

NINE YEARS OF BIRD BANDING AT FOUR AREAS IN NEW JERSEY

I. INTRODUCTION

By Oscar Sussman, Raymond E. Kerlin, William C. Carter,
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INTRODUCTION:

Birds were captured and banded at four areas in New Jersey from 1960 through 1968 as part of an extensive study of the ecology of Eastern and Western Encephalitis. The first five years of this activity have been summarized (Sussman et al 1966). The purpose of this report is to present information on the number and kind of birds captured at these four areas. For this study, we are not considering the banding records of other areas where birds were captured over a shorter period of time.

The object of this series of articles (over the next 11 or 12 issues of EBBA News, Ed.) is to present the mass of information which has been collected during nine years. The extensive amount of information precludes intensive consideration of many specific points of interest. Only a few conclusions are made concerning returning characteristics and longevity. It is anticipated that the authors will prepare additional articles regarding seasonal variation, resident species and migration. It is further anticipated that other workers will refer to this information and draw conclusions.

LOCATION OF AREAS:

Great Swamp. This area includes the Great Swamp National Wildlife Refuge, Passaic Township, Morris County and sanitary landfill just across the boundary in Chatham Township, Morris County. Latitude and longitude coordinates: 404-0742.

Forked River. All of the activities in this area were conducted at Forked River Game Farm, Lacey Township, Ocean County. Coordinates: 395-0741.

Oceanville. Most of the activities in this area were conducted at the Brigantine National Wildlife Refuge. Some bird capturing was accomplished at a nearby residential area and at the Nacote Creek Experimental Station. All of these stations are in Galloway Township, Atlantic County. Coordinates: 392-0742.

Estell Manor. All of the activities in this area were conducted at the Atlantic County Game Preserve, a private club in Estell Manor, Atlantic County. Coordinates: 392-0744.

OPERATING PROCEDURES:

Bird capturing activities in these areas were performed by public health veterinarians assigned or attached to the Veterinary Public Health Program of the New Jersey State Department of Health and by veterinary students and graduate students in biology under the supervision of the

veterinarians.

Most of the bird captures were made with mist nets placed along trails in wooded sections. A few mist nets were placed in residential areas. A starling trap was used at Great Swamp 1966 and 1967, Forked River 1966, 1967 and 1968, and Oceanville 1968.

The project was operated throughout the year at the four areas during several of the years covered by this report. Table I shows the periods of operation by area and by year.

Processing of birds included identification, sexing by plumage of certain species, banding, and drawing a blood specimen by jugular venipuncture (Kerlin, 1964; Kerlin and Sussman, 1963), following which the birds were released.

In addition to banding schedules and other reports required by the U.S. Department of the Interior, a file card was prepared for each bird which repeated or returned.

CAPTURES:

During the period of this report, a total of 39, 976 captures of 148 species was made at these four areas. Birds were subjected to venipuncture at the time of initial capture and at the time of each repeat or return, except when recaptured within a week.

A total of 34,366 birds were banded at these four areas during this period. The majority of birds were not recaptured (repeats and/or returns), as might be expected, for many birds were intransit migrants. Nevertheless recaptures were made 5,610 times. These captures were of 4,343 individuals or 12.6% of the total banded. Summary of number of birds captured and recaptured are shown in Table II.

RETURNS, LONGEVITY AND FOREIGN RETRAPS:

The longest period between banding and most recent capture in this study is seven years. A White-eyed Vireo at Oceanville and an Ovenbird at Estell Manor each hold this record. Returning characteristics, longevity and foreign retraps will be covered in more detail in subsequent articles in this series.

ACKNOWLEDGEMENT:

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LITERATURE CITED:

- Kerlin, Raymond E. 1964. Venipuncture of Small Birds. Journal Amer. Vet. Med. Assoc. 144(8):870-874.
- Kerlin, Raymond E. and Sussman, Oscar. 1963. Capture Processing and Venipuncture of Small Birds. Proc. Book, Amer. Vet. Med. Assoc.: 111.
- Sussman, Oscar; Kerlin, Raymond E.; Carter, William C.; Swinebroad, Jeff; and Goldfield, Martin. 1966. Ecology of Arbovirus Infection in New Jersey, Review of a 5-year Mist-Netting Program. Bird-Banding 37: 183-190.

AVAILABILITY OF RECORDS:

All of the records upon which these articles are based are available for study and use by interested persons. Arrangements may be made by contacting:

New Jersey State Department of Health
Veterinary Public Health Program
P.O. Box 1540
Trenton, New Jersey 08625

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	Great Swamp		Forked River		Oceanville		Estell Manor	
	From	To	From	To	From	To	From	To
1960	-	-	-	-	-	-	Apr.	Sep.
1961	May	Dec.	May	Dec.	Jun.	Dec.	Apr.	Dec.
1962	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.
1963	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.
1964	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.
1965	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.
1966	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.	Jan.	Dec.
1967	Jan.	Nov.	Jan.	Nov.	Jan.	Dec.	Jan.	Nov.
1968	Aug.	Oct.	Aug.	Oct.	Jan.	Oct.	-	-

TABLE I. PERIODS OF OPERATION

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	Great Swamp		Forked River		Oceanville		Estell Manor		Four Areas		
	Banded	Rec.	Banded	Rec.	Banded	Rec.	Banded	Rec.	Banded	Rec.	
1960	-	-	-	-	-	-	125	34	125	34	
1961	576	85	767	124	976	290	685	139	3,004	638	
1962	1,622	307	815	213	763	272	670	163	3,870	955	
1963	1,343	404	637	154	788	328	652	150	3,420	1,036	
1964	740	155	415	89	386	142	568	157	2,109	543	
1965	799	134	651	78	1,031	170	698	106	3,179	488	
1966	3,110	103	3,203	190	1,313	240	823	348	8,449	881	
1967	2,822	204	3,088	278	1,130	219	794	155	7,834	856	
1968	205	8	964	24	1,207	147	-	-	2,376	179	
TOTAL	FOR	11,217	1,400	10,540	1,150	7,594	1,808	5,015	1,252	34,366	5,610
PERIOD											

TABLE II. NUMBER OF BIRDS BANNED AND RECAPTURED
(Returns and Repeats)

--New Jersey State Department of Health, Veterinary Public Health Program,
P.O. Box 1540, Trenton, N.J. 08625.

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NOTE: It was with some hesitance, that we accepted the above for publication. The total manuscript will fill 11 or 12 issues of EBBA News, in individual chapter sections of 5 to 15 pages each. Nevertheless, after reading the entire work, I could not decide otherwise. A wealth of information is contained in the twelve chapters which otherwise would not find itself into the hands of our members. We've been preaching consistently about those of you who "sit" on vast mountains of information which you do not want to see into print. Here is one instance of the opposite; thanks to the authors of the above, all banders in EBBA will be able to share the data gathered by these gentlemen. We hope you benefit from the amount of work they've put into their study, and your favorable reaction to seeing this in print, in EBBA News. Editor.