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Rhinebeck Birds and Seasons

Articles Published in the Rhinebeck Gazette
October 3rd, 1914, to September 25th, 1915

BY

MAUNSELL SCHIEFFELIN CROSBY

Illustrated With Photographs
by Members of the Rhinebeck Bird Club

TO WHICH IS ADDED
*THE SECOND ANNUAL REPORT
OF THE RHINEBECK BIRD CLUB*

NOTE STORAGE

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Photograph by M. S. Crosby

BARRED OWL WITH INJURED WING
Grasmere

Photograph by M. S. Crosby

MALE BOBWHITE STANDING OVER NEST
Grasmere

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PUBLISHED BY
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RHINEBECK, N. Y.

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REMOTE STORAGE

Introduction

SOME people think that almost everything worth knowing about our native birds has already been discovered and printed in books. As a matter of fact, some of the most natural questions that arise in connection with bird-life cannot be answered by even the most expert students. For instance who can say how old wild birds live to be; just where our chimney swallows go in winter; what birds of all that have lived and been reared there shall occupy the old phoebe's nest this season; what becomes of the extra birds which each pair rear every year; whether male birds precede the females in the spring; whether birds take new mates each season—or answer innumerable similar problems? About the mysteries of bird migration, especially, there is much still to be learned.

There is but one way to add to our knowledge of bird life, and that is by the systematic placing on record of individual observations. If only we had access to the note books of many thousand bird lovers, we should find plenty of truths that have never been published.

The members of the Rhinebeck Bird Club realize that in Mr. Maunsell S. Crosby they have a bird student and field worker of very unusual qualifications. They further realize that heretofore the published records of Dutchess County birds have been most meagre and that at present Mr. Crosby is undoubtedly doing more than any one man to place our beautiful county on the ornithological map. The excellent articles which he contributed to The Rhinebeck Gazette from October 3, 1914 to September 25, 1915 are of such merit that they should be preserved in more permanent form. The Club has from time to time received requests for these articles, which hitherto could not be complied with, because they were so scattered. Although Mr. Crosby informs us that he has improved upon many of the records since they were published in The Gazette, it has been thought wise to preserve

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them just as they appeared. They represent the personal field work of the author and comprise his best observations at the time of publication.

Later on, we have reason to believe, Mr. Crosby will be in a position to publish some very complete data on the subject of Dutchess County birds. In the meantime the Club is making The Gazette articles readily accessible by combining them in the same covers with its annual report. Rhinebeck bird lovers particularly will find them invaluable for reference, and, it is hoped, will often consult them.

—C. G. A.

Rhinebeck Birds and Seasons

By MAUNSELL SCHIEFFELIN CROSBY

Bird Feeding and Care

A number of residents in this town have for several years past fed the birds regularly in winter and all have announced immediate success in attracting and taming the various species which are present at that time of the year. Aside from the pleasure of feeding and watching them, there is the certainty that a number are thus saved to live and multiply the next year; for, under normal conditions, the mortality among birds is very large, especially in cold weather.

The time has fortunately passed when it was necessary to argue the value of birds and prove by figures that they are worth more than the bit of shot it takes to kill them. We all admit their economic value to the farmer and horticulturist and most of us appreciate and enjoy their presence and their songs. Few, however, have the time and taste to study them and to become acquainted with them without making a special effort. Yet the methods of taking care of them are really very simple and easy. Two cents worth of suet tied to a tree will feed several woodpeckers, nuthatches and chickadees, while a handful of hayseed and crumbs thrown daily on the packed snow of the front path will supply a large flock of tree sparrows, juncos, and goldfinches. Sunflower seeds are appreciated by all kinds of wintering birds and can be bought cheaply at any feed store.

On farms a shock of unthreshed grain set up in a sheltered spot will attract our few surviving bob-white and also any grouse, partridges or pheasants that may be about, and thus keep a supply of food on hand for them above the level of the snow.

Well-designed feeding tables and nesting boxes can now be purchased from a number of manufacturers. Several such tables and boxes have been used with great success during the past year or two at Foxhollow Farm in this town, and anyone who did not wish to buy them could easily make effective substitutes. The modern custom of cementing all cavities in trees drives such hole-nesting birds as the bluebirds, wrens, nuthatches, flickers, woodpeckers and screech owls elsewhere in search of homes, unless we provide boxes to take the place of natural hollow trees. Bird baths made of shallow galvanized iron trays nearly filled with gravel have also been freely patronized the past summer by various kinds of birds. Such a bath, or a deeper one of cement, which could contain a few aquatic plants, would add greatly to the attractiveness of any garden or shrubbery. It must always be borne in mind, however, that part of the artificial pool must be made shallow enough with heaped up gravel for a small bird to use, about a quarter of an inch deep at the very edge.

In fairness to the birds, we should not try to attract them if cats are to be allowed near their feeding, bathing or breeding

grounds, and I hope that all those who are willing to help the birds this coming winter and next spring, will do their best to eliminate the birds' worst enemy from their property. It would be far better to neglect the birds than to entice them into easy reach of a cat's ever eager claws.

—October 3, 1914.

Proposed Work of the Rhinebeck Bird Club

A number of people have read of the successful launching of the Rhinebeck Bird Club and many have already rallied to the good cause and joined its ranks. A few remarks as to its purpose and activities should interest those who are still on the outside.

According to its constitution the objects of the club are: the study and protection of our birds, and the stimulation of interest in them in the field, in the home, and in the schools.

The study of birds is fascinating in a manner that can be understood only by those who have actually gone into the garden and woods to look for them. Everything concerning them is interesting, much is delightful, and often even an amateur can discover something that is entirely new and of vital interest to all ornithologists. The study of the hundreds of species that visit us, of their migrations, their food, their mating and nesting, their various plumages and habits, their songs, call notes and cries of alarm, provides an unending amount of entertainment at all times of year all over the country. For those who are bored or tired or who wish they were in the city, it is a positive cure-all. Let everyone try it and see!

The protection of birds will include feeding, planting shrubbery, providing nesting-boxes and bird baths, and eliminating the English sparrow and red squirrel. The boy with the gun will be shown that he can have ten times more fun with five-dollar field glasses or camera than with a five-dollar gun. The sportsman will be shown that our quail, partridge, woodcock, and wood duck are on the verge of extinction and that the smaller his bag at the end of a hunt, the more it will be to his credit for self-control, while the pestiferous jack-rabbits are, on the other hand, most worthy of his skill. The farmer will be shown that the big, sailing hawks are his very best friends and that only the small, sly and swift sharp-shinned, Cooper and pigeon hawks, and the very rare duck hawks and goshawks are worthy of the name of "chicken hawks."

By getting together and comparing notes and ideas, by obtaining wholesale prices on bird food and bird boxes, by occasionally enjoying lectures and in many other ways, the club expects to stimulate interest in birds. It has been offered space in *The Gazette* for timely articles, wholesale rates for bird food by a local merchant, co-operation on the part of the Starr Institute in the establishment of a "Bird Shelf," and much valuable advice and help by several prominent ornithologists, bird clubs and societies.

One of its chief functions will be the instruction of the children

Photograph by Tracy Dows

FOOD HOUSE AND STRAW SHELTER
Foxhollow Farm

Photograph by Tracy Dows

CHICKADEE AT WEATHER-VANE FEEDING TABLE
Foxhollow Farm

in all our schools. A junior membership for those up to the age of sixteen years has been established at the nominal cost of ten cents, and it is purposed to prepare every child under that age for a career of useful active membership as soon as he or she becomes eligible. The system of instruction used by the National Association of Audubon Societies will be used in these classes.

The children will study birds in the class, with the aid of colored charts and other drawings and will identify them in the field. Special walks will be taken by both teachers and pupils as well as by members not connected with the schools. In this way a valuable census of birds of the whole township will be taken, and the results will be sent to the Biological Survey in Washington to be filed in their records.

A census will be made for the magazine "Bird-Lore" on Christmas Day, and as many as possible should join in the game. Bird-Lore's motto is "A bird in the bush is worth two in the hand" and we are sure that all will soon agree with this reversal of the old adage. If however we can succeed in coaxing a bird to the hand by kindness and protection, we will know that it is worth a hundred limp and lifeless bunches of mangled feathers shot down because we could not think of any other way of amusing ourselves.

—December 12, 1914.

Our Winter Birds—I

Although winter is the off season for birds, it is in every way the very time to begin to study them. The species present are few in number and in consequence there will be much less confusion in trying to identify them. There are probably not more than fifty species that can be seen now, instead of a hundred and fifty, as will be the case when spring comes. Any beginner who identifies more than twenty birds before the first of March will have made a very good start. Hunger makes birds tamer and at this season we can readily approach much more closely to them than at any other time of year. The snow makes a good background on which to study them, and the leafless trees and bushes prevent their hiding themselves from our gaze. By all means let us begin now and try to go out for an hour or two in the morning at least once a week and get acquainted with our sturdy winter friends.

We all know the crow. Put it down as species number one. It has a nearer cousin with a hoarse voice, called the fish crow, and they look exactly alike. Are we sure that we know the house or "English" sparrow from the other sparrows? It is larger than most other sparrows and the male has a black throat. The female is plain brown above and gray below. We are not likely to find them far from buildings. The tree sparrow is smaller, has a reddish brown cap, and a faint spot on the breast. It looks very much like our common summer doorstep chipping sparrow and is therefore often called the "winter chippy." It has sweet tinkling notes, and leaves us the first

week in May to nest farther north. It returns to us regularly about the first of November. Very often it is in company with the junco or snowbird, which comes to us in September to remain until May. The male junco is slate-colored above, on the head, throat, and upper breast. The rest of the underparts are white. The female is brownish instead of slaty. Both sexes show white outer tail feathers when they fly. The two last mentioned species are generally seen on the ground and are very useful in devouring weed seeds.

Two other birds we are sure to meet are the downy and hairy woodpeckers. They are both black and white with a white streak down the back and long, strong beaks. The males have a small red patch on the back of the head. The hairy woodpecker is much larger than the downy, and also rarer and shyer. Both species are with us the whole year round, and are almost invariably to be found on the trunk or larger branches of trees, hammering away for dear life to reach the insects under the bark.

The white-breasted nuthatch is a handsome little bird with feeding habits like a woodpecker, but can be identified by the fact that it frequently works head downward, while the woodpeckers do not. It has a bluish back, black crown on its head and white cheeks and underparts. Its note is a nasal "ank, ank." It too is a permanent resident. One of the best little birds in every way is the cheerful chickadee. Remaining with us throughout the year, tame and confiding, it is a universal favorite. With back of gray, cap and throat of black and cheeks and underparts of white, it looks like a little ball of black and white fluff and everyone in the country who has ever fed birds in winter has had it as his most regular guest.

The brown creeper is a little brown, mouse-like winter visitor with a curved bill, which crawls up trees in search of insects, and then suddenly drops off and starts up another tree. It is generally found in company with chickadees and nuthatches. The golden-crowned kinglet is also here in winter. It is the tiniest bird we have next to the hummingbird and it will never cease to be a wonder how such a mite can keep alive in zero weather.

Two birds that often are, but never should be confused are the blue jay and the bluebird. The former is a big, blue and white cousin of the crow. It is with us the year round and is especially noticeable in small flocks in winter. The bluebird is much smaller. The male has the upper parts of the deepest blue, and a brick-red breast and white belly. Its notes are a sweet, plaintive "far away" call and a soft, rich, warbling song. The female is bluish but much duller. It is a cousin of the robin, and like the robin, is with us most of the year, but very seldom seen in winter. Both the robin and bluebird practically disappear after Christmas, and are not likely to return before February. The bluebird always comes back first.

There are several members of the sparrow family besides the tree sparrow and junco that come to us in autumn and go north in spring. An exception is the goldfinch, which is generally with us the year round, but which in its dull, brownish winter suit is likely to escape notice. Its sweet canary-like notes and undulating flight, during

which it cries "per-chi-co-ree," will help to identify it. The purple finch nests as far south as the Catskills and arrives here in September, to leave us in May. Only the adult males are highly colored—a deep rose-color, not "purple"—the female and young being streaked with brown. They have thick bills and sharply forked tails. The redpoll and pine siskin often visit us in winter. They are smaller than the purple finch and also have forked tails. The redpoll has a deep rosy crown and spot on the throat and a pinkish wash on the sides of the breast. The siskin is greenish above and streaked below. The former feeds chiefly on birch seed, the latter on hemlock seed. The purple finch prefers the seed clusters of the white ash. Lastly, a beautiful and rather unusual apparition is the transparent, nearly white snowflake, also called, like the junco, "snowbird." It comes drifting down to the ground like a real flake of snow, and cannot be mistaken for any other bird.

Another occasional winter visitor is the horned lark, a handsome cousin of the famous European skylark. It wears a black bridle around its face, and two little black "horns." Its cheeks and throat are yellow and its back is brown. It does not hop like most small birds, but walks like a blackbird.

In closing it would be well to mention the latest addition to the established species in New York State—the starling, which was introduced from Europe over twenty years ago. It looks black but is really an iridescent green and brown, with buffy tips to its feathers. It walks, like its relation the meadowlark, and the two are sometimes seen feeding on the ground together in winter. The latter is larger and brown, with two white patches on the outer edges of the tail and a yellow breast with a black "shield" on it. It is a native American bird and very useful to the farmer, whereas the starling is very quarrelsome and appropriates the nest-holes of other species, such as the flicker and bluebird. It is also accused of damaging fruit and of eating the eggs of ground nesting birds, so altogether it is not a desirable neighbor.

—December 19, 1914.

Our Winter Birds—II

Besides the smaller land birds previously discovered as occurring in winter there are several kinds of waterfowl and game birds and numerous hawks and owls that we may come across in our winter walks.

A trip over the ferry or a ride on the railroad when the river is partly open will very likely reward us with several species. The slowly-flapping, silvery herring gull is with us in varying numbers from September to May and only disappears when the river is frozen solid. That large handsome black and white duck with a dark head, the American merganser or shelldrake, and less commonly his crested cousin, the red-breasted merganser, arrive much later but also remain until May. The black duck, which cannot be confused with any other

species, are present in thousands throughout the autumn and early winter, but disappear in the very coldest weather and do not return till March. A few may very likely be present all summer in some of the more extensive marshes along the river, for I have seen a pair flying at Peekskill early in August. The golden-eye or whistler and little, diving, white-crested bufflehead or butterball duck both look black and white and are often to be seen on the river in December.

Our two standard game birds, the bobwhite or "quail" and the ruffed grouse or "partridge" are rare sights nowadays. The former is nearly extinct in New York State, but with suitable protection the latter may again increase in numbers. The bobwhite is supposed to be the most useful of all birds and destroys an incredible number of insects or weed-seeds every day of its life. Every farmer who is lucky enough to have a flock on his premises should protect it as he would his horse or his cow. This statement sounds strong, but it is supported by facts. During the past three or four years a number of ring-necked pheasants and Hungarian partridges have been liberated south of this village and we should all co-operate in protecting them and giving them a chance to establish themselves. If we use self-restraint for a few seasons, we ought soon to have a good game country. Anyone who finds game birds in his vicinity should put up a sheaf of unthreshed wheat so that they can feed on it when the ground is covered with snow, and thus live to breed another year.

To turn to birds of prey. Our two commonest hawks are the red-shouldered and the red-tailed best recognized in adult plumage by the markings that give them their names. The immature specimens are very hard to identify. They are both big, broad-winged, sailing hawks and from the examination of countless numbers of their stomachs have been proved to be most beneficial to the farmer. Their chief food consists of mice, moles, snakes, insects and so forth, and only in the rarest instances do they touch birds or poultry, yet they are universally known as "hen hawks" and "chicken hawks." I have personally had a number of them examined and not one had eaten a bird. Even more respectable is the long-tailed, silvery marsh hawk, which lives almost entirely on mice. It flies low over fields and marshes and has a rather gull-like appearance. The female is brown but has a large, white spot at the base of the tail. The common little sparrow hawk, with its narrow wings curved like a bow, is a familiar sight. Its food consists mainly of insects and it is too small and peaceful to injure the poultryman. The real villain of the family is the Cooper's hawk, a long-tailed, medium sized, blue bolt which prefers feathers to fur, and which is so swift as generally to escape capture. There is one now near my home which I one day saw strike a robin and soon after found carrying off a limp blue jay nearly as big as itself. On neither occasion was I armed, and although I have since gone out to capture it, it has so far eluded me.

The rare northern goshawk is also an enemy of the farmer, but seldom comes here. There are three other harmful species, the sharp-shin, the pigeon hawk and the duck hawk, but I have never found them in winter and so will not describe them until later. The

splendid bald eagle occasionally comes over from the Catskills but our national bird is now so rare as to deserve complete protection.

So much for the day-light mouse-destroyers. When night comes the owls set out and take up the good work of holding in check the rodent pests. The screech owl is one of our very best friends. It may occasionally take a small bird or two, but it does not hanker after poultry and lives principally on mice. It is very small and has two ear-tufts or "horns," and occurs in two colors, gray and bright brown. The gray is the common one locally, although the brown and gray are often found in the same nest. The barred owl is much larger and is commonly known as the "hoot owl." It is mottled a soft gray and brown and has a large, round, human face. It too is a great mouser and unlike most other owls often flies about and hoots loudly in the daytime. I have had a pair and their descendants roosting in some spruces less than a hundred yards from my house for the last thirteen years and they are very welcome night-watchmen.

The great horned owl, a splendid big fellow, unfortunately has a bad record and although it does a great deal of good I shall not attempt to defend it, for its fondness for poultry is undeniable. Another big owl, and a very beautiful one, is the snowy owl, a rare winter visitor from the far north. It also is fond of poultry but is so rare as barely to figure in the scoring. I have only two records of its appearance here during the last six years and have never seen it myself.

—December 26, 1914.

Our Winter Birds—III

A number of common summer birds which usually go farther south to winter, occasionally remain with us during part or all of the cold weather. In this class are the meadowlark, robin and bluebird already described, the song sparrow, cowbird, flicker, kingfisher, ruby-crowned kinglet, yellow-bellied sapsucker and red-headed woodpecker.

There are also several irregular or uncommon winter visitors from the north that I have not yet mentioned. They are the northern shrike, pine and evening grosbeaks, American and white-winged crossbills and Lapland longspur.

The song sparrow ordinarily appears just after the bluebirds become established in early spring and a little ahead of the first flocks of robins. That would be some time between the 20th of February and the middle of March, according to the season. This little brown, streaked bird with its cheery and incessant song is abundant from that time until November, when it gradually disappears, until in December it becomes a decided rarity and is then found only along creeks and on the borders of swamps. My latest record for it is January 5th, but I have no doubt that in favorable winters it may remain during the entire season in some sheltered spot.

My earliest record of arrival in spring for the cowbird is March

Photograph by C. G. Abbott

TREE SPARROWS AT RUSTIC FEEDING SHELF
Foxhollow Farm

Photograph by C. G. Abbott

A FARM BOY'S FEEDING SHELF
Sheldon Streever's Farm

18th and the latest of departure is November 24th, but I have three local winter records that prove that the bird may occasionally be seen throughout the year. A male spent the winter with a flock of English sparrows at my barns in 1907-1908. Mrs. Goodell has seen one on February 20th and I have found a female on January 13th feeding with a flock of English sparrows at Rhinecliff station. The male is a handsome, iridescent black bird with a brownish head, and the female is a dark gray. They are smaller than the "crow blackbirds" or grackles, but walk like them instead of hopping. They have the bad habit of laying their eggs in other birds' nests and removing the eggs of the rightful owner, so that their unfortunate victims raise young cowbirds instead of their own young. Cowbirds do not build nests of their own, and as they are also polygamous, remain in small flocks the year around and never pair during the nesting season.

The flicker or "high-hole" is one of our most useful birds. It is also known as the "golden-winged woodpecker" on account of the bright yellow underside of its wings. Its body is brown, with a red mark on its head, a broad white patch at the base of the tail which shows in flight and a black triangle on the breast. Like the other woodpeckers, it nests in holes in trees, but, unlike its cousins, its favorite food is ants, of which it destroys enormous numbers. Ordinarily it arrives in March and leaves in November, but I have occasionally recorded it in very mild seasons in December, January and February.

The kingfisher is also scheduled to arrive late in March and leave before the first snow, but I have seen it two or three times in January when the river was still open. I have never seen it in February. It is a big, crested bird with very short legs, is bluish above and white below with a band across the breast, and has a long, ringing call, like a policeman's rattle. It is almost invariably seen flying near creeks, rivers or ponds, but, strange to say, burrows a hole in a sand bank to make its nest.

The ruby-crowned kinglet is a near relation of the golden-crowned kinglet already described, but instead of being a winter visitant it is in the class of transients; that is, it nests north of Rhinebeck and winters south of us. From the middle of April till the middle of May this green midget among birds is abundant in our woods on its way north and again in October on its return journey. However, I have recorded it once in December and again on January 2nd, so that it belongs on our list of winter birds.

The yellow-bellied sapsucker has twice been reported as being present here in winter. The male is a black and white woodpecker with yellowish underparts, and red on top of the head and on the throat. The female lacks the red on the throat.

I am keeping track of two young red-headed woodpeckers that so far have condescended to stay near my house. They hitherto have been present only as transients in May and September, but these two have been with me ever since October and behave as though they intended to stay, for they have been very busy storing acorns

in every conceivable crevice, including an upright iron pipe, out of which they can never get them again! These birds are now brown and white but their heads are gradually becoming red and part of their wings blue-black—the plumage of the adult bird. It remains to be seen whether their stores of acorns and my offering of suet will cause them to remain until spring.

The northern shrike is sometimes quite common in winter. It is black, bluish-gray, and whitish in color, with a strong, hooked bill. The only bird it can be confused with is the blue jay but it is not nearly so blue. It lives chiefly on mice, which it has to impale on thorns in order to tear them apart, as its feet are not made for holding. The shrike is also useful for its raids on English sparrows and destroys many injurious insects.

The grosbeaks and crossbills are rare and irregular winter visitors. They are fond of the seed of evergreen and berry-bearing bushes such as sumach and mountain ash.

The pine grosbeak is a large, tame, slow-moving finch with a big beak and deep rosy plumage. The evening grosbeak is yellow, white and black. The male crossbills are deep rosy and the females and young are brownish. These can be distinguished by their bills, which are crossed, an arrangement that enables them to extract the seeds from pine-cones with greater ease. I have no records of either crossbill at Rhinebeck.

The Lapland longspur also is a member of the finch and sparrow family. It has a chestnut patch on the back and a black patch on the upper breast. The rest of its plumage is brownish. I have one record of it on March 25th, 1912, when a late blizzard played havoc with the spring migration and sent some of the earliest arrivals back to the south.

—January 2, 1915.

The First Migrants

So far this winter has been remarkable for its mildness, and although I am very far from being a prophet, general indications point towards an early Spring. We must not forget, however, that last year the worst weather did not begin until the middle of February, and we may have that experience again.

The birds have reacted in accordance with the weather conditions, and there has been a dearth of northern visitors. The juncos, tree sparrows, purple finches, brown creepers and golden-crowned kinglets have of course been here, but I have only seen one northern shrike and no siskins or horned larks since autumn. The grosbeaks, crossbills, snowflakes, longspurs and redpolls have, as far as reports go, been entirely absent, as has the Acadian chickadee, which visited us last year.

On the other hand, there has been an unusual abundance of birds which generally winter south of us, and at best are rarely seen at this season. The most remarkable example is the red-headed

woodpecker. Probably ten or more are wintering here. Song sparrows and bluebirds have been seen several times, and one flicker and one meadowlark have been reported. Robins have been especially common, there being one daily at the feeding stations at Foxhollow Farm, while Professor Freeman of Vassar College, Poughkeepsie, saw a flock of ten one day in the middle of January. On the river, which has been partly open below Rhinebeck, there have occasionally been herring gulls, mergansers and scaup ducks.

On the 7th of this month, I saw a pair of red-breasted nuthatches—my first winter record of this species, which, unlike the white-breasted, is migratory, nesting in Canada and wintering south of Rhinebeck. It is smaller than the white-breast, with a dull, reddish breast and a black stripe through the eye that at once distinguishes it. It is seldom seen far from evergreens, as its usual winter food is the seed which it extracts from the cones.

Very soon we may expect the bluebirds, song sparrows, meadowlarks and robins to become commoner, and when the first flock of blackbirds arrives the winter will be practically over and the spring migration will have begun. Sometimes the blackbirds make a miscalculation and are forced back again by a late snow, but when the phoebe comes, some time in March, it is a sure sign that spring is here. At this point it is pertinent to remark that the chickadee has a high, clear whistle, making the notes "phee-bee," uttered slowly, which must not be confused with the quick, hoarse and unmusical "phoebe, phoebe" of the real phoebe.

In making out a migration table, it is rather hard to distinguish between the first arrivals and hardy individuals that have wintered close by. For instance, I have never seen a robin in February that I consider justly entitled to be called a new arrival. On the other hand, I have seen bluebirds, song sparrows and meadowlarks in February that apparently had just come and that were restless and flying in small flocks in places where they had not been seen all winter. The following table of February arrivals therefore omits the robin, although it has been frequently seen during the month. Perhaps this year or next it will really come in February in a fair-sized flock, and by its nervous call-notes indicate that it is a real migrant just come from farther south. I heard two bluebirds on February 7th of this year, but cannot yet tell if they formed the advance guard of the migrants.

February Arrivals From the South

February 8—Bluebird, 1909. Usually seen in winter.

February 22—Red-winged blackbird, 1909.

February 23—Meadowlark, 1909. Occasional in winter.

February 25—Starling, 1912. Permanent resident ever since.

February 26—Song sparrow, 1901. Occasional in winter.

February 27—Purple grackle, 1909.

Note—There are two grackles, the purple and the bronzed. I have yet to make sure when the first of the latter arrives, as the two

species are very hard to distinguish in life. They are both an iridescent black and have long tails and whitish eyes. The red-wing has a shorter tail and the male has a brilliant scarlet patch on each shoulder. His mate is brown, streaked with blackish, and does not arrive until later.

—February 13, 1915.

Birds of the First Two Weeks In March

If the weather we have had so far continues, the birds will surely break all records for arrival. The surest indication of warm weather is the arrival of the grackles or crow blackbirds, and these came this year on February 17th—just ten days ahead of my best previous record. Other birds, too, have come ahead of time and I give herewith a summary of their doings up to February 24th.

February 1—One robin becomes regular visitor at food station at Foxhollow Farm.

February 5—Tree sparrow sings.

February 7—Bluebird and red-breasted nuthatch arrive.

February 13—American merganser seen on river.

February 13—Snowy owl reported.

February 14—Song sparrow reported singing.

February 16—Flicker utters spring call.

February 17—Purple finch sings. Flocks have been present all winter.

February 17—Barred owl hoots.

February 17—Bronzed grackle arrives.

February 21—Herring gull and black duck arrive.

February 23—First migrating flock of American mergansers arrives.

February 23—Red-winged blackbird and purple grackle arrive.

February 24—Cedar waxwing arrives.

The following species should arrive during the first two weeks in March. The dates given represent my best previous records, but it is likely that some of these will be broken.

March 2—Purple finch, 1913. Wintered 1911-12, 1914-15.

March 6—Robin, 1910. Occasional in winter.

March 7—Fox sparrow, 1910.

March 10—Flicker, 1903. Occasionally seen in winter.

March 11—Broad-winged hawk, 1914.

The snowy owl is very large and nearly pure white, so it is unmistakable. The herring gull is the large silvery-gray gull which appears on the river every spring and autumn. The rusty grackle or blackbird is smaller than other grackles, and, if possible, has an uglier voice. Its tail is not so long, and it is not so glossy. Its eyes are white. A chorus of rusties "singing" reminds one of nothing so much as a lot of creaking cart-wheels.

The cedar waxwing or cedarbird is smaller than the robin and of a beautiful, soft brown color. It has a black mask across its face, a slender body, and a delicate crest on the head. It flies in small or medium-sized flocks and is very inconspicuous, uttering only a low, thin "seet, seet." The fox sparrow is the largest member of the sparrow tribe, and is really about as big as a thrush. It has a bright, chestnut-brown back and blotches of the same color on the breast, while its head is rather slaty. Its song is loud and sweet. The broad-winged hawk is a small cousin of the red-shoulder and red-tail. All the other species mentioned in this paper have already been described.

—February 27, 1915.

Birds of the Second Half of March

The steady north wind that has been blowing during the past two weeks has materially slowed down the advance of the birds so auspiciously started in February. The blackbirds, common two weeks ago, have almost disappeared but will soon be here in force again. The cedarbirds, which came on February 24th, have however remained and bluebirds are common.

On February 26th a bald eagle was reported by several as sailing over the cove south of the village and on the 27th the sparrow hawk and horned larks put in an appearance. On the 28th I was motoring just south of Rhinebeck at about half-past six in the moonlight, when my searchlights revealed what was apparently a small rabbit trying to cross the road. I thought I could not avoid hitting it when, at the last moment, it lifted its wings and tried to dive past the car. I then knew it must be a small owl, and thinking I had hit it, I stopped and walked back, but was unable to find it. Just then I heard a peculiar two-syllabled rasping note, first nearby, then gradually further away, the owner of the voice flying slowly in a large circle and finally crossing the road and going away towards the west. I had no doubt now that this was a saw-whet owl—the smallest of our owls—which I had never seen before, and on returning home I was able to confirm my decision in various bird books for no other owl has a note like it.

I once started up a screech owl in this way from the ground, and twice, in California, the barn owl.

On March 1st the little winter colony of robins at Foxhollow Farm received additions to the total number of eight and on the ninth the phoebe was reported as heard. Let me here again warn those who are just beginning bird study that the chickadee has a plaintive whistle which reminds one of the word "phoebe" and which must not be confused with the very different, real phoebe's call.

The following list gives my best records of arrival for the latter half of March. I hope everyone will try to better them:

March 15—Canada goose, 1903.

March 15—Fish crow, 1914. Wintered 1910-11.

March 16—Phoebe, 1903.

March 18—Woodcock, 1903.
 March 18—Cowbird, 1903. Rare in winter.
 March 19—Mourning dove, 1903.
 March 22—Winter wren, 1911.
 March 25—Kingfisher, 1902. Rare in winter.
 March 25—Field sparrow, 1903.
 March 26—Yellow-bellied sapsucker, 1903.
 March 29—Vesper sparrow, 1903, 1910.
 March 29—Wood duck, 1909.
 March 29—Migrant shrike, 1914.
 March 29—Hermit thrush, 1914.

The Canada goose is a large, brown bird with a black neck, which flies in wedge-shaped flocks of a dozen or more birds. I have only one spring date for it and would appreciate receiving reports about it.

The fish crow is indistinguishable from the common crow, except by its voice which is hoarse and drawling. The phoebe is a flycatcher—an inconspicuous brown bird, with a dark head, gray breast and long tail, which it moves up and down constantly while perched on post or twig or wire waiting for winged insects on which it feeds almost entirely. It is the common "bridge bird" or "pewee" of our doorsteps, whose mossy nests are sometimes objected to because they are often not very clean.

The woodcock is one of our best known game birds, but unfortunately all too rare nowadays. Some people call the woodpecker "woodcock" by mistake, but of course there is not the remotest resemblance between them.

The cowbird is a small blackbird with a brownish head and neck. The female is dark gray and instead of building her own nest, lays her eggs in the nests of other and smaller birds, whose own offspring are generally crowded out or starved by the larger, parasitic young cowbirds. I have often seen a little mother warbler trying to reach a big fledgling cowbird's bill as the great unwieldy youngster sat lazily asking to be fed, though nearly twice as large as his foster parent. The sight is both amusing and pathetic.

The mourning dove is the only wild member of the pigeon family in the north-eastern states and by its long tail and brown color can easily be distinguished from the barn-yard varieties.

The winter wren is very like our common, summer house wren, but arrives much earlier than the latter and goes farther north about the time the house wren gets here. The kingfisher has already been described.

The field sparrow is a small cousin of the tree sparrow but lacks the chestnut cap and spot on the breast. It has a sweet, plaintive little song. The vesper sparrow is more like the song sparrow, in that it has a streaked breast and slightly similar song, though at a different pitch. It can at once be distinguished, however, by the white outer tail feathers which it has in common with the junco.

The yellow-bellied sapsucker is a woodpecker which can be

distinguished from the hairy by a white stripe down each wing (instead of down the back) and by the red throat in the male. Both the male and female have the familiar red woodpecker marking on the back of the head, while their breasts are yellowish instead of white. Unlike the other woodpeckers, they generally tap live instead of dead wood and drill rows of small holes from which they drink the sap.

The wood duck, though very small, is the handsomest of our ducks, and has a brilliant green crest on its head. The female is dull brown with whitish cheeks. It is the only one of our ducks that nests regularly in southern New York, and as it is now nearly extinct it should be protected by every bird-lover and true sportsman, at least for a few years to come. At one time every pond and every creek had its pair of wood duck and they would even nest in hollow apple trees, (I have seen such a nest not a hundred feet from a house,) but now they are as rare as they are beautiful and seem to be on the high road to extinction.

The migrant shrike is very hard to distinguish from the northern shrike, but is smaller and has a whitish breast without the fine barring which the northern has.

The hermit thrush is a typical member of its family, with a brown back and spotted breast. Its distinguishing feature is its bright rufous tail which it slowly raises and lowers when suspicious. It is most often seen either in the woods or near them, feeding on the ground.

—March 13th, 1915.

A Calendar for the First Part of April

Although this month has so far been ideal and I have heard no complaints about the weather, the continuous north winds and frosty nights have retarded the further arrival of birds, begun so auspiciously in February. The following records are, however, worth mentioning:

March 12—Canvasback; fish crow.

March 17—Mourning dove; pigeon hawk.

March 19—Phoebe reported seen.

The first four mentioned species establish new records in this region so far as I know.

The pigeon hawk is a very small hawk with bow-shaped wings. It is very destructive to birds and can be distinguished from the beneficial sparrow hawk only by its dull brown color and barred tail. The sparrow hawk is reddish brown and feeds mostly on mice and grasshoppers.

The canvasback can be distinguished by its white back. It is the king of the duck tribe from the point of view of the sportsman and epicure. It seems to be increasing in numbers since the prohibition of spring shooting.

A number of birds that should be here now have so far escaped

my notice. They are the marsh hawk, fox sparrow, broad-winged hawk, Canada goose, woodcock, cowbird and winter wren.

Although I dare say few people realize it, the nesting season has already begun, and if we only knew where to look we might find the nests of the great horned and barred owls. The red-shouldered hawks, crows and bluebirds are mated and prospecting for nests and the screech owls, nuthatches and robins will soon follow suit.

The following species should arrive during the first ten days of April:

- April 3—Chipping sparrow, 1903; bufflehead, 1912.
- April 6—Tree swallow, 1913.
- April 7—Yellow palm warbler, 1909.
- April 8—Mallard, 1914, wild?; Savannah sparrow, 1914; Louisiana water-thrush, 1914.
- April 9—Osprey, 1903, 1914; ruby-crowned kinglet, 1903, accidental in January; American golden-eye, 1914; duck hawk, 1914.
- April 10—Spotted sandpiper, 1903.

The chipping sparrow is another cousin of the tree sparrow. It has the chestnut cap, but lacks the spot on the breast. It is the tamest of our native birds, with the exception of the chickadee. Its song is a simple trill. The Savannah sparrow is streaked and hard to distinguish from the song sparrow. Its song is grasshopper-like and will help to identify it.

The bufflehead is another favorite with sportsmen, who call it "butterball." It is black and white, with a white patch or crest on the back of the head. The golden-eye has a dark green head running up almost into a point on the crown and a white spot in front of the eye. Both these ducks are great divers and very irritating to the observer who is trying to identify them, as they seem to spend more time under the water than above it.

The mallards I saw last year may have been from tame stock that had been liberated, but they were flying fast up Hog Bridge Creek, and from all appearances were wild. The male has a green head, white ring around the neck and chestnut breast. The female is brown.

The tree swallow is the first of its tribe to arrive. It is iridescent greenish blue above and pure white below. The yellow palm warbler is found more in the open than any other of our warblers, and is usually seen near the ground. It is brownish-green above, has a chestnut patch on the head and a yellow breast, slightly streaked. Its outer tail feathers are partly white. The Louisiana water-thrush is really a warbler, although it looks like a very small thrush. It is brown above, with a white line over the eye. Its breast is creamy white streaked with brown. It bobs its body and tail up and down constantly, and walks instead of hopping. It frequents damp woods, always near a stream, and has a loud, clear song, something like: "Wee; chwee, chwee. chweedle-eedle-eedle-eedle"—much more musical than it looks!

The osprey, or fish hawk, is often mistaken for the bald eagle, because of its large size and the white on its head. The eagle's entire head is white, while the fish hawk's is only partly so. The rest of the eagle's plumage is black, except the tail, whereas in the fish hawk the plumage is brown above and mostly white below. The duck hawk is the swiftest, most daring, and one of the worst of our hawks. Fortunately it is about the rarest. It is a large edition of the pigeon hawk, with long pointed wings, which it beats rapidly, instead of sailing. In the middle ages this hawk was carried blindfolded on horseback and released to hunt other birds for sport.

The ruby-crowned kinglet is, with its relation, the golden-crown, the smallest of our birds excepting the hummingbird. Unlike the golden-crown, it has a loud, ringing, beautiful song. It is a greenish mite, and the male has a partly concealed, red crown-patch. The spotted sandpiper or "tip-up" is a long-billed, long-legged wader, common on the banks of our ponds and streams. It is brown above and spotted below. It is shot in autumn as game, but it is a pity to kill so small a mouthful for food.

—March 27th, 1915.

Birds of Mid-April

Many of the returning species are still behind schedule time, but on the other hand there are redeeming features in this year's migration. I have just been able to add two new species to the local list and to improve two former records by many days. The following list brings the migration up to date:

March 21—Ring-billed gull.

March 21—First migrating juncos arrive.

March 31—Cowbird; fox sparrow reported.

April 2—Woodcock.

April 5—Wood duck; killdeer, reported by C. G. Abbott.

April 6—Vesper sparrow, reported by C. G. Abbott.

April 7—Black-crowned night heron.

April 8—Pintail; kingfisher.

The ring-billed gull and pintail are both new to me here. The former is hard to tell in adult plumage from the adult herring gull, but at close quarters a black ring around the bill is distinguishable. The young and first year birds, which I saw, have a narrow black band on the tip of the tail, which the herring gulls have not.

The pintail is a very long-necked duck and the male has a brown head, the front of the neck is white, and the two middle tail-feathers are very long and pointed. I was examining some black duck, mergansers and gulls this afternoon, when a pair flew directly into the range of my glasses and I was able to distinguish the above field marks. The pintail is by no means rare, and no doubt comes here quite regularly.

The killdeer is a plover and belongs to the shore-bird family to which the sandpipers belong. It has two black bands across its

Photograph by M. S. Crosby

FEMALE INDIGO BUNTING ON NEST

Grasmere

Photograph by M. S. Crosby

FEMALE GOLDEN-WINGED WARBLER ON NEST

Grasmere

white breast and a brown back. Its note resembles the syllables "kill-dee, kill-dee." It is often seen in meadows far from water and nests in them.

The black-crowned night heron is the handsomest of all our herons or "cranes." It is a very large wader and flies slowly over our swamps with neck bent back and feet extended behind. Its crown is black and its wings are a beautiful pearl-gray color.

From now on the different species should come thick and fast, especially those that are already late, while the following will be due to arrive according to my schedule:

April 11—Lesser scaup duck, 1914.

April 12—Bonaparte's gull, 1912; red-breasted merganser, 1912; American scaup duck, 1912.

April 15—White-throated sparrow, 1912; swamp sparrow, 1912.

April 16—Common tern, 1912.

April 17—Blue-headed vireo, 1906; barn swallow, 1914.

The scaup and lesser scaup are called "bluebills" by sportsmen. They have distinctively shaped heads and are iridescent purple and green on the head and neck. The scaup has white on its sides while the lesser scaup has the sides finely barred with blackish.

Bonaparte's gull is a small gull with the entire head black—an excellent field mark.

The red-breasted merganser has a green head with a crest and a reddish band across the breast. Otherwise it resembles the American merganser, previously described. It is almost impossible to distinguish the females of the two species, both of which are gray and white with brown heads and crests.

The white-throated sparrow has, as its name implies, a white throat, and also three white stripes, separated by black, on top of the head. It is a very sweet, plaintive singer, and fortunately lingers for a long time in our gardens before going farther north to breed.

The swamp sparrow is rather common locally. It has a trilling song, something like that of the chippy. It also has a chestnut cap, but its cheeks and breast are dark gray.

The common tern is a relative of the gulls, but more airy and graceful, hence its common name of "sea swallow." It is pearly gray above and white below and has a black crown. It passes to the north before the end of the month.

The blue-headed vireo is a small, unobtrusive bird of the woods, like the rest of its plainly-colored family, most of whom generally escape our notice although they literally live at our very elbows. The blue-head's head is really slaty and it has a white eye-ring. Its back is greenish and its breast is yellowish. It has a sweet, rather monotonous chirping song. In May it goes farther north to breed.

I think we all know the barn swallow, with its long pointed wings and beautiful, deeply-forked tail. Its back is brilliant steel blue and its throat and upper breast are a warm brick-red—something like the bluebird's.

Try to identify all these birds before more arrive, or the total number, nearly 200, will fairly bewilder you.

—April 10th, 1915.

More April Birds

At last the late species are coming and the recent warm weather promises to bring the remainder more nearly on schedule time. The following have arrived since the 8th:

April 9—Chipping sparrow.

April 12—Osprey; winter wren; ruby-crowned kinglet; first migrant golden-crowned kinglets.

April 14—First migrant brown creepers.

All the above mentioned species have been described in previous papers.

The following species are due during the next few days:

April 19—Towhee, 1910; pine warbler, 1910; black and white warbler, 1910, 1914.

April 20—Myrtle warbler, 1910; bank swallow, 1914; cliff swallow, 1914.

April 22—Green heron, 1901; house wren, 1913.

April 26—Brown thrasher, 1913.

April 27—Henslow sparrow, 1910.

April 28—Catbird, 1909; black-throated green warbler, 1911.

The towhee is a handsome bird, nearly as large as a robin, with black upper parts and throat, white underparts and chestnut sides. The outer tail feathers are white. The female is brown where her mate is black.

The pine warbler is a member of the very numerous and brightly colored family of tiny songsters that fills our trees in May. It is greenish above and yellow below and has a trilling song like the chipping sparrow. It leaves us early in May.

The black and white warbler is streaked like a tiny woodpecker and runs up and down trees like a nuthatch. It remains with us all summer.

The myrtle warbler is only a temporary visitor, but is very numerous. It is a gray color above and yellowish below, with streaks on the breast and sides. It can be identified by its yellow rump which flashes when the bird flies.

The bank swallow is a cousin of the barn swallow, but is dull brown above and whitish below, with a brown band around the throat. Its tail is nearly square. It builds its nest in a hole in a sandbank.

The cliff swallow is more like the barn swallow, but the forked tail is less marked. It has a bluish back and reddish throat, and a yellowish crescent on the forehead. It nests on the other side of the river but not here.

The green heron is another long-legged wader with a reddish-brown head and neck and a slaty back. It is smaller than the other herons and passes the summer along our ponds and streams. Its common name is "shiedpoke."

The house wren, brown thrasher and catbird all belong to the same family and are very sweet singers. The tiny brown wren with its short, turned up tail needs no further description. The thrasher is like a large, reddish thrush with a long tail and yellow eyes. The catbird is slate-colored from head to tail. All three species remain here to nest. The Henslow sparrow is very rare and irregular here. It has a way of running through the grass like a mouse and hiding behind tufts. It is hardly worth while describing until we are familiar with the commoner varieties.

The black-throated green warbler is common during the migrations but goes farther north to nest. It is greenish above, with a black throat and bright yellow cheeks.

If anyone knows of a robin's, crow's, hawk's or owl's nest with eggs in it, I should like to be told of it. In fact, any early nest will be of interest, as I am trying to compile a list of the earliest dates on which the various species nest.

—April 17th, 1915.

Birds of the End of April and First Week In May

Since my last paper appeared, the following species have arrived:

April 14—Field sparrow.

April 15—Savannah sparrow; hermit thrush, reported earlier.

April 18—Rusty grackle; tree swallow; yellow palm warbler;
Louisiana water-thrush.

April 19—Chimney swift, record; sapsucker.

April 20—Golden-eye duck.

April 21—Pied-billed grebe, record; marsh hawk; barn swallow; pine warbler.

April 22—White-throated sparrow.

April 25—Spotted sandpiper; sharp-shinned hawk, record;
bank swallow.

April 27—Black and white warbler; house wren.

April 28—Towhee.

The chimney swift looks like a swallow, but has practically no tail, only sharp spikes which it uses to prop itself against the inside of a chimney or the trunk of a tree. It belongs to the same family as the whippoorwill. It is a plain sooty color.

The pied-billed grebe is a remarkable diver and will remain under water a long time when suspicious. It is a small, brown, duck-like bird, with a whitish bill with a dark spot near the middle.

The marsh hawk is long-tailed and has a white patch on its back near the base of the tail. It flies slowly over the fields, generally keeping near the ground, and devours great numbers of mice.

The sharp-shinned hawk is very much smaller and very bold. All other arrivals have been described before.

The following all arrived together last year on April 29th and broke all my best previous records. I had quite a remarkable walk and identified fifty-nine species. If I had started my walk earlier I could have passed the sixty mark. Most of the warblers really are not due until well on into May. The record arrivals were the least flycatcher, Nashville warbler, northern parula warbler, chestnut-sided warbler, Blackburnian warbler, Maryland yellow-throat, redstart, water-thrush, black-throated blue warbler and wood thrush.

The least flycatcher is like a diminutive phoebe. It can best be recognized by its note, a sharp "chebec, chebec," which has given it its common name. It remains here to nest.

The Nashville warbler has a slaty-blue head with a partly concealed reddish crown-patch, a greenish back, and pure yellow throat and breast. The parula warbler is slaty-blue above, except for a yellowish patch in the middle of the back. Its breast and throat are yellow, but it has a reddish band below the throat.

The black-throated blue warbler is best described by its name and cannot be mistaken for any other warbler.

The chestnut-sided warbler has a greenish back, bright yellow crown, black "whiskers," chestnut sides and white underparts.

The Blackburnian warbler is mostly black and white above, with flaming orange underparts, streaked with black except on the throat. It is the most brilliant of all the warblers.

The Maryland yellow-throat is greenish above and bright yellow below, and the male has a black "highwayman's mask" across its face.

The water-thrush is also a warbler, and is hard to distinguish from its cousin, the Louisiana water-thrush already described.

The redstart is black above and below, but has bright salmon patches on the wings and tail, which it keeps constantly spread as it flits about.

Most of the warblers keep in the tree-tops and prove a great source of trouble and stiff neck to the beginner. They are seldom still and as they travel in large, mixed flocks, they are most bewildering. Their songs are mostly plain little ditties, some trilled, others "buzzed," although each is distinct and can be memorized with a little effort. The chestnut-sided warbler, Maryland yellow-throat and redstart stay here all summer but the others mentioned above go farther north to nest.

The wood thrush is our finest songster. His back is rich brown and his breast white with black spots. Fortunately he is very common and his delicious, violin-like notes can be heard from every grove morning and evening throughout the spring until the second brood of young grows up, about the first of August.

The following species are due the coming week:

May 1—Kingbird, 1914; warbling vireo, 1914.

- May 2—Bobolink, 1902; yellow-throated vireo, 1911-12; ovenbird, 1911, 1914; golden-winged warbler, 1914; yellow warbler, 1914; veery, 1914.
- May 4—Baltimore oriole, 1911-12-13-14; crested flycatcher, 1913; grasshopper sparrow, 1913-14; Cape May warbler, 1914; magnolia warbler, 1914.
- May 5—Red-eyed vireo, 1914.

The kingbird is a common summer resident in our orchards. It is very pugnacious, and although only a flycatcher, will drive every hawk and crow away from the vicinity of its nest. It has a black crown, gray back and tail, and white breast. The tail feathers have white tips. The crested flycatcher is the largest member of its family. It has a prominent brown crest, its back is brownish and its tail is reddish-brown. Its loud, musical whistle sounds almost human.

The warbling vireo is greenish gray and as retiring as it is conspicuous. It minds its business in the tops of our tall maples, where it spends its time devouring caterpillars. Its song is a rising and falling warbled whistle, very pleasing to hear. Its nest is cup-shaped and so strongly built as to stand the winter.

The red-eyed vireo is hard to distinguish from it, but at close range its red eye can be seen and it has a dark stripe through it. Its song is monotonous and broken into short phrases. Its habits and nest resemble those of the warbling vireo.

The yellow-throated vireo is the handsomest of this unobtrusive family. It has a white eye-ring and a rich yellow throat and breast. Its song is also richer than the red-eye's which it otherwise resembles.

The bobolink is well known in all our hay fields. It is black below and has a buffy patch on the back of the head and a white back. Most birds are lighter below than above, but it reverses this rule. Its song is most delightful—effervescent and sparkling; some of its notes are banjo-like in quality. Unfortunately it is one of the first of our residents to stop singing. Its mate is dull brown.

The Baltimore oriole belongs to the same family. Its flaming livery of orange and black is too well known to need description, as is its pendulous nest. I have found it the most regular of all our spring arrivals.

The ovenbird is a relative of the water-thrush, and looks like it, but is greener above and has an orange crown. Its nest is hooded over, with the entrance on one side. Its song resembles the word "teacher" repeated half a dozen times, and growing louder and louder.

The golden-winged warbler has a yellow crown and yellow bars on the wings. It has a black throat and whitish breast. Its back is bluish-gray. The yellow warbler is almost entirely yellow, brighter below, and with a few brownish streaks on the sides of the breast.

The Cape May warbler is rather rare. Its face is reddish, the side of the neck and rump yellow, the back brownish, and the breast yellow, heavily streaked.

The magnolia warbler has a slaty crown, white line behind the

eye and on the wing, black cheeks and back, and yellow throat, rump and breast, the last named streaked with black. When it spreads its tail two white spots are visible on the outer feathers.

The veery is a thrush. It is tawny above and white below, with reddish-brown spots on the throat and upper breast only. It has a wierdly beautiful song.

The grasshopper sparrow is very small and insignificant. Its song has given it its name, as it sounds more like an insect than like a bird. It can best be recognized from this fact and from its very short tail. It is found only in open fields.

—May 1st, 1916.

The Height of the Spring Migration

The next ten days will mark the climax of the spring migration and after the middle of May there will be very few new arrivals, while most of the transients will move on to the north, until by June 1st only our normal summer population will be left, excepting, perhaps, a belated warbler or two.

Compare the following list of this year's arrivals with the record list covering the same period published last week, and you will see that there is not a very great variation.

On April 27th arrived the house wren and black and white warbler.

April 28—Towhee.

April 29—Wood thrush, equals record.

April 30—Blue-headed vireo; black-throated green warbler, 2 days late; parula warbler, 1 day late; black-throated blue warbler, 1 day late; myrtle warbler.

May 1—Nashville warbler, 2 days late; broad-winged hawk, record; duck hawk.

May 2—Yellow throated vireo, equals record; chestnut-sided warbler, 3 days late; ovenbird, equals record; cat-bird; brown thrasher; veery, equals record.

May 3—Great blue heron; bobolink, 1 day late; Baltimore oriole, record.

May 5—Yellow-legs, record; least flycatcher; cliff swallow; golden-winged warbler, 3 days late; Blackburnian warbler; redstart; Maryland yellow-throat; prairie warbler, record.

The broad-winged hawk is built like the red-shoulder, but is much smaller. It has a peculiar whistled note resembling that of the wood pewee.

The yellow-legs is a large sandpiper. It is brown above and whitish below, with a speckled breast. It has a very long bill and long yellow legs. I saw a pair of them this morning wading in the Mill Pond. They show white on the lower back when they fly.

I have seen the prairie warbler here once before—a number of years ago, and unfortunately have not the date, but believe it was

in late summer. It is a little like the Cape May warbler, but pure yellow on the throat and breast and streaked only on the sides. All the other species have been described before.

The following species are due to arrive from now on till the 14th:

May 6—Hummingbird, 1909; white-crowned sparrow, 1909; rose-breasted grosbeak, 1914.

May 7—Wood pewee, 1901; indigo bunting, 1901; scarlet tanager, 1909; Brewster warbler, 1909; American bittern. 1910; solitary sandpiper, 1910.

May 8—Yellow-billed cuckoo, 1901; worm-eating warbler, 1909, 1914; white-eyed vireo, 1910; whippoorwill, 1911; yellow breasted chat, 1911.

May 11—Olive-backed thrush, 1913; orchard oriole, 1914.

May 12—Lincoln sparrow, 1901; Wilson warbler, 1901, 1909. black-billed cuckoo, 1912; bay-breasted warbler, 1914.

May 13—Blackpoll warbler, 1911; Canadian warbler, 1912, 1914.

May 14—Pectoral sandpiper, 1911; black tern, 1914.

I think we all know the hummingbird—the smallest bird in the world. Its wings buzz so fast that they can scarcely be seen. It is brilliant green above and white below, and the male has an iridescent throat of metallic red.

The white-crowned sparrow resembles the white-throat, except that its crown is much whiter and it lacks the white on the throat.

The Lincoln sparrow can scarcely be distinguished from the song sparrow, but is buffy on the breast instead of white. Both species are similarly streaked above and below.

The rose-breasted grosbeak is nearly as large as a robin. Its head and back are black and the wings black and white. The underparts are white except the upper breast, which has a beautiful rosy triangle on it. The female is one of the ugliest birds I know—streaked above and below with black and brown.

The wood pewee is like a phoebe, only greener, and has slight bars on the wings. It has a very plaintive whistle which gives it its name. It nests only in trees.

The indigo bunting is about the size of a goldfinch, only instead of being yellow and black it is deep indigo blue from head to tail. It has a song very like the goldfinch, but not so varied. The female is brown.

The scarlet tanager ranks with the oriole in brilliancy. It is entirely red except the wings and tail, which are black. The female is greenish. Its song resembles a robin with a bad cold in its head, but is very cheerful to hear in the deep woods on a hot day.

The Brewster warbler is supposed to be a hybrid species. I have only recorded it once. It is exactly like the golden-wing, but lacks the black throat.

The worm-eating warbler is plain brown above and gray below and has three buffy streaks on the crown. If you hear a song like

the chipping sparrow's coming from the deep, damp woods, you may be sure it is a worm-eater.

The Wilson warbler is greenish above and yellow below and has a black cap.

The bay-breasted warbler has a reddish cap and throat, a blackish face, and two white wing-bars.

The blackpoll warbler is streaked like the black and white warbler, but the entire top of its head is black.

The Canadian warbler is bluish-gray above and yellow below, with a ring of dark spots around the throat.

The American bittern resembles a heron. It is a large wading bird, streaked with yellowish, black and brown. When discovered, it points its bill straight up in the air and remains motionless until the intruder leaves.

The solitary sandpiper is a small wader. It shows white on the tail in flight, which serves to distinguish it from the spotted sandpiper. The pectoral sandpiper has a reddish tinge on its back and a buffy breast.

The yellow-billed cuckoo is a long-billed, long-tailed, quiet bird of a beautiful, soft brown color. Its breast is white. Its lower mandible is yellow. The black-billed cuckoo resembles it closely, but its entire bill is black and it has a red ring around the eye visible only at very close range.

The white-eyed vireo's chief characteristics are its eye and its impatient, jerky notes. It is always found in the underbrush instead of in the trees, which the other vireos frequent.

The whippoorwill's note at dusk is familiar to most of us. It is a mottled brown and gray bird, that lays its eggs on the ground in the woods without building any nest.

The yellow-breasted chat is a very large warbler. It is brown above and pure lemon yellow below. It has a white eye-ring. Both its flight and its notes are loose, jerky and disconnected.

The olive-backed thrush is a dull colored, inconspicuous member of its family, and although it has a wonderful song, seldom utters it till it reaches its northern home.

The orchard oriole is chocolate colored where the Baltimore oriole is flaming orange. The female is yellowish. It is not nearly as common as its brilliant cousin.

The black tern is a sooty edition of the common tern previously described. It looks like an enormous swallow, and is quite likely to appear over our inland ponds in search of flying insects during the migration.

—May 8, 1915.

The End of the Spring Migration

The rapidly arriving procession of migrants continues with great precision and promptness. Very few species are late, although several, like the green heron, swamp sparrow and water-thrush, seem to be entirely absent this year. It is not too late, however, to

find them. The following arrived during the past week:

- May 6—Kingbird; warbling vireo; Tennessee warbler, record.
- May 7—Solitary sandpiper, equals record; crested flycatcher, 3 days late; orchard oriole, record; scarlet tanager, equals record; yellow warbler.
- May 8—Yellow-billed cuckoo, equals record; red-eyed vireo, 3 days late; worm-eating warbler, equals record; magnolia warbler; Cape May warbler.
- May 9—White-crowned sparrow, 3 days late.
- May 10—Rose-breasted grosbeak; blackpoll warbler, record; yellow-breasted chat, 2 days late.
- May 11—Olive-backed thrush, equals record.

All the above were described last week or the week before. The following are all that remain on the calendar for spring arrival, beginning where I left off in my last article:

- May 15—Red-headed woodpecker, 1909.
- May 16—Nighthawk, 1909; gray-cheeked thrush, 1909.
- May 17—Mourning warbler, 1909.
- May 18—Philadelphia vireo, 1909.
- May 19—Acadian flycatcher, 1909.
- May 26—Yellow-bellied flycatcher, 1914.

When the red-heads came south last autumn they broke all rules, and remained with us during the entire winter and are still here, where we hope they will nest. Their plumage is glossy black and white, except the head and neck, which are brilliant red. The male downy and hairy woodpeckers have small red top-knots but these can never be confused with the entirely red head of their far handsomer relative.

The nighthawk would be indistinguishable from the whippoorwill were it not for a large white patch on each wing which is plainly visible when the bird is flying. It looks like a large swallow, but its flight is much more erratic and jerky.

The gray-cheeked thrush is very hard to distinguish from the olive-backed thrush, but is darker and less buffy on the cheeks and breast. It is also more retiring in disposition and only found in deep woods.

The mourning warbler's head, neck and throat are slaty blue. The rest of the upper parts are olive-green, and of the underparts, yellow. It is decidedly rare.

The Philadelphia vireo resembles the red-eyed vireo, but has black eyes and a slightly yellower breast. It, too, is rare.

The Acadian and yellow-bellied flycatchers would be practically indistinguishable were it not that the latter has a yellower breast. It also has a loud, characteristic call, "tip-pee-uh" with the accent on the second syllable. Both are present only a few days during the latter part of May.

The nesting season is now well under way, and this is perhaps even more fascinating than the migration. So far I have seen the

Photograph by M. S. Crosby

BABY BLUE JAYS
Grasmere

Photograph by M. S. Crosby

FIVE YOUNG KINGFISHERS
Grasmere

inhabited nests of the bluebird, white-breasted nuthatch, robin, English sparrow, phoebe, starling, song sparrow and blue jay, and after anxiously watching a black and white warbler building its nest for several days I was disgusted to have it desert when a wretched cowbird laid an egg in it. I found a song sparrow's nest close to it today and soon spied the cowbird, apparently waiting to impose on it, too, but I promptly drove off the intruder.

The starlings and English sparrows too, were prevented from continuing housekeeping, for the sake of the native birds for whom the boxes were erected. I have high hopes that flickers, red-heads and wrens will use some of the boxes I have put up this year.

—May 15, 1915.

Departure of the Transients

A few more belated birds are still arriving but practically all are here and soon the last of the transient species will have passed on to the North. The following have come since the 11th inst:

May 12—Nighthawk, record; whippoorwill; wood pewee; water-thrush.

May 13—Indigo bunting.

May 14—Hummingbird; Canadian warbler.

May 15—Swamp sparrow; white-eyed vireo; long-billed marsh wren.

May 16—Purple martin.

May 19—Acadian flycatcher.

The long-billed marsh wren is found only in reedy marshes, such as "Tivoli Bay" where I saw several the other day. It has a long bill and an unmusical, bubbling song like the syllables "cong-queedle-eedle-eedle."

The purple martin is a large bluish-black swallow. I have seen it nesting in bird houses in Poughkeepsie, but never in Rhinebeck. All the other species mentioned have been described before.

As the migration is so nearly over it might be fitting to study the time and order in which the various transients leave us. Some spend two or three months with us on their way North—others only a day or two. The pipit, which is common in the autumn seems to pass us without a stop, or perhaps uses another route, for I have never seen it in spring. The appended list shows when the various species may be expected to depart:

Feb. 12—Holboell grebe, 1912.

Feb. 13—Snowy owl, 1915.

Mar. 8—Hoary redpoll, 1912.

Mar. 12—Acadian chickadee, 1914.

Mar. 15—Canada goose, 1903.

Mar. 25—Lapland longspur, 1912.

Mar. 27—Pine grosbeak, 1912.

Mar. 28—Snowflake, 1912.

- Mar. 29—Ring-billed gull, 1915.
 Apr. 3—Redpoll, 1909.
 Apr. 8—Mallard, 1914; rough-legged hawk, 1914; migrant shrike, 1914; pintail, 1915.
 Apr. 11—Lesser scaup, 1914.
 Apr. 12—Red-breasted merganser, 1912; Bonaparte bull, 1912.
 Apr. 17—Fox sparrow, 1914.
 Apr. 19—Bufflehead, 1912.
 Apr. 21—Pied-billed grebe, 1915; prairie horned lark, 1915.
 Apr. 22—Scaup, 1912; golden-eye, 1914.
 Apr. 24—Common tern, 1914.
 Apr. 30—Pigeon hawk, 1914.
 May 2—Broad-winged hawk, 1915; duck hawk, 1915.
 May 3—Tree sparrow, 1914; great blue heron, 1915; American merganser, 1914.
 May 4—Yellow-bellied sapsucker, 1911.
 May 5—Golden-crowned kinglet, 1909; prairie warbler, 1915.
 May 6—Yellow palm warbler, 1915.
 May 7—Brown creeper, 1909.
 May 8—Brewster warbler, 1909; winter wren, 1914; red-breasted nuthatch, 1914.
 May 12—Black duck, 1914.
 May 14—American bittern, 1911; greater yellow-legs, 1911; osprey, 1911.
 May 15—Rusty blackbird, 1915.
 May 16—Hermit thrush, 1901; junco, 1913; Lincoln sparrow, 1914; cliff swallow, 1914.
 May 17—Pine siskin, 1914; tree swallow, 1914; herring gull,
 May 18—Ruby-crowned kinglet, 1909; purple finch, 1914; Cape May warbler, 1914-15.
 May 19—Tennessee warbler, 1915.
 May 21—Myrtle warbler, 1909; grey-cheeked thrush, 1911.
 May 22—Acadian flycatcher, 1914.
 May 23—Blue-headed vireo, 1914; Northern parula warbler, 1914.
 May 24—Solitary sandpiper, 1913; white-throated sparrow, 1913; black-throated blue warbler, 1913-14; Blackburnian warbler, 1914; pine warbler, 1914; olive-backed thrush, 1914.
 May 25—Bay-breasted warbler, 1909; black-throated green warbler, 1909.
 May 26—Nashville warbler, 1901; magnolia warbler, 1901.
 May 27—Nighthawk, 1910. Nests in towns and cities.
 May 28—Wilson warbler, 1901.
 May 30—Yellow-bellied flycatcher, 1914.
 June 1—Blackpoll warbler, 1909.
 June 2—Canadian warbler, 1901; water-thrush, 1912.
 June 6—Mourning warbler, 1901.
 June 11—White-crowned sparrow, 1913.

—May 22nd, 1915.

The Nesting Season

Just as May marks the height of the Spring migration, so does June mark the height of the nesting season. By that time, it is true, most of the crows, hawks and owls will have raised their broods, but among the smaller birds there will be practically none that are idle.

The bluebirds, robins, song sparrows and English sparrows may have led forth their first broods, but they will promptly commence over and begin to raise another batch. The chipping sparrow, field sparrow, phoebe, house wren, catbird and the cuckoos also raise two or more broods and whenever one attempt fails they will usually build again until successful. The loss of eggs and nestlings is very high and the accidents met with from weather conditions or enemies are innumerable. It is a wonder that any bird succeeds in raising its young at all.

The following very incomplete list gives dates on which I have found inhabited nests of various species:

- Apr. 1—Bluebird, 1915, 4 eggs, blizzard caused desertion.
- Apr. 10—Red-shouldered hawk, 1914, female incubating.
- Apr. 18—White-breasted nuthatch, 1915, female incubating.
- Apr. 19—Crow, 1905, bird incubating.
- Apr. 22—Robin, 1901, 3 eggs, later deserted.
- Apr. 25—English sparrow, 1915, 3 eggs.
- May 2—Phoebe, 1911, bird incubating.
- May 3—Starling, 1915, bird incubating.
- May 9—Song sparrow, 1905, 1915, 4 eggs.
- May 10—Blue jay, 1915, 4 eggs; cowbird, 1915, egg in black and white warbler's nest.
- May 14—Flicker, 1915, bird incubating.
- May 16—Chipping sparrow, 1901, 3 eggs, bird incubating; black and white warbler, 1915, 4 eggs after removing 2 of cowbird.
- May 17—Bank swallow, 1901, bird seen flying into nest hole.
- May 18—Catbird, 1911.
- May 19—Field sparrow, 1909, 4 eggs; hairy woodpecker, 1915, with young.
- May 20—Golden-winged warbler, 1911, 5 eggs.
- May 24—Kingfisher, 1915, tracks worn deep in nest hole; house wren, 1915, 5 eggs; chickadee, 1915, bird incubating; wood thrush, 1915, 4 eggs, bird incubating.
- May 25—Veery, 1914, 4 eggs, bird incubating.
- May 26—Brown thrasher, 1909, 3 eggs, later deserted.
- May 29—Red-winged blackbird, 1901, 4 eggs.
- May 31—Baltimore oriole, 1914.
- June 1—Yellow-breasted chat, 1901, 3 eggs.
- June 3—Downy woodpecker, 1901, with young; warbling vireo, 1901, male singing while incubating.
- June 11—Hummingbird, 1909, bird incubating.

- June 15—Green heron, 1902, with dead young, also new nest with 3 eggs; red-eyed vireo, 1902, 3 eggs; rose-breasted grosbeak, 1909, bird incubating.
- June 18—Crested flycatcher, 1902.
- June 19—Scarlet tanager, 1901, female incubating.
- June 22—Indigo bunting, 1902, 3 eggs.
- June 23—Yellow-billed cuckoo, 1901, 1 egg, later overturned by a storm.
- June 24—Maryland yellow-throat, 1901, 1 egg; redstart, 1905, with young.
- June 25—Bobwhite, 1902, 14 eggs, field mowed and bird deserted, eggs hatched under bantam; chimney swift, 1905; cedar waxwing, 1905, 2 eggs, later deserted.
- June 27—Barn swallow, 1914, with young; ovenbird, 1914, 2 eggs.
- June 28—Purple martin, 1905, in bird house at Poughkeepsie.
- July 1—Kingbird, 1902; orchard oriole, 1905, with young.
- July 9—Worm-eating warbler, 1904, with young.
- July 16—Towhee, 1902, with 4 large young.
- July 21—Meadowlark, 1903, hatching, but destroyed in mowing.
- July 28—Black-billed cuckoo, 1901, with 2 eggs and 2 large young.
- Aug. 5—Goldfinch, 1901, 5 eggs.
- Aug. 15—Vesper sparrow, 1914, with young.

—May 29th, 1915.

The End of the Nesting Season

As has been shown in the last paper, there is a wide variation in the dates of nesting in different species. The owls start in March, while the cedar waxwing and goldfinch often wait till July. The height of the nesting season at Rhinebeck is during the first ten days of June.

Having studied the earliest dates when complete clutches of eggs can be found, it is interesting to know when the last young leave the nest—in other words, the range of time during which each species may be expected to breed.

Some young birds, like the hawks, owls, and herons, spend weeks in the nest, while others, like the chipping sparrow, are practically full grown and are able to leave in a few days. On the other hand, the chipping sparrow raises several broods, so its nesting season is really longer than the owls'. An enormous number of accidents attend every nesting season, and when a nest is destroyed, its owner usually makes one or more additional attempts to raise a brood. In this manner a bird which normally nests in May will find itself busily occupied with household duties in July.

My data on this subject are very meagre and fragmentary, but some of the above mentioned facts are clearly shown. Thus, the barred owl's young leave their nest by May 25th, when about two dozen species have not yet finished building their nests.

The warblers raise but one brood and their young mature quickly. A few of their nesting periods follow: black and white warbler, May 16-June 28; golden-winged warbler, May 20-June 15; redstart, May 24-July 3; chestnut-sided warbler, May 26-August 2 (clearly a case of an accident to the first brood); yellow-breasted chat, June 1-July 13. Thus the average breeding season of these warblers is forty-four days.

Now take the thrush family. We will omit the veery which raises only one brood. The robin often raises three, the bluebird and the wood thrush, two. Bluebird, April 1-July 23; robin, April 22-August 6; wood thrush, May 24-July 27. The average here is ninety-four days.

The catbird and house wren, which raise two broods, have nesting periods of 85 and 81 days, respectively. The song sparrow's is 96 days and that of the chippy 110, four days longer than the robin's. The orioles and vireos have short seasons. The cuckoos have a peculiar habit of laying a second clutch of eggs in the same nest with the young of the first brood, before the latter are old enough to leave. The bluebird's record of 114 days is the longest I have yet noted.

Latest Nesting Dates

- May 17—Bank swallow, 1901.
- May 25—Barred owl, 1915.
- May 26—White-breasted nuthatch, 1909.
- May 28—Wood pewee, 1909, building.
- May 31—Hairy woodpecker, 1914.
- June 2—Veery, 1914, eggs.
- June 3—Downy woodpecker, 1901; warbling vireo, 1901, eggs.
- June 14—Brown thrasher, 1909, eggs.
- June 15—Golden-winged warbler, 1902; rose-breasted grosbeak, 1909.
- June 24—Maryland yellow-throat, 1901, egg.
- June 27—Ovenbird, 1914, 2 eggs.
- June 28—Crow, 1901-02; black and white warbler, 1902; purple martin, 1905, Poughkeepsie; Baltimore oriole, 1905.
- June 30—Chickadee, 1900; green heron, 1901.
- July 1—Blue jay, 1902, eggs.
- July 2—Hummingbird, 1904.
- July 3—Redstart, 1914.
- July 4—Field sparrow, 1903, 1909.
- July 6—Red-shouldered hawk, 1904.
- July 7—Kingfisher, 1901.
- July 10—Killdeer, 1915, eggs hatching.
- July 11—Orchard oriole, 1902.
- July 12—Flicker, 1903.
- July 13—Yellow-breasted chat, 1901, eggs.
- July 14—Kingbird, 1903; crested flycatcher, 1903.

July 16—Towhee, 1902.
 July 17—Red-winged blackbird, 1901, eggs.
 July 19—Indigo bunting, 1901, eggs; chimney swift, 1915.
 July 21—Meadowlark, 1903.
 July 22—Barn swallow, 1914.
 July 23—Bobwhite, 1903, eggs; bluebird, 1903, eggs; phoebe, 1914.
 July 27—Wood thrush, 1904, eggs pipping.
 July 28—Red-eyed vireo, 1904.
 July 29—Worm-eating warbler(?), 1901.
 Aug. 2—Chestnut-sided warbler, 1903.
 Aug. 3—Black-billed cuckoo, 1901.
 Aug. 6—Robin, 1914.
 Aug. 11—Catbird, 1903.
 Aug. 13—Song sparrow, 1914; house wren, 1914.
 Aug. 14—Scarlet tanager, 1901.
 Aug. 15—Vesper sparrow, 1914.
 Sept. 3—Chipping sparrow, 1901.
 Sept. 5—Cedar waxwing, 1901.
 Sept. 12—Mourning dove, 1902.
 Sept. 17—Yellow-billed cuckoo, 1901; goldfinch, 1901, eggs hatched on 16th, so young probably spent some time longer in the nest.

I think few people realize that five species can be found nesting here in September.

—July 24th, 1915.

The Federal Bird Census

The Biological Survey in Washington, D. C., last year started a national bird census and proposes to hold it annually, so as to determine if possible, whether birds are increasing or decreasing, what species need protection, what environments suit them best and other important matters dealing with economic ornithology.

Every one who is interested is invited to select a piece of farm or woodland, not less than forty acres in extent, as a rule, and to count the number of breeding pairs of birds found on it. This is done by making a careful count of the singing males heard early in the morning in the beginning of June, when all the transients have left for the north and the summer residents have mostly settled down to housekeeping. Some species, like the nighthawk, have no true song and care must be taken not to overlook them.

I decided this year to make such a census, and selected a tract of about 210 acres, divided as follows—drives, lawns, gardens and buildings, 15 acres; orchards, 40 acres; hay, 25 acres; corn, 20 acres; oats, 11 acres; rye, 7 acres; woods and swampland, 92 acres. The task of counting all the breeding pairs was more difficult than it at first seemed, particularly in the case of the commoner birds, such as the chipping sparrow and robin. I carried a pad and pencil in my

pocket and worked over each section separately several times. Even the cultivated land had to be gone over, as the fields contained trees in which many birds might nest. Of course, it was not necessary actually to find each nest, the continued presence of the adult birds was sufficient evidence.

In this way I counted 387 pairs of 56 species. The robins, chipmunks and song sparrows were partly estimated, but in every case the figures are conservative and at least that number of pairs was present. The list follows:

Robin, 38 pairs; chipping sparrow, 37; song sparrow, 36; catbird, 19; ovenbird, 18; house sparrow and wood thrush, each 17; house wren, 15; veery, 13; red-eyed vireo, 11; Maryland yellowthroat, 10; wood pewee and Baltimore oriole, each, 9; flicker and chestnut-sided warbler, each, 8; yellow-throated vireo, 7; downy woodpecker, 6; phoebe, blue jay, scarlet tanager, indigo bunting, black and white warbler, golden-winged warbler and redstart, each, 5; chimney swift, crested flycatcher, starling, cowbird, meadowlark, vesper sparrow, yellow warbler and bluebird, each, 4; kingbird, goldfinch, field sparrow and warbling vireo, each, 3; hummingbird, hairy woodpecker, least flycatcher, crow, red-winged blackbird, grasshopper sparrow, worm-eating warbler, Louisiana water-thrush, white-breasted nuthatch, chickadee, each 2; mourning dove, barred owl, kingfisher, bobolink, orchard oriole, swamp sparrow, towhee, barn swallow, bank swallow and cedar waxwing, each, 1.

It will be interesting to see from year to year what new species may nest on this tract, or what species will fail to return; also, the increase and decrease in the numbers of the regularly breeding species. Since I put up boxes last spring there has been a great increase in the number of wrens. Until this year I have never had more than about five pairs. On the other hand, twelve species that have nested on the chosen tract were absent this season. They are the wood duck, green heron, bobwhite, red-shouldered hawk, sparrow hawk, screech owl, yellow-billed cuckoo, fish crow, white-eyed vireo, yellow-breasted chat and brown thrasher. Four species that have nested near the tract, but never, to my knowledge, on it, are the ruffed grouse, ring-necked pheasant, Savannah sparrow and Henslow sparrow.

—July 31st, 1915.

Tragedies of the Nesting Season

Every bird is beset with dangers large and small from the time the egg it comes from is laid to the moment when it at last succumbs to the elements or to its live enemies—for practically no wild creature dies a natural death from sheer old age. That pleasure is reserved for human beings and the cattle, pets and caged beasts which they have in their care. Nature is wasteful and cruel, though outwardly smiling, and there are tragedies enacted about us daily of which we never dream.

Photograph by C. G. Abbott

YOUNG CEDAR WAXWINGS
Grasmere

Photograph by C. G. Abbott

SONG SPARROW ON ROSE-BUSH NEST
Grasmere.

Every year I run across a number of nests and I am always surprised to see how few produce a brood successfully. The time spent in the nest and the period immediately after leaving it, before the flight feathers are fully developed, form the most dangerous stage in the life of a bird, for then it is nearly helpless and depends entirely on the instincts of its overworked parents.

We can do a lot to make it safe for birds to nest near us, but there are many dangers which we cannot mitigate or control. We can kill cats and red squirrels and English sparrows and black snakes, and yet we cannot prevent more from coming. We can set up shelves for robins to nest on, but they will often put their clumsy structure on some flimsy vine and a rainstorm or the weight of the growing young finally dashes it to the ground. A little warbler may have started its nest in a most secluded spot, but a cowbird will happen along, remove one or more eggs and lay its own in the nest instead. Then the unsuspecting warbler will hatch the cowbird's egg and the young interloper will crush or oust the rightful tenants.

Gulls, crows, jays, grackles and even catbirds occasionally help themselves to their neighbors' eggs, and if a wren has an argument with another bird, she will sometimes get even by pecking holes in the eggs of her enemy. Foxes, skunks, raccoons, weasles, rats and mice, as well as a few rarer hawks and owls, relish young birds, and where they abound bird life is usually scant.

Although I have been but little in the field during the present nesting season, I have witnessed a number of tragedies. On April first I found my earliest bluebird's nest with four eggs in it. On the fourth came a blizzard and the bluebird deserted and started a new nest in a box fastened to a thorn tree. In this she safely hatched six young. Just before they were ready to fly I found them all dead in the box, sitting up with an expectant look in their glazed eyes. The nest was badly soiled, so the birds must have starved to death. Either food was too scarce or both parents had been killed at this crucial time.

A song sparrow hatched four eggs near the edge of a wood. When the young were about three days old I found them dead in the nest and the old bird gone. Not twenty feet away a black and white warbler built her nest. A cowbird laid the first egg in it. Next day there were two cowbird's and a warbler's egg. I removed the cowbird's eggs and eventually the warbler laid five eggs and I have reason to believe successfully reared her brood, for there has been a little flock of warblers in those woods ever since. A pair of ovenbirds near by hid their nest too well for me but not too well for the cowbird, as I have seen them recently feeding two immense, overgrown youngsters twice as big as their foster-parents. The poor deluded ovenbirds were perfectly devoted and fed the wretched cowbirds as fast as they could. Behind this scene I could see the tragedy of the baby ovenbirds that had probably been crushed or starved in the nest.

A veery had a nest under a piece of wire netting, containing four eggs. After a few days she deserted, perhaps because the wire

netting grew no leaves and she felt conspicuous. A redstart, with a nest ten feet up in an ash, either ate her own eggs after I found her abode, or else lost them to some intruder. A mourning dove built her nest in a locust tree on my drive, but her wild nature could not endure the frequent traffic on the road beneath her and she deserted. A red-eyed vireo deserted her first clutch of eggs and, after building a new nest, has successfully hatched a second. A nuthatch deserted her nest in a knothole after my dog had chased a squirrel into it. A tanager never completed the nest I saw it building in May. A wood thrush deserted her nestful of eggs.

A friend of mine put up several bird boxes, but a wren that had always used her awning insisted on continuing to nest in it. When the young were almost ready to fly they were all knocked out of the nest and died. Whether the wind did it or not I do not know. A phoebe on my house met with a similar experience, but I suspect English sparrows as the culprits, for the nest was in a very safe situation. A few days ago some children took a young oriole away from a cat, and thus saved its life. Probably the cat's owner still thinks "My cat doesn't touch birds, it was somebody's else cat." Do you know, every one who owns a cat says that to me!

How small a percentage of the total number of accidents this list must represent! Imagine the struggle for existence in a place where wild enemies abound and where children hunt birds instead of protecting them. Even after they have reached maturity, birds are never safe from their enemies and have to face either the long flights of the autumn and spring migrations or the months of cold and starvation of our long winters.

Let us therefore try to eliminate the enemies of the birds. Let us plant shrubs and put up boxes for birds to nest in. Let us feed them in winter and provide a pan of water for them to drink and bathe in in summer. Let us encourage our children to study them and keep their fingers out of their nests. It is not much trouble and is infinitely worth while.

Since writing the above, an indigobird has lost her entire set of three eggs and a hummingbird, which deserted its first nest is now safely bringing a second brood to maturity. A nest of five young swifts fell down a neighbor's chimney and after vain attempts had been made to feed them, all died.

—Aug. 7th, 1915.

Bird Banding

We know a good deal about the nesting and feeding habits of birds, of their songs, call-notes, plumage, internal structure and so forth. But there are other important facts concerning them of which we as yet know little or nothing. One much-discussed question is whether the variation in plumage of the same species in different parts of the country due to climatic conditions, is sufficient to subdivide the species into subspecies. Another is the mystery of the power of flight, so well illustrated by the long-continued soaring of

hawks without any perceptible wing-motion. Other questions, which have puzzled scientists for centuries, are where birds go when they leave us, whether they return to their original homes, and how long they live in a wild state.

These last three mysteries are very slowly being cleared up. A number of years ago some European ornithologists devised the scheme of putting small, harmless, aluminum bands on young birds before they left the nest and of numbering and marking the bands so that if their wearers were ever shot or picked up dead, their finder would notify the banders. The returns were, of course, few and far between, but sufficient to warrant the experiments being tried in America. Several individuals attempted banding privately and finally the American Bird Banding Association was formed to undertake the work on a larger scale. Thousands of bands have been made, stamped with serial numbers and the words "Notify Am. Museum, N. Y." and given to any one who would use them. A person using a band fills out a card provided for the purpose with the number, date, locality, species, age and sex of the bird banded, if known, and sends this record to the American Museum of Natural History where it is filed away for future reference in case the bird described is ever reported.

Several thousand birds of nearly a hundred species have been banded up to this time and many interesting returns have been received showing how far the birds have travelled and how long they lived. Almost every record possesses individual interest. Several birds were picked up within a block or two of the spot where they were banded, having been killed by cats. Others flew many hundreds of miles southward to spend the winter and were shot for a pie. A chimney swift banded by Mr. Baynes at Meriden, N. H., flew into his room just a year after he had banded it and he was able to capture it in his hand and verify the record. This very small bird had flown all the way to its winter quarters and back without mishap and had been able to find the exact chimney in which it had lived the year before. A bluebird, banded in Minnesota, was killed by a shrike in Iowa, three years later, presumably while on its third northward trip over an invisible but well-beaten track which only the birds know.

On March 16th, 1913, a swallow was captured in South Africa bearing a band with the number E937 on it, and the name and address of a London ornithologist. The captor sent the band to him and found that the bird had been banded in its nest in Scotland the summer before. Thus, a few weeks after it had left the nest, this young bird had flown several thousand miles to spend the winter.

By means of these bands it has also been found that birds do not always start south when they leave the nest, but may range east or west, or even north, in search of food before the time for southward migration arrives.

The following species have been banded in Rhinebeck within the last year or two: woodcock, 1; screech owl, 1; chimney swift, 2; downy woodpecker, 1; goldfinch, 1; chipping sparrow, 4; song spar-

row, 3; barn swallow, 5; black and white warbler, 1; wood thrush, 2; robin, 15. No returns have as yet been reported.

If carefully done, banding does not injure a bird in any way, nor does it interfere with its walking or flight or make it conspicuous to hunters or natural enemies. Not one bird has been shot because it was thought to be wearing a band.

—August 14th, 1915.

Arrival of Transients From the North

Although the nesting season here will drag along until about the first of September, and a few dilatory or, perhaps, extra energetic species may continue well on into the month, farther north the season is over and already the southward tide of migration has started. Our own summer residents will disappear one by one, but we shall hardly miss them, for almost all except the pewee, goldfinch and song sparrow have already stopped singing.

On the other hand, the transients are arriving from the Adirondacks and Canada. In ever increasing numbers they come, until the September woods swarm with them. They are more numerous than in May, owing to the presence of the young of the year, but much less noticeable on account of their general silence and usually duller colors. And how confusing those juvenile and winter plumages are! The warblers, especially, are enough to drive the amateur student crazy. Even our commoner birds are often hard to recognize. The bobolink becomes brown like his mate and so does the goldfinch, while the scarlet tanager assumes the greenish tints of his better half.

The first birds to flock and move southward are the swallows, generally late in July. The appearance of the first great blue heron is a good sign that the migration has commenced. At that time we will notice that our warblers have banded together in flocks consisting of several species, usually attended by a few chickadees.

The following list gives the earliest records of autumn arrival at Rhinebeck:

July 9—Tree swallow, 1914.

July 13—Cliff swallow, 1914.

July 16—Purple martin, 1911. Summer resident at Poughkeepsie.

Aug. 1—Common tern, 1911; great blue heron, 1911; solitary sandpiper.

Aug. 9—Magnolia warbler, 1909; Bicknell thrush, 1914; osprey, 1915, near Hudson.

Aug. 10—Florida gallinule, 1915.

Aug. 11—Mourning warbler, 1915; Canadian warbler, 1915.

Aug. 13—Blackburnian warbler, 1914; water thrush, 1915.

Aug. 14—Black duck, 1915.

Aug. 15—Herring gull, 1903; broad-winged hawk, 1909.

Aug. 17—Yellow-bellied flycatcher, 1913.

Aug. 18—Wilson warbler, 1915.

Aug. 19—Nighthawk, 1912.
 Aug. 20—Blue-winged warbler, 1912.
 Aug. 21—Black-throated green warbler, 1901.
 Aug. 24—Purple finch, 1911.
 Aug. 25—Bay-breasted warbler, 1914; pine warbler, 1914.
 Sept. 2—Black-throated blue warbler, 1911.
 Sept. 4—American bittern, 1914; Savannah sparrow, 1914;
 Nashville warbler, 1914; Cape May warbler, 1911;
 myrtle warbler, 1914.
 Sept. 6—Connecticut warbler, 1913.
 Sept. 7—Red-headed woodpecker, 1903, probably resident near
 by; Philadelphia vireo, 1914.
 Sept. 8—Horned grebe, 1914; hooded warbler, 1914; brown
 creeper, 1914.
 Sept. 10—White-throated sparrow, 1914; Lincoln sparrow, 1914;
 red-breasted nuthatch, 1914.
 Sept. 12—Pied-billed grebe, 1914; Tennessee warbler, 1914;
 Parula warbler, 1914.
 Sept. 14—Blue-headed vireo, 1911; blackpoll warbler, 1914;
 ruby-crowned kinglet, 1914.
 Sept. 18—Pipit, 1911; junco, 1914; olive-backed thrush, 1914.
 Sept. 20—Winter wren, 1914.
 Sept. 22—Hermit thrush, 1911.
 Sept. 23—Yellow-bellied sapsucker.
 Sept. 28—Pigeon hawk, 1914.
 Sept. 29—Golden-crowned kinglet, 1913.
 Sept. 30—Henslow sparrow, 1914, summered in 1910-11.
 Oct. 3—Sharp-shinned hawk, 1913.
 Oct. 6—Yellow palm warbler, 1912.
 Oct. 7—Bufflehead, 1913.
 Oct. 9—Rusty blackbird, 1914.
 Oct. 9—White-crowned sparrow, 1910.
 Oct. 11—Pine siskin, 1913.
 Oct. 12—Mallard, 1913.
 Oct. 18—Canada goose, 1909.
 Oct. 21—Coot, 1914.
 Oct. 26—Fox sparrow, 1911.
 Oct. 29—Duck hawk, 1914.
 Oct. 30—Bronzed grackle, 1911.
 Oct. 31—Tree sparrow, 1911.
 Nov. 1—Northern shrike, 1913; horned lark, 1914.
 Nov. 5—Goshawk, 1913.
 Nov. 9—Redpoll, 1914.
 Nov. 12—Rough-legged hawk, 1913.
 Nov. 13—Snowflake, 1913.
 Nov. 27—Acadian chickadee, 1913.
 Dec. 3—Golden-eye, 1909.
 Dec. 10—American merganser, 1913.
 Dec. 25—Evening grosbeak, 1910.
 Dec. 27—Canvasback, 1909.

Dec. ?—Short-eared owl, 1908.
Dec. ?—Snowy owl, 1909.
Feb. 12—Holboell grebe, 1912.
Mar. 8—Hoary redpoll, 1912.
Mar. 25—Lapland longspur, 1912.
Mar. 27—Pine grosbeak, 1912.

Among the last-named species are half a dozen accidental winter visitants.

The Bicknell thrush is practically indistinguishable from the gray-cheek, but its summer range is south of the latter's and it therefore generally reaches us sooner. The Florida gallinule and coot are known as "mudhens." The former is a wader with iridescent purplish plumage and white markings. The latter is slate-colored, with a white bill and has its feet partly webbed or lobed to aid it in swimming. Both species are found in the bays along the river and it is probable that the gallinule breeds there. The blue-winged and Connecticut warblers are very rare here and I have had one of each reported to me. I have one record of the hooded warbler, a near relative of the Maryland yellow-throat. The pipit is a sparrow-like bird that appears in our ploughed fields and stubble in autumn. It walks instead of hopping. The short-eared owl is a great mouser and is frequently seen on the ground. I have never seen any of these species in spring.

—August. 21st, 1915.

The Departure for the South

The southward migration is now in full swing and it is time to consider the dates of departure of the various species that have spent the summer with us and also of those that are passing through from the north. The shore birds and swallows are the first to go and these are followed by some of the warblers and flycatchers; then the orioles, vireos, cuckoos and thrushes, and finally the hardier sparrows, the blackbirds, the ducks and some of the hawks.

The spring migration is not so much affected by the weather as is the southward movement. Warm weather will often detain the wanderers for weeks during the late autumn, while an early cold snap will send them all away almost in a single night. The list of latest dates of departure in this neighborhood follows:

Aug. 1—Common tern, 1911.
Aug. 2—White-eyed vireo, 1913; purple martin, 1914.
Aug. 4—Yellow-breasted chat, 1901.
Aug. 12—Long-billed marsh wren, 1915.
Aug. 15—Cliff swallow, 1909.
Aug. 17—Bank swallow, 1915.
Aug. 20—Blue-winged warbler, 1912; yellow-bellied flycatcher, 1913.
Aug. 26—Orchard oriole, 1901; mourning warbler, 1914.

- Aug. 27—Acadian flycatcher, 1915.
 Aug. 30—Killdeer, 1914; worm-eating warbler, 1914.
 Sept. 1—Golden-winged warbler, 1901, 1915.
 Sept. 2—Louisiana water-thrush, 1905; alder flycatcher, 1915.
 Sept. 4—American bittern, 1914; Canadian warbler, 1914;
 Bicknell thrush, 1914.
 Sept. 5—Veery, 1901; whippoorwill, 1915.
 Sept. 6—Connecticut warbler, 1913.
 Sept. 7—Philadelphia vireo, 1914.
 Sept. 8—Chestnut-sided warbler, 1915; hooded warbler, 1914.
 Sept. 10—Bay-breasted warbler, 1914.
 Sept. 11—Spotted sandpiper, 1901; tree swallow, 1902.
 Sept. 14—Barn swallow, 1914.
 Sept. 15—Bobolink, 1901; yellow warbler, 1913.
 Sept. 16—Least flycatcher, 1914; Wilson warbler, 1914.
 Sept. 17—Tennessee warbler, 1914; yellow-billed cuckoo, 1901.
 Sept. 18—Indigo bunting, 1901; warbling vireo, 1901; crested
 flycatcher, 1913.
 Sept. 19—Yellow-throated vireo, 1902; Blackburnian warbler,
 1902.
 Sept. 20—Red-headed woodpecker, 1903, wintered in 1914.
 Sept. 21—Kingbird, 1901; Baltimore oriole, 1901; black-billed
 cuckoo, 1902; redstart, 1914.
 Sept. 25—Ovenbird, 1903; house wren, 1903, 1914; nighthawk,
 1909.
 Sept. 28—Solitary sandpiper, 1914.
 Sept. 29—Chimney swift, 1914.
 Sept. 30—Wood pewee, 1914; water thrush, 1914; wood thrush,
 1914.
 Oct. 1—Cape May warbler, 1914.
 Oct. 3—Hummingbird, 1913; pigeon hawk, 1914.
 Oct. 5—Florida gallinule, 1914; red-eyed vireo, 1914; pine
 warbler, 1914.
 Oct. 7—Rose-breasted grosbeak, 1914; brown thrasher, 1914.
 Oct. 8—Black and white warbler, 1914; Nashville warbler,
 1914; northern parula warbler, 1914; magnolia
 warbler, 1914; black-throated green warbler, 1914.
 Oct. 9—Green heron, 1910; black-crowned night heron, 1910;
 osprey, 1910.
 Oct. 15—Grasshopper sparrow, 1914; black-throated blue warb-
 ler, 1914; olive-backed thrush, 1914.
 Oct. 18—Phoebe, 1914; blackpoll warbler, 1914.
 Oct. 21—Broad-winged hawk, 1909; coot, 1914; white-crowned
 sparrow, 1914; Maryland yellow-throat, 1914.
 Oct. 23—Chipping sparrow, 1911; yellow palm warbler, 1911;
 blue-headed vireo, 1914.
 Oct. 24—Sharp-shinned hawk, 1913; towhee, 1913.
 Oct. 29—Field sparrow, 1913.
 Oct. 31—Vesper sparrow, 1911; Henslow sparrow, 1911.

- Oct. ?—Sora, 1910.
- Nov. 1—Savannah sparrow, 1914; swamp sparrow, 1914; Lincoln sparrow, 1914.
- Nov. 2—Myrtle warbler, 1909, 1913.
- Nov. 4—Red-breasted nuthatch, 1914.
- Nov. 5—Goshawk, 1913; hermit thrush, 1914.
- Nov. 6—Pipit, 1911.
- Nov. 7—Rusty grackle, 1911.
- Nov. 10—Catbird, 1909; purple grackle, 1914.
- Nov. 15—Fox sparrow, 1911.
- Nov. 19—Bronzed Grackle, 1900.
- Nov. 24—Cowbird, 1914, also 3 winter records.
- Nov. 26—Yellow-bellied sapsucker, 1914.
- Nov. ?—Woodcock.
- Dec. 3—Mourning dove, 1908; golden-eye, 1909; Canada goose, 1910.
- Dec. 5—Wood duck, 1913.
- Dec. 7—Pied-billed grebe, 1910; mallard, 1910.
- Dec. 9—Duck hawk, 1914.
- Dec. 10—Red-winged blackbird, 1909; winter wren, 1913.
- Dec. 16—Great blue heron, 1913.
- Dec. 25—White-throated sparrow, 1913.
- Dec. 27—Meadowlark, 1901; horned grebe, 1909; bufflehead, 1909; canvasback, 1909.
- Dec. 29—Purple finch, 1911, sometimes winters.
- Dec. 31—Black duck, 1911, sometimes winters.
- Dec. ?—Short-eared owl, 1908.
- Jan. 2—Flicker, 1911; robin, 1915, sometimes winters.
- Jan. 3—Ruby-crowned kinglet, 1909; kingfisher, 1911.
- Jan. 4—Song sparrow, 1902, rare in winter.
- Jan. 6—American merganser, 1914, rare in winter.
- Jan. 8—Bluebird, 1915.

—September 25, 1915.

Photograph by Tracy Dows

PHEASANTS LEAVING FOOD SHELTER ON TERRACE
Foxhollow Farm

Photograph by Tracy Dows

PHEASANTS UNDER FOOD HOUSE
Foxhollow Farm

Second Annual Report
Rhinebeck Bird Club

1916

The Rhinebeck Bird Club

Officers

MAUNSELL S. CROSBY	MRS. JACOB H. STRONG
PRESIDENT	FIRST VICE-PRESIDENT
ERNEST C. PULLEN	CLINTON. G. ABBOTT
SECOND VICE-PRESIDENT	SECRETARY
TRACY DOWS	MAUNSELL S. CROSBY
TREASURER	GENERAL MANAGER

Board of Directors

(Term of office expires November, 1917) (Term of office expires November, 1918)

CLINTON G. ABBOTT	MRS. GEORGE F. COOKINGHAM
MAUNSELL S. CROSBY	DR. JAMES F. GOODELL
TRACY DOWS	REV. L. A. MITCHELL
MRS. JAMES F. GOODELL	ERNEST C. PULLEN
MRS. JACOB H. STRONG	MISS CAROLYN WELLS

Committee on School Work

CLINTON G. ABBOTT	LEWIS B. BARBER
ERNEST C. PULLEN	

Committee on Bird Boxes and Bird Feeding

ROBERT G. DECKER	TRACY DOWS
THOMAS A. ROBINSON	

Library Committee

TRACY DOWS	MISS JENNIE FELLOWS
DR. GEORGE N. MILLER	

The Second Annual Meeting of the Rhinebeck Bird Club

THE proceedings of the second annual meeting of the Rhinebeck Bird Club and of its Board of Directors, held at the High School Building on December 2, 1916, may be summarized as follows:

The reports of the various officers were presented, accepted, and placed on file.

Report of the Secretary

Since the last annual meeting, the Rhinebeck Bird Club has held four public lectures on the following dates: February 1, March 17, June 6, and October 18, 1916. In addition, there have been meetings of the Executive Committee on August 30, and November 21. It is the aim of the Society to hold some sort of a public meeting every other month, and this schedule was approximately adhered to until the July meeting, for which a field day had been planned. Owing to the absence of the President on military duty, this meeting had to be abandoned. The September meeting was postponed to October on account of the danger of infantile paralysis.

The speakers at the lectures and their subjects, in the order named, were as follows: Clinton G. Abbott (Secretary of the Club), "Travels in Birdland"; T. Gilbert Pearson (Secretary of the National Association of Audubon Societies), "The Work of the National Association"; Louis Agassiz Fuertes (Bird Artist), "Familiar Birds and their Notes"; Howard H. Cleaves (Assistant Curator of the Staten Island Museum), "Attracting and Photographing Wild Birds."

All of the lectures were illustrated with lantern slides and in addition that of Mr. Pearson was illustrated with motion pictures.

The attendance at the lectures has been most gratifying. The crowd attending Mr. Murphy's lecture at the last annual meeting overflowed the capacity of the High School auditorium and for the lectures this year the larger auditorium of the Starr Institute has been used. In order to protect members of the Bird Club who complained of being unable to secure seats, a system was inaugurated, beginning with Mr. Pearson's lecture, of charging ten cents admission to all non-members. But little diminution of numbers was noticed as a result, and for all the lectures the hall was filled, with some persons standing. The average attendance at all four lectures was about four hundred.

The membership in the club has maintained a satisfactory growth during the year, as is shown by the following table:

	An'l Meet. 1915	An'l Meet. 1916	Gain
Life members.....	10	14	4
Sustaining members..	10	11	1
Active members....	66	73	7
Associate members..	16	20	4
Junior members.....	179	262	83

It is pleasing to note that not a single resident member has failed to renew his or her subscription.

The Club has published during the year "The Year Book of the Rhinebeck Bird Club", which contained the Constitution and By-Laws of the Club, reports of officers covering the first year's work, and a list of the members. This was distributed to members in January, 1916. The second annual report is already in preparation, to which it is proposed to add the articles on Rhinebeck Birds by Maunsell S. Crosby, which appeared in The Rhinebeck Gazette, October 3, 1914 to September 25, 1915. The Club has also published a table of the spring bird migration in Rhinebeck compiled by Maunsell S. Crosby from his records covering many years of observation. This will be distributed to all members and school children in the town on the first of next March.

Mention might be made of the bird censuses which Mr. Crosby contributed to the records of the Biological Survey in Washington, D. C. These were made in 1915 and 1916, and covered 210 acres of the "Grasmere" estate. Three hundred and eighty-seven pairs of breeding birds were recorded in 1915 and three hundred and fifty-seven in 1916. The 1915 census was particularly commended in the report which the Department of Agriculture issued on the subject.

In the way of Educational Work, the Club held a Bird Essay Contest open to pupils in all the schools of the township. It called for an article of not less than 250 words on some phase of bird life, prize winners to be decided by a committee appointed by the President. To each school was offered a first prize of "Reed's Bird Guide" (in two volumes) and a second prize of a year's subscription to the magazine "Bird-Lore." There were six entries in the contest with the following results:

School	First Prize	Second Prize
High School, 1st year..	Harriet West	Florence E. Closs
7th and 8th Grades.....	John O. Hamlin	Earl Odell
6th Grade	Harriet Tator	Madeleine Beach
4th and 5th Grades.....	Vernon Sipperley	Joseph Sullivan
Flat Rock	Jennie Dexheimer	Clarence Watson
Ackert Hook	Ernest R. Crapser	Helen Beach

The essays were submitted in June, and those winning prizes were all subsequently printed in The Rhinebeck Gazette. The prizes were publicly awarded at the meeting of the Club held on October 18th. A school contest in bird-feeding devices has already been announced for next year.

Since its inception the Club has made a particular attempt to interest the people of Rhinebeck in the winter feeding of birds, and the providing of nesting boxes in the summer. A plentiful supply of these devices has always been kept on hand at the Club's headquarters and they have been bought in considerable numbers by residents of the town. Recently the club has also been selling ready-prepared bird-food, put up in 5 and 10 pound bags.

In addition to its local work the Club last winter inaugurated a little extension work in the neighborhood of Rhinebeck, with the idea of arousing a greater interest in birds throughout this part of Dutchess County. To this end the Secretary delivered free illustrated lectures on "Dutchess County Birds" in Rhinecliff, Wurtemburgh, Hillside, Staatsburg and Hyde Park. At the invitation of the Millbrook Bird Club, he also lectured on the same subject in Millbrook.

At the meeting of the Executive Committee held on November 21, it was voted that the Club should join the National Association of Audubon Societies.

CLINTON G. ABBOTT,
Secretary.

Report of the Treasurer

Receipts

Balance on hand beginning of year.....	\$ 5.56
From dues of Active members, 1916.....	\$ 39.50
From dues of Active Members, 1917 & 1918.....	11.00
From dues of Sustaining Members, 1916.....	50.00
From dues of Sustaining Members, 1917.....	10.00
From dues of Associate Members, 1916.....	5.00
From dues of Associate Members, 1917.....	5.00
From fees of Life Members.....	245.00
From receipts at lectures.....	30.10
From sale of Bird Boxes and Feeders (gross).....	24.10
From sale of Bird Feed (gross).....	50.60
	<hr/> \$470.30
	<hr/> \$475.86

Payments

Rent of Starr Institute, four evenings.....	\$ 24.00
Printing and Postage.....	51.27
Prize Books, Doubleday, Page & Co.....	12.85
Expenses of Lectures.....	65.00
Ten Life Membership fees transferred to Rhinebeck	
Savings Bank	250.00
	<hr/> \$403.12
Balance on hand.....	<hr/> \$ 72.74

TRACY DOWS,
Treasurer.

Report of the General Manager

The report of the Secretary covers practically all the activities of this Club, but there is one branch of which the General Manager has had entire charge, namely the Junior Audubon work. The organization of Junior Audubon classes in the schools of the town is one of the most important departments of the Rhinebeck Bird Club's work.

Every teacher who forms a class of ten or more members receives the National Association of Audubon Societies' magazine, "Bird-Lore," free of charge for a year, and upon payment of ten cents each pupil receives a membership button and ten illustrated leaflets of various species of birds. These leaflets form the basis of bird-study for the year.

During the first year of the Rhinebeck Bird Club's existence, in the winter of 1914-15, five classes, numbering in all 91 members, were formed. Last year 11 classes, totalling 208 pupils, took the course, and so far the classes for 1916-17 number 15, with an enrollment of 262. Only three of the district schools remain to be heard from, among which is that of Rhinecliff, which had a class last year.

The importance of these classes lies in the fact that tastes are formed in early youth and a child who once gains a knowledge and a love of birds will always have an instinctive sympathy for wild creatures in after life. Such a training tends to make the child a better citizen in every way.

The following is the membership tabulated by districts:

District No.	1	3	4	5	6	7	8	9	11
No. of Pupils	11	20	11		10	10	10	11	15
Grade 1				25					
" 2				20					
" 3				36					
" 4				22					
" 5 & 6				34					
" 7 & 8				12					

Choristers' School—15.

MAUNSELL S. CROSBY,
General Manager.

Then followed the election of five members of the Board of Directors, to serve for two years. Mrs. G. F. Cookingham, Miss Carolyn Wells, Dr. James F. Goodell, Rev. L. A. Mitchell and Mr. Ernest C. Pullen, having been duly nominated, were unanimously elected.

Election of officers of the Club for the ensuing year resulted as follows:

President and General Manager—Maunsell S. Crosby.

1st Vice President—Mrs. Jacob H. Strong.

2nd Vice President—Ernest C. Pullen.

Secretary—Clinton G. Abbott.

Treasurer—Tracy Dows.

Due notice having been given, the question of a change in the Constitution, abolishing the Executive Committee of the Club, and causing its duties to devolve upon the Board of Directors, was brought up and discussed. On motion, it was unanimously voted to adopt the amendment, and the necessary changes in the wording of the Constitution were ordered made.

The revised Constitution is appended:

Constitution

ARTICLE I

Name

The name of this organization shall be the Rhinebeck Bird Club.

ARTICLE II

Objects

The objects of this Club shall be the increase and protection of our local wild birds and the stimulation of interest in bird life in the field, in our homes and in the schools.

ARTICLE III

Membership

Section 1. The membership of this Club shall consist of Junior Members, Associate Members, Active Members, Sustaining Members, Life Members, Patrons and Honorary Members.

Section 2. Any boy or girl under the age of 16 residing in the Town of Rhinebeck may become a Junior Member by paying ten cents annually.

Section 3. Any person in sympathy with the objects of this Club, whether a resident of the town or not, may become an Associate Member by paying fifty cents annually.

Section 4. Any resident of the Town of Rhinebeck may become an Active Member, on election by the Board of Directors and payment of fifty cents annually.

Section 5. Any person in sympathy with the objects of this Club may become a Sustaining Member upon payment of five dollars annually and upon election by the Board of Directors.

Section 6. Any person in sympathy with the objects of this Club may become a Life Member upon payment of twenty-five dollars at one time and upon election by the Board of Directors.

Section 7. Any person in sympathy with the objects of this Club may become a Patron upon payment of one hundred dollars at one time and upon election by the Board of Directors.

Section 8. Honorary Members can be elected only by unanimous vote by the Board of Directors. There are no dues for Honorary Membership.

Section 9. The voting power shall be limited to Active Members, and Sustaining Members resident in this town.

Section 10. A Life Member, resident in this town, may exercise the power to vote by paying fifty cents annually.

Section 11. A member may be expelled from the Club upon the written recommendation of any officer, by the majority vote of the members of the Board of Directors present at any meeting, provided that notice of such action, with reasons therefor, be presented to the member and to the Board of Directors at least one week before the meeting.

Section 12. All persons three months in arrears for dues will automatically cease to be members.

ARTICLE IV

Government

Section 1. The governing body of this Club shall consist of a Board of Directors of ten persons, divided into groups of five each. The tenure of office of the Directors shall be two years, but only five Directors' terms can expire by limitation in any one year. Therefore, at each annual meeting of the Club, five new Directors shall be elected by ballot of a majority of the members present, due notice having been given in advance to all members.

Section 2. Only Active Members, Sustaining Members resident in this town and Life Members paying fifty cents annually are eligible to the Directorship, and no person in arrears of payment of annual dues will be eligible.

Section 3. The Board of Directors shall elect at its annual meeting, from its own members, by ballot and a majority vote, a President, a First Vice-President, a Second Vice-President, a Secretary, a Treasurer and a General Manager.

Section 5. Vacancies occurring in the Board of Directors may be filled by the President to complete the year in which they occur.

Section 6. At the annual meeting any member may suggest candidates to fill vacancies in the Board of Directors.

Section 7. The President may at any time appoint committees for specified purposes consisting of members of the Club.

ARTICLE V

Duties of Officers

Section 1. The duties of officers shall be such as pertain to their respective offices in similar clubs. The President shall be ex-officio chairman of the Board of Directors.

Section 2. Vice-Presidents shall perform the duties of the President, in his absence, in order of seniority of office.

Section 3. The Secretary shall record the proceedings of the Club and of its Board of Directors in books to be kept for that purpose; shall have charge of the records of the Club and of its publications; shall conduct the correspondence of the Club, and keep record thereof; shall inform members, Directors and officers of their election, and shall give notice of all meetings, and inform officers of all matters requiring their attention.

Section 4. The Treasurer shall collect all bills and assessments due the Club; shall pay from the funds of the Club all bills duly approved by the President or General Manager, and shall send to the Secretary at least once a month the names and addresses of all new members. He shall furnish, at the request of the President or Board of Directors, a statement of the financial condition of the Club.

Section 5. The General Manager shall have general oversight of the activities planned by the Club for carrying on its work as indicated in Article II. This office may be held jointly, if advisable, with any of the above.

ARTICLE VI

Meetings

Section 1. There shall be a regular meeting of the Club on the third Wednesday of every other month: in January, March, May, July, September and November. The November meeting shall be the annual meeting. A notice of each regular meeting shall be printed in The Rhinebeck Gazette immediately before such meeting.

Section 2. A notice of the annual meeting shall be mailed to each member not less than ten days prior to such meeting.

Section 3. A special meeting may be called at any time on three days notice, by the President, by the General Manager, or on a written application signed by three members of the Board of Directors.

Section 4. Nine members shall constitute a quorum at any meeting of the Club.

Section 5. Meetings of the Board of Directors may be held at such times as may be appointed by the President, or in his absence, by the Secretary, and two days' notice of such meetings shall be given. Three members of the Board of Directors shall constitute a quorum at their meetings.

Section 6. The order of business shall be as follows:

Reading records of previous meeting. May be dispensed with by majority vote.

Reports by officers in order as in Article IV, Sec. 3.

Reports of committees.

Reading of communications.

Election of members.

Unfinished business.

New business.

ARTICLE VII

Amendments

Amendments or alterations of the Constitution may be made by a two-thirds vote of the members present at any meeting, provided written notice of the proposed change shall have been sent to every member of the Club not less than four days prior to said meeting.

Classes of Membership

Patron	-	-	\$100.00	In One Payment
Life	-	-	\$25.00	In One Payment
Sustaining	-	-	\$5.00	Annually
Associate	-	-	50c	Annually
Active	-	-	50c	Annually
Junior	-	-	10c	Annually

List of Members

Active

Abbott, Clinton G.	Lynch, Miss Elizabeth M.
Abbott, Mrs. Clinton G.	McCarty, Mrs. Charles E.
Applegate, Mrs. J. Florence	McCarty, Miss Helen
Asher, J. Raymond	Mann, Alexander
Barber, Lewis B.	Merritt, Douglas
Barber, Mrs. Lewis B.	Mitchell, Rev. L. A., D. D.
Brown, William K.	Mitchell, Mrs. L. A.
Connor, Miss Charlotte M.	Montgomery, Miss Margaret
Cookingham, Mrs. George F.	Moore, John W.
Crosby, Mrs. Ernest H.	Mulrein, Mrs. James
Decker, Philmore	Odell, Miss Mae
Decker, Robert G.	Olmsted, Miss Julia
Decker, Mrs. Robert G.	Olmsted, Miss Mary
deLaporte, Theodore	Pells, Miss Helen
deLaporte, Mrs. Theodore	Pennington, C. F.
Dimmick, Miss Rose	Philbrick, B. W.
Fellows, Miss Jennie	Pullen, Ernest C.
Fisher, Mrs. W. G.	Rafter, Mrs. Katherine M.
Foster, W. W.	Reed, Miss Anna
Foster, Mrs. W. W.	Reed, Miss Julia
Gallup, James W.	Rikert, R. Raymond
Goodell, Dr. James F.	Robinson, Thomas A.
Goodell, Mrs. James F.	Sheldon, Dr. Thomas
Hadden, W. A.	Snyder, Mrs. Frank R.
Hamlin, Mrs. J. C.	Strong, Jacob H.
Hawkins, W. W.	Strong, Mrs. Jacob H.
Herrick, Frank	Suckley, Miss Margaret
Herrick, Mrs. Frank	Sullivan, Patrick J.
Irvis, Mrs. C. M.	Traver, Miss Emma F.
Johnston, Mrs. Robert	Tremper, Benjamin
Knowles, William	Van Etten, Mrs. Sarah H.
Latson, Miss Lilian B.	Van Vliet, Miss Clara Tremper
Lawson, Richard	Van Vredenburgh, Mrs. Lee
Little, Rev. Francis K.	Watt, Duncan
Little, Mrs. Francis K.	Wells, Mrs. Eugene
Lynch, Miss Ada C.	Wells, Miss Carolyn
	Yost, William

Associate

Barbey, Henry G., Katonah, N. Y.	Kuser, Mrs. Anthony R., Bernardsville, N. J.
Boomhower, Rev. W. G., Troy, N. Y.	Kuser, J. D., Bernardsville, N. J.
Clark, W. N., High Bridge, N. Y.	Nichols, John Treadwell, New York City
Crosby, Miss Grace A., New York City	Platt, Edmund, Po'keepsie, N. Y.
Crysler, Miss Catherine, Hawthorne, N. Y.	Suckley, Miss Elizabeth M., New York City
Crysler, E. M., Hawthorne, N. Y.	Troy, Peter H., Po'keepsie, N. Y.
de Billier, Miss A., New York City	Wagstaff, C. DuBois, New York City
Frost, Allen, Poughkeepsie, N. Y.	Wagstaff, Oliver C., New York City
Heermance, Martin, Poughkeepsie, N. Y.	Webb, J. G., Clinton Corners, N. Y.
Kuser, Anthony R., Bernardsville, N. J.	Willard, Miss Mary L., New York City

Sustaining

Astor, Mrs. Vincent	Kip, Garrett B.
Dows, Tracy	Kip, W. Ruloff
Dows, Mrs. Tracy	Landon, Major Francis G.
Hoe, Mrs. Richard M.	Merritt, Mrs. Douglas
Huntingfield, Lady	Miller, Dr. George N.
	Olin, Col. S. H.

Life

Crosby, Maunsell S.	Redmond, Geraldyn
Delano, Warren	Redmond, Geraldyn L.
Hoyt, Gerald L.	Redmond, Johnston L.
Huntington, Mrs. Robert P.	Rogers, Archibald
Mills, Mrs. Ruth	Vanderbilt, Frederick W.
Morgan, Mrs. Gerald	Vanderbilt, Mrs. Frederick W.
Morton, Mrs. Levi P.	Zabriskie, Mrs. Andrew C.

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