

OPERATION RECOVERY AT SANDY HOOK, NEW JERSEY - 1962
by Robert C. Frohling

Sandy Hook, New Jersey, offers a unique location for an Operation Recovery station. Whether one subscribes to the theory of broad-front movement of nocturnal migrants or the theory of channelization of these migrants down river valleys, along mountain-tops, etc., Sandy Hook would seem to be a natural place for birds to concentrate (Fig. 1). As a result of occupation by the U. S. Army for many decades, parts of the Hook have remained in an essentially natural condition. In July, 1962, the lower one-third of the isthmus was turned over to the State of New Jersey for administration as a public park.

Realizing the potentials of this area as an Operation Recovery station, I made application to the proper state authorities for permission to set up a netting project. After some hesitation because of the small size of the area involved, authorities granted permission for a limited "test" project. As will be noted further on, I now believe that this hesitation was justified.

The netting was done in a wooded tract of approximately 200 acres on the northeast shore of Spermacetti Cove. This section has been designated a "natural area" and is not open to the public. Ancient holly trees (*Ilex opaca*), some of them two feet in diameter, dominate the scene. An understory of smilax, poison ivy and other shrubs is almost impenetrable. Salt marsh vegetation sweeps in among the trees in several places. Along the cove are dunes covered with beach plum, poison ivy, and their ecologic associates. Before the state acquired the area, army bulldozers had cleared several lanes. In addition, the park naturalist had cut a trail through some of the heaviest growth. These openings were used as netting lanes.

Banding was started on the evening of September 13 and continued intermittently until October 13. A total of fifteen days or part days were spent on the project. On most days, the nets were in operation from dawn to dusk. The number of nets (standard 12 meter $1\frac{1}{2}$ " nets) in use varied but never exceeded six. During the first few days there was considerable shifting of nets until the best locations were determined.

A total of 552 individuals of 48 species were banded. There were no rarities nor species of unusual interest. Table 1 gives a numerical summary of the birds banded. The following species have been eliminated from the table to increase its readability. Only one individual (two where noted) of each was netting during the project - Sparrow Hawk (10/12), Mourning Dove (10/7), Whippoorwill (9/22), Yellow-bellied Flycatcher (9/29), Blue Jay (9/30), House Wren (9/23), Winter Wren (10/13), Parula Warbler (9/22), Cape May Warbler (10/7), Black-throated Blue Warbler - two (10/6),

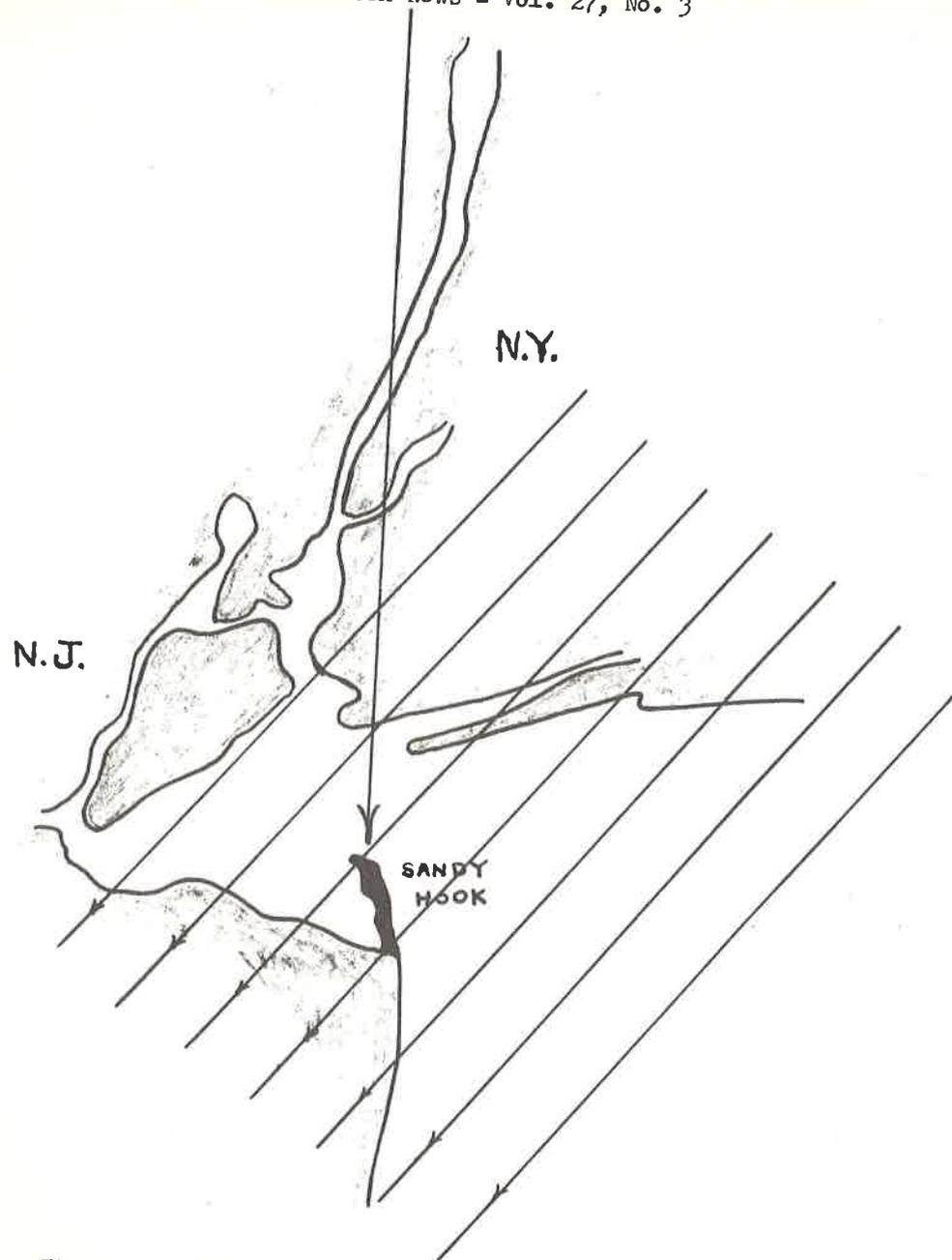


Figure 1. Relation of Sandy Hook to possible flight lines.

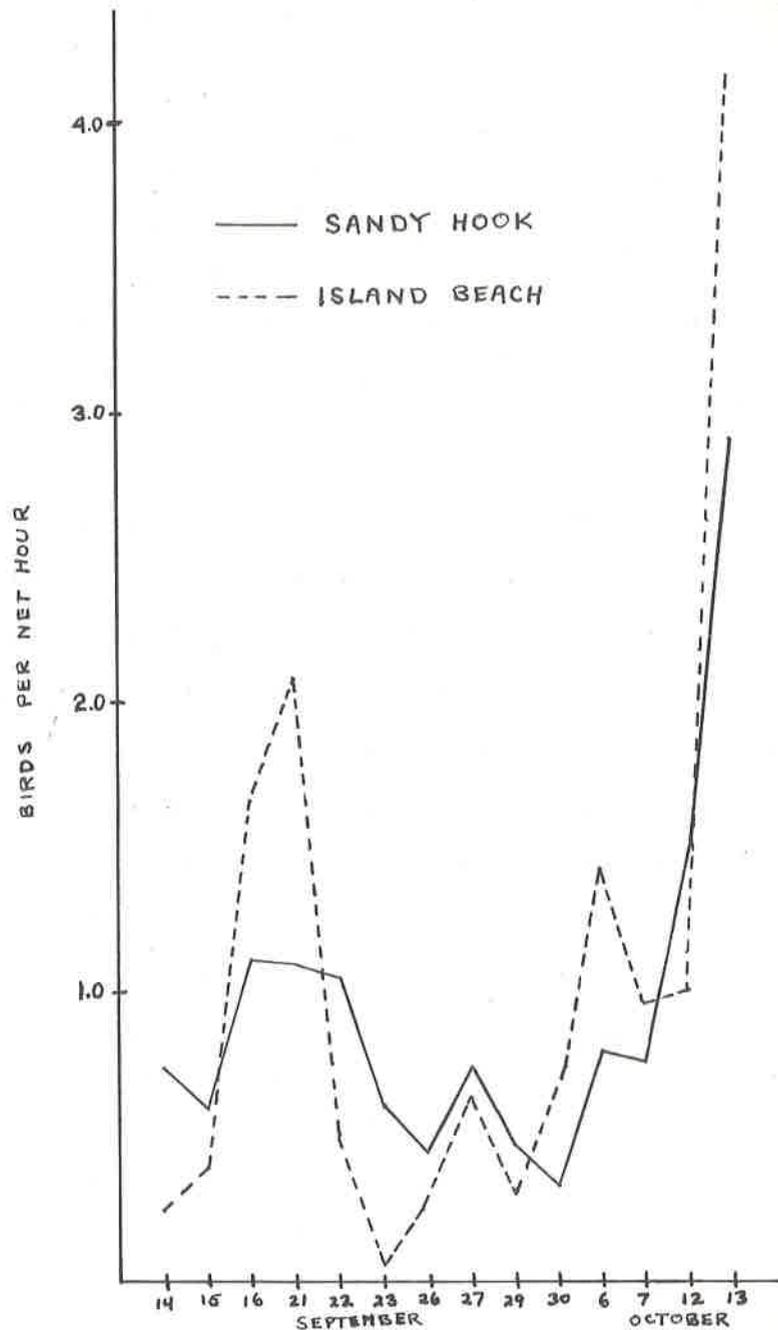


Figure 2. Comparison of Birds Per Net Hour at Sandy Hook and Island Beach on Selected 1962 Days.

Species	September												October			Total	
	13	14	15	16	21	22	23	26	27	29	30	6	7	12	13		
Yellow-s. Flicker	-	1	6	4	-	-	-	1	-	-	-	-	1	-	4	1	28
Yellow-b. Sapsucker	-	1	-	-	-	1	-	-	-	1	-	-	-	3	3	7	
Hairy Woodpecker	-	1	-	1	-	-	-	-	-	1	-	-	-	1	1	4	
Downy Woodpecker	-	-	1	2	-	-	1	-	-	-	1	2	2	1	1	11	
Eastern Phoebe	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	8	
Black-c. Chickadee	-	1	-	1	2	2	-	-	-	1	1	1	1	1	1	11	
Brown Creeper	-	-	-	-	-	14	-	-	-	2	4	5	10	12	10	59	
Catbird	-	3	5	4	2	7	3	1	1	4	-	-	2	3	1	37	
Brown Thrasher	1	-	1	1	1	1	1	1	1	-	1	-	-	-	-	8	
Wood Thrush	-	-	-	-	-	3	-	1	1	-	1	-	-	-	-	8	
Hermit Thrush	-	-	-	-	-	-	-	1	6	4	-	-	-	8	9	17	
Swainson's Thrush	-	1	4	9	1	5	4	1	1	4	-	1	2	5	2	43	
Gray-cheeked Thrush	-	-	-	2	1	1	1	2	1	-	-	-	1	1	2	15	
Veery	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	4	
Golden-c. Kinglet	-	-	-	-	-	1	1	1	1	-	-	-	-	2	1	4	
Ruby-c. Kinglet	-	5	1	-	-	1	-	-	-	-	-	-	4	1	-	6	
White-eyed Vireo	-	1	1	-	-	1	-	-	-	1	-	-	4	1	-	6	
Red-eyed Vireo	-	1	1	-	-	1	-	-	-	1	-	-	3	1	-	6	
Black & Wh. Warbler	-	2	1	2	-	3	1	-	-	1	1	1	1	2	-	9	
Magnolia Warbler	-	-	-	-	-	1	1	-	-	1	1	1	1	1	-	12	
Myrtle Warbler	-	-	-	-	-	-	-	-	-	-	12	2	2	23	12	49	
Blackpoll Warbler	-	3	1	-	-	1	-	-	-	-	4	-	-	2	-	6	
Ovenbird	-	1	1	-	-	1	1	1	-	-	1	-	-	-	-	7	
North. Waterthrush	-	1	1	2	1	2	4	1	-	1	1	-	-	-	-	12	
Yellowthroat	-	-	2	1	-	1	-	-	-	-	-	-	-	-	-	4	
American Redstart	-	1	6	7	4	8	2	-	-	2	-	-	-	1	-	34	
Cardinal	-	1	1	1	4	1	1	-	-	-	3	1	-	1	-	5	
Rufous-s. Towhee	1	7	3	3	-	4	-	-	1	-	1	-	-	1	-	36	
State-c. Junco	-	-	-	-	-	-	-	-	-	4	-	-	-	3	-	13	
White-thr. Sparrow	-	-	-	1	2	-	-	-	-	-	5	1	2	5	6	15	
Song Sparrow	1	-	-	-	-	-	-	-	-	-	1	9	1	2	1	69	
Total Individuals*	3	28	33	47	11	67	19	8	11	28	13	52	49	99	84		
Total Species*	3	13	13	19	6	22	10	7	15	13	8	19	17	23	15		
Net Hours	9	37	55	42	10	64	30	18	15	59	39	66	65	69	29		

*See text for omitted species

Bay-breasted Warbler (9/29), Yellow-breasted Chat (10/12), Hooded Warbler (9/16), Wilson's Warbler (9/16), Canada Warbler (9/16), Indigo Bunting (10/12), Swamp Sparrow - two (9/30 & 10/13).

It is interesting to compare catches with those obtained at Island Beach, 40 miles to the south. Figure 2 shows the birds per net hour for fourteen days at the two locations. Although at first glance there seems to be a similarity in trends, closer examination reveals disparities not expected from two coastal locations in close proximity. Catches on only about half of the days showed similar trends. Many factors are undoubtedly at work which are not being considered.

An observation on chickadee distribution was made during the project. The Raritan River is usually cited as the dividing line between the Black-capped and Carolina Chickadees. Most chickadees to the south of the river are considered to be Carolinas. All six of the chickadees banded were identified as Black-caps.

There were two interesting recoveries which resulted from the study. A Brown Creeper (#102-37431) banded by S. S. Dickerson at Island Beach on October 11 at 0730 was netted by me at Sandy Hook on October 12 at 0900. A Magnolia Warbler - immature (#102-59917) banded by me at Sandy Hook on October 6 at 1300 was picked up dead in Brooklyn, New York City (near Sheepshead Bay) on October 7 about 1200 by R. Greenman (pers. comm.). Both of these recoveries were made almost due north of the banding location. The constitute further banding evidence of the phenomena of reverse migration.

A comment on the conservation of this area is in order. The "natural area" tract is small, it is unique botanically, and it will be subject to disturbance despite the efforts of the park personnel. Millions of people live within an hour or two drive of these precious 200 acres. Added use by banders is questionable at this time. If the State of New Jersey were able to acquire the rest of the Hook, some banding might be permitted.

This location is also the nesting site of at least three species of herons and a number of Ospreys. In June, one of our banding fraternity seriously damaged the bark of many of the large ancient hollies by using climbing irons to reach the nests of the herons. This was done without permission from the park personnel. Entrance to the area had been gained by obtaining a special permit for "bird observation." Need more be said!

I would like to thank Mr. James MacDonald of the Department of Conservation and Economic Development for permission to band in the park; Mr. Richard Cole, Park Naturalist, for his help and interest in the project; and Mr. Richard Riker, Park Superintendent, for many courtesies (especially for permission to bunk in the old Coast Guard Station).

Belle Mead, New Jersey

Table 1. BIRDS BANNED AT SANDY HOOK - 1964 *