







Handwritten scribble

QH
1
L 758x
v. 3
NH

TRANSACTIONS

of the

Linnæan Society of New York

VOLUME THREE

THE BIRDS OF DUTCHESS COUNTY
NEW YORK

From Records Compiled By
MAUNSELL S. CROSBY

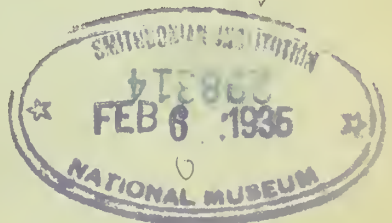
By

LUDLOW GRISCOM

With Three Plates

Published by the Society, December, 1933

NEW YORK:
Press of Urner-Barry Company
MCMXXXIII



758t
15.3
NH





MAUNSELL SCHIEFFELIN CROSBY

QH
1
L 758t
v. 3
NH

TRANSACTIONS

of the

Linnæan Society of New York

VOLUME THREE

THE BIRDS OF DUTCHESS COUNTY
NEW YORK

From Records Compiled By
MAUNSELL S. CROSBY

By

LUDLOW GRISCOM

With Three Plates

Published by the Society, December, 1933

NEW YORK:
Press of Urner-Barry Company
MCMXXXIII

TO MAUNSELL SCHIEFFELIN CROSBY

In Memoriam

By his friends and admirers

The members of the Linnæan Society of New York

Copies of "The Birds of Dutchess County" may be obtained at the price of \$2.00, by addressing the Secretary of the Linnæan Society of New York, in care of American Museum of Natural History, West 77th Street and Central Park West, New York City.

Table of Contents

	PAGE
Preface and acknowledgements - - - - -	7
PART I—Introduction*	
CHAPTER I	
M. S. Crosby and his Dutchess County records - - - - -	9
CHAPTER II	
Sources and material - - - - -	15
CHAPTER III	
Description of the territory, climate and life-zones - - - - -	20
CHAPTER IV	
Status of occurrence of species - - - - -	26
CHAPTER V	
The migration of land birds	
Spring - - - - -	32
Fall - - - - -	40
CHAPTER VI	
The migration of water-fowl - - - - -	41
CHAPTER VII	
The census counts	
The spring census trips - - - - -	52
Breeding census on Grasmere - - - - -	53
CHAPTER VIII	
Notable days afield - - - - -	56
PART II—Systematic List	
CHAPTER IX	
Detailed distributional list of species and subspecies - - - - -	68
CHAPTER X	
Bibliography - - - - -	175

*Abstract presented before the Society, January, 1932.

Because of his great intimacy with Maunsell S. Crosby, and because of his profound knowledge of Dutchess County ornithology, consequent upon their many days afield together, it is altogether fitting that Ludlow Griscom should have been the author of this work, and the Linnæan Society of New York considers itself exceedingly fortunate in having the opportunity to publish the results of their collaboration.

THE LINNÆAN SOCIETY OF NEW YORK

By JOHN H. BAKER,

President.

Preface and Acknowledgments

Shortly after the publication in 1921 of his "Preliminary List of the Birds of Dutchess County" (in the Year Book of the Rhinebeck Bird Club for 1920), the late Maunsell S. Crosby proposed publication of a much more elaborate treatise on the avifauna of his home county, to follow years of carefully planned field work. The nature and scope of this work were frequent subjects of discussion between him and me. I was perhaps as cognizant of his ideas and wishes in this respect as anyone.

However this may be, it transpired after his untimely death in the winter of 1931, that he had bequeathed to me his Dutchess County records, which were then sufficiently complete to warrant the preparation of a detailed report. Fortunately many mutual friends in the Linnæan Society of New York were fully aware of the situation; perhaps Messrs. John H. Baker and William Vogt were the prime movers in suggesting that the Society publish "The Birds of Dutchess County" as a memorial volume to Mr. Crosby, and I was asked to prepare the report.

Whatever merit it may prove to possess is largely due to the interest and invaluable assistance rendered by two gentlemen, who individually or jointly could have prepared the report themselves. Mr. Allen Frost, a life long friend of Crosby's, has been a resident of Poughkeepsie his entire life, and has had an unrivalled field experience there. Mr. John H. Baker has in recent years acquired a farm on Chestnut Ridge, near Millbrook, and is in the County throughout much of the year. These two friends relieved me of much tedious compilation by completing the migration tables for the last six years. I sent them the completed manuscript for revision. They took endless trouble,

resulting in excellent suggestions, which their experience rendered of the most authoritative kind.

More than a passing word of acknowledgment is also due Mr. William Vogt, Dr. Ernst Mayr and Mr. Charles K. Nichols for painstaking editorial revision, and to Mr. Charles A. Urner for his sympathetic handling of the details of printing and format.

LUDLOW GRISCOM,
Cambridge, Mass.,
Sept. 1, 1933.

Part I.

Chapter I

M. S. Crosby and his Dutchess County Records

Maunsell Schieffelin Crosby (Feb. 14, 1887—Feb. 12, 1931) was so intimately associated with the ornithology of Dutchess County, New York, that a brief sketch of his life and ornithological activities there is not out of place. The estate at Rhinebeck, "Grasmere", was acquired by his parents about 1899, at which time Crosby was removed from Cutler School in New York City, and Clinton G. Abbott became his tutor at Rhinebeck and prepared him for boarding school at Morristown, New Jersey. He also taught him the birds around Grasmere, and thus started the main interest of his life, a fact of which Crosby was always gratefully recognisant.

The first entry in any bird notebook of Crosby's I find is for 1903. "Migrants recorded in 1903 during a stay at Rhinebeck caused by whooping cough." We note a Phoebe on March 16, and the Waxwing on April 6, a most unusual season for this species. In September, 1904, Crosby entered Harvard University, and there are only a few fragmentary notes from Dutchess County during this period. He graduated in 1908, and spent the summer and early fall in Europe.

The regular year's record for Dutchess County begins with 1909, kept in a larger book separate from the daily bird lists. In that year he recorded 133 species in the vicinity of Rhinebeck, his only collaborators being Dr. and Mrs. J. F. Goodell. The Starling is entered for October 24, as a species "not known here before". There is a second section entitled the "nesting season", during which Crosby found 151 nests on Grasmere. Very brief notes on the fall migration ensue, but an article in the Rhinebeck Gazette (Oct. 23, 1909) predicts that 170-180 species should occur annually near Rhinebeck.

The next few years were uneventful. Each year Crosby learned a few new birds and had the advantage of field experience elsewhere. Thus in the summer of 1910 he went to the Temagami Region of Ontario, and spent the late winter and spring of 1911 in Santa Barbara, California, where he saw a good deal of J. Hooper Bowles, and learned many new birds.

By 1914 the County list was kept more carefully. Notes by Professor Freeman at Poughkeepsie appear for the first time. New species for the County are noted marginally and doubly underscored. Record arrival dates are underscored once and also noted in the margin. The year's list around Rhinebeck was 155 species. Professor Moulton and Edmund Platt of Poughkeepsie added the Prairie Horned Lark to the County list in 1915. Records by Allen Frost and George Gray first appear in 1916, the year's list rising to 171 species, and for the first time it is impossible to tell how many species Crosby found himself around Rhinebeck, but it is apparent from his daily notebook that he went as far afield as Millbrook and also visited Cruger's Island. From 1915 on he was frequently in Albany on military duty, serving on Governor Whitman's staff and as a captain in the National Guard. In 1917 he promptly entered the army and did not return to Rhinebeck until the summer of 1919.

During this period there are practically no Dutchess County notes, but he was studying the water birds of Long Island with enthusiasm, got in touch with members of the Linnaean Society of New York, and laid the foundations of his more scientific studies. By 1920 everything was going full steam ahead. The Rhinebeck Bird Club was in full swing. Crosby was preparing his Preliminary List for publication and was constantly in the American Museum of Natural History, later becoming Dr. Dwight's scientific assistant. It was in 1921 that I first had my attention drawn to the birds of the County by Crosby asking me to read the proof of his list and make suggestions, and my first visit to him was paid in the spring of 1921.

This year began the frequent bird-hunting parties that later became almost an institution. Crosby kept open house for ornithologists, and always hoped to bag one or more persons for every week-end during the spring and fall migrations. In this way nearly every active member of the Linnaean Society visited the County at least occasionally, and added to the number of pairs of eyes that scoured the best country under genial and competent leadership. The ornithological compliment was returned, as Crosby joined Linnaean Society parties to Barnegat Bay, to Jones Beach and Montauk Point, Long Island, and returned to Rhinebeck better prepared than ever to catch some rare or casual water bird on the Hudson. The May census parties were the most popular, but the duck migration was sure to draw visitors in spring and fall after 1923. Crosby kept ever more elaborate records, and began assembling these and having them typewritten with the assistance of a young man, Henry W. Kiemle, Jr., of Salt Point, greatly interested in birds, and at that time earning money to go to Pratt Institute and study for an artistic career.

Crosby's Dutchess County records now before me consist of the following:

1. Daily Field Bird List—small notebook size, incomplete.
2. Diary—1920-1931—notable events and records of trip, route, weather, and party.
3. A series of annual County lists from 1920 on, each year arranged chronologically, with species added to the year's list for each day. From 1924 on a note was preserved, of place and person making the addition, provided it was not Crosby alone. This list was in four sections.
 - a. Winter list plus spring arrivals plus additional species recorded in summer and fall; 212 species in 1929, 206 in 1925, 200 in 1923, 1924, 1926, 1930.
 - b. Spring departures.
 - c. Fall arrivals.
 - d. Fall departures.
4. A list in systematic order, giving arrival and departure dates every year from the earliest records through 1924 for each species. This list was

kindly filled out for me by Messrs. John H. Baker and Allen Frost through 1930. It gives no localities and no authorities.

5. A series of monthly lists. Thus all the species ever recorded in January, with all interesting records or extreme dates, are given with locality and authority. Often the only place where this latter information is available for records prior to 1924. Fortunately, these monthly lists were completed up to 1927 for all twelve, and through 1929 for January to May. I reproduce the figures for these monthly lists, as it is one graphic method of obtaining a seasonal curve of abundance.

February	82 species	August	165 species
March	111 "	September	185 "
April	164 "	October	180 "
May	207 "	November	127 "
June	151 "	December	110 "
July	140 "	January	90 "

6. a. Spring departure dates, summary for all years chronologically through 1916.

b. Autumn arrival dates, ditto.

c. Autumn departure dates, ditto. Of purely statistical interest.

7. a. Spring arrival record dates.

b. Spring departure record dates.

c. Autumn arrival record dates.

d. Autumn departure record dates.

Arranged chronologically by days of the month. These are important, as they give locality and authority. Where none is given, "Rhinebeck, Crosby" is to be understood.

8. Dutchess County. Earliest nesting dates of Lisenard Horton.

9. Earliest and latest nesting dates complete through 1930.

10. Summer residents restricted locally. (Very incomplete.)

11. The May census lists from 1925 on, the southern and northern parties combined without any differentiation.

12. Greatest daily lists for every day in the year.

13. List of the County observers, with addresses and the years, who sent migration blanks to the Biological Survey.

14. Grand summary and abstract of all these Biological Survey records arranged systematically and chronologically without any differentiation. It is quite obvious from an examination of these records that the recorders were relatively inexperienced and inactive. I know, however, that Crosby greatly appreciated the kindness of the Survey in giving him access to these data. He spoke of it to me, and I find an entry about it in his diary.

15. Bibliography of Dutchess County ornithology through 1925.

A perusal of these fifteen categories demonstrates the unusual elaborateness with which records were kept, and also shows how essentially statistical was Crosby's mind. Whenever an early arrival date was obtained, it required an entry in six different places and conceivably in two others as well!

At first sight one might conclude that there were no possible records not kept, and yet this proves not to be correct. Crosby always regarded the County as a unit, and was remarkably selfless in his interest. The greatest daily lists are, for instance, quite worthless for comparative purposes. If Crosby and I went to Pine Plains from Rhinebeck and made a list of 49 species, he would call up Frost and Gray on the off chance that they had seen some species not found by us. If they had three such between them, the day's list became 52 species, and no note of the source or origin of these three additional species was preserved, unless one of them happened to be a record. The May censuses were conducted in the same manner. Crosby's interest was the combined total of the northern and southern parties, and in the great majority of these trips it is quite impossible to discover what species the two parties saw separately. Crosby himself was remarkably consistent here in his self-effacement. He cared nothing about his own personal list, made no effort to see any particular species, unless a great rarity, and kept no personal record, except when alone. From year to year his main interests were the year's list, the size of the combined May census lists, the new record early arrival and late departure dates, and the discovery of new breeding localities for the local summer residents. Prior to 1922 he frequently destroyed his own field list after the records affecting the items above had been copied off in the proper places. He never kept the observations of others unless they affected these same items.

These comments are not intended as unfavorable criticism. Nobody ever lived who was interested in every possible detail of a faunal study. I have had some experience in compiling and examining the records of others, and never have I been privi-

leged to study such complete and elaborate data as Crosby left me. I have tried to do the best I could with them, with the kind advice and assistance of others. Crosby was one of my dearest friends. Need I add that I would give almost anything in the world if he were here to have written the "Birds of Dutchess County" himself, and that I am well aware that he could have done much better justice than I to his own field work and the data compiled and supplied by his many friends?

Chapter II

Sources and Material

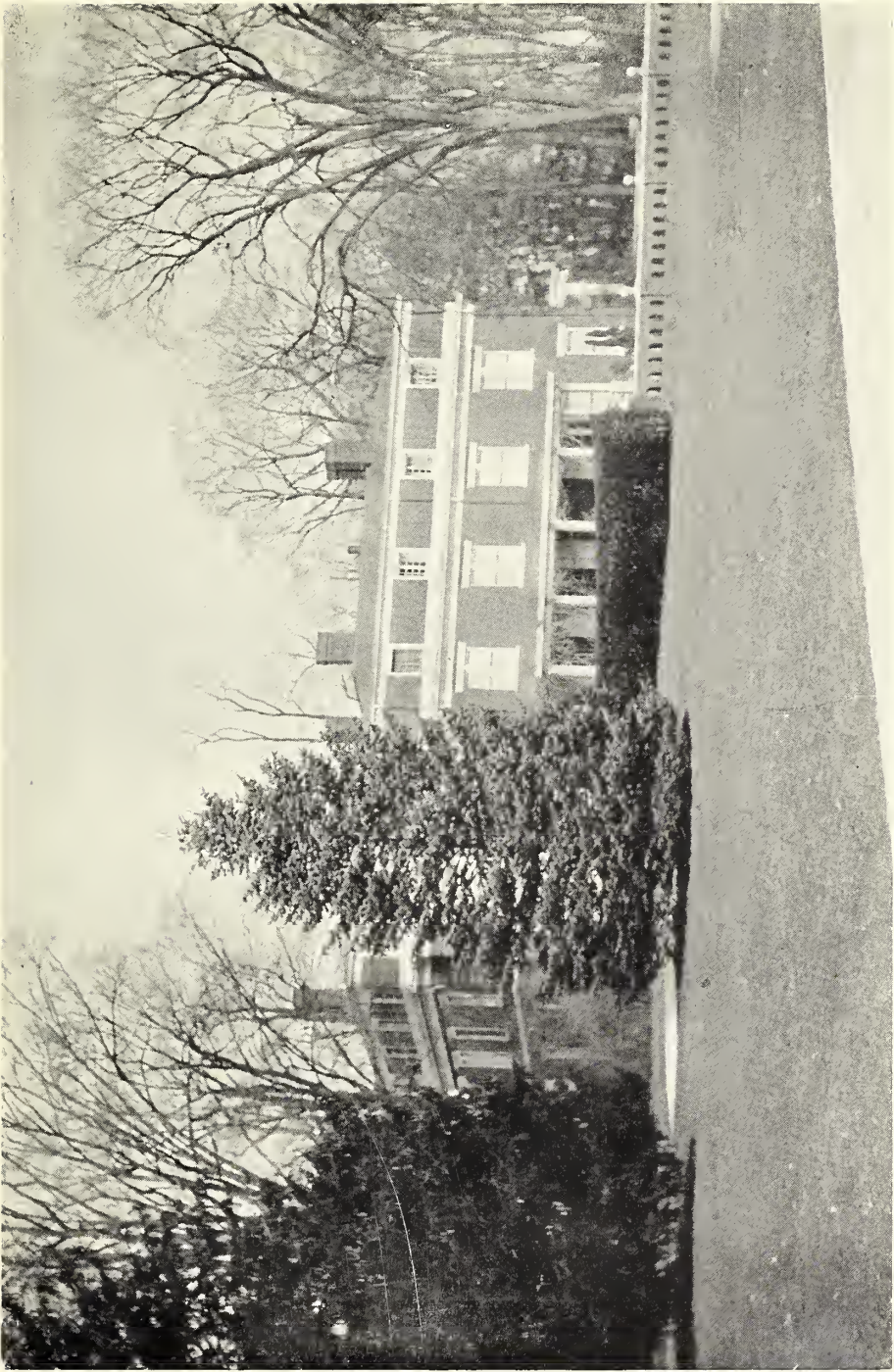
Dutchess County is unfortunate in not having any early ornithological history. J. P. Giraud, the biographer of the birds of Long Island, lived at Poughkeepsie during a part of his later years, and bequeathed some of his collections to Vassar College. So did James Orton a generation later. Even Audubon mentions Dutchess County once in "The Birds of America". But none of the earlier colonial records applies to our area with absolute definiteness, and we shall never know in detail the early history of the Wild Turkey and Passenger Pigeon, or whether the Whooping Cranes and the White Pelican, migrating down the Hudson River, were ever actually shot in the County or no.

The first person really to give us specific information was Edgar A. Mearns. While he himself lived on the west bank of the Hudson River at Highland Falls, he visited the east bank from Rhinebeck to Fishkill Landing (now Beacon), and his friend Peter de Nottbeck contributed records chiefly for game birds and waterfowl from the Hudson River islands. At least ninety per cent. of the data in Mearns' excellent list (1878-1881) was from the vicinity of Highland Falls, but his "region" explicitly included Dutchess, Putnam and Westchester Counties on the east bank and Ulster, Rockland and Orange Counties on the west bank. In most cases no attempt at a more precise restriction of locality was made, but Mearns was distinctly ahead of his time in giving just this precise information in cases of unusual occurrences or records in any way notable or novel. The modern bird student in evaluating the "local lists" of a preceding generation, must remember that the extreme refinement and restriction of field current today was largely undreamed of then. An excellent illustration of this is Stearns' list for Fishkill (1880). It is based on birds seen or collected

by the author during a ten months' stay, supplemented by records obtained by friends and acquaintances in previous years. At first sight it appears like a local list ideally restricted to the field of our own inquiry, but an examination of the contents reveals the inclusion of the Canada Jay on the basis of a specimen collected in the Adirondacks. We cannot help wondering whether other rarities in Stearns' list were based on specimens actually shot in Dutchess County, or whether they came from some more or less adjacent area. Crosby and I agreed years ago to omit all such rarities in Stearns' list, for which no voucher has been secured in subsequent years.

From 1881-1900 a period ensued, that yields us a little more information. Miss Mary Hyatt of Stanfordville recorded spring arrivals near her home from 1886 on, and published a few popular notes. Miss Caroline Furness noticed birds around Poughkeepsie, and Franklin D. Roosevelt, now President of the United States, observed and collected birds on his estate at Hyde Park, chiefly in 1896. In 1894 Lispenard Horton began a long series of observations at Poughkeepsie, but he was interested primarily in finding the nests and eggs of the breeding birds. Crosby obtained all his records, and the data he accumulated in this special field have never been surpassed, and were published by Crosby in his Preliminary List in 1921. The migration table of Dutchess County in Eaton's Birds of New York was based on the records of Miss Hyatt and Mr. Horton.

In many ways the most important work done during this period, however, was the collecting of Mr. Arthur Bloomfield at Hyde Park, which began in 1890 and terminated about 1913. Bloomfield was an Englishman and butler to Colonel Rogers, and his study of birds was the ruling interest of his life, to which he devoted all his spare time and a liberal share of his savings. His connection with a prominent and wealthy family gave him considerable field experience on Long Island, in South



"GRASMERE"

Carolina and in Saskatchewan, where he collected diligently as opportunity offered, and secured other specimens whenever possible from local taxidermists and hunters. These were all laboriously stuffed and mounted, and the data were written on a label on the bottom of the stand. In addition to this he kept a field note book and diary, listing all specimens shot and items of interest observed. Mr. Bloomfield was, however, essentially a collector, not an observer. His technique was that of an earlier generation, which used the gun to obtain desirable specimens for their cabinets, and his work of reference consisted almost wholly of an antiquated edition of Coues' Key. Nevertheless Mr. Bloomfield's main interest was the birds near Hyde Park. He was perfectly informed as to the status of every species, and he was also fully aware of the normal period of migration of each one. Whenever, therefore, he encountered an exceptionally early or late individual, it was collected, if possible, and preserved. In this way we know something of the phenomenally late spring of 1907 in Dutchess County, thanks to Bloomfield's zeal.

Crosby first heard of Bloomfield through Mr. Roosevelt. He and I went to visit him on November 4, 1923, and were received in a most courteous and hospitable manner. There was a special museum building at the bottom of the garden, which contained hundreds of mounted birds, some mammals and other objects of natural history. A brief tour of inspection made it evident that Mr. Bloomfield had specimens of the great majority of species known from Dutchess County, including at least ten for which Crosby had no records at all. He turned over all his records and data for examination, and gave permission to use any of value and novelty. Crosby and I went over these with the greatest care, and paid another visit on June 1, 1924, with a final list of questions. In two cases we suspected a possibility of confusion of data, where a highly unlikely record for the County was not supported by an entry in the field note book. But every bird in the Museum was correctly identified, includ-

ing even the subspecies of Horned Larks. I gladly pay a tribute here to Mr. Bloomfield's work. A man of humble means and limited resources, he had none of the advantages in bird study we take for granted. Alone and unaided he worked things out for himself as best he could, devoid alike of companionship and instruction. Crosby and I were the first people he ever met who knew anything about birds or who were really interested in his work. I hope these lines of appreciation will be printed in time for him to read them.

As already recorded in detail in Chapter I, Crosby himself began studying birds about 1900 under the guidance of his tutor and close friend, Clinton G. Abbott, now director of the San Diego Natural History Society. During this time and up to 1914 steady observations were made by Dr. J. F. Goodell at Rhinebeck. By 1914 Crosby was quite active, and had established contact with a group of men at or near Poughkeepsie, Messrs. Allen Frost and George Gray, and Professors C. W. Moulton (died 1924) and F. A. Saunders of Vassar College (1914-1919). Crosby was virtually absent from the County from 1917-1919, but returned with greatly increased knowledge and field experience, while the Poughkeepsie group had maintained steady observation. From 1919 on Crosby acted as compiler for all the data secured in the County from all possible sources, and no one could have received more cordial and unstinted cooperation. In addition to this he imported a steadily increasing number of students from New York City and elsewhere, chiefly fellow members of the Linnaean Society, so that parties rather than individuals were constantly taking the field throughout the year. Of these, good fortune in the way of leisure and other circumstances made me the most frequent visitor. From 1920-1929 I saw 218 species in Dutchess County, with Crosby in every case, and in addition to week-ends spent several vacations or parts of vacations in the County during both the spring and fall migrations. From 1919 on Crosby and Frost steadily visited the eastern sections of the County as oc-

casation permitted, making special nesting surveys of all likely places on camping trips in June that lasted a week each from 1919-1924. No one now living has had a field experience in the County in any way comparable to that of Mr. Frost in length or variety.

This is the modern era of sight records, and it is no exaggeration to say that ninety per cent. of the data for this treatise has been accumulated since 1920. It is based, however, on an ample substratum of specimens collected. Few are the species recorded beyond, for which a County specimen does not exist, and still fewer are the exceptional occurrences not so validated. I collected quite a few specimens myself since 1920, and Crosby secured others, but the wholesale use of the gun is no longer required for detailed studies of the present kind. Certainly few local areas can boast of so active and competent a band of workers as Dutchess County in the last decade.

Chapter III

Description of the Territory, its Climate and Life Zones

A few words concerning the territory covered will not be amiss. According to the United States Department of Agriculture's "Soil Survey of Dutchess County, New York," issued March 30, 1909, it is bounded by the Hudson River on the west, by the State of Connecticut and less than a mile of the State of Massachusetts on the east, by Columbia County on the north and by Putnam County on the south. "It is included between the parallels of $42^{\circ} 27'$ and $42^{\circ} 5'$ north latitude, and meridian 74° west from Greenwich passes about a mile west of the most western point in the county. The county comprises 511,872 acres or approximately 800 square miles."

To quote the Survey further: "Dutchess County possesses an uneven or diversified surface. It has no very extensive level or undulating areas, but hills and ridges...are common...cut by a number of trough-like valleys...The elevations...range from sea-level on the Hudson River, which here has a tidal flow [not brackish, however], to a little over 2300 feet on the highest mountain [Brace¹ Mt.] in the extreme northeast corner of the County...The mountainous part of the County lies along the southern and eastern boundaries. The Fishkill Mountains, which are a part of the Hudson Highlands, begin at the extreme southwest corner of the County [and] continue along the southern boundary...North of Tenmile River...the mountainous topography follows the eastern side of the Dover Valley, continuing along the Connecticut State line...culminating in Brace or Monument Mountain...and on into the State of Massachusetts, where there are still higher points.

"There are three main interior valleys...[whose] trend is

¹Much better known as Mt. Riga. the name used throughout this work.

from northeast to southwest...the Wappinger Valley,...the valley of Fishkill Creek...and...the...valley occupied by Ten-mile River and its tributaries. The first two flow into the Hudson River, the last-named into the Housatonic. There are also several smaller creeks and a number of ponds, either artificial or dammed by debris deposited by glaciers."

The region has been settled since 1682, and contains many flourishing towns and two cities, mostly near the Hudson.

The visitor to Dutchess County will, however, be impressed with the essentially rural nature of most of this area. North of Poughkeepsie along the Hudson River in a belt 5-8 miles wide is a succession of large and fine estates, with much good hardwood timber and a little white pine and hemlock. The coves of the Hudson River are consequently largely protected, and some have developed fine cattail marshes, thanks to the jumping of the New York Central Railroad from point to point, and the resultant partial filling in of the enclosed area. The northern central third of the County is the least interesting ornithologically and the most denuded of timber. It is a rolling upland, with many sterile and rocky pastures, and is a region avoided by nearly all migrants.

The eastern third of the County is the most variegated. The hills rise ever higher eastward to the Connecticut line with relatively narrow limestone valleys, which still contain some good second growth woods. On the hills hemlock is much commoner, but in the past lumbering has been extensive and complete. There was once a fine hemlock and spruce forest on the summit of Mt. Riga, which contained a rich Canadian flora (Hoysradt, 1870). This forest also existed on the summit of Stissing Mt. near Pine Plains, and assuredly also on other high hills southward, such as Schaghticoke and Bald Mts. near Dover. The Canadian Zone element in the bird-life must have been far more pronounced formerly. In addition there are numerous glacial ponds and lakes, but as is invariably the case with these morainal lakes, very few indeed are sufficiently shallow to pro-

duce marshes favorable for water birds. This area is surprisingly similar to the hill country of northwestern New Jersey, and its bird-life is similar. We have here the same large list of summer residents and the curious interpenetration of Canadian and Carolinian elements in the avifauna, due to a combination of ecological or habitat factors.

Climatically Dutchess County is also similar to northwestern New Jersey. Compared to New York City the summers are hotter in the Hudson Valley, and severe thunderstorms are of frequent occurrence. The winters are much more severe. Two or three feet of snow on the level for weeks at a time is by no means unusual, as are temperatures of -10° . In a normal year the Hudson River is frozen solid above the Highlands from late December to early March, exceptionally from early December to late March. Spring is consequently later, often two to three weeks behind New York City in March, at least a week behind by the middle of April, and not synchronous until the first week in May. By the last week in May the mean daily temperature in the Hudson Valley passes that of New York City. In fall the migration is a week ahead of New York City by the end of September, and is practically concluded for land birds by the first week in November.

Two other features of the climate require mention, particularly in spring and fall. One is the disagreeable and, to the ornithologist very trying, prevalence of high northwesterly winds. Many a lovely April or May morning is ruined by the high wind, which springs up between 11 and 2 o'clock, and these winds will sometimes blow day and night for several days. The other factor worthy of note is the greater daily range in temperature, especially in spring and fall. It is surprising to the New Yorker to note how often a warm May day is followed by a cool or even a frosty night. The effect on the migration will be discussed beyond.

This brief survey of the climatic features with their parallelism to those of northwestern New Jersey will in part explain the

inosculation of Life-Zones already alluded to. The relatively hot summer climate induces a certain percentage of Carolinian species to nest here at the extreme northern limits of their ranges. The hemlock clad ravines and higher hills satisfy the requirements of the lower Canadian Zone species. It follows that the great majority of the breeding birds of the County belong to the Transition Zone, or are so wide ranging as not to be zonal indicators at all.

The Carolinian Zone species are listed below in two groups, the regular summer residents first, followed by casual visitors. For the sake of comparison, northern limits are given for the Atlantic seaboard.

CAROLINIAN ZONE SPECIES

a. Species of Regular Occurrence

	COUNTY LOCALITY OR STATUS	NORTHERN LIMITS FOR ATLANTIC SEABOARD
Turkey Vulture	Mt. Beacon	N. W. New Jersey and Kent, Conn.
King Rail	Three localities	Near Boston, Mass.
Barn Owl	General	Connecticut Valley in Mass.
Fish Crow	Hudson Valley only	Rhode Island; Wareham, Mass.
White-eyed Vireo	Decreasing	Formerly to N. E. Mass.; now almost extirpated in that state.
Worm-eating Warbler	General	Portland, Conn.
Blue-winged Warbler	General; increasing	New London, Conn., casually in eastern Massachusetts.
Cerulean Warbler	10 localities	Central New York and Delaware.
Louisiana Water-Thrush	General	Connecticut Valley, Mass., southern half.
Yellow- breasted Chat	Decreasing	Now casual in whole of Mass.
Hooded Warbler	Mt. Beacon	Southern Connecticut, casually northward.
Orchard Oriole	Uncommon	Rare and irregular north of southern Connecticut.

b. Of More or Less Casual Occurrence

	COUNTY LOCALITY OR STATUS	NORTHERN LIMITS FOR ATLANTIC SEABOARD
Acadian Flycatcher	Bred once; a few spring migrants since	Southern Connecticut formerly.
Tufted Titmouse	Casual; once	Bergen County, N. J.
Carolina Wren	Casual visitor	Irregular north of Long Island and Bergen County, N. J.
Mockingbird	Casual; twice	Nantucket, Mass.
Kentucky Warbler	Casual; twice	Putnam County, N. Y.
Cardinal	Bred once	Staten Island, N. Y. Appar- ently now breeding on Long Island.

CANADIAN ZONE SPECIES BREEDING IN THE COUNTY

	COUNTY LOCALITY	SOUTHERN LIMITS AT SIMILAR ALTITUDES
Brown Creeper	One locality; regular	Irregular in Connecticut and Sussex County, N. J.
Hermit Thrush	Two localities	Sussex Co., N. J.; Long Island.
Blue-headed Vireo	Three localities	Boston, Mass., and Warren County, N. J.
Nashville Warbler	Fairly common eastward	Warren County, N. J., and hills of Connecticut.
Black-throated Blue Warbler	Fairly common eastward	Warren County, N. J., and hills of Connecticut.
Mourning Warbler	Casual; once	Northern New England and central New York at similar altitudes.
Canada Warbler	Fairly common eastward	Bergen County, N. J., and hills of Connecticut.
Junco	Casual; once	Berkshire County, Mass.

An inspection of these lists will show graphically how much more strongly the Carolinian Zone is represented in Dutchess County than the Canadian. The Hudson Valley is a better highway for the northward extension of the Carolinian Zone

than is the Connecticut Valley at Springfield, Massachusetts, or the coast line northeast to a similar latitude in Massachusetts. In the first comparison the much greater breadth of the Hudson Valley and the fact that it is at sea-level north to Albany is a possible explanation. In the latter case the cooler climate near relatively cool salt water is a possible explanation. As regards the Canadian Zone, topographic features are probably all important. This Zone is much better represented in the hills of Litchfield County, Connecticut, and northwestern New Jersey, than in Dutchess County. In each of these areas, however, the hills are higher and more extensive, and there are well forested plateaus, which do not exist in Dutchess County. If Mt. Riga were still unspoiled and unlumbered, I am convinced that Dutchess County would have a far longer list of breeding species characteristic of the Canadian Zone. This view is still further confirmed by the discovery in the past four years of a stronger Canadian Zone element in Putnam County, N. Y., just south of Dutchess, where there are far wilder, less lumbered hills, with extensive stands of hemlock.

Chapter IV

Status of Occurrence of Species

a. Permanent Residents—27

(Omitting summer residents wintering casually, very rarely, or irregularly.)

Black Duck	Great Horned Owl
Mute Swan	Northern Flicker
Red-tailed Hawk	Hairy Woodpecker
Red-shouldered Hawk	Downy Woodpecker
Bald Eagle	Blue Jay
Sparrow Hawk	Crow
Ruffed Grouse	Brown Creeper
Gray Partridge	Black-capped Chickadee
Bob-white	White-breasted Nuthatch
Pheasant	Starling
Barn Owl	House Sparrow
Long-eared Owl	Goldfinch
Barred Owl	Song Sparrow
Screech Owl	

b. Summer Residents—101

Pied-billed Grebe	Osprey
Green Heron	Duck Hawk
Black-crowned Night Heron	King Rail
Bittern	Virginia Rail
Least Bittern	Sora
Wood Duck	Florida Gallinule
Turkey Vulture	Killdeer
Sharp-shinned Hawk	Woodcock
Cooper's Hawk	Spotted Sandpiper
Broad-winged Hawk	Mourning Dove
Marsh Hawk	Yellow-billed Cuckoo

b. Summer Residents (continued)

Black-billed Cuckoo	Yellow-throated Vireo
Whip-poor-will	Blue-headed Vireo
Nighthawk	Red-eyed Vireo
Chimney Swift	Warbling Vireo
Hummingbird	Black and White Warbler
Kingfisher	Worm-eating Warbler
Red-headed Woodpecker	Golden-winged Warbler
Kingbird	Blue-winged Warbler
Crested Flycatcher	Nashville Warbler
Phoebe	Yellow Warbler
Acadian Flycatcher ¹	Black-throated Blue Warbler
Alder Flycatcher	Black-throated Green Warbler
Least Flycatcher	Cerulean Warbler
Wood Pewee	Chestnut-sided Warbler
Prairie Horned Lark	Pine Warbler
Tree Swallow	Prairie Warbler
Bank Swallow	Ovenbird
Rough-winged Swallow	Louisiana Water-Thrush
Barn Swallow	Mourning Warbler ¹
Cliff Swallow	Northern Yellow-throat
Purple Martin	Yellow-breasted Chat
Fish Crow	Hooded Warbler
House Wren	Canada Warbler
Long-billed Marsh Wren	Redstart
Short-billed Marsh Wren	Bobolink
Catbird	Meadowlark
Brown Thrasher	Red-winged Blackbird
Wood Thrush	Orchard Oriole
Hermit Thrush	Baltimore Oriole
Veery	Purple Grackle
Bluebird	Bronzed Grackle
Robin	Cowbird
Cedar Waxwing	Scarlet Tanager
White-eyed Vireo	Cardinal ¹

¹Once only.

b. Summer Residents (continued)

Rose-breasted Grosbeak	Vesper Sparrow
Indigo Bunting	Junco ¹
Towhee	Chipping Sparrow
Savannah Sparrow	Field Sparrow
Grasshopper Sparrow	Swamp Sparrow
Henslow's Sparrow	

¹Once only.

This list is complete, and includes every species definitely found nesting in the County. When we add the permanent residents, it will be seen that there are 128 breeding species, a most respectable number. There is a possibility that at least four other species will be found nesting in the future. The New York City region has only 143 species that have bred, and the entire State of Connecticut, 146. When we consider the much greater area possessed by these two regions and their extensive marine littoral, Dutchess County compares very favorably indeed.

Many of the species on this list winter occasionally and the majority are most abundant on migration.

c. Summer visitants—4

American Egret	Little Blue Heron
Snowy Egret	Laughing Gull

d. Winter visitants—20

(Some often rare and irregular, or as transients only in certain years.)

Canvas-back	Snowy Owl
American Merganser	Saw-whet Owl
Goshawk	Pileated Woodpecker
Rough-legged Hawk	Horned Lark
Herring Gull	Acadian Chickadee

d. Winter visitants—20 (continued)

Golden-crowned Kinglet	Redpoll
Northern Shrike	Red Crossbill
Evening Grosbeak	White-winged Crossbill
Purple Finch	Tree Sparrow
Pine Grosbeak	Snow Bunting

To this list should be added the permanent residents, and certain species listed among the summer residents, such as the Prairie Horned Lark, the Waxwing, and the Junco, to give an idea of the winter bird-life, excluding casual individuals of other species.

e. Transients—74

Loon	Old-squaw
Holboell's Grebe ¹	White-winged Scoter
Horned Grebe	Ruddy Duck
Double-crested Cormorant	Hooded Merganser
Great Blue Heron ¹	Red-breasted Merganser
Canada Goose	Pigeon Hawk
Mallard	Coot
Red-legged Black Duck ¹	Semipalmated Plover
Gadwall	Wilson's Snipe ¹
Baldpate	Upland Plover
Pintail	Solitary Sandpiper
Green-winged Teal	Greater Yellow-legs
Blue-winged Teal	Lesser Yellow-legs
Shoveller	Pectoral Sandpiper
Redhead	Least Sandpiper
Ring-necked Duck	Semipalmated Sandpiper
Greater Scaup	Sanderling
Lesser Scaup	Ring-billed Gull
Golden-eye ¹	Bonaparte's Gull
Bufflehead	Common Tern

¹Recorded in winter.

e. Transients—74 (continued)

Short-eared Owl ¹	Cape May Warbler
Sapsucker ¹	Myrtle Warbler ¹
Yellow-bellied Flycatcher	Blackburnian Warbler
Olive-sided Flycatcher	Bay-breasted Warbler
Red-breasted Nuthatch ¹	Blackpoll Warbler
Winter Wren ¹	Palm Warbler
Olive-backed Thrush	Yellow Palm Warbler
Gray-cheeked Thrush	Northern Water-Thrush
Bicknell's Thrush	Connecticut Warbler
Ruby-crowned Kinglet	Wilson's Warbler
Pipit	Rusty Blackbird
Migrant Shrike	Pine Siskin ¹
Philadelphia Vireo	White-crowned Sparrow
Tennessee Warbler	White-throated Sparrow
Orange-crowned Warbler	Fox Sparrow
Parula Warbler	Lincoln's Sparrow
Magnolia Warbler	Lapland Longspur

Many of the summer residents and winter visitants belong primarily in this group.

f. Casual visitants—26

(Including species out of their normal range, or whose habitat requirements do not exist in Dutchess County.)

Red-throated Loon	Knot
Whistling Swan	White-rumped Sandpiper
European Widgeon	Baird's Sandpiper
American Scoter	Northern Phalarope
Surf Scoter	Long-tailed Jaeger
White Gyrfalcon	Caspian Tern
Golden Plover	Brünnich's Murre
Black-bellied Plover	Dovekie
Ruddy Turnstone	Arkansas Kingbird
Willet	Tufted Titmouse

¹Recorded in winter.

f. Casual visitants—26 (continued)

Carolina Wren	Prothonotary Warbler
Mockingbird	Kentucky Warbler
Gnatcatcher	Hoary Redpoll

Statistical Summary

Permanent residents	27
Summer residents	101
Summer visitants	4
Winter visitants	20
Transients	74
Casual visitants	26
Extinct Species (Passenger Pigeon).....	1
Total.....	<hr/> 253

Chapter V

The Migration of Land Birds

Spring

There is so much detailed and exact knowledge today of the migration of birds, that an account of the seasonal variation in Dutchess County would be largely repetitious unless it were contrasted and compared with that of the much better known territory of New York City to the south. The climatic differences largely account for the differences in the first half of the spring, but I shall attempt to demonstrate that other factors enter into the situation in May.

The extreme variability in the beginning of spring is graphically shown in the accompanying table, compiled from Crosby's diaries, and applying strictly to the Hudson Valley from Rhinecliff northward.

- 1922—First wave March 12. River opens the 17th.
- 1923—First wave of land-birds, March 18. River partly open on the 26th; freezes solid with cold wave (down to 3°); partly open again on 29th; ice gone April 4th.
- 1924—Very backward season; river practically open on the 28th and first wave of land-birds the same day.
- 1925—First land-birds Feb. 22. River open and second wave of land-birds March 11.
- 1926—March 5, 5°! River open and migrants common March 25.
- 1927—River open March 11.
- 1928—Scattered land-birds March 5. March 11, 8°. River open on March 18, but plenty of snow left inland. No real wave of land-birds or ducks until March 24.
- 1929—First land-birds March 12. River open the 15th.
- 1930—First land-birds Feb. 23-March 2. River open the 7th.



LUNCH IN TURKEY HOLLOW

Left to Right—Allen Frost, Hon. Edmund P. Platt, Maunsell S. Crosby, and Chas. W. Moulton.

Certain comments on this table are in order. The "first wave of land birds" *does not mean* the first arrival of individuals; these are often ten days or more in advance of the species' becoming common. Messrs. Frost and Gray almost always recorded some of these birds near Poughkeepsie before Crosby noted them at Rhinebeck.

The water-bird migration on the Hudson permits of certain generalizations also. The Herring Gull, American Merganser and Black Duck precede the opening of the river by several days, as these birds can invariably be found flying north at Cruger's Island or sitting on the ice, with the River still frozen solid. The fresh water ducks do not arrive until the coves are open, which may take place while the main river is still full of drifting ice. As a general rule the arrival of the Herring Gull and Black Duck is synchronous with that of the first land-birds, and that of the other fresh water ducks with the second wave of land-birds. But in seasons where there has been exceptionally heavy snow in February and early March, the river migration will be ahead of the land birds, as in 1928.

The month of **April** resembles March in being even more erratic and variable than around New York City. Snow is of frequent occurrence early in the month, and frosts can be expected throughout. A summary for the years covered by the March table are as follows:

- 1922—April 1, heavy snow. Exceptionally mild and pleasant weather from 10th-16th. Snow on the 20th, freezes hard 20th-24th. Balance of month cold and windy. The only pronounced wave on the 16th.
- 1923—April 1, 4°. Warm April 7 and 8. Freezes hard the 15th-17th. Very hot on the 21st. Unusually warm to the end of the month. Many early scattered arrivals, but not a single wave the entire month!
- 1924—Ten inches of snow April 1 and 2. Warm 6th-14th, marked migration the 13th and 14th. Moderate temperatures prevailed to end of month, but continuous high northwest winds spoiled the migration.

- 1925—Warm with marked migration on the 8th and 9th. Freezes 17th. Frost on 21st. April 23, temp. 86°. Marked wave on the 26th, with phenomenally early arrivals to the end of the month.
- 1926—April 2, temp. 25°. Some migration on the 10th. Hard frost 13th. Some migration April 18th. Frost 18th and 19th. April 23, 77°. Marked wave on the 24th, 76 species recorded (Crosby and Frost), and the 25th (77 species), but the season very backward and remains so to close of month.
- 1927—Cold and disagreeable with snow on the 5th. Frost almost every night to the 17th. Very hot the 20th. Marked wave on the 22nd. April 25, temp. 19°. Cold to end of month and hardly any migration.
- 1928—April 2, temp. 22°. April 4, temp. 89°. Wave on the 5th. April 9, frost. April 12, snow. April 15-22, frost nearly every night. April 28, blizzard and deep snow. No migration to speak of after the 5th.
- 1929—Wave April 5. April 7, temp. 85°, another wave. Cold, frost or freezing, 10th-18th, snowing 14th-16th! Warming up, with waves on 27th and 28th.
- 1930—Migration on the 6th. Very moderate weather with no extremes through the 20th, with very slight migration. Freezes 23rd and 24th, and the month closed very backward.

An inspection of this table shows how unsatisfactory a month April usually is, and how rare are the days when the weather is pleasant and birds are really common. It will also be profitable to contrast this record for Dutchess County with the same years for New York. Fortunately the latter region has detailed summaries for 1926 and 1927 (Griscom) and 1928 and 1929 (Kuerzi). (See Abstracts Proc. Linn. Soc. N. Y., nos. 38-42). As a general proposition, a backward season in one place is also a backward season in the other. The difference consists chiefly in that cold spells in Dutchess County are more severe

and last longer than near New York, this difference sometimes being sufficient to destroy a wave or marked migration at the more northern locality. To avoid repetition it will be understood that migration follows on the heels of a warm spell. If therefore such a spell brings a wave near New York and there is none in Dutchess County, it will be apparent that the colder climate there destroyed it.

New York	Dutchess County
1926. April 1-20—No wave.	April 10—Migration of late March species.
April 22—A wave.	April 24 and 25—The same wave.
April 30—A wave.	May 3—The same wave.
1927. April 13 and 15—Big waves.	Nothing until April 22.
April 29	Never materialized.
1928. April 3, 4 and 5—Good flights.	April 5—Wave.
Nothing further.	Nothing further.
1929.	April 5—Wave for March species.
April 7—Wave.	April 7—Wave, chiefly late March species.
April 14 } Waves.	
April 21 } Waves.	April 27—The same wave.
April 26 } Waves.	
April 28 }	May 3—The same wave.

It will be obvious from this comparison how much poorer and less varied the bird-life of Dutchess County is in April than near New York. We shall see that the situation can be completely reversed in May, and our comparative method can be advantageously continued.

New York	Dutchess County
1922. May 2—A flight.	May 4—Big wave, including Tennessee Warbler.
May 3—A small flight.	May 8 and 9—Good flights, including the Cape May Warbler and Red-eyed Vireo.
May 7—Big wave.	
May 10—Big wave, the first Tennessee Warbler.	May 11—Wave.
May 14—Red-eyed Vireo.	May 14—Big wave.

- | New York | Dutchess County |
|-------------------------------------|--|
| 1922. May 22—Small flight. | May 19—Good flight. Tennessee Warbler common. |
| | May 20—Good flight. |
| 1923. May 6—Small flight. | May 23—Small flight. |
| May 12—Good flight. | May 5—Good flight. |
| May 13—Big wave, Tennessee Warbler. | May 6—Good flight. |
| May 17—Good flight. | May 8—Cerulean Warbler. |
| | May 10—Tennessee Warbler. |
| May 18—Cape May Warbler. | May 13—Small flight, Cape May Warbler. |
| May 25—A wave. | May 19—Good flight. |
| | May 20—A wave; 24 species of Warblers, including Mourning, and several Tennessees. |
| | May 21-28—No observation. |
| 1924. May 3—Good flight. | May 30—Small flight. |
| | May 3—Good flight, Cape May Warbler. |
| May 4—Good flight. | May 4—Big wave. |
| May 7—Cape May Warbler. | May 5—Good flight, Lincoln's Sparrow. |
| (Protracted cold spell) | (Protracted cold spell.) |
| | May 18—Good flight, Mourning Warbler. |
| May 23—Good flight. | May 25—Big wave. |
| | May 26—Big wave. |
| 1925. May 2—Flight. | May 30—Wave. |
| May 4—Small flight. | |
| | May 9—Good flight, Cape May and Cerulean Warblers. |
| | May 10—Big wave, White-crowned Sparrow, Orange-crowned and Tennessee Warbler. |
| May 11—Big wave, Cape May Warbler. | (Cold spell.) |
| May 15—Tennessee Warbler. | |
| May 16—Big wave. | May 17—Big wave, the same one. |

New York

1925. May 20-21—Good flights.
 May 25 and 26—Big flights.
1929. "The normal waves decidedly less marked than usual . . . and on the majority of days observers reported relatively few species and fewer individuals" (Kuerzi).
 May 10—Wave.

Dutchess County

- No observation.
- May 27—Big wave.
- May 4—Good flight.
 May 5—Big wave.
- May 12—Big wave.
 May 15—Good flight.
 May 17—Big wave.
 May 19—Big wave.
 May 23—Big wave.
 May 26—Big wave.
- (For the rarer transients, the second best year ever recorded, and the best for general abundance of birds.)

Two interesting conclusions result from a study of these tables. The first is, that granted a continuation of fair and warm weather, a wave in the New York City region reaches Dutchess County one or two days later, and the same general list of species arrives. If, however, the weather suddenly turns bad the day of a wave or the day after, this wave never materializes in Dutchess County. The second and far more important conclusion is that Dutchess County obviously receives flights and waves that have nothing whatever to do with any schedule around New York, and many of the rarer transient Warblers also arrive on dates that bear no relation to the New York City region. When we consider also their greater abundance in the upper Hudson Valley, and the presence there of the Cerulean Warbler as a regular summer resident, I am convinced that Dutchess County receives an influx from the southwest or west as well as from the south. This view receives further indorsement in early spring. Crows and various black-birds are regularly seen every spring and fall migrating across the Hudson River in a southwest to northeast diagonal, which

affects the whole area from Rhinecliff to Cruger's Island. This flight often occurs on the very same day that other crows and blackbirds are streaming straight north further inland. It is a marked phenomenon, which I have frequently seen myself, and which Crosby carefully checked every year.

Reverting for a moment to the time it takes for a New York wave to reach Dutchess County, it is quite surprising how often the advance guard of many species are recorded south of Poughkeepsie ahead of Rhinebeck. It is also quite unexpected to note how seldom a wave applies both to the southern and northern halves of the County on the same day. These points have been brought out by the census trips of the past ten years, with two parties always working a southern and a northern route two or three week-ends each May. Examples follow. The species listed for the southern party were not recorded by the northern.

	Southern Party	Northern Party
1925, May 10—	No flight; Black-billed Cuckoo, Tennessee and Magnolia Warblers.....	Good flight
1926, May 9—	No flight; Wood Pewee, White-crowned Sparrow, Tanager, Red-eyed Vireo, Cerulean and Canadian Warblers.....	No flight
May 16—	Small flight; Alder Flycatcher and Black-poll Warbler	No flight
1927, May 8—	No flight; Alder Flycatcher, Indigo Bunting, Red-eyed Vireo; Blue-winged, Magnolia, Blackburnian Warblers, Chat.....	No flight
1928, May 13—	Good flight; 13 arrivals not recorded by northern party	No flight
May 20—	No flight	Good wave
1929, May 5—	No flight; Yellow-billed Cuckoo, Orchard Oriole, Tanager, Chat, Magnolia and Wilson's Warblers	Big wave
May 12—	Big wave; Nighthawk, Pewee, Alder and Yellow-bellied Flycatchers, Tennessee and Cape May Warblers.....	Big wave

Southern Party	Northern Party
1929, May 19—Big wave	Good flight
1930, May 11—Good flight; Blackburnian and Canadian Warblers	Good flight
May 18—Good flight	No flight

A few words now as to the relative abundance of typical May transients. Crosby made careful warbler counts for 1914-1916, and 1920-1925 based on daily observation. He rarely attempted to do so for other species of birds, unless particularly interested, and his daily lists give no clue as to the number of individuals seen. I made careful counts around Rhinebeck in 1929, also daily. Such data as really reflect consistent observation and record are given below. The numbers given represent the total number of individuals seen during the season. These figures can profitably be contrasted with Mr. Urner's statistical study of the same species near Elizabeth, New Jersey (cf. Abstract Proc. Linn. Soc. N. Y., nos. 39, 40, pp. 44-98). It will be apparent that 1916 was a marvelous year, 1929 a very good year, and 1924 remarkable for the numbers of the late transients, due to the three waves the last week in May. Another advantage in printing these numbers is the graphic illustration they afford of the fluctuation which takes place from year to year, a fluctuation which is undreamed of by the inexperienced observer, who does not appreciate how relative and variable is the term "common transient."

Further for the sake of comparison I add similar counts of my own in 1926, 1913 and 1914 for the New York City region, picking them deliberately as the best years I ever had there. They are consequently fairly comparable only with Rhinebeck's best. We must remember, however, that we are comparing the three best years in twenty-two for New York with the three best years in ten only for Rhinebeck. Even so, the sum of Rhinebeck's three best counts is way ahead of New York for most of the species, the Parula Warbler and Olive-backed Thrush being the outstanding exceptions.

Seasonal Counts of Warblers, Etc.

	Dutchess County											New York	
	1914	1915	1916	1920	1921	1922	1923	1924	1925	1929	1926	1913	1914
Solitary Sandpiper	—	—	—	—	—	45	—	—	27	24	—	—	—
Yellow-bellied Flycatcher	—	—	7	—	—	—	—	42 ¹	14	15	11 ¹	0	0
Olive-sided Flycatcher	—	—	—	—	—	—	—	6	4	8	2	1	3
Olive-backed Thrush	—	—	40	—	—	38	—	35	34	98 ¹	89	100	79
Blue-headed Vireo	—	—	16	16	5	13	12	9	20	17	15	17	18
Tennessee Warbler	0	9	109 ¹	41	26	68	30	14	5	9	2	3	6 ¹
Nashville Warbler	32	26	53	15	9	39	19	26	35	18	10	18	22
Parula Warbler	70	21	98	14	5	29	50	19	—	36	27 ²	177	206
Cape May Warbler.....	10	8	42 ¹	5	3	5	1	4	3	17	6	14 ¹	2
Magnolia Warbler	36	10	85	31	29	40	53	121	—	98	86	69	124
Black-throated Blue Warbler.....	44	27	92	16	16	18	36	40	—	83	21 ²	81	69
Blackburnian Warbler	12	9	56	24	10	10	12	44	9	67	33	14	35
Bay-breasted Warbler	5	3	46	5	2	4	5	26	8	31	12	37 ¹	7
Northern Water-Thrush	20	9	37	8	8	7	13	20	10	32	15	76 ¹	26
Mourning Warbler	—	2	2	3	—	3	1	6	1	6	1	1	1
Wilson's Warbler	2	1	22	6	1	8	2	8	9	36	18	19	14
Canada Warbler	18	5	63	16	4	12	11	135	27	76	47	69	34
Lincoln's Sparrow	—	—	—	—	—	—	—	4	7	13	4	2	2

¹Exceptionally numerous.²Unusually scarce.

Fall

The fall migration requires little elaboration here, as it is a replica of that near New York City, differing only in beginning a little earlier and ending very much earlier, sometimes nearly a month. The factors that make the spring migration distinctly richer in the Upper Hudson Valley do not apply in the fall, when a marked easterly or southeasterly trend to the coast is well-known throughout the northeast. Even years ago when the Cape May and Tennessee Warblers were very rare in spring near New York City, they were occasional in fall. While some undoubtedly come down the Hudson Valley, others come down the coast from Massachusetts southward, a migration route which naturally does not affect Dutchess County. I can see no evidence either in Crosby's records or my own field experience to warrant the belief that land-bird transients are especially abundant in this area in fall. Optimum periods for great variety are around September 10 and October 10 in favorable years.

Chapter VI

Fall Migration of Water-Fowl

It was not until 1920 that anyone began to study water-fowl in Dutchess County, or that any one made the discovery that the Hudson River was a migratory highway. Crosby really deserves the credit for this discovery, and above all for finding out how to do it. He had never studied waterfowl until his war service on Long Island brought him for the first time to the coast. He returned to Dutchess County in 1919 resolved to "work up the ducks of his region." We often discussed this question that fall and the following winter, revived Mearns' and Fisher's success lower down the River a generation ago and argued that the ducks they recorded must have come down the River in fall and passed up river in spring. The great question was, did this old migration route still survive in the modern period, with the number of water-fowl greatly reduced? If so, did they stop, and if so, where?

Crosby's efforts the fall of 1919 were complete failures. All he could think of was to visit the marshes in North Bay at Cruger's Island. As these were full of hunters after September 15, blazing away at Rails, Coots and blackbirds night and day, he saw nothing but a few scared Black Ducks. I paid him my first visit in early April, 1921, and the object was to find ducks. I well remember the depressing effect of my first sight of the Hudson in Dutchess County, a dirty yellow stream about a mile and a half wide, with hilly, straight banks, the most conspicuous features being the railroad on each bank, bordered by endless rows of brick yards and ice houses. A more unlikely territory for ducks I never beheld. If I recall aright, Crosby, Frost, Guernsey and I took a motor boat at Poughkeepsie and chugged up river for about ten miles and then gave it up. Beyond Herring Gulls, a few American Mergansers and a flock of Scaup, we found absolutely nothing, but had learned one thing: we would surely never do again.

By the end of the spring of 1921 Crosby had discovered that in spring the ducks stopped in those coves the land side of which was unspoiled, heavily wooded private property. He also discovered that the great cat-tail marsh at Cruger's Island was alive with ducks, provided that they were "shot out" with a revolver. Here the area is so great and the vegetation so high even in early spring that the ducks are quite invisible from the land or the railroad track, and they pay no attention to the trains. Hereafter a revolver was always part of Crosby's equipment during the duck season. On favorable days 13-15 species of ducks can be found by visiting Vanderberg Cove south of Rhinecliff, Cruger's Island, and the land side of South Bay at low tide, when the ducks feed on the exposed mud flats. By sneaking through the woods of the Zabriskie estate, one can often approach these feeding flocks within shotgun range. A typical good day is the following over the route just described.

April 18, 1926 (an exceedingly backward season). Crosby and Griscom. American Merganser 10 (Vanderberg Cove and South Bay); Hooded Merganser 19 (Vanderberg Cove); Mallard 4 (South Bay); Red-legged Black Duck 20 (Vanderberg Cove); Black Duck 200 + (everywhere); Baldpate 2 + 7 (Vanderberg Cove and South Bay); Green-winged Teal 20 (South Bay and North Bay); Blue-winged Teal 8 (same two places); Shoveller 4 ♂ + 3 ♀ (with Teal); Pintail 18 (South Bay); Wood Duck 2 (North Bay); Greater Scaup 4 and Lesser Scaup 2 (together South Bay), also 40 (Lesser?) Scaup (off Vanderberg Cove); Ring-necked Duck 3 ♂ + 1 ♀ (with Scaup South Bay); Golden-eye 24 (Vanderberg Cove and South Bay); Mute Swan 10 (Vanderberg Cove).

The year 1926 was particularly late, no less than 9 species of ducks being recorded on May 10. The year 1925 was exceptionally early, and 14 species were recorded on March 22. The year 1927 was remarkably poor. In spite of persistent and unremitting search, practically no ducks were found at all. In fact the extraordinary fluctuation in the numbers of the ducks

is remarkable and defies analysis. A glance at the tables at the close of this section show that this fluctuation both spring and fall is very much greater than for the land bird transients.

In 1922 Crosby discovered how to find ducks and where to look for them in fall. They avoid the coves entirely, and come in flights at dawn. Some of these bed in the River in a large raft between Barrytown and the south end of Cruger's Island. This raft usually remains for an hour or two, very rarely longer, and then moves down the River. More rarely there is a flight just before sunset, but these never stop. These down flights take place with falling temperature and northwest winds, and are often most impressive and interesting. They begin about October 10 and last into the first week of November. After this the fresh water ducks are mostly gone, and the scene shifts down-river to a section off Vanderberg Cove and just north of a little lighthouse. Here Canvas-back, American Mergansers and Golden-eyes form a nucleus to attract other diving ducks and stragglers of Anatinae. There is undoubtedly feed here for the diving ducks, and these sometimes linger until the river is frozen in December, or most exceptionally, early January. From very fragmentary observation on Crosby's part, there is some evidence of another late fall gathering of ducks off Deming's Point, below Beacon, but this still awaits proper study.

Returning now to the dawn flights in October, Crosby paid these particular attention from 1922-1929. During favorable weather he was often at Barrytown before daylight two or three times a week, and kept most elaborate and detailed records of the history of events. Some of these are reproduced below as a matter of record.

October 26, 1926

Arrived at Barrytown Dock at 5:45 A.M. Nearly dark. Temp. 39°. Moon shining. Upper wind W. by N. W., lower stratum W. by S. W.

6:00 A.M.	Crows start to come across river—150 as a starter.
6:10 A.M.	Black Duck 10.....flying N
	Black Duck 15, Pintail 1.....flying N

6:11 A.M.		Black Duck 20.....	flying	S
6:12 A.M.		Loon 1 (early record).....	flying	S
		Redleg 9	flying	S
6:15 A.M.		Herring Gull 4.....	flying	S
6:20 A.M.		House Sparrows calling		
6:23 A.M.		Black Duck 3 (flying low).....	flying	S
6:25 A.M.		Black Duck 15, Hooded Merganser 1, Pintail 1..	flying	S
6:30 A.M.		Goldfinches 2, fly over; also Starlings, Red- wings and Grackles, the last named going East.		
6:35 A.M.		Herring Gull 1.....	flying	N
		Black Duck 9.....	flying	S
6:38 A.M.		Pipit 1	flying	S
6:40 A.M.		Black Duck 13.....	flying	S
	one	{Black Duck 650.....	flying	S
	flock	{Mallard 5	flying	S
		{Pintail 3	flying	S
		{Lesser Scaup 4.....	flying	S
		Cowbirds 20	flying	S
6:45 A.M.	one	{Black Duck 200.....	flying	S
	flock	{Mallard 5	flying	S
		{Gadwall 1	flying	S
		Herring Gull 1.....	flying	S
6:47 A.M.		Black Duck 2.....	flying	S
		Black Duck 15.....	flying	N
	one	{Black Duck 65.....	flying	S
	flock	{Mallard 2	flying	S
6:50 A.M.		Black Duck 150 (far off across the river).....	flying	N
		Black Duck 15.....	flying	S
	one	{Hooded Merganser 6.....	flying	S
	flock	{Scaup 1 (probably Lesser).....	flying	S
		Black Duck 8.....	flying	S
		Black Duck 17.....	flying	S
6:53 A.M.		Black Duck 1.....	flying	S
6:56 A.M.		Black Duck 1.....	flying	S
		Herring Gull 1.....	flying	N
		Crow (several)	flying	N
7:00 A.M.		Herring Gull 1.....	flying	S
7:05 A.M.		Herring Gull 1.....	flying	S
7:13 A.M.		Myrtle Warbler 1, heard.		
7:16 A.M.		Pipit 1	flying	S

October 30, 1926

Arrived at Barrytown Dock at 5:45 A.M. Heavy fog. Temp. 38° (up to 49° in the afternoon); I heard Chipping Sparrows calling in the corn in front of the house at 5:25 by moonlight.

- 5:45 A.M. Black Duck (many heard).
Crows (heard).
- 5:55 A.M. Ducks' wings whirring over the river.
- 6:00 A.M. Able to see to write without using dash-light.
- 6:05 A.M. A Snow Bunting heard—an early record.
- 6:12 A.M. House Sparrow calls.
More whistling of ducks' wings.
- 6:20 A.M. Song Sparrow chirps.
- 6:22 A.M. A Pipit calls.
- 6:37 A.M. A Starling calls.
- 6:48 A.M. A Chickadee calls.
- 6:49 A.M. A Goldfinch calls.
- 6:57 A.M. A Jay calls.
Fog lifting a little from the land only.
- 7:12 A.M. Fog has settled down again.
- 7:42 A.M. Puff of westerly breeze.
- 7:43 A.M. A Bluebird calls.
- 7:44 A.M. Fog lifts suddenly from West.
- 7:45 A.M. A few ducks heard, flying through rising mist.
A Herring Gull fishing over the river.
Apparently no ducks left near dock, except 6
Blacks and flocks way to the North.
- 7:48 A.M. Black Duck 50, Mallard 1.....flying S
Black Duck 3.....flying S
- 7:49 A.M. Black Duck 10.....flying S
- 7:50 A.M. Black Duck 13.....flying S
- 7:51 A.M. Black Duck 14.....flying S
Black Duck 17.....flying S
Downy Woodpecker calls.
- 7:55 A.M. Black Duck 27.....flying S
(Night boat Rennselaer pulling up anchor to
proceed North, now that the fog has lifted suf-
ficiently.)
- 7:57 A.M. Juncos calling.

7:58 A.M.	Black Duck 35.....	flying S
	Black Duck 3.....	flying N
7:59 A.M.	Black Duck 50.....	flying S
	Black Duck 20.....	flying N
8:00 A.M.	Black Duck 250, Shoveller 5, Mallard 2.....	flying S
8:03 A.M.	Black Duck 30, Mallard 2.....	flying S
8:04 A.M.	Black Duck 18.....	flying S
8:06 A.M.	Black Duck 20.....	flying S
8:07 A.M.	Black Duck 11.....	flying N
8:08 A.M.	Black Duck 7.....	flying S
8:09 A.M.	Black Duck 4.....	flying S
8:10 A.M.	Black Duck 19.....	flying S
8:13 A.M.	A Nuthatch calls.	
8:20 A.M.	(I start walking up railroad tracks.)	
8:27 A.M.	Black Duck 25.....	flying S
	Grackle heard.	

About 450 ducks in a raft in the River below Cruger's Island, including Mallard 5, Scaup 10, Baldpate, pair, Gadwall 1. Two Snow Buntings on the railroad tracks. I left about 9:30 A.M.

November 1, 1926

Arrive at Barrytown Dock at 5:45 A.M. Temp. 33°. No wind, river as smooth as glass. Very clear air. Last quarter of moon.

5:45 A.M.	A gull and sparrow heard. No ducks heard or seen.	
5:51 A.M.	A duck heard quacking.	
5:56 A.M.	Crows calling.	
5:59 A.M.	A slight mist rising off water.	
6:01 A.M.	Black Duck 10.....	flying S
6:02 A.M.	Black Duck 50.....	flying S
6:04 A.M.	Black Duck 25.....	flying S
6:06 A.M.	Black Duck 75.....	flying S
	Black Duck 5.....	flying S
6:07 A.M.	Black Duck 12.....	flying S
	Black Duck 8.....	flying N
6:08 A.M.	Black Duck 14.....	flying S
	Black Duck 70.....	flying N
	Black Duck 50.....	flying S
	Crows crossing river towards west.....	
		flying E

6:09 A.M.	Black Duck 25.....	flying	N
6:10 A.M.	Black Duck 30.....	flying	S
	Black Duck 4.....	flying	N
6:11 A.M.	Black Duck 80, Mallard 1.....	flying	S
6:12 A.M.	Black Duck 20.....	flying	N
	Black Duck 140, Mallard 1.....	flying	S
	Black Duck 30.....	flying	N
	Black Duck 40.....	flying	S
6:13 A.M.	Black Duck 60.....	flying	N
	Black Duck 20, Mallard 2.....	flying	S
6:14 A.M.	Black Duck 25, Pintail 1.....	flying	S
	Black Duck 40.....	flying	S
6:15 A.M.	Black Duck 60.....	flying	S
	Song Sparrow and House Sparrow calling.		
6:16 A.M.	Black Duck 15.....	flying	N
	Grackle heard.		
6:17 A.M.	Black Duck 9.....	flying	S
	Black Duck 6.....	flying	N
6:20 A.M.	Black Duck 9, Mallard 1.....	flying	S
	Blue Jay heard.		
6:21 A.M.	Black Duck 9, Mallard 1.....	flying	S
	Black Duck 25.....	flying	S
	Black Duck 4.....	flying	S
	Black Duck 4.....	flying	S
	Black Duck 25.....	flying	S
	Starling heard.		
	Black Duck 15.....	flying	N
6:22 A.M.	Black Duck 5.....	flying	S
	Black Duck 12.....	flying	N
	Black Duck 35.....	flying	S
	Black Duck 15.....	flying	S
6:24 A.M.	Black Duck 4.....	flying	S
	Black Duck 40.....	flying	S
	Black Duck 20.....	flying	N
6:25 A.M.	Black Duck 9.....	flying	N
	Black Duck 30.....	flying	S
	Black Duck 10.....	flying	S
6:26 A.M.	Great flock of Grackles passing inland to East of me, flying southwards.		
6:28 A.M.	Black Duck 2.....	flying	S

- 6:29 A.M. Another big ribbon of Grackles, Starlings, etc.,
its west end passing above me.
Goldfinch heard.
- 6:30 A.M. Black Duck 5.....flying S
Black Duck 25.....flying N
Black Duck 6.....flying N
Black Duck 15.....flying N
- 6:31 A.M. Redwings, etc., going South at an enormous
height.
Black Duck 8.....flying N
- 6:32 A.M. Black Duck 12.....flying S
Black Duck 12.....flying S
- 6:34 A.M. Black Duck 1.....flying N
More waves of blackbirds. (Have not appeared
on other mornings; perhaps the weather affects
their morning departure and direction.
Herring Gull 1.....flying N
- 6:37 A.M. Started up railroad tracks to examine great flock
of ducks below Cruger's Island.
- 6:43 A.M. Black Duck 7.....flying S
- 6:46 A.M. Black Duck 4.....flying S
Ducks heading rapidly to north.
Red-breasted Merganser 9.....flying S
- 6:47 A.M. Black Duck 35.....flying S
Downy Woodpecker calls.
- 6:52 A.M. Nearly 1000 Black Ducks and 11 Mallards,
driven up by passing steamer, leave raft below
Cruger's Island and fly south to alight about a
mile below Barrytown Dock. About 120 still
remain far up the river.
- 6:54 A.M. Black Duck 14.....flying S
- 6:55 A.M. Black Duck 20.....flying S
I returned to car at this point.
- 7:07 A.M. Black Duck 1, Mallard pair, Pintail 1.....flying S

October 28, 1928

Arrived at Barrytown Dock at 5:45 A.M. Dark; wind still south; temp. 39°. Light enough to write by daylight at 6:05. A gentle drizzle, gradually clearing. Barred Owl hooted at home. Song Sparrow sang several times at 6:10. A Crow flew south low over the water at 6:18.

6:26 A.M.	Black Duck 1.....	flying	S
6:28 A.M.	Black Duck 1.....	flying	N
6:30 A.M.	Starling calls.		
6:33 A.M.	Starlings } Grackles }	flying	S
6:34 A.M.	Black Duck 14.....	flying	S
6:36 A.M.	Black Duck 26.....	flying	S
	Black Duck 2.....	flying	N
6:37 A.M.	Black Duck 15.....	flying	S
6:39 A.M.	Herring Gulls 3.....	flying	N
6:40 A.M.	Cowbird 1	flying	S
6:42 A.M.	Myrtle Warbler (calls).		
6:45 A.M.	Gull 1	flying	N
6:48 A.M.	Gull 1 (circling)		
6:57 A.M.	Black Ducks 2.....	flying	S
6:58 A.M.	Black Duck 13 } Pintail 4 }	flying	S
6:59 A.M.	Black Duck 47.....	flying	S
7:00 A.M.	Black Duck 500 } Shoveller 1 }	flying	S
7:02 A.M.	Black Duck 50 } Pintail 4 }	flying	S
7:06 A.M.	Black Duck 1.....	flying	S
	Crow 2	flying	S
7:07 A.M.	White-winged Scoter 5.....	flying	S
	Black Duck 1.....	flying	S
7:09 A.M.	Black Duck 89.....	flying	S
7:10 A.M.	Black Duck 5.....	flying	S
7:13 A.M.	Black Duck 86 } Pintail 2 } Baldpate 1 }	flying	S
7:16 A.M.	Black Duck 11.....	flying	S
7:17 A.M.	Black Duck 9 settling among about 30 others way out in river northwestward.		
7:20 A.M.	Discovered about 150 freshly alighted ducks quarter mile north of dock.		
7:28 A.M.	Lesser Scaup 7.....	flying	S
	Black Duck 120 } Mallard 2 }	including small flock al- ready recorded on water to northwest.	

7:30 A.M.	Black Duck 4.....flying S
7:31 A.M.	Black Duck 13 dropping into large flock quarter mile north of dock.
7:32 A.M.	Black Duck 13 (more dropping into flock north of dock)flying S
	Black Duck 6.....flying S
	Lesser Scaup 6.....flying S
7:33 A.M.	Black Duck 1.....flying S
	Black Duck 600}
	Baldpate 1}flying S
7:37 A.M.	Black Duck 36.....flying S
	Black Duck 10 (circling opposite).
7:40 A.M.	I started up railroad tracks.
	Black Duck 15.....flying S
7:43 A.M.	Black Duck 3.....flying N
	House Sparrow (chirps).
	Downy Woodpecker (calls).
7:45 A.M.	I reached point opposite ducks on water north of dock. Ducks still alighting. Flock includes besides Blacks: Lesser Scaup 8+4, Mallard 1+, Pintail 10.
8:05 A.M.	Nearest part of flock moved farther out, due probably to extra number of trains passing. Chickadee (calls).
8:10 A.M.	Fired at nearer part of flock so as not to spoil sport of gunner far to north. The flock now numbers fully 1000 ducks. I identified several Mallard and Gadwall.

DUCKS IN THE SPRING

	1922	1923	1924	1925	1926	1927	1928	1929	1930
Canada Goose	4	0	0	0	15	0	6	flock	0
Mallard	29	19	29	89	23	2	6	17	8
Gadwall	2	0	0	2	1	0	0	1	1
Baldpate	13	45	72	57	33	6	25	22	4
Pintail	10	13	15	76	42	2	10	31	23
Green-winged Teal	54	35	2	119	128	11	24	85	23
Blue-winged Teal	9	6	5	14	41	0	2	10	8
Shoveller	4	2	0	0	36	0	0	3	2
Redhead	0	0	0	0	3	0	0	0	0
Ring-necked Duck	2	1	3	0	8	0	0	0	2
Canvas-back	0	0	0	2	0	0	0	1	0

	1922	1923	1924	1925	1926	1927	1928	1929	1930
Scaup	15	16	585 ¹	6	86	20	17	86	3
Golden-eye	41	59	37	17	56	2	16	23	1
Buffle-head	1	1	1	0	0	1	0	3	0
Ruddy Duck	0	0	0	0	0	0	0	0	1
Hooded Merganser	5	4	25	2	23	0	8	6	0
Red-breasted Merganser ..	1	5	0	2	0	0	0	9	0

¹Includes 1 flock Scaup (575).

DUCKS IN THE FALL

	1922	1923	1924	1925	1926	1927	1928	1929	1930
Canada Goose	flock	0	15	14	0	15	0	0	—
Mallard	35	116	295	275	97	15	86	24	—
Galdwall	0	0	7	2	2	1	1	1	0
Baldpate	189	204	54	40	34	5	8	27	—
Pintail	116	101	109	73	38	54	29	78	—
Green-winged Teal	6	11	23	16	17	11	12	14	60
Blue-winged Teal	2	11	22	13	3	16	1	40	0
Shoveller	1	4	0	9	10	0	1	0	0
Redhead	0	26	14	11	9	32	0	27	0
Ring-necked Duck	0	0	0	1	2	0	0	0	1
Canvas-back	0	92	82	439	20	18	270	6	24
Scaup	17	46	65	73	91	95	23	119	91
Golden-eye	20	18	6	6	9	4	9	4	—
Buffle-head	1	0	0	2	1	0	0	1	0
Old-squaw	0	0	23	6	0	0	6	0	0
White-winged Scoter	1	25	3	29	144	56	5	2	0
Surf Scoter	0	0	0	0	0	1	0	0	0
American Scoter	0	0	2	0	0	61	0	0	0
Ruddy Duck	0	6	2	1	4	0	0	0	0
Hooded Merganser	2	3	4	15	13	0	3	0	5
Red-breasted Merganser ..	0	7	0	14	9	4	0	0	—

N.B. The Black Duck is omitted from these tables, as being far too abundant for accurate counts.

Chapter VII

The Census Counts

The Spring Census Trips

The May census trips were Crosby's great interest in the last years of his life. The first ten have been so fully treated by him in the *Wilson Bulletin* (Sept., 1925) that a brief abstract only is presented here. Mr. Frost suggested the first one, on May 18, 1919, and nine others were taken through 1924. In 1922 the census takers divided into a northern party led by Crosby and a southern party led by Frost. Each of these routes was altered or added to nearly every year as experience increased, so that the results obtained are not really comparable.

The southern party route started from Poughkeepsie south to Mt. Beacon and east to Jackson's Pond and Freedom Plains, concluding at Brickyard Swamp. It was not finally stabilized until 1929, when Frost and Gray started at dawn at Millbrook, went east to Turkey Hollow and Swamp River, and concluded at Brickyard Swamp, Poughkeepsie, omitting Mt. Beacon. This is the best route in the County, and produced 127 species on May 19, 1929 (Frost, Gardner, Gray). It is surprisingly uneven compared to the northern route, as it is much poorer on the first and third week-ends, but is usually the better on the middle week-end.

The northern party used to start on Crosby's place, Grasmere, where they obtained 60-70 species before breakfast. They then went to Cruger's Island, to Pine Plains (after 1923), to East Park, concluding at Brickyard Swamp, where the two parties always compared notes. At my suggestion this route was substantially altered in 1925 to commence at Thompson's Pond, Pine Plains, at daybreak. Stops were made en route, according to the discoveries of the spring, for owls, the Whip-poor-will, the Prairie Horned Lark, and the local night singing sparrows, the

Henslow's and Grasshopper on the Astor flats, and the Savannah near Rock City. Breakfast at 9:30 A. M. at Red Hook. Thence to Cruger's Island, Annandale, Mt. Rutsen, lunch at Rhinebeck, on to Hyde Park and East Park, and Brickyard Swamp, Poughkeepsie. Over this route R. J. Eaton and Griscom obtained 119 species on May 23, 1929, but the average for the three middle-week-ends has been 105, 111, 105. Larger lists are only made on days of big waves. The census trips have all but once been limited to Sundays, and surprisingly poor luck has been had with weather and waves on the whole. The record combined total was 145 on May 19, 1929; the northern route yielded 111 species in the great and early wave of May 5, 1929, and 110 species on May 30, 1924 (Crosby, Frost, Griscom), a very late year. In 29 census trips, 1919-1930, a total of 193 species has been recorded, but a large number of these are casuals or stragglers. I cannot speak for the southern route, but I do not believe that the score can be materially increased for the northern route.

For contrast with other routes, I might add that the automobile mileage involved is about 100 miles for the northern route. A route practically all on foot between Rhinebeck and Cruger's Island would yield about 100 species on a good day in the middle of the month.

Breeding Census on Grasmere

From 1915-1917, 1920-1923, Crosby conducted a careful census of the breeding birds on the northernmost 210 acres of his estate, Grasmere, at Rhinebeck. The results are presented below in tabular form.

RESUMÉ OF 210 ACRE TRACT CENSUSES¹

	1915	1916	1917	1920	1921	1922	1923
Black Duck	—	—	1	1	1	—	1
Wood Duck	—	2	—	—	—	—	—
Green Heron	—	1	—	—	—	—	1
Mourning Dove	1	—	—	—	1	1	1
Cooper's Hawk	—	1	—	—	—	—	—

¹As these lists are direct copies of journals, the sequence of the third edition of the A.O.U. Check-List used in them has not been altered.

Resumé of 210 Acre Tract Censuses—(Cont.)

	1915	1916	1917	1920	1921	1922	1923
Red-shouldered Hawk	—	—	—	1	1	1	1
Barred Owl	1	1	1	1	1	1	1
Yellow-billed Cuckoo	—	2	2	2	—	1	1
Black-billed Cuckoo	—	1	1	—	—	—	—
Belted Kingfisher	1	1	1	—	1	—	—
Hairy Woodpecker	2	2	2	1	4	2	2
Downy Woodpecker	6	4	3	1	2	2	4
Northern Flicker	8	6	3	3	10	4	8
Chimney Swift	4	6	5	3	4	3	6
Ruby-throated Hummingbird	2	2	3	2	1	2	1
Kingbird	3	1	2	—	1	1	1
Crested Flycatcher	4	3	4	4	2	2	2
Phoebe	5	4	6	4	7	4	6
Wood Pewee	9	9	11	8	7	8	8
Least Flycatcher	2	1	1	2	—	—	1
Blue Jay	5	3	2	2	3	3	3
Crow	2	3	3	4	4	3	2
Starling	4	1	2	—	5	2	11
Bobolink	1	3	—	—	—	—	—
Cowbird	4	8	5	2	4	1	3
Red-winged Blackbird	2	3	2	1	1	1	1
Meadowlark	4	1	—	—	1	—	—
Orchard Oriole	1	2	2	—	—	—	—
Baltimore Oriole	9	10	7	6	5	5	4
Purple Grackle	1	—	—	—	—	—	—
House Sparrow	17	20	22	19	12	21	15
Goldfinch	3	5	2	3	2	3	5
Vesper Sparrow	4	4	3	3	3	1	2
Grasshopper Sparrow	2	—	—	—	1	1	1
Chipping Sparrow	37	30	28	20	34	33	30
Field Sparrow	3	1	3	3	3	2	1
Song Sparrow	36	28	37	22	34	28	24
Swamp Sparrow	1	—	—	—	—	—	—
Towhee	1	1	—	—	1	1	—
Rose-breasted Grosbeak	—	—	—	1	—	—	—
Indigo Bunting	5	3	4	1	4	3	2
Scarlet Tanager	5	4	4	4	4	4	3
Barn Swallow	1	—	1	1	2	1	1
Bank Swallow	1	—	—	—	—	—	—
Rough-winged Swallow	—	1	—	—	—	—	1

Resumé of 210 Acre Tract Censuses—(Cont.)

	1915	1916	1917	1920	1921	1922	1923
Cedar Waxwing	1	2	2	2	1	—	—
Red-eyed Vireo	11	12	9	13	14	14	15
Warbling Vireo	3	1	1	—	—	—	1
Yellow-throated Vireo	7	5	4	3	2	4	3
Black and White Warbler.....	5	6	5	4	4	5	2
Worm-eating Warbler	2	—	1	1	1	—	2
Golden-winged Warbler	5	2	5	2	2	1	1
Yellow Warbler	4	3	1	2	2	1	2
Chestnut-sided Warbler	8	8	9	6	3	2	3
Oven-bird	18	13	17	7	10	13	10
Louisiana Water-Thrush	2	1	2	2	2	1	2
Northern Yellow-throat	10	6	11	7	4	5	9
Redstart	5	10	6	8	12	6	6
Catbird	19	19	17	7	16	11	14
House Wren	15	22	21	9	25	19	17
White-breasted Nuthatch	2	3	3	1	2	1	6
Chickadee	2	2	2	2	3	2	3
Wood Thrush	17	11	14	7	11	10	9
Veery	13	10	12	6	10	9	11
Robin	38	38	41	34	45	33	34
Bluebird	4	4	2	3	6	3	3
<hr/>							
Totals—							
Species	57	56	52	48	52	48	53
Pairs	387	357	359	251	341	285	307

Species which nested on tract between 1901 and 1914: Bob-white, White-eyed Vireo, Chat. Other species which have nested since 1923, Killdeer, Cooper's Hawk, Cerulean Warbler.

Chapter VIII

Notable Days Afield¹

The following lists are reproduced to give an idea of optimum conditions during the migration period. Abbreviations fl.=flock; sev.=several; c.=common; f.c.=fairly common; abd.=abundant.

1. **March 22, 1925**, a very early season. Grasmere, Vanderberg Cove, and territory between Rhinebeck and Cruger's Island; 9:30 A.M. till dark; temp. 38°-50°; Crosby, Warren F. Eaton, Frost, and Griscom. Comments for the same route Saturday, March 21, are added.

- | | |
|---|--|
| 1. Pied-billed Grebe 1—ties earliest date | 20. Marsh Hawk 1 each day |
| 2. Herring Gull 12 | 21. Red-tailed Hawk 7 |
| 3. American Merganser 10 | 22. Red-shouldered Hawk 7 |
| 4. Hooded Merganser 1 ♀ — not seen Saturday | 23. Sparrow Hawk 4 |
| 5. Mallard 3 — about 10 on Saturday | 24. Barred Owl 1 |
| 6. Black Duck | 25. Kingfisher 1 each day—earliest date |
| 7. Red-legged Black Duck } ³⁰⁰ | 26. Hairy Woodpecker 1 |
| 8. Galdwall 1 ♂ — not seen Saturday | 27. Downy Woodpecker 2 |
| 9. Baldpate 6 | 28. Flicker 4 |
| 10. Green-winged Teal 6 + 2 + 3 | 29. Phoebe 10 |
| 11. Blue-winged Teal — pair both days | 30. Blue Jay 6 |
| 12. Pintail 4 | 31. Crow 25 + 50 migrating north in small lots. |
| 13. Wood Duck 1 ♀ — pair Saturday | 32. Starling sev. 100 |
| 14. Lesser Scaup 2 ♂ 1 ♀ | 33. Cowbird sev. each day |
| 15. Golden-eye 4 | 34. Meadowlark 3 |
| 16. Mute Swan 10 | 35. Red-wing |
| 17. Killdeer 1 | 36. Rusty Blackbird
Hundreds of Red-wings and Rusty Blackbirds roosting in Cruger's Island marsh at dusk. A few of both during the day. |
| 18. Ruffed Grouse 1 | 37. Purple Grackle |
| 19. Pheasant 2 | |

¹As these lists are direct copies of journals, the sequence of the third edition of the A.O.U. Check-List used in them has not been altered.

- | | |
|--|--|
| 38. Bronzed Grackle
Many hundreds of Grackle at dusk. A few of both positively identified during the day. | 44. Junco com., at least 100 |
| 39. House Sparrow | 45. Song Sparrow — abd., many migrating flocks |
| 40. Purple Finch 2 | 46. Fox Sparrow 1 + 4 |
| 41. Goldfinch 6 | 47. Creeper 3 |
| 42. Pine Siskin 3 | 48. White-breasted Nuthatch 4 |
| 43. Tree Sparrow 6, on Saturday only | 49. Chickadee 10 |
| | 50. Golden-crowned Kinglet 2 + 1 |
| | 51. Robin 50 |
| | 52. Bluebird 25 |

2. **April 18, 1926.** Rhinebeck, Dutchess County, N. Y. (Cruger's Island, Grasmere, Vanderberg Cove, Pine Plains); 5:00 A.M. to 5:00 P.M.; temp. 30°-41°, high n. w. wind in afternoon; latest spring to date ever known, flora 3-4 weeks behind, birds 20 species below normal. No decent warm weather all week, frost several times.

- | | |
|---------------------------------------|---|
| 1. Pied-billed Grebe 5 + 2 | 22. Ruffed Grouse 1 + 1 |
| 2. Herring Gull 20 | 23. Pheasant 2 |
| 3. American Merganser 20 | 24. Marsh Hawk 2 |
| 4. Hooded Merganser 1 | 25. Red-tailed Hawk 4 |
| 5. Mallard 4 | 26. Red-shouldered Hawk 4 |
| 6. Red-legged Black Duck 20 + | 27. Bald Eagle 1 |
| 7. Black Duck 200 — | 28. Duck Hawk 2 — same pair as last year — 3 eggs |
| 8. Baldpate 2 + 7 | 29. Sparrow Hawk 3 |
| 9. Green-winged Teal 20 | 30. Fish Hawk 3 — arrival |
| 10. Blue-winged Teal 8 | 31. Long-eared Owl 1 |
| 11. Shoveller 4 ♂ 3 ♀ | 32. Barred Owl 1 |
| 12. Pintail 1 | 33. Kingfisher 3 — arrival |
| 13. Wood Duck 2 | 34. Hairy Woodpecker 2 |
| 14. Scaup 4 | 35. Downy Woodpecker 6 |
| 15. Lesser Scaup 2 } together + 40 | 36. Sapsucker 1 — arrival |
| 16. Ring-necked Duck 3 ♂ 1 ♀ — latest | 37. Flicker 10 |
| 17. Golden-eye 24 | 38. Phoebe 10 |
| 18. Mute Swan 10 | 39. Blue Jay 6 |
| 19. Great Blue Heron 3 | 40. Crow com. |
| 20. Night Heron 15 — arrival | 41. Fish Crow 2 |
| 21. Killdeer 2 | 42. Starling 15 |

- | | |
|--|--|
| 43. Cowbird 15 | 55. Swamp Sparrow 10 |
| 44. Meadowlark 6 | 56. Barn Swallow 2 — arrival |
| 45. Red-wing sev. fl. | 57. Tree Swallow 10 — arrival |
| 46. Rusty Blackbird 2 fl. | 58. Louisiana Water-Thrush 1 — arrival |
| 47. Purple Grackle 1 colony | 59. Winter Wren 1 |
| 48. Bronzed Grackle — 2 migrating flocks | 60. Nuthatch 10 |
| 49. House Sparrow | 61. Chickadee 2 |
| 50. Redpoll 1 — latest by 3 weeks | 62. Golden-crowned Kinglet 4 — arrival |
| 51. Vesper Sparrow sev. | 63. Ruby-crowned Kinglet 1 — arrival |
| 52. Chipping Sparrow 1 — arrival | 64. Robin — f. c. |
| 53. Junco — f. c. | 65. Bluebird 6 |
| 54. Song Sparrow — c. | |

3. **May 23, 1929.** Big day route complete; fine clear day, frost in early A.M., but wind s. w.; 4th big wave of the year; L. Griscom with R. J. Eaton.

- | | |
|---|---------------------------------|
| 1. Pied-billed Grebe 1 | 20. Pheasant c. |
| 2. Hooded Merganser — Halcyon Lake, Pine Plains | 21. Dove sev. |
| 3. Mallard 1 | 22. Red-shouldered Hawk sev. |
| 4. Red-legged Black Duck | 23. Duck Hawk 2 |
| 5. Black Duck 2 | 24. Barred Owl 1 |
| 6. Wood Duck 1 — Halcyon Lake | 25. Screech Owl 1 |
| 7. Mute Swan sev. | 26. Yellow-billed Cuckoo 1 |
| 8. Bittern sev. | 27. Black-billed Cuckoo sev. |
| 9. Green Heron 2 | 28. Kingfisher sev. |
| 10. Night Heron 1 | 29. Downy Woodpecker sev. |
| 11. Virginia Rail 2 | 30. Flicker c. |
| 12. Gallinule sev. | 31. Whip-poor-will 1 |
| 13. Woodcock 2 | 32. Nighthawk 1 |
| 14. Least Sandpiper 1 + 3 | 33. Swift c. |
| 15. Solitary Sandpiper 2 | 34. Ruby-throated Hummingbird 1 |
| 16. Spotted Sandpiper sev. | 35. Kingbird 10 |
| 17. Killdeer sev. | 36. Crested Flycatcher c. |
| 18. Ring-neck Plover 1 | 37. Phoebe c. |
| 19. Grouse 1 | 38. Olive-sided Flycatcher 1 |
| | 39. Wood Pewee 6 |

40. Yellow-bellied Flycatcher 5
 41. Acadian Flycatcher 1
 42. Alder Flycatcher 1
 43. Least Flycatcher sev.
 44. Prairie Horned Lark 1
 45. Jay c.
 46. Crow c.
 47. Starling c.
 48. Bobolink c.
 49. Cowbird c.
 50. Red-wing c.
 51. Meadowlark c.
 52. Orchard Oriole 1 — Rock City
 53. Baltimore Oriole c.
 54. Bronzed Grackle 1
 55. Purple Grackle sev.
 56. House Sparrow c.
 57. Goldfinch c.
 58. Vesper Sparrow c.
 59. Savannah Sparrow 1
 60. Grasshopper Sparrow 10
 61. White-crowned Sparrow 1
 62. White-throat 1
 63. Chippy c.
 64. Field Sparrow c.
 65. Song Sparrow c.
 66. Lincoln's Sparrow 1
 67. Swamp Sparrow c.
 68. Towhee c.
 69. Rose-breasted Grosbeak c.
 70. Indigo Bunting sev.
 71. Tanager 30 — great flight
 72. Purple Martin 1
 73. Cliff Swallow 3
 74. Barn Swallow c.
 75. Tree Swallow c.
 76. Bank Swallow 50
 77. Rough-winged Swallow 2
 78. Waxwing
 79. Red-eyed Vireo 10
 80. Warbling Vireo 1
 81. Yellow-throated Vireo 10
 82. White-eyed Vireo 1
 83. Black and White Warbler c.
 84. Worm-eating Warbler 1
 85. Blue-winged Warbler 1
 86. Golden-winged Warbler 10
 87. Orange-crowned Warbler 1
 88. Tennessee Warbler 5
 89. Parula Warbler 2
 90. Cape May Warbler 1 — Cruger's Island.
 91. Yellow Warbler c.
 92. Black-throated Blue Warbler 6
 93. Myrtle Warbler 15
 94. Magnolia Warbler 25
 95. Cerulean Warbler 4
 96. Chestnut-sided Warbler c.
 97. Bay-breasted Warbler 5
 98. Black-poll Warbler 4 only
 99. Blackburnian Warbler 10
 100. Black-throated Green Warbler 10
 101. Ovenbird c.
 102. Water-Thrush 4
 103. Louisiana Water-Thrush 2
 104. Mourning Warbler 1
 105. Northern Yellow-throat c.
 106. Chat 1, Stissing; 1 Cruger's; 1 East Park
 107. Wilson's Warbler 4
 108. Canada Warbler 20
 109. Redstart 50
 110. Catbird c.

- | | |
|--------------------------------|-----------------------------|
| 111. Thrasher 4 | 116. Veery c. |
| 112. House Wren c. | 117. Gray-cheeked Thrush 4 |
| 113. Long-billed Marsh Wren c. | 118. Olive-backed Thrush 30 |
| 114. Chickadee sev. | 119. Robin c. |
| 115. Wood Thrush c. | 120. Bluebird 6 |

Enormous flock of warblers at Stissing Mountain, no unusual number elsewhere; Sora, Red-tailed Hawk, Henslow's Sparrow, Hairy Woodpecker, Fish Crow and White-breasted Nuthatch, almost incredible misses.

4. **September 10, 1922.** Morgan Lake, Poughkeepsie (dawn), Grasmere, Pine Plains (in p. m.). Shore-birds at Morgan Lake and Halcyon Lake, Pine Plains; warblers at Grasmere and Thompson's Pond, Pine Plains; Crosby, Frost and Griscom.

- | | |
|---|---|
| 1. Pied-billed Grebe 1 | 25. Downy Woodpecker 2 |
| 2. Bittern 1 | 26. Flicker sev. |
| 3. Green Heron 1 | 27. Swift 6 |
| 4. Night Heron 1 | 28. Hummingbird 3 |
| 5. Virginia Rail 1 | 29. Kingbird 4 |
| 6. Florida Gallinule 1 | 30. Crested Flycatcher 2 |
| 7. Pectoral Sandpiper 3 | 31. Phoebe c. |
| 8. Least Sandpiper 2 + 1 | 32. Wood Pewee 3 |
| 9. Lesser Yellow-legs 3 + 1 | 33. Yellow-bellied Flycatcher — collected 2 |
| 10. Solitary Sandpiper 3 + 1 | 34. Least Flycatcher — 1 collected + 2 |
| 11. Spotted Sandpiper 2 + 1 | 35. Blue Jay sev. |
| 12. Killdeer 50 + 84 | 36. Crow c. |
| 13. Ruffed Grouse 1 | 37. Starling |
| 14. Mourning Dove 3 | 38. Cowbird 5 fls. |
| 15. Turkey Vulture 1 | 39. Bobolink sev. |
| 16. Marsh Hawk 3 | 40. Red-wing 1 |
| 17. Sharp-shinned Hawk 2 | 41. Meadowlark 1 |
| 18. Red-shouldered Hawk 1 | 42. Grackle 1 |
| 19. Red-tailed Hawk — probably, but not positive, 1 | 43. House Sparrow — |
| 20. Bald Eagle 1 | 44. Goldfinch c. |
| 21. Sparrow Hawk 4 | 45. Chipping Sparrow sev. flocks |
| 22. Barred Owl 1 | 46. Field Sparrow 1 |
| 23. Kingfisher 1 | 47. Song Sparrow sev. |
| 24. Hairy Woodpecker 1 | |

- | | |
|--|---|
| 48. Barn Swallow sev. | 64. Black-poll Warbler 2 |
| 49. Tree Swallow sev. | 65. Blackburnian Warbler 4 |
| 50. Waxwing c. | 66. Black-throated Green Warbler 12 |
| 51. Red-eyed Vireo sev. | 67. Palm Warbler — earliest date 1 |
| 52. Philadelphia Vireo — 1 collected, 2 others | 68. Northern Yellow-throat 2 |
| 53. Black and White Warbler 2 | 69. Canada Warbler 2 |
| 54. Blue-winged Warbler — latest date 1 | 70. Redstart 6 |
| 55. Golden-winged Warbler—latest date 2 | 71. Catbird 2 |
| 56. Nashville Warbler 2 | 72. House Wren 2 |
| 57. Tennessee Warbler 4 | 73. L.-b. Marsh Wren 1 |
| 58. Parula Warbler 2 | 74. Nuthatch 3 |
| 59. Cape May Warbler 6 | 75. Chickadee c. |
| 60. Black-throated Blue Warbler 2 | 76. Blue-gray Gnatcatcher 1 collected—1st County record |
| 61. Magnolia Warbler 4 | 77. Wood Thrush 1 |
| 62. Chestnut-sided Warbler 4 | 78. Veery 1 |
| 63. Bay-breasted Warbler 1 ad. | 79. Robin c. |
| | 80. Bluebird c. fls. |

October 8, 1927. Dutchess County, N. Y.; Cruger's Island (dawn); Mt. Rutsen; Grasmere; Pine Plains in p.m. Rain, very warm all Friday night, clearing about 9:00 a. m.; wind now shifting to east during night. Birds by no means common, *total 69 species*. **October 9.** Same; Barrytown (dawn); Mt. Rutsen; Hyde Park; Vanderberg Cove and Grasmere; overcast, east wind, raining most of the day; raw and cold; total 65 species, an extraordinary list, considering the weather. All records Saturday; Sunday observations in second column.

	Oct. 8	Oct. 9
1. Pied-billed Grebe	15 + 6	3
2. Herring Gull	2	6
3. Double-crested Cormorant	1	—
4. Black Duck	220 + 35	250
5. Red-legged Black Duck.....	6	—
6. Gadwall—earliest	1	—
7. Green-winged Teal	3 + 5	1?
8. Blue-winged Teal	8	—
9. Pintail	12	20
10. Baldpate	—	1
11. American Scoter	61 ♂	—

	Oct. 8	Oct. 9
12. Surf Scoter—the first definite record, since the vague remark of Stearns in the 70s (with American Scoters)	1 ♀	—
13. Great Blue Heron.....	2	1
14. Mute Swan	—	10
15. Green Heron	—	1
16. Gallinule	1	—
17. Coot	1	—
18. Greater Yellow-legs	1	—
19. Killdeer	10	1
20. Ruffed Grouse	—	1
21. Pheasant	1	1
22. Goshawk 1—earliest (Vanderberg Cove)....	1	1
23. Red-tailed Hawk	1	2
24. Red-shouldered Hawk	2	1
25. Bald Eagle	—	1
26. Pigeon Hawk	1 ad.	—
27. Barred Owl	1	1
28. Great Horned Owl, hooting at dawn in woods west side Cruger's Island marsh.....	1	—
29. Kingfisher	1	1
30. Downy Woodpecker	sev.	sev.
31. Sapsucker	6	1
32. Flicker	sev.	1
33. Whip-poor-will—latest	1	—
34. Arkansas Kingbird, 1, Thompson's Pond, Pine Plains, gradually working south, too rapidly to be overtaken and collected; new to County	1	—
35. Phoebe	3	3
36. Blue Jay	c.	c.
37. Crow	c.	c.
38. Fish Crow	1	—
39. Starling	abd.	abd.
40. Cowbird	6	—
41. Red-wing	1000	6
42. Meadowlark	3	2
43. Rusty Blackbird	100	25
44. Grackle	25	—
45. House Sparrow	—	—
46. Goldfinch	12	2
47. Vesper Sparrow	1—	—
48. White-throated Sparrow	c.	c.
49. Chipping Sparrow	6	10

- | | |
|--|--------------------------------------|
| 4. Herring Gull 1 | 37. Crow c. |
| 5. Red-breasted Merganser 8 —
early date | 38. Starling abd. |
| 6 Hooded Merganser 1 + 1 —
early date | 39. Cowbird 1 fl. |
| 7. Mallard 25 in a.m. | 40. Meadowlark 2 |
| 8. Black Duck 250 a.m. + 2500 p.m. | 41. Red-wing abd. |
| 9. Red-legged Black Duck 1 + | 42. Rusty Blackbird abd. |
| 10. Gadwall 1 — earliest | 43. Grackle com. |
| 11. Baldpate 20 | 44. House Sparrow |
| 12. Green-winged Teal 1 p.m. | 45. Purple Finch 6 |
| 13. Blue-winged Teal 1 + 1 | 46. Goldfinch sev. small flocks |
| 14. Pintail 20 + 4 p.m. | 47. Pine Siskin 15 |
| 15. Buffle-head 2 — early date | 48. Vesper Sparrow 1 |
| 16. Great Blue Heron 1 | 49. Savannah Sparrow 1 |
| 17. Virginia Rail 1 | 50. White-crowned Sparrow 1 im. |
| 18. Sora 1 | 51. White-throated Sparrow abd. |
| 19. Wilson's Snipe 1 + 1 | 52. Chipping Sparrow sev. fl. |
| 20. Greater Yellow-legs 1 — ties lat-
est date | 53. Field Sparrow 1 +6 |
| 21. Killdeer 1 | 54. Junco, a few single birds |
| 22. Grouse 5 | 55. Song Sparrow c. |
| 23. Dove 1 | 56. Swamp Sparrow 3 + sev. +
sev. |
| 24. Turkey Buzzard 2 together —
latest of 5 records | 57. Fox Sparrow 1 — earliest date |
| 25. Marsh Hawk 1 | 58. Towhee 4 |
| 26. Sharp-shinned Hawk 1 | 59. Waxwing 2 fl. |
| 27. Red-tailed Hawk | 60. Red-eyed Vireo 1 |
| 28. Red-shouldered Hawk 3 | 61. Blue-headed Vireo 1 |
| 29. Pigeon Hawk 1 | 62. Myrtle Warbler com. |
| 30. Barred Owl 1 | 63. Black-poll Warbler 6 + 10 |
| 31. Kingfisher 2 | 64. Black-throated Green Warbler 2 |
| 32. Hairy Woodpecker 2 | 65. Pipit 25 |
| 33. Downy Woodpecker 2 | 66. Catbird 5 |
| 34. Sapsucker 8 | 67. Winter Wren 8 |
| 35. Flicker 10 | 68. Creeper sev. |
| 36. Blue Jay c. | 69. White-breasted Nuthatch f.c. |
| | 70. Chickadee c. |
| | 71. Golden-crowned Kinglet 10 |
| | 72. Ruby-crowned Kinglet f.c. |

73. Gray-checked Thrush 1 — latest date
74. Hermit Thrush 6
75. Robin abd.
76. Bluebird c.

7. **November 1, 1925.** Rhinebeck, Dutchess Co., N. Y. (Barrytown at daylight; Grasmere, Vanderberg Cove, Mt. Rutsen, Cruger's Island); temp. 21° at daylight, 1½ inches of snow the last two days, breaking all records; up to 44° midday; beautiful clear, calm day; Crosby, Urner, Baker and Griscom.

- | | |
|--|--|
| 1. Pied-billed Grebe 2 | 16. Mute Swan 24 |
| 2. Herring Gull 10 | 17. Ruffed Grouse 1 |
| 3. American Merganser 1 ♂ — earliest date; also a female, either this or <i>serrator</i> | 18. Pheasant 1 |
| 4. Hooded Merganser 4 + 3 | 19. Dove 1 |
| 5. Mallard 35 | 20. Red-tailed Hawk 5 |
| 6. Black Duck | 21. Sparrow Hawk 3 |
| 7. Red-legged Black Duck } ²⁵⁰⁰ | 22. Hairy Woodpecker 2 |
| 8. Gadwall ? 1 ♂ at enormous distance; a large pale uniform grey duck was probably this species, but white on wing very indistinct through telescope, and Urner was quite positive that it was really on belly in contrast with black of tail-end, a field mark present in Pintail and Baldpate, but not correct for this species. | 23. Downy Woodpecker sev. |
| 9. Baldpate sev. | 24. Flicker 2 |
| 10. Green-winged Teal 1 + 1 | 25. Jay sev. |
| 11. Blue-winged Teal 3 | 26. Crow — c. |
| 12. Pintail 10 or more | 27. Starling — many thousands at Cruger's Island roost |
| 13. Redhead 1 ♀ (Urner) + 9 (3 ♂) | 28. Red-winged Blackbird — ditto |
| 14. Canvas-back about 150, in several bunches | 29. Rusty Blackbird — sev. flocks |
| 15. Lesser Scaup 50 in all — those seen on the water with numerous other species were very small in contrast and probably belong here | 30. Purple ? Grackle — sev. hundred |
| | 31. House Sparrow — |
| | 32. Evening Grosbeak 1 ♀ collected, flew in from north at Barrytown with a loud chirp like a glorified House Sparrow |
| | 33. Purple Finch 1 |
| | 34. Goldfinch sev. |
| | 35. Siskin 1 |
| | 36. Snowflake 1 + 3 |
| | 37. White-throated Sparrow sev. |
| | 38. Tree Sparrow in sev. places |
| | 39. Junco c. |

- | | |
|----------------------------------|---|
| 40. Song Sparrow 2 | 46. Golden-crowned Kinglet — two small flocks |
| 41. Fox Sparrow 6 | 47. Ruby-crowned Kinglet 3 |
| 42. Winter Wren 1 | 48. Hermit Thrush — sev. |
| 43. Creeper 1 | 49. Robin — c. |
| 44. White-breasted Nuthatch — c. | 50. Bluebird — c. |
| 45. Chickadee — f.c. | |

8. **November 7, 1926.** Rhinebeck, Dutchess Co., N. Y. (Barrytown and Cruger's Island, dawn—9:30; Vanderberg Cove region until 1:00 P.M.; Pine Plains until dark). Warm and still; 34°-54°; no flight of ducks in A.M.; practically all of them bedded near the Vanderberg Cove region. M. S. Crosby and L. Griscom.

- | | |
|--|--|
| 1. Pied-billed Grebe 2, Crugers; + 1 Pine Plains | 23. Kingfisher 1 |
| 2. Red-throated Loon 1, Barrytown — 3rd record | 24. Downy Woodpecker 3 |
| 3. Herring Gull 25 | 25. Red-headed Woodpecker 10 |
| 4. Mallard 5 | 26. Flicker 3 |
| 5. Black Duck 12, Barrytown; 150 Vanderberg Cove; 20 Pine Plains, flying in from n. e. over Halcyon Lake at sunset | 27. Horned Lark 1 Cruger's; + 150 Pine Plains |
| 6. Baldpate 1, Crugers, + 14 | 28. Jay c. |
| 7. Green-winged Teal 3 | 29. Crow abd., great roost back of Halcyon Lake |
| 8. Blue-winged Teal 1, Cruger's | 30. Starling abd. |
| 9. Shoveller 1, Cruger's | 31. Cowbird 3 |
| 10. Pintail 3 | 32. Red-wing sev. fs. |
| 11. Redhead 2 prs. | 33. Rusty Blackbird c. |
| 12. Canvas-back 15 | 34. Purple Grackle 3 |
| 13. Scaup 15 | 35. Bronzed Grackle 1000 + |
| 14. Lesser Scaup 50 | 36. House Sparrow |
| 15. Golden-eye 1 ♀ — earliest date | 37. Purple Finch 1 |
| 16. Buffle-head 1 ♀ | 38. Goldfinch sev. small fs. |
| 17. White-winged Scoter 3 + 6 | 39. Snowflake 2, Cruger's |
| 18. Ruddy Duck 1, + 2 Pine Plains | 40. Lapland Longspur 1 with Horned Larks — 2nd County record |
| 19. Great Blue Heron 2 | 41. White-throated Sparrow 3 |
| 20. Coot 2 | 42. Chipping Sparrow 2 |
| 21. Marsh Hawk 1 ad. | 43. Tree Sparrow c. |
| 22. Red-tailed Hawk 7 | 44. Junco sev. small fs. |
| | 45. Song Sparrow 4 |

- | | |
|---|----------------------------------|
| 46. Fox Sparrow 3 + 1 + 2 | 52. White-breasted Nuthatch sev. |
| 47. Cedar Waxwing 8 | 53. Chickadee |
| 48. Myrtle Warbler 1 | 54. Golden-crowned Kinglet 1 |
| 49. Winter Wren 1 | 55. Hermit Thrush 1 — latest |
| 50. Long-billed Marsh Wren 1, singing freely at Cruger's — latest | 56. Robin 10 |
| 51. Creeper 1 | 57. Bluebird 10 |
| | 58. Mute Swan 25 |

Part II.

Systematic List

The following detailed account of the birds of Dutchess County follows the order and nomenclature of the 4th edition of the A. O. U. Check-List. Under each species will be found the extreme migration dates together with casual dates if any; the statement of normal dates follows; and for the summer residents early and late nesting dates if any. Comment is usually restricted to those cases in which the status of the species in the County differs from that in adjoining areas. No comment is given in numerous cases of birds of uniform status over wide areas in the northeast.

1. **Gavia immer immer** (Brünnich). Common Loon.
Rare transient, particularly in fall; seldom alighting.

April 6, 1929—1 in South Bay, Cruger's Island (Crosby).

May 30, 1924—1 flying over Rhinebeck (Crosby).

Oct. 5, 1929—1 alights in Hudson, Barrytown (Baker and Crosby).

Dec. 9, 1923—1 flying south, Cruger's Island (Crosby and Pangburn).

In the spring loons are noted flying over almost every year, and occasionally alight, even on the larger ponds in the eastern part of the County. There are only four fall records in recent years, but there are at least two specimens shot on the River many years ago.

2. **Gavia stellata** (Pontoppidan). Red-throated Loon.
Casual transient in fall.

There are only four records for this Loon in the County. One was collected at Low Point Nov. 14, 1876, and another "some years later" near Fishkill (Stearns). On Oct. 19, 1924, Crosby and I were at Barrytown at dawn, where there was a notable

migration of water-fowl in progress. Among these was a flock of seven Red-throated Loons flying up the river high in the air, followed by a lone individual low over the water. On Nov. 7, 1926, Crosby and I saw a lone bird in the river off Barrytown, which dove occasionally for food.

3. *Colymbus grisegena holbœlli* (Reinhardt). Holbœll's Grebe. Rare transient in fall on the Hudson; of very rare or casual occurrence in mid-winter and spring, chiefly on smaller bodies of water inland.

March 16, 1930—2, Mud Pond, Pine Plains (Frost and Crosby).

May 13, 1928—1, Jackson's Pond (Frost, Gray and Gardner).

Oct. 11, 1925—2, Cruger's Island (Crosby, Frost and Griscom).

Nov. 12, 1926—1, Barrytown (Crosby).

In the years from 1922-1926, when Crosby was studying the water-fowl migration on the Hudson intensively (2 or 3 times a week), Holbœll's Grebe was recorded annually, and I have little doubt but what similar results could be obtained in the future. In the spring the species is chiefly of casual occurrence. There are but seven records, and the majority are later than April 25, long after the bird has left its maritime wintering grounds near New York City. On three occasions Holbœll's Grebes have been picked up exhausted in mid-winter, as follows:

Feb. 14, 1912—A pair in the snow at Rhinebeck (Crosby).

Jan. 28, 1930—One in the snow on the Dows Estate, Rhinebeck.

Feb. 9, 1930—"A Holbœll's Grebe this p.m. trying to get into the duck-yard with the Mallards. Its left flank was injured, and there was blood on its plumage and the snow. It was, however, very vicious and vigorous" (Crosby, diary).

4. *Colymbus auritus* Linnæus. Horned Grebe.

Of regular occurrence on the Hudson in October and early November in very small numbers; much rarer in spring.

March 5, 1927—1 seen near Beacon (T. D. Carter).

April 30, 1920—1 Cruger's Island (Crosby).

Sept. 29, 1922—1 seen at Cruger's Island (Crosby).

Dec. 27, 1909—1 shot, Hyde Park (Arthur Bloomfield).

The Horned Grebe can scarcely be called common even in the fall. The maximum number of birds ever seen in one season was 14 in 1923, and two or three is the usual average. On a very few occasions small flocks have been noted flying down the river. There are spring records for only 6 years out of 16, single birds in all cases.

5. **Podilymbus podiceps podiceps** (Linnaeus). Pied-billed Grebe. Local summer resident and common transient, particularly in fall.

March 22, 1925—1 seen, Cruger's Island (Crosby, Eaton, Frost, and Griscom).

Dec. 7, 1910—Rhinecliff (Crosby).

Usually early April to November 15.

Several pairs of Pied-bills breed at Thompson's Pond, Pine Plains, where their Cuckoo-like *kow* notes are a feature of this lovely spot in May. The bird has been found nesting sporadically elsewhere in the eastern part of the County, notably near Jackson's Pond, where young have been seen as early as May 14, 1922 (Frost, Gray, and Moulton).

As a transient it occurs throughout the waters of the County, but is most abundant in fall in the coves of the Hudson, where it arrives earliest and lingers latest. Indeed transients are still passing through after the resident birds have commenced to breed. It has been noted on the Hudson as early as July 27, 1921 (Crosby and J. T. Nichols), but is rarely recorded before the middle of September or after the middle of November. In the spring its arrival usually coincides with the second wave of fresh water ducks. About ten times as many individuals are seen in fall as in spring.

6. **Phalacrocorax auritus auritus** (Lesson). Double-crested Cormorant.

Very rare transient in fall.

The records given below show that a very few cormorants migrate overland from the Great Lakes to the coast, and recall

other published data from the Finger Lakes in central New York, and Lake Champlain.

Sept. 30, 1923—1 flying south, Cruger's Island (Carter and Crosby).

Oct. 4, 1923—1 at Cruger's Island (Crosby).

Oct. 21, 1923—1 at Cruger's Island (Crosby).

Oct. 30, 1925—2 at Barrytown (Crosby).

Oct. 8, 1927—1 near Beacon (Griscom).

7. **Ardea herodias herodias** Linnæus. Great Blue Heron.

A common transient particularly in fall; casual in winter.

March 25, 1926—Annandale (Crosby).

June 18, 1931—Chestnut Ridge (Baker).

July 15, 1925—Vanderberg Cove (Crosby).

Dec. 27, 1931—Cruger's Island (Frost).

Early April to mid-May; mid-August to early November.

The Great Blue Heron occurs on migration throughout the County, but most numerous in the coves along the Hudson River, where it appears in spring well before arriving in the interior. There are 2 winter records, one from a creek in the interior south of Poughkeepsie, Jan. 30—Feb. 14, 1922 (Gray), and Hyde Park, Jan. 8, 1894 (Arthur Bloomfield).

8. **Casmerodius albus egretta** (Gmelin). American Egret.

Rare visitor in late summer.

July 15, 1925—Vanderberg Cove (Crosby).

Sept. 14, 1930—Vanderberg Cove (Helen Crosby).

As is now well known, the Egret has greatly increased as a summer visitor along the coast in the northeastern states. It has always been much rarer inland, and recently it has been recorded inland only when unusually numerous along the coast. Except for a single record in 1918 (Frost), it was unknown in Dutchess County until 1925, when the first of the marked flights of recent years took place. In that year it was found in several localities, and several birds remained for some time near Poughkeepsie, and Allen Frost took some fine photographs. There are several more recent records.

9. ***Egretta thula thula*** (Molina). Snowy Egret
Casual summer visitant, one record.

Aug. 2, 1929—2 birds, Sprout's Creek, Fishkill Plains (Frost).

During the remarkable flight of southern herons in 1929, the Snowy Egret was recorded in several places around New York City. Allen Frost was so fortunate as to find two birds among a large flock of Little Blue Herons in Dutchess County, and every diagnostic character was fully noted (Auk, 1930, pp. 73-74).

10. ***Florida cærulea cærulea*** (Linnæus). Little Blue Heron.
Recorded only during the flights of 1929 and 1930.

1929, July 21—2 birds, Rhinebeck (Helen Crosby).

Sept 8—1 bird, Rhinebeck (Crosby).

1930, June 21—Flock of 14, Tivoli (Mr. and Mrs. J. L. Redmond).

July 15—Vanderberg Cove (Crosby).

During the great flight of 1929, Little Blue Herons were common and widely distributed in Dutchess County. On the mill pond at Rhinebeck, the two birds of July 21 increased to ten by the next week. On Aug. 2, Frost in a tour of the County found 48 birds, and a little later a flock of 60-80 was seen near Fishkill Plains. (Auk, 1930, pp. 73-74.)

11. ***Butorides virescens virescens*** (Linnæus). Green Heron.
A generally distributed summer resident in rather small numbers.

April 20, 1917—Poughkeepsie (Saunders).

Oct. 17, 1923—Rhinebeck (Crosby).

Late April—late September.

May 15, 1913—Nest and eggs, Brickyard Swamp (Frost).

While probably to be classed as a common summer resident, it is most exceptional to see half a dozen birds in a long day in Dutchess County. The Green Heron usually arrives the last few days of April or the first days of May. It has lingered into October only seven years out of 45.

12. **Nycticorax nycticorax hoactli** (Gmelin). Black-crowned Night Heron.

An uncommon transient and very local summer resident, no large colonies known.

April 3, 1920—Poughkeepsie (Frost).

Oct. 25, 1928—Poughkeepsie (Frost).

Latter half of April to early October.

May 9, 1917—Nest and 5 eggs Brickyard Swamp (Frost).

Night Herons are more common near Poughkeepsie than anywhere else in Dutchess County, and small colonies breed in several places near the city and southeast of it. In the northern part of the County I know of no breeding locality, but the bird is seen both spring and fall at Rhinebeck and along the Hudson River, and less frequently inland. It is often heard flying over at night during its migrations.

13. **Botaurus lentiginosus** (Montagu). American Bittern.

Locally common summer resident.

April 2, 1929—Poughkeepsie (Frost).

Nov. 16, 1923—North Bay, Cruger's Island (Crosby).

April 20 to Oct. 15.

The Bittern is so restricted in habitat, that a topographic map of the open swamps and marshes of the County would almost serve as a distributional map of the species. The number of pairs in any one marsh is entirely a question of area. It is consequently more local in the Hudson River valley than in the eastern half of the County. The Bittern occurs in larger numbers on migration, and is then occasionally flushed from small swamps where it does not remain to breed.

14. **Ixobrychus exilis exilis** (Gmelin). Least Bittern.

Rare and local summer resident.

June 14, 1916—3 eggs, Cruger's Island (Abbott and Crosby).

July 2, 1917—3 eggs, Cruger's Island (Crosby).

This secretive little heron requires special search and study. Breeding pairs or colonies are best located by visits to likely

places at dawn or dusk in late May and June to listen for the cooing notes. Unless such efforts are made, the Least Bittern is found only by happy accident at long intervals. In Dutchess County it has been found nesting at Hyde Park in 1906 (Franklin Roosevelt), at Brickyard Swamp, Poughkeepsie, and in North Bay, Cruger's Island. It has been seen in June in the cattail swamp at the head of Thompson's Pond, Pine Plains, and more recently in the cattails at Pink's Pond, east of Rhinebeck. In the last three localities it presumably breeds regularly, but definite evidence is lacking. There are only two spring records, May 3, 1916, and May 22, 1932. There are no late summer or fall observations whatsoever. The bird deserves more careful study.

15. **Sthenelides olor** (Gmelin). Mute Swan.

A few feral birds from introduced stock.

March 14, 1930—Female sitting on nest, Vanderberg Cove (Crosby).

Mr. Jacob Ruppert some years ago liberated several pairs in Vanderberg Cove, below Rhinecliff. These birds have bred freely and increased in numbers. Crosby kept careful watch on them, and established the fact beyond peradventure that they wandered up and down the River, and a certain number migrated south in the fall and returned again in the spring, provided they were not caught by the keepers and penned for the winter.

16. **Cygnus columbianus** (Ord). Whistling Swan.

Casual in fall, one indefinite record.

Mearns in his "Birds of the Hudson Highlands" states: "Dr. A. K. Fisher informs me that one was shot several years since (before 1881), on the Hudson River near Newburgh."

17. **Branta canadensis canadensis** (Linnæus). Canada Goose. Uncommon transient, rarely alighting; casual in winter.

- Feb. 17, 1915—Poughkeepsie (Frost).
 March 5, 1890—Poughkeepsie (Lispenard Horton).
 May 17, 1925—Flock of 7, Amenia (Spingarn).
 Oct. 9, 1925—Flock of 12, Barrytown (local hunter).
 Dec. 12, 1920—Poughkeepsie (Frost and Moulton).

Late March and early April; late October to December.

Nearly every season both spring and fall, flocks of Canada Geese are noted flying overhead. While the Hudson River is the most frequent route, Geese are often seen inland. I am not aware of any recent record of their alighting in spring, but they do so occasionally in fall, although very rarely on the inland ponds. There is no doubt but what Geese were more common in preceding generations than now.

There are two recent winter records, the latest a single bird on the Hudson near Poughkeepsie, Feb. 15, 1926 (Frost). I fear, however, that the great increase in feral or semi-domesticated birds might always explain exceptional occurrences of this nature.

18. **Anas platyrhynchos platyrhynchos** Linnæus. Mallard.

A common transient, very variable in numbers, but five to ten times as numerous in fall as in spring; in open seasons lingering into early winter.

- March 11, 1925—1 ♂, Cruger's Island (Crosby).
 May 25, 1929—1 ♀, Cruger's Island (Crosby and Griscom).
 July 29, 1922—3 ♀, Cruger's Island (Crosby and Frost).
 Jan. 24, 1932—4, Cruger's Island (Frost and Guernsey).

Late March to late April; mid-September to December.

Dutchess County is fortunate in that the Hudson River coves and marshes do not harbor the stock of feral Mallards, which afflict the sea coast near New York City. The observer does not have to wonder, therefore, whether his birds are really wild or not. The Mallard is one of the ducks which is outstandingly more common in the upper Hudson Valley than nearer the sea-coast, and it is quite impossible to allege as a reason the existence of more favorable habitats. Indeed the diametrically

opposite more properly represents the facts, as the Hudson River is a resting spot only, the numerous fall flocks departing before noon to feed elsewhere.

The Mallard is of regular occurrence in very small numbers in the fall on the more suitable ponds in the eastern part of the County.

19. **Anas rubripes rubripes** Brewster. Red-legged Black Duck. An abundant spring and fall transient, often lingering into early winter.

March 12, 1925—1 ♂, Cruger's Island (Crosby).

May 23, 1926—1 bird, Cruger's Island (Crosby and Pangburn).

Oct. 5, 1929—Small flock, Thompson's Pond, Pine Plains (Baker and Crosby).

Jan. 17, 1931—Small flock, Beacon (Crosby).

Black Ducks are so abundant in Dutchess County that it is quite impossible to apportion the two subspecies accurately in the multitudes seen annually. For some years Crosby and his friends made every effort to determine Black Ducks definitely whenever possible. There is no doubt but what the general summary above is accurate. It would also appear to be reasonably certain that the Red-leg does not arrive in numbers in the fall until at least a month after the Black Duck, but there would seem to be no essential difference in the spring migration. There are no summer or breeding records. What we do not know is the status of the two forms in winter. The very few definite identifications at this season afford no real evidence, as winter Black Ducks are usually dark specks sitting on the ice in the middle of the River, and subspecifically absolutely indeterminate.

20. **Anas rubripes tristis** Brewster. Common Black Duck. A fairly common summer resident throughout the County in creeks, swamps and small ponds; an abundant transient in very large numbers, particularly in fall; recorded in small numbers every winter.

Black Ducks arrive from the south the first moment that open leads form in the Hudson River in early March. They are abundant by the end of the month, and transients are present in the coves well into May, or long after the local summer residents have begun to breed. These latter disperse gradually in the interior, and nesting operations are well under way by the end of April. As a breeder the Black Duck is really commoner than casual observation would lead one to infer, as it has developed the gentle art of making itself scarce at this season to a fine point. Indeed one can live within a few hundred yards of a breeding pair without discovering the fact, until the young are on the wing.

By the end of July or early August small flocks of Black Ducks appear in the coves of the Hudson, or in favorable places in the interior like Thompson's Pond at Pine Plains. These flocks are undoubtedly the season's yield of the local breeders. As August waxes and wanes the bird's gregarious instinct increases, and these flocks tend to become larger and fewer in number. In most parts of the County there will be a period of about a month when the species will be unrecorded.

By the first of September these local flocks are undoubtedly receiving accretions from the north, but it is not until frosty weather in mid-October that the great fall flights take place down the Hudson, which are described in detail in the Introduction. Like all ducks its numbers fluctuate remarkably from year to year, but the observer who visits some coign of vantage at dawn, after all cool nights with northwesterly winds, will see from fifty to one hundred thousand birds during the season. These great flights are over by the middle of November, after which the number of individuals present depends upon the severity of the season and the degree to which the River is free of ice. At the same time in very much smaller numbers, Black Ducks occur throughout the waters of the County, and afford some shooting for the local gentry and farmers. On the Hudson, however, the great flights are not molested. There are no

feeding grounds for them, and with rare exceptions they depart on the evening of the day of their arrival. A few birds only venture into the coves after dark. Some of these are killed by a few local pot-hunters, but the markmanship of these people has always amazed me by its pathetic futility. They usually avoid a technical failure by potting a few Coots in the cattails.

The pollution of the water and the constant traffic of steamers and tugs has made the Hudson River about as unfavorable a body of water for ducks as is conceivably possible. I am not then concerned for their decrease in Dutchess County, and I see no reason in the years to come to fear the cessation of the great fall flights of the Black Duck, one of the features of the bird-life of the County.

21. **Chaulelasmus streperus** (Linnæus). Gadwall.

Rather rare transient on the Hudson.

March 22, 1925—1 ♂, Cruger's Island (Crosby, Eaton, Frost and Griscom).

April 27, 1930—1 ♂, Cruger's Island (Leonard Allen, Crosby and Frost).

Oct. 8, 1927—1 ♀, Cruger's Island (Crosby and Griscom).

Dec. 17, 1924—1 ♂, Barrytown (Crosby).

In recent years occasional Gadwalls have been found with other fresh water ducks both spring and fall. With one or two exceptions all records have been of single birds only. In spite of active search for ducks from 1920-1930, this species was often unrecorded for one or two seasons in succession. It is easily the rarest of the fresh water ducks which visit this area with any degree of regularity, and the paucity of the County records is not commensurate with the increase of the species near the coast.

22. **Mareca penelope** (Linnæus). European Widgeon.

Excessively rare, perhaps only a casual transient.

There is but one unquestioned record, a fine drake seen with other fresh water ducks at Cruger's Island, April 3, 1932 (Baker and Frost).

23. *Mareca americana* (Gmelin). Baldpate.

A common transient, very variable in numbers, in poor seasons uncommon, occasionally almost abundant in fall.

March 11, 1925—1 ♂, Cruger's Island (Crosby).

May 19, 1919 1 ♀, Cruger's Island (Griscom and Robert Walcott).

Sept. 13, 1924—1 ♀, Cruger's Island (Crosby and Griscom).

Jan. 13, 1924—Pair, Cruger's Island (Crosby).

Late March to May; late September to December.

The Baldpate is but little less numerous than the Mallard in Dutchess County, but tends to be noted in larger flocks, which are not so definitely associated with Black Ducks. It is the tamest and least suspicious of the *Anatinae*, and is the only one of its group which regularly alights in the coves in fall. The number of individuals noted in spring has varied from 4 to 72, and in fall from 5 to 204, a most remarkable fluctuation.

24. *Dafila acuta tzitzihua* (Vieillot). Pintail.

A common transient, most numerous in autumn, in abnormally warm seasons lingering into early winter.

March 11, 1925—Pair, Cruger's Island (Crosby).

May 27, 1929—3 ♀, Cruger's Island (Crosby and Griscom).

Aug. 23, 1923—1 ♀, Cruger's Island (Crosby).

Jan. 24, 1932—Flock of 14, Cruger's Island (Frost and Guernsey).

Late March to May; mid-September into December.

The Pintail is a little less common than the Mallard and Baldpate, and is equally variable in numbers from year to year.

25. *Nettion carolinense* (Gmelin). Green-winged Teal.

A regular transient, often quite common in spring, always in smaller numbers in fall.

March 7, 1930—1 ♂, Cruger's Island (Crosby).

May 11, 1930—Flock of 5, Cruger's Island (Baker, Crosby, Eaton, Griscom, and J. T. Nichols).

Sept. 13, 1929—Flock of 8, Cruger's Island (Crosby and Frost).

Dec. 16, 1928—Flock of 10, Cruger's Island (Crosby, Frost and Vogt).

Late March through April; Oct. 1 to late Nov.

Small flocks of Green-winged Teal can be found with some frequency in the coves along the Hudson in spring, and on the average the species will be seen about half a dozen times each season. In the fall it is much less common, as only occasional stragglers care to join the large rafts of ducks in mid-stream. The majority of the individuals are recorded in the coves before the shooting season opens, and later small flocks are occasionally noted hurtling past at dawn without stopping. Teal are sometimes found on the ponds inland in the fall, but in very small numbers.

26. *Querquedula discors* (Linnæus). Blue-winged Teal.
An uncommon transient, in slightly greater numbers in spring than in fall.

March 15, 1925—Pair, Cruger's Island (Crosby and Frost).

May 9, 1926—1 ♀, Cruger's Island (Baker, Crosby, Eaton, Griscom, and Nichols).

Aug. 9, 1922—Cruger's Island (Crosby).

Nov. 28, 1926—Vanderberg Cove (Frost and Urner).

April; mid-September to November 1

This Teal is much less common in Dutchess County than the Green-wing, but otherwise what I have said about the one applies equally well to the other. It is the only fresh water duck which has shown no signs of increase whatever.

27. *Spatula clypeata* (Linnæus). Shoveller.
A rare and irregular transient.

April 3, 1932—6 at Cruger's Island (Baker and Frost).

May 9, 1926—1 ♀, Cruger's Island (Baker, Crosby, Eaton, Griscom, and Nichols).

Aug. 26, 1922—1 ♀, Cruger's Island (Crosby).

Dec. 1, 1923—1 ♂, Rhinecliff (Crosby).

The Shoveller is almost as rare a bird as the Gadwall, but occurs much more often in flocks, so that the numerical count of individuals is much higher. Moreover the birds tend to linger

for some time on occasion. Thus the December record above is of a drake probably present continuously from November 3 on. Except in late fall, the Shoveller is almost invariably associated with Blue-winged Teal. It is not recorded oftener than six years out of ten.

28. ***Aix sponsa*** (Linnæus). Wood Duck.
Uncommon and very local summer resident.

March 14, 1925—Rhinebeck (Crosby).

Dec. 7, 1924—2 ♀, Cruger's Island (Crosby and Frost).

Late March to mid-October.

The Wood Duck is so shy and secretive in the breeding season that it is usually overlooked unless specially sought. Certainly the ordinary field work of the year would give no proper idea of its real status. It is not difficult to find the males just after their arrival in spring, but the species disappears from mid-April to mid-August, unless one visits regularly some wooded swamp where the bird is known to nest. Finding a new breeding locality is the result either of happy accident or really hard work. By mid-August small flocks gather in favorable marshes like those of Cruger's Island or Thompson's Pond at Pine Plains. These often linger to mid-October, but there is no convincing evidence of any accretions from the north. There is no County record for the Wood Duck between Oct. 25 and Nov. 28. There are four records of stray birds between Nov. 28 and Dec. 27, 1909. This last record is in Crosby's notes, but is unfortunately without qualifying details and the name of the observer.

29. ***Nyroca americana*** (Eyton). Redhead.

Rare and irregular transient in fall; casual in spring, one record only.

April 25, 1926—1 ♂, Cruger's Island (Crosby and Frost).

Oct. 8, 1926—Flock of 5, Barrytown (Crosby and Griscom).

Jan. 14, 1928—Flock of 12, Rhinecliff (Crosby and Vogt).

November 1 to mid-December.

In recent years, with constant and intensive observation along the Hudson River, small flocks of Redhead are recorded almost every autumn. In late October and early November they come with other ducks in the dawn flights and pass rapidly on. Later in the season they occasionally join a flock of Scaup hanging about one of the wider stretches of the River, and then may remain some time. The maximum number of birds ever recorded in one season is 32.

30. **Nyroca collaris** (Donovan). Ring-necked Duck.
Rare transient, particularly in fall.

March 26, 1926—1 ♂, Cruger's Island (Crosby).

May 25, 1930—1 ♀, Thompson's Pond, Pine Plains (Crosby, Kuerzi, and Kassoy).

Oct. 23, 1926—1 ♀, Barrytown (Crosby).

Dec. 28, 1927—1 ♂, off Vanderberg Cove (Crosby).

April 1 to 25; late October to mid-December.

The Ring-neck was unrecorded in Dutchess County until April 1, 1922 (Crosby and Griscom). Since then it has been found in six different years in spring, but only once a season except in 1926, when eight birds were noted. There are only four fall records, but the bird's rarity at this season may be more apparent than real. In spring the Ring-neck is found in the coves with the fresh water ducks and is easily discovered and identified. But in fall it may well be lost in the great rafts of wildfowl in mid-river, and is certainly much harder to identify.

There are two May records which I regard as casual, both on inland ponds. One is given above; the other is of two pairs on the same pond, May 15, 1932 (Baker).

31. **Nyroca valisineria** (Wilson). Canvas-back.
Ordinarily a common fall transient; small flocks wintering regularly except in the severest seasons; excessively rare in spring.

March 16, 1925—Pair in South Bay, Cruger's Island (Crosby).

April 7, 1929—1 ♀, Cruger's Island (Crosby).

Oct. 20, 1924—3, Barrytown (Crosby).

Early November to late February.

The status of the Canvas-back in Dutchess County is exactly opposite to what it is in most of the northeastern States, where it is much rarer than the Scaups and the Redhead. In the upper Hudson valley it is much commoner than the other members of the group. It is by no means unusual to see several hundred birds a season. Next to the Golden-eye and Goosander, it is the latest of the ducks to appear in fall. As soon as the river begins to fill with ice the flight is over for the year, but small flocks linger as long as there are any open leads. Canvas-backs now winter in some numbers on the lower Hudson, and even in a severe winter a February thaw is almost certain to witness a few Canvas-back wandering up the river to Dutchess County. The first sign of weather conditions presaging the real thaw of spring and the arrival of the first Black Ducks witnesses the departure of the Canvas-back. There are only the two spring records given above.

32. *Nyroca marila* (Linnæus). Greater Scaup.

Regular transient in small numbers, fewer in spring than in fall, rarely lingering in winter.

33. *Nyroca affinis* (Eyton). Lesser Scaup.

Regular transient in small numbers, its status about the same as the larger species but tending to linger later in the spring.

March 16, 1925—2 ♂, 1 ♀, Cruger's Island (Crosby).

May 30, 1929—1 ♀, Barrytown (Crosby).

Sept. 24, 1928—1 ♀, Rhinecliff (Crosby).

Jan. 12, 1929—1 ♂, 2 ♀, Rhinecliff (Crosby).

Late March to May; mid-October to December.

Shooting records and specimens collected prove beyond peradventure that both Scaup are of regular occurrence on the Hudson River, that a very few are found on the larger lakes and ponds inland in fall, and that stragglers occur in similar places in spring. Inland the great majority of records, if not all, apply to the Lesser Scaup. But on the Hudson River there is no evi-

dence that one species predominates over the other. Curiously enough the abundant sight records of the past decade afford no evidence on this point either. In other parts of the northeast, field work in the past thirty years has tended to upset the ideas of an older generation that there were essential differences in the migration periods of the two species. There is then the less need of weighing critically the sight records of recent years in Dutchess County. It is true that under favorable circumstances a male Scaup with other ducks can be determined specifically with reasonable certainty; chiefly in the spring in some cove, when size comparisons are available, and the gloss on the head is easily visible at very close range. In the fall both species will occasionally occur together in rafts of mixed ducks, and the existence of two sizes will be evident, both sitting and in flight. Such cases are, however, exceptional. Other cases are little more than "educated guesses," and in the majority of the local observations of Scaup, exact specific determination has been and always will be out of the question.

I will be pardoned, therefore, I trust, if I decline to give outside dates for the migration of both species, when all are based on sight records, and when I have ample reason to know that any of these dates might apply equally well to either species.

Considering the two species collectively, Scaup occur in small flocks every fall, and at the end of the season often remain for some time in the open river in sections where they seem able to obtain some food. A favorite place is above the lighthouse in the river opposite Vanderberg Cove and just below the Suckley dock. Here Scaup can regularly be found in late November and early December, and other species often join them. This situation does not arise in spring. Single birds or pairs are occasionally seen in the coves with fresh water ducks, but never flocks of any size. Curiously enough there is at least one exception. In 1924 a flock of over 500 were recorded in the Hudson, and this is by all odds the largest flock of Scaup ever observed in the County in the last decade.

34. *Glaucionetta clangula americana* (Bonaparte). Golden-eye. Regular transient in late autumn in small numbers; occasional in winter; most frequent in spring.

Nov. 7, 1926—Barrytown (Griscom).

March 7, 1930—1 ♂, Cruger's Island (Crosby).

May 5, 1929—1 ♀, Thompson's Pond, Pine Plains (Crosby, Griscom, and Jaques).

November to January; mid-March to mid-April.

The Whistler winters commonly on the lower Hudson, but never arrives in numbers until bitter winter weather. When the conditions bringing them south obtain, the River in Dutchess County is nearly or quite frozen over, and in ordinary years only the earliest migrants are recorded locally. Five years out of ten the Golden-eye is not reported in our area until December. In the spring this duck appears with the first open water, and is recorded regularly in the coves in small flocks well into April. Stragglers are occasionally noted on the larger inland ponds, often later than the normal period on the Hudson.

35. *Charitonetta albeola* (Linnæus). Buffle-head. Rare spring and fall transient.

April 2, 1922—1 ♀, South Bay (Crosby and Griscom).

April 22, 1927—1 ♀, Cruger's Island (Crosby).

May 25 and 26, 1924—1 ♀ on Annandale Pond (Crosby and Griscom).

Oct. 5, 1929—1 ♂, Barrytown (Baker and Crosby).

Dec. 27, 1910—Rhinecliff (Crosby).

Early April; mid-October to mid-November.

The few Buffle-head wintering on the coast near New York are nearly always gone by April 1. A very few birds move north up the Hudson, and in Dutchess County one or two birds are noted about seven years out of ten. A flock of eight were, however, seen in Vanderberg Cove, April 8, 1932 (Baker and Frost). The species is even scarcer on the return migration in fall. There are casual records for the inland ponds.

36. *Clangula hyemalis* (Linnæus). Old-squaw. Very rare in fall, casual in spring.

The Old-squaw is so rare in the upper Hudson Valley, that all the definite records are given below.

- May 13, 1923—1 ♂ in breeding plumage, Halcyon Lake, Pine Plains (Crosby and Murphy).
- Nov. 5, 1924—Flock of 22, Barrytown (Crosby).
- Nov. 21, 1924—1 ♀, Barrytown (Crosby).
- Nov. 1, 1925—2, Barrytown (Baker, Crosby, Griscom, and Urner).
- Nov. 22, 1925—Flock of 4, Vanderberg Cove (Crosby and Frost).
- Oct. 29, 1928—Flock of 6, Barrytown (Crosby).
- Dec. 27, 1931—One bird off Cruger's Island (Frost).

It will accordingly be noted that the intensive field work in recent years fails to support Stearn's statement that the Old-squaw was "rather common" at Fishkill fifty years ago.

37. *Melanitta deglandi* (Bonaparte). White-winged Scoter. Regular fall transient in very small numbers; casual inland in spring.

- May 19, 1929—Pair, Stissing Lake, Pine Plains (Crosby, Janvrin and Murphy).
- Oct. 1, 1926—Flock of 5, Barrytown (Crosby.)
- Dec. 7, 1924—1 ♂, Cruger's Island (Crosby and Frost).

Like many other ducks this Scoter is astonishingly variable in numbers. One fall only a single bird or a small flock will be noted, in others fair sized flocks will be seen on half a dozen occasions.

38. *Melanitta perspicillata* (Linnæus). Surf Scoter. Casual in fall.

- Oct. 8, 1927—1 ♀ with American Scoters, Barrytown (Crosby and Griscom).

39. *Oidemia americana* Swainson. American Scoter. Exceedingly rare in fall.

- Oct. 17, 1924—1 ♀, Cruger's Island (Crosby and Griscom).
- Dec. 7, 1924—1 ♀, Cruger's Island (Crosby and Frost).
- Oct. 8, 1927—Flock of 61 ♂, Barrytown (Crosby and Griscom).
- Nov. 4, 1927—1 ♀, Barrytown (Crosby and Vogt).

For those who are accustomed to see Scoters off our coasts, the observation of Oct. 8, 1927 was almost unique. Crosby and I were at the Barrytown dock at daylight and for 15 minutes had watched Black Ducks with a scattering of other species, streaming down river from the north. A large flock appeared far up river of ducks assumed to be Blacks, flying high above the level of the tops of the hills on the opposite shore. At this great range and height the only factor arousing suspicion was the formation of the flock. When directly opposite us, they suddenly decided to stoop to the gathering flock of Blacks in mid river, and tumbled down in a series of remarkably steep zig-zags, like a bundle of falling leaves. The last pitch brought them almost to the water level below the main raft, and they next swung up river and against the wind in a wide loop, which brought them past our dock at close range. It was not until then that we realized that this flock was composed of 61 male American Scoters and one female Surf Scoter.

40. *Erismatura jamaicensis rubida* (Wilson). Ruddy Duck.
Very rare spring and rare fall transient.

March 23, 1930—1 ♂, Cruger's Island (Crosby and Frost).

April 6, 1930—1 off Barrytown (Crosby and Frost).

May 13, 1923—1 ♂, Jackson's Pond near Poughkeepsie (Frost, Gray, and Moulton).

Oct. 10, 1925—1 ♀, South Bay, Cruger's Island (Crosby).

Dec. 9, 1923—One off Cruger's Island (Crosby and Pangburn).

Mid-October to early November.

In the case of the Ruddy Duck there is, alas, every reason to credit Stearn's statement that it was "common" on the River in his day, and its rarity now is part of a wide-spread and general decrease. There are only 5 recent spring records. In fall it was recorded annually until 1927, but there have been none since. Even at that, six is the greatest number of individuals noted in any one season. I conclude that the Hudson Valley was never a really favored migration route, and that should no improvement in the status of the species take place, we may only expect to see an occasional bird with ever increasing infrequency.

41. *Lophodytes cucullatus* (Linnæus). Hooded Merganser. In recent years an uncommon transient, more numerous in spring than in fall.

March 15, 1929—1 ♂, Cruger's Island (Crosby).

May 7, 1926—Pair, Cruger's Island (Crosby).

Oct. 11, 1925—1 ♀, Barrytown (Crosby, Griscom, and Frost).

Nov. 30, 1922—Pair, Vanderberg Cove (Crosby).

Casual Records

May 23, 1929—1 ♀, Halcyon Lake, Pine Plains (R. G. Eaton and Griscom).

Sept. 9, 1930—1 ♀, Cruger's Island (Crosby).

The lovely Hooded Merganser was unrecorded in Dutchess County, until the sudden increase of the rarer ducks of the past generation began. Since 1922, however, it has been noted every season both spring and fall, with the exception of the notably poor duck years of 1927 and 1930. In the fall stray individuals or pairs are occasionally seen attached to the great rafts of ducks floating in mid-stream, but in spring small flocks frequent the coves. They are nearly always paired, and the males can be watched pursuing the females over the quiet waters, flashing their white crests in the ardor of the chase, against the spring tinted background of the wooded hills.

42. *Mergus merganser americanus* Cassin. American Merganser.

Common fall transient, regular in winter, abundant in spring.

Nov. 1, 1925—Barrytown (Baker, Crosby, Griscom, and Urner).

May 23, 1929—1 ♀, Vanderberg Cove (Crosby).

Late November to early May.

Barring a few early stragglers, these hardy ducks do not arrive in the fall until really cold weather, and in a mild season like 1930, they were not recorded until Dec. 12. A few Mergansers always linger in the open leads in the southern half of the County, and in the ferry routes northwards; in fact like the Herring Gull, there are some as long as there is any open water. In spring it is often flying up the river ahead of the ice going

out, and as soon as the river is open, large flocks appear, and the bird is abundant for nearly a month. At this season Mergansers not infrequently appear on the larger ponds and lakes in the eastern part of the County, an event of much rarer occurrence in the autumn. One of the reasons why the American Merganser is a feature of the bird-life of the river is its wariness and wisdom. In spring when there is no shooting, it abounds in the shallow coves, paying no attention to the great express trains roaring by within a few feet. In the fall, however, it remains out in the open river, and gives even the steamers and tugs a wide berth. There has been no appreciable change in its numbers the past twenty years.

43. **Mergus serrator** Linnæus. Red-breasted Merganser. Rare transient, of casual occurrence in early winter and late spring.

March 16, 1929—1 ♂, Cruger's Island (Crosby).

April 22, 1923—Cruger's Island (Crosby and Griscom).

May 22, 1932—1 ♀, Thompson's Pond, Pine Plains (W. F. Eaton).

Oct. 11, 1925—Flock of 8, Barrytown (Crosby, Frost, and Griscom).

Dec. 4, 1921—A pair on Wappinger's Creek near Poughkeepsie (Frost and Gray).

Jan. 24, 1932—2 off Cruger's Island (Frost and Guernsey).

The Red-breasted Merganser has been recorded only eight times in spring, and eight times in fall in the past 22 years, and in only two years has it been noted both seasons. From this it will be evident that very few individuals use the Hudson River valley as a migration route, and they do not alight in the upper river as frequently as in the Tappan Zee below Ossining. A flock of 14 on April 19, 1925 is the largest number observed.

44. **Cathartes aura septentrionalis** Wied. Turkey Vulture. Regular visitor along southern border, rare wanderer northward.

April 20, 1930—Mabettsville (Frost).

Oct. 11, 1925—Rock City (Crosby, Frost and Griscom).

The Turkey Vulture is a regular summer resident in the high hills of Putnam County, and occurs annually around Mt. Beacon, so it might be found nesting in Dutchess County. It wanders northward with some regularity into the south central portions of our area, and Kiemle reported it frequently from Salt Point. Further north it decreases rapidly and becomes merely a straggler. There are two records for Rhinebeck, two for Rock City, and Frost has noted the species at Red Hook and Millerton.

45. ***Astur atricapillus atricapillus*** (Wilson). Eastern Goshawk. Rare and irregular winter visitor.

Oct. 9, 1927—Vanderberg Cove (Crosby and Griscom).

May 3, 1930—1 adult, Cruger's Island (Crosby).

Mid-November to late March.

We have scattering records for the Goshawk, back to 1894, but the winter of 1926-1927 is the only year when there was a marked flight, and the bird was recorded frequently and many were shot. There was not a single County record from 1917-1926.

46. ***Accipiter velox velox*** (Wilson). Sharp-shinned Hawk. Common transient; rare summer resident; very rare in winter.

March 23, 1929—Red Hook (Crosby and Frost).

May 30, 1924—Pine Plains (Crosby, Frost, and Griscom).

Aug. 21, 1928—Rhinebeck (Crosby).

Dec. 21, 1923—Rhinebeck (Crosby).

Early April to mid-May; mid-September to November.

June 15, 1924—New nest, Little Whaley Lake (Crosby, Frost, and Griscom).

Early June, 1929—Setting female, Dover Stone Church (Frost); 4 young on the 8th.

The Sharp-shinned Hawk is a common transient in the Hudson Valley and over the hills in the eastern sections of the County which run mainly north and south. In the fall there are sometimes marked flights with cool winds from the north-

west. In the wilder sections of the county a few pairs breed, probably more than the few records would indicate, as this little Hawk must be specially sought, or it escapes detection. It has been found in June on Mt. Riga, at Little Whaley Lake, southeast of Poughkeepsie and at Barrytown. It is very rare in mid-winter, and there are only three records in 20 years.

47. **Accipiter cooperi** (Bonaparte). Cooper's Hawk. Not uncommon summer resident, in greater numbers on migration; very rare in mid-winter.

March 13, 1927—Rhinebeck (Carter).

Oct. 25, 1928—Poughkeepsie (Frost).

April 20, 1902—4 eggs, Hyde Park (Lispenard Horton).

The Cooper's Hawk arrives as soon as spring has fairly commenced and repairs to its regular breeding woods, but transients drift over the countryside until early May. After this date Cooper's Hawks are hard to find or to see, unless the woods containing a breeding pair are visited, and the bird's low *cack-cack-cack* of alarm is recognized as it slips through the trees, well ahead of the intruder. In Dutchess County the Cooper's Hawk, like the Red-shouldered, prefers the rich alluvial or valley woods. Transients south bound are occasionally noted in late August, but the main flight is the last of September and October. The number of birds seen, however, in spring and fall will be very much less than the number of Sharp-shinned Hawks. Like the Red-shouldered Hawk again, this species departs relatively early, and there are only three winter records.

48. **Buteo borealis borealis** (Gmelin). Eastern Red-tailed Hawk. Common winter visitant, chiefly near the Hudson River; still breeds in three localities in the eastern part of the County, and probably in several others.

April 13, 1902—2 eggs (Lispenard Horton).

Sept. 17, 1928—Cruger's Island (Crosby).

May 5, 1929—Barrytown (Crosby and Griscom).

The Red-tailed Hawk has bred for years on Stissing Mt. near Pine Plains, and more recently Mr. Baker has found it in late May and June at Chestnut Ridge, and Messrs. Frost and Gray near Millbrook. Frost has seen it in other places in summer as well. There is as yet no evidence that any of these breeding or summering birds remain nearby in winter. Otherwise it is known in Dutchess County as a winter resident, and year after year birds will arrive with some regularity in the middle of October in the same trees overlooking the same pastures, and will remain until the middle of April. There is little evidence of any movement of transients, even in fall.

49. ***Buteo lineatus lineatus*** (Gmelin). Northern Red-shouldered Hawk.

Common summer resident in the valleys, occasional in winter in the southern half of the County.

Feb. 22, 1925—Rhinebeck (Frost).

Nov. 12, 1927—Rhinebeck (Crosby).

April 4, 1902—5 eggs, Poughkeepsie (Horton).

In most of Dutchess County, the Red-shouldered Hawk is a veritable harbinger of spring, arriving with the Bluebird and the Robin. It departs with great regularity the last of October. Near Poughkeepsie Mr. Frost finds an occasional bird in all but the most severe winters, but at Rhinebeck there is only one mid-winter record, Feb. 17, 1921, a year in which the breeding birds did not return until March 15. It is most exceptional to see any signs of a fall flight.

50. ***Buteo platypterus platypterus*** (Vieillot). Broad-winged Hawk.

Uncommon transient; local summer resident.

April 21, 1927—Rhinebeck (Crosby).

May 26, 1929—Rock City (Crosby, Urner, and Vogt).

Aug. 15, 1909—Rhinebeck (Crosby).

Nov. 1, 1923—Cruger's Island (Crosby).

Late April to mid-May; September and early October.

A very few Broad-winged Hawks are observed nearly every spring and fall. At much longer intervals real flights are noted in fall with northwesterly winds, and on such a day more Broad-wings will be seen than in several average years combined. This hawk has been found nesting at Hammersley Lake on Schaghticoke Mt., and the hills near Dover Furnace, and recently Mr. Baker finds it frequent near Chestnut Ridge. It may be expected anywhere in the wilder wooded hillsides of the eastern part of the County, where the Red-shoulder does not occur, and it should always be remembered that it is much less conspicuous in the breeding season than its larger relative.

51. *Buteo lagopus s. johannis* (Gmelin). Rough-legged Hawk. Irregular winter visitant, absent some years, several records in others.

Oct. 12, 1925—Rhinebeck (Crosby and Griscom).

April 3, 1929—Poughkeepsie (Frost).

November 10 to mid-March.

52. *Haliaeetus leucocephalus leucocephalus* (Linnæus). Southern Bald Eagle.

Uncommon visitant throughout the year; perhaps still breeds at Whaley Lake.

March 25, 1891—2 eggs, in Vassar Museum (Stack and Young).

The Bald Eagle occurs throughout the wilder areas of the upper Hudson valley, retiring to some remote lake in the interior to nest. It is said to have an eyrie near Whaley Lake, but it has never been located in recent years. The hunting territory of any one bird is enormous, and Eagles are occasionally seen almost anywhere in the County at any time of year. They are commonest, however, on the Hudson River. Adults are noted most frequently in winter. As is the case near New York City, young birds are occasionally recorded in May, August and September. These records can only represent the wanderings of non-breeding birds. There are June records of adults from Pine Plains and Rudd Pond, Millerton in addition to Whaley Lake.

53. **Circus hudsonius** (Linnæus). Marsh Hawk.

Very local but regular summer resident; quite common on migration; occasionally wintering in the southern half of the County.

March 2, 1929—Poughkeepsie (Frost).

Nov. 11, 1928—Rhinebeck (Crosby).

March 20 to late October.

May 2, 1897—4 eggs, Poughkeepsie (Lispnard Horton).

Aug. 9, 1916—1 young and 1 addled egg, Rhinebeck (Crosby and Dr. G. F. Goodell).

Mr. Frost frequently finds the Marsh Hawk in winter near Poughkeepsie, but at Rhinebeck there is no record of the species between Nov. 11 and March 15. It always arrives with the Blackbirds and the Fox Sparrow, preceded by a week each year by the Red-shouldered Hawk. On migration it is a common bird for a hawk, and is seen throughout the open pasture and upland areas of the County. Scattered pairs nest throughout our area, and the nest is frequently found. In fall transients are noted along the river coves as early as the middle of August.

54. **Pandion haliaëtus carolinensis** (Gmelin). Osprey.

A common transient, an occasional pair still nesting perhaps in the wilder sections of the southeast.

March 16, 1928—Jackson's Pond (Brinckerhoff).

June 12, 1932—Chestnut Ridge (Baker).

Aug. 27, 1921—Cruger's Island (Crosby).

Nov. 5, 1915—(Rhinebeck Bird Club Year Book).

Early April to late May; September to mid-October.

Ospreys nested in Dutchess County in 1896 (Hyde Park, Franklin Roosevelt), and a pair were found breeding at Tyrrel Lake in 1923 (Crosby and Frost). On rare occasions Ospreys are noted between late June and early August. These birds are probably nesting in the County or just outside it across the River. As a migrant it is commonly noted throughout the spring,

but is usually much less frequently recorded in fall, the species having a marked tendency at this season to migrate down the coast.

55. **Falco rusticolus candicans** Gmelin. White Gyrfalcon.
Accidental in winter, one record.

Feb. 3, 1928—Cruger's Island (Crosby and Vogt).

This bird, a fine white adult, flew over the observers' heads, and every detail of size, color, and shape, were duly noted. Crosby immediately wrote me a "what bird is that" letter, and it was a simple matter to name the species. Needless to say, Crosby was not in the slightest doubt himself as to the identity of his bird. I feel that even a sight record of so striking and conspicuous a bird deserves full credence, when made by such experienced observers.

56. **Falco peregrinus anatum** Bonaparte. Duck Hawk.
Breeds in a quarry on Little Stissing Mountain at Pine Plains; a very rare transient elsewhere.

March 16, 1930—Little Stissing Mt. (Crosby and Frost).

Oct. 16, 1927—Little Stissing Mt. (Crosby).

April 18, 1926—3 eggs, Stissing Mt. (Crosby).

The breeding eyrie on Little Stissing Mt. was not discovered until May 10, 1925 (Baker, Crosby and Griscom), and it is not definitely established that the bird was not at this station previously. The dates given above excellently show its stay there.

There are only seven County records for transient birds, three in spring and four in fall and early winter.

April 19, 1922—Grasmere (Crosby).

May 2, 1915—Rhinebeck (Crosby).

Sept. 30, 1923—Cruger's Island (Carter and Crosby).

Jan. 14, 1928—Rhinebeck (Crosby and Vogt).

57. **Falco columbarius columbarius** Linnæus. Pigeon Hawk.
Uncommon to rare transient.

April 24, 1921—Manchester Bridge (Crosby and Frost).

May 18, 1930—Cruger's Island (Baker and Crosby).

Sept. 8, 1923—Jackson's Pond (Crosby and Griscom).

Nov. 8, 1922—Cruger's Island (Crosby).

The dashing little Pigeon Hawk is very irregular in Dutchess County. In some years it will be recorded two or three times both spring and fall, in other years there will be no records in one season or another, and in 1928 and 1929 there were no records at all.

58. *Falco sparverius sparverius* Linnæus. Eastern Sparrow Hawk.

Very common transient; thinly scattered throughout the County as a summer resident; recorded nearly every winter from Poughkeepsie southward, much more rarely northward, except in 1930.

April 25, 1902—4 eggs, Poughkeepsie (Horton).

Migrating Sparrow Hawks arrive about March 20, and the great majority have passed on by April 20. In the fall the species is again common from late September to November, when the great majority of individuals, both breeders and transients, have left for the south. The bird is distinctly less common now than twenty years ago.

59. *Bonasa umbellus umbellus* (Linnæus). Ruffed Grouse. Fairly common permanent resident.

April 19, 1931—2 eggs, Chestnut Ridge (Baker).

April 30, 1899—8 eggs, Poughkeepsie (Lispenard Horton).

The Grouse manages to hold its own very well in Dutchess County. There is plenty of wild country in the eastern half of the County, and along the Hudson River it still persists, thanks to the numerous large estates with undisturbed patches of woodland. It is very variable in numbers, having, as is now well known, cycles of relative abundance followed by declines. At the moment the Grouse has been gaining after a low point in 1930.

60. ***Perdix perdix perdix*** (Linnæus). European Partridge.
An introduced resident, now almost extinct.

Some 90 pairs were liberated near Rhinebeck in 1912 and 1913, and for several years they seemed to hold their own, and extended their range. They have almost completely disappeared, and the introduction is undoubtedly a failure. The only records since the war are:

June 14, 1924—2 birds at Wingdale (Crosby, Frost, and Griscom).

Nov. 16, 1926—Small flock at Hyde Park (Bloomfield).

Feb. 23, 1930—2 birds, 3 miles north of Amenia (Frost).

61. ***Colinus virginianus virginianus*** (Linnæus). Bob-white.
A permanent resident, now largely extirpated.

June 16, 1915—Fifteen eggs, Poughkeepsie (Frost).

Aug. 14, 1901—Eight eggs, Poughkeepsie (Horton).

The Bob-white was formerly common in Dutchess County, but excessive shooting, severe winters, and the introduction of southern and less hardy stock have in combination caused it to disappear from most of our area. Mr. Arthur Bloomfield tells me that from 1890-1900 it was still fairly common around Hyde Park, but none have been seen there for some years. It was found on Grasmere as late as 1915. It still survives in the southeastern sections of the County at Clove Valley, Chestnut Ridge and Dover Plains, and in the last five years, thanks to a succession of remarkably mild winters, has slightly increased, just as elsewhere throughout the northern limits of its range. It remains to be seen whether this gain will be permanent or temporary.

62. ***Phasianus colchicus x torquatus***. Pheasant.

Permanent resident; introduced in 1913, now well established and generally distributed.

63. ***Rallus elegans elegans*** Audubon. King Rail.

Rare and irregular summer resident, at three localities only.

- May 10, 1925—1 bird calling, Thompson's Pond, Pine Plains (Baker, Crosby, and Griscom).
 May 20, 1928—1 bird calling at Cruger's Island (Crosby, Eaton, Johnson, Murphy, and Vogt).
 May 15, 1932—One seen, Thompson's Pond (Baker).
 May 15, 1932—One heard, Pink's Pond (Frost).
 May 22, 1932—One or more heard, Thompson's Pond (Baker, Eaton, Eliot, Frost, Janvrin, and Urner).

The King Rail is a far more difficult bird to discover and study than our smaller rails. It prefers to live in deep cattail swamps, and is far less loquacious, rarely calling except at dawn and dusk on calm days, and almost never with any frequency. Recent field work near New York City and Boston has demonstrated the presence of breeding birds in localities which have been visited by competent ornithologists for several generations without discovering the species. Thompson's Pond is another case in point, as it is one of the best known and most frequently visited localities in Dutchess County. It was not until the May census route was altered so as to reach the pond at daybreak that the King Rail was discovered there. When we consider that this pond has been visited at daybreak 3 to 4 times each May since 1925 by parties the members of which were thoroughly familiar with the notes of the King Rail, the few records given above are a graphic illustration of the ease with which this species can be overlooked. Indeed I would not venture to presume that the bird was irregular at Thompson's Pond, were it not for the fact that the King Rail is here at the extreme northern limit of its range in the Hudson Valley, and that near Boston, its extreme north-eastern limit, it is definitely known to be absent in unfavorable years.

The King Rail should also be found occasionally in the great cattail marshes on the North Bay of Cruger's Island, but this locality has never been visited regularly in late May and June at the proper times of day by competent people.

64. **Rallus limicola limicola** Vieillot. Virginia Rail.
 A common summer resident in nearly all the swamps and

marshes of the County, but very local in the immediate vicinity of the Hudson River.

April 10, 1921—Brickyard Swamp, Poughkeepsie (Crosby, Frost, and Griscom).

Oct. 19, 1924—Thompson's Pond, Pine Plains (Crosby and Griscom).

May 30, 1921—Young out of nest, Poughkeepsie (Frost).

June 10, 1914—7 eggs, Poughkeepsie (Frost).

The Virginia Rail is rarely recorded before the end of April, chiefly because it does not begin to call until some time after its arrival. In the fall it is not recorded at all unless specially looked for, but a few individuals linger until October annually. Its status in the County is just what might be expected, and requires no elaboration here.

65. *Porzana carolina* (Linnæus). Sora.

A common spring and abundant fall transient in favorable localities; breeding in a few localities in the interior of the County, away from the Hudson River.

April 18, 1931—Chestnut Ridge (Baker).

Oct. 19, 1918—Cruger's Island (Crosby).

June 9, 1932—2 young out of nest, Poughkeepsie (Frost).

The Sora breeds at Brickyard Swamp, Poughkeepsie (Frost), commonly at Thompson's Pond, Pine Plains, and the big swamp at the base of Mt. Riga in the extreme northeast corner of the County, and a few scattered pairs in smaller marshes in the eastern sections. Transients occur in all these localities in spring, where there is a marked falling off in the dawn Sora chorus after the middle of May. In 1929 I found Soras quite common in a little marsh between Red Hook and Barrytown the first week in May, but they had all departed by the 15th. In the fall Soras are exceedingly abundant in the wild rice marshes in the coves of the Hudson River, where they do not breed. They arrive

sometimes as early as July 30, 1922 (Crosby and Frost), and are in maximum numbers in September before the opening of the hunting season.

66. *Gallinula chloropus cachinnans* Bangs. Florida Gallinule. Summer resident in three localities; casual on migration elsewhere.

April 16, 1922—Cruger's Island (Crosby, Frost, and Gray).

Oct. 19, 1928—Mud Pond, Pine Plains (Crosby).

June 14, 1916—9 eggs, Cruger's Island (Abbott and Crosby).

July 2, 1917—8 eggs, Cruger's Island (Crosby).

At least 6 pairs of gallinules nest regularly in the North Bay of Cruger's Island, and two or more pairs at Thompson's Pond, Pine Plains, where the species arrives a week later than on the Hudson River. Frost has found it recently at Pink's Pond. At long and irregular intervals gallinules are seen or shot on migration. Thus it has been seen in May on a small pond southeast of Poughkeepsie (1929, Frost, et al.), one was shot in the 'seventies on the Hudson near Fishkill (Stearns), and another was killed Oct. 13, 1898 near Hyde Park (Arthur Bloomfield, mounted specimen examined).

67. *Fulica americana americana* Gmelin. Coot.

Rare spring and common fall transient.

April 3, 1932—4 on Thompson's Pond (Baker and Frost).

May 17, 1925—1 on Little Jackson Pond, Poughkeepsie (Frost and Gray).

Aug. 2, 1925—1 at Cruger's Island (Crosby and Frost).

Sept. 18, 1929—Flock of 10, Cruger's Island (Crosby).

Nov. 24, 1923—1 shot, Cruger's Island (Crosby and Frost).

The Coot is rare and irregular in spring, but is likely to occur on any favorable body of water in the County. In the fall it is quite common, and small flocks are regularly noted in the Hudson River and on all the larger lakes and ponds in the interior, and a considerable number are killed each season. Flocks of

Coot are occasionally observed in fall in mid river attached to some raft of ducks, and I have seen them migrating down the river at dawn with the ducks, loons and grebes.

68. **Charadrius semipalmatus** Bonaparte. Semipalmated Plover. Rare and irregular transient in very small numbers.

May 14, 1922—Jackson's Pond (Crosby, Frost, Gray, and Murphy).

June 3, 1928—State Hospital Lake, Poughkeepsie (Frost).

Aug. 1, 1926—Halcyon Lake, Pine Plains (Frost).

Sept. 17, 1928—Annandale mill pond (Crosby).

From one to four little Ringnecks are occasionally noted on the shores of our muddy ponds, particularly when the water is low. On a few occasions they have been seen on the mudflats of the Hudson at low tide. There are very few spring records as compared with fall.

69. **Oxyechus vociferus vociferus** (Linnæus). Killdeer. Common summer resident, now much commoner and more widely distributed than formerly.

Feb. 25, 1930—Rhinebeck (Dexter Burroughs).

Dec. 26, 1920—Poughkeepsie (Frost).

Late March to early November.

April 7, 1930—4 eggs, Rhinebeck (Sheldon Burroughs).

July 10, 1915—Eggs hatching, Red Hook (James Kearns).

Like all the earliest spring migrants, the Killdeer is exceedingly irregular in its appearance, and may arrive 3 weeks earlier one year than the next. Even in the most backward seasons the breeding population is present by April 1. In fall Killdeer gather in flocks which haunt some favored place, and the species will not be seen unless one of these localities is visited. Such a place and the most favored in this County is Halcyon Lake at Pine Plains. Here flocks of 50 birds can be seen annually, and Crosby and I once counted 104. The outcry made by these birds as they flew away at our approach was indescribable. After late September these gatherings diminish rapidly.

70. *Pluvialis dominica dominica* (Müller). Golden Plover.
Casual on migration, one record.

Sept. 20, 1921—Cruger's Island (Crosby).

71. *Squatarola squatarola* (Linnæus). Black-bellied Plover.
Casual on migration, one record.

Sept. 17, 1928—3 birds, State Hospital Reservoir, Poughkeepsie
(Frost).

72. *Arenaria interpres morinella* (Linnæus). Ruddy Turnstone.
Casual on migration, two records.

Aug. 7, 1921—Brickyard Swamp, Poughkeepsie (Frost).

May 20, 1928—New Hamburg (Frost, Gray, and Guernsey).

73. *Philohela minor* (Gmelin). Woodcock.

Common summer resident, irregularly common in the fall migration.

Feb. 22, 1928—1 singing bird, Brickyard Swamp, Poughkeepsie
(Frost).

Nov. 2, 1915—Shot by gunner near Rhinebeck.

Late March to mid-October.

May 3, 1887—4 eggs, Stanfordville (Hyatt).

Five years out of ten the actual arrival of the Woodcock passes unnoticed, and hunters have a better idea of the date to which it lingers in the fall than the bird student. It is far commoner and more generally distributed than the average bird-lover supposes, who does not visit likely places in spring after sunset in search of singing birds. Too often they visit only some one favored locality so as to get the species on the day's list, and years pass without any proper conception of the breeding population being obtained. The somewhat meager evidence before me strongly indicates a marked decrease in numbers the past fifty years, and also that the Woodcock breeds less commonly in the immediate vicinity of the Hudson River than farther east.

74. **Capella delicata** (Ord). Wilson's Snipe.

A fairly common transient, occasionally wintering in open spring holes near Poughkeepsie.

April 1, 1928—Rhinebeck (Crosby).

May 20, 1928—Near Poughkeepsie (Frost, Gray, and Guernsey).

Aug. 2, 1925—Brickyard Swamp, Poughkeepsie (Frost).

Sept. 20, 1921—Cruger's Island (Crosby).

Oct. 21, 1923—Cruger's Island (Crosby).

Dec. 11, 1921-Feb. 13, 1922—As many as 7 birds in Brickyard Swamp, Poughkeepsie (Frost).

Early April to mid-May; late September to mid-October.

The Snipe never occurs in any great numbers. It is distinctly commoner in fall than in spring, but it is most exceptional to find 6 birds together in any one place.

75. **Bartramia longicauda** (Bechstein). Upland Plover.

Very rare fall transient, only 5 records.

July 6, 1925—1 at Amenia (Pangburn).

Aug. 28, 1927—4 at Quaker Hill (Frost).

In former times the rolling uplands of the eastern part of Dutchess County must have been ideal breeding grounds for Upland Plover, but we have no historical record of it. Mr. Arthur Bloomfield's collection was found to contain a specimen killed at East Hyde Park, July 16, 1919, and he claims to have seen the birds there several preceding seasons. I still feel that almost any year a pair or two will be found nesting in the more rural eastern sections, many parts of which are unvisited from one year's end to another.

76. **Actitis macularia** (Linnaeus). Spotted Sandpiper.

Common transient and summer resident.

April 19, 1925—Rockdale (Kenneth Flewelling).

Oct. 5, 1898—Hyde Park, specimen collected by A. Bloomfield.

Late April to mid-September.

May 18, 1899—4 eggs, Poughkeepsie (Horton).

77. *Tringa solitaria solitaria* Wilson. Solitary Sandpiper.
A very common transient.

April 22, 1922—Cruger's Island (Crosby).

May 27, 1917—Poughkeepsie (Frost and Saunders).

July 18, 1919—Rhinebeck (Crosby).

Oct. 6, 1929—Cruger's Island (Crosby and Frost).

May; early August to late September.

I have never been anywhere in the eastern States, where the Solitary Sandpiper is as common as in the upper Hudson Valley. It is quite possible to see over 20 individuals in a day in spring, and this number could be exceeded in fall. It is certainly much commoner here than in the vicinity of New York City. In Dutchess County it is commoner near the Hudson River than inland, also arriving earlier and departing later. In only three years out of 20 has it been recorded in April.

78. *Catoptrophorus semipalmatus* subsp. Willet.
Casual on migration, one record.

Sept. 1, 1922—Flock of 5, Morgan Lake, Poughkeepsie (Frost).

There is, of course, no presumption whatever as to the subspecies to which these birds belonged.

79. *Totanus melanoleucus* (Gmelin). Greater Yellow-legs.
Regular transient in very small numbers.

April 22, 1927—Cruger's Island (Crosby).

May 27, 1929—Cruger's Island (Crosby and Griscom).

July 22, 1922—Halcyon Lake, Pine Plains (Crosby).

Oct. 18, 1926—Cruger's Island (Crosby).

The Greater Yellow-legs never occurs in any numbers in Dutchess County, but in favorable years when the ponds are low, it will be frequently recorded over two months or more, and small flocks will occasionally be found in good places. It occurs on the mud flats of the Hudson River at low tide far more frequently than any other migrant shore-bird.

80. **Totanus flavipes** (Gmelin). Lesser Yellow-legs.
Very rare in spring; irregular in fall, usually present only in years when conditions are unusually favorable.

May, 5, 1925—Rhinebeck (Crosby).

June 3, 1928—State Hospital Lake, Poughkeepsie (Frost).

Aug. 1, 1926—Halcyon Lake, Pine Plains (Frost).

Oct. 16, 1921—Cruger's Island (Frost).

There are five spring records for this species in 10 years. When we consider the small size of the total area included, it will be apparent that the Lesser Yellow-legs is relatively less rare in spring in Dutchess County than it is in the New York City region on the coast. In fall it is the least common of any of the mainly maritime species which visit the County with any degree of regularity.

81. **Calidris canutus rufus** (Wilson). Knot.

Casual on migration; two records.

Aug. 21, 1921—1 immature bird on the beach of Halcyon Lake, Pine Plains (Crosby, Frost, and Griscom).

July 30, 1922—Another immature, same locality (Crosby and Frost).

82. **Pisobia melanotos** (Vieillot). Pectoral Sandpiper.

Irregular transient in fall, occurring only in seasons of low water.

Aug. 2, 1925—Brickyard Swamp, Poughkeepsie (Frost).

Sept. 28, 1920—Rhinebeck (Crosby).

In Dutchess County the Pectoral Sandpiper is found along grassy and muddy borders of ponds when the water is low, or on the edges of artificial ponds when the dam is opened and some of the water is allowed to run out. In 1922, for instance, Morgan Lake near Poughkeepsie was largely dry, and a small flock of Pectorals remained there for over two weeks.

83. **Pisobia fuscicollis** (Vieillot). White-rumped Sandpiper.

One shot near Poughkeepsie prior to 1845 (Giraud).

84. *Pisobia bairdi* (Coues). Baird's Sandpiper.
Casual on migration, one record.

1922—Two birds discovered Sept. 9 at Morgan Lake, Poughkeepsie and 1 collected (Crosby, Frost, and Griscom). The other was still present on Sept. 17.

85. *Pisobia minutilla* (Vieillot). Least Sandpiper.
A transient in small numbers, unrecorded only in seasons of exceptionally high water.

May 8, 1926—Rhinebeck (Crosby).

May 30, 1924—Halcyon Lake, Pine Plains (Crosby, Frost, and Griscom).

July 25, 1925—Rhinebeck (Crosby).

Sept. 14, 1924—Halcyon Lake, Pine Plains (Crosby and Griscom).

The Least Sandpiper is likely to be found on almost any pond shore in the County, decoying freely to Solitary Sandpipers and Yellow-legs. It occurs in any numbers only under exceptionally favorable conditions. Thus in 1925 the mill pond at Rhinebeck was allowed to run dry, leaving a large area of mud flats. Least Sandpipers appeared on July 25, the day after the water was let out, and on September 13, Crosby found 51, the largest flock of migrant shore-birds ever recorded in the County.

86. *Ereunetes pusillus* (Linnæus). Semipalmated Sandpiper.
Rare and irregular transient.

May 11, 1930—Halcyon Lake, Pine Plains (Crosby, Murphy, and Vogt).

June 7, 1928—State Hospital Reservoir, Poughkeepsie (Frost).

July 30, 1922—Halcyon Lake, Pine Plains (Crosby and Frost).

Sept. 28, 1920—Rhinebeck (Crosby).

A far less common bird in Dutchess County than the Least Sandpiper. The great majority of records are of single birds only.

[*Ereunetes maurii* Cabanis

Western Sandpiper

On Sept. 9, 1922, Crosby, Frost and I were studying a mixed flock of shore-birds at Morgan Lake, Poughkeepsie. We noticed an *Ereunetes*

that had a noticeably longer bill than two other adjacent birds, and it was promptly collected and brought to the American Museum in New York. Most unfortunately the sex organs were destroyed by the shot and the bird was immature. The bill was well above the measurements for male Western Sandpipers, but just within the maximum for female *pusillus*.

On Aug. 18, 1923, Crosby and I found another suspicious bird at Halcyon Lake, Pine Plains, also with a *pusillus* for comparison, and studied at very close range. This bird was an adult, and not only did we notice the longer bill, but rufous feathers were also obvious in the crown and back.

A specimen of so critical a species should, however, be collected, before giving it a definite place in any formal list.]

87. **Crocethia alba** (Pallas). Sanderling.

Exceedingly rare transient, perhaps only casual.

Aug. 4, 1918—Brickyard Swamp, Poughkeepsie (Frost).

Aug. 22, 1920—2 birds, Jackson's Pond (Frost).

Sept. 1 and 2, 1922—Morgan Lake, Poughkeepsie (Frost).

May 26, 1924—Brickyard Swamp (Crosby and Griscom).

July 31, 1925—Cruger's Island (Crosby).

88. **Lobipes lobatus** (Linnaeus). Northern Phalarope.

Casual, one record.

Sept. 7, 1924—One swimming on a pond near Amenia (Alfred O. Gross and E. W. Spingarn).

89. **Stercorarius longicaudus** Vieillot. Long-tailed Jaeger.

Casual transient in fall.

On Sept. 7, 1929 an immature bird of this species was killed near Millbrook by flying into the wind-shield of an automobile. Fortunately the driver was sufficiently interested to keep the bird, and turned it over to Mr. Allen Frost, thus validating the most remarkable and unexpected bird record in Dutchess County.

[**Larus kumlieni** Brewster

Kumlien's Gull

On April 18, 1926, Crosby and I carefully studied an immature of this Gull, with direct comparison available with young Herring and Ring-billed Gulls. On May 3, 1930, Crosby saw another. Both birds were in Vanderberg Cove. It is now believed, and in my opinion quite correctly,

that this Gull is a hybrid between the Iceland and Thayer's Gull. When it is considered that we are dealing with the most critical plumage of a little known hybrid, sight records can scarcely validate the occurrence of this bird in Dutchess County.]

90. *Larus argentatus smithsonianus* Coues. Herring Gull. Common transient, and always present in winter, disappearing only during severe cold spells when the Hudson is completely frozen over.

Aug. 15, 1919 (Crosby) to May 29, 1924 (Crosby and Griscom).
September 25 to May 15.

The Herring Gull is present in some numbers on the Hudson River throughout the spring and fall, the majority departing when the river freezes over in December. In winter a few Gulls hang around the ferry slips at Beacon and Rhinecliff, where the ice is broken up. In exceptionally severe spells the ferries are forced to stop running, and the Gulls then depart, only to wander back with the first thaw. The spring migration often anticipates the opening of the river by several days. It is by no means unusual to see Herring Gulls sitting on the ice in the midst of a frozen waste off Cruger's Island in early March, and to notice others streaming steadily northward. Numerically, the multitudes which throng our harbors and coasts are lacking on the River, and it is most unusual to see a flock of one hundred individuals.

On rare occasions Herring Gulls are seen flying over inland, and they occasionally alight on the larger ponds in the eastern part of the County.

91. *Larus delawarensis* Ord. Ring-billed Gull. A rare and irregular transient in spring.

March 21 1915—Rhinecliff (Crosby).
April 16, 1921—Vanderberg Cove (Crosby and Griscom).

On rare occasions one or two Ring-billed Gulls are detected in spring sitting among the Herring Gulls in some cove or point along the Hudson River. Even in recent years, however, the species has been undetected in the County for five years at a

stretch. It is quite surprising that it should never have been found in fall.

92. *Larus atricilla* Linnæus. Laughing Gull.

In recent years, wandering up the River occasionally in late summer and early fall; once only in spring.

May 10, 1924—An adult in full plumage above Poughkeepsie (Frost).

Aug. 13, 1927—2 seen at Beacon (Frost).

Oct. 4, 1924—3 seen at Deming's Point (Griscom).

The Laughing Gull was unrecorded in Dutchess County until 1924. It will be recalled that in the years since 1920 it had suddenly increased in numbers, and by 1923 it was of regular occurrence in large flocks in the Sound and the lower Hudson River. It is by no means remarkable then that a few individuals wander further up the River to Dutchess County, and remain for several weeks around Beacon and Deming's Point.

93. *Larus philadelphia* (Ord). Bonaparte's Gull.

Rare and irregular transient.

April 3, 1932—Vanderberg Cove (Baker and Frost).

May 19, 1930—Vanderberg Cove (Crosby).

Sept. 17, 1921—Vanderberg Cove (Crosby).

Nov. 21, 1929—Below Poughkeepsie (Crosby).

There are so few records for this little gull, that there is no such thing as a usual season of occurrence, in spite of the good spread of dates. Indeed there are only 6 spring and 5 fall records. In practically all cases single birds only have been observed, but a notable exception was a flock of forty on April 16, 1930.

94. *Sterna hirundo hirundo* Linnæus. Common Tern.

Rare and irregular transient on the Hudson in fall, casual in spring.

May 17, 1929—1 collected in Clove Valley (Frost).

Aug. 1, 1911—Hudson River (Crosby).

Sept. 17, 1921—Beacon (Crosby).

There is only one casual spring record, and only six fall records on the Hudson for the Common Tern in Dutchess County. All but two of the latter are in August.

95. *Hydroprogne caspia imperator* (Coues). Caspian Tern.
Casual transient.

Two birds off Cruger's Island, April 30, 1920 (Crosby).

96. *Chlidonias nigra surinamensis* (Gmelin). Black Tern.
Very rare transient both in spring and fall.

May 14, 1914—1 over mill pond, Rhinebeck (Crosby).

Sept. 9, 1922—1 over Cruger's Island (Crosby, Frost, and Griscom).

May 5, 1923—5, Jackson's Pond (Frost and Gray).

May 25, 1924—1, Cruger's Island (Crosby and Griscom).

Aug. 27, 1928—1, Rhinecliff (Crosby).

It is most interesting to see that the records of the Black Tern in Dutchess County in nowise reflect the status of the species on the coast near New York City, where it is very rare in spring, but often common in fall.

97. *Uria lomvia lomvia* (Linnaeus). Brünnich's Murre.
Casual visitor in late fall.

At long and irregular intervals murrelets occur inland in the northeastern States. Usually there are widely scattered records in some one particular season, and the presumption is that migrating flocks have been blown far out of their course by a gale. The County records are as follows:

Dec. 1, 1894—1 shot by Lispenard Horton.

Nov. 30, 1897—1 ♂, 1 ♀, shot in the Hudson at Hyde Park (Arthur Bloomfield).

Dec. 1, 1897—1 ♀ shot in the Hudson Hyde Park (Arthur Bloomfield).

Mr. Bloomfield kindly presented one of these specimens to Crosby, who bequeathed it to Allen Frost, and it is now in the collection of Vassar Brothers' Institute.

98. **Alle alle** (Linnæus). Dovekie.

Casual transient in late fall.

Of much rarer occurrence inland than the Brünnich's Murre. On Dec. 29, 1901, Arthur Bloomfield collected two specimens in the Hudson at Hyde Park. One of these was presented to Crosby, and is now in the Vassar Brothers' Institute. In the great flight of 1932 one was picked up at Millbrook on Nov. 20 by Howard Dunn and shown to Frost.

99. **Zenaidura macroura carolinensis** (Linnæus). Mourning Dove.

Common summer resident, occasionally lingering into winter.

March 17, 1915—Rhinebeck (Crosby).

Jan. 3, 1925—Flock of 20 (Crosby and Griscom).

May 2, 1897—2 eggs, Poughkeepsie (Horton).

Sept. 12, 1902—Young in nest, Rhinebeck (Abbott and Crosby).

The Mourning Dove usually arrives the very last days of March and rapidly becomes distributed throughout the County, absent only in the wooded areas. A proper idea of its real numbers can only be gained in spring, when its cooing song forms a somewhat inconspicuous element in the dawn chorus. As a matter of ordinary experience few doves are noticed during the summer months. In the fall they band together in small flocks, which are easily overlooked except by hunters of pheasant and woodcock. These take their departure in early November, but not infrequently a small flock will linger into early winter in some field where there happens to be an abundant food supply protected from the snow. In only four years, however, has the Mourning Dove been recorded after mid-winter, single birds in each case.

100. **Ectopistes migratorius** (Linnæus). Passenger Pigeon.

The Passenger Pigeon was undoubtedly an abundant transient in Dutchess County in colonial times and probably bred. There were no local ornithologists at the time of its disappearance, and

our latest record of it is found in Stearns' list, who regarded it as "not rare in migration."

101. *Coccyzus americanus americanus* (Linnæus). Yellow-billed Cuckoo.

Irregular, usually relatively uncommon summer resident.

May 3, 1916—Cruger's Island (Crosby).

Oct. 1, 1922—Rhinebeck (Crosby and Griscom).

May 13 to September.

May 26, 1894—4 eggs, Poughkeepsie (C. C. Young).

Sept. 17, 1901—1 young in nest, Rhinebeck (C. G. Abbott).

In Dutchess County the Yellow-billed Cuckoo is near the normal northern limit of its range. Few of our local avifaunas bring out its great fluctuation in numbers from year to year, or how little its arrival corresponds with the type of season. Ordinarily it is a relatively late arrival, but in the years when it is almost common it will arrive much earlier in numbers. Such a year was for instance 1927, when it came on May 6, and was common by May 8, although the first week of May that year was cold and backward. In 1924 it was unrecorded anywhere in the County. In 1919, by no means a late spring, it did not arrive until May 25.

The breeding birds slip away in mid-summer and the species is rarely recorded in the fall, perhaps because there are so few transients from farther north.

102. *Coccyzus erythrophthalmus* (Wilson). Black-billed Cuckoo. Common summer resident.

May 4, 1929—Rhinebeck (Crosby).

Oct. 12, 1921—Rhinebeck (Mrs. James F. Goodsell).

May 13 to October 1.

May 30, 1922—3 eggs, Mt. Beacon (Crosby, Gray, and Johnston).

Aug. 24, 1917—3 young in nest, Poughkeepsie (Frost).

There is relatively little fluctuation in the number of breeding birds annually, but this species is far more frequently recorded

in fall, due doubtless to its more northerly breeding range and the consequent greater number of transient individuals. It is equally irregular in its arrival, anywhere from May 4 to May 26. Oddly enough the cuckoos agree on this point remarkably well, as both are early or late in the same year.

103. *Tyto alba pratincola* (Bonaparte). Barn Owl.
Rare resident.

May 23, 1926—4 eggs, New Hackensack (Gray).

In recent years Messrs. Frost and Gray have found Barn Owls annually near Poughkeepsie and to the southeast of that city along Wappinger's Creek. The nest has been found on several occasions. The majority of observations are of course in winter. As is well known this owl turns up outside its normal breeding range at most unlikely seasons of the year. This habit probably explains the discovery of one in a conifer grove on Grasmere, Feb. 11, 1928 (Crosby) and another on Cruger's Island, Jan. 9, 1925 (Crosby).

104. *Otus asio naevius* (Gmelin). Eastern Screech Owl.
Common resident for an owl.

105. *Bubo virginianus virginianus* (Gmelin). Great Horned Owl.
Uncommon to rare resident, most numerous in winter.

March 30, 1930—1 young fallen out of nest, Rhinecliff (H. Leonard Allen).

The Horned Owl is the prevailing large owl in the wilder country in the interior of the County, but is a rare bird near the Hudson. I know of only two pairs north of Poughkeepsie. Every winter a certain number are shot or trapped by farmers and gamekeepers, and these find their way to local taxidermists' shops or are nailed to barn doors as trophies. As many as ten birds have been killed in a season on the Dows' Estate near Rhinebeck, though there is no local source of supply.

106. *Nyctea nyctea* (Linnæus). Snowy Owl.

Very rare and irregular winter visitant.

Oct. 12, 1923—1 shot at Hyde Park by a local pot-hunter.

Feb. 24, 1922—1 on the ice off Newburgh (F. B. Robinson).

The Snowy Owl is much rarer inland in the northeastern states than along the coast. In the flight in the fall of 1926, four were killed between Nov. 16 and Jan. 1. Otherwise there are only 8 records since 1899, including the two extreme dates listed above.

107. *Strix varia varia* Barton. Northern Barred Owl.

Rather common permanent resident, except in the wilder country eastward.

March 29, 1921—Bird incubating, Rhinebeck (Crosby).

108. *Asio wilsonianus* (Lesson). Long-eared Owl.

Rare or little known summer resident; fairly common and regular winter visitant.

March 27, 1898—Nest and 4 eggs, Poughkeepsie (Lispenard Horton).

April 10, 1921—Nest and 4 eggs, Poughkeepsie (Crosby, Frost, and Griscom).

May 17, 1903—Nest with young, Hyde Park (Lispenard Horton).

We know far too little about the Long-eared Owl in Dutchess County, as no one has ever searched for it specially except in winter, when it may be found anywhere between Dec. 7 and April 18. In other words the bird breeds before winter migrants have departed northward. It is gregarious in winter, and small flocks are found about as often as single individuals. The paucity of breeding records has no real significance, and I am confident that if an expert "owler" should really work Dutchess County, the Long-eared Owl would prove to be widely scattered throughout. We should remember that it is not a wilderness species, but delights to nest in birch groves, stands of young white pine and old cedar lots, habitats which abound in this county.

109. **Asio flammeus flammeus** (Pontoppidan). Short-eared Owl.
A strangely rare visitant.

I am unable to account for the surprising rarity of this owl in Dutchess County. It is far less likely to be overlooked than other species. All the records are given below.

Early December, 1908—1 for several days near Rhinebeck
(Crosby).

Oct. 15, 1909—1 shot at Hyde Park (Arthur Bloomfield).

May 24, 1925—Amenia (Spingarn).

Jan. 25, 1931—Wingdale (Baker).

110. **Cryptoglaux acadica acadica** (Gmelin). Saw-whet Owl.
Uncommon, usually overlooked, winter visitant and transient.

Oct. 2, 1896—1 shot, Hyde Park (Arthur Bloomfield).

April 2, 1922—Cruger's Island (Crosby and Griscom).

The Saw-whet Owl is seldom recorded unless specially and carefully looked for. It should be found nesting in the wilder hills of the eastern part of the County.

111. **Antrostomus vociferus vociferus** (Wilson). Eastern Whip-poor-will.

Common summer resident.

April 22, 1885—Stanfordville (Miss Hyatt).

Oct. 8, 1927—Cruger's Island (Crosby and Griscom).

The Whip-poor-will is a common summer resident throughout the hills in the central and eastern portions of the County, but is locally absent in the flat and level country near the Hudson River. Here it is regularly recorded on migration in May when it is calling, but is very rarely noted in fall. At Rhinebeck transients have been noted in spring as late as May 30. Breeding birds arrive the very last days of April or the first days of May.

112. **Chordeiles minor minor** (J. R. Forster). Eastern Night-hawk.

Breeds locally near Poughkeepsie and East Park; uncommon spring, common fall transient elsewhere.

- May 8, 1895—Stanfordville (Hyatt).
 June 8, 1930—Rhinebeck (Crosby and Charles Johnston).
 Aug. 8, 1916—Rhinebeck (Crosby).
 Sept. 25, 1909—Rhinebeck (Crosby).
 Oct. 25, 1930—Poughkeepsie (Frost).
 May 13 to May 30; Aug. 25 to Sept. 15.

113. *Chaetura pelagica* (Linnæus). Chimney Swift.
 Abundant summer resident.

- April 13, 1919—Poughkeepsie (Frost).
 Oct. 28, 1919—Poughkeepsie (Frost).
 Late April to late September.
 June 17, 1893—3 eggs, Poughkeepsie (C. C. Young).
 Aug. 12, 1915—Young in nest, Rhinebeck (Crosby).

114. *Archilochus colubris* (Linnæus). Ruby-throated Hummingbird.
 Fairly common summer resident.

- May 5, 1894—Stanfordville (Miss Hyatt).
 Oct. 5, 1929—Rhinebeck (Frost).
 May 10 to September 22.
 May 21, 1900—2 eggs, Poughkeepsie (Lispnard Horton).
 Aug. 2, 1915—Young in nest, Rhinebeck (Crosby).

115. *Megaceryle alcyon alcyon* (Linnæus). Eastern Belted Kingfisher.
 Local and uncommon summer resident; common transient, often lingering into winter.

- March 21, 1925—Rhinebeck (Crosby and Griscom).
 Nov. 25, 1932—Pine Plains (Baker).

The Kingfisher arrives the very last days of March or the first days of April and is quite common until the middle of May, after which the resident birds prove to be thinly scattered over the whole County. They are reinforced by transients in August, and the species is again quite common through October, by which time the great majority have departed. Kingfishers are frequently found, however, lingering near rapid or open

water well into January, and very rarely to the middle of February. It is a remarkable fact that there are fewer November records for Dutchess County than there are December and January records.

116. **Colaptes auratus luteus** Bangs. Northern Flicker.

Abundant migrant, common summer resident, regularly wintering near Poughkeepsie and more rarely along the Hudson River northward.

March 6, 1921—Rhinebeck (Crosby).

April 20, 1929—4 eggs, Rhinebeck (Crosby).

The Flicker arrives regularly the latter half of March throughout the County, but a few birds appear earlier in the immediate vicinity of the Hudson Valley. The species is most numerous in late September and early October, when loose flocks of 30-50 individuals can be seen streaming south across the uplands.

117. **Ceophloeus pileatus abieticola** Bangs. Northern Pileated Woodpecker.

Probably a very rare resident.

Presumably common in colonial times, the Pileated Woodpecker was probably extirpated in Dutchess County and may have been for years only a casual straggler in winter. To this latter period the following records belong:

Feb. 6, 1891—1 shot at Hyde Park (Arthur Bloomfield).

Feb. 28, 1894—1 shot at Hyde Park (Arthur Bloomfield).

In the past ten years this woodpecker has reappeared in many parts of the northeast, and is showing every sign of adapting itself to less primeval conditions. The following records belong to this last period, and I predict that it will only be a question of time before a pair of Pileated Woodpeckers is located in one of the wilder sections of the County.

Oct. 5, 1923—Seen at Hyde Park (Gerald Morgan).

Dec. 14, 1923—Seen at Hyde Park (Arthur Bloomfield).

Jan. 12 and 28, 1924—Amenia (Spingarn).

118. *Melanerpes erythrocephalus* (Linnæus). Red-headed Woodpecker.

Local and erratic summer resident, chiefly southeast of Poughkeepsie; usually uncommon as a transient; one or more birds occasionally wintering in some favorable grove.

May 6, 1916—Rhinebeck (Crosby).

May 16, 1929—Rock City (Crosby, Urner, and Vogt).

Aug. 18, 1916—Rhinebeck (Crosby).

Oct. 22, 1928—Rhinebeck (Crosby).

June 1, 1901—5 eggs, Poughkeepsie (Lispenard Horton).

In the breeding season the Red-headed Woodpecker is practically confined to the banks of the larger creeks in the southeastern section of the County, but occasional pairs nest elsewhere with great irregularity, rarely two years in succession. Such records come from Red Hook and Rhinebeck. It is noted annually on migration throughout, but usually in small numbers. It occasionally winters where it breeds, and much more rarely elsewhere. Thus five birds wintered in an oak grove on the Ruppert place south of Rhinecliff in 1926-27. Such wintering colonies have lingered as late as April 26, before departing northward.

119. *Sphyrapicus varius varius* (Linnæus). Yellow-bellied Sapsucker.

Usually uncommon in spring, usually common in fall and frequently wintering.

April 5, 1929—5 at Rhinebeck (Crosby).

May 23, 1929—Poughkeepsie (Frost).

Sept. 20, 1921—Rhinebeck (Crosby).

April 13 to May 10; September 25 to January.

The Sapsucker is a much commoner bird in the upper Hudson Valley than near New York City, but it is most surprising to find it far more frequent in winter, the opposite of the usual rule. It is relatively commoner in spring than near New York, but in fall is sometimes less common. There are remarkable

flights at long intervals in spring, when 20-30 Sapsuckers can be seen almost daily for some time. In a normal season perhaps a dozen all told would be the usual figure. No such remarkable flights have ever been recorded in fall, but normally one would expect to see three times as many as in spring. There are innumerable December and January records.

120. **Dryobates villosus villosus** (Linnæus). Eastern Hairy Woodpecker.

Common resident, distinctly more numerous in autumn and winter.

April 23, 1898—3 eggs, Poughkeepsie (Horton).

121. **Dryobates pubescens medianus** (Swainson). Northern Downy Woodpecker.

Common resident, slightly more numerous in autumn and winter.

May 14, 1916—eggs, Cruger's Island (Crosby).

122. **Tyrannus tyrannus** (Linnæus). Eastern Kingbird.

Common summer resident, often abundant during the fall migration.

April 29, 1923—Wappinger's Falls (Crosby, Frost, and Moulton).

May 1, 1891—Collected, Hyde Park (Arthur Bloomfield).

Sept. 16, 1922—Rhinebeck (Crosby).

May 6-9 to September 1.

June 1, 1900—3 eggs, Poughkeepsie (Lispenard Horton).

The Kingbird arrives with great regularity with the second May wave. Occasional birds straggle in earlier, but there is always a noticeable gap between these early birds, and the real arrival of the species the same year. In fall the Kingbird is quite gregarious, and in late August large flocks are sometimes noted drifting south over the uplands. This phenomenon is of much less frequent occurrence inland in Dutchess County than along the coast.

123. *Tyrannus verticalis* Say. Arkansas Kingbird.
Casual transient in fall.

Oct. 8, 1927—Thompson's Pond, Pine Plains, one bird drifting south, well seen and studied (Crosby and Griscom).

Oct. 14, 1927—Another bird in a field off the old post road near Barrytown (Crosby).

As is now well known a few Arkansas Kingbirds cross the continent and migrate down the Atlantic coast. Some years there are no records at all, but in others there are several to many. Such a year was 1927.

124. *Myiarchus crinitus boreus* Bangs. Northern Crested Flycatcher.

Common summer resident.

May 1, 1929—Poughkeepsie (Gray).

Sept. 18, 1914—Rhinebeck (Crosby).

June 15, 1900—6 eggs, Poughkeepsie (Lispenard Horton).

The Crested Flycatcher arrives with great regularity on the crest of the first May wave, and it is exceptional for straggling individuals to appear earlier. In the very backward year of 1917, it did not arrive until May 19. The bird departs during August, a few individuals occasionally lingering into September.

125. *Sayornis phoebe* (Latham). Eastern Phoebe.
Common summer resident.

March 8, 1918—Rhinebeck (Mrs. Burroughs).

Oct. 27, 1915—Poughkeepsie (Gray).

Dec. 1, 1915—Poughkeepsie (Gray).

March 17 to October 10.

April 25, 1902—5 eggs, Poughkeepsie (Horton).

Aug. 1, 1923—Young in nest, Rhinebeck (Crosby).

The Phoebe has only twice been recorded before March 17, in both cases stragglers well ahead of the breeding birds. It is distinctly commoner on migration than in summer.

126. **Empidonax flaviventris** (W. M. and S. F. Baird). Yellow-bellied Flycatcher.

Regular, but usually uncommon transient in spring, less often noted in fall.

May 11, 1924—Poughkeepsie (Frost, Gray, and Guernsey).

June 12, 1921—Mt. Riga (Crosby and Frost).

Aug. 17, 1913—Rhinebeck (Crosby).

Sept. 10, 1922—3 birds, 1 collected, Rhinebeck (Crosby, Frost, and Griscom).

May 23 to June 1; mid-August to early September.

Crosby's notes contain sight records for Sept. 21, 1919, and Oct. 3, 1920, but no evidence remains as to where in the County these observations were made or by whom. In this most difficult group of flycatchers, I have not hesitated to omit sight records 'way beyond the normal dates shown by collected specimens.

The Yellow-bellied Flycatcher is more numerous in the upper Hudson River valley than near New York City. On the basis of *daily* observation, I noted 15 birds near Rhinebeck in the spring of 1929, an average year, and 42 in 1924, by far the best year. In fall there has never been careful daily observation, so the records are not comparable. I greatly doubt if this species would really prove to be essentially less numerous at this season.

127. **Empidonax virescens** (Vieillot). Acadian Flycatcher.

Rare and little known visitant in spring, and summer resident from Poughkeepsie southward.

May 24, 1925—Amenia (Spingarn).

May 27, 1925—Rhinebeck (Crosby).

June 23, 1913—Nest and eggs near Poughkeepsie (Frost).

The records given above are the only *absolutely definite* ones of the Acadian Flycatcher in recent years in Dutchess County. Almost every spring, however, the species is reported as seen *but not singing* on one or two occasions, the majority of these reports from Poughkeepsie or southward. The outside dates are

May 9—June 4. While some or all of these may be correct, the following factors render them unconvincing and unsatisfactory in my opinion.

1. The Acadian Flycatcher has only twice been found nesting further north than Poughkeepsie, in each case years earlier than the 1913 record given above.

2. North of its breeding range, there is only *one record* of a spring straggler in 100 years, supported by a specimen.

3. Since 1900 the Acadian Flycatcher is definitely known to have abandoned the greater part of its northeastern breeding range.

4. In Dutchess County the May records since 1913 have never been corroborated by any late June records.

5. Individuals carefully studied by Crosby, Frost and Griscom and thought to be Acadian Flycatchers have been collected, and proved to be something else (1920-1923).

6. Since this demonstration, the number of reports is very much less than in the preceding ten years.

From these facts it will be apparent that the 22 sight records since 1913 in Dutchess County are out of all proportion to the probabilities in the case of a species like the Acadian Flycatcher, whose only regular breeding station during this period north of southern New Jersey was in southern Westchester County.

128. **Empidonax trailli trailli** (Audubon). Alder Flycatcher. Fairly common summer resident in the interior of the County, very local near the River; often quite common on migration.

May 8, 1927—Cruger's Island swamp (Griscom).

Sept. 18, 1929—Same place (Crosby).

May 15 to mid-August.

June 15, 1902—4 eggs, Poughkeepsie (Lispenard Horton).

Like many other birds, the Alder Flycatcher arrives on its breeding grounds from May 8—15, but transients are much later, passing through from May 20 to early June. The return flight is from mid-August to Sept. 10. It is most exceptional to find individuals lingering on their breeding grounds after mid-August.

129. **Empidonax minimus** (W. M. and S. F. Baird). Least Flycatcher.

Common summer resident.

April 10, 1915—Poughkeepsie (Frost).

April 26, 1925—Salt Point (Kiemle).

Sept. 28, 1927—Rhinebeck (Crosby).

Oct. 6, 1929—Cruger's Island (Crosby, et al.).

May 2 to September 10.

May 29, 1896—4 eggs, Poughkeepsie (Lispenard Horton).

Transients have been noticed as late as June 2 in spring, and as early as Aug. 24 in fall.

130. **Myiochanes virens** (Linnæus). Eastern Wood Pewee.

Common summer resident.

May 7, 1901—Rhinebeck (Abbott and Crosby).

Oct. 8, 1915—Rhinebeck (Crosby).

May 15-20; Sept. 15.

June 13, 1916—Complete clutch, Rhinebeck (Crosby).

The Wood Pewee is a very leisurely migrant in spring and often is noted several days earlier at Poughkeepsie than at Rhinebeck. It is seldom common or generally distributed before May 25.

131. **Nuttallornis mesoleucus** (Lichtenstein). Olive-sided Flycatcher.

Regular, but uncommon transient.

May 15, 1921—Spook Hollow (Crosby, Frost, Murphy, et al.).

June 9, 1920—Rhinebeck (Crosby).

Aug. 8, 1920—Poughkeepsie (Frost and Gray).

Sept. 13, 1929—Staatsburg (Frost).

May 25 to June 1; Aug. 25 to Sept. 5.

The Olive-sided Flycatcher passes through Dutchess County so rapidly and in such small numbers, that it is occasionally missed in spring in years when observation is limited to census parties which take the field on Sundays only. But when there is daily observation, from 4-8 birds are observed annually. In fall the records are even more erratic, as there never has been daily observation at this season.

132. *Otocoris alpestris alpestris* (Linnæus). Northern Horned Lark.

Irregular winter visitant and transient, seldom in any numbers.

Jan. 26, 1892—1 shot, Hyde Park (Bloomfield).

Feb. 15, 1911—1 shot, Hyde Park (Bloomfield).

1915, winter, 1 collected, Hyde Park (Bloomfield).

133. *Otocoris alpestris praticola* Henshaw. Prairie Horned Lark.

Local summer resident in the eastern half of the County; irregular winter visitant.

March 1, 1931—2 on breeding grounds at Chestnut Ridge (Baker).

Jan. 27, 1898—1 shot, Hyde Park (A. Bloomfield).

1915, winter, 3 shot, Hyde Park (A. Bloomfield).

March 31, 1930—3 young in nest, Rock City (Crosby and Frost).

A few pairs of Prairie Horned Larks breed in Dutchess County, and these arrive on their nesting grounds in March. Nests have been found from late March to early May. These nesting birds are most frequently noted in May and June, when the adults and young birds begin to wander around. There is no record of a Horned Lark in Dutchess County between June and October.

During the winter half of the year the two Horned Larks are involved in inextricable confusion, and the two subspecies are best treated together. On rare occasions between Oct. 15, (1927) and Dec. 12, (1926), single birds or small flocks have been noted flying south, but the subspecies has naturally been undeterminable, and I know of no reason to suppose that the probabilities

favor one race more than another. In late winter after heavy snow, Horned Larks sometimes appear in large flocks. Both subspecies have been shot out of the same flock; in other cases a given flock has been composed entirely of one or the other race. Twice in recent years (March 24, 1929, and April 2, 1932), small flocks of Horned Larks have been seen migrating northward. In these cases the probabilities favor the Northern Horned Lark, as the Prairie is generally distributed on its breeding grounds prior to these dates.

134. *Iridoprocne bicolor* (Vieillot). Tree Swallow.
Abundant transient; one breeding colony.

April 3, 1920—Poughkeepsie (Frost).

May 30, 1924—Cruger's Island (Crosby, Frost, and Griscom).

July 9, 1914—Cruger's Island (Crosby).

Oct. 6, 1929—Flock of 12, Cruger's Island (Crosby and Frost).

June 12, 1921—Female incubating, Grassy Lake, Mt. Riga (Crosby and Frost).

Several pairs breed annually in the wooded swamp at Grassy Lake at the foot of Mt. Riga. The arrival in spring is very irregular.

135. *Riparia riparia riparia* (Linnæus). Bank Swallow.
Common transient; usually several breeding colonies annually.

April 19, 1922—Rhinebeck (Crosby).

Sept. 13, 1924—Cruger's Island, 5 birds (Crosby and Griscom).

Late April to mid-August.

The Bank Swallow seems remarkably erratic in the breeding season, and in any one year an accurate census would be very difficult, as breeding localities are abandoned more rapidly than ordinary observation serves to discover new ones. At the present time the birds are constantly founding a new colony in some cut made by the building of a state motor highway, but rarely return another year, discouraged perhaps by the heavy summer traffic. On migration the Bank Swallow has been noted as late

as May 30, and as early as July 13 at Chestnut Ridge (Baker). It is much less often noted in fall than in spring.

136. *Stelgidopteryx ruficollis serripennis* (Audubon). Rough-winged Swallow.

Uncommon summer resident, scattered throughout the Hudson River valley, rare and local further inland.

April 14, 1922—Brickyard Swamp, Poughkeepsie (Crosby).

Sept. 9, 1921—Rhinebeck (Crosby).

Late April to August.

June 6, 1916—3 eggs, Rhinebeck (Crosby and L. A. Fuertes).

This Swallow is extraordinary in its indifference to what most birds would regard as intolerable conditions. For years several pairs have bred between Rhinecliff and Barrytown in holes in the stone retaining walls in the deep railroad cuts of the New York Central, where heavy express and freight trains roar by every few minutes throughout the day and night.

137. *Hirundo erythrogaster* Boddaert. Barn Swallow. Common summer resident, abundant transient.

April 11, 1920—Poughkeepsie (Moulton).

Oct. 5, 1924—Cruger's Island (Crosby and Griscom).

April 20 to mid-September.

May 31, 1914—4 eggs, Poughkeepsie (Frost).

Aug. 3, 1899—4 eggs, Poughkeepsie (Horton).

138. *Petrochelidon albifrons albifrons* Rafinesque. Northern Cliff Swallow.

Very local summer resident, formerly common; fairly common spring, uncommon fall transient.

April 19, 1922—Rhinebeck (Crosby).

Sept. 25, 1927—Cruger's Island (Crosby).

May; late July to September 1.

June 10, 1922—1 egg, Mt. Riga (Crosby and Frost).

The Cliff Swallow still nests in scattered colonies in the most rural sections in the eastern third of Dutchess County from Mt.

Riga to Pawling. There is good reason to believe that these colonies are increasing in number in the last ten years, and the species is "coming back" in many parts of its northeastern range. It last nested near Poughkeepsie in 1898. In most of our area it is a transient only, but is much commoner than near New York City.

139. **Progne subis subis** (Linnæus). Purple Martin.

Two breeding colonies in Poughkeepsie; very rare as a transient elsewhere.

March 24, 1920—Poughkeepsie (Frost).

April 10, 1921—Poughkeepsie (Crosby, Frost, and Griscom).

Sept. 1, 1922—Poughkeepsie (Frost).

Aug. 15, 1924—3 young in nest, Poughkeepsie (Frost).

The Martin has been nesting at Poughkeepsie since the days of Giraud, and is extremely irregular in arrival, sometimes as late as April 29, 1923. It is only exceptionally that birds linger there after July. Elsewhere in the County it is a very rare transient, an occasional bird with other migrating Swallows, but one sees more Orange-crowned Warblers than Martins in Dutchess County. The last record of a migrant was May 30, 1924 (Crosby, Frost, and Griscom).

There is every possibility, however, that there is another small nesting colony somewhere east of Hyde Park. For some years past every Sunday throughout May, the northern census party visited a certain swamp in East Park, always in the late afternoon. Invariably from several to eight Martins would appear from over a high hill due east, and after hawking over the swamp return east again. Every effort to locate the breeding place of these birds failed.

140. **Cyanocitta cristata cristata** (Linnæus). Northern Blue Jay. Common permanent resident, sometimes abundant on migration in May, late September and October.

May 2, 1915—6 eggs, Poughkeepsie (Frost).

141. **Corvus brachyrhynchos brachyrhynchos** Brehm. Eastern Crow.

Abundant permanent resident, but relatively few winter in the wilder, rural, eastern sections.

April 15, 1900—5 eggs, Poughkeepsie (Horton).

The Crow obviously arrives from two different directions. There is a north and south line of flight, but others arrive from and depart towards the southwest. In late March (and again in late October) it is most instructive to walk along the Hudson River from Barrytown to Cruger's Island. East of the River Crows are flying due north, but over the river itself a steady stream is crossing over along a southwest diagonal. On a favorable morning Crosby and I have counted over a thousand arrivals in half an hour, and the line of Crows will be at least three miles long. This matter has been most carefully checked, and occurs every spring and fall.

142. **Corvus ossifragus** Wilson. Fish Crow.

Scattered pairs nest annually throughout the Hudson River valley; three winter records near Poughkeepsie.

March 5, 1922—Poughkeepsie (Frost).

Oct. 15, 1927—Poughkeepsie (Crosby and Frost).

143. **Penthestes atricapillus atricapillus** (Linnæus). Black-capped Chickadee.

Common permanent resident, most numerous in winter.

May 13, 1900—8 eggs, Poughkeepsie (Lispenard Horton).

July 11, 1920—Young in nest, Turkey Hollow (Crosby and Frost).

144. **Penthestes hudsonicus littoralis** (Bryant). Acadian Chickadee.

Very rare winter visitant, during the two flights only.

Nov. 27, 1913—April 21, 1914, several at Rhinebeck (Crosby, et al.) and Poughkeepsie (Frost).

Oct. 28, 1916, to Jan. 1, 1917—Several at Rhinebeck (Crosby).

145. *Baeolophus bicolor* (Linnæus). Tufted Titmouse.
Accidental visitant.

Oct. 28, 1929—1 collected, Rhinebeck (Crosby).

146. *Sitta carolinensis carolinensis* Latham. White-breasted Nuthatch.

Common winter resident, rather uncommon summer resident.

April 13, 1898—6 eggs, Poughkeepsie (Horton).

147. *Sitta canadensis* Linnæus. Red-breasted Nuthatch.
Remarkably erratic transient; sometimes abundant in fall, a few birds wintering; often unrecorded in spring and never common.

July 16, 1929—Rhinebeck (Crosby).

May 21, 1916—Rhinebeck (Mrs. Goodell).

In some years this Nuthatch has become common by Aug. 15, and in others it will not appear until October. There is no County record between February and May 4. It is unrecorded in spring after a fall in which only one or two birds were noted.

148. *Certhia familiaris americana* Bonaparte. Brown Creeper.
Fairly common winter resident, more numerous on migration; breeding in one locality.

Aug. 24, 1928—Rhinebeck (Crosby).

Sept. 15, 1930—Rhinebeck (Crosby).

May 19, 1928—Rhinebeck (Crosby).

Sept. 24 to early May.

Since 1920 the Creeper has been noted with some regularity along Swamp River in the southeastern section of the County in mid-May, June, July and August. There is every reason to suppose that it breeds there, but the nest has never been found, as it has not been looked for at the proper season. This is the first two weeks in May, when Dutchess County students are engaged in making all day censuses.

On June 6, 1930, Crosby and Charles Johnston found 2 Brown Creepers at "Ellerslie," north of Rhinecliff, suggesting a casual breeding record in a most unfavorable locality.

Transients have been noted as early as April 2, and as late as Nov. 1.

149. *Troglodytes aëdon aëdon* Vieillot. Eastern House Wren.
Very common summer resident.

April 15, 1922—Rhinebeck (Crosby).

Oct. 11, 1915—Rhinebeck (Crosby).

April 21-26 to Oct. 1.

May 24, 1915—5 eggs, Rhinebeck (Crosby).

Aug. 25, 1915—Young in nest, Rhinebeck (Crosby).

150. *Nannus hiemalis hiemalis* (Vieillot). Eastern Winter Wren.

Common fall, uncommon spring transient, occasionally wintering.

March 13, 1921—Rhinebeck (Crosby).

May 18, 1930—Swamp River (Frost and Gray).

Sept. 8, 1924—Rhinebeck (Crosby).

April 1 to early May; September 25 to January.

The Winter Wren is a much commoner bird in the upper Hudson Valley than near New York. In a good fall one can see 6 or more birds in a day and 25-30 in the course of the season.

151. *Thryothorus ludovicianus ludovicianus* (Latham). Carolina Wren.

Erratic visitant, never becoming permanently established.

May 5, 1897—Poughkeepsie (Lispensard Horton).

May 14, 1922—Jackson's Pond (Frost).

March 30, 1924—Cruger's Island (Crosby and Frost).

Oct. 15, 1927—Cruger's Island (Crosby and Frost).

Sept. 1-11, 1929—"Leacote," Rhinecliff (Crosby).

May 24-Nov. 21, 1930—Cruger's Island (Crosby, et al.).

152. *Telmatodytes palustris palustris* (Wilson). Long-billed Marsh Wren.

Locally abundant summer resident.

May 3, 1925—Cruger's Island (Carter and Crosby).

Nov. 7, 1926—Cruger's Island (Crosby and Griscom).

May 8 to October.

June 8, 1920—5 eggs, Cruger's Island (Crosby).

Great numbers nest at Cruger's Island and Thompson's Pond, Pine Plains. There are smaller colonies at Rudd's Pond, Pink's Pond, near Poughkeepsie, and Grassy Lake, Mt. Riga.

153. *Cistothorus stellaris* (Naumann). Short-billed Marsh Wren.

Rare and local and erratic summer resident.

May 10, 1925—A transient at East Hyde Park (Baker, Crosby and Griscom).

Oct. 3, 1920—New Hackensack (Crosby, Frost, Moulton, and Platt).

June 5, 1902—7 eggs, Poughkeepsie (Lispenard Horton).

Aug. 22, 1902—5 eggs, Poughkeepsie (Horton).

From 1912-1920, one or two pairs bred in a swampy meadow east of Lafayetteville. In 1923, 3 pairs were found in a meadow near Mt. Riga, but they too disappeared after 1925. More recently one or two pairs have been found at New Hackensack, Swamp River, and Amenia. The scarcity of the bird in Dutchess County is quite surprising, as in the eastern third particularly there are numerous areas of wet meadow which would appear to offer an ideal habitat.

154. *Mimus polyglottos polyglottos* (Linnæus). Eastern Mockingbird.

Casual visitant.

May 17, 1919—Poughkeepsie (Prof. F. A. Saunders).

July 6, 1930—3 miles north of Millbrook (John Kieran).

155. *Dumetella carolinensis* (Linnæus). Catbird.

Very common summer resident, casual in early winter.

April 22, 1916—Poughkeepsie (Freeman).

Nov. 10, 1909—Rhinebeck (Crosby).

May 2 to October 10.

May 18, 1911—3 eggs, Rhinebeck (Crosby).

Aug. 11, 1903—Young in nest, Poughkeepsie (Horton).

On two occasions Catbirds have lingered near Rhinebeck into December (Crosby and Dows). At sunset on Jan. 6, 1924 Crosby saw a bird fluttering against a window of Grasmere, and going out was astonished to find a Catbird, which took refuge in a honeysuckle vine. It was there the next morning, but disappeared during the afternoon.

A few Catbirds arrive in advanced seasons the last days of April, but the species is never common until the first May wave, and sometimes not until the second.

156. *Toxostoma rufum* (Linnæus). Brown Thrasher.
Locally common summer resident, decreasing northward.

April 16, 1922—Poughkeepsie (Moulton).

Oct. 7, 1914—Rhinebeck (Crosby).

May 26, 1902—5 eggs, Poughkeepsie (Lispnard Horton)

The Thrasher is common around Poughkeepsie and in the eastern part of the County, where there are innumerable dry brushy hillsides. It decreases northward and is very local and uncommon along the Hudson River north of Staatsburg. Normally it arrives the last days of April. Apparently it is seldom observed in fall.

157. *Turdus migratorius migratorius* Linnæus. Eastern Robin.
Abundant summer resident, a few birds not infrequently wintering.

March 3, 1929—Rhinebeck (Mrs. Burroughs), the earliest date of spring migrants, to Dec. 20, 1926, a season in which no wintering individuals were found. March 26, 1885 and 1895, is the latest date of spring arrivals.

April 20, 1919—3 eggs, Rhinebeck (Mrs. Burroughs).

Aug. 30, 1919—Young in nest, Rhinebeck (Mrs. Burroughs).

158. *Hylocichla mustelina* (Gmelin). Wood Thrush.
Common summer resident.

April 25, 1925—Poughkeepsie (Frost).

Oct. 16, 1927—Pine Plains (Frost).

Nov. 4, 1916—Poughkeepsie (Freeman and Moulton).

Early May to Sept. 20.

May 22, 1899—4 eggs, Poughkeepsie (Lispenard Horton).

July 27, 1904—Eggs pipping, Poughkeepsie (Horton).

159. *Hylocichla guttata faxoni* Bangs and Penard. Eastern Hermit Thrush.

Locally common summer resident; very common transient.

March 29, 1914—Rhinebeck (Crosby).

May 19, 1929—Cruger's Island (Griscom and Judge Robert Walcott).

Sept. 20, 1929—Rhinebeck (Crosby).

Jan. 10, 1931—Cruger's Island (Crosby and Frost).

April 10 to May 10; October 10 to early November.

June 8, 1924—3 eggs, Mt. Riga (Crosby and Frost).

The Hermit Thrush breeds commonly on Mt. Riga above 1200 ft. (Crosby and Frost), and several pairs on the summit of Bald Mt. back of Wingdale, nest and 3 eggs found June 15, 1924 (Crosby, Frost, Griscom). Otherwise it is a very common transient. There are two December records of stragglers, the next latest date being Nov. 14, 1920.

160. *Hylocichla ustulata swainsoni* (Tschudi). Olive-backed Thrush.

Common spring, uncommon fall transient.

May 1, 1929—Rhinebeck (Crosby).

June 4, 1917—Poughkeepsie (Frost and Moulton).

Sept. 1, 1921—Rhinebeck (Crosby).

Oct. 21, 1921—Rhinebeck (Crosby).

May 11 to 30; September 15 to October 10.

In May, 1925, Crosby saw 35 individuals of this Thrush, and in 1929 I saw 98, a fair idea of the variation in numbers between poor and very good springs. The Olive-backed Thrush is much less common in fall, 6-15 the usual number, and in 1925 only a single bird was recorded.

161. *Hylocichla minima aliciae* (Baird). Gray-cheeked Thrush. Uncommon spring, rare fall transient.

May 2, 1914—Poughkeepsie (Moulton).

June 9, 1912—Poughkeepsie (Frost).

Sept. 18, 1921—Rhinebeck (Crosby).

Oct. 11, 1925—Mt. Rutsen (Crosby, Frost, and Griscom).

May 13-30; late September and early October.

The Gray-cheeked Thrush reverses the usual rule among our transient land birds in being much less common in the upper Hudson Valley than near New York City. One to three birds a spring is the normal number, and the species was missed in 1925. In the fall it has been recorded only three times in the last nine years.

162. *Hylocichla minima minima* (Lafresnaye). Bicknell's Thrush.

Rare and little known transient.

May 27, 1923—Hyde Park, specimen collected (A. Bloomfield).

Twice Crosby and I have seen what appeared to be very small Gray-cheeked Thrushes in May, without being able to collect them. Birds I have shot as possible Bicknell's turned out to be Gray-cheeked.

163. *Hylocichla fuscescens fuscescens* (Stephens). Veery. Common summer resident.

April 25, 1920—Rhinebeck (Crosby).

Sept. 20, 1919—Rhinebeck (Crosby).

May 2 to 6; late August.

May 22, 1898—4 eggs, Poughkeepsie (Lispenard Horton).

164. *Sialia sialis sialis* (Linnæus). Eastern Bluebird.

Common summer resident, a few birds wintering almost every year near the Hudson River.

Genuine arrivals in recent years have been Feb. 22, 1925, and March 3, 1923. In the backward year 1926, no migrants were seen until March 20.

April 1, 1915—4 eggs, Rhinebeck (Crosby).

July 23, 1903—Eggs, Rhinebeck (Crosby).

165. *Polioptila caerulea caerulea* (Linnæus). Blue-gray Gnat-catcher.

Casual visitant.

Sept. 10, 1922—1 collected, Rhinebeck (Crosby, Frost, and Griscom).

March 13, 1929—1 seen Cruger's Island (Frost).

166. *Regulus satrapa satrapa* Lichtenstein. Eastern Golden-crowned Kinglet.

Common transient, uncommon winter resident.

Sept. 23, 1922—Rhinebeck (Crosby).

May 13, 1928—Millbrook (Frost).

Aug. 22, 1920—1 bird, Turkey Hollow (Crosby and Frost).

September 30 to late April.

Comparatively few Kinglets winter in Dutchess County, and in 1926 it was not recorded until April 18. In milder seasons the spring migration has commenced as early as March 30. Kinglets almost always linger into January, but very few remain in February and March.

167. *Corthylio calendula calendula* (Linnæus). Eastern Ruby-crowned Kinglet.

Abundant transient, casual in winter.

April 2, 1921—Cruger's Island (Crosby).

May 19, 1929—Pine Plains (Crosby, Janvrin, and Murphy).

Sept. 5, 1920—Poughkeepsie (Moulton).

Nov. 6, 1929—Rhinecliff (Crosby).

April 12 to May 13; late September to late October.

The Ruby-crowned Kinglet is notably abundant in Dutchess County, distinctly more numerous than near New York City. Stragglers have remained near Poughkeepsie into December (Frost and Moulton) and Feb. 2, 1917 (Gray).

168. *Anthus spinoletta rubescens* (Tunstall). American Pipit. Uncommon erratic transient in spring, very common in fall.

March 2, 1919—Poughkeepsie (Gray).

May 17, 1925—Pine Plains (Crosby, Murphy, and Pangburn).

Sept. 10, 1916—Cruger's Island (Crosby).

Nov. 24, 1919—Poughkeepsie (Moulton).

Late March to early May; late September to November.

The Pipit is exceedingly erratic in spring. Some years several flocks are recorded, but ordinarily one or two birds from one to several occasions is all that can be found. Its status in fall in nowise differs from adjacent areas.

169. *Bombycilla cedrorum* Vieillot. Cedar Waxwing. Fairly common summer resident; irregular winter visitant and erratic migrant, often common in late May and fall.

June 11, 1894—5 eggs (C. C. Young).

Sept. 5, 1901—Young in nest (C. G. Abbott).

It seems useless to give formal migration dates for so erratic a bird. In most years the summer residents arrive between May 10 and 20, but the species is rarely common until the very last of the month. In late August or early September there is often a distinct fall migration, and at irregular intervals waxwings are common in September and during part of October. In most years the species is gone by early November, but irregularly some flock will be found late in November, sometimes in December or even in January. These birds almost never spend the winter. Chiefly in winters when there have been no waxwings earlier, there will be a flight during late January or February and the flocks at this season will often contain over 100 birds. These will linger into March and then disappear. Sporadically a very few birds will be recorded in late March or during April, such records apparently bearing no relation to the presence or absence of a late winter invasion. These birds also disappear before the arrival of the summer residents in May, the only regular migration habit the Waxwing has.

170. *Lanius borealis borealis* Vieillot. Northern Shrike.
Irregular winter visitor, rarely in any numbers.

Nov. 1, 1913—Rhinebeck (Crosby).

April 8, 1914—Rhinebeck (Crosby).

Late November to mid-March.

The shrike occurs with greater frequency in the upper Hudson Valley than near New York City, and has been recorded annually in Dutchess County since 1913. About once every 7-10 years there is a real flight, but on these occasions the Shrike is usually not as common here as near New York, as the latter region receives the marked coastwise flight in addition. It is in these flight years that the bird is most likely to be seen in November and March. In ordinary years one or two birds only will be noted in January or February. It is extraordinarily bold and blood-thirsty, and has become a veritable plague in flight years at feeding and trapping stations.

171. *Lanius ludovicianus migrans* W. Palmer. Migrant Shrike.
Very rare fall transient.

In August from 1896-1899, Dr. William H. Wiegmann of New York City, an experienced observer, spent his vacations at a farm house on the Old Post Road between Wey's Crossing and "Hog Bridge" Station. Here on several occasions annually he found a Migrant Shrike in the extensive orchards southeast of the Ten Broek Farm. There are no other records for the County, in spite of a constant lookout for years by several people.

The rarity of this species is surprising, but is in itself of interest. Apparently the very few birds nesting in southern Canada and northwestern New England that do occasionally migrate southeastward, do so at a rather sharp diagonal that brings them to the coast of Massachusetts. From here south the bird is almost unknown away from the coast until latitudes well south of the New York City region.

172. *Sturnus vulgaris vulgaris* Linnæus. Starling.

Now an abundant resident, first recorded at Rhinebeck Oct. 29, 1909, and continuously present after Feb. 25, 1910.

April 27, 1916—Complete clutch, Rhinebeck (Crosby).

173. *Vireo griseus griseus* (Boddaert). White-eyed Vireo.

Uncommon and local summer resident, decreasing in the last twenty years.

May 3, 1892—Poughkeepsie (Lispenard Horton).

Sept. 30, 1922—Rhinebeck (Crosby and Griscom).

May 9 to September 10.

July 17, 1895—3 eggs, Poughkeepsie (Horton).

Even in the last ten years the White-eyed Vireo has disappeared from many a swamp, where a pair used to nest regularly. This decrease is merely part of a gradual shrinking of the bird's northeastern range, which has been going on for some time. As might be expected, the bird is distinctly commoner south of Poughkeepsie than north of that city. At the present time Cruger's Island and a swamp at East Hyde Park harbor the only breeding pairs I know of in the northern half of the County.

174. *Vireo flavifrons* Vieillot. Yellow-throated Vireo.

Common summer resident.

April 27, 1921—Rhinebeck (Crosby).

Oct. 5, 1930—Poughkeepsie (Frost).

First week of May to September 15.

June 3, 1899—4 eggs, Poughkeepsie (Lispenard Horton).

175. *Vireo solitarius solitarius* (Wilson). Blue-headed Vireo.

Common transient, breeding in three localities.

April 12, 1922—Poughkeepsie (Myers).

May 26, 1929—Thompson's Pond, Pine Plains (Crosby and Urner).

Aug. 23, 1923—Rhinebeck (Crosby).

Sept. 6, 1921—Rhinebeck (Crosby).

Oct. 23, 1926—Cruger's Island (Crosby).

April 23 to May 15; September 23 to October 15.

June 8, 1922—4 eggs, Turkey Hollow (Crosby and Frost).

The Blue-headed Vireo breeds regularly in Turkey Hollow, on the summit of Bald Mt., and in Washington Hollow Glen (Frost). Otherwise it is a fairly common transient throughout the County. In spring 5-20 birds can be seen during the season at Rhinebeck, a slightly better average than around New York City.

176. **Vireo olivaceus** (Linnæus). Red-eyed Vireo.

Very common summer resident.

May 4, 1913—Poughkeepsie (Frost).

Oct. 20, 1928—Rhinebeck (Crosby).

May 12 to early October.

June 2, 1895—4 eggs, Poughkeepsie (Lispenard Horton).

Aug. 3, 1916—1 young and 1 cowbird, Rhinebeck (Crosby).

177. **Vireo philadelphicus** (Cassin). Philadelphia Vireo.

Rare fall transient.

Sept. 7, 1914—Rhinebeck (Crosby).

Sept. 23, 1920—Rhinebeck (Crosby).

Sept. 10, 1922—1 collected at Rhinebeck, and two others seen at Pine Plains (Crosby, Frost, and Griscom).

Sept. 13, 1927—Rhinebeck (Crosby).

Oct. 5, 1927—Poughkeepsie (Frost).

Sept. 9, 1930—Mt. Rutsen (Crosby).

In his preliminary list in the 1921 Yearbook of the Rhinebeck Bird Club, Crosby gave several spring and one summer record of this rare Vireo, all prior to 1916. He long since told me that he proposed to cancel these records until a spring specimen was secured, especially as the more competent and intensive observation of the past decade had failed to endorse them. Needless to say, I gladly follow this conservative position.

178. *Vireo gilvus gilvus* (Vieillot). Eastern Warbling Vireo.
Common summer resident.

April 29, 1925—4 singing males, Poughkeepsie (Frost).

Sept. 18, 1901—Rhinebeck (C. G. Abbott and Crosby).

May 6 to early September.

May 31, 1894—4 eggs, Poughkeepsie (Lispnard Horton).

The visitor from eastern New England or New York City will be agreeably pleased to see how common and generally distributed the Warbling Vireo is in the rural country of Dutchess County. It is almost never recorded in fall, unless a bird is heard singing after the moult, and just before departing southward in early September.

179. *Mniotilta varia* (Linnæus). Black and White Warbler.
Common summer resident, more numerous on migration.

April 19, 1896—Poughkeepsie (Lispnard Horton).

Oct. 20, 1918—Poughkeepsie (Frost).

April 25 to October 1.

May 16, 1915—4 eggs, Rhinebeck (Crosby).

180. *Protonotaria citrea* (Boddaert). Prothonotary Warbler.
Casual visitant.

June 27, 1892—1 collected, Hyde Park (Arthur Bloomfield).

181. *Helmitheros vermivorus* (Gmelin). Worm-eating Warbler.
Uncommon summer resident in the level country near the Hudson River, common on Mt. Beacon and the wooded hills in the eastern part of the County.

May 5, 1924—Rhinebeck (Crosby).

Aug. 27, 1915—Rhinebeck (Crosby).

Sept. 23, 1919—Poughkeepsie (Frost).

May 10 to August 20.

June 6, 1925—3 young and 1 egg, Bald Mt. (Crosby, Frost, and Griscom).

July 29, 1901—Young in nest, Rhinebeck (Abbott and Crosby).

182. *Vermivora chrysoptera* (Linnæus). Golden-winged Warbler.

A common summer resident; now, near Rhinebeck, distinctly less common than twenty years ago.

April 30, 1921—Rhinebeck (Crosby).

Sept. 10, 1922—Pine Plains (Crosby, Frost, and Griscom).

May 6 to late August.

May 19, 1922—5 eggs, Rhinebeck (Crosby).

There is but little evidence of transient individuals of this Warbler, and it is most exceptional to record 12 individuals in a day near Rhinebeck. These small flights take place about the middle of May.

183. *Vermivora pinus* (Linnæus). Blue-winged Warbler.

Formerly a rare transient and local summer resident southeastward; steadily increasing in recent years; now a fairly common summer resident southeastward, north to East Hyde Park; transients are noted nearly every spring and occasionally in fall in the northern half of the County.

May 2, 1929—Poughkeepsie (Frost).

Sept. 10, 1922—Pine Plains (Crosby, Frost, and Griscom).

June 4, 1922—4 young and 1 egg, Whaley Lake (Crosby, Frost, and Gray).

182 X 183. *Vermivora leucobronchialis* (Brewster). Brewster's Warbler.

Of annual occurrence in very small numbers throughout the County; several nests found with a male Brewster's paired with a female Golden-winged; numerous records from May 4, 1922, to Sept. 2, 1928.

182 X 183. *Vermivora lawrencei* (Herrick). Lawrence's Warbler.

Very rare summer resident.

May 20, 1923—Poughkeepsie (Frost, Gray, and Guernsey).

June 14 and 15, 1924—Adult male mated with a Blue-wing at Whaley Lake, nest and eggs found (Crosby, Flewelling, Frost, and Griscom).

184. *Vermivora peregrina* (Wilson). Tennessee Warbler.

A transient, regular, but usually uncommon in fall; in spring formerly rare, common to abundant 1916-1923, now uncommon.

May 4, 1922—Rhinebeck (Crosby).

June 4, 1917—Poughkeepsie (Moulton).

Aug. 10, 1922—3 birds, Rhinebeck (Crosby).

Oct. 14, 1915—Rhinebeck (Crosby).

May 12 to 28; September 6 to October 1.

The remarkable fluctuation in status in spring of the Tennessee Warbler in most of the northeast during the last generation has never been properly brought out. In our area there was only 1 spring record from 1909-1915. In 1915, no less than nine were seen by Crosby, and in 1916 there was an astonishing flight. Crosby saw not less than 109 individuals around Rhinebeck, and that year the Myrtle was the only other transient Warbler seen in greater numbers. It continued common until 1924, when there was a marked falling off. Since then 5-15 is the usual total number seen per season around Rhinebeck. It will thus be evident that the Tennessee is much commoner in the upper Hudson Valley than near New York City. Its status in fall requires no elaboration, but it is again relatively more numerous.

185. *Vermivora celata celata* (Say). Orange-crowned Warbler. Unknown until 1925, now a rare transient.

May 10, 1925—Singing male collected, Little Stissing Mt., Pine Plains (Baker, Crosby, and Griscom).

Oct. 15, 1925—Rhinebeck, shot after identification, but bird lost (Crosby).

Oct. 3, 1926—Rhinebeck (Crosby).

May 7, 1927—Singing ♂, Pine Plains (Frost).

May 8, 1927—2 singing ♂, Rhinebeck (Griscom).

Oct. 3, 1927—Rhinebeck (Crosby).

Oct. 9, 1927—East Park (Griscom).

May 12, 1929—Singing male, Pine Plains (Baker, Crosby, and Griscom).

May 23, 1929—1 female, Stissing Mt., Pine Plains (R. J. Eaton and Griscom).

186. *Vermivora ruficapilla ruficapilla* (Wilson). Nashville Warbler.

Fairly common summer resident in the hilly eastern third of the County; common transient throughout.

- April 22, 1927—Rhinebeck (Crosby).
 April 29, 1914—Rhinebeck (Crosby).
 June 7, 1928—Poughkeepsie (Frost).
 July 12, 1925—A casual at Rhinecliff (Crosby).
 Aug. 7, 1929—Rhinebeck (Crosby).
 Oct. 15, 1927—Jackson's Pond (Crosby and Frost).
 May 2 to May 25; September 1 to October 5.

The Nashville Warbler is scattered throughout the tops of the higher hills in Dutchess County in summer, and more locally near cool glens at lower elevations. Mearns, however, reports the Nashville nesting near Poughkeepsie (Dr. Clinton Bagg). As many as four males can be heard singing simultaneously on Mt. Riga, and a day's tramp over Bald Mt. will yield a dozen or more. Ordinarily the Nashville is one of the commoner Warblers on migration in spring, but has occasional poor years. At Rhinebeck thirty is an average number of individuals for the season, the extremes being 9 and 53. In fall the number noted is always less than in an average spring.

187. *Compsothlypis americana pusilla* (Wilson). Northern Parula Warbler.

Common transient.

- April 28, 1923—Rhinebeck (Crosby).
 June 3, 1917—Poughkeepsie (Moulton).
 July 29, 1925—Rhinebeck (Crosby), next seen on Sept. 6.
 Aug. 8, 1921—Rhinebeck (Crosby).
 Oct. 21, 1915—Rhinebeck (Crosby).

May 2 to May 25; September 6 to early October.

The Parula is often our second commonest transient Warbler in spring. In the remarkable year 1916, no less than 98 were seen at Rhinebeck, but in 1921, a very poor year for Warblers, only 5 were recorded, and several other species were more numerous. Comparatively few are seen in fall.

188. *Dendroica aestiva aestiva* (Gmelin). Eastern Yellow Warbler.

Common summer resident.

April 25, 1915—Poughkeepsie (Gray).

Sept. 15, 1913—Rhinebeck (Mrs. Goodell).

May 1 to mid-August.

May 24, 1926—3 eggs, Poughkeepsie (Gray).

189. *Dendroica magnolia* (Wilson). Magnolia Warbler.

Common transient.

May 3, 1902—Stanfordville (Hyatt).

June 4, 1917—Poughkeepsie (Moulton).

July 6, 1930—Casual at Dover Stone Church (Frost and Guernsey).

Aug. 9, 1909—Rhinebeck (Crosby).

Oct. 15, 1916—Poughkeepsie (Freeman).

May 10 to May 30; late August to early October.

In spring the Magnolia Warbler takes turns with the Parula and the Black-throated Blue as to which will be the second commonest transient species after the Myrtle. At Rhinebeck the lowest count was 10 in 1915, and the highest 121 in 1924. In ordinary years one sees 30-50, in good years around 100. As is the usual rule, far fewer are noted in fall.

190. *Dendroica tigrina* (Gmelin). Cape May Warbler.

Fairly common transient.

May 2, 1916—4 ♂, Rhinebeck (Crosby).

June 6, 1907—♀ collected, Hyde Park (Arthur Bloomfield).

Aug. 3, 1921—Rhinebeck (Crosby).

Oct. 9, 1930—Poughkeepsie (Frost).

May 9 to 25; September 1 to 30.

This popular and eagerly sought warbler is far commoner in the upper Hudson valley than any other part of the north-east. In the great warbler year of 1916, no less than 42 were seen at Rhinebeck, but 5-15 is the average. In fall about as many are noted as in an ordinary spring. The bird is partic-

ularly fond of ornamental spruces and larches on private estates, and one to several birds will often remain several days in the same tree.

191. *Dendroica caerulescens caerulescens* (Gmelin). Black-throated Blue Warbler.

Common summer resident above 800 ft. in the hills of the eastern part of the County; common transient.

April 27, 1923—Rhinebeck (Crosby).

June 3, 1917—Poughkeepsie (Frost).

Aug. 19, 1923—Pine Plains (Crosby and Frost).

Oct. 21, 1916—Poughkeepsie (Frost).

May 4 to 25; September 15 to early October.

As already stated the Black-throated Blue is sometimes our second commonest transient warbler. It fluctuates a little less in numbers from year to year than the Parula and Magnolia Warblers according to Crosby's detailed studies at Rhinebeck, the maximum being 92 in 1916, with a low of 16 in both 1920 and 1921.

In the breeding season it is commonest on Mt. Riga, on Bald Mt., and in Turkey Hollow.

192. *Dendroica coronata* (Linnæus). Myrtle Warbler.

Abundant transient, wintering casually.

April 6, 1892—Hyde Park, collected (Arthur Bloomfield).

May 30, 1917—Poughkeepsie (Frost).

Aug. 11, 1921—Rhinebeck, and continuously present thereafter (Crosby).

Nov. 12, 1927—Rhinebeck (Crosby).

Winter 1877-'78—Fishkill (Mearns).

Dec. 25, 1920 to April 3, 1921—Rhinebeck (Crosby).

April 25 to May 20; late September to late October.

The Myrtle Warbler is so abundant as a transient in Dutchess County that it is impossible to estimate its numbers accurately, so large and so numerous are the migrating flocks. There is no doubt, however, that it greatly outnumbered all other

transient species combined in spring, and this disproportionate abundance is even more marked in fall.

193. *Dendroica virens virens* (Gmelin). Black-throated Green Warbler.

Common summer resident in hemlock woods in the eastern part of the County, very rare elsewhere; abundant transient.

April 20, 1915—Poughkeepsie (Frost).

June 8, 1917—Poughkeepsie (Frost).

Aug. 11, 1928—Rhinebeck (Crosby).

Nov. 4, 1915—Rhinebeck (Crosby).

Late April to May 25; late August to early October.

June 2, 1923—4 eggs, Turkey Hollow (Crosby and Frost).

The Black-throated Green Warbler nests commonly in the hills, wherever there are hemlock groves. In the past few years Crosby has found a few scattered pairs breeding in white pine groves on the bluffs of the Hudson River between Rhinecliff and Barrytown. As a transient it is usually one of the commonest species next to the Myrtle.

194. *Dendroica cerulea* (Wilson). Cerulean Warbler.
Rare but regular summer resident.

May 5, 1929—Hyde Park (Crosby, Griscom, and Jaques).

Sept. 1, 1923—1 ♂ singing, Tivoli (Crosby).

May 10 to August.

May 29, 1922—2 eggs, Poughkeepsie (Gray).

The Cerulean Warbler is perhaps the most interesting and unexpected of Dutchess County birds, as the local breeding pairs are so far removed from the main breeding range of the species. It was first found in the County by Lisenard Horton, who observed it in May and on one occasion, July 4, 1894, in summer. This was probably a breeding bird, as we now know, but no one ventured to claim this as satisfactory evidence at that time. It was not until 1922 that a male and female were found together at Wappinger's Creek (Frost, Gray, and Moulton), and the nest and eggs found May 29 (Gray). This pair

enabled all the local County observers to learn the difficult song perfectly, and a thorough search began. As related by Crosby (Auk, 1923, p. 104), 6 other males were found that year at Hyde Park and several points near Rhinebeck.

This warbler is so high ranging and the female so inconspicuous, that the only good way of locating breeding pairs is to hear the singing male. If such a bird is found regularly in the same place through May and early June, the probability is that there is a breeding pair. The female arrives very shortly after the male, and courtship begins at once. It is only during courtship that the female is at all readily found. By the end of May the nest is built and laying and setting commence. Unless the observer is prepared to spend one or more days watching the male, to wait for him to betray the whereabouts of the female, she will be seen during this period only by accident. Experience proves, however, that she is really there. Unmated males act quite differently and move off in search of a female in a relatively short time. The evidence in Dutchess County would seem to be that there is a marked excess of males over females.

I am also convinced that there has been a marked influx of the species since 1922. In that and subsequent years it has been observed every May and June in woods that had been under regular observation for the preceding decade. Crosby himself was one of the best experts on warblers I have ever known, and I have never met his equal in his ability to "pick up" the faint and less characteristic songs at so great a distance. His warbler census of Grasmere began in 1914, and I cannot believe that the Cerulean occurred annually on migration in his east woods and occasionally bred prior to 1922, unknown to and overlooked by him. The same is true of the regular breeding station on Wappinger's Creek, which is within a few hundred yards of Gray's house.

As much as is pertinent of the history of the Cerulean Warbler in Dutchess County since 1922 is given below (cf. Gray, Auk, 1924, p. 161).

May 7, 1923—A pair on Wappinger's Creek at last year's breeding station.

May 12, 1923—2 ♂ at regular Hyde Park station.

May 18, 1923—1 ♂, "Camp Meeting Woods," Rhinecliff, present last year.

May 19, 1923—3 ♂ at Hyde Park Woods.

May 20, 1923—1. Wappinger's Creek, the pair of May 7 building.
2. Another pair further down the Creek.

3. A third pair on the Creek near New Hackensack.

May 22, 1923—"Leacote" above Rhinecliff, 1 ♂; present last year.

May 30, 1923—A fifth male on Wappinger's Creek.

June 3, 1923—A sixth ♂ along Wappinger's Creek.

June 27, 1923—1 ♂, "Chanler Woods," Barrytown. All other males previously seen at their stations.

Sept. 1, 1923—1 ♂ singing at Tivoli.

May 14, 1924—1 ♂, Wappinger's Creek. Station 1.

May 17, 1924—1 ♂, Hyde Park station.

May 24, 1924—1 ♂, Grasmere, a transient not seen again.

May 25, 1924—1 ♂, Chanler Woods, Barrytown.

May 30, 1924—2 ♂, Mt. Rutsen, Rhinebeck.

June 1, 1924—2 ♂, Hyde Park station.

June 12, 1924—1 ♂ at 1,000 ft. on Schaghticoke Mt., east of Dover.

June 17, 1924—2 ♂ on Wappinger's Creek near New Hackensack.

June 24, 1924—1 ♂, Dr. Miller's Woods, Rhinebeck.

Camp Meeting Woods destroyed this year; at all other stations birds present through June.

May 9, 1925—1 ♂, Hyde Park station.

May 10, 1925—2 ♂, Hyde Park, 1 ♂ at Wappinger's Creek.

May 16, 1925—1 ♂, Grasmere, present through June.

May 27, 1925—1 ♂ at Leacote, and remains for season.

May 31, 1925—1 ♂ at "Ellerslie," Rhinecliff.

June 1, 1925—1 ♂, Chanler Woods, Barrytown.

June 7, 1925—Woods on Bald Mt., along road to Pawling.

June 12, 1925—1 ♂, Mt. Rutsen.

June 17, 1925—2 ♂ in another wood at "Leacote."

June 18, 1925—2 ♂ at Mt. Rutsen.

May 9, 1926—Wappinger's Creek.

June 11, 1926—2 ♂ at Chanler Woods, Barrytown.

No bird at Grasmere and only 1 at Leacote.

May 7, 1927—Wappinger's Creek.

May 13, 1928—Wappinger's Creek.

June 6, 1928—Pair in east woods, Grasmere, still there June 26.

May 5, 1929—1 ♂, Hyde Park.

May 7, 1929—2 ♂, Mt. Rutsen.

May 17, 1929—3 ♂, 1 ♀, Mt. Rutsen, only 1 pair later.

May 23, 1929—2 ♂, Mt. Rutsen; 2 ♂, Hyde Park.

June 7, 1929—6 ♂ along Wappinger's Creek.

A pair in east woods, Grasmere.

1931—Nine singing males around Tivoli in June and July (Joseph J. Hickey).

1932—Twelve singing males around Tivoli (Hickey).

From this it will be evident that the Cerulean Warbler breeds commonly along a certain section of Wappinger's Creek, regularly at Hyde Park, and regularly at four stations between Rhinebeck and Tivoli. In good years two or more pairs instead of one breed at some of these stations, and the species occupies certain additional stations. There is also distinct evidence of transient males, as at Grasmere in 1922 and 1923, at Hyde Park in 1923, and Mt. Rutsen in 1929. The two stations in the eastern part of the County have never been followed up, and we do not know whether the species is of regular occurrence there or not. It is also apparent that the bird always arrives at Wappinger's Creek (or Hyde Park) well in advance of its Rhinebeck-Barrytown stations, in fact the hiatus is astonishingly great in some years. This schedule is quite without any analogue among other breeding warblers, where one day is the rule, unless some storm suspends the migration, and raises the presumption that the Rhinebeck stations are a relatively recent overflow from the Wappinger Creek breeding grounds.

195. *Dendroica fusca* (Müller). Blackburnian Warbler.

Usually uncommon, sometimes very common transient in spring; uncommon to rare in fall.

April 29, 1914—2 ♂, Rhinebeck (Crosby).

June 6, 1907—Specimen collected, Hyde Park (Arthur Bloomfield).

Aug. 13, 1914—Rhinebeck (Crosby).

Oct. 5, 1921—Poughkeepsie (Frost).

May 4 to May 27; late August to September 20.

The Blackburnian Warbler is ordinarily relatively uncommon in spring, 10-12 birds being the normal average. At long intervals, however, it will be very common; thus Crosby saw 56 in 1916, and I saw 67 in 1929. In fall it is most exceptional to see more than two or three birds, and in a few seasons it has been unrecorded.

A casual record is June 20, 1920 at Rhinebeck (Crosby).

196. *Dendroica pensylvanica* (Linnæus). Chestnut-sided Warbler.

Very common summer resident.

April 28, 1929—Pine Plains (Frost).

Oct. 5, 1930—Poughkeepsie (Frost).

May 5 to September 20.

May 26, 1914—3 eggs, Rhinebeck (Crosby).

Aug. 2, 1903—Young in nest, Rhinebeck (Crosby).

197. *Dendroica castanea* (Wilson). Bay-breasted Warbler.

Usually uncommon, occasionally common in spring; of regular occurrence in fall in small numbers.

May 9, 1925—Hyde Park (Crosby and Griscom).

June 3, 1917—Poughkeepsie (Frost).

June 16, 1912—Casual, at Poughkeepsie (Frost).

Aug. 11, 1921—4 birds, Rhinebeck (Crosby).

Oct. 8, 1927—1 collected, Rhinebeck (Griscom).

May 15 to 27; late August through September.

The spring count of Bay-breasted Warblers is just behind the Blackburnian. In normal years 5-8 birds is the average, but in 1916 Crosby saw 46 at Rhinebeck, and in 1929 I saw 31. In fall, however, it is reported more frequently than the Blackburnian, and there would probably be even more records were it not so difficult to distinguish from the numerous Black-polls through September.

198. *Dendroica striata* (J. R. Forster). Black-poll Warbler.
Common spring, abundant fall transient.

May 8, 1930—Rhinebeck (Crosby).

June 15, 1928—Rhinebeck (Crosby).

Sept. 6, 1925—Cruger's Island (Crosby and Griscom).

Oct. 28, 1928—Rhinebeck (Crosby).

May 13 to June 4; September 15 to October 18.

The Black-poll Warbler does not become common until the fourth or last May wave, May 24-27, and the main bulk of the spring flight passes through the last week in May. About 60-100 birds is the usual count per season. In fall the species floods the country and there are no really reliable figures, but it is certainly far more numerous than all the other warblers put together, excepting of course the Myrtle.

199. *Dendroica pinus pinus* (Wilson). Northern Pine Warbler. Very rare and local summer resident; uncommon transient in spring, almost unknown in fall.

April 5, 1928—Cruger's Island (Crosby).

Oct. 5, 1921—Poughkeepsie (Frost).

Mid-April to October.

In the past few years Crosby found about three pairs of breeding Pine Warblers in white pine or pitch pine groves on the bluffs of the Hudson River from Rhinecliff to Cruger's Island. The only regular locality, however, is on the estate Leacote belonging to the Merritts, where one or two pairs breed annually and the nest has been found (June 20, 1925). The male has been found singing there on Sept. 3, 1927.

In 1932 Messrs. Joseph J. Hickey and R. T. Peterson noted 5 singing males during the summer at Tivoli.

As a transient the bird is decidedly uncommon. On Grasmere, Crosby found 1-4 birds a season, the latest, May 1, 1916. Numerous May dates before me all come from places where the bird was subsequently found nesting. In fall there are only three reliable records, all in early October. Other records from Aug. 3 to Sept. 24 in earlier years, refer either to breeding birds or, so Crosby told me, to possible confusion with the fall plum-

age of the Black-poll Warbler, a very common mistake of inexperienced observers.

200. *Dendroica discolor discolor* (Vieillot). Northern Prairie Warbler.

Exceedingly rare summer resident, and very rare transient.

- May 2, 1913—Poughkeepsie (Frost).
- May 5, 1915—Rhinebeck (Crosby).
- May 23, 1915—Poughkeepsie (Frost).
- Sept. 24, 1916—East of Rhinebeck (Clinton G. Abbott).
- May 18, 1924—Stissing Mt., Pine Plains (Granger and Murphy).
- June 11, 1924—Singing male foot of Schaghticoke Mt., east of Dover Plains (Crosby and Frost).
- June 12, 1924—Nest found (Frost).
- June 22, 1924—Nest and 3 eggs (Frost).
- May 27, 1925—Salt Point (Kiemle).
- May 16, 1926—Dover Plains (Frost and Gray).
- May 18, 1930—Millbrook (Frost and Gray).
- May 21, 1932—2 ♂ on limestone ridge east of Dover Plains (Baker).

The Prairie Warbler is so preeminently a coastal plain species in the northeast, that its occurrence in Dutchess County is remarkable even on migration, as there is no known breeding colony north of Dutchess County. Its nesting in the County in 1924 was regarded as casual (cf. A. O. U. Check-List, range), but one or two subsequent records arouse the suspicion of a possible colony near Dover Plains. This possibility deserves careful investigation.

201. *Dendroica palmarum palmarum* (Gmelin). Western Palm Warbler.

Very rare spring, and rare fall transient.

- May 4, 1922—Rhinebeck (Crosby).
- May 10, 1925—Halcyon Lake, Pine Plains (Baker, Crosby, and Griscom).
- Sept. 10, 1922—Rhinebeck (Crosby, Frost, and Griscom).
- Oct. 18, 1915—Rhinebeck (Crosby).

The Palm Warbler is of regular occurrence in fall along the coast from Massachusetts southward, sometimes in fair numbers. It is consequently of interest to note its comparative rarity inland at this season in Dutchess County, where it is sometimes unrecorded two or three years in succession. There are only the two spring records given above.

202. *Dendroica palmarum hypochrysea* Ridgway. Yellow Palm Warbler.

Fairly common transient in spring, irregular in fall.

April 5, 1929—Rhinebeck (Crosby).

May 12, 1929—Rock City (Baker and Crosby).

May 23, 1915—Poughkeepsie (Frost).

Oct. 1, 1922—Rhinebeck (Crosby and Griscom).

Oct. 31, 1929—Wey's Crossing (Crosby).

The Yellow Palm Warbler is much less common inland than along the coast, though its numbers are particularly variable both spring and fall. In Dutchess County, Crosby would see an average of fifteen birds a season, with a low of eight. At irregular intervals there is a conspicuous flight of this species, when it is much more numerous than usual. Thus in 1916 Crosby saw 65 individuals at Rhinebeck. In fall the Yellow Palm is even more erratic than in spring. There is never so marked a flight and in the past decade it has not been recorded at all in three seasons.

203. *Seiurus aurocapillus* (Linnaeus). Oven-bird.

Very common summer resident.

April 25, 1915—Poughkeepsie (Moulton).

Sept. 28, 1920—Rhinebeck (Crosby).

Early May to September 20.

May 28, 1890—5 eggs, Stanfordville (Hyatt).

The Oven-bird cannot be overlooked in spring or early summer, but after August it requires special search to find it. As a consequence it is often unrecorded in fall, and departure dates are very meager.

204. **Seiurus noveboracensis noveboracensis** (Gmelin). Northern Water-Thrush.

A transient, fairly common in spring, rare in fall.

April 25, 1905—Stanfordville (Hyatt).

June 2, 1912—Rhinebeck (Crosby).

July 31, 1925—Rhinebeck (Crosby).

Sept. 30, 1914—Rhinebeck (Crosby).

May 4 to 27; mid-August to September 20.

Usually less than twenty Water-Thrushes will be seen in spring, often less than 10, the maximum 37 in 1916. In fall it is occasionally unrecorded, and it is exceptional to see more than two or three birds a season. It is consequently much less common in Dutchess County than along the coast near New York City, where in great flights I have seen at least 75 birds in one day.

205. **Seiurus motacilla** (Vieillot). Louisiana Water-Thrush.

Fairly common summer resident throughout.

April 8, 1914—Rhinebeck (Crosby).

Aug. 22, 1920—Rhinebeck (Crosby).

This Water-Thrush is well distributed throughout the County along the Hudson River, but does not occur in any numbers, compared to other warblers. The wild ringing melody of its song and the charm of its secluded haunts impress the bird upon one's mind to the exclusion of other "common summer resident" warblers, which are actually in infinitely greater numbers. I know of a dozen breeding localities from Rhinebeck and Rhinecliff north to the County line. Singing has greatly decreased by the end of May, and after the middle of July the species is often not seen again. It nests north to Albany, but there are so few birds north of Dutchess County, that I know of no real evidence of transients on migration in our area.

206. **Oporornis formosus** (Wilson). Kentucky Warbler.

Casual visitant in spring.

May 23, 1915—Poughkeepsie (Frost).

May 25, 1919—Poughkeepsie (Frost and Saunders).

207. *Oporornis agilis* (Wilson). Connecticut Warbler.
Apparently a very rare fall transient.

- Sept. 6, 1913—Rhinebeck (Mrs. Goodell).
- Oct. 8, 1915—Poughkeepsie (Gray).
- Sept. 9, 1927—Poughkeepsie (Frost).
- Oct. 1, 1928—Cruger's Island (Crosby).
- Sept. 20, 1929—Rhinebeck (Crosby).

Dutchess County is abundantly provided with rich wooded swamps, lush with jewel weed, and cedar grown hillsides, the two favored haunts of the Connecticut Warbler on migration in the northeast. And yet there are only the five records given above. So secretive a bird is easily overlooked, and this may in part explain the dearth of records. Nevertheless the facts are that the Connecticut Warbler is unrecorded in New York State between the central tier of counties and the coast (inland as far as Westchester County); that in New England it is much rarer inland than near the coast; and that all localities where it is reported as occasionally common are on or near the coast (Cambridge, Mass.; New Haven, Conn.; New York City region). It is not without significance that Merriam never found it in the Adirondacks, Judd and his assistants obtained no records near Albany, Bicknell did not report it from the Catskills, and Mearns never saw it in the Hudson Highlands. There is every reason to suppose, therefore, that the upper Hudson Valley is not a favored migration highway of this warbler, and that only a relatively few individuals reach the coast by this route.

208. *Oporornis philadelphia* (Wilson). Mourning Warbler.
Casual summer resident; uncommon spring, very rare fall transient.

- May 12, 1922—Poughkeepsie (Frost).
- June 8, 1917—Poughkeepsie (Frost and Moulton).
- Aug. 11, 1915—Rhinebeck (Crosby).
- Sept. 23, 1922—Rhinebeck (Crosby).
- May 22 to May 30.

Mr. Baker found a pair of Mourning Warblers on his place at Chestnut Ridge in 1931. The male was first seen on May 24, the female on May 30. Both birds were frequently seen in the same wood up to July 3, by him and by Frost, Gray and Guernsey, who searched in vain for the nest.

As a transient the Mourning Warbler is of regular occurrence in Dutchess County in spring in very small numbers. Crosby missed it at Rhinebeck in 1921 and 1926, but ordinarily he recorded 2-6 birds. I saw 5 myself between May 25 and 30, 1924, and 6 between May 17 and 27 in 1929. There are only four fall records.

209. *Geothlypis trichas brachidactyla* (Swainson). Northern Yellow-throat.

Very common summer resident.

April 14, 1922—Poughkeepsie (Walter Smalley).

April 27, 1891—1 collected, Hyde Park (Arthur Bloomfield).

Oct. 21, 1914—Rhinebeck (Crosby).

May 4 to early October.

May 27, 1894—4 eggs, Poughkeepsie (Lispenard Horton).

210. *Icteria virens virens* (Linnæus). Yellow-breasted Chat. Locally common summer resident, chiefly south and east of Poughkeepsie; formerly more common and general.

May 5, 1929—4 birds, Poughkeepsie to Millbrook (Frost and Gray).

Aug. 29, 1929—Poughkeepsie (Frost).

May 9 to August.

May 25, 1902—4 eggs, Poughkeepsie (Horton).

July 13, 1901—Eggs, Rhinebeck (Abbott and Crosby).

The Chat tends to gather into small colonies. Several pairs will inhabit a brushy hillside on the edge of a swamp, and miles of similar situations will be untenanted. It has been steadily decreasing in Dutchess County for the past fifteen years, a decrease which has affected the whole northeastern portion of its range. Prior to 1920 several pairs nested on Grasmere, at least two on Mt. Rutsen, and one along the lane to Cruger's Island.

The last pair of these birds was found at Mt. Rutsen in 1923. At the present time East Park is the northern limit of the Chat in Dutchess County, where 1-4 pairs can be found annually in a certain locality. On May 23, 1929, during a big warbler wave, R. J. Eaton and I found a Chat at Pine Plains and another at Cruger's Island. These are, I believe, the only records for the bird north of East Park since 1923.

211. *Wilsonia citrina* (Boddaert). Hooded Warbler.

Breeds commonly on Mt. Beacon; casual on migration elsewhere.

- May 6, 1923—Mt. Beacon (Frost, Gray, and Moulton).
- July 25, 1924—Mt. Beacon (Frost).
- May 27, 1897—1 collected, Hyde Park (Arthur Bloomfield).
- May 19, 1907—♂ collected, Hyde Park (Arthur Bloomfield).
- Sept. 8, 1914—Rhinebeck (Crosby).
- May 23, 1915—Poughkeepsie (Frost).
- May 4, 1924—Vassar College Campus (Frost and Moulton).
- June 8, 1925—Male on Bald Mt. (Crosby and Frost).
- May 9, 1926—Sylvan Lake (Frost, Gray, and Guernsey).
- May 19, 1929—2 ♂, New Hamburg (Frost).
- May 18, 1930—Chestnut Ridge (Frost and Gray).

At least six pairs nest in the rocky woods on Mt. Beacon, where it was first found by Mearns. Other spring records given above strongly raise the presumption that the Hooded Warbler may yet be found nesting in the hills of southeastern Dutchess County.

212. *Wilsonia pusilla pusilla* (Wilson). Wilson's Warbler.

A transient, often quite common in spring, always very uncommon in fall.

- May 4, 1919—Poughkeepsie (Saunders).
- June 4, 1917—Poughkeepsie (Frost and Moulton).
- Aug. 16, 1919—Rhinebeck (Crosby).
- Oct. 1, 1922—Rhinebeck (Crosby and Griscom).
- May 12 to 28; late August to September 20.

The average spring yields 6-10 Wilson's Warblers, but Crosby saw 22 in 1916, and I saw 36 in 1929. The bulk of the individuals pass through very rapidly from May 18-27. There is usually a late warbler wave in this period, and Wilson's will be quite common on this day. If this wave is missed the season's count will be very much less. Thus in 1929 the species was recorded between May 5 and 27, but I saw 10 on May 18 and 10 on May 19, in other words, more than half the total number of individuals on 2 days out of 22. In fall it is most unusual to see more than two or three birds.

213. *Wilsonia canadensis* (Linnæus). Canada Warbler. Common summer resident in the hills of the eastern part of the County; common transient throughout in spring, uncommon in fall.

April 29, 1928—Poughkeepsie (Frost).

May 5, 1922—Cruger's Island (Crosby).

June 7, 1892—Collected, Hyde Park (Arthur Bloomfield).

Aug. 5, 1923—Jackson's Pond (Crosby and Frost).

Oct. 6, 1915—Poughkeepsie (Gray).

May 11 to 30; August 15 to September 15.

The Canada Warbler nests rather commonly in the mountain laurel thickets on the tops of the higher hills and in cool ravines like Turkey Hollow and those near Dover Furnace. Near the Hudson it is usually common in spring, 25-50 birds being the season's average, but if there are one or two late May waves the count will go as high as 135 in 1924 and 76 in 1927. In fall 6 birds would be an exceptional year.

214. *Setophaga ruticilla* (Linnæus). American Redstart.

April 28, 1912—Poughkeepsie (Frost).

Oct. 11, 1921—Rhinebeck (Crosby).

May 5 to September 20.

May 24, 1913—4 eggs, Poughkeepsie (Frost).

The Redstart is usually quite regular in its arrival in spring, but in the cold May of 1927 a very anomalous situation existed

on the 8th, when I saw fewer Redstarts than Black-billed Cuckoos in a day's birding between Rhinebeck and Cruger's Island. Like many other birds the summer residents slip away in late July and early August, and transients from further north are not seen very often in September.

215. *Passer domesticus domesticus* (Linnæus). English Sparrow.

Formerly an abundant permanent resident; steadily decreasing since 1910, but still fairly common.

April 25, 1896—4 eggs, Poughkeepsie (Lispenard Horton).

July 26, 1915—Young in nest, Rhinebeck (Crosby).

216. *Dolichonyx oryzivorus* (Linnæus). Bobolink.

Common summer resident.

April 30, 1916—Rhinebeck (Crosby).

Oct. 2, 1927—Cruger's Island (Crosby).

May 5 to September 20.

May 18, 1900—5 eggs, Poughkeepsie (C. C. Young).

The Bobolink has slightly increased in the last 8 years in the western half of the County, where there are now more pairs in more pastures and meadows than formerly. It is almost abundant in parts of the rural eastern half. The breeding birds disappear during July and August, after which the species is rarely seen unless the wild rice marshes in the Hudson River coves are visited. Here they often linger into late September, but are easily overlooked in the huge multitudes of Starlings, Red-wings, Cowbirds and Grackles which roost nightly in the reeds.

217. *Sturnella magna magna* (Linnæus). Eastern Meadowlark.

Common summer resident, recorded almost yearly in winter near Poughkeepsie.

Feb. 23, 1909—Rhinebeck (Crosby).

Nov. 23, 1927—Rhinebeck (Crosby).

March 15 to early November.

May 22, 1897—5 eggs, Poughkeepsie (Lispenard Horton).

July 28, 1901—4 eggs, Poughkeepsie (Horton).

Crosby has obtained straggling records for Meadowlarks up to Christmas at Rhinebeck, but no case of an individual remaining for the entire winter. Near Poughkeepsie, however, this happens with some regularity. The year 1909 had one of the earliest springs on record, and the date given above is a genuine arrival date. Ordinarily severe mid-winter conditions prevail at this time.

218. **Agelaius phoeniceus phoeniceus** (Linnæus). Eastern Red-wing.

Very common summer resident, very rare in winter.

Feb. 22, 1909—Rhinebeck (Crosby), genuine arrival.

March 10 to late November, stragglers to late December.

May 4, 1921—4 eggs, Brickyard Swamp (Frost).

At Rhinebeck one bird remained until Jan. 22, 1921. On Jan. 4, 1925, Frost found a pair at Brickyard Swamp, Poughkeepsie.

219. **Icterus spurius** (Linnæus). Orchard Oriole.

Uncommon and irregular summer resident.

May 5, 1880—Fishkill (Mearns).

Sept. 10, 1916—Cruger's Island (Frost).

May 10 to July.

June 5, 1894—4 eggs, Poughkeepsie (C. C. Young).

A few pairs of Orchard Orioles nest annually southeast of Poughkeepsie along Wappinger's Creek, and in the Harlem Valley from Pawling northward. Every few years the species is slightly more numerous in this area, and is seen at least on migration further northward. At still longer intervals there is almost what might be called a flight. Such a year was 1927, and around New York City that year an astonishing number were seen on migration. In Dutchess County pairs nested at Rock City and Rhinebeck, where the species also bred in 1913 and 1916. The Orchard Oriole is, therefore, the only member of a more austral group of species in this County, which is commoner in the eastern part of the County than in the vicinity of the Hudson River.

220. *Icterus galbula* (Linnæus). Baltimore Oriole.
Common summer resident.

April 29, 1925—Poughkeepsie (Frost).

Oct. 4, 1920—Rhinebeck (Crosby).

May 4 to September 1.

Casual Nov. 26 to Dec. 18, 1916, Poughkeepsie (Gray).

May 31, 1914—Nest and eggs, Rhinebeck (Crosby).

There are only three September records for the County. The Oriole is notably regular in its spring arrival, and is remarkable for arriving on the same day over an enormous area, sometimes almost the whole of New York State on May 4-6.

221. *Euphagus carolinus* (Müller). Rusty Blackbird.
Common transient, casual in winter.

March 7, 1930—Cruger's Island (Crosby).

May 16, 1914—Rhinebeck (Crosby).

Sept. 20, 1921—Flock of 18, Cruger's Island (Crosby).

Nov. 22, 1930—Cruger's Island (Crosby).

Dec. 25, 1924—Cruger's Island (Crosby).

Jan. 16, 1921—Poughkeepsie (Frost).

The Rusty Blackbird is a common bird in Dutchess County, particularly in fall, when it is less conspicuous in favorable places like Cruger's Island, because of the prodigious number of Starlings, Red-wings and Grackles also present. It lingers latest in fall along the Hudson River and per contra latest in spring in some wooded swamp in the interior.

222. *Quiscalus quiscula quiscula* (Linnæus). Purple Grackle.
Locally common summer resident.

Feb. 22, 1925—Poughkeepsie (Frost) and Salt Point (Kiemle).

Nov. 7, 1926—2 birds positively identified among Bronzed Grackles at Grasmere (Crosby and Griscom).

May 11, 1893—4 eggs, Poughkeepsie (C. C. Young).

Dutchess County is in the zone of rapid intergradation between the Bronzed and Purple Grackle. If our conception of

the former is restricted to a bird in which the whole body is uniform bronze, then the great majority of the *breeding* Grackles in this County belong to phase 3 of Chapman's unexcelled analysis, while a liberal number of birds near the Hudson River might be classed as phase 2. Their arrival in spring is always obvious, but their final departure in fall is undetermined, due to the hordes of transient Bronzed Grackles. The breeding Purple Grackles often leave the vicinity of their nesting colonies early in September, and after this the subspecific determination of the roving fall flocks requires good luck and special effort to approach sufficiently close. There is not the slightest evidence, however, that the Purple Grackle remains later than early November, and all positive determinations and specimens collected after this date have been Bronzed Grackles.

223. *Quiscalus quiscula aeneus* Ridgway. Bronzed Grackle. Abundant transient, occasional in winter; possibly breeding in the extreme northeast, from Pine Plains and Millerton to Mt. Riga.

March 23, 1891—Collected, Hyde Park (Arthur Bloomfield).

May 1, 1927—Small flock, Cruger's Island (Griscom).

Oct. 2, 1921—Enormous flock, Cruger's Island (Crosby).

The Purple Grackle being at the extreme northern limit of its range in Dutchess County, it follows that transient birds must almost certainly be Bronzed, and all such flocks carefully examined have always proved to be Bronzed Grackles. The extreme dates are less easy to determine, however. The Purple Grackle soon after its arrival repairs to the vicinity of its nesting colonies, and after this large flocks wandering over the country far from any such nesting colony may be presumed to be Bronzed. Such flocks have been noted as early as March 16 in a year when the Purple came much earlier. The Bronzed Grackle is most abundant from late March to April 20. In the fall its exact arrival is again unknown, but it is present in numbers by early October. The main flight is over by early November, but flocks linger until the end of the month. After this

stragglers or even small flocks are occasionally noted up to Christmas, and there are numerous winter records. A flock of 24 spent the winter of 1920-21 at Rhinebeck. In all cases winter specimens collected have proved to be Bronzed.

In May, 1924, Crosby identified the breeding Grackles at Pine Plains as Bronzed. I can confirm this, as on several occasions in May and June since 1924 he and I have obtained excellent observations of adult males on the ground at close range in full sunlight, and they seemed to me to be Bronzed. Nevertheless it would be desirable to collect a specimen, though on geographic grounds there is no inherent improbability in the correctness of this identification.

224. **Molothrus ater ater** (Boddaert). Eastern Cowbird.
Common summer resident, rare in winter.

March 12, 1921—Red Hook (Crosby).

Nov. 22, 1930—Still common, Cruger's Island (Crosby).

Late March to early November.

April 27, 1913—3 eggs in Phoebe's nest, Poughkeepsie (Frost).

In fall Cowbirds occur in great numbers at Cruger's Island, but are often missed elsewhere, unless some wandering flock is encountered by chance. There are at least seven winter records in the last twenty-five years. It is curious that there are so many for a bird which arrives much later in spring than the Red-wing, which is casual in winter.

225. **Piranga erythromelas** Vieillot. Scarlet Tanager.
Common summer resident, often abundant on migration.

May 3, 1916—Poughkeepsie (Freeman).

Oct. 3, 1920—Rhinebeck (Crosby).

May 9 to late September.

June 7, 1922—4 eggs, Hammersley Lake (Crosby and Frost).

Aug. 14, 1901—Young in nest, Poughkeepsie (Horton).

The Tanager's arrival on its breeding grounds is often a protracted affair, a few individuals sometimes showing up a week

or ten days ahead of the main bulk of the resident individuals. The transients pass through still later, often in marked flights. Thus on May 23, 1929, R. J. Eaton and I saw at least 30 near Rhinebeck, and on May 26, 1924 Crosby and I saw over 50, both days, when big waves of birds poured through the County.

226. *Richmondia cardinalis cardinalis* (Linnæus). Eastern Cardinal.

Casual visitant and summer resident.

1913—Pair bred at Poughkeepsie, nest and eggs June 8, fully fledged young July 6 (Frost).

July 10, 1922—Adult male, Hyde Park (Franklin D. Roosevelt).

Dec. 8, 1929 to March 27, 1930—A male at feeding stations in Rhinebeck village; a female also on Jan. 8.

227. *Hedymeles ludovicianus* (Linnæus). Rose-breasted Grosbeak.

Fairly common summer resident, at irregular intervals much commoner for one season only.

May 3, 1916—Rhinebeck (Crosby).

Oct. 16, 1921—Cruger's Island (Crosby and Frost).

May 7 to late September.

June 1, 1915—3 eggs, Poughkeepsie (Frost).

The Rose-breasted Grosbeak is a common spring transient in the Hudson River valley, but is usually quite uncommon there in summer, preferring the hills of the eastern section. At irregular intervals numbers remain to breed, when the species is proportionately more numerous inland. It is curious but noteworthy how seldom this species is observed in fall.

228. *Passerina cyanea* (Linnæus). Indigo Bunting.

Common summer resident, but less so than formerly.

April 28, 1894—Poughkeepsie (Lispenard Horton).

May 5, 1929—Mt. Rutsen (Crosby and Griscom).

Oct. 5, 1924—Cruger's Island (Crosby and Griscom).

May 11 to September 20.

June 1, 1902—3 eggs, Poughkeepsie (Horton).

Aug. 1, 1915—3 eggs, Rhinebeck (Crosby).

In occasional years the Indigo Bunting straggles in before May, but no general arrival of the species takes place until much later. In 1929, for instance, it was not seen again until the 12th and did not become common until the 22nd.

229. *Hesperiphona vespertina vespertina* (W. Cooper). Eastern Evening Grosbeak.

Formerly unknown, in recent years an irregular winter visitant.

Feb. 24, 1911—2 birds, 1 collected, Hyde Park (Arthur Bloomfield).

Feb. 20 to May 5, 1916—Small flock, Poughkeepsie (Frost, Moulton, etc.).

March, 1916—Flock at Rhinebeck.

April 15, 1917—Several, Poughkeepsie (Frost).

Dec. 25, 1919—Rhinebeck (Crosby).

Feb. 1, to May 24, 1920—Flock of 15, Rhinebeck, and other flocks at Poughkeepsie.

Dec. 4, 1921—1 ♂ adult at Poughkeepsie (Frost).

Nov. 1, 1925—1 ♀ collected, Barrytown (Griscom).

March 25, 1926—1 at Cruger's Island (Crosby).

Nov. 10, 1929—1 at Millbrook (Baker).

Jan. 5, 1930—1 ♂, 2 ♀, Cruger's Island (Crosby and Frost).

April 21, 1930—1 ♂, 1 ♀, Rhinebeck (Crosby).

230. *Carpodacus purpureus purpureus* (Gmelin). Eastern Purple Finch.

Abundant transient; almost always wintering and often common; probably a very rare summer resident.

No definite proof of the nesting of the Purple Finch has ever been obtained in Dutchess County, but there is strong presumptive evidence that it may do so in the interior. Miss Mary Hyatt found it in June at Stanfordville in 1887, 1888, 1889, and 1891. Mr. Gray has noted it in June near Wappinger's Falls, Mr. Spingarn at Amenia, and Mr. Baker reports a singing immature male June 30 and July 1, 1932 at Chestnut Ridge, and another at Millbrook July 16. Crosby saw one at Rhinebeck July 21, 1921.

In spring the main migration is from April 20 to May 20, stragglers remaining until June 3. The fall migration is chiefly from Sept. 20 to November, but stragglers are occasionally noted any time after August 11. It will be apparent, therefore, that the Purple Finch must nest very near the County limits, or else that immature, non-breeding birds wander around in late summer and early fall. In abundance the species is very erratic from year to year. It is often positively uncommon in spring, and was not recorded at all in the fall of 1925.

231. *Pinicola enucleator leucura* (Müller). Canadian Pine Grosbeak.

Rare and irregular winter visitant; common to abundant at very long intervals.

Jan. 16 to March 2, 1890—Hyde Park (Arthur Bloomfield).

Abundant from Jan. 27 to April 4, 1896—Hyde Park (Franklin D. Roosevelt).

Jan. 1, 1900—Hyde Park (Arthur Bloomfield).

March 27, 1912—Rhinebeck (Crosby).

Nov. 25, 1918—Poughkeepsie (Frost and Moulton).

December to March 14, 1919—Rhinebeck (Crosby).

Jan. 28 (3) and Feb. 4 (11), 1920—Rhinebeck (Crosby).

Nov. 3, 1921, to Jan. 20, 1922—Rhinebeck, several records of single birds and one small flock (Crosby).

Nov. 10, 1921—Flock of 10, Poughkeepsie.

Nov. 2, 1923—1 at Barrytown (Crosby and Griscom).

Dec. 1, 1923—6 at Rhinebeck (Crosby).

Jan. 22, 1927—2 at Rhinebeck (Crosby).

Feb. 4, 1928—1 ♀, Rhinebeck (Crosby).

1929-1930—Common throughout the County from Nov. 10 to Feb. 18.

This table shows graphically how frequently the Pine Grosbeak straggles to Dutchess County in years when there are no marked flights, as compared with the New York City region.

232. *Acanthis hornemanni exilipes* (Coues). Hoary Redpoll. Casual winter visitant.

March 8, 1912—Rhinebeck (Crosby, Auk, 1923, p. 101).

233. *Acanthis linaria linaria* (Linnæus). Common Redpoll.
Irregular winter visitant, sometimes common to abundant.

Nov. 9, 1914—Rhinebeck (Crosby).

April 18, 1926—Cruger's Island (Crosby and Griscom).

For a period of years from 1900-1922, the Redpoll was common in southern New England and New York every three or four years. There has been no marked flight in this whole area the past ten years, and the species was unrecorded in Dutchess County in 1924 and 1925.

234. *Spinus pinus pinus* (Wilson). Northern Pine Siskin.
Irregular transient and winter visitant; sometimes common in April and November; rarely recorded in spring, unless present the preceding fall or winter; never wintering in any numbers.

Sept. 25, 1925—2 at Rhinebeck (Crosby).

May 30, 1917—Poughkeepsie (Frost and Moulton).

October 15 to December, (winter); late March to May 20.

235. *Spinus tristis tristis* (Linnæus). Eastern Goldfinch.
A resident, usually common, always abundant on migration, sometimes very scarce in winter.

July 18, 1899—5 eggs, Poughkeepsie (Lispenard Horton).

Sept. 16, 1901—5 eggs, Rhinebeck (C. G. Abbott).

236. *Loxia curvirostra pusilla* Gloger. Red Crossbill.
Highly erratic winter visitant or transient, not common for many years.

October, 1877—Fishkill (Stearns).

May 17, 1916—Rhinebeck (Crosby).

The Red Crossbill has been a rarer bird in Dutchess County for a generation than the Pine and Evening Grosbeaks. Since 1916 there have been a few January and February records in 3 different years, and spring records in March or May in three others.

237. *Loxia leucoptera* Gmelin. White-winged Crossbill.
Rare and irregular winter visitant.

Dec. 1, 1916—Rhinebeck (Crosby).

Feb. 15, 1923—Poughkeepsie (Gray).

The last real flights of the White-winged Crossbill were in 1900 and 1907, years in which there were no observers or records kept in Dutchess County. Since 1916, this Crossbill has been recorded in only five years, and only in two years twice, single records the other three.

238. *Pipilo erythrophthalmus erythrophthalmus* (Linnæus).
Red-eyed Towhee.

Common summer resident.

April 16, 1900—Stanfordville (Mary Hyatt).

Nov. 3, 1918—Poughkeepsie (Frost).

Dec. 25, 1923—1 ♀, Rhinebeck (Crosby).

April 25 to October 15.

May 15, 1927—3 eggs, Mt. Rutsen (R. H. Howland).

July 17, 1893—3 eggs, Poughkeepsie (Horton).

239. *Passerculus sandwichensis savanna* (Wilson). Eastern
Savannah Sparrow.

Local summer resident, chiefly eastward; common transient throughout.

March 20, 1929—Lafayetteville (Crosby).

Nov. 1, 1914—Rhinebeck (Crosby).

April 10 to October 15.

The Savannah Sparrow breeds regularly at Rock City, Lafayetteville, Pine Plains, and locally throughout the Harlem Valley from Mt. Riga and Millerton to the meadows south of Pawling near the Putnam County line. In some places it is common, as at Chestnut Ridge (Baker). It will doubtless be found elsewhere in extensive meadows or the higher uplands. In 1912 a male sang regularly in a meadow near Rhinebeck. In the summer of 1932 Joseph J. Hickey found 20 pairs of Savan-

nah Sparrows in some fields near Tivoli. Throughout the County it is a common transient, lingering to May 20, and arriving southbound about the middle of September.

240. *Ammodramus savannarum australis* Maynard. Eastern Grasshopper Sparrow.

Formerly a common summer resident, now less common, and largely gone from the Hudson River valley north of Poughkeepsie.

April 19, 1914—Poughkeepsie (Frost).

Oct. 27, 1915—Near Poughkeepsie (Gray).

Early May to October.

The little Grasshopper Sparrow used to nest commonly near Rhinebeck, and prior to 1916, two pairs bred on Grasmere. Since then, however, only once has a pair nested, in 1927, back of the village to the east. In 1932, however, Hickey found 8-12 pairs near Tivoli. In the hilly country in the interior it is scattered throughout the more sterile and barren pastures. The bird is almost never recorded after the singing period is over.

241. *Passerherbulus henslowi susurrans* Brewster. Eastern Henslow's Sparrow.

A summer resident, scattered throughout the eastern part of the County, rare and erratic near the Hudson River. .

April 27, 1910—Rhinebeck (Crosby).

Sept. 30, 1914—Rhinebeck (Crosby).

Early May to October.

The Henslow's Sparrow breeds commonly at Chestnut Ridge (Baker), locally throughout the Harlem Valley uplands from Pawling to Millerton, on the high uplands between Millerton and Pine Plains, at Amenia and near Lafayetteville. It is so elusive that it is overlooked, unless one happens to stop the car at likely spots and listen for the song, so I do not doubt that it occurs elsewhere in this general area. Near the Hudson River, however, it is rare and irregular. It bred on Grasmere at Rhine-

beck in 1909, 1910 and 1912; in a meadow near Rhinebeck in 1924; in 1929 a colony appeared in the Astor flats just south of Red Hook, and in 1930 this colony had doubled. In 1932 Mr. Joseph J. Hickey found 4 pairs in a field near Tivoli.

242. *Poœcetes gramineus gramineus* (Gmelin). Eastern Vesper Sparrow.

Very common summer resident, casual in winter.

March 20, 1929—Rock City (Crosby).

Nov. 4, 1923—Hyde Park (Crosby and Griscom).

April 1 to October 20.

May 16, 1899—4 eggs, Poughkeepsie (Lispenard Horton).

The Vesper Sparrow is distinctly less common near the Hudson River than in the uplands in the interior of the County, where it positively swarms. There are five winter records between late December and late February.

243. *Junco hyemalis hyemalis* (Linnæus). Slate-colored Junco. Abundant transient, common winter resident, casual summer resident.

Sept. 10, 1916—Rhinebeck (Crosby).

May 16, 1913—Rhinebeck (Crosby).

June 15, 1924—Bald Mt., nest and four eggs (Crosby, Frost, Flewelling, and Griscom).

Late September to May.

The spring flight begins as early as March 12, and the fall flight is over by early November. An interesting albinistic male came to Crosby's trap, and was collected Jan. 27, 1930. The specimen, now in the Vassar Brothers Institute at Poughkeepsie, was kindly forwarded to me for examination. It proves to be an adult male with an extra pair of tail feathers, white, two well defined wing bars, and a few white feathers on the throat. It is undoubtedly such specimens that are the basis of the recent sight records in the northeast of the White-winged Junco, a much larger and paler grey species in which the head and chest are not darker grey than the upperparts.

244. *Spizella arborea arborea* (Wilson). Eastern Tree Sparrow.
Common winter visitant.

Oct. 20, 1929—Poughkeepsie (Frost).

Oct. 20, 1929—Pine Plains (Frost).

May 13, 1923—Jackson's Pond (Frost).

Late October to mid-April.

245. *Spizella passerina passerina* (Bechstein). Eastern Chipping Sparrow.

Abundant summer resident.

March 29, 1921—Rhinebeck (Crosby).

Nov. 18, 1925—Rhinebeck (Mrs. Goodell).

April 10 to late October.

May 8, 1898—4 eggs, Poughkeepsie (Lispenard Horton).

Sept. 3, 1901—Young in nest, Rhinebeck (C. G. Abbott).

246. *Spizella pusilla pusilla* (Wilson). Eastern Field Sparrow.
Common summer resident, distinctly decreasing northward.

March 17, 1912—Poughkeepsie (Frost).

Nov. 2, 1915—Rhinebeck (Crosby).

Early April to October 20.

May 19, 1909—4 eggs, Rhinebeck (Crosby).

July 19, 1899—3 eggs, Poughkeepsie (Horton).

247. *Zonotrichia leucophrys leucophrys* (Forster). White-crowned Sparrow.

Fairly common transient, casual in winter.

April 21, 1912—Poughkeepsie (Frost).

May 1, 1925—Salt Point (Kiemle).

May 29, 1916—Rhinebeck (Crosby).

June 11, 1913—Rhinebeck (Crosby).

Sept. 27, 1919—Rhinebeck (Crosby).

Oct. 27, 1929—Rhinebeck (Crosby).

Winter of 1916-1917—One at a feeding station, Poughkeepsie (Saunders).

May 6 to 23; October 10 to 25.

The White-crowned Sparrow is a much commoner bird in the upper Hudson Valley than near the coast, and is seen annually

in spring, often in some numbers. It probably comes in from the southwest, as it is distinctly more numerous north of Poughkeepsie than south of it. In any one season it tends to pass through very rapidly, the great majority on the crest of the mid-May wave. If this wave is missed, or it is broken up by a long cold spell, very few are noted. In fall fewer birds are reported, largely due to the preponderance of the immature birds, lost in the hordes of other sparrows.

248. *Zonotrichia albicollis* (Gmelin). White-throated Sparrow. Abundant transient, wintering casually at feeding stations; casual in summer, no breeding evidence.

April 2, 1922—Rhinebeck (Crosby and Griscom).

May 29, 1923—Rhinebeck (Crosby).

1908—1 male all summer at Rhinebeck (Crosby).

July 24 and 27, 1921—Rhinebeck (Crosby).

Aug. 23, 1923—Rhinebeck (Crosby).

Sept. 9, 1921—Rhinebeck (Crosby).

Nov. 14, 1920—Cruger's Island (Crosby).

Dec. 23, 1916—Poughkeepsie (Gray).

April 15 to May 25; September 18 to November 1.

In spring the White-throat does not become common until late April or abundant until the first May wave. The peak of abundance in fall is from late September to Oct. 15.

249. *Passerella iliaca iliaca* (Merrem). Eastern Fox Sparrow. Common transient, abundant at long and irregular intervals.

Feb. 24, 1921—Rhinebeck (Crosby).

March 2, 1929—Poughkeepsie (Gray).

May 1, 1922—Cruger's Island (Crosby).

Oct. 11, 1925—Pine Plains (Crosby, Frost, and Griscom).

Dec. 1, 1930—Rhinebeck (Miss Sabine).

March 10 to late April; October 20 to November 20.

250. *Melospiza lincolni lincolni* (Audubon). Lincoln's Sparrow. Uncommon spring, rare fall transient.

April 30, 1923—Poughkeepsie (Frost and Guernsey).

May 5, 1924—Cruger's Island (Crosby).

May 28, 1928—Rhinebeck (Crosby).

Sept. 21, 1924—Rhinebeck (Crosby and Frost).

Nov. 1, 1914—Rhinebeck (Crosby).

May 10 to 25; September 21 to October 15.

Like the White-crowned Sparrow, the Lincoln's is commonest in the Hudson Valley north of Poughkeepsie, and is a rare bird inland. It is easily overlooked, but if special attention is paid to it, 6-12 birds a season can be found near Rhinebeck. Mt. Rutsen and the lane to Cruger's Island are the best spots. There are few fall records, but the species is largely overlooked.

251. *Melospiza georgiana* (Latham). Swamp Sparrow.

Locally common to abundant summer resident in marshes and swamps; common throughout on migration; rare in winter.

March 27, 1925—Cruger's Island (Crosby).

Nov. 3, 1918—Poughkeepsie (Frost).

April 5-15 to late October; five records for wintering birds.

May 31, 1903—5 eggs, Poughkeepsie (Lispnard Horton).

A few Swamp Sparrows arrive early along the Hudson River, but the breeding birds are not common until April 20, and do not appear at inland swamps much before May. Transients pass through from May 10 to 25, occurring commonly in the uplands. This migration is even more marked in fall, when the bird sometimes gathers in good-sized flocks in some favorable weedy pasture or garden.

252. *Melospiza melodia melodia* (Wilson). Eastern Song Sparrow.

A permanent resident, abundant on migration, very common in summer, a few always wintering near the Hudson; the main migration the last half of March and October.

May 2, 1886—5 eggs, Stanfordville (Hyatt).

Sept. 3, 1916—Young in nest, Rhinebeck (Crosby).

253. *Calcarius lapponicus lapponicus* (Linnæus). Lapland Longspur.

Very rare visitant in fall and winter.

March 4, 1892—1 collected among Snowflakes after a snow storm, Hyde Park (Arthur Bloomfield).

March 25, 1912—Adult male after a snow storm at Rhinebeck (Crosby).

Nov. 7, 1926—1 with Horned Larks, Pine Plains (Crosby and Griscom).

Nov. 12, 1929—1 flying south, Barrytown (Crosby).

254. *Plectrophenax nivalis nivalis* (Linnæus). Eastern Snow Bunting.

Regular transient in fall in very small numbers; irregular winter visitant; only once in spring.

March 30, 1926—3 at Cruger's Island (Crosby).

Oct. 30, 1926—1, Barrytown (Crosby).

Dec. 8, 1923—Flock of 11, Barrytown (Crosby and Pangburn).

There are numerous mid-winter records of Snowflakes, chiefly after heavy snow storms, and they are sometimes abundant in large flocks for a few days. Such flights have occurred between Jan. 13 and March 13. Only in the winter of 1928-29 did Snowflakes arrive in fall and remain continuously through Feb. 16.

Chapter X

Bibliography¹

- 1831 AUDUBON, JOHN JAMES
 "Ornithological Biography"
 See next item below.
- 1843 "The Birds of America," Vol. 6
 Page 255—Domesticated flock of Gadwall seen in Dutchess
 County in 1812, raised from a captive pair.
- 1844 GIRAUD, J. P., JR.
 "The Birds of Long Island"
 Page 242—Schinz's (White-rumped) Sandpiper near Pough-
 keepsie.
- DE KAY, JAMES E.
 "Natural History of New York." Part I. Zoology of New-York,
 or the New-York Fauna; Part II. Birds
 Page 294—White Pelican formerly numerous on the Hudson
 River.
- 1878 MEARNS, EDGAR A.
 Bulletin of the Nuttall Ornithological Club, Vol. 3
 Page 146—Red-throated Diver (Loon) collected Nov. 14, 1876,
 at Low Point.
 Bulletin of the Essex Institute, Vol. 10
 Page 166—A List of the Birds of the Hudson Highlands, with
 Annotations. (Serial installments following below.) Includes
 Dutchess County in field of research.
- COUES, ELLIOTT
 "Birds of the Colorado Valley"; Bibliographical Appendix
 Page 743—Includes Mearns' record of Red-throated Loon.
- 1879 MEARNS, EDGAR A.
 Bulletin of the Nuttall Ornithological Club, Vol. 4
 Pages 33-34—Winter Wren winters as far north as Rhinebeck.
 Yellow-rumped (Myrtle) Warbler numerous at Rhinebeck,
 March 18, 1878. Meadowlark wintering at Fishkill, 1874-1875.
 Sharp-shinned Hawk observed in winter from Rhinebeck to
 Riverdale.
 Bulletin of the Essex Institute, Vol. 11
 Page 50—Nashville Warbler's nest from Poughkeepsie.
 Page 166—Yellow-breasted Chat from Fishkill Landing
 (Beacon).
 Page 167—Hooded Warbler from Fishkill Mts. and vicinity.
 Page 191—White-bellied (Tree) Swallow's spring arrival at
 Fishkill.
 Page 193—Purple Martin colony at Poughkeepsie.

¹By Maunsell S. Crosby through 1925; after 1925 by Ludlow Griscom.

- 1880 MEARNs, EDGAR A.
 Bulletin of the Essex Institute, Vol. 12
 Page 15—Snow Bunting near Fishkill Landing (Beacon).
 Page 18—Albino Song Sparrow taken at Rhinebeck.
 Page 24—Orchard Oriole arriving at Fishkill May 5.
 Page 24—Purple Grackle breeding at Fishkill. Arrived there
 Feb. 29, 1877.
 Page 113—Phoebe arriving at Fishkill, Mar. 26.
- STEARNS, WINFRID ALDEN
 Bulletin of the Nuttall Ornithological Club, Vol. 5
 Page 242—Capture of second specimen of Red-throated Loon.
 "List of Birds in Vicinity of Fishkill-on-Hudson, N. Y.," 16 pages.
 Gives 133 species as having been seen near Fishkill by the
 author during a ten months' stay, or by Peter de Nottbeck
 or John Lynch, or as being in their collections and having
 been taken in the vicinity.
- A[LLEN], J. A.
 Bulletin of the Nuttall Ornithological Club, Vol. 5
 Page 233—Review of Stearns' List of the Birds of Fishkill.
- 1881 MEARNs, EDGAR A.
 Bulletin of the Essex Institute, Vol. 13
 Page 79—Black-crowned Night Heron heronry at Low Point.
 Page 81—Quotes Stearns (1880)—Florida Gallinule at Fishkill.
 Pages 81-82—Whistling Swan recorded by Dr. A. K. Fisher
 from Hudson River near Newburgh.
 Page 82—Snow Geese seen on the Hudson River off Cornwall.
 Page 82—Quotes Stearns (1880) for occurrence of Brant.
 Page 83—Redheads shot at Cornwall (opposite Dutchess Junction),
 Oct. 23, 1877.
 Page 86—Laughing Gull shot on the Hudson, at Cornwall.
 Page 88—Refers to capture of two Red-throated Loons.
- 1890 The Auk, Vol. 7, No. 1
 Page 55—Double-crested Cormorant taken at Cornwall (opposite
 Dutchess Junction), Oct. 10, 1883. "Others seen on
 the Upper Hudson, Nov. 4, 1889."
- HYATT, MARY
 The Observer, Vol. 1, No. 12
 Page 1—The Yellow Warbler.
- 1891 The Observer, Vol. 2, No. 6
 Page 5—The Record of a Day in June.—June 15th at Stan-
 fordville, N. Y., 30 species noted singing.
- 1894 The Observer, Vol. 5, No. 11
 Page 327—Some of Our Feathered Friends.—At Stanfordville,
 N. Y., Mourning, Black and White, Yellow, Oven-bird, Mary-
 land (Northern) Yellow-throat, Magnolia, Parula, Red-
 start, Blackburnian, Black-throated Green, Chestnut-sided
 Warblers, Chat, Cuckoo, Chewink, Catbird, Veery.
 Science, Vol. 23
 Page 58—Familiarity of Certain Wood Birds.—Woodpecker,
 Redstart, Wood Thrush, Crested Flycatcher, Oven-bird.

- 1896 FURNESS, CAROLINE E.
The Auk, Vol. 13
Page 175—The Pine Grosbeak at Poughkeepsie, N. Y.—Numerous during the winter of 1895-6. Red-breasted Nuthatch also present.
- 1902 ABBOTT, CLINTON G.
Bird-Lore, Vol. 4
Page 96—Notes on the Golden-winged Warbler at Rhinebeck.
Page 147—Photographs of eggs and young of Red-wing.
- CROSBY, MAUNSELL S.
Bird-Lore, Vol. 4
Pages 26-27—Christmas Census, 1901. 11 species.
- ABBOTT, CLINTON G., AND CROSBY, MAUNSELL S.
Wilson Bulletin, Vol. 11
Pages 77-80—July Census-Horizon.—59 species recorded on 150 acres in 3 hours.
- 1905 CROSBY, MAUNSELL S.
Bird-Lore, Vol. 7
Pages 16, 170, 200, 206—Photographs of House Wren, Indigo Bunting, Kingbird, and Bobwhite at Rhinebeck.
- 1907 ABBOTT, CLINTON G.
Bird-Lore, Vol. 9
Page 95—National Association of Audubon Societies Leaflet No. 25. Photograph of Red-winged Blackbird's eggs from Bird-Lore, Vol. 4, page 147.
- 1909 CROSBY, MAUNSELL S.
Bird-Lore, Vol. 11
Pages 22-23—Christmas Census, 1908.—13 species plus 5.
Page 85—Wintering Ruby-crowned Kinglet and Cowbird.
- ABBOTT, CLINTON G.
Bird-Lore, Vol. 11
Pages 149-153—A Cowbird's Nursery.—The story of a Chestnut-sided Warbler nesting at Rhinebeck, 1900.
- HORTON, LISPENARD S.
Bird-Lore, Vol. 11
Page 155—Photograph of Wood Pewee from Bird-Lore, Vol. 6, page 129.
- CROSBY, MAUNSELL S.
Rhinebeck Gazette, October 23
Dutchess County Birds.—Enumerates 122 species seen during the year.
- 1910 EATON, ELON HOWARD
"Birds of New York." N. Y. State Museum Memoir 12, Part 1
County schedules of occurrence by Lispenard S. Horton and Mary Hyatt, distributional maps and references to Dutchess County in the text under different species.
- 1911 CROSBY, MAUNSELL S.
Bird-Lore, Vol. 13
Page 27—Christmas Census, 1910.—19 species plus 2. Pine Grosbeak should be Evening Grosbeak.

- 1912 CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 14
 Page 26—Christmas Census, 1911.—14 species plus 1.
 Page 87—The Barred Owl at Rhinebeck, N. Y.
- CRANDALL, LEE S.
 Zoological Society Bulletin, Vol. 16, No. 51
 Page 864—The Tragedy of the Grebes (Editorial.—13 Holboell's Grebes received between February 11 and 28, 1912, including shipment (2) from Rhinebeck.
- 1913 Bird-Lore, Vol. 15
 Page 293—Notes on a Pair of Holboell's Grebes.
- 1914 Chatham (N. Y.) Courier, Dec. 10 (1913), Jan. , Feb. 18, Mar. 18, Apr. 15, May 20, June 11, July 17, 1914
 Articles based on data obtained in Dutchess County.
- GOODELL, JAMES F., AND CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 16
 Page 34—Christmas Census, 1913.—20 species.
- CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 16
 Page 448—Occurrence of Acadian Chickadee in Hudson Valley.
- EATON, ELON HOWARD
 "Birds of New York." N. Y. State Museum Memoir 12, Part 2.
 References to Dutchess County in the text under different species and photographs by Lispernard S. Horton.
- FROST, ALLEN
 Poughkeepsie Eagle, April 10
 Campaign Against the English Sparrow.
- 1915 CROSBY, MAUNSELL S.
 Rhinebeck Gazette
 Series of Articles later reprinted and referred to below under the title "Rhinebeck Birds and Seasons."
- RHINEBECK BIRD CLUB
 Bird-Lore, Vol. 17
 Page 30—Christmas Ccnsus, 1914.—19 species.
- CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 17
 Page 130—The Spring Migration of 1914 at Rhinebeck, Dutchess County, N. Y.
 Page 208—Note on Red-headed Woodpecker at Rhinebeck, N. Y. Wintering in 1914-1915.
 Abstract of Proceedings of the Linnæan Society of New York, Nos. 26-27
 Page 40—Red-headed Woodpecker wintering at Rhinebeck.
- FORBUSH, EDWARD HOWE
 The Starling. Massachusetts State Board of Agriculture, Circular No. 45
 First recorded at Rhinebeck in 1909.
- 1916 GOODELL, MRS. JAMES F., DOWS, TRACY, AND CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 18
 Pages 24-25—Christmas Census, 1915.—18 species.

- 1916 OLDYS, HENRY
 The Auk, Vol. 33
 Pages 17-21—Rhythmical Singing of Veeries. First noticed in a bird at Rhinebeck, May 19, 1915.
- CROSBY, MAUNSELL S.
 Abstract of Proceedings of the Linnæan Society of New York, Nos. 28-29
 Page 32—Brown-capped Chickadee at Rhinebeck.
 Rhinebeck Gazette
 Jan. 8, Feb. 12, Mar. 11, Apr. 8 and 29—Birds of the month.
 Sept. 23. A Rhinebeck Nesting Census.
 "Rhinebeck Birds and Seasons," 62 pages
 Articles published in the Rhinebeck Gazette, Oct. 3, 1914, to Sept. 25, 1915.
 Rhinebeck Bird Club Folder
 The Spring Migration of Birds in Dutchess County, N. Y.—153 species arriving, 96 departing.
- The Auk, Vol. 33
 Pages 436-7—Warbler Notes from Rhinebeck, N. Y.—Blue-winged, Tennessee, Cape May, Bay-breasted, Blackburnian, and Wilson's Warblers.
- COOKE, WELLS W.
 U. S. Department of Agriculture Bulletin No. 396, Oct. 23. Second Annual Report of Bird Counts in the United States.
 Page 13—Section of 210 acres at Rhinebeck had native bird population of 366 pairs of 54 species in 1915.
- GRAY, GEORGE W.
 Bird-Lore, Vol. 18
 Page 107—Evening Grosbeaks, Poughkeepsie, Feb. 17-20, 1916.
 Page 182—Letter almost identical with the above.
 The New York Tribune, Dec., 1916.
 More Testimony Against Wrens.
- 1917 Bird-Lore, Vol. 19
 Page 19—Christmas Census near Poughkeepsie, Dec. 23, 1916.—24 species, including White-winged Crossbill, White-throated Sparrow, Brown-capped Chickadee, Hermit Thrush.
- CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 19
 Page 20—Christmas Census, 1916.—21 species.
 Page 309—Photograph of Brown-capped Chickadee.
 The Auk, Vol. 34
 Page 91—Acadian Chickadee at Rhinebeck, N. Y.
 Rhinebeck Gazette, June 16
 Notes on Spring Bird Migration.—Very late in 1917.
 Rhinebeck Bird Club Folder
 The Autumn Migration of Birds in Dutchess County, N. Y.—97 species arriving, 145 departing.
 Early and Late Nesting in Dutchess County, N. Y.—81 species.
 Third Annual Report of the Rhinebeck Bird Club
 Pages 29-31—A Story of Successful Winter Feeding. Also reprints of migration and nesting tables from folders.

- 1918 ABBOTT, CLINTON G.
 Bird-Lore, Vol. 20
 Page 107—Photographs of winter bird feeding at Rhinebeck.
- CROSBY, MAUNSELL S.
 Rhinebeck Gazette, Sept. 28
 A Comparison of Long Island Birds with Those of Dutchess County.—Chiefly concerns the birds of Long Island, N. Y.
- 1919 Bird-Lore, Vol. 21
 Page 31—Christmas Census, 1918.—14 plus 3 species.
- 1920 Bird-Lore, Vol. 22
 Page 23—Christmas Census, 1919.—11 plus 6 species.
- FROST, ALLEN, and CROSBY, MAUNSELL S.
 The Auk, Vol. 37
 Page 597—Some Summer Residents of Dutchess County, N. Y.
 —Bald Eagle, Blue-winged, Brewster's, Nashville, Black-throated Blue, Black-throated Green, and Canada Warblers, Brown Creeper and Hermit Thrush.
- NICHOLS, JOHN T.
 Bird-Lore, Vol. 22
 Pages 46, 166, 225, and 356—The Season.—References to Dutchess County Birds.
- HYATT, MARY
 Bird-Lore, Vol. 22
 Page 348—Bird Notes from Dutchess County, N. Y.—Screech Owl, Pine Grosbeak, Purple Martin and Brown Thrasher.
- CROSBY, MAUNSELL S.
 Abstract of Proceedings of the Linnæan Society of New York, No. 32
 Pages 13 and 14—Pine Grosbeak, Purple Finch, White-winged Crossbill, Redpoll, and Pine Siskin at Rhinebeck.
- 1921 Bird-Lore, Vol. 23
 Page 10—Christmas Census, 1920.—21 species.
- YEARBOOK OF THE RHINEBECK BIRD CLUB FOR THE YEARS 1918, 1919, AND 1920
 Articles on Barn Owl, Barred Owl, Evening Grosbeak and House Wren and a Preliminary List of the Birds of Dutchess County, N. Y., by M. S. Crosby, enumerating 229 species.
- NICHOLS, JOHN T.
 Bird-Lore, Vol. 23
 Pages 32, 33, 92, 144, and 250—The Season.—References to Dutchess County birds.
- BISHOP, S. C.
 The Auk, Vol. 38
 Page 454—Swans on the Hudson River.—Swans seen above Staatsburg reported as probably being *Olor columbianus*.
- CROSBY, MAUNSELL S.
 Rhinebeck Gazette, Dec. 31
 Birds of North Flocking to Rhinebeck.—Pine and Evening Grosbeak, Northern Shrike, Red-breasted Nuthatch.

- 1921 C[HAPMAN], F. M.
 Bird-Lore, Vol. 23, No. 3
 Page 151—Review of "Yearbook of the Rhinebeck Bird Club for the Years 1918, 1919, and 1920."
- S[TONE], W.
 The Auk, Vol. 38, No. 3
 Page 479—"Yearbook of the Rhinebeck Bird Club"—Review.
- 1922 CROSBY, MAUNSELL S.
 The Auk, Vol. 39, No. 1
 Page 100—Mute Swans on Hudson.—Answer to S. C. Bishop.
 Country Life in America, November
 Pages 34-39—Water Fowl on the Hudson. With paintings by Courtenay Brandreth.—Based on observations including Dutchess County. Refers to Golden-eyes on March 10 off Kingston.
 Rhinebeck Gazette, Nov. 11
 Reprint of above article.
- GRISCOM, LUDLOW, AND JOHNSON, JULIUS M.
 The Auk, Vol. 39, No. 1
 Page 101—Black Tern on Long Island in Spring.—Refers to Black Tern at Rhinebeck, May 14, 1914, as being the first spring record in the New York City region.
- NICHOLS, JOHN T.
 Bird-Lore, Vol. 24
 Page 43—The Season.—Evening Grosbeak and Redpoll in Dutchess County.
 Pages 216-217—The Season.—House Wren at Rhinebeck, April 15; migrants abundant May 14.
- 1923 CROSBY, MAUNSELL S.
 The Auk, Vol. 40, No. 1
 Pages 94-105—Supplementary Notes on the Birds of Dutchess County, N. Y.—109 species annotated, including seven additions: Hooded Merganser, Shoveller, Ring-necked Duck, Knot, White-rumped Sandpiper (Giraud, 1844.), Golden Plover, and Ruddy Turnstone. Migrant Shrike and Bicknell's Thrush removed to hypothetical list.
- GRISCOM, LUDLOW
 The Auk, Vol. 40, No. 3
 Pages 529-530—Baird's Sandpiper in Dutchess County, N. Y., Remarks on its Identification in Life.
- CROSBY, MAUNSELL S., FROST, ALLEN, AND GRISCOM, LUDLOW
 The Auk, Vol. 40, No. 3
 Page 544—Blue-gray Gnatcatcher in Dutchess County, N. Y.
- OBERHOLSER, HARRY C.
 The Auk, Vol. 40, No. 4
 Page 678—Eighth Annual List of Proposed Changes in the A. O. U. Check-List of North American Birds.—Mute Swan introduced and apparently naturalized on the Hudson River, New York."

- 1923 CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 25, No. 1
 Pages 15-16—Christmas Census, 1922—23 species, chiefly at
 Cruger's Island, including Golden-eye.
- NICHOLS, JOHN T.
 Bird-Lore, Vol. 25
 Page 47—The Season.—History of Junco No. 27137.
 Page 131—The Season.—Resume of Juncos banded at Rhine-
 beck.
 Page 139—Review of "The Auk," including "Supplementary
 Notes on the Birds of Dutchess County, N. Y."
 Page 192—The Season.—Shoveller and Ring-necked Duck at
 Cruger's Island.
- FORBUSH, EDWARD HOWE
 Report of the Division of Ornithology, Department of Agricul-
 ture, Commonwealth of Massachusetts, 1922.
 Page 14—Nesting of Cerulean Warbler.
- COOKE, MAY THACHER
 Report on Bird Censuses in the United States, 1916 to 1920.
 United States Department of Agriculture, Department Bul-
 letin No. 1165, July 20, 1923
 Page 31—Decrease in birds nesting on 210-acre census area at
 Rhinebeck after 1917.
- MCATEE, W. L.
 Local names of Migratory Birds. United States Department of
 Agriculture Miscellaneous Circular No. 13, October, 1923
 Page 39—Mute Swan included as being found near Rhinebeck.
- GRISCOM, LUDLOW
 "Birds of the New York City Region," contains the following
 references to Dutchess County:
 Page 254—Wintering Grackles at Rhinebeck prove to be
 Bronzed.
 Page 306—Philadelphia Vireo more common up the Hudson.
 Page 328—Cerulean Warbler nesting in Dutchess County.
 Page 382—Mute Swan near Rhinebeck.
- 1924 GRAY, GEORGE W.
 The Auk, Vol. 41, No. 1
 Pages 161-162—Cerulean Warbler in Dutchess County, N. Y.
- CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 26, No. 1
 Page 22—Christmas Census, 1923 (Towns of Rhinebeck and
 Red Hook).—31 species, including Baldpate, Grackle, Tow-
 hee, and Winter Wren.
- SPINGARN, EDWARD D. W.
 The Auk, Vol. 41, No. 3
 Page 480—Northern Pileated Woodpecker in Dutchess County.
 Bird-Lore, Vol. 26, No. 5
 Page 332—Apparent Increase of the Henslow's Sparrow in
 Eastern Dutchess County, N. Y.
 Bird-Lore, Vol. 26, No. 6
 Page 403—Northern Phalarope in Dutchess County, N. Y.

- 1924 CROSBY, MAUNSELL S., FROST, ALLEN, FLEWELLING, KENNETH, AND GRISCOM, LUDLOW
 The Auk, Vol. 41, No. 4
 Page 613—Junco nesting in Dutchess County, N. Y.
- CROSBY, MAUNSELL S., FROST, ALLEN, AND FLEWELLING, KENNETH
 The Auk, Vol. 41, No. 4
 Page 614—Prairie Warbler nesting in Dutchess County, N. Y.
- CROSBY, MAUNSELL S., GRISCOM, LUDLOW, SPINGARN, EDWARD, AND WILLIAMS, LAIDLAW
 Abstract of the Proceedings of the Linnæan Society of New York, for the Four Years Ending March 25, 1924
 Pages 2, 6, 13, 20, 27, 28, 33, 40, 43, 46, 47, 49, 54, 57, 76, 85, 91, 93, 103, 106, and 107—References to Dutchess County Birds.
- LINCOLN, FREDERICK C.
 United States Department of Agriculture, Department Bulletin No. 1268
 Returns from Banded Birds, 1920 to 1923.—Return records of Barred Owl, Blue Jay, White-throated Sparrows, Tree Sparrows, Juncos, White-breasted Nuthatches, and Chickadees banded at Rhinebeck, N. Y.
- CROSBY, MAUNSELL S.
 Natural History, Vol. 24, No. 5
 Pages 605-617—Bird Banding.—References to the following species banded in Dutchess County: Barred Owl, Blue Jay, Purple Finch, Tree Sparrow, Junco, Song Sparrow, Fox Sparrow, White-breasted Nuthatch and Chickadee.
- NICHOLS, JOHN T.
 Bird-Lore, Vol. 26
 Page 120—The Season.—Robin, 7 Doves, and 3 Baldpate, Jan. 13; Catbird, Jan. 6-7.
 Page 186—The Season.—Carolina Wren, Mar. 30; 1 male and 2 female Ring-necks, April 5.
- 1925 CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 27
 Page 31—Christmas Census. (Townships of Rhinebeck and Red Hook.)—24 species, including Mallard, 14 Doves, and Rusty Blackbird.
- KIEMLE, HENRY W., AND WALLACE
 Bird-Lore, Vol. 27
 Page 31—Christmas Census. (Salt Point.)—11 species.
- CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 27
 Pages 153-157—Bird Study Near Home.—Illustrated by Allen Frost.—A summary of June camping trips with Allen Frost and others from 1920 to 1924. Notes on some rarer summer residents of Dutchess County.
 Natural History, Vol. 24, No. 5, 1924
 Pages 605-617—Series of Junco returns from Rhinebeck.

- 1925 KIEMLE, HENRY W., JR.
 Bird-Lore, Vol. 27
 Pages 177-178—The Spring Song of the Woodcock.—Based on observations at Salt Point.
- NICHOLS, JOHN T.
 Bird-Lore, Vol. 27
 Page 185—The Season.—Gadwall in Dutchess County.
 Page 334—The Season.—Includes Dutchess County records.
- DOWS, DEBORAH
 Rhinebeck Gazette, July 4
 Robin and Wren nesting simultaneously in same breeding station.
- BENTON, CHARLES E.
 Troutbeck Leaflets, No. 6, July, 1925
 Four Days on the Webatuck River.—Colony of Bank Swallows.
- GRISCOM, LUDLOW
 Bird-Lore, Vol. 27
 Page 394—Early Arrival of the Evening Grosbeak in the Hudson River Valley, at Barrytown, Dutchess County.
- 1927 CROSBY, MAUNSELL S., GRISCOM, LUDLOW, AND SPINGARN, EDWARD D. W.
 Abstract of the Proceedings of the Linnæan Society of New York, Nos. 37 and 38
 Pages 3, 5, 6, 8, 10, 11, 13, 17, 25, 28, 30, 33, 37, 38, 42, 43, 48, 56, and 61.—Notes on Dutchess County birds.
 Bird-Lore, Vol. 29
 Page 22—Christmas Census at Rhinebeck.
- 1928 CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 30
 Page 36—Christmas Census at Red Hook and Rhinebeck.
- SPINGARN, EDWARD D. W.
 Bird-Lore, Vol. 30
 Page 34—Christmas Census at Amenia.
- 1929 CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 31
 Page 31—Christmas Census at Red Hook and Rhinebeck.
- 1930 CROSBY, MAUNSELL S.
 Bird-Lore, Vol. 32
 Page 29—Christmas Census at Rhinebeck.
 Abstract of the Proceedings of the Linnæan Society of New York, Nos. 39 and 40
 Pages 28, 29, and 30—Dutchess County notes.
- FROST, ALLEN
 Auk, Vol. 47
 Pages 73-74—White Herons in Dutchess County, N. Y.
- 1931 ALLEN, H. LEONARD
 Bird-Lore, Vol. 33
 Page 37—Christmas Census at Rhinebeck.

9 2.12





SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01314 2864