

Nine Years of Bird Banding at Four Areas in New Jersey

III. TYRANNIDAE, HIRUNDINIDAE AND SITTIDAE

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Birds of the Families Tyrannidae, Hirundinidae, and Sittidae were captured during a nine-year period at four areas in New Jersey. (Sussman et al, 1971) The areas are known as Great Swamp, Forked River, Oceanville and Estell Manor.

Bands were placed on 1,006 birds of Family Tyrannidae, 148 birds of Family Hirundinidae and 100 birds of Family Sittidae.

The most frequently banded bird of the Tyrannidae was Eastern Wood Pewee (Contopus virens). The most frequently banded member of Hirundinidae was Barn Swallow (Hirundo rustica). The most frequently banded of the Sittidae was White-breasted Nuthatch (Sitta carolinensis). (Table I)

RETURNING CHARACTERISTICS AND LONGEVITY:

A record was maintained for each bird which repeated or returned. These records were used to prepare tables showing the number of individuals of each species captured each year. The tables were expanded to show the number of those individuals recaptured in subsequent years. For this purpose any bird was counted only one time in any calendar year, although many birds were actually captured several times per calendar year.

Eastern Kingbird (Tyrannus tyrannus):

Eighty-one of these birds were banded. Three of these repeated during the month of original capture: one at Estell Manor in August 1961, one at Estell Manor 1963, and one at Great Swamp in June 1967. No birds of this species returned.

Great Crested Flycatcher (Myiarchus crinitus):

Great Crested Flycatchers were captured at Great Swamp (1961-1967), Forked River (1961-1967), Oceanville (1961-1968), and Estell Manor (1960-1967).

At Great Swamp, no individuals of this species were among the birds recaptured in 1966. These birds were captured other years in varying numbers up to eleven individuals in 1962. (Table II). The number of individuals captured at Forked River varied from 3 in 1965 through 15 in 1961. (Table III). At Oceanville, from one in 1965 and 1966 through 18 in 1961 were captured (Table IV) and at Estell Manor from one in 1960 through 16 in 1963 were banded (Table V).

The longevity records established in these populations of Great

Created Flycatchers were: Great Swamp one year, Forked River six years, Oceanville two years, and Estell Manor five years.

Eastern Phoebe(*Sayornis phoebe*):

Eastern Phoebes were captured at Great Swamp (1961-1967), Forked River (1961-1966), Oceanville (1961-1968), and Estell Manor(1960-1967).

The number of individuals captured at Great Swamp per calendar year varied from 6 in 1967 through 43 in 1961 (Table VI). At Forked River, the number of individuals varied from zero in 1962, 1963 and 1966 through four in 1965 (Table VII). The number of individuals captured at Oceanville varied from 2 in 1964 and 1967 through 21 in 1963 (Table VIII). At Estell Manor, the number of individuals varied from one in 1964 through ten in 1962 (Table IX).

The longevity record established at Great Swamp was two years. No Eastern Phoebes were ever recaptured in following years at the other three areas.

Empidonax Flycatchers:

Two hundred four of these birds were banded. Two of these birds repeated at Great Swamp: one in June 1967 and one in August 1967.

No birds in the genus *Empidonax* repeated or returned at Forked River. At Oceanville, one repeated in August 1962, and one bird banded in May 1966 returned two years later in July 1968. One of these birds was captured during June, July and August 1961, another was captured during June and August 1961, and one repeated in June 1961, all at Estell Manor.

Eastern Wood Pewee:

Eastern Wood Pewees were captured at Great Swamp (1961-1968), Forked River (1961-1967), Oceanville (1961-1968), and Estell Manor (1960-1967).

At Great Swamp, the fewest individuals captured in any calendar year were two in 1968 when very little netting was done in that area. During the years of more active netting, the number of individuals handled varied from six in 1961 through 62 in 1962. (Table X). The number of individuals handled at Forked River varied from zero in 1961, 1962, 1965 and 1968 through six in 1967 (No table was prepared because there were no repeats or returns.). The number of individuals captured at Oceanville per calendar year varied from 2 in 1965 and 1967 through 19 in 1963. (Table XI). At Estell Manor, the number of individuals captured per calendar year varied from zero in 1961 through 34 in 1966 (Table XII).

The longevity records established in those populations of Eastern Wood Pewees were: Great Swamp two years, Forked River no repeats or returns, Oceanville no returns, and Estell Manor no returns.

Tree Swallow(*Iridoprocne bicolor*), Rough-winged Swallow(*Steligidopteryx rudicollis*), and Purple Martin (*Progne subis*):

Twenty Tree Swallows, six Rough-winged Swallows and two Purple Martins were banded. None returned.

Barn Swallow:

One hundred twenty of these birds were banded. At Forked River, one of these birds which was handled in July 1961 repeated in September of the same year. One individual handled at Oceanville in July 1961 returned to the same area in August a year later in 1962.

White-breasted Nuthatch:

White-breasted Nuthatches were captured at Great Swamp (1961-66), Forked River (1961-68), Oceanville (1961-65), and Estell Manor (1961 - 1966).

The number of individuals captured at Great Swamp per calendar year varied from five in 1965 through 22 in 1961. (Table XIII). At Forked River, the number varied from zero in 1964 through eight in 1966. (Table XIV). The number of individuals captured at Oceanville varied from zero in 1962 and 1964 through two in 1961. (Table XV). At Estell Manor, the number of individuals varied from zero in 1963 and 1964 through two in 1965 and 1966. (Table XVI).

The longevity records established in these populations of White-breasted Nuthatches were: Great Swamp three years, and Forked River one year. No individuals were recaptured at Oceanville or Estell Manor after the year in which they were first handled.

Red-breasted Nuthatches (*Sitta canadensis*):

Seven of these birds were banded. There were no repeats or returns at any of the areas.

LITERATURE CITED:

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Kerlin, Raymond E.; Carter, William C.; Sussman, Oscar; and Goldfield, Martin. 1971. Nine Years of Bird Banding at Four Areas in New Jersey. II. Cuculidae and Picidae. EBBA NEWS 34(3): 113-119

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This investigation was supported in part by Public Health Service Research Grant #AI-04397 from the National Institutes of Health, Institute of Allergy and Infectious Diseases.

	1960	1961	1962	1963	1964	1965	1966	1967	1968	Total
Eastern Kingbird	0	13	16	22	6	3	9	5	7	81
Great Crested Flycatcher	1	48	28	30	27	9	17	16	12	188
Eastern Phoebe	2	57	39	57	18	22	26	2	8	231
Empidonax Flycatcher	0	68	15	10	14	11	57	28	1	204
Eastern Wood Pewee	2	15	79	55	44	15	45	40	7	302
Tree Swallow	0	18	1	1	0	0	0	0	0	20
Rough-winged Swallow	0	6	0	0	0	0	0	0	0	6
Barn Swallow	0	82	20	6	6	2	0	0	4	120
Purple Martin	0	0	0	2	0	0	0	0	0	2
White-breasted Nuthatch	0	11	18	24	10	10	11	4	5	93
Red-breasted Nuthatch	0	6	0	0	0	0	0	0	1	7

TABLE I. TYRANNIDAE, HIRUNDINIDAE, AND SITTIDAE BANDED AT FOUR AREAS IN NEW JERSEY

	Indiv. Cap.*	Recap# 1962	Recap 1963	Recap 1964	Recap 1965	Recap 1966	Recap 1967	
1961	1	1	0	0	0	0	0	*Individuals Captured; Includes returns from previous years when applicable.
1962	11	-	0	1	0	0	0	
1963	7	-	-	1	0	0	0	
1964	3	-	-	-	0	0	0	
1965	3	-	-	-	-	0	0	
1966	0	-	-	-	-	-	0	
1967	3	-	-	-	-	-	-	
								#Recaptured.

TABLE II. RETURNING CHARACTERISTICS OF GREAT-CRESTED FLYCATCHERS CAPTURED AT GREAT SWAMP (1961 - 1967)

Year	Indiv. Cap.*	Recap# 1962	Recap 1963	Recap 1964	Recap 1965	Recap 1966	Recap 1967
1961	15	1	1	0	0	0	1
1962	7	-	0	0	0	0	0
1963	5	-	-	0	0	0	1
1964	9	-	-	-	0	0	0
1965	3	-	-	-	-	0	0
1966	7	-	-	-	-	-	0
1967	5	-	-	-	-	-	-

TABLE III. RETURNING CHARACTERISTICS OF GREAT-CRESTED FLYCATCHERS CAPTURED AT FORKED RIVER (1961 - 1967)

Year	Indiv. Cap.*	Recap# 1962	Recap 1963	Recap 1964	Recap 1965	Recap 1966	Recap 1967	Recap 1968
1961	18	1	1	0	0	0	0	0
1962	7	-	2	0	0	0	0	0
1963	9	-	-	0	0	0	0	0
1964	10	-	-	-	0	0	0	0
1965	1	-	-	-	-	0	0	0
1966	1	-	-	-	-	-	0	0
1967	8	-	-	-	-	-	-	0
1968	7	-	-	-	-	-	-	-

TABLE IV. RETURNING CHARACTERISTICS OF GREAT-CRESTED FLYCATCHERS CAPTURED AT OCEANVILLE (1961 - 1968)

Year	Indiv. Cap.*	Recaptured.....							
		1961	1962	1963	1964	1965	1966	1967	1968
1960	1	0	0	0	0	0	0	0	0
1961	14	-	3	4	0	0	0	0	0
1962	9	-	-	1	0	1	0	1	0
1963	16	-	-	-	1	0	0	0	0
1964	7	-	-	-	-	0	0	0	0
1965	3	-	-	-	-	-	0	1	0
1966	9	-	-	-	-	-	-	2	0
1967	5	-	-	-	-	-	-	-	0

TABLE V. RETURNING CHARACTERISTICS OF GREAT-CRESTED FLYCATCHERS CAPTURED AT ESTELL MANOR (1960 - 1967)

Year	Indiv. Cap.*	Recap# 1962	Recap 1963	Recap 1964	Recap 1965	Recap 1966	Recap 1967
1961	43	2	1	0	0	0	0
1962	25	-	3	1	0	0	0
1963	33	-	-	1	0	0	0
1964	17	-	-	-	0	0	0
1965	9	-	-	-	-	0	0
1966	9	-	-	-	-	-	0
1967	6	-	-	-	-	-	-

TABLE VI. RETURNING CHARACTERISTICS OF EASTERN PHOEBES CAPTURED AT GREAT SWAMP (1961 - 1967)

Year	Indiv. Cap.*	Recap# 1962	Recap 1963	Recap 1964	Recap 1965	Recap 1966
1961	2	0	0	0	0	0
1962	0	-	0	0	0	0
1963	0	-	-	0	0	0
1964	0	-	-	-	0	0
1965	4	-	-	-	-	0
1966	1	-	-	-	-	-

TABLE VII. RETURNING CHARACTERISTICS OF EASTERN PHOEBES CAPTURED AT FORKED RIVER (1961 - 1966)

Year	Indiv. Cap.*	Recap# 1962	Recap 1963	Recap 1964	Recap 1965	Recap 1966
1961	8	0	0	0	0	0
1962	6	-	0	0	0	0
1963	21	-	-	0	0	0
1964	2	-	-	-	0	0
1965	4	-	-	-	-	0
1966	3	-	-	-	-	0
1967	2	-	-	-	-	-
1968	6	-	-	-	-	-

TABLE VIII. RETURNING CHARACTERISTICS OF EASTERN PHOEBES CAPTURED AT OCEANVILLE (1961 - 1968)

*Includes returns from previous years when applicable (all tables)

	Indiv. Cap.*	Recaptured.....							
		1961	1962	1963	1964	1965	1966	1967	1968
1960	2	0	0	0	0	0	0	0	0
1961	4	-	0	0	0	0	0	0	0
1962	10	-	-	0	0	0	0	0	0
1963	8	-	-	-	0	0	0	0	0
1964	1	-	-	-	-	0	0	0	0
1965	5	-	-	-	-	-	0	0	0
1966	7	-	-	-	-	-	-	0	0
1967	6	-	-	-	-	-	-	-	-

TABLE IX. RETURNING CHARACTERISTICS OF EASTERN PHOEBES CAPTURED AT ESTELL MANOR (1960 - 1967)

1961	6	0	0	0	0	0	0	0	0
1962	62	-	0	0	0	0	0	0	0
1963	22	-	-	0	0	0	0	0	0
1964	24	-	-	-	2	0	0	0	0
1965	8	-	-	-	-	0	1	0	0
1966	8	-	-	-	-	-	0	0	0
1967	9	-	-	-	-	-	-	0	0
1968	2	-	-	-	-	-	-	-	-

TABLE X. RETURNING CHARACTERISTICS OF EASTERN WOOD PEWEES CAPTURED AT GREAT SWAMP (1961 - 1968)

1961	9	0	0	0	0	0	0	0	0
1962	10	-	0	0	0	0	0	0	0
1963	19	-	-	0	0	0	0	0	0
1964	16	-	-	-	0	0	0	0	0
1965	2	-	-	-	-	0	0	0	0
1966	3	-	-	-	-	-	0	0	0
1967	2	-	-	-	-	-	-	0	0
1968	5	-	-	-	-	-	-	-	-

TABLE XI. RETURNING CHARACTERISTICS OF EASTERN WOOD PEWEES CAPTURED AT OCEANVILLE (1961 - 1968)

1960	2	0	0	0	0	0	0	0	0
1961	0	-	0	0	0	0	0	0	0
1962	7	-	-	0	0	0	0	0	0
1963	13	-	-	-	0	0	0	0	0
1964	2	-	-	-	-	0	0	0	0
1965	7	-	-	-	-	-	0	0	0
1966	34	-	-	-	-	-	-	0	0
1967	16	-	-	-	-	-	-	-	-

TABLE XII. RETURNING CHARACTERISTICS OF EASTERN WOOD PEWEES CAPTURED AT ESTELL MANOR (1960 - 1967)

* Includes returns from previous years when applicable(all tables)

	Indiv. Cap.*	Recaptured.....							
		1961	1962	1963	1964	1965	1966	1967	1968
1961	22	0	0	0	0	0	0	0	0
1962	16	-	2	0	0	0	0	0	0
1963	24	-	-	1	1	1	1	1	1
1964	11	-	-	-	1	0	0	0	0
1965	5	-	-	-	-	-	0	0	0
1966	6	-	-	-	-	-	-	-	-

TABLE XIII. RETURNING CHARACTERISTICS OF WHITE-BREASTED NUTHATCHES CAPTURED AT GREAT SWAMP (1961 - 1966)

1961	4	0	0	0	0	0	0	0	0
1962	1	-	1	0	0	0	0	0	0
1963	1	-	-	0	0	0	0	0	0
1964	0	-	-	-	0	0	0	0	0
1965	3	-	-	-	-	0	0	0	0
1966	8	-	-	-	-	-	0	0	0
1967	2	-	-	-	-	-	-	0	0
1968	1	-	-	-	-	-	-	-	-

TABLE XIV. RETURNING CHARACTERISTICS OF WHITE-BREASTED NUTHATCHES CAPTURED AT FORKED RIVER (1961 - 1968)

1961	2	0	0	0	0	0	0	0	0
1962	0	-	0	0	0	0	0	0	0
1963	1	-	-	0	0	0	0	0	0
1964	0	-	-	-	0	0	0	0	0
1965	1	-	-	-	-	-	-	-	-

TABLE XV. RETURNING CHARACTERISTICS OF WHITE-BREASTED NUTHATCHES CAPTURED AT OCEANVILLE (1961 - 1965)

1961	1	0	0	0	0	0	0	0	0
1962	1	-	0	0	0	0	0	0	0
1963	0	-	-	0	0	0	0	0	0
1964	0	-	-	-	0	0	0	0	0
1965	2	-	-	-	-	-	0	0	0
1966	2	-	-	-	-	-	-	-	-

TABLE XVI. RETURNING CHARACTERISTICS OF WHITE-BREASTED NUTHATCHES CAPTURED AT ESTELL MANOR (1961 - 1966)

* Includes returns from previous years when applicable(all tables)

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