselves within the Snowy Egret colony, but no evidence of nesting was found. In 1984, at least one adult was periodically flushed from the same colony, but again no evidence of nesting could be found. It seems likely that this species will establish itself on Monomoy in the future.

Northern Harrier. One nest was located in 1984, from which three nestlings fledged. This was the first confirmed nesting on Monomoy since 1981. A second nest was suspected but never confirmed.

Common Black-headed Gull. In 1983 there had been a single territorial adult of this species in the Laughing Gull colony. Presumably the same bird returned to exactly the same spot in 1984 but, this time, with a mate. Two eggs were laid, but the chicks died while emerging from the shells. A cold heavy rain on the night of hatching was believed to be the cause of death.

Herring Gull and Great Black-backed Gull. The 1984 breeding census of these species was conducted under the direction of Ralph Andrews of the USFWS Regional Office in Newton, Massachusetts. The census recorded 14,521 nesting pairs of Herring Gulls and 4996 nesting pairs of Great Black-backed Gulls, the largest colonies of these species in North America. The combined total of 19,517 nesting pairs of gulls represents the largest gull colony on the Atlantic seaboard.

Black Skimmer. Two pairs of skimmers established territories on Monomoy in 1984. One pair laid three eggs, all of which hatched successfully. Though many juveniles were observed on Monomoy in late summer, we do not know whether any of these nestlings fledged. The second pair scraped out nest sites but did not lay. A third pair was present for a short time during the early summer. The one nesting represents the first record of breeding Black Skimmers in Massachusetts since 1976.

Short-eared Owls. The population appears stable with an estimated twelve to fifteen individual adults. There was one nesting attempt on north Monomoy in late June, but this nest with eggs was abandoned. South Monomoy had four successful nesting territories. These owls are sensitive to disturbance during the nest site selection period, and care should be taken to avoid disturbance wherever they might breed.

DENVER W. HOLT is a research associate with the state's Natural Heritage Program and is investigating the population, distribution, and breeding biology of the Short-eared Owl in Massachusetts to produce recommendations for the management of this species.

JOHN P. LORTIE is the Refuge Manager of the Rachel Carson Wildlife Refuge at Wells, Maine. A wildlife biologist, he has studied gull control, woodlot management, and has revised the plant list for Monomoy. He is interested in resource analysis and master planning of refuge management practices.

ROBERT C. HUMPHREY is the Refuge Manager of Monomoy and is a graduate student in Wildlife Biology at the University of Massachusetts doing research on the American Oystercatchers on Monomoy. An accomplished wildlife photographer, he has won recognition of his work in photographic competitions.