

OUR  
DOBYARD  
FRIENDS



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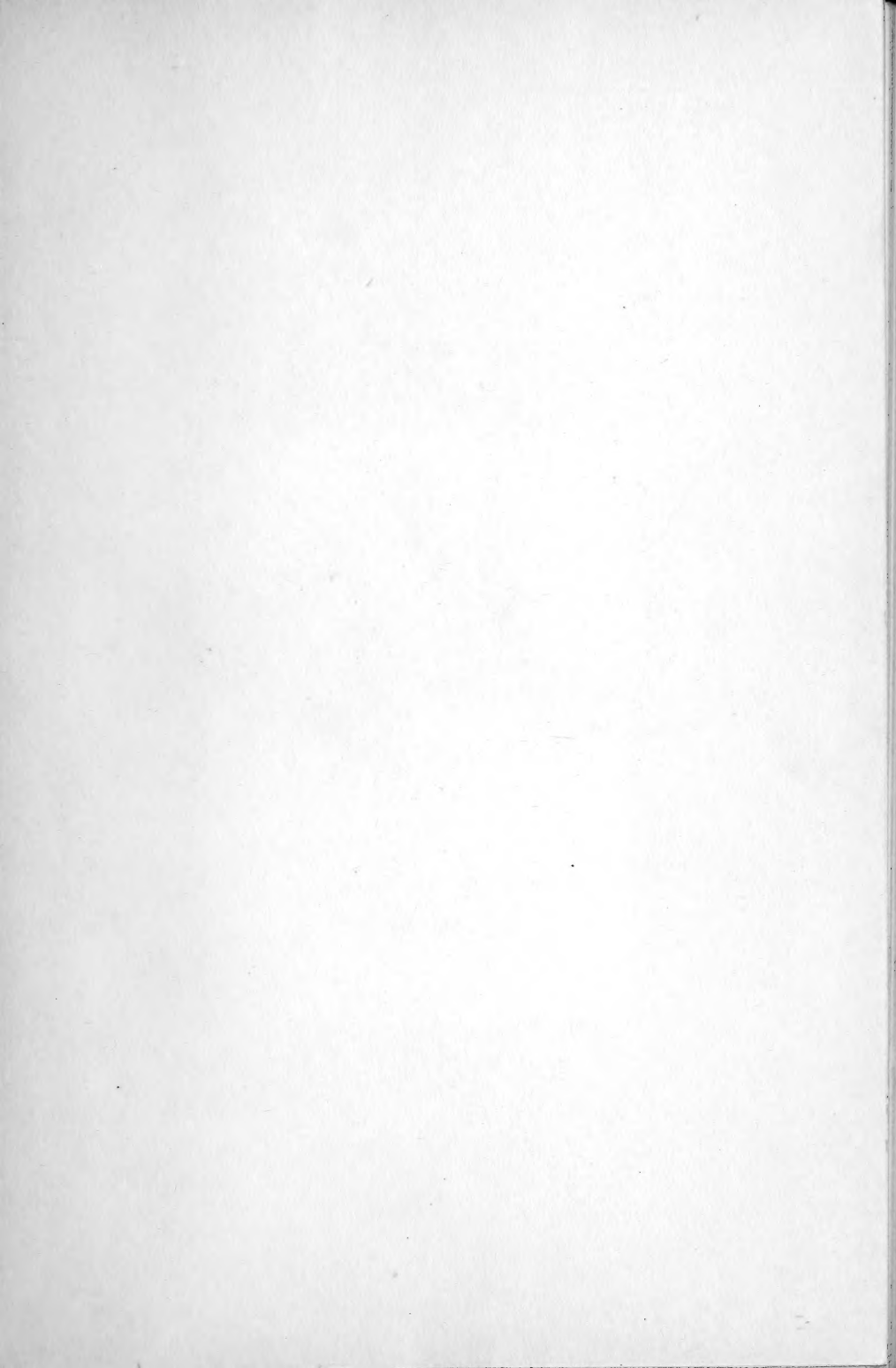


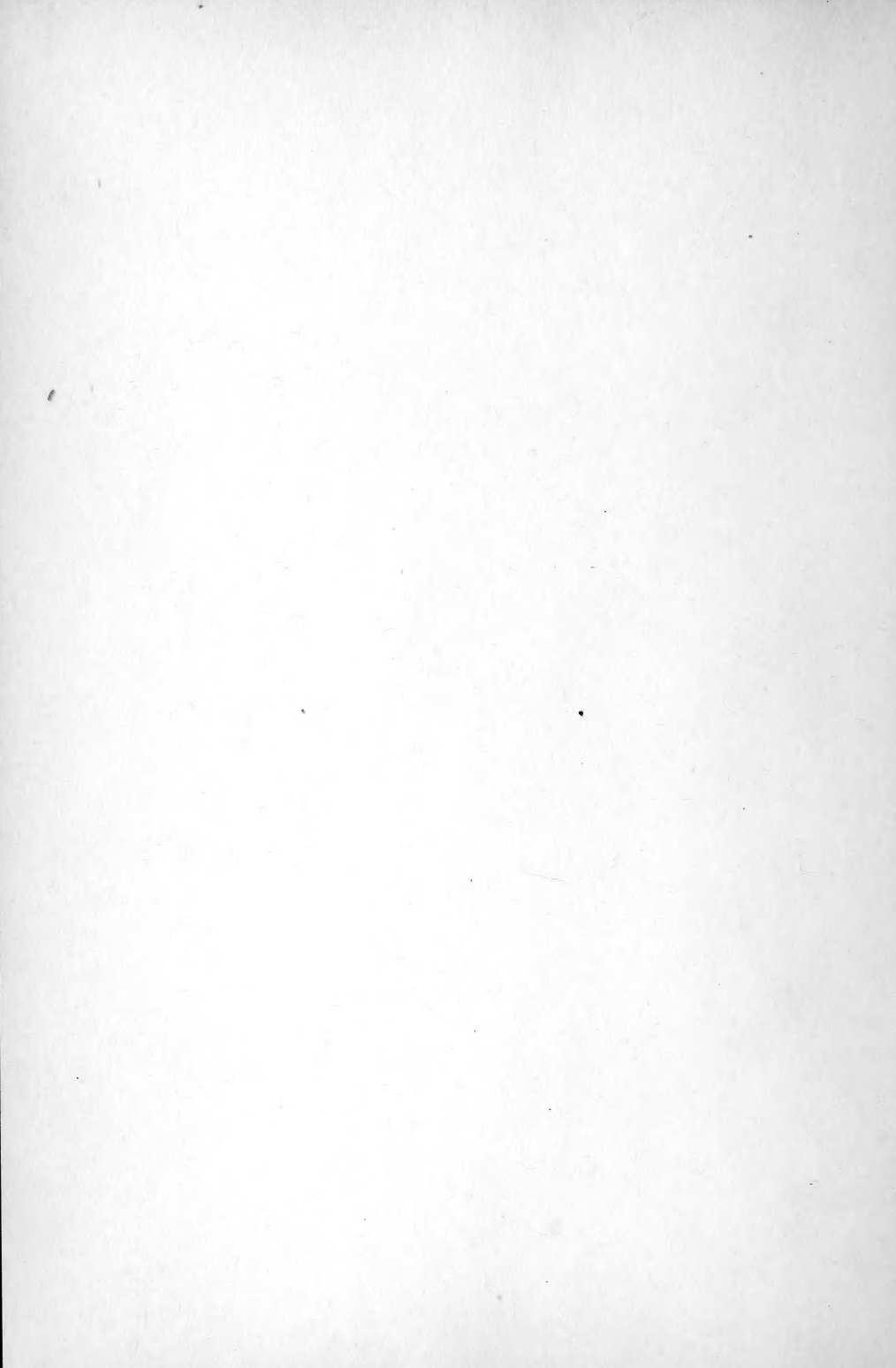
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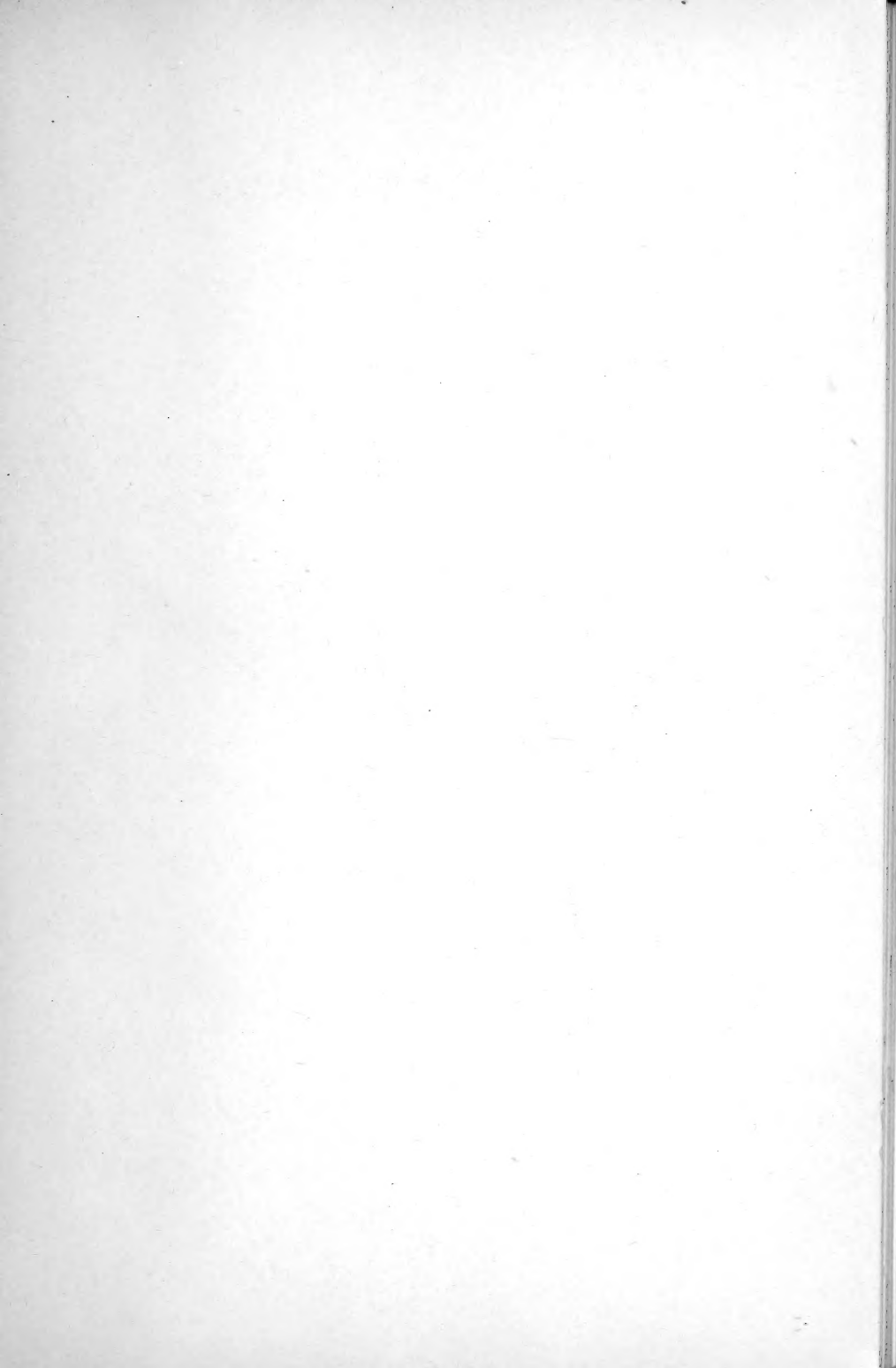
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WHITE-BREASTED NUTHATCH, UPPER FIGURES, MALE AND FEMALE  
RED-BREASTED NUTHATCH, LOWER FIGURES, MALE AND FEMALE

Order—PASSERES  
Genus—SITTA

Family—SITTIDÆ  
Species—CAROLINENSIS AND CANADENSIS

# Our Dooryard Friends

— BY —

SARA V. PRUESER



THIRD EDITION

*Published by*

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TO THE  
BOYS' NATURE CLUB OF SHAWNEE GLEN

*This Book is Dedicated in Grateful and Loving  
Homage by the Author*



MAY 23 1918

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no. 1



## INTRODUCTION

One who long has lived the intensive life of cities can know little about birds. Indeed, we city folk seldom hear birds, or hear them mentioned, unless it be when we are told that the English sparrows have driven all the other birds out. This perhaps is as likely to be as incorrect as most general statements; perhaps it is we who have driven out all the other birds, if they have been driven out, or perhaps it is but our way of excusing ourselves for our astounding ignorance about all of the manifestations of life about us. We have dull vision, and grope our way stupidly and purblindly among mysteries and beauties we have not the wit to recognize and enjoy. About all we know of English sparrows is that they are forever quarreling and scuffling in the streets, and we ourselves in that respect are not much beyond the development they have attained.

I can tell a robin or a bluejay, but I should be unable to identify many other members of the bird family. I do know a meadow lark when I see one, because on the golf links in early summer these blithe birds are constantly springing up from one's feet and flying low across the downs with a note of music that might have been swept from the strings of a harp, and one is now and then begging the caddies to respect

the nests they so recklessly build in the open fields. And there comes back, too, a recollection of long years since, when a flash of red through the green woods was identified for me as a scarlet tanager. Only the other day I had the amazing adventure of beholding an owl in a tree; we saw it from the veranda of the Country Club; and down on Lake Erie, in the winter, I have seen bedraggled eagles sitting cold and disconsolate in the tops of tall trees, waiting for the fishermen to haul their nets from the ice, and share with them the spoil.

But I am not a naturalist, and cannot undertake to write any sort of critical appreciation of a book that is so explicit about birds as the manuscript of "Our Dooryard Friends" proves to be, and so I am unable to speak in any wise of the scientific value of those observations which Miss Prueser has made among the birds. If I fail to share all of her raptures about nature, perhaps it is because I have been so exclusively occupied with the expressions of man, about whom it becomes more and more difficult to have any sort of rapture, but I can own to a joy in reading the simple and sincere sketches which Miss Prueser has gathered to make this little book. And in reading them I have not been reproached for my lack of knowledge of birds, I have been reproached by my own ignorance of my own land. I was assured, ever since my teachers tried to drum it into my head when I was a little boy, that the valley of the Maumee River was rich in historical interest, but I never knew that there was

so much of interest going on in it as Miss Prueser has discovered within a few yards of her own door. And so I have read her pages with interest, and I have had my joy in that little world she creates and in which she seems to move, a little world so curiously remote from the work-a-day world of men with all its striving and its savagery, that one might wish that she had been more discursive and more explicit about it. She writes of it in a plain and straightforward manner, and tells us quite simply, almost naively, all the wonderful things she beholds in it; it becomes a world in which the human interest is entirely subordinated, when it exists at all, to the manifold interests of the inhabitants of that world whose affairs are doubtless quite as important as our own.

BRAND WHITLOCK.

Toledo, Ohio.

## PROCLAMATION

*It is related that in the early days of Illinois history it was the custom of the leading lawyers to accompany on horseback the judge as he "rode the circuit," journeying from town to town to hold court. On one of these journeys it was observed that one of the best known and ablest lawyers of the party had fallen behind and had become separated from his distinguished associates. Inquiry developed the fact that this great lawyer and statesman, noticing as he passed along the country road that a robin's nest had fallen to the ground, bringing wreck and ruin to a tiny home, and vast trouble to a little bird-mother, had dismounted from his horse, gathered up the helpless young birds, placed them in the nest and climbed up into the tree to place this little house with its tender inmates on a more secure foundation out of harm's way. This kindly, humane act performed, the big-hearted lawyer mounted his horse and rode on. Abraham Lincoln could thus find time to save suffering and administer to the wants of a poor little bird-family; he became the liberator of a race and the savior of his country. Who shall say that this thoughtful care for the grief-stricken bird-mother and her helpless brood was not a forerunner of that sympathy, devotion and tenderness which have endeared Lincoln to the world? If he as a boy had robbed birds' nests and taken delight in inflicting pain and suffering on the innocent and defenseless, it is safe to say that*

as a man he would not have achieved the high place he enjoys in the nation's affections.

Let our boys and girls be taught that it is weak and cowardly to inflict suffering upon birds and dumb animals. Let us by example teach them that it is manly and womanly to protect the helpless and to love the good, the true and the beautiful. The conservation of bird life and the encouragement of tree planting is more than mere sentiment—it is fast becoming an economic problem of nationwide importance. The unfortunate decimation of bird life has brought a myriad of insect pests which threaten the very life of farm crops and orchards.

It is fitting that in the morning of a new century and a higher civilization the hand of man should guide nature in the restoration of a portion of the primeval forest and the protection of the birds that sing among the branches.

In compliance with authority vested in me by law, I therefore designate April 9th, as Arbor and Bird Day, and recommend that it be appropriately observed by the common schools, higher institutions of learning, civic organizations and citizens generally, to the end that the utility and beauty of tree and bird and bud and bloom and song may be more fully understood and appreciated and that the forest foliage may protect the home, adorn the landscape and clothe again the rugged slope of the everlasting hills.

FRANK B. WILLIS.

Executive Department,  
Office of the Governor,  
February 15, 1915.

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## IT'S THE STATE'S DUTY.

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"I feel that the protection of song and insectivorous birds is a duty which the state owes to itself. The surest way to establish this protection is to inculcate in the minds of our school children such love for birds and such an interest in their habits as to make all desire for the destruction of either the birds or their eggs impossible, thereby insuring the preservation of crops which are a prey to insect pests."

Hon. Geo. W. P. Hunt, Governor of Arizona.

## PREFACE

Little less than a century ago, Henry Rix bought a tract of land for which he paid the government \$1.25 per acre. It is on this old tract, a part of the original Northwest Territory, from which nearly all the observations, reported in this volume, have been made.

In writing these sketches, my purpose has been to interest both young and old in the life and beauty of the out-of-doors. And in endeavoring to do this, no effort has been made to contribute anything to science but I have merely tried to tell the truth as I saw it. If others in their observations of out-door life should verify these truths the writer's happiness will be all the greater.

I wish to express my thanks to The School Century, Comstock Publishing Co., and to Doubleday, Page and Co., for permission to reprint a few of the sketches that have appeared in their journals. To Homer H. Helmick and other friends, I am indebted for helpful suggestions and kindly criticism, and to Claud Prueser Helmick for his assistance in photography.

SARA V. PRUESER.

January, 1915.

Defiance, Ohio.



BLACK CAPPED CHICKA'DEE

Did you ever see the little Chickadee, in winter or summer, lifting the myriads of scale pests from the bark crevices of your trees?

OUR DOORYARD FRIENDS

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OCTOBER, 1917.

**TREE SPARROWS—NEW YEAR'S DAY.**

Into the hawthorn thicket had flown a flock of small birds, sparrow-like in appearance. Their sweet, clinking notes I had heard before; their weak, chipping calls were not new to me. Then why should I be in doubt as to their identity? It was the sweet ripple of song that followed, much like the note of the goldfinch but not as loud or as musical, that caused me to hesitate in naming the singer. What a charming song it was!—a soft ripple of merry tinkling notes. The woods were silent, except for the choruses sung by these little creatures, that flew from one clump of rose bushes to another, then into the thickets again. How happy I was to hear this outburst of song on this mild New Year's Day. The day was ideal—warm, bright, sunny. No wonder they favored me with their March love songs in January.

During the half-hour's enjoyment of their musical performance, I took some notice of their looks. Quietly creeping up to within two yards of one of them, I saw that the top of his head was a rich rufous, bordered by a dull gray, that his back was striped with black, buff and rufous; that his wing coverts were tipped with white, and that in the center of his grayish white breast was a small dark spot. The rufous on his head made me think of the chipping sparrow or hairbird; some notes in his song reminded me of the wild canary's and of the junco's song. I was quite sure that he must be a tree sparrow or our winter

chippy, as some please to call him. The description in the bird book confirmed my conviction.

Now that I was sure of their identity, I was intensely interested to see what they might do and what traits of character they might exhibit. Being clad in sparrow-colored clothes myself, made me less conspicuous, so I could get within a few feet of them as they settled down in the grassy places in the woods to feed upon the weed seeds. How much in color were they like the dried leaves, and tanned and grayed grasses! Often I would lose sight of them as they flew ahead to new feeding grounds, for their forest-colored backs were so like the colors of the ground and leaves that it was difficult to place them. In their flight they seemed like a lot of loose leaves blown by a strong wind from one brush pile to another.

When they reached the edge of the woodland, they flew into a number of low hawthorn bushes and for some minutes not a sound escaped them. Tucking their little heads under their wings, they sat motionless, indulging in little naps and taking their sun baths at the same time. Wise little creatures,—excellent economizers of time!

In most parts of Ohio and other central states the tree sparrows are common winter residents but, like many of the other birds, their number is rapidly decreasing. This decrease is likely due to a lack of food and to the disappearance of bushy undergrowths from our fields and the destruction of our forests. If the former be the chief cause, it can be, in a measure,



overcome by feeding them through the winter months, when food is scarce. Tree sparrows are very fond of all kinds of grass and weed seeds. Hemp, rag and knotweed seeds are eagerly sought as well as those of the ash and ironwood trees. Fine cracked corn is also relished. Regular feeding places, on the outside limit of English sparrow territory, can be established. Some men on our farms are taking quite as much pride in caring for the wild birds in winter as they do in looking after their domestic birds.



FIELD SPARROW

**THE CHEERFUL CHICKADEES.**

What bird can bring more cheer when the snow lies piled in great drifts about your door, than the chickadee? From the woods and over the meadows they come, visiting in the orchard long enough to glean from the bare boughs the insect food hidden in the bark.

How thankful one is for their cheering notes, "Chicka-dee, chicka-dee, de, de!" What wild woodland notes they introduce into the noise and clatter of domesticity! Sometimes, two long notes, sweet and plaintive emanate from one of them. Then follows a chorus of "chick-a-dee" and "da, da, da."

In mid-winter when food becomes scarce, they are welcome guests at your kitchen door, picking up any bits that may have escaped the refuse can. Often some generous-hearted person invites them to something better and spreads a feast for them upon the hard-crusted snow in his farmyard. How they do enjoy the meal of good things—mere left-overs from the farmer's larder and grain house—dry crumbs of rye and corn bread, seeds, scraps of meat, and broken nut kernels.

During one cold February, a flock of chickadees visited the south porch to the kitchen every week of the month. How delighted I was to see them drop down from the pear tree to the ground, feeding on the crumbs from the breakfast table. And never were they ungrateful, they sang their "thanks," over and over

again. One who has never heard the merry notes of the chickadee can not realize what it means to have such a jocund company so near.

Sometimes, a pair of tufted titmice were with them. What a spirited concert they gave: "Chickadee, dee, dee, peto, tseep, peto, wheweeet, chicka-dee, da, da, da," and so on with the various parts repeated. You wanted to clap your hands for very joy. Such sweet, rapturous, inspiring music!

The chickadees are with us the year round, and no month passes but that they pay a number of visits to the orchards. To know how much better the fruit trees fare after each visit, one needs only to watch them at work on the branches. Every crack and crevice is probed for moth eggs, grubs, larvae, nor is he satisfied with a dozen insect eggs at a meal. Where moth life is abundant, he has been known to eat as many as 5,000 eggs in one day. If one's hospitality extends itself on the cold winter days to pinning an occasional bone in a fruit tree, or to scattering seeds and cracked nuts on the snow-covered ground, the chickadees will come to your orchards, and search for the destructive insect life.

Often have I visited the woods and thickets on a cold day in winter and found the woods silent. When all at once, as if by magic, a troupe of chickadees made the bushes ring. A few mouthfuls, then a song. Eat, sing, and be merry, seemed to be their philosophy of right living. From bush to bush, they flitted, skipping among the gray twigs, then flying to the trees, one of

them dangling head downward, when he wished to excavate an oak gall at the end of a twig too light to bear his weight.

In the spring the flocks break up and the birds pair off and go nest hunting. In old dead trees and stumps they build their nests. If a woodpecker or a nuthatch has done the excavating, so much the better, for it saves them the labor. If they do not find holes already made, they set to work excavating some tree, usually twelve or fifteen feet from the ground. In this hole, they place a well made nest of fine mosses, feathers, hair, and plant down. From five to eight small white eggs spotted with brown, chiefly at the larger end, are laid in the snug cradle. When eight eggs are laid and all of them hatch, the parent birds have quite a family to care for.

The loose flocks one sees in early autumn are often the individual families, traveling about as one company, distributing good cheer to the passers-by. Nor is this good cheer club spasmodic in its efforts of dispensing happiness. Their attitude is always kindly. Wherever they are, whatever the day—be it ever so dismal, they are singing gaily. Free concerts certainly deserve patronage. So when the hens are cackling in your yard on a cold winter day because they have had some good hot mash, do not forget to entertain the cheerful chickadees with a good free lunch of suet cakes and nutty food.

### THE TUFTED TITMOUSE.

Each year I am appreciating more and more the invaluable pleasures of farm life. It is something to have a farm in such close proximity to the woods that the birds do not discriminate between the trees of the woods and those of the dooryard.

Often when at work in the yard or garden, I have had the greatest moments of my life because of some new bird visitor pouring out his very soul to me in a song vibrating with love and life. Then, I can think of no greater pleasure than to have the same family of birds visit me each month of the year, like good old friends who do not wait for invitations. The tufted titmice are of this class.

On such familiar terms are we that rarely do they miss an opportunity of coming each month of the year. Through the winter months when bird visitors are few, they are frequent callers. Their piping whistled notes bring a wintry charm to the bare trees of the dooryard, making them seem quite alive.

To really know the titmice, one must live pretty close to them in the spring months. Vividly do I remember how a number of them entertained me one morning in June.

From the garden, near the cherry and cedar trees, there came a merry chorus of exquisite music. The titmice had come; not only one of them, but a whole family. And such music! Had they come to help fill my cup of joy which was now near overflowing?

I had heard the crested tits many times before, but never had I heard the song that they sang that June morning. I wished for some sort of plate on which to make a record of it. The inward ear has it but an attempt to put it in letters and words robs it of its musical charm. There were two long notes, clear and flute-like, then a tinkling little warble; a warble not as joyous and voluble as the vireo's nor as strong as the orchard oriole's. After this distinctive song, they sang the characteristic and monotonous "peto, peto," followed by the "day, day, de," in mocking response to the chickadees. Dawson in "Birds of Ohio," says: "The cheery, cheery call of the titmouse is one of the most familiar sounds of the woods and village groves. More loud and clear is the 'Peter, Peter,' or 'peto, peto,' note of springtime. As a distinct modification of the first named note there is a rare musical 'chooy, chooy,' which has in it much of the flute-like character of the wren's song." The wrens were singing but I could not detect any notes of semblance in their song to the sweet delicate warble of the titmouse.

One of the singers remained some time in the cherry tree after the others had flown away. Once he was less than two yards from my hand, for I had concealed myself under the low spreading branches of the cedar, whose limbs interlocked with those of the cherry tree, making an effectual screen. Once he ate the pulp of the cherry from the pit, at another time he duplicated the performance of the red-headed woodpecker swinging himself trapeze-like to a twig and pulling the

cherry from the stem, carrying it to the cedar, where he held it on the limb with his foot, deliberately eating his dessert. After the cherries were eaten, he sang his "thanks" not once, but over and over again. Sometimes but a few measures were sung, then the whole repertoire. I could have thrown bouquets at him in appreciation of this delectable entertainment.

I noticed that several of the titmice in this flock had but the slightest tinge of rufous or rustiness in their plumage. These were the young birds which do not have on their full uniform till later in the season. The prevailing color of the adult titmouse is gray, the weathered gray of pine boards. The forehead is a dusky black and the under parts an ashy white. He can always be easily identified by his conspicuous bluish gray crest.

Here in latitude forty-one the tufted titmice are frequent visitors to the orchards both in winter and in summer nearly always traveling with chickadees. Often on a cold day in January, a flock of titmice and chickadees spend a good part of the morning in the pear and apple trees, going carefully over the branches in search of insect food. I am glad to have the tufted titmice come to our garden and orchard for they are such good insect hunters; more than sixty per cent of their food consists of animal matter. From apple and pear trees, the titmouse takes the eggs of the tent caterpillar (*chisiocampa americana*). Then, too, he comes for the eggs of plant lice, and for the larvae, chrysalis, and eggs of the moths.

### MY WHITE-BREASTED NUTHATCH.

Up and down the elm he clammers—this little nuthatch of mine. I call him mine for no one else claims him. Somehow he is always without a mate. Perhaps she has died or deserted him, or as it does sometimes happen, she may have divorced him. But whatever the cause, or the reason, he comes alone in his visits to the yard and orchard; so I have adopted him into my family. And what a faithful member of it he is. No matter what the day or the season, he never fails to visit me on successive days before retiring to the woods.

Quite unlike many of us he wears the same costume throughout the year, not so much as changing the color of his coat, although it seems to be a little thicker and closer fitting through the winter months. A white vest, a black cap, a blue-gray coat bordered and trimmed in white and black, is the costume he wears—his business clothes—his dress suit.

Like an old experienced hunter, the nuthatch is very methodical and deliberate in his movements. He knows where he wants to go and what he wants to do. He is so much of an athlete that he never fails to entertain and interest you. Down the tree trunk he goes, head first, then reversing the procedure ascends by describing spiral curves until he reaches the top. Often each big branch of the tree is circumscribed in the same manner, but always does he keep a sharp lookout for a nice mess of eggs that may lie half concealed



behind a loose bit of bark, or for a good fat grub nicely stowed away in the wood, a rich morsel for the nuthatch. If in one tree he finds little that tempts his appetite, he goes to another where his maneuvers in search of food are repeated.

The way in which the nuthatch drops from one part of the tree to another is always more or less of a curiosity to me. He lets go and simply drops like a pushed off piece of bark to the branch below. Never does he lose his balance or land on his head, as one of us might do should we undertake such a trapeze-like performance. His flight from tree to tree is done in just such a confident, straightforward manner; the short flights are sure to be straight and direct, the long ones undulated in gentle curving dips. Seldom does he alight on the ground, usually planting himself against the tree's bole or branch. Then he begins his tedious process of excavation, carefully examining each crack and crevice in search of insect food. We do not find him a respecter of trees for he seems just as fond of the moth eggs and larvae in the forest trees as he is of the codling moth in the apple and the curculios in the plum and pear trees. One day he confines his food-hunting rambles to the oaks, elms, and maples, another day he is in the orchard clearing up the old fruit trees.

My nuthatch does not sing like the cardinal and goldfinch, but his chatting call notes are welcome sounds to my listening ears. His cheering "yank, yank" has in it the music of blest contentment and

good will. Sometimes on a dark December day, when not another bird will be in sight, he will come to the elm in the yard, shambling up and down its trunk, talking mechanically. What a boon it is to have him so near; to hear his voice, to see him at work. Little does he dream that his presence makes joyous the hour to the guest within. On another day when February snows and ice make food hard to get, he spends much time in the trees in the dooryard, going over the old tramping grounds and "yanking" his thanks for the fresh supply of cartilage and suet.

No attempt was made to domesticate this nuthatch but from the first he seemed more docile and confident than any other member of his family. Little interruptions never seemed to disturb him, for he plodded along mechanically calling, "yank, yank" as if that were his present duty, and "to occupy until He come." I often wonder just how much joy or pain, pathos or humor there is in that monotonous "yank." Just what emotion he wishes to express by it, I am unable to tell. It may be a hunger call, a love note, a signal for alarm, it is quite the same "yank." Why he thus sings and talks to himself is another bird problem with which the nature lover may concern himself.

### THE PURPLE FINCH.

The name of this bird is very misleading for he has no purple in his plumage. Instead, his head, breast, and rump is a dull rosy red, as though he had taken a dust bath near a brick or tile mill; his back is brownish; and lower breast, white streaked with brown. His mate and the young birds are less attractive, very much like sparrows in appearance. Were it not for the thin tuft of feathers in the forehead, the forked tail, and white streak above the eye, it would be difficult to distinguish her from the sparrow tribe. Like the red-headed woodpeckers, the young males do not wear the bright-colored coats till the second season.

With us the purple finch is but an irregular winter visitor, most frequently seen in the spring and fall. One often sees the finches in October roving over the fields and through the rustling wood. And in the spring, on an April day when you expect the very street to "Grow purple at your feet" these birds will be flying along the grass-grown roadside, feeding on the few remaining weed seeds.

The purple finches are by nature seed eaters and their food for the most part is vegetable matter. Buds are eaten, too, both of fruit and forest trees. When breeding in the Northern woods the buds of the spruce and hemlock attract them. A small quantity of insect food is taken in the spring and summer; as larvae and small flies. They are fond of the soft shelled nuts of the forests. It is amusing to watch a flock of them

thresh out the hop-like strobiles of the iron-wood or hornbeam tree. Jerking away at the tough strobiles, they tear open the bladdery bags with their stout bills, the dry bracts dropping to the ground, hulling the small nuts from the chaff quite as effectually as a machine.

Purple finches are known to sometimes travel with goldfinches, which in winter plumage bear a strong resemblance to them, but the former's creaking flight-notes enable you to distinguish them.

When migrating in the spring and again in October, you hear the finch's song—a delicate warble. But before passing judgment upon his singing powers, go with him to the coniferous forests of the North where he sings his mating song—a love lyric of exquisite intonation. High up in a cone-bearing tree sits his mate, on her brown-speckled blue eggs. Do you wonder now what inspired the song of the week before? After all in that respect are we so very unlike the birds? Do we not sing our sweetest songs to the hearts that respond with love?

**THE WOODPECKER FAMILY (Picidae).**

How silent and forlorn the winter woods would be without the woodpeckers. A few of them remain North each year, and dare to thrust their probing bills into the heart of things. Those we hear oftenest are the downy, hairy, and red-headed woodpeckers, the yellow-bellied sapsucker, and the golden-winged woodpecker or flicker.

Every active, wide-awake boy admires the woodpeckers. They are such excellent tree-climbers. Up and around the bole and boughs of the tree they go, never falling or even as much as losing balance. But what bird could not creep up the smoothest tree-trunk if he were given woodpecker toes. The four toes on the foot of a woodpecker, two in front and two behind, are so directed that they act as a kind of pinchers, assisting the bird to cling to upright objects. When in resting position, the stiff-pointed feathers of the tail serve as a stay or prop. Woodpeckers have strong, stout bills that serve them well both as handy tools and as musical instruments. With its bill a woodpecker can carve out a house or beat a rolling tattoo to its beloved mate. One minute it uses its bill as a chisel to cut into the dead wood, another minute it is a sounding-fork that locates an embedded tree borer.

In dead trees and limbs hollowed out by them they have their nests, their white eggs lying on the dry chips at the bottom of the hole. The downy, hairy and

red-headed woodpeckers lay from four to six white eggs, but the flicker is more prolific and lays from five to nine eggs, uniformly white.

Perhaps none of the woodpeckers is as well known as the downy—that little visitor to your yard and orchard. He is the smallest of his tribe and I was just about to say the bravest of his fellows. This winter he has been almost a daily visitor to the trees along the street. Peck, peck, peck, he hammers away at the tree trunks, stops and looks around, pecks away again, halts a moment as if listening; then raps away again, puncturing the rough bark in search of food. When I hear downy tapping on the limb of an old tree, then suddenly stop, and begin a vigorous chiseling into the dry wood, probing his spear-like tongue into the cavity and drawing out a fat grub, I am reminded of how a boy used to go into the melon patch, rap with his knuckles on the melons to test their ripeness, and how chagrined he was when the sound misled and a green melon was pulled. But not so with downy. I doubt if he ever makes a mistake or sinks a hole in the wrong place. He locates the position of the wood-boring larvae with the exactness of a specialist, a surgeon who knows his business. Let any one who is skeptical of downy's service as a tree surgeon go to the woods where he is at work, and watch him probe into the rough and loose bark for moth and beetle eggs. After observing his work for a week or more on certain infected trees, make a careful examination of the operations he has performed, and you will be



*The Woodland Had Been Transformed Into an Icy Fairyland.*



*Where the Sandpiper Liked to Play.*



*A Bird's Paradise, Along the Maumee.*



greatly amazed at the results of your investigation. A saw mill was recently placed in a wood, frequented by a woodpecker. As I examined the various pieces of timber and tree-tops, where he had worked to destroy the forest-tree borers, I was quite ready to corroborate any report I might hear of his valuable services as a conservator of our forest trees. The downy woodpecker is almost altogether a grub-and-larvae eater, and for that reason, if for no other, he should be coaxed to live in the fruit trees of the orchards and dooryards. Every codling moth eaten will help to save your apples that would be otherwise spoiled and started on the road to decay. The downy is known to feed but sparingly on weed seeds and the berries of a few plants and shrubs, eating in season a small quantity of woodbine, dogwood and pokeberries.

Downy, like most of the woodpeckers common to this section, is a permanent resident, taking up his abode in a hollow tree, often cutting a hole into an old dead one; there he spends the winter. The next spring he may excavate another tree and change his place of abode. The abandoned holes are often appropriated by the chickadees as nesting places.

"The way to a man's heart is through his stomach" is an adage that might apply fully as well to birds as to men. Feed the downy woodpecker when he is hungry, and you win him to your orchard. Suet, dried fruits, cracked nuts, marrow, and bones are relished by the downies. Suet and cartilage tied to a branch attract him on the cold days. Cracked nuts and dried

fruits, such as currants and raisins, placed on the feeding shelves allay his hunger. Old, dead tree-trunks, placed in the orchard, furnish them nesting-places.

Before introducing you to the hairy woodpecker, you must take some notice of downy's appearance that you may know him ever after. He has a light breast, a scarlet stripe runs across the black nape, a white streak extends down the center back, wings are black spotted with white, inner tail feathers are black, and the outer ones white checked with black spots.

### The Hairy Woodpecker.

So much like the downy does this woodpecker look, that he is often taken for him, but he is several inches longer and this difference in size aids in properly placing him. The color marks of the two birds are very similar, an exception being made in the outer tail feathers, hairy's being white, and downy's white with black spots. The hairy woodpecker has a more seclusive nature than the downy, and prefers staying in the woods, where he gets his food in the same manner as the downy.

One morning I watched a hairy woodpecker sinking his shallow well-pits into a red cedar. Peck, peck, his little hammer kept cutting away like a woodman's axe. Only resting at short intervals, he continued his work for more than an hour and a half. When he had finished, I examined his work. Into the trunk

sixty-four wells had been sunk and that within a radius of eight inches. Each tiny well would have held a sweet pea seed. Each well seemed to have been dug where the surface was covered with an exuberance of sap crystals. Did his appetite call for the aromatic bark or the resinous crystals?—is a question still unanswered.

### **Red-headed Woodpecker.**

From behind the telephone post the red-headed woodpecker plays a pretty peek-a-boo, shuffling part way round, then retreating to the opposite side of the pole, he keeps one guessing as to his next move. Sometimes he doesn't finish the game at all, but hastily flies away then flaps against the trunk of a big tree, climbing it easily, as a spurred lineman does the tall pole. When he has reached the top, he cries out noisily, then circling about a branch, he flies to another tree. For years the red-headed woodpeckers have taken possession of the great oaks on the college campus. They are a noisy set in the springtime, beating their err-rat-tat-toos, rolling love-calls, from the resonant limbs. Drumming on the dry, hard wood, pecking and drilling into the coarse bark, shrieking from the tree-tops, they are as jubilant as a corps of drum majors before a battle.

The red-headed woodpecker is so conspicuous, because of his color arrangement, that it is easy to know him. His flag-like coat suggests a nation's emblem.

Invert the colors of the German flag and you have the colors of his attractive coat: red, white, black. The young birds do not have red heads the first season, instead their crowns are a dark grayish brown, and their light breasts more or less streaked with a blackish brown. Gradually as the season advances their breasts become uniformly white and their wings and tails blacker.

The red-headed woodpecker gets some of his food on the wing, after the manner of the wood pewee and other fly-catchers. Beetles and grasshoppers form more than a third of his food. In the summer he eats wild fruits and berries. In June the red-heads help themselves freely to the wormy fruit. When they remain all winter, as a few of them do, other nutty food and dried berries are eaten. They also get some food from the ground, taking the insects that lurk in the leaves and grasses. These woodpeckers seem able to adapt themselves to their surroundings, changing their fare to the food of the prevailing season.

### **The Yellow-bellied Sapsucker.**

This bird is but a casual winter resident or transient visitor in most sections of the country. The male wears a scarlet crown; the back is barred with black and a buff-white; wings spotted with white; tail, black, outer feathers with white margins; throat, red; breast, black, under parts, pale yellow; sides streaked with black. He can always be distinguished from other

woodpeckers by the black patch on his breast and his red throat. The female's throat is white and the crown a grayish black. The yellow-bellied sapsucker is the one species of the woodpecker family that drills into the trunks of the trees for the mere purpose of getting the sap from the wood. As the sap collects in the little pit thus made he drinks it empty. In the course of a day he may thus drive and empty several dozen wells. Because of this sap-sucking habit which works injury to the trees whose bodies have been punctured by numerous wells, he has become the target for the guns of men and boys. Before the law made the killing of the yellow-bellied sapsucker an offence, boys and men with shot guns often patrolled the woods, shooting them for mere sport; they may live to pay the penalty of their misdirected sport, for the yellow-bellied sapsucker is rapidly disappearing from our woods. The damage he does to trees is not great, and the little injury wrought is fully compensated by the insects he consumes.

### **The Flicker or Golden-Winged Woodpecker.**

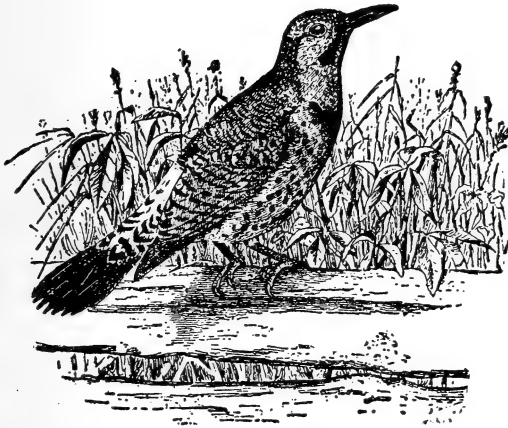
The flicker is so generally distributed throughout the country that most persons know him as a woodpecker that feeds on the ground as well as in the trees. "I saw a flicker licking up ants in an ant-hill" is an observation commonly reported by our Boys' Audubon Club. Yes, the flicker likes ants and eats hundreds of them. The Ohio State Experiment Station reports

that one yellow hammer's stomach contained more than 3,000 ants. His bill and tongue are well suited for ant-hunting; with his long, stout bill he probes the hill or mound, the ants readily adhering to the tongue, which is as rough as a file and covered with a sticky substance. He also feeds upon the ants living in the bark and outer wood of the trees, licking them up in their runways. In the summer, when he is getting a part of his food from the ground, the flicker eats a great many crickets and grasshoppers. He does not drill into tree-trunks for food as other members of the woodpecker family do. The purpose of his hammering is to cut or enlarge an opening for a home or nesting-place, and he may occupy the same hole for more than one season.

The flickers are migratory, only a few of them remaining North for the winter, and these usually stay in the thick woods where they occupy the holes and hollows of dead trees. Yesterday, a flicker left the woods to come to a tree where he took away with him a piece of suet. The flicker, like the rest of us, likes fatty food in freezing weather.

One thinks of him as a big brown bird, and yet he probably has as many colors to his credit as Joseph's coat had. Six distinct colors are found in his plumage: gray, red, black, brown, white and yellow. The top of his head is dark gray; back of his neck, red; back, brown marked with black; lower back or rump, white; under the wings, yellow; breast, light rufous, spotted with dark spots and marked with a black crescent.

The flicker is known by a great many names. One man calls him a "yellow hammer," another, a "high hole," and a third, an Easterner, a "clape." But no matter what you call him, he is the same cheery, chatty bird wherever he is found, not a foe but a friend to mankind.



FLICKER

Do you understand why the woodpeckers, nut-hatches and other such birds creep around, over and under the tree branches, pecking into the little crevices?

### JUNCOS OR SNOWBIRDS.

When the air has in it an icy crispness, I find the juncos coming to the stripped currant bushes in the garden. Just as a playful wind picks up a handful of leaves, forcing them upwards into an airy whirlpool, then dropping them to earth, so these little snowbirds rise from the garden and drop into the weeds of the woodlot. Then back to the garden they go for the remaining hemp seeds still shuttled in the dry heads.

Restless, active, little creatures they are. Their slaty-gray backs are a good match to the gray-black stems and stalks, as if the dead hemp had put on winter leaves to mock their somber severity. Not only are their backs dark but the iron-gray color extends well over their throats and ends in a distinct line across the breast where the white begins. Their outer tail feathers are white, showing conspicuously in flight, making them easy to follow. The female junco has more of a brownish back, and a paler throat and breast. Both male and female have flesh colored bills.

Usually, the first note that escapes the junco after his arrival is a short, snappy 'tsip.' But listen for his song. It has that delicate clink and tinkle to it that makes you want to catch every note. Sometimes a whole flock will break spontaneously into a chorus of merry trills, followed by a succession of sweet, musical twitterings.

Often when driving over a frozen road, a flock of juncos will start up from the weedy fence row where



they have been feeding, and flit along the roadside, as vesper sparrows do, always keeping a little ahead and out of reach of me. Again I see them feeding on the seeds in a neglected meadow; ragweed, smartweed, and other weed seeds appeal to them. Nine-tenths of their food is small grain and seeds. Only a small per cent of their winter food is animal or insect, consisting for the most part of beetles, spiders, and various kinds of small insects.

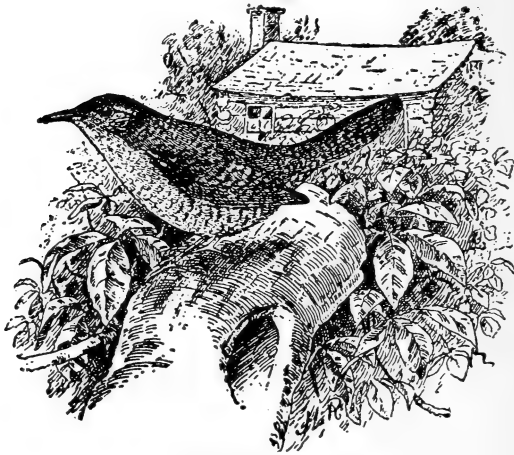
Juncos are quite sociable creatures, and often go about with field and song sparrows nor do they shun the associations of the garrulous English sparrows. When snow and ice has much of their food under lock and key, the juncos join the house sparrows in the barnyard, where they pick up a breakfast from the litter of seeds shaken from the hay and straw. Often they flit about on the doorsteps at the rear of the house, where small particles of food have been dropped. How eagerly they skim over the ground in search of dainties.

The juncos are not only winter residents in most of the central states, but in the woods of mountainous districts they may be found the year round. However, I have come across them in the Maumee valley, in the summer months, undoubtedly, a delinquent or transient flock.

To find their nests one must generally go north of forty-five degrees or into the highlands and uplands of the mountains. Like the towhee buntings, juncos are found about brush piles and rotted tree-tops. They

build either on or very near the ground. The nest is quite compactly made of moss, grasses, and rootlets, lined with hair and fine grasses.

In the weedy fields and open woods there is more than food enough for the juncos. It is only when the snow lies knee-deep or when the landscape is under cover of a thick ice-coating that one needs to assist nature and provide some extra nourishment for the feathered folk. At such a time the best plan is to take the seeds to their natural feeding grounds, clear away the snow and ice, and scatter the seeds on the bare places, or one may erect a rude platform of boards on which the food may be placed.



HOUSE WREN

Did you ever watch the little wren hunting mosquitoes about the outside nooks of your buildings, or along the fence or wall?

## THE WAXWING.

My first cedar waxwing was a dead one. A young boy found it lying near the sidewalk under a clump of white pines. He brought it to me, saying, "I have found a dead bird—what is it?" Scarcely had the lifeless creature touched my hand when my eyes caught sight of the coral red, wax-like beads on the wings; just as if some one had stamped each feather tip of the upper wing with a tiny drop of sealing wax. "It's a cedar waxwing," I exclaimed quite confidently, for just then a mental picture of him helped to fix his identity. It was a kind of sorry-glad feeling that I had. Glad that I had him, but sorry that he lay cold and stiff in my warm hands. My joy would have been a thousand-fold greater could I have been under the pines and put out my hand to him in welcome.

What caused his death I am unable to say. There were no signs of gunshots or marks of violence upon his body. Had he been found lying at the base of a tall-spired building, the report of the coroner's inquest would have read, "Accidental death, dashed against the dark spire."

Before his burial, I wished to make sure of his identity, that I might know any of his family ever after. The description follows: he wears a conspicuous, crested cap. Forehead and chin, black. Back—strong, grayish brown. Wings and tail—gray, the latter with yellow band at its end. Secondaries—with small seal-

ing-wax tips. Breast—same as back, changing into yellowish on belly. Length—nearly  $7\frac{1}{2}$  inches.

A few days later I had the great joy of seeing several of the dead bird's relatives, in the red cedar trees, feeding on the berries. I wondered if he had been one of this small flock of six, and whether they really missed him.

The cedar waxwings are of a very high caste of bird creatures. So refined and gentle are they in their ways, their dress so modest and subdued in color, that they are the embodiment of bird ideals in clothes and conduct. But not so in song, for they are almost voiceless. They do not sing. One must listen closely to hear their low whistled notes, a kind of wheezy, whispered communication in which each member participates.

The waxwings travel over a wide range of territory. As permanent residents they are found in most parts of eastern U. S., and they breed anywhere from Virginia to Labrador. It is believed that many of the cedar birds spend their winters in the South, but not all. A number of the migrating train remain in the various states during the winter. One sees more waxwings in the early spring and late in the fall. Only an occasional flock is seen at other times of the year, feeding upon the berries in the mountain ash, or taking the last dried fruit from the wild cherry.

The economic value of these birds should be recognized for they take the elm beetles from our forest trees, and the grubs, worms, and caterpillars from our

orchards. But it is a rare thing nowadays to see a flock feeding in an old orchard, for the orchards are disappearing as rapidly as the birds.

In the spring when insect life is more abundant, the waxwings feed sparingly on bugs, beetles, and grasshoppers, but it must be remembered that they are vegetarians, taking but thirteen per cent of animal matter as food. In autumn the waxwings roam about over the country, getting their feed from the berries of the woods and fields; woodbine, hawthorn, dogwood and juniper berries are then eaten morning, noon and night.

Birds are an asset; just as great an asset as trees, grass and flowers. Many species subsist entirely upon winged insects which come to destroy your fruits, crops and trees.

### THE BROWN CREEPER.

Some day when you are out in the woods, your attention may be arrested by a rather weak, squeaky note. You look all about, endeavoring to locate the place from which it came. Suddenly, almost before your very eyes a dark bird drops from a tree and lands head-up against the trunk of another. To follow him is not an easy task for so much does he look like the bark of the tree over which he creeps that he is not readily seen even at close range.

A close observation reveals that his back has a mixture of subdued colors, dark brown, white and dull tan; rump, a lighter brown; the tail, light grayish brown, and white under parts.

You may call him the brown creeper, for he belongs to the Old World family of creepers, and is the only one of the twelve species that is found in the eastern part of our country. As a common winter resident, he has a wide range, being at home in most of the states south of Canada. A true tree-creeper is he, using his stiff tail as a prop, like the woodpeckers.

Rarely, will you find a bird who is more interesting than the quiet, queer-acting little creeper. His slow, deliberate movements as he winds spirally up and around one tree trunk after another, may tax your time and patience. You expect him to say something, to make some sound, either of song or motion. But he is wholly unconscious of your thoughts and presence and goes noiselessly on with his food-getting work,

uttering only occasionally thin bat-like squeaks. He does sing a touching little strain but it is sung to the tender ear of his mate in the fir-bearing trees of the North.

So well does the brown creeper like the cold, thin atmosphere that he and his mate either go to the north woods to rear their young or into the uplands of the Alleghanies. Behind a piece of gapping bark of a tree some twigs, moss, and fluffy stuff are arranged into a nest, in which are laid five to eight white eggs, spotted with brown and lavender, chiefly at the larger end.

Watch the brown creeper as he zigzags up a tree trunk; going around, backing down, then up again till he has spied into every hidden closet looking for its skeleton. See him with his hard, curved bill tear open the tree spider's egg sac. Small insects, eggs, larvae, all disappear before him; he is only taking what rightly belongs to him—parasites of the tree trunks. You must give him the credit of being a tree doctor of no mean reputation, for in the coldest weather, Mr. Creeper is busily engaged relieving the big trees from infective diseases. How much he assists in keeping them in a healthy condition, is best proven by the food he eats, a large part of which is composed of destructive insects; which conceal their eggs and larvae in the interstices of the bark of shrubs and trees.

While you find the creeper in the woods oftener than in any other place, he frequently comes to the trees of the lawns and dooryards, especially during the months of April and November.

### THE CARDINAL.

Just why I am more optimistic while the cardinal sings than at any other time, I do not know. There is something in his song that seems to strike the note of kinship, and of universal faith that

“God is in His Heaven,  
All’s right with the world.”

Perhaps it is the way he sings that forces one to believe in one’s self and one’s fellowmen. He certainly is not a half-hearted performer but a soloist of the highest type. With what power and enthusiasm he executes each performance, regardless of the number of times it has been rendered. How his clear whistled notes ring out on the midwinter day, “whew-eet whew-eet, whet year, whet year,” and then the forcefully accented “purty, purty, purty.” Is it any wonder that such a magnificent singer should inspire the writers of “The Kentucky Cardinal,” and “The Song of The Cardinal” to paint glowing eulogies of this Caruso of birdland?

The cardinal is a common permanent resident although we see less of him in the summer when he spends most of his time in the deep woods. In the early spring one hears his familiar call note, a short explosive “tsip” in the trees of the lawns and streets. At this time, the female’s song—very sweet and pleasing—breaks in a passionate outburst from some bare tree. The male responds, and vibrating waves





*Blue Jay sitting on the hand of the President  
of an Audubon Society.*



*Yellow Warbler's Nest.*

of merry whistled tunes float from the throats of the pair.

In the central states, the cardinals usually travel about in single pairs through the spring months but congregate in flocks in the winter season. In the south where they are more abundant they wander about in flocks throughout the year.

Early in May nest building begins, and for a few days Mrs. Cardinal is a busy bird, getting her sticks, straws, and rootlets for the nest which she places in some thorny bush or tree. When she comes to our dooryard, she usually selects such a tree or bush that will conceal her home; a rose bush, a mulberry tree, a honeysuckle vine, may prove very attractive to her.

The cardinal lays three or four greenish or bluish white eggs, spotted with dull browns. When the female leaves the nest, the male remains near-by, often exercising the greatest care and protection over it. On her return, he flies farther away to some tree top where he pours out his heart in passionate song. When sitting, if disturbed, she flies from the nest to some place not far away, where she suspiciously watches every move of the intruder. When the coast is clear, she flits noiselessly back to the nest.

The cardinal's good looks puts him in constant danger of those who seek his life. His crimson coat is a strong revealing mark and coveted by the seekers of fashion. Notwithstanding all the laws, clubs, and societies that afford him protection, he is still secretly caught and slain by the cruel and the vicious, who

regard neither law nor life. The female is more modestly attired and thus less conspicuous. Her wings and tail are a dull red; back, olive-brown; throat, grayish black; and under parts, buff, tinged with rosiness on the breast.

The cardinal relishes a mixed diet of seeds, grains, fruits and insects. Through the winter months, he lives largely on weed seeds, buds, black beetles, and dried berries. In the summer, ants, bugs, crickets, caterpillars, and grasshoppers are eaten. A friend of mine tells me of the cardinal coming to the back porch for his daily ration of table crumbs. If fed during the winter season, he becomes quite tame and you may be able to coax from him one of his rapturous songs, even on a very cold day.

Feeding the birds in winter is absolutely necessary if you would keep them about your homes in summer.

### MEADOWLARKS.

A Washington's Birthday seldom passes that I do not hear the shrill, piercing notes of the meadowlarks or field larks as some may wish to call them. Sometimes they arrive a day or two earlier than February 22, but not often. In this latitude, forty-one degrees north, only a few remain all winter; but farther south they are common winter residents.

Often on a clear, stinging February morning, from tree tops, fence posts and bare meadows, these larks whistle their variant clarion calls of approaching springtime. Their flute-like notes never escape the ear of the farmer boy who sees and hears. It is he who is the first to announce, "The meadowlarks are here. Spring is coming!" Spring may sleep on a fortnight or more in the lap of Winter; but the boy has caught something of the bird's buoyant spirit that quickens his step, and turns his soul-spirit into the creative realm of returning life and action. He sees the returning robins, bluebirds, and song sparrows; hears their carols, warbles and trills, though they be many miles away. It is he who loves the larks and protects their nesting-places.

It is not always that the field larks find meadows that are left undisturbed by the farmer's plowshare, or the knives of the mower, or untrampled by the hoofs of cattle or horses. Fortunately, there are meadows where no farm implement or domestic animal has broken the thick sod for a score of years; where the

grasses grow and ripen, fertilize the soil and propagate life. In one such meadow—a larks' retreat—dozens of nests were found each spring and summer.

On the morning of May 18th, I was walking through this meadow on my way to the woods, when I came upon three larks' nests, so cleverly tucked away under tufts of timothy and grasses that even an experienced eye might not have seen them. The nests, built flat upon the ground, were made wholly of grasses. Over them the longer blades of grass had been dexterously pulled to form a protective color-arch for the eggs, concealing them from bird enemies. In one nest there were four young birds about two days old; in another there were six white eggs, mottled and specked with brown; and another had but four eggs. That I might continue my observations, I marked their places by the weeds that grew near them. The first was near some stalks of mayweed; the second nest, under the protection of a common field thistle; and the third, was partially overrun by cinquefoil or five-finger. The mother bird would always remain on the nest until I was so close that in a few more steps I might have crushed her beneath my feet, but always before the fatal step, she would fly off muttering a whirring alarm much like that of the quail. Like many other birds, the meadowlarks do not fly directly to their nests, but fly over the meadow and light a short distance from the nests, then walk to them. On the third day, the young larks were only partially covered with a fuzzy down, not unlike in color to the grasses and

earth near them. Soon their pinkish skin was entirely covered with down and on the upper part of their wings, feathers sprouted. In a few days their white triangular-shaped bills grew darker and harder.

Frank Chapman in *Bird Life* says that the eggs of the meadowlark are laid about May 15th. This is true in some states but I have found them much earlier than this. My notes for 1911 read: April 30th, meadowlarks, robins, mourning doves, field and song sparrows, and hairbirds' nests contain their full quota of eggs. It is merely a conjecture, but I am inclined to favor it as a fact, that the larks that nest in April are those that raise three broods in one season.

The protection afforded by the coloring of the meadowlark is very great. In early spring and in late autumn a flock of larks will start from the dry meadow and light in some other part of it; not till they walk about can you see them for their dull mottled backs are so like the color of the meadow that they seem to be a part of it. In winter, their plumage is somewhat lighter; the black becomes a dusky brown, the yellow is slightly weathered, and the whole plumage is uniformly blended and toned down.

You may know the meadowlark by the conspicuous black crescent on its yellow breast, and the sparrow appearance of the back. The outer tail feathers are white, showing conspicuously when flying.

As an insect-eating bird, the meadowlark is very valuable to the farmer. The U. S. Biological Survey examined 285 stomachs of meadowlarks to determine

the kinds of food eaten. Mr. Beal of that department reported that seventy-three per cent was animal food and twenty-seven, vegetable. Of the animal food, grasshoppers made up twenty-nine per cent, which was increased to sixty-nine per cent in August, when the insects are abundant. Caterpillars, twenty-eight per cent, ground beetles, twenty-one per cent, and the other insects were chinch bugs, cut worms, spiders, flies, and wasps. Grasshoppers were preferred and were eaten whenever they could be found. Of the vegetable food, grain and weed seeds constituted the larger part. The meadowlark eats a small amount of grain but it more than pays for this by taking the troublesome seeds of ragweed, smartweed, and barn grass from the fields. Who would not give the meadowlarks a daily breakfast of grain in return for the grasshoppers taken from the clover meadows or the chinch bugs and cutworms from the corn and wheat fields?

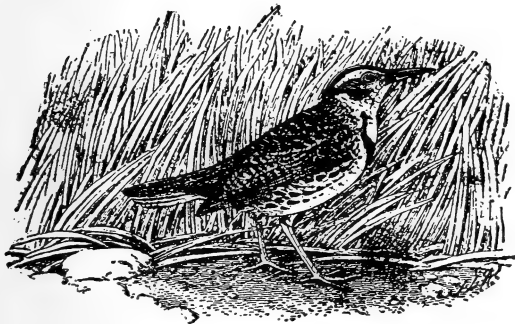
Notwithstanding the efforts that are put forth to protect the meadowlarks, they are decreasing in numbers in many localities. This decrease may be due to several causes, the chief one being the disturbance of their nesting-places; the plowshares, the mowing-machines, the herds of cattle and droves of horses destroy many eggs and young larks that might otherwise have grown to maturity. The shotgun brings to the ground too many birds each returning autumn. When will men cease to rob and to kill? It is not mere sentiment that causes me to make this plea for



a bird so valuable to the farmer and agriculturist. Had you seen the fields of corn, blackened with chinch bugs; and the clover meadows, swarming with grasshoppers; you, too, would have said, "The insects are many, they that eat them are few."

"The summer came and all the birds were dead;  
The days were like hot coals, the very ground  
Was burned to ashes; in the orchard fed  
Myriads of caterpillars, and around  
The cultivated fields and garden beds  
Hosts of devouring insects crawled, and found  
No foe to check their march, till they had made  
The land a desert without leaf or shade."

Why? Because the meadow lark is dead.



THE MEADOW LARK

**REDPOLLS.**

For more than ten years with each returning spring, I listened for new bird notes, not that I had grown tired of the old and familiar ones, but I hungered for the pleasure of hearing a new song, of making another acquaintance. This joy was mine on the morning of March 4, 1911. The earth was still and cold from a succession of hard frosts, the air crisp and chill. A few of the summer residents had arrived, but more were on their way.

From the low cedars near the garden, there came a chorus of unknown voices; something like the chuckling chatter of juncos and yet not the same, it was different from the hairbird's twitter and still slightly suggestive of it; in action similar to the canary-like notes of the goldfinch. No. I had heard nothing like this concert before. New actors had come with a joyous song that was quite their own. I was so thoroughly intoxicated with their music that I walked boldly up to the cedars to see the performers. Such an intrusion was alarming to these visitors of the hour. With a triumphant chant, they took wing, flying to a wild cherry tree in a near-by meadow. In my insane enthusiasm, field glass and kodak were unthought of, but two good eyes served me well. I followed them hastily. Their undulating flight and call notes made one think of the goldfinches but not till they descended to the lowest branches of the tree where the red, crown caps and pink washes on the breasts and rumps

of the males, could be seen, did I know them. Redpolls! I exclaimed. Such a host of them! There must have been no less than two hundred in the flock, estimating from the numbers that were on the various branches of the trees. A minute of chatter, a whirl of wings and they were in the young peach orchard. It seemed they did not miss a single branch. Twittering, skipping, singing, flitting, eating, they made their way from tree to tree. I wish that I might know how many buds, moth eggs, and scales they ate that cold March morning. Never had the peach trees gotten such a cleansing. Strange as it may seem, there was a good crop of peaches that season and but few wormy ones. No sprays had been used. Would that the redpolls could stop off on their spring tours to the north each season.

A few days later a flock, perhaps the same, was seen in a sheltered ravine of an old pasture land, where they were feeding upon the weed seeds that were still housed under weathered coverlets. What a picture they did make! Swinging in the weather-beaten stalks, pulling, chuckling, flitting—a unison of sound and motion. At another time, the whole flock stopped to feed in a clover field where the previous summer there had been an abundant growth of chicory. Poor famished things! The black, four-sided seeds were, no doubt, as palatable to them on that spring day as the green leaves are to us when our appetites crave for what our grandmothers call “greens.”

In the fields where there has not been a rotation of crops, chicory grows abundantly, often infesting both clover and alfalfa meadows. Redpolls in their irregular migrations often stop in alfalfa fields to feed upon the chicory seeds. Since young alfalfa is easily killed by weeds, redpolls help to serve the growers of alfalfa crops by eating the weed seeds.

It is the occasional or transient bird visitors to which we are most attracted, they are with us but a few weeks and then may not return for a number of years. If a troop of Eskimos from the Arctic islands were to pass through our country occasionally, every American citizen would take some note of their pilgrimage, but passing few are they who are concerned about the lesser redpolls who travel from distant icy regions to spend an occasional winter with us.

"The redpoll linnets," says Bradford Torrey, "are irregular visitors in this region (New England). Several years may pass and not one be seen." This is also true of the Ohio Valley region. Mr. Leander Kiser, who so faithfully watched the birds in Ohio, makes no mention of the redpolls in "In Birdland," but since its publication, several migrations have been noted.

## OUR BOBWHITES.

A few of our state legislatures have come to realize that the passing of the passenger pigeon will have its parallel in the passing of the bobwhite if laws are not enforced prohibiting the shooting of this bird. While pot-hunting has not been permitted for several years, still there has been a continuous slaughter in the hunting season of birds shot on the wing. Where the prohibitory laws are obeyed the restrictions have proved of permanent benefit to the quail. During the armistice declared by the state, they will have time to rear their families in peace.

For several years at least, the disturbing report of a gun will not affect them. But haven't we been rather slow in recognizing the economic value of these birds of our fields and woods? Notwithstanding the protection given them in recent years in certain sections of the country, the rate of increase has been very small, and in others noted decreases have been reported. After all it may be a case of locking the barn after the horse is stolen. A precaution taken too late is of little consequence, and it may be we have waited too long to save our quail from partial extermination. The woods about me once swarmed with ruffed grouse, now we have but few. May not the same thing happen to the bobwhite?

Poverty and want usually follow in the wake of great extravagance. When fifty or more quails are served at a dinner as the spoils of one hunt, is it any

wonder that they are disappearing? Not more than two score and ten years ago, northern Ohio and other states were overrun by large bevvies of grouse and quail, now, one does well to find one bevy to a square mile of land. Just a few years ago several hundred bobwhites were brought into a town at Thanksgiving time to be eaten by men who said thanksgiving grace at their tables. Had these men bred and raised them, the case would have been different, but to go into the woods and mercilessly destroy the innocent and defenseless, is nothing less than wholesale slaughter and murder. Ignoring the "No Hunting" signs, these men tramped through the woods shooting, killing, and bagging the quail as they went. I will not call them sportsmen for a sportsman makes some distinction as to the kind and number of wild creatures to be taken, but not so with the man with the gun on his shoulder, who blazes away at every living thing that may come within seeing distance.

But here comes an old quail hunter who says: "Might as well let us shoot 'em, as to let 'em starve." True enough, but is there any reason for letting the birds starve? Could not each farmer look after the quail that frequent his fields and woods? Waste seed in chaff, cracked corn, and a little small grain would not be missed from your barn and granary. If the food is put under cover in the woods near their roosts, old decayed logs, brush heaps, and thickets, the quail will find it. One can imagine the condition of the quails when their food lies under cover of a thick, loose snow;

in an attempt to leave the roosting-place in search of food they flounder about in the deep snow, hungry and exhausted, the bitter-biting North does the rest. Starved and frozen, you find their cold lifeless forms, the day after. Systematic feeding during the winter weeks of snow and ice would do much to save the quail from starvation.

Possibly the only hope we have of preventing a marked decrease in the number of quail, is in the fact that they are quite easily domesticated. A number of men have begun raising quail and make it as much of a business as the raising of poultry.

A study of bobwhite's food reveals some interesting facts. In late fall and winter he lives chiefly on weed seeds. Ragweed, pigweed, sheep sorrel, pigeon weed, jewel weed, and other miscellaneous weeds constitute more than three-fifths of his food; another fifth is grain, fruit, buds, and leaves, and the remaining fractional part consists of animal matter. Most of the seeds he eats are noxious. They are the seeds of the weeds and grasses that every farmer would like to exterminate from his fields and pastures. In the summer bobwhite takes more animal matter, and eats bugs, beetles, grasshoppers, caterpillars, and other insects. Among the injurious insects taken are the potato and cucumber beetles, cutworms, army worms, clover weevil and chinch bugs.

Every tiller of the soil knows just what the Colorado potato beetle did to his last year's potato patch, what the grasshoppers did to his clover, the chinch bugs to

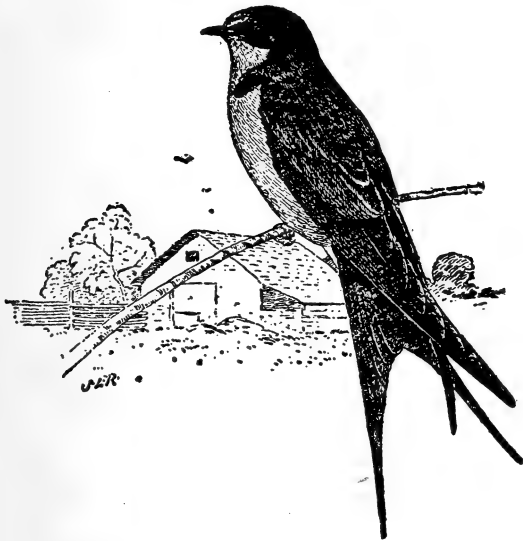
his corn and wheat crops, and yet he permits the best exterminator of these terrible pests to die or be killed almost before his own eyes. Just this morning a man shot a quail, in defiance of the law. "He can be fined for doing it," said one, "but I won't report him for he is my neighbor." Might he not as well have gone to his neighbor's poultry yard and shot one of his Rhode Island Reds?

Bobwhite raises a large family, and by careful protection of the nesting place the size of his family may be greatly increased, for sometimes two broods are raised in one season. About the first week in May ten to eighteen, and sometimes as many as twenty-two, white eggs are laid in a grass-lined oven, or in a grassy dip in the ground. I used to find many quails' nests in the fence rows of timothy meadows where they were seldom discovered by common bird enemies. In recent years they seem to have taken to nesting in the open woods as well as in pasture grounds. Neither man nor dog should be permitted to disturb the nest in the least. Bobwhites are very sensitive creatures; if the eggs are turned or moved ever so little, it will cause them to desert the nest. Mother bobwhite often places her nest near an old log, or a tumbled-down stump, where there is little danger of it being trampled upon by cattle browsing in the woodland.

Almost as soon as they are hatched the little quail chicks begin to follow after their parents, hunting for food. They run over the brown-plowed fields, through the grassy meadows, and into the woods and thickets,



gleaning the seeds and insects from the ground and grasses. When an intruder comes too near, the mother quail utters a note of alarm, and no sooner is the danger signal given, than every bobwhite seems to disappear, while the intruder's attention is directed upon the mother bird floundering about on the ground, feigning a broken wing or acting as if injured, while the young birds are snugly tucked away in places concealing them. In a few minutes one hears a sudden whirr-rr of wings and away she goes.



BARN SWALLOW

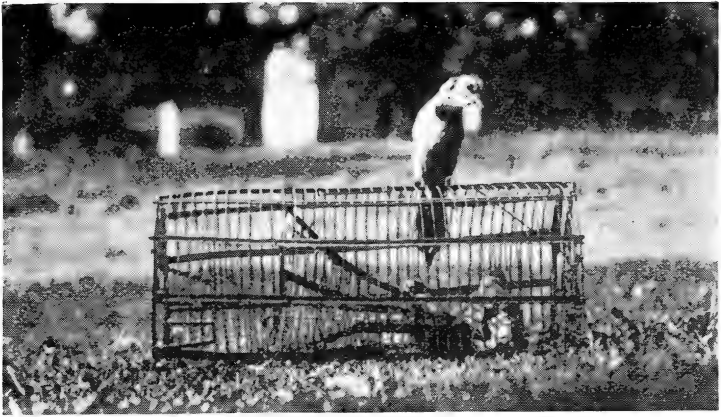
## WITH THE KINGLETS.

On a cool morning in early autumn you are awakened by a weak, distant "tse, tse, see." Then faint little chords, struck lightly, escape from the ripening leaves of the maple trees near your window, and you know that the kinglets have come. What a delicious serenade they give you! Somehow, you become conscious that summer is gone—that the sun is lowering in the eastern horizon—and that its milder beams fail to dispel the chill in your room. The various masses of turning leaves have ripened into deeper yellows, tans and russets, and from the maples you miss the warbling note of the vireo.

A little more rest, a little more slumber, you think, and are loath to leave the bed that gives such a sense of comfort on this keen autumn morning. But the little golden-crowned creatures seem to grow more nervous and tantalizing. Every branch and twig is suddenly alive. You can resist no longer; the fever of unrest is on. You are dressed, breakfasted and out in the crisp air, while the frost still holds to leaf and stricken flower. Almost imperceptibly this great passion for a taste of the out-of-doors seizes you. Away from shop and store and school it takes you. Away from the grind of mills and hum of wheels, Nature's great dynamo starts you. The kinglets have come, and you long to be free—free as the wind that stirs the oak; free as the air that lightens your footsteps;



*Catbird's nest.*



*A Blue Jay Ready to Feed the Young in the Cage.*



*A Young Mourning Dove, Ready to Leave the Nest.  
Catbird's Nest.*

free as the little creatures that stir in the autumn leaves.

Just to be out with the wild things, with beast, bird and flower is now your great delight—far out into the advancing oaks, elms, and maples which seem so mysteriously near. Down the wayside road you wander, by weedy ditch in autumn array of violet aster and purple ironweed, belated goldenrod and evening primrose, wild yarrow and fragrant everlasting, closed gentians and blossoming brunella. Along the old rail fence, with its clumps of sumac and the wild rose stalks, brilliant with scarlet leaves and hips, past the rambling blackberry vines, whose last leaves you fear to touch, you make your way. But you are not alone; above you in the oaks and elms are the kinglets, clearing insect life from leaf and twig. What blessings they bring to you in next season's fruits and flowers!—For never can it be known how many orchard blossoms bear fruit because of their visits.

Down the lane their high-pitched notes follow you. Little heed is now given to the jay's squall, the nut-hatch's "yank," and the woodpecker's "quirk." The kinglets have come and you are content. The narrowing lane becomes a cattle-beaten trail into the magic wood, but the day is yours, and you follow it. Under the strong oaks you go. By red haw and dogwood tree, through clumps of hawthorn, you tread your way. Ripe, woodsy things emit their sweet scent everywhere; from woodland fruit and steaming leaves, you inhale the wholesome aroma of the forest,

It is but natural that you heed the impulse of your own heart and follow the trail to the still lake, hidden in the hills, where you study the skill of the belted kingfisher, teeter with the sandpiper, and listen to the scolding of the marsh wren. You sit and watch, muse and think; a spirit softly permeates the air which carries you from the materialism of the world to the realm of empyreal phantasy and contemplation. And as you tarry on the beach of that placid lake, you awaken to a conception of life, all the nobler and purer, and to an appreciation of animate and inanimate things hitherto unrevealed. The leaves above your head, the smooth pebbles at your feet, the live creatures about you, yes, nature in all her varied and wondrous aspects, tells the story that "God is seen in the star, in the stone, in the flesh, in the soul and in the clod."

**BLUE JAYS.**

In late autumn on a gray November day when the trees are bending like tortured wraiths before the strong wind, what sounds can be more in keeping with the tumultuous uproar than the clamorous calls of the blue jays? While other birds are seeking the shelter of deep woods, they seem to delight in screeching their shrill cries from the isolated trees of the open woods and fields. Swaying tree tops, creaking branches, and the rustle of wind-driven leaves—mere expression of the storm's fury—do not dampen their spirit. Instead one hears their high-pitched notes above the roar of the warring forces. And at this time, their notes are not displeasing, for they seem to be a part of the orchestral accompaniment of the storm.

On another day they are seen, when the bleak December landscape has been whitened by the first snow of winter. What an attractive picture they make! A simple winter scene, a study in gray, blue, and white, in which the jays introduce the element of life. A minute later, the whole aspect of the scene is changed for the jays have taken a few acorns from the snowy earth and have flown into the oaks, where they are rapidly ripping them open.

See how cleverly the jay works! His strong toes hold the acorn securely against the hard branch. With his stiff bill, he makes the incision, tearing away a full-length strip of the nut. The rest is easy enough, hammering, shredding, eating, he continues till his

appetite for nutty food is gratified. Occasionally, an acorn slips from him, but he never takes the pains to look for it.

Because the jay is with us the year round, we are so accustomed to his piercing cries that we seldom listen for the clear whistled notes ringing from the bare trees on a cold snappy morning. One can scarcely call these varied whistles musical, and yet he sometimes produces a low minor note that has in it the sweetness of a Scottish fife. Again, he gives a long squeaky cry like that of a hawk. But most familiar are his rasping calls and noisy jibbering, especially in autumn, when he is joined by others of his tribe. During the breeding and moulting seasons, he has little to say, only an occasional scream escapes him as he sallies forth on a pillaging tour, puncturing the eggs and destroying the young of other birds.

Because of his villainous traits of character it is hard to say much of the blue jay that is commendable; unless it be the one virtuous trait he has of burying seeds and nuts. He is a forester of no mean reputation.

Because of his meddlesome and tantalizing actions the jay is very unpopular in bird society. When he approaches a tree in which other birds have congregated, there's a sudden flurry of wings, the birds take their departure. The kinglets, small as they are, seem to fear him the least, and continue their work of insect hunting notwithstanding his teasing maneuvers.

Perhaps it is because I have had the blue jay about



me all my life that I have seen so much in him to admire. I like his fearlessness. He is not a coward, and will risk his own life to save his family. A vivid illustration of this fact came under my observation last spring. A pair of blue jays had built their nest in an oak very near the porch. One day when I wished to photograph the three young jays that had just left the nest, I was greatly surprised that the parents should possess so much courage in what must seem to them the immediate face of danger. The young birds were put in a wire cage. I sat a few feet away, having attached a cord to the shutter of the kodak. At first they seemed a little shy of the black box-like object but the cries of the young fledglings brought them near. At first they swooped low over the cage, their wingbeats just escaping my head. Another cry or two from the young brought the mother bird to the cage. Then came the male, hovering low over the cage and dropping something into the mouth of one of them. As their cries continued the mother bird began feeding them. At first she sallied along the side of the cage, poking her head through the wire meshes. Soon she began flying boldly down and alighting on the top of the cage, depositing a billful of food into the gaping mouth though I was almost in arm's grasp of her. The young ones seemed equally as fearless, for soon one of them sat with a confident air on a boy's hand while its picture was taken.

If rightly treated the blue jays will nest in the trees and vines of our dooryards as readily as the robin.

I have found their nests on the low branches of the hemlock, locust, oak and hickory, usually from eight to twenty-five feet from the ground. Sometimes a wisteria vine attracts them, and again they may place their nest of sticks, straws, and rootlets in some hidden nook under the porch roof. The eggs, four to six in number, are either pale olive-green or a brownish drab, conspicuously marked with brown spots.

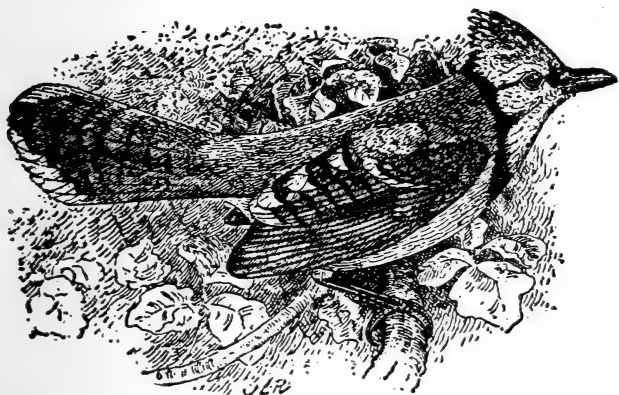
It is to be regretted that a bird as beautiful as the blue jay should have such a bad reputation, but he is not as bad as he is painted. Yet we shall have to admit that a few jays do devour the eggs and nestlings of other birds, but this is thought to be only an individual trait and not characteristic of the whole race.

The investigations of biologists show that the jay's food is about one-fourth vegetable matter and three-fourths animal, the vegetable food consisting of seeds, grains and fruits. In the spring and fall months, corn is his favorite food, but much of this is gleaned from the fields after harvest. We should not begrudge the jay the grain of corn when he in turn takes a noxious beetle. Various kinds of berries are eaten throughout the year. In the summer, it's the fresh fruit of the grape, cherry, blackberry, and mulberry. Through the fall and winter, dried fruits constitute a small per cent of his diet. I enjoyed watching a flock of jays, on November 19, feeding upon black haws. They ate the soft black pulp, dropping the split seeds to the ground underneath the haw.

In the animal food of the jay, one finds that twenty

per cent of it is beetles, grasshoppers, and caterpillars, nearly all of them noxious. When grasshoppers are plentiful, they constitute one-fifth of his food. Where the gypsy moth infects the trees, the jay is known to eat the larvae or caterpillar. Mice, fish, snails, slugs and salamanders make up one per cent of his food. The jay is very fond of nutty food of all kinds. The kernels of acorns, chestnuts, beechnuts, and chinquapins form nearly one-half of his diet in early fall, and later in the season constitutes almost three-fourths of his diet.

The jays are very common permanent residents in most of the states east of the Mississippi and north of the Carolinas. Farther south, the Florida jay, a slightly different species, inhabits the woods.



BLUE JAY

### PRAIRIE HORNED LARKS.

Almost any November day, along the seacoast, on sand dunes, in open tracts of woodland, or in bare meadows, you may happen upon a flock of brownish gray birds, whose plumage matches well the colors of their surroundings. At first sight of their black ear-marks you think of them as little bobwhites, but they are not bobwhites but true larks, horned larks, or as some prefer to call them—shore larks.

They have come from the north, the Hudson Bay Territory, or, perhaps, from Labrador to spend the winter in Ohio and other states north of thirty-five degrees and east of the Mississippi. In some of these states they will be recorded as transient visitants, remaining but a few weeks in November, and in March.

Of the true lark family, there are but two species found in eastern United States, the horned lark and the prairie horned lark. There are but slight differences in the two species. The male horned lark is a brownish-gray bird, in color like the bare meadow over which he runs. On his dull white breast is a conspicuous black crescent, the sides of his head are marked with black, horn-shaped curves. His cheeks and throat are yellow, his tail is black bordered with white. The plumage of the female is similar to that of the male, only the markings are less prominent and more subdued. The prairie horned lark is a trifle smaller than the former species. It is a little over seven inches long. It is lighter gray in color and has

the white markings on head and throat. This is a species formerly of the prairies but now of a different range. Where the country has been deforested, it began living in various stretches of country north of North Carolina and Tennessee.

It is not an uncommon thing in winter to find both species of these birds in one flock. Large flocks of the prairie horned larks come to the bare fields and meadows in October and November, feeding upon the seeds, dried berries, insects and larvae in one place, then passing on to pastures new.

Often when driving along a country road, a flock of prairie horned larks will suddenly rise from the roadside, then settle down again a few feet away, several of them often running ahead of the horses' hoofs, and so close to them that you fear they will be trampled upon. You will notice that they run and walk but do not hop. You will also observe how like the dry road in color their weathered plumage is. Their colors generally harmonize with the places and haunts where they live. This protective coloring is of great advantage to them as a concealment from the pot hunters.

The prairie horned larks breed in the northern and New England states but the shore or horned larks go much farther northward, and build their nests of grasses on the ground in Newfoundland, Labrador and the Hudson Bay region. Their eggs, three to four in number, are bluish or greenish-white, speckled with pale grayish brown.

Like the English skylark, they sing as they take wing, yet I have heard them utter a musical chatter when running about in the bush-lined fence rows. Frequently in late November, flocks of larks will be feeding in clover and timothy meadows. One day long before I reached the field, I heard their low whistling. Upon my approach they suddenly took flight, a number of them breaking forth into musical strains, like the tinkling notes of miniature bells. Some people think their songs unmusical. This is true of their whistled call notes, but there's a certain joyousness and buoyancy in their song that will cause you to lend a listening ear.



BLUEBIRD

Do you know that the bluebird is one of the greatest known destroyers of cutworms?

## GOLDFINCHES.

What a dismal day! The steel-blue sky is cold and clammy, revealing the grief it feels in a silent, solemn mist, that chills one to the bone. Not an inviting or cheerful scene does the landscape present today. But the call of the woods is upon me, and I must go, rain or shine. Foolish! Senseless, extravagant exposure! are the epithets hurled at me in decisive derision, when contemplating obedience to such a call. But what do they know of sylvan secrets who have never experienced discomforts in getting them?

I follow the call to the woods beyond. How utterly cheerless and dead everything seems, and yet how much of life, waiting to be awakened in its own good time. A flock of dull brown-colored birds rise from the tall grasses as I enter the wood. They break the silence with their twittering notes. With them all goes "merry, merry as a marriage bell." Over the deep, long grass they fly in undulating wave-like dips, rising and falling to irregular depths and heights as the waves of an unresting sea. "Per-chic-ore, per-chic-ore, chic, chic-ore," they call as they fly along the old rail fences, halting now and then in the hoary mullein stalks.

In their winter plumage they look much like sparrows, but they are not. Both their flight and song prove their identity as goldfinches. They are also known as yellow birds, thistle birds, and often erroneously called wild canaries. The backs of the males

are an olive brown, wings, blackish, tipped with white, breasts, a dull light gray. The females are much of the same color, only less distinctly marked. How well their sparrowy uniforms harmonize with their environs in the "sober realm of leafless trees." But the goldfinches are not always so modestly clad. In the summer the males appear in bright, canary yellow and black. Their breasts and backs are then pure yellow; their crown caps, black; wings, black with white tips; tails, black, white underneath. The females are neatly costumed in dull olive green, grayish brown and yellow. Early in the fall, after the breeding season, the males begin to moult, gradually changing their bright yellow coats to the more subdued colors of a winter wood. In April they appear again in brilliant breeding plumage. In the moulting months, their appearance is often misleading. Unless one knows their flight and song, they may at such times be taken for other species. After several weeks moult the male goldfinch has his entire plumage grayed and subdued; the yellow feathers are a dull buff, the black faded, with an olive green tinge.

So sweet, rich and rippling is the goldfinch's song that his peers as soloists are few. I really believe him to be the best singer of all his family, which is a very large one. Out in the wild mustard, whose blossoms are quite as yellow as his suit, he sings his summer-day song, a sweet, canary-like medley of rippling slurs and trills. One loses himself in the song of the singer. It has such a spontaneous and fascinating rhythm and a wild ringing quality that is exceedingly captivating.



His song possesses none of that cultivated air which the wild canary's seems to have. His feeding and flight notes in the winter season are quite joyous and pleasing. And when a flock of these finches go bounding over the frozen fields, twittering as they fly, one is made to think of the redpolls who follow in their wake, their song having a noted semblance.

When the wind takes the thistledown and when the dandelion has formed its golden mat into a fluffy ball, as soft and ephemeral as a soap bubble, the goldfinches begin to look for nesting sites. They have waited late. Some birds are rearing their second brood. It is past Independence Day. But the goldfinches are in no hurry, and have waited till the days are warm and long; and building material is plentiful, for they are quite choice in their selection. Having decided upon a nesting place in some bush or tree, the female begins building the nest, collecting bits of bark, grass fibers and down, forming them into a compact, waterproof nest. She lines it with soft plant down—thistle lettuce, dandelion silk. It is a beautiful thing, skillfully made, and so well formed, as if it had grown into shape like the saucer of an acorn. Into this silk-lined nest, three bluish-white eggs are laid, another female may lay six in hers, the maximum number. There is no fixed law as to what elevation the nest should have, one goldfinch prefers a height of five feet, another may go to the extreme and place hers fifty feet from the ground in a well formed crotch of a tree.

To their young growing fledglings, the goldfinches

feed plant lice, young grasshoppers, and small seeds. The plants of the compositae family, seem especially suited to the goldfinches, they feed upon the seeds of the wild lettuce, thistle, dandelion, and sunflower. A little mustard seed is eaten also, perhaps as a relish. In the winter, they must subsist principally upon the seeds of ragweed, mullein, thistle, and other weed seeds whose tall, coarse stalks extend above snow level.

Feed the birds in winter and they will inhabit your premises during the summer months, adding charm and cheer to the place, while cleansing the atmosphere and foliage of insect pests.

**BIRDS IN A DECEMBER WOODLAND.**

To most persons the woods in December appear cold and bare; they see but the desolate landscape with its naked trees and somber colorings. The grayed and aged aspect overwhelms them with its emptiness, and little there is that appeals to them. Perhaps they would be quite surprised to know that a score or more of birds spend the winter in these uninviting woodlands and that this, when the trees are stripped of their leafy garments, is an excellent time for bird study.

By the middle of December, most of the migrant species will be gone and we have with us only the ever present permanent residents and the winter visitors. All of these, because of the kind of food they eat, may be divided into three classes:

First, the larger birds of prey, as the owls, which prey upon field mice, sparrows and insects. Hawks, and occasionally crows and buzzards, which are chiefly flesh-eating birds and live upon mice, birds, moths and caterpillars, all remain throughout the winter.

In the second class, we may put those birds that get their food principally from insect life and its products found in the bark of trees and a small per cent from nuts, seeds and berries. Cocoons and beetles are eaten by them. They might be termed the insect-eating birds. To this class belong the downy and hairy woodpeckers, brown creepers, titmice, nuthatches and chickadees.

The third class is almost wholly seed-eating birds. When December snows cover the bleak woodlands you will find them usually in flocks, flying through the meadows, settling down here and there, pulling away at the seed heads of the weeds above the snows. In this class are the sparrows, goldfinches, juncos and horned larks.

A few residents for the winter only, are found in most localities. These have come down from the north to spend their winter in a milder climate and where food is more abundant. The most common of these winter visitors are the tree sparrows, redpolls, snowbuntings and golden-crowned kinglets. Excepting the last mentioned, they are almost wholly seed-eating species.

Not only in the selection of food have the winter residents adapted themselves to their environment, but in the selection of their homes and lodgings as well. The hollow trees and thickets shelter the larger birds while the smaller seed-eating species nestle close to the earth under a raised tussock or in little hollowed places, snugly covered with long grasses and leaves.

A change in their plumage has also taken place. It has grown thicker and warmer. In many of the various species that winter here you will observe that the colors have slightly changed. They are more faded and subdued. The blue jays, nuthatches, chickadees and titmice, all of which have much gray in their plumage, harmonize beautifully with the dull grays of wood and field and the blue in winter skies.

The male goldfinches in doffing their yellow coats for the quiet grays and browns have the protective coloring adapted to the season. The snowbunting, sparrows and juncos in their modest attire match well the bleached leaves and gray tree branches. The cardinal alone being the one winter resident that gives brilliancy to the landscape, his crimson body like a signal flag is seen in wood and field as you pass through them.

While I am writing this the snow is falling in soft flakes and I can hear the sharp screeching calls of the jays in the oaks, only a few rods away. They will help themselves to the acorns, storing a few for winter use. The golden-crowned kinglets are here, clearing up both fruit and forest trees, by freeing them of insect life. But if the winter should be severe and the earth lie blanketed under heavy snows for several months, most of the birds will need some help in getting their food supply.

The birds of prey will take care of themselves, but the insect-eating class may need some help, for insects are scarce during the winter season. Woodpeckers, whose food is seventy per cent animal, will be glad for the bones, cartilages and waste scraps from your table. Chickadees and nuthatches are fond of meaty foods; a little suet fastened to the trees will bring them to your dooryard. Birds whose food is largely vegetable like the nutritious seeds in winter. Goldfinches, juncos and blue jays will enjoy the sunflower and flax seeds you may furnish them. It is not an

uncommon thing in the winter season to have several days of sleet and snow, when the landscape is covered with a sheet of ice. During this time the food supply of the birds is practically cut off. Weed heads, shrubs, trees, all alike are wrapped in a thick coating of ice, too hard and cold for weak-billed birds to break. It is then that the birds need your help. A few feeding stations established near your town may be the means of saving the lives of many birds. In the country they will come to the barn and dooryards where they can be supplied with seeds, vegetable parings, bones and cartilage. In the towns and cities the boys and girls can do no greater service for humanity than by caring for these little feathered creatures that are so beneficial for preserving the balance in nature.

**OTHER WINTER RESIDENTS.**

Among the common winter visitors to Rix Farm is the song sparrow. In a small, slender hickory near the roadside, which has won for itself the enviable name of "Song Sparrow" tree, one hears his merry chant each month of the year. The greater number of his family are in the South for the winter. He and a few other species have chosen to remain in the North.

This winter a pair of song sparrows have been feeding on the waste food in the poultry yard. All around them are the English sparrows, disputing every inch of ground, but the brave little song sparrows are not the kind to order a retreat, so hunt fearlessly about for the small droppings of mash and vegetables.

One can easily distinguish the song sparrow from his English cousins by his black and brown streaked breast, in the center of which is a dark spot. His back is a mixture of black, brown and gray checks and stripes.

Not only Henry van Dyke, who wrote,

"I'd choose the song sparrow, my dear,  
Because he'd bless me every year,  
With 'sweet, sweet, sweet, very merry cheer,'"

but I am quite sure that every man, woman and child would choose, as his bird friend, this very same kind of sparrow because of his sweet, ecstatic song. A song which has in it variations as sweet and voluble as the

strains of an exquisitely cultivated human voice. He sings his song as if some unseen director were commanding to him—"Now high, now low, now sweet and slow," and he were trying to excel himself in the expression of each command. Forenoon, afternoon, and night one may hear at least a fragmentary part of this cheery songster's repertoire, nor is he at all particular as to the kind of day or to the time of year it is.

Early in the spring, usually about the first week in May, the song sparrow builds her nest on the ground in some meadow or pasture land, sometimes it is placed in a low bush. Coarse grasses, rootlets, and dry leaves are used for the bulk of the nest, which is lined with hair or fine grasses. Occasionally one finds a song sparrow's nest built entirely of fine and coarse grasses. The eggs, from four to five in number, are thickly spotted with brown and lavender. Two and three broods are raised in one season. The young nestlings look very much like those of the house sparrow, and grow quite as rapidly.

The song sparrow is a great seed eater. Almost two-thirds of its food consists of the seeds of dock, sorrel, and smartweed, and the remaining third is chiefly insects which are injurious to vegetation.

Now and then a robin spends his winter here. This bird is so well known that he needs no introduction. One needs, however, to know something of his economic value in order to save him from the market hunters of the South.

There is little doubt but that fruit-growers in cer-



tain localities have suffered some loss from the depredations of the robins, but not enough to warrant their extermination. The robin prefers wild fruit always and only feeds upon the cultivated varieties when the other cannot be had. Grapes, cherries, and various kinds of berries are taken when he can get them, but so are the destructive insects. Who would be so stingy as to begrudge a bird a berry when at another time he may take from the soil the cutworm that would destroy the corn or clover?

The robin's food varies with the season. He generally takes that which he can obtain the easiest; if grasshoppers are plentiful he helps himself, if a caterpillar crawls near him, he puts it out of the way, and he seems to be always ready for just another earthworm or wireworm. He also feeds on various beetles injurious to vegetation. In fact, Prof. Beal reports that more than two-fifths of his entire food is insects, while the remainder is made up largely of small fruits and berries. How anyone could kill and eat a song bird so valuable from an economic standpoint, I do not understand.

Only rarely does a bluebird winter in this section of the country. He is the last to leave the farm in December and among the first to arrive from the South in March. With his arrival one feels that Spring is very near, although it is by Time's schedule more than a fortnight away.

Not long after the first arrival, one hears a pair of bluebirds warbling their first spring message as they

fly through the still cheerless woodlots and lawns. What delicious memories they awaken!—memories of spring buds and blossoms, green pastures and still waters, walks in pleasant paths through grain-grown valleys! Then one begins to wonder if this pair will stop to nest in last year's box; or whether they will seek the more natural and artistic house-cave in the old, gnarled apple tree. Or, perhaps, they may shun them both and prefer simpler summer quarters such as the weathered fence-post can give. Or they may even go to the woods and become the tenants in a former woodpecker's home.

Where two or three broods are raised in one season nest building must begin early, so, as soon as a location is decided upon, the mother bluebird begins collecting and weaving the dry grasses into a nest.

Fully three-fourths of the bluebird's food consists of insects and low forms of animal life. The insects eaten are chiefly beetles, grasshoppers, and caterpillars. The vegetable food taken consists of wild fruits and seeds. Examinations of the stomachs of bluebirds made at experiment stations reveal the fact that the bluebird eats a great variety of wild berries, poke-berries, partridge berries, juniper berries, and the fruit of the green briar, bittersweet, sumac, and Virginia creeper.

It is a rare thing for a winter wren to stay throughout the season in this neck o' the woods; further south he is frequently seen in the clearings, and among the fallen logs of the woods. He is very much like the

house wren in appearance, except a trifle smaller in size. He likes the woods and seldom becomes sociable enough to call at the garden gate.

The scolding, chattering notes of the Carolina wren may be heard here in winter as well as in summer. He can always be known by the conspicuous white line over his eye, and by his larger size. In the woods, from the depths of a brush pile issues his sweet, rollicking song—a song that lends its exquisite charm to the woodland choir on a winter day.

Usually one can count on a few more than four-and-twenty songbirds visiting a given region each winter. If to this number one adds the number of birds of prey, crows, owls, hawks, and eagles, the number of land birds found in a locality may be increased to forty different species. Excepting one or two species of hawks, all of these winter birds are beneficial to the farmer and deserve his care and protection.

### THE MOURNING DOVES.

It is not always in April that you hear the sad love-song of the mourning or turtle dove. It may be on a clouded June morning that the pensive cooing disturbs your merriest mood; or on a dark day in August, when an east wind predicts a three-day drizzle, that its cooing seems somewhat melancholy. The mourning dove arrives early in the Spring, usually about April 1-15, and remains late in the Fall. Its song, a rather sad "coo-oo, coo-oo," is heard throughout the Summer season.

On April 20th, I found a mourning dove's nest in the lowest branch of a yellow pine, not more than nine feet from the ground. Had not my walking under the tree disturbed the mother bird, causing her to fly from the nest, I should not have suspected that the few dry twigs and sticks lying crisscross on the branch were a bird's nest. The colors of the bird and nest were so like that of the twigs and needles that she was all but invisible. In the nest were two white eggs, much smaller than the eggs of the passenger pigeon, for which they are often taken.

After a few visits, she became accustomed to my coming and never left the nest unless I pulled down the branch, when she would drop to the ground giving vent to a low muttered alarm, then scuttling away to a safe distance, she would fly into a tree, and return again to the nest.

In two weeks the eggs were hatched. The young

birds grew fast. In two weeks more they left home, the last one leaving on the fourteenth day. Young robins and mocking birds usually leave the nest on the eleventh day, but the young turtle doves require a little longer time to develop strength for flight.

Soon after the last little dove left the nest, the mother bird began laying eggs for the second brood. Seldom does the turtle dove lay more than two eggs, but often two and even three broods are raised in a season. The nest is not always built in the lower branches of trees. You may find them in low bushes, in brush piles, and on the ground. I have found quite as many nests on the ground, as in any other place. One pair of doves built their nest under an elm at the foot of the tree trunk. Another pair collected a few sticks, placing them in a bare, open space in the woods, and there reared their young.

Few land birds have as beautiful babies as the mourning doves. When a week old, their backs are uniformly and narrowly streaked in black and white. What a soft, silvery look they have at this time! Their appearance is quite in keeping with the beauty of the lichens that grow so near them. When two weeks old, they begin to show strong resemblances to their parents, and are ready to try the world, outside the nest, with them.

What healthy vegetarians the doves are! Their food is almost exclusively vegetable matter. Many of the troublesome weeds in waste fields and meadows furnish seeds for them. Wood sorrel, barn grass and

prairie grass seeds are eaten in large quantities. In the stomach of one dove, more than 7,000 seeds of wood sorrel (*oxalis stricta*) have been found. I do not know of any bird that is a better exterminator of that prolific weed than the mourning dove.

So often mourning doves are mistaken for passenger pigeons, which are now rarely seen at all in this country, although at one time they were very numerous. Their nesting colonies in the northern woods numbered into the thousands. It is possible that there are a few isolated pairs of pigeons in northern Michigan and Wisconsin. Mourning doves can readily be distinguished from the passenger pigeons by their size. They are about a foot long, whereas the pigeons measure nearly seventeen inches. Another marked difference is that the pigeon's back is a grayish blue, the dove's a grayish brown. The males of both doves and pigeons have the iridescence on the sides of the neck. The nests are much alike, mere platforms of rough sticks. The pigeon arranges her twigs in a tree, preferably near streams and lakes, while the dove is more likely to lay her irregular wreath of sticks on the ground.

**BROWN THRASHERS IN HAWTHORNS.**

When buckeye leaves begin to spread their fingers in the April woods, you may look for the brown thrasher (*Harporhynchus rufus*) out nest hunting. He and his mate are scurrying about the hawthorns, bent on finding the most desirable place for the laying of their rude, log house, in which to rear their young.

In pasture fields and open woods in Ohio, Indiana and Michigan the abundant growth of hawthorns offers many birds desirable nesting sites. That brown thrashers have a decided preference for these low shrubs is shown by the large number of nests that are found in them. In one open thicket in northern Ohio, I found sixteen nests of brown thrashers, within a radius of twenty rods. Ten of these nests were built in the common cockspur thorn (*Crataegus crusgalli*). These shrubs never grow very tall, usually from six to ten feet high, and when isolated as in fields and groves will grow as symmetrical as a cedar. In May, when the nests for the first brood have been built, the cockspur has a thickly-set blanket of dark green, glossy leaves. The nests are placed from four to eight feet from the ground, and from two to four feet within the thick, leafy dome. You might walk past a cockspur thorn every day and not suspect that it held a thrasher's nest.

Only by parting the branches can the nest be exposed to view; you can get down on your knees and push yourself up through the framework of thorny

twigs and branches. In either case, you must expect to leave some blood to mark the tragic performance. The thrashers sleep in these spiny bushes without fear of attack from nocturnal foes. Can you think of an owl trying to wedge his bulky form through such a labyrinth of spines?

Other thrasher nests were found in *Crataegus tomentosa*, *C. mollis* and in *C. margaretta*. While to the casual passer-by these hawthorns appear to be of one species, yet in blossom and fruit they show great differences. In autumn, when the crimson and scarlet berries are ripe, the kinds are readily distinguished. *C. mollis*, with the largest white blossoms, blooms a fortnight earlier than the others, and its large berries are the first to turn scarlet in autumn. Fewer nests of thrashers were found in this species, the open branching of the tree affording less protection.

The dark red berries of *C. tomentosa* do not tempt the appetites of the thrashers, perhaps because they are too insipid; or, like ourselves, the birds may be having too much of the same diet in season. In *C. margaretta* you are likely to find quite as many nests as in the cockspurs. The gray spines and thick branching offer protective coloring for the nest and an armor against attack. The nests in these trees were built in much the same way as in the cockspurs, always placed where a dozen or more small branches crossed and recrossed, making it difficult to tell the nest, a wreath of twigs, from the real branches of the shrub. Do not expect the thrasher to construct a nice, downy nest.



On a mere platform of dry sticks he lays some weed stalks and then finishes with a simple lining of rootlets and weed straws. In one nest a few cornstalks and dry, leathery leaves were introduced into the foundation.

This protective selection for nesting is a decided advantage to the thrasher, for both his size and color would easily betray him to his enemies. He measures nearly a foot in length. His cinnamon brown or rufous back and tail, and light breast heavily streaked on the sides with black, make him a conspicuous object.

A week after the nests were built, the eggs were laid. Most bird books say that the thrasher lays from three to six eggs; I have oftener found three or four than any other number. The eggs are grayish-white, and heavily dusted with cinnamon brown, just a repetition of color from the bird's back and breast.

The first broods hatched in May and in early June. The young thrashers grew rapidly and left their nest from twelve to fourteen days after they were hatched. What pleasure it was to watch them! One morning my waiting was rewarded by hearing two of the young thrashers, six weeks old, practising their first song. It was so unlike the song of the parent birds that I could scarcely believe that they were thrashers singing. The trills lacked the volume and variations of the older birds' song, and were devoid of all passion; yet an unmistakable joyousness characterized each attempt. The weak trills seemed to increase in strength and range with repetition.

On another June morning, on approaching a nestful of young birds but a day old, I was surprised at the fight put up by the mother bird in defense of her young. She flew back to a branch a few inches from the nest and refused to leave. As I parted the branches to get a better view of them, she flapped her wings, twitched her tail excitedly, then threw out a desperate and alarming volley of "tsips" and hisses. Before this time, when brooding, she did not seem to mind my visits, and never left the nest, except when I parted the branches.

Not wishing to prolong her anxiety I crawled under the hawthorn, where I could watch the parent bird feed the young with beetles and grasshoppers. Often no more than a ten-minute interval elapsed between meals. I did not count the number of insects dropped into the wide-open mouths. At length they seemed satisfied, and the mother bird resumed her place on the nest.

Most bird lovers pay their respects to the thrasher's singing. He is a big bird with a big voice, and seems to be glad to let you judge for yourself its great range and melody. Beginning in early April he will give you such a magnificent concert that other bird notes seem weak in comparison. No matter how many other birds are singing, his song is in the ascendant—strong, expressive, passionate. What a concord of sweet sounds! Try counting the variations, note with what ease the song is executed. You have his orders: "I am singing, will you attend?"

In some localities of the South the brown thrasher is called mavis ; in others, French mocking birds, sandy thrush, and red thrush. Farther north he is more commonly called brown thrush, brown mocking bird and brown thrasher. Since he is neither a thrush nor a mocker the name "brown thrasher" is best suited to him. It is one by which he is known in various parts of the country.

More than 60 per cent of the thrasher's food is insects—beetles, grasshoppers and caterpillars. Thirty per cent of his insect diet consists of injurious beetles, many of which infest our crops. What a valuable asset a colony of thrashers is to the farmer! Within the last score of years, with the taking away of the old rail fences, hawthorns have been cleared from fields and pasture lands. In places thrashers have been driven to the thicket and woods, but how much longer will they find protection there? Can we not afford to encourage the growth of hawthorns in the fence-rows as nesting places for them?



THE BROWN THRASHER

### THE SONG OF THE WHIPPOORWILL.

Late in April on a balmy night, sweet with the fragrance of budding leaf and blossom when the moon sheds its pale beams on the soft growing things, suddenly the great silence is broken by the clear ringing notes of the whippoorwill.

"Whippoorwill, whippoorwill," come the calls nearer and clearer, as if he were speaking directly to you. What precious memories of other April nights his calls bring back! Out of the darkness comes the call that makes one forget the wintry blasts and sets the senses agoing. We hear the low twitter of another bird. We inhale the sweet perfume of the blossoming wild cherry and plum. Our appetites call for watercress and sassafras.

This first song of the whippoorwill calls me next day into the woods, glorious with the beauty of flower and tree, where the brown and gray of winter are brightened by the blue and gold of Springtime. Spring beauties and anemones, like great starry snowflakes, whiten the edges of the dry leaf curls. Violets, "colored with Heaven's own blue," lift their sweet faces above the bleached grass blades. Here and there, in the open, under the trees, and beside the burnt and blackened places, masses of sweet Williams parade their showy blossoms. Walk where I will, surprise awaits me. Under the leaves, cast aside by my foot, I pick up a bishop's-cap; and a few steps more brings me to jack-in-the-pulpit. Trilliums nod their pure white blossoms as I pass.



*A Killdeer's Nest.*



*A Song Sparrow's Nest.*



*Bank Swallow's Nest.*



*A Robin's Nest.*



*A Chipping Sparrow's Nest.*



*A Bank Swallow's Nest in a Stone Culvert.*

Down by the little run which has made serpentine curves in the moist, black earth, the dogtooth violet and yellow adder's tongue shake their delicate blossom-heads. Marsh-marigolds and buttercups, like concentrated drops of sunlight, illumine the dark marrowy places. Toothworts are in full bloom. Bellworts in bud, and at the foot of the low dipping hill an orchis blooms. Ten years ago in this very same woods, the yellow lady's slipper or moccasin flower grew profusely, now I rarely find one. Those spared by the wasteful hands of children, were uprooted or trampled to death by the hungry cattle that browsed in the woods.

I pass the wild ginger, hastening on to the hills where the moss pinks grow, but my walk is suddenly intercepted by a dark bird floundering about, almost under my feet. It flies to an old dead tree, stretching itself on a large branch. So much does it look like the lichen-covered knots of the branch that it is difficult to discern what is bird and what is tree. It is the male whippoorwill, I have seen it before.

For an hour or more, I stand under that half-rotten oak, waiting for the bird to make some movement or fly away. At length, tired of waiting, child-like, I throw a stick, or a piece of bark at him. Noiselessly, he flies to another bare, broken tree a few rods away, where he again becomes a part of the tree itself. In his plumage are the colors of the lichen-covered tree trunk, for his back is mottled with dull brown, gray and white, and heavily streaked with black. The

upper part of his dusky colored breast is broken by a white stripe. What wonderful protective coloring! When down on the ground the bits of bark, twigs, and dry leaves are like the colors of his back.

With such protective coloring as a safeguard, it is not surprising that his mate does not take the trouble to make a nest, but lays her eggs on the ground, on the dry leaves under a tree, or near old logs and stumps. Neither man nor beast is likely to see her as she sits there in the woods. Should you, in a tramp through the woods, accidentally stumble upon her, she will flounder along, and if you follow her, you are lured from the nest. When she has drawn you away a safe distance, she flies into a tree.

While one sees but little of the whippoorwill during the daytime, he is active enough at nightfall. From some dark post he sweeps through the yard or over the garden, catching the flies, moths and beetles that cross his path. The long bristles fringing the sides of his mouth serve as a splendid net for the big fly-trap mouth.

"A fair day to-morrow, the whippoorwill is singing." How often have you heard this prediction from the tired and anxious farmer, sitting on his low porch watching the setting sun slip down behind the dark hills. The west is black and threatening, but this does not matter to him. The whippoorwill is calling and the rain-clouds will soon be cleared away. Such faith does the honest old man have in this weather prophet that it matters not if the chief of the weather bureau



does forecast otherwise, the whippoorwill knows; he is weatherwise, and the morrow will be fair.

A few people, mostly the city-born, dislike to hear the calls of the whippoorwill and withdraw themselves from regions inhabited by them. To them, the calls are as fearful echoes of a dark and distant wood, portentous of evil. Every call fills them with an uncontrollable fear, and as the night grows darker the repeated "whippoorwills" fill their hearts with a loneliness that is weird and gruesome.

But such feelings come only to those who have come into an evil heritage handed down to them by old traditions and by the lips of the superstitious.

The country-born look forward to the return of the whippoorwill as eagerly and as happily as they do for the coming of the first robin of the spring. And what woodland calls have a wilder, choppiier ring than the clear, rapid whippoorwill chorus at eventide? One hears the calls long after the blackness has shut out the day, and the last good-night call puts the simple, country folk to bed. "Good weather to-morrow," the whippoorwill is calling.

**OUT-OF-DOORS, MAY 2ND.**

How old and tame everything indoors seems! So frayed and faded do the things within appear that their ugliness stands out in coarse contrast to the fresh green grass just outside the open window. On a May morning like this, one is not content with work indoors but every sense seeks employment with things without. Naturally a man wants to swing his fish-pole over his shoulder and start for the nearest creek or river, where he dotes not so much on the catch he may get as on the pleasure he receives from the lazy, carefree mood that comes with the sun bath as he sits on the broad flat stone at the river's edge.

Likewise I am seized with the fever of unrest, but I know its cure can be found in the walk to the river road, less than a mile away. The blue jays in the great oaks near the window bid me go and I start. A flicker is making the telegraph pole serve as a keyboard. Pecking "tup, tup, teerup," the message is sent. He listens, far away a faint "tup, tup, teerup" is flashed back on the wireless air as a response from his mate. The saucy maneuver of a red-headed woodpecker prevents his sending another, and hastens his flight across the broad, level lawn. In the trees along the street a pair of Baltimore orioles are taking newborn insects from the maple keys. Robins are everywhere, caroling in the trees, flying to the ground, hopping across newly made garden beds, and halting here and there to pull out some hidden earthworm. There's

a mother robin in her nest above the window and a father robin is here in the road, taking a dust bath.

I pass a cockspur thorn standing near the roadside. A flash of light, reddish brown from within reveals a secret. I make her secret mine. Parting the branches and working my way in, I find the thrasher's nest of twigs and straws roughly built where the spiny branches start from the trunk. In it are two whitish eggs, thickly brown spotted on the larger end. Tomorrow there will be three eggs in it, and perhaps, the next day, four. A cowbird's low squeaky whistle is heard as it skulks across the pasture field. Down the road are the blackbirds, headed for the river, too. I love their quirking whistle, so unlike the notes of other birds. From every thicket, from every tree clump, I hear the song sparrow's, "tweet, tweet, tweet." When there's so much music in the air, who would stay indoors?

To the river I am drawn, its banks are overgrown with shrubby growths; willows, wild cherries, and hawthorns send their branches to the water's edge, making ideal summer retreats for the birds. A flock of juncos skip along in the thick undergrowth, leaving a trail of music in their wake. The river is quiet and yellow-brown with drift. The clayey pigment seems only to intensify the beauty of coloring for the reflected trees and shrubs are wonderfully picturesque—a marine scene in rich sepia tints.

Nature's attractions are alluring so on I walk to greet new arrivals. Yellow warblers, a dozen or more,

flit about in the yellow-green bushes. Their little bodies blend so harmoniously with the new leaves that it is hard to follow them. Almost from my very feet flies the little hairbird. Her hair nest with its little brown speckled eggs is neatly tucked away under the higher grass blades on the ground. As I shuffle down the river's bank, a spotted sandpiper flies up the river. A kingfisher crosses the stream, hesitating above it, where a fish in jumping up has thrown the water into circular ripples.

The charming songs of the mocking birds take me from the river's bank to the woods across the road. Into the grassy swamp I plunge just in time to see a pair of them fly to the wooded hollow beyond. Surely this is a bird's Paradise! Tall trees, dense shrubs, thickets, swampy ravines, open grassy plots, and running water are features of a wood that appeal to the birds. For in it, food, drink and protection, the very necessities, are had.

I have often heard the catbird's song, but there always seemed to be in it some note that I had not heard before, so I was greatly pleased to hear two of them sing their songs over and over till I could say it after them—"Trr, who, whuet, tow whees, erit, torit, toreet, toreet, trr, turwheet," followed by a volley of hisses and mews. It is very difficult to put a bird's song into words, and doubtless the catbird's song may be interpreted differently by each new auditor. Wisely, the catbird often selects a tree, in which the color of the branches matches the dark slaty plum-

age of his body. His tail drops downward, giving his whole form a cat-like curve. In this position he utters a kind of kittenish hiss or mew every few minutes. Only a few feet from him, high up in the shag bark hickory, the towhee bunting or chewink is singing, "towhee, towhee, ee, ee, ee." Few birds sing with as much vigor as the towhee. With spreadout tail, he flies to a heap of dead limbs near by and continues to sing his one song over and over again.

In the next hour other birds' voices are heard in this May morning concert. A cardinal calls "purty, purty," then a patch of red falls like a crimson leaf from the tree top and drops into the thick bushes below. A wren trills in an old broken down apple-tree, field sparrows sing, "cher we, dee, dee." A pair of hairbirds twitter their love ditty, and the yellow warblers keep up an incessant "tsee, tsee." A pair of bluebirds fly in and out of an old woodpecker hole in a hollow tree, daring a few call notes, suggestions of the song they might sing. From a tree on the hillside a tufted titmouse calls lonesomely "peto, peto." Bank swallows skim low over a grassy pool and from apparently far away comes the plaintive "coo, coo, oo" of the turtle dove which may be but a few rods distant. Field and vesper sparrows are trilling and calling, mate answering mate.

But above the songs of all others, I hear the cardinal's and brown thrasher's magnificent performances. They are certainly stars in grand opera. In strength and purity of tone, they have few equals. Surpassed,

perhaps, only by the mocking bird who because of his great power of imitation can sing as well and better than the various birds he mocks.

But one sense has quite overpowered the others. So lost am I in listening to this spring concert, that little notice is taken of the stage effects. I awake to an admiration of the scenery—a blossoming, budding wood. Like Ben Greet players, birds like a woodland grove, ideal in its appointments. The landscape this morning furnishes just such features in its staging. In some places, the hard black lines are softened by a shimmer of silvery gray or white leafage. In another place, rich masses of yellow-green fill the dark intervals of space. Soft maples are covered with a lacy, pale yellow drapery, which on nearer approach, resolves itself into fine yellow threads from which are suspended dainty little blossom bells. On some of the maples small crinkley tufts of leaves are ready to expand under the warm sunshine. In pretty contrast to them are the red maples who have built their spring fires and are all aglow with blazing keys and young garnet leaves. How the cottonwoods glitter; their leaves, small, sleek, shining, throw their reflections like little pendant mirrors with each stir of the wind. Even the elms are dressed as for a May day festival. Each branch, no longer bare, is showing its fine, filmy blossoms—thousands of little pocket-like bags hanging from as many yellow threads. The Judas tree or red bud is most attractive and fills a dark gap in the ravine with a rare rosiness of blos-

soms. The terminal branches of a few hickories have large oval buds, almost creamy white, but the oaks are still naked as in winter and intrude their blackness into the shimmering green forest. Horse chestnuts being the first to put on spring attire, are in full leaf and blossom. Already their thick, green foliage suggests the shade and coolness of midsummer.

The beauty of the setting is not altogether overhead. Underfoot new life and loveliness presents itself at every step. Like great soft flakes of newly fallen snow, spring beauties and anemones scatter their whiteness on the green and brown earth. The hillside has its wealth of dandelion gold, which still lies near the surface in great, yellow patches. In the shade, down among the leaves and grasses, and in the most unexpected places, violets lift their modest heads, a little bluer than the sky above them.

The woods are full of promise. Almost everywhere the green earth shows numberless buds ready to break into blossom. In another fortnight the trees will be fully draped in the tender green of springtime. And how immaculately clean and fresh the woodland is today: its charm so sweet and pure that the slightest suggestion of the unnatural is distasteful. Anything dragged into it looks coarse and ugly, and mars the beauty of the immediate environment. How unsightly are the scraps of paper blown into the weeds, fringing the ravine! And how one old tin can detracts from the loveliness of the little rivulet into which it has been thrown.

As I let my eyes rest on the various tints and shades so harmoniously blended in the growing leaves of the trees that form the walls of this woodland temple above which the blue sky forms an airy canopy, I am made to think of how hard and coarse-looking are the walls of the place we call a home. No atmosphere to soften the hardness, no fine lacy network of branches and leaves to make you wonder what they contain, no intricate, hidden places to arouse your interest in the unknown. No, much of the decoration within our homes is bad and bold and barbarous. But the awakening is at hand. Already the best decorators and artists are introducing into their art natural effects. The New York Grand R. R. Terminal has a starlit sky for its roof. Some day art will evolve a process by which the place we call home may be transformed into a veritable bit of out-of-doors.

When we come into a realization of the fact that no rug from the Orient, ever so elegant, can compare with a grassy carpet of wood or field, or a woodland pasture, luxuriant with the blossoms of springtime or the ripened leaves of an autumn day; and that wall tapestry however expensive does not nearly approach the beauty of the foliage, trees and shrubs, it is then that we shall come into a right appreciation of Nature and natural effects. When we come to know how perfectly sane and pure Nature is in all her moods, we shall stand in awe of our own baseness and be appalled at the distorted notions we have acquired of what we believe to be right living.



## THE BIRDS' MAY FESTIVAL.

All through the changeful March and showery April the birds were arriving. On the trains of wind and rain and sleet they came. Often many miles of desert air had to be covered to find food and shelter. The love-making days came and went, and in sun and shade and shower the home-making weeks began.

No matter if the cold days, lingering, do chill the lap of spring, often delaying the forming of the scenic curtains, the festival is sure to be in May. Unless you live far north of the forty-ninth parallel, the chief performers will arrive before the last old-moon nights of the month have darkened.

A Birds' Festival to which I was a listener on a twenty-first of May, is still "a thing of beauty" and will remain "a joy forever." It was early in the morning; the eastern horizon lay bathed in its first wash of gray violet and pale vermilion. To the northward, a great flame of deep rose, softly diffused into pale yellows and tender greens, gave evidence of a coming sun. The dandelions in the spring meadows and along the rough roadsides had turned their yellow mats of gold into milky-white full moons of transparent down. These little gossamer planets, pushed above the common level, gave a downy softness to earth as the filmy flecks of vapor repeated the favor in the blue dome above. Much of the cold grayness of the old rail fence had been lost beneath the clambering blackberry vines, whose white blossoms in green setting

brought to mind a picture of a belated May snowfall. The crane's-bill generously warmed the sheltered nooks and grassy plots, while violets in deep blues and kingly purples brightened the luxuriant green aisles.

There was no lack of scenery, no fear of monotony, for almost every moment the scenes were changed. To the north the woods were still more yellow than green, in which the hickories and red oaks gave most of the spring color to the landscape. The buckeye, the maples, and the lonely ashes with their brown tresses filling the sky spaces, were approaching the myrtle green of midsummer, while the slender hickory saplings in stencils of sap green and fleshy scarlet imparted cheerful splashes of color. In another part of the woods were elms, their graceful flaring tops painted as dark green plumes against the blue sky, while little green leaves covered the gray trunks with tender pity. Among the elms one white oak stood, attractively arrayed in pink-and-white apples, touching the opening, rose-velvet leaves with new beauty.

A soft, green mat of fresh grasses warmed by scattered bits of brown, yellow, and umber, lay on the floor of the temple. Mosses, algae and lichens had veiled "with hushed softness" the cold, bare places of weathered stumps and somber logs.

The Festival had begun in the last watch of the night, for the hairbirds were already entertaining in the upper galleries of the trees with their rapid, staccato notes and must have borne off the prize for remarkable speed.

The cardinal grossbeak, one of the chief performers, made a dashing picture in his uniform of bright cardinal with the green leaf draperies in the background. His first exercise was to give us his delicious, pleading, love solo, "purty, purty." As a response to his mate's hearty encore, he appeared again, to the delight of all, this time responding with "such harmonious madness," that we listen even now to the vigorous call of "wy cheer." Another silent, but all the more enthusiastic encore, and out he came again, only to give a few closing "tsips," before retiring behind the screen of elms.

An interval of restful silence followed—a few moments for thoughtful appreciation—when suddenly, a melodious choir of sweet male voices sang to me. They had been heard before. Was not their music sweeter each time they sang? Such bursts of merry chants, such joyous trills, such a concord of sweet sounds! Was I not listening to Nature's sublimest symphony? And who were these little, modest, unattractive fellows in quiet, unobtrusive checks and stripes of brown, grey, white and black, who by their divine melody had brought Paradise to earth? All were members of the sparrow family. There were song, tree and field sparrows. Such famous singers deserve a word of praise. Who has not heard the song sparrow's sweet, rippling chant and not felt a thrill of joy, a deeper faith, an inspiration to better living? Of all the songsters, to me his song is the best. What a patient, brave little fellow he is. From January to

December he is engaged. No season of rest for him. Hear him in the bleak woods on a mild winter day, or after a sultry thunderstorm on an August afternoon, or when the blue lights have veiled the November woodlands.

The tree sparrow is more chary of his song. It is modest, soft and sweet. There is something captivating about the song of the field sparrow; it is so dreamy and plaintive.

The next performer to make his appearance, was less quiet and modest in manner. Sounds of vigorous shuffling on the curled leaf-mats behind the screen of brush heaps preceded his song. At last, from a stage of badly charred old logs, he began his rehearsal; he struck the chord, he ran the scale. This he did again and again. But it bears repetition, quite unlike the monotonous practice of the platform soloist. Towhee bunting, as he is called by all lovers of woodland temples, was appropriately clad in colors to suit his environment. His black coat and cravat, chestnut-brown and dusky white vest, harmonized with the places he most frequented; the burnt stumps, the brown rotten logs, and the gray-black brush-piles.

While choristers were singing, the tree swallows, making rapid gyrations far above me, filled the air with gossip. Dark shadows fell upon us. The bass performers had come. A troop of great black fellows greeted us with their harsh, rasping "caws." Their performance, far from being musical, was followed by shrill cries of the change-of-weather prophets, calling

out sharply in their rapid flight high up through the blue sky. The leader, very particular that their names be not misunderstood, announced clearly and rapidly "killdeer, killdeer."

But new emotions were to be felt for all of a sudden a weird, plaintive voice sang feelingly, "pewee-ee, pewee." His note of sadness touched us the more as he shifted from his concealed position to the headless form of an old oak. Here the subdued colors of his coat and crested cap became a part of the ragged strips of bark that dangled from its trunk. As if to check the ominous forebodings into which the Festival had lapsed, the cheery goldfinches came out in summer garbs of bright shining yellow and black, and lent a pretty contrast to their surroundings. From flower garden to thistle stalk, from thistle stalk to open woodlands, their wild, ringing notes were heard. You soar with them in flights of ecstasy through the fresh, free air. Was all this music wasted on earth and sky? Surely not. Gladly would I have called them back, but their "per-chic-o-re" grew fainter as they undulated across the green meadow.

As the sun grew warmer and soared higher, sending great waves of heat into the vast ocean of air, the earth floor grew warm. Sitting on a log under the shelter of a beautiful red maple, I listened to the heralds of spring—the bluebirds and robins. For eighty successive days they had carried their rich, mellow warbles from orchard and meadow to grove and woodland. Have you ever thought what spring would be without these songsters? Is there anything

in the world that brings to you what the bluebird's warble does from some cheerless tree?

Nor were all the exercises of the Festival vocal. Other performers with well-tuned instruments played the accompaniments to many a solo, duet and chorus. The old trees made excellent drums for the downy, hairy and red-headed woodpeckers. Their rapid tattoos had been heard weeks before the Festival. Often, the yellow hammer, the great brown fellow that he is, plays well with this woodpecker band. Faintly, sweetly, as the dying echoes of a last chord, came the flute-like notes of a little player in gray. I drew nearer the place from which the sound came. I held my breath. Again I heard the clear whistled notes, "peto, peto." Downward he came silently. It was our old friend, tufted titmouse.

It was eight o'clock by the sun. Twenty different performers had sung, drummed and whistled. They had sung the old songs, beat the old drums, whistled the old tunes, but to me there came a strange song, a fresh rhythm, a new life.

As I was about to leave the sacred retreat, I was held by the music of a grand oratorio. Never did men sing like these denizens of the forest. Would that we could sound the notes that are only for the inward ear! We then should hear the phoebe's call, the hair-bird's twitter, the field sparrow's trill, the bluebird's warble, the brown thrasher's medley, the song sparrow's chant, the cardinal's whistle, the robin's song, the jay's squall, the nuthatch's "yank," the woodpecker's "quirk," and the towhee's "chewink."



*The President of a Junior Audubon Club.*



*The House Wren built her nest in the clothes pin bag.*



**PHOEBES.**

A phoebe came to our porch one day in May. Above the window on the projecting ledge she began her housebuilding. Day after day she toiled. Upon the clay foundation she placed rootlets, weed straws, a little moss, and some dried grasses. The upper part of the nest was finished with wool, hair, and fine blades of grass, lined with wool and hair. It took only a few days to complete the nest, and in less than a week, four small white eggs were in it. The male would fly back and forth with the mother bird but did not, so far as I could see, assist much with the nest building. He would sing and swing on the hanging basket, keeping a sharp lookout for intruders. The birds did not mind my standing in the doorway watching them, but no sooner did I move one step in the direction of the nest, than they would fly away, always talking and scolding excitedly in short, saucy "phoebes." When disturbed, they seldom flew further than five yards away from the nest, and usually to the nearest cedar, whence they could plainly observe the maneuvers of an intruder.

While the mother was sitting, the male always remained very near. At times his vigorous "phoebe" notes grew a bit monotonous, and you wished that he might cease from singing a song that had so little variation to it.

In little less than a fortnight, from the four little eggs came four naked bird youngsters, of whom, how-

ever, only two remained alive. The cause of the death of the others was at once apparent. Above, below, inside and outside, the nest swarmed with small black lice. This wool-hair-and-hay nest had served as an excellent incubator for the parasites and the weaker youngsters had been overcome by the vermin. The parents had made the mistake of taking their materials from too near the hen house. The two surviving and stronger phoebes grew rapidly. Little more than a day before the time came for them to leave the nest, I took my kodak, expecting to get a shot at the two young survivors, but as I mounted the chair and lifted the kodak, out they flew. Their wings were still weak, but they managed to get into the cedars, free from danger. The empty nest was removed, and a brush dipped in kerosene applied to the projecting ledge, put an end to the vermin. Soon after the renovation, I noticed that Mrs. Phoebe had started to lay the foundation for another nest in the same place, but she proceeded no further than depositing a few small sticks and rootlets. The next day I found the parent birds building under the north porch, where they had built previous summers. They probably had concluded that the old building site was the best. The nest was constructed of the same material as the first. They used a generous quantity of wool and hair for the lining. I became rather anxious because of this, aware of what had happened before. Four eggs were laid and on June 24th the mother began hatching.

The last days of June were very warm, and each succeeding day grew hotter till on the 4th day of July the thermometer registered 112 degrees, an unusually high temperature, but in such a baking heat there was no danger of the eggs cooling. The male would take her place when she left, standing on the rim of the nest with wide-open mouth, gaping and panting for draughts of cool air.

In fourteen days the eggs were hatched. On July 7th four little lumps of flesh and blood lay where the day before were four white eggs. What surprised me most was that birds so large could be hatched from eggs so small. How tightly they must have been compressed within the little shells. On the second day the birdlings looked quite fuzzy and downy on their backs, and they even ventured to open their mouths. Then began the feeding of each little mouth. Every day they seemed to require stronger food, for they were getting older and bigger. A number of birds partly masticate the food for their young when they first begin to feed them. At least, Mrs. Phoebe seemed to do so. One day she brought a small moth, tore it into bits, and fed the shreds to the different youngsters.

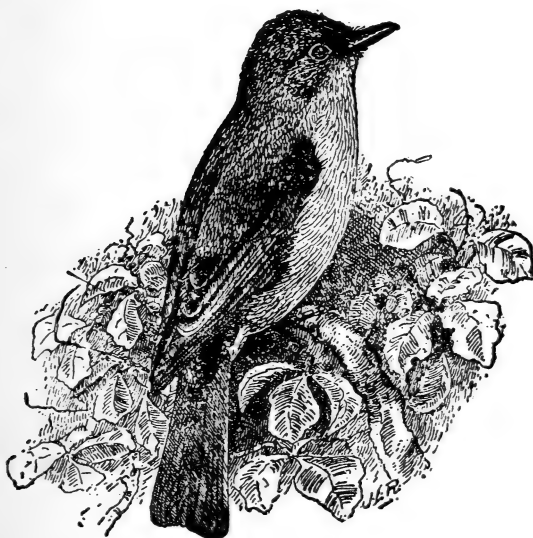
How quickly the little things were clothed! In a week they had their feathers, and when eleven days old they were so well rounded that I concluded it was time to have their pictures taken. Fortunately, the parents were not at home while this was going on, or they might have objected to such a proceeding, but

in less than a half-hour the mother bird was again feeding the brood.

Each succeeding day found the phoebes a little stronger and a little larger, till the nest became so crowded that when the mother brought the food there was scarcely any room for her to place her feet upon the nest. Often, in five minutes she had made the round; into each mouth had gone some bit of insect food—the first course of their early breakfast. Then back and forth she flew, bringing food till their hungry cries were quieted. A spell of silence usually followed—an interval for the enjoyment of little morning naps. During the last week before nest leaving there was much moving about and exercising the muscles of their wings by flapping them up and down. On the 20th of July, they sat on the rim of the nest, looking down and upon an unexplored world. The father and mother birds called to them to come out, but they drew back into the nest. The next day, when just three weeks old, there was an exciting time in the phoebe family. Four young phoebes chirped and twittered. The old birds called again and again, then followed a responsive chorus of weak chirps, a flapping of wings, and the young birds flew from the nest for the first time. Their destination was a pear tree but two rods away. Soon they made their way to other trees in the orchard, where the old birds continued to feed them.

What a blessing it was to have the phoebes about, for they helped to keep the porch free from flies and

spiders. More than 90 per cent of their food consists of spiders and other insects, mostly of the noxious species, such as weevils, click and May beetles. At times they vary their diet with fruit. In June they helped themselves to cherries, to which they were most welcome. Afterward they fed on young grasshoppers from the gardens. The field grasshoppers of the summer season were very small and made choice morsels for both the young and the old.



PHOEBE

**WITH THE WARBLERS.**

Would you know these nervous little creatures that people our tree tops, then take your field glass and go into the moist woods and thickets. Do not expect to hear warbling songs, for notwithstanding the name warbler, the warblers do not warble. The songs of the most of them are weak, wiry, high-pitched sounds, rapidly repeated.

There are three score and ten warblers in the United States, but less than half that number visit the central states. Only a few of these are summer residents, turning south in August and September, when the woods abound with their lisping notes. The last half of May is probably the best time to observe the warblers. The transient visitors often arriving before the trees are in full foliage, tarry long enough to make their identity possible. The warblers are among our smallest birds, only a few species measuring more than six inches in length.

With but few exceptions the warblers inhabit the thick wood, living chiefly in the upper branches of the trees and feeding on the myriads of small insects infesting tree life. Few people learn to know the warblers as they have neither the time nor the inclination to remain in the woods long enough to make sure their identity. However, there are a few species that every one may know. Of these the yellow warbler is the commonest and the best known in most localities, for he will come to your gardens and orchards, and to your

vines and shrubbery. Don't call him a wild canary, though he does wear a canary-colored suit—he is the summer yellow bird or yellow warbler. If you are a careful observer, you'll see the olive green in the back and the brown streaks on the breast of what is otherwise a yellow bird. The male and female are much alike, both wearing yellow. They flit about like ripened leaves driven about by an unruly wind.

Last year the yellow warblers were here by May 11th and in a week many of them had their nests built. Near the edge of town, in trees and shrubbery along a ravine, I found four of their nests, all of which were hung less than six feet from the ground. A blackberry vine, a willow tree, an elm shrub, and a small horse chestnut bush, each held a flaxen pouch. These silvery-gray pouches were artistically woven from fine plant fiber and lined with down and fine hair. The nests were beautiful, as beautiful as the birds themselves. No sooner had the nests been made, when that impostor, the cowbird, began her intrusions. In each nest, among the bluish white eggs mottled with brown, a cowbird had deposited her egg, which was twice the size of the warbler's egg. I was interested to know what would happen. In one of the nests the cowbird's egg was left undisturbed, in another the warbler cleverly built another story over the bottom of the nest, thus concealing and burying it. The yellow warbler often builds a nest of several stories in order that she may get rid of the unwelcome eggs.

The nest in the elm shrub fared the worst, for in

this nest the cowbird had deposited two eggs among the four warbler's eggs, making six eggs to be brooded over until the day when the eggs would hatch. Two weeks later my patient waiting was rewarded by seeing a nest filled with four young warblers and two big cowbirds. What a family for the little parents to feed! On the morning of the fourth day after hatching, I visited the nest and found that two of the warblers were missing. Who was responsible for their tragic fate? While I was thinking of some possible cause of their disappearance, my eyes were attracted to some flies at work on something near my feet. There lay the warblers—dead. There was but one solution to this tragedy; the little birds having starved to death, were carried from the nest and dropped to the earth. The cowbirds, their flaming red mouths wide open, had taken the food which rightly belonged to the young warblers.

Some day in May, you may see a pair of black and white-streaked birds creeping around the tree trunks very much like the nuthatches do. They are not nuthatches but black and white warblers, helping themselves to a meal of insect food. Listen to the song—a weak, wiry, “zee, zee, zee,” he calls as he plants himself against the trunk of another tree. The black and white warbler builds her nests on the ground, in which she lays four or five small white eggs, speckled with cinnamon brown on the larger end. This warbler is easily identified; a black and white streaked back, a black throat, a light breast heavily streaked with



black are the marks by which you may know him. Then, too, he is smaller than the woodpeckers and brown creepers.

You must not miss seeing our summer resident warbler—the American redstart, brilliant and flaming. If you chance upon a pair of birds flitting from tree to tree, catching insects on the wing, dressed in black and salmon, you may be quite sure that they are redstarts. The head, back, the upper wing and middle tail feathers of the male are black, basal, half of wing feathers, sides of breast and flanks, rich salmon. The female is less gorgeous in her attire, the salmon of the male being replaced by a dull yellow, and the back is somewhat grayish. I like the redstart's song, perhaps because it is so genuinely rich and jolly. Moist woods, May flowers, grass grown brooks, these are the proper stage setting for the redstart, which is very much of a tropical bird. The nest usually placed in a small tree or sapling, six to twenty feet from the ground, is built of strips of bark, rootlets and lined with fine tendrils and down. Sometimes the redstart is taken for the Blackburnian warbler. The latter has orange not salmon in his plumage. The orange in the center of the black crown, and the conspicuous white feathers in the tail, are characteristic markings that help you to know the Blackburnian from his cousin the redstart.

If you should happen upon a bird in your orchard, wearing a black mask and a yellow vest, call him the Maryland yellowthroat. His home is in the thickets, but he often frequents the orchards and vines near by,

to feast upon the insects feeding there. He is such a restless little body, skipping nervously from one retreat to another, making it hard for you to follow him. But listen to that outburst of song "witch-ee-tee, witch-ee-tee," he sings to his mate, then retreats to the thicket. The female does not wear the black mask. Her plumage is more subdued in color; back, olive green; breast, grayish, white underneath; sides, yellowish. The yellow throat, unlike most warblers, builds on or near the ground. The nest is made of strips of bark, dry leaves and grasses, the interior being lined with fine grasses. Her nest like that of the yellow warbler's is often invaded by the cowbird, who intrudes her eggs into the nest of the helpless victim. Instead of evicting the egg, the yellowthroat hatches the egg and cares for the young impostor, though her own little ones may be starving.

The myrtle warbler occasionally spends the winter here. You may know him by his strong, forcible call note, "tchip," the yellow patch on his crown, the yellow under parts, and the yellow patches on rump and wings. Myrtle warblers go north to nest. They are often seen in their migrations, tarrying a few days in the central states, as they journey northward.

It is interesting to note the various warblers that may be found along a certain parallel of latitude. In this latitude—41 degrees north—I have never found the pine warbler as a summer resident, but in Colorado he sang to me on a hot August day from the stunted pines and quaken asp on Prospect Hill.

However, he may have been already journeying southward. In the latitude of Boston, he is a common summer resident, while at Washington he is an uncommon summer resident.



BOBOLINK

A few chippy-birds and yellow warblers will clean the slugs from your roses and shrubs.

**A MORNING ROLL CALL, JUNE 21ST.**

Farewell to Spring! Good morning to Summer! A good long day in which to enjoy June's offerings from vine and tree in field and wood. Sixteen hours of light today in which to watch the white woolly clouds pile up in great soft masses till they reach mid-heaven. Oh, glorious day of sun and shade! When old Sōl climbs up to 100 degrees, would that all men could throng to the country and seek shelter under the thick-foliaged trees. For on a morning like this you want to get down by some cool stream hemmed in by a thick wood, and rest and dream.

The birds and bees come and go and you need not get up and follow them, for if you are in modest attire, and don't "flash" a fiery tie or some other signal, you'll be surprised how many of them will take no notice of you. The birds will chirp and skit about in the trees above your head and the bees hover in the flowers at your feet. This seems to be a morning in which the sparrows and finches are especially active. From tree-tops, shrubs and vines, from fences, underbrush, and pasture land, come "tsips," chirps, trills, and songs of sparrows and finches.

I take my pencil and begin calling the roll. Song sparrow! Yes! Clear, strong, and variable comes the response from a small oak. He turns so as to show his marked breast. He outdoes all others in singing, for he has six variations of song to his credit.

Field sparrow! From the underbrush comes a num-

ber of simple trills. Then one sings his plaintive little ditty, "cher, we, de—de." When he comes nearer, I see that he wears a reddish-brown cap and a not very clean white vest. In a few minutes he disappears in the neighboring woodland.

Vesper sparrow! No answer. He passed by a short time ago, the white shafts in his tail being too conspicuous for him to lose his identity. There he is! Back again! A little plaintive and sad but tender and expressive are his vesper trills, often sung in early morning as well as in the evening.

White-crowned sparrow! No response. He answered my call a month ago. Two long notes and a little trill was his repertoire. But it was so sweet, so simple and natural that you wished him to sing it over and over again. What a trim little fellow he was, wearing his black and white striped crown.

Chipping sparrow! Hairbird! Yes. A pair of them twitter their monotonous response. Repeatedly, they tell me that they are happy, and soon the cause of their extreme happiness is made known by the little nest of hair, carefully concealed in a hawthorn bush, from which the young birds are about to fly. Quick as crickets, small as wrens, they run about, apparently fearing nothing. They are the smallest but most fearless members of the sparrow family. Their appearance differs but little from other sparrows—rufous caps, light vests, and coats of mixed brown, black, gray and white, complete their uniforms.

Grasshopper sparrow! From the old pasture field an

insect-like "tzee-ee-ee-ee" answers my call. I passed his nest this morning on my way to the woods. Almost did I crush his mate beneath my feet for she did not fly up from the ground till I was within a yard of her. You would not have seen her at a rod's distance for her mixed black, brown, gray and buff back and tail matched the scanty growth in the meadow. What wonderful protection do the quiet, mixed colors in the plumage afford these sparrows. The nest, a simple wreath of fine straws and grasses, lay flat upon the earth, in which were four small eggs, white, thickly dotted with reddish brown. The yellow on the wing is the most characteristic marking of this sparrow and for that reason he is often called the yellow-winged sparrow. Some erroneously call him the ground bird, or ground sparrow.

But listen! What is that song I hear, coming from the low wet marsh beyond the stream? Some transient visitor, I dare say, whom I have not heard before. "Tweet-tweet-tweet," comes the oft-repeated song, sweet and clear. To what name will he answer the roll call? A search through the various bird books reveals the fact that he is the swamp sparrow, a good name to give to a bird who likes wet, grassy marshes and swamps; but untrue to the name he bears, in the South you will often find him frequenting dry fields and meadows.

## VESPERS.

The day is August tenth. The hour is seven. The entrance to the sacred retreat the country road. As you approach this forest abbey, you pause reverently, silently admiring its wondrous creation. The great, green trees are its walls; the illimitable sky, its roof; the spacious earth, its floor; the weather-beaten log by the gray, old fence, your seat; and the low bank of the blossoming ditch, your footstool.

It is early evening, and you are alone at this vesper service. The western sky is an even blue-gray, and a moist breeze stirs the foliage. The air is full of distant sound—the woodland choir engaged at rehearsal.

For some moments the other senses seem brothers to your feasting eyes, as you behold the wealth of color. Goldenrods stretch along the woodside, their flaring heads, swaying in beautiful contrast to the purple ironweeds. Near the earth are generous drops of blue and violet in the heads of heal-all. Bright clusters of yellow nestle close to the woody stems of St. Johnswort; and in richer setting against the gray rails are the orange touch-me-nots of the jewel-weed. Strong and straight as Indian sentinels, stand the teasels, lifting their lilac cones with respectful dignity to attract the passing bee. Your hands are perfumed with the wholesome smell of pennyroyal, and with the wind's caress, comes the sweet scent of everlasting.

You wonder on this quiet August night, when bird voices are usually silent, why so many songsters join

in this vesper service; and whether with them as with yourself, the balmy breeze, the humid air, and the show of color serve as a tonic to their moods. For, perhaps, not another night of this month will echo so many bird voices, "sweeter than the priests."

From near and far, you could hear the sweet chants of the vesper sparrows, for whom this service was named. Their notes were never so strong or as joyful as those of the song sparrows, but they were always more plaintive, suggestive, and tender. The simplicity of the vesper's song has always appealed to me. I do not feel that his trills are "degraded," as one bird lover writes. You may tire of them, when stronger voices are in the ascendant, but at the eventide, when all living things are wont to tender their farewells to the dying day, the vesper sparrows touch the right chords.

Then born from afar, came the musical "cher-we-de-de-des" of the field sparrows. In this still, evening hour, these modest, little birds paid to earth and heaven their enchanting devotions. How they did sing! Sometimes, but a single note, then a dozen or more clear, ringing voices could be heard in the melodious choir. Nor did they always sing the same song; their variation or trills made music fit for the gods. Would that some instrument might reproduce the various sparrow trills for the delight of all woodland folk. Even now, they sound upon my inward ear. Joy, sorrow, pathos, love, tenderness, every emotion the human heart is heir to, seems to find its expression in some note of song.





*Four Young Thrashers.  
(Permission of Doubleday,  
Page & Co.)*



*A Brown Thrasher's Nest  
in a Hawthorn.*



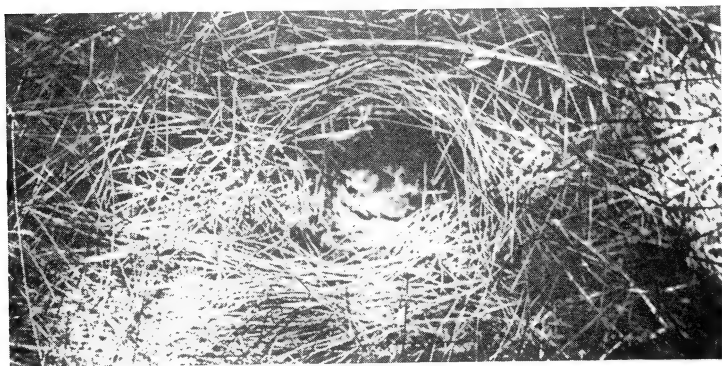
*A Meadowlark's Nest.*



*Young Thrashers (Nest in a  
Brush Heap).*



*The Grassy Nest of a Field  
Sparrow.*



*A Young Field Sparrow.*

A flash of white, an advance of brown, from what would otherwise be a black bird; several long notes, and then a shuffle of feet among the leaves, are marks of uniform and preliminary tunings that belong to towhee bunting or chewink. He, more than other birds, loves to sing at sundown, at early dawn, and even in the black hours of midnight. Often, in the spring, the stillness of an April wood will be broken by this ground robin's clever performance. His song is very simple, just a few strong notes, then a rapid trill, a descent of the scale.

Your ears now catch a sad strain, for the wood pewee introduces a plaintive note that makes you feel that somewhere, some one is suffering, and you may be to blame. The gray-black of the bird and the tree are the first to be lost in the deepening shadow of night, but the "pewee-ee-ee" grows in feeling and pathos as the night continues to darken. Soon all markings that distinguish one bird from another are lost in the dusky shadow that grows blacker with the advance of night. The flesh-colored bill of the field sparrow, and the white shafts in the vesper's tail are no longer seen.

You would miss none of the last notes, as the birds seek cover for the night. There's the jerky "tsip" of the cardinal, as he skips from one bush to another, the faintest warble of the bluebird from the scrubby oaks, and the low chirp of the robin from the hawthorn thicket. Sometimes there is but a single chant, an interval of silence, then a duet of sparrow trills, followed by a score or more of voices. Wrens, gold-

finches, indigo buntings, crested titmice and thrashers contribute some of their rarest notes to the midsummer night's vespers. They rarely sing their full repertoire. No, they are the sweet "good nights" low, tender, musical. Ere long the vespers cease. One by one, bird notes grow fewer. Only a low twitter from the cockspur thorn breaks upon the silent night, and the wild screech of an owl sends a shudder through the forest folk. You go to your tent, draw in its folds for the night—a night in which you have lived and learned.



SONG SPARROW

## GNATCATCHERS.

September is an unusually good month to watch gnatcatchers for they often leave the thick woods before migrating southward and come to the orchards and gardens. The blue-gray gnatcatcher is the only species found in eastern North America. It may be seen in various parts of the country from the Atlantic to the Rocky Mountains, south of latitude 42. North of this it is found only as an occasional visitor. Mr. Frank Chapman in "Bird Life" speaks of the gnatcatcher as a "southern bird, occurring only locally or as a straggler north of Maryland." However, as a summer resident, it is quite common in the central states. In the springtime he usually stays in the dense, moist woods, where insect life is abundant, but in the months of August and September you may look for him in your gardens and orchards.

The blue-gray gnatcatcher is about the size of the golden-crowned kinglet, both birds measuring less than five inches. They belong to the same family and are great insect eaters. When it is in a bush or tree with the English sparrow, the gnatcatcher looks to be but half as large as the sparrow.

You will have no trouble in identifying these nervous little birds in their blue-gray uniforms. The backs of the males match the lilac grays of weathered boards and tree trunks. Their breasts are a grayish white; the wings show markings of light gray and white. In the tail the outer feathers are white, the others chang-

ing gradually to darker values until the center ones are black. The females are lighter and more grayish. The young birds show, during the first season, the same colorings as the mother bird. Later in the year the males grow darker.

Would you spend a pleasant hour? Then watch the gnatcatchers get their food, a large part of which is made up of gnats, flies, bugs, mosquitoes and worms. Watch them in the cedars extracting insect eggs and larvae from twig and trunk. To and from the tree they go in quick short flights, catching the small flies swarming near the outer branches. Soon they are on the potato vines helping themselves to the larvae of the Colorado beetle; then they go to the currant bushes and the grape arbor and feed upon the aphides and small grubs found there. One August day, in less than five minutes, the gnatcatcher fed a full-grown young bird two worms, a half dozen gnats, and an insect taken from the trunk of the cedar. They like to visit the wild cucumber vine, for it attracts many small flies and insects. One family of gnatcatchers visited this vine daily for one whole week, feasting upon the tiny flies and bugs that tenanted its blossoms. In securing their food on the wing they do not whirl about in the air as much as the flycatchers, but by a quick dip or two they take the passing flies while making their flight from one place to another.

To see the gnatcatcher's nest you will need a field glass, for he usually builds high up on a limb or a crotch of a tree, often thirty and more feet from the

ground. Such a trim, little bird would be expected to build an artistic nest, and he does. Tendrils, bits of bark, and fine grasses dexterously interwoven with an outer covering of lichens, complete the pretty structure, in which the mother bird lays four or five bluish-white eggs, thickly mottled with brown.

In their flight and movements the gnatcatchers are much like the kinglets. They sing a sweet little song, oftener heard at mating time than at any other season, but their squeaky call notes are incessantly repeated when feeding in the trees.



Cats, like boys and girls, have to be trained not to kill birds and little chickens. Homeless cats are among the greatest destroyers of bird life.

**WHERE SOME BIRDS BUILD THEIR NESTS.**

Birds are quite as different in their habits of nest-building as men are in the locating of their homes. The low, sandy beach, the river's brink, the grassy swamp, the level meadow, the leafy bush, the hawthorn thicket, the scrubby oak, the graceful elm, the rocky cliff and the mountain top, have all been selected as fit nesting places by the birds.

Most of our land birds build flat on the ground, or in low bushes and shrubs, or in trees twenty to fifty feet from the surface of the earth. In the spring, when the meadows are still bare, you'll find a number of nests low on the ground, made of fine weed stems, hair and grasses. These are owned by the field, song, vesper, and grasshopper sparrows. Unless the birds are near, the amateur will find it difficult to tell to which particular sparrow the nest belongs; for these sparrows build their nests very much alike, and of the same kinds of materials. They do not always build in the meadows but just as often select the low bushes, usually some species of the hawthorn, in which to raise their young. Hairbirds, or chipping sparrows, weave their hair-lined nests in low bushes and trees, from three to twenty feet from the ground.

Mourning doves collect a few sticks into a round pile on the ground, which serves the purpose of a nest, but they too sometimes prefer a higher outlook and build in trees, usually about twenty feet up.

Meadowlarks and quails like the timothy meadows



and grassy fields. The former places her nest of grass, straws and blades under some grassy tussock close to the earth, while the quail conceals her ten or more eggs in an arched oven or tunnel well made of grass and weeds.

Since meadows are often much disturbed by cultivation, quails frequently place their nests in the open spaces of overgrown pastures and woodlands.

In the shrubbery of your lawns, and in the thickets and bushes of open woods, the yellow warblers, very much like wild canaries in appearance, flit nervously about. Look for their nests in the wild rose stalks and in the leafy bushes, about five feet high. In April, 1912, I found one in a small horse chestnut bush, another in an elm sapling, and others in the blackberry vines and in the willows bordering the creek. The yellow warbler's nest is so exquisite in structure, that it deserves more than passing notice. Beautifully woven of hempen fibers, and lined with soft silken down, this flaxen pouch forms a luxurious cradle for the young birds. The cowbird often selects the yellow warbler's nest in which to deposit her unwelcome egg. In that case, the little warbler usually builds another story to her nest, covering up the cowbird's egg. If the cowbird persists in intruding and lays a second egg, the warbler may even add another story, thus ridding the nest of the undesirable burden. Last summer every warbler's nest I found had from one to two cowbird's eggs in it. In one nest were four young warblers and two cowbirds. The latter consumed so much of

the food brought by the old birds that their own young were deprived, and starved to death.

Catbirds, brown thrashers, and cardinal grosbeaks generally build in tangled vines, thorny bushes and low scrubby trees. For some seasons I have found the catbirds and thrashers showing preference for the hawthorns or white thorns. In fact, all the nests found were built in the different varieties of hawthorn. In one woods nine thrashers' nests were built in the crugalli—or cockspur thorn, and nearly as many catbirds' nests. The nests were placed well in the center of the tree on a platform of crossed branches generally eight to fifteen feet from the ground. Birds find in the hawthorn bushes excellent nesting places, for surrounded by a circular screen of thick green leaves, the nest is well hidden. The stout gray spines form an effectual barrier to cats and owls and the thick network of branches, in color and arrangement, afford protection to the rude nest of coarse sticks and straws. Formerly the brown thrasher built his nest on the ground, but continued exposure to the disturbance of domestic animals, has caused him to seek another environment.

The cardinal grosbeak, like the robin, nests in various places. If he lives exclusively in the woods, you will find his nest, seldom over ten or twelve feet from the ground, in the hawthorn, in the locust, or in any other tree with closely-woven branches. If your cardinal is sociable and frequents the lawns, gardens and orchards, you may find his nest in the mulberry tree

in the back yard, or in the cedar on the front lawn, and if kindly treated he may find a convenient nook under your porch. Cardinals, thrashers, and catbirds build their nests very much alike, of coarse sticks, weed straws, dry leaves, and grass stems. Sometimes they make use of materials from cultivated fields, such as old cane and cornstalks, which are used as foundation planks.

Robins, those charming visitors to our orchards and gardens, build their nests in the trees along our streets and dooryards and in the fruit trees of our orchards. They often build in forest trees, but seldom in the thick woods. The robin likes to place his mud plastered nest in the crotch of a tree from ten to thirty feet from the ground. Where there are maple trees, he shows a preference for them. In 1912, in the trees along the streets of a small town more than two score of robins' nests were found in the maples. The year following more than half that number were built in the same trees. The robins like to build under the eaves of porches and, if let alone, will often nest there season after season.

Wrens find nesting sites in places where other birds would not think of venturing. I have found them nesting in old cans, in old shoes, in the pocket of an old coat left on the fence, in gourd boxes, in currant bushes, and in the niches of porches.

At one time we thought of the phoebes as birds who loved the wet woods where insect life was plentiful. Formerly they built under some old bridge or culvert

or in some rocky bank. But the phoebe has rapidly adapted itself to the comforts afforded by civilization and now comes to the porches and pergolas, to the barns and sheds. The eaves of an old shed, the projecting board above the porch window, or the porch post, is a good place on which to lay its foundation of mud, moss, and grasses. The phoebe lines her nests with hair and feathers, sometimes using wool instead of hair. The wool and feathers picked up for nest lining often causes the death of her young. For too often they are chicken feathers, pregnant with parasites, and when the eggs hatch, the lice attack the young birds, killing them. One would think that a tragic experience of this kind would prevent their using the materials a second time, but this is not the case. Last summer four phoebe nests were built under our east and north porches. All were wool and feather lined. Sixteen young birds were hatched. Two of the nestlings were killed by the vermin that preyed upon them.

Of the plover family, but one of the species nests in this latitude. The killdeer, which is really a shore bird and more numerous near lakes and rivers, is very common in many localities. Always have I found the killdeer's nest, if nest it can be called, in dry meadows.

On May 27th, I was walking through a pasture field when a killdeer flew up just a few feet from me. On the dry ground she had raked together some small bits of bark and laid her eggs. In another meadow a few sticks formed into a loosely arranged fence kept the eggs within their confines. In some places the

killdeer builds better, appropriating dry grasses and weed straws in place of twigs and bark. The killdeer's eggs are large, measuring nearly two inches in diameter. In color, they are a trifle lighter than putty, looking like good hard clay. Over the buffy-gray surface of the egg, spots of black or fuscous are scratched and scrawled, chiefly on the larger end.

Baltimore orioles usually swing their neat hammocks from the extremity of some branch of a tall tree, twenty to fifty feet up. If the oriole shows a preference for any tree, it is for the elm, for more oriole nests are found in elms than in other trees. The orchard oriole likes to place her deftly woven cradle in the fruit trees, especially in the apple and pear.

If you are out in the woods late in May, look for the warblers who are claiming the tree tops, and feeding upon the insects found under the leaves and in the bark of the trees. With but a few exceptions the wood warblers live and nest in the forest trees. Their nests are built at various altitudes, some of them on the ground, others, like the yellow warbler and Maryland yellowthroat, in bushes and low shrubs. But the greater number of them build high in trees, from twenty to fifty feet from the ground.

We regret that in the last few years so many purple martin houses have been without tenants. These house swallows used to appropriate the boxes and gourd-houses erected for them. That they are decreasing in numbers in some parts of the country is apparent from the number of deserted nesting-places. Some of the

empty boxes have attracted the tree swallows which seem to prefer them to the holes in hollow tree trunks where they formerly nested. It is also a lamentable fact that too many of our modern barns are so constructed that they furnish little or no hospitality to the barn swallows. Wherever possible, they build their mud-plastered nests, softly lined with feathers and grasses, on the rafters of old barns and sheds.

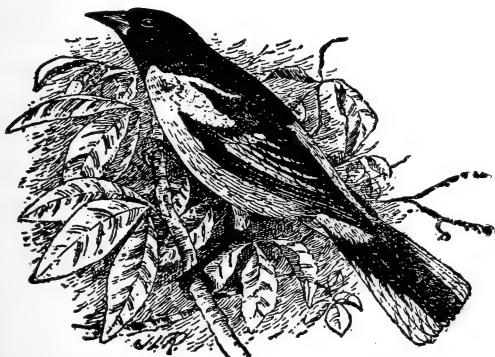
Closely related to the barn swallow is the eave swallow, known in the west as the cliff swallow, because of its preference for cliffs and rocks as nesting-sites. Under the shelter of the eaves and projecting roofs of barns and outbuildings, the eave swallows build their rows of clay abodes. Their nests, pouch-shaped affairs, are made almost entirely of mud.

Near the water in the sandy bank of the streams, you will find the dark cavernous tunnel of the bank swallow. Along one river I saw a score of these dark holes dug in the bank, within a stretch of twenty rods. The holes vary from two to three feet in depth. For a number of successive seasons they came back to the same old bank until the ravages of ice and water, undermining their tunnels, made it necessary for them to prospect in other places. The next season whole colonies of them began their excavations in the river's bank farther down stream.

The rough-winged swallow prefers to be less shut in than the bank swallow, and would have less darkness in his home; no black curtains are to be drawn around his domicile. He and his mate carry their

sticks and grasses to a niche in the embankment of an old bridge, or sometimes place them in the wall of a stone culvert. From four to six eggs are laid, small and white. Like the bank swallow, the rough-winged frequently returns to its old nesting place.

One has only to keep a sharp lookout throughout April and May to find the places where the birds build. On the marshy shore, just out of reach of the rippling waves, the sandpiper finds a place to deposit her spotted eggs, while high on the mountain side at Summit, more than 10,000 feet above the nest of the sandpiper, a pine warbler builds her nest in a fir tree. One man likes his summer home built at the ocean's edge, the other erects his on a cliff in the mountains. Each is happy in his own environment, and so it is with the birds. They place and hang their domiciles in such places and altitudes as are best adapted to their needs and comfort.



BALTIMORE ORIOLE

### TAKING THE BIRD CENSUS.

Some people in this world do things for the mere love of doing; for the pleasure they get from knowing the work has been done is sufficient reward and compensation. Many of them are engaged in creating such an environment that man and child, beast and bird may live as "one family here." To this class of persons belong the census-takers of the birds, self-appointed men, women, and children, who take it upon themselves to determine the increase or decrease of the avian population.

They choose their own time and district. Their work is to determine the number of birds in a certain district by actual count. In order to do this accurately, the counts must be made both in the spring and the fall. There are a number of them at work now, taking the bird census in order to determine the number of new nests built this year and the total number of living birds in the districts worked.

The birds are classified as permanent residents, seasonal, or merely transient visitors. All birds are reported and belong to one of these classes. To illustrate: latitude 41 degrees north, nuthatches, titmice, chickadees, cardinals, hairy woodpeckers and blue jays are permanent residents, remaining throughout the year. Tanagers, bobolinks, orioles, wrens, warblers and bluebirds are seasonal residents or summer residents, as some wish to call them; they remain only through the summer season, while tree sparrows and



juncos are winter residents in this latitude, and kinglets, redpolls, and crossbills are transient visitors.

The only qualifications requisite to become an enumerator of birds are: the person must see and hear well, tell the truth, not indulge in mere speculation; must know to what families and resident class the birds belong, where they build their nests, and the trees in which they build; and make semi-annual reports of actual counts of nests built and young birds raised in the district during the season.

A notebook and a pencil is all the outfit required. This little company of silent workers is very small. That others may become interested in the work of taking the bird census, I am submitting a report from one of them:

Longitude 84° W. Latitude 41° North. State of Ohio. Sec. 3. Range 4. Township 4. County of Defiance.

Burr Woodland (20 Acres).

Report Showing Bird Population, 1911.

Name of Bird	Nests			Birds		
	New	Old	Total	Young	Old	Total
Hairbirds .....	5	7	12	16	10	26
Song Sparrows .....	3	6	9	10	6	16
Field Sparrows .....	2	2	4	6	4	10
Towhee Buntings .....	1		1	3	2	5
Yellow Warblers .....	1		1	4	2	6
Brown Thrashers .....	2	1	3	8	4	12
Cardinal Grosbeak .....	1		1	3	2	5
Total .....	15	16	31	50	30	80

Of the number of birds that actually live in this twenty-acre woodland, the average is about five to an acre of woods, including those that had built nests near

the edge of the woodland. All the nests were built in hawthorns, which form three separate thickets in the woodland where the larger timber had been cut away. Brown thrashers have long shown preference for hawthorns, but the absence of nests in other trees and bushes proves that other birds also show preference for these thorny trees and shrubs. The Burr woodland being rich in hawthorns makes it an excellent retreat for birds. Six varieties of hawthorns grow in it. These hawthorns, or white thorns, furnish excellent nesting places for birds. In the springtime they are encircled by belts of foliage which completely obscure the nest. Their long, stout spines on twigs and branches make protection secure by keeping out most bird enemies, and since the leaves remain on till September, it is possible for the birds to raise several broods in them and yet have the necessary seclusion.

The network of gray spines and branches is so similar in color to the materials of which most nests are built, especially the thrasher's, cardinal's, and catbird's nests, that it is difficult to discern the nest from the netted mass of twigs and dry leaves in the hawthorn. In autumn, the fruit of the *Crateagus mollis* is a palatable food for the broods of young birds that have been reared in it. Every farm should have a large number of hawthorns growing in the fence-rows of its fields and meadows, as nesting places for birds. In many places there are but 10 to 15 insect-eating birds to an acre. With the balance of nature so badly disturbed, is it any wonder that the insects are devouring our

crops and killing our orchards?

The following is a report of a census-taker working in Shawnee Glen, Ohio:

Name of bird.	No. of nests.	Location.
Robins	32	Maple, 10; oak, 4; locust, 2; hawthorns, 3; poplar, 2; elm, 1; pear, 2; other places, 8.
Hairbirds	4	Vines, 2; hawthorns, 2.
Wrens	4	Pear, 1; other places, 3.
Orioles	2	Elm, 2.
Yellow Warblers	4	Elm, 1; horse chestnut, 1; vines, 2.
Meadow Larks	6	On the ground in meadows.
Bank Swallows	3	In bank of river.
Cardinal	1	Hawthorn, 1.
Mourning Dove	1	White pine, 1.
Goldfinches	1	Hawthorn, 1.
Catbird	2	Hawthorn, 2.
Thrashers	3	Hawthorn, 3.
Warbling Vireo	1	Elm, 1.
Yellow Hammer	1	Oak, 1.
Song Sparrows	5	On the ground.
Field Sparrows	3	On the ground.
Phoebes	2	Under porch roofs.
Total	75	

12 in hawthorns.

10 in maples.

4 in elms.

4 in oaks.

45 in other places and trees.

Total number of eggs laid, 249.

Approximate number of young birds living in Shawnee Glen, June 1st, 180. Causes of death of young birds:—Two wrens' nests destroyed by cats.

Three song sparrows' nests invaded by cowbirds.

Five yellow warblers starved to death because of the imposition of cowbirds.

Two robins' nests invaded by owls.

May 27th, a heavy rain storm loosened many robins' nests from their anchorings; the next morning the nests lay beneath the trees, the young birds drowned.

Seventy-seven different species of birds were identified in Shawnee Glen, but some of them nested outside the district in which the observations were made.



ROBIN

## VISITORS TO THE OLD COTTONWOOD.

Only a few rods from the old farmhouse stood an aged cottonwood which had felt the snow and sleet, the showers and sunshine of a half-century.

In its early youth, the lightning had ripped off a small branch but the wound soon healed, leaving only a slight scar. So tall and towering it grew that once its head was clipped that it might better withstand the tempests. Before it reached its fiftieth year, a number of the lower branches were lopped off by the violent storms, that made it seem much like a broken-down veteran who has the spirit of youth but bears the infirmities of old age. With its branches broken, its symmetry destroyed by beheading, it was to all appearances an ugly tree in the winter season, but in summer its ugliness and deformity were lost under the glossy green foliage. It was then fairly good-looking.

Standing half way between the source and mouth of the river and midway between an expanse of meadow and wood, the tree was an excellent stop-over place for the birds.

Every month of the year it was visited by some of the permanent residents, who traveled but short distances to and from the place. On the cold days of January the nuthatch shuffled up and down the upper trunk of the tree, and the red-headed, hairy, and downy woodpeckers left their bill prints in the rough bark. Blue jays came to scold and shriek; then to

chuckle at their own foolish clamor, and to have a game of tag in the bare branches. Chickadees and tufted titmice examined the loose bark for moth eggs and cocoons. Flitting, singing, chirping; their cheery commotion was hailed with delight.

On other days, when the sky was dark and forbidding, and a strong east wind scattered loose flakes of snow, a flock of juncos swooped down upon it, setting the tree all a-twitter with their sweet clinking notes.

The brown creeper, a rare visitor, usually made his short call in mid-winter. I have in mind a picture of him, slowly creeping up and around the tree trunk, much as a clammy mud puppy would do if it were his business to climb trees. Who knows but that the creeper may be distantly related to him. So quiet and deliberate was he in all his maneuvers, and so perfectly heedless to intrusion, that I was made to wonder why the bird assumed such an indifferent attitude. It may have been that he depended upon his protective coloring as a safeguard, for his back was so like the grayish black trunk that he was not readily seen even when in an exposed position.

Every now and then he uttered a mechanical note not unlike the jerky squeak produced by a distorted sapling locked in the arms of a larger tree and suddenly wrenched by a violent wind. Often when going up the tree he would halt a moment as if thinking out some new mode of procedure. If thoughts they were, they certainly failed to produce new actions for he went on doing the things he had done all his life. But

we have forgotten that the process of evolution was not for a day and even our feathered friend—the brown creeper—may yet evolve from his dense stupidity.

Occasionally, through the winter, a flock of prairie horned larks visited the cottonwood, not perching on its branches but running under it and along the clay road passing the tree. Always we liked to hear their soft tinkling music as they flew low over the meadow. Regularly, every January, the gold finches swept through it on their way to the woods and thickets. They might have been taken for sparrows, had not their undulating, wavelike flight betrayed them.

Once, on a cold, damp day a sparrow hawk sat still and straight on an upper branch. Whether his eyes were fixed on the English sparrows, twittering in the red haw tree; or whether he was dreaming of the field mice in a near-by cornfield I could not tell. However, it must have been the latter for after a time he flew to the field where a few shocks of corn had been left standing.

No other birds were as frequent in their visits to the tree as the yellow hammers, or flickers. From late February to late December, every month of the year, except January, the old tree became a drumming place for these stocky birds.

In late February, there always came a pair of flickers to the tree. Into the old hole, just below a broken limb they would thrust their heads, and probe about the opening, calling contentedly, "witchy, witchy, witchy." Not far away was a large, dead oak in which they

drilled a hole and built their nests. To this same old oak they returned for several years. What a commotion there was going on during the mating season; such clattering among the branches, chasing up and down the hollow trunk, chattering in flicker talk, and making the woodland ring with their lively tattooing.

In the dead of winter few birds stopped to sing at the tree-station. So it was a time of great rejoicing when a cardinal one day dared to leave his retreat and favor the passing folk with his charming whistled tunes.

Today a cardinal sang his song  
To the world and its kin as they passed by;  
Not an ear was tuned in all that throng,  
Not an eye was raised to the tree so high.

Yet, on he sang as if the world did know  
Each note of love in his song's refrain,  
So, "purty, purty," did the words come and go  
Through hours of sunshine, shadow and rain.

If the days before February 22nd were bright and mild, a song sparrow came to announce the first spring song. After that song, "Singing in the Spring," one grew expectant for the spring migrants and summer residents were on their way North and who could tell but that they might drop down to the old station on that very night. For three successive years the old cottonwood recorded the weird piercing cry of the



meadow lark on the 22nd of February. Sometimes a few of the larks remained all winter and so could not be called new arrivals.

Unless some climatic influence, as a great snow storm, or zero weather, retarded their progress, the bluebirds and robins came on the first spring train which arrived about February 25th. Because of the continued rigor of the winter, they sometimes came a week later than the scheduled time or about March 1st.

Well do I remember the thrill of rapture experienced on hearing the first bluebird warble as he came back in the spring. Almost instantly, I forgot the terrors of winter and hungrily employed all the senses in joy of what was to follow that first spring song. The ground was still hard and frozen and no perceptible stir of life in the tree, but the bluebird had come. He sang! and into that song he breathed the breath of spring. Scarcely had he left when a pair of robins chuckled in the cottonwood. Their love-chatter was meaningless as to words but I caught the spirit of the season and exclaimed, "We and they are His creatures—one family here."

Almost on the wings of the robins came the black-birds and grackles on March 5th.

From darkened skies, from treetop, high,  
There came a mighty clatter;  
Of birds in black—a countless crowd flew by;  
In concert then to chatter.  
A chuck, a chirp, a million squeaks and squirks,

In Blackbird Esperanto.

Did we but know the nameless quirks

In that supernal canto.

A few days later, March 10th, very familiar—short, jerky notes broke through the chilly air. A phoebe was singing from the lowest branch, “pee weet, pee weet.” From the tree, he saw the place above the door of the old house where he and his mate would build their nest.

A queer squeaking note floated down from the tree on March 14th, when a cowbird was leaving it to join another of his kind not far away. A week later a soft mournful “coo oo oo” sounded from the woods and the old tree knew that the mourning doves were there.

On March 21st, spring arrived. All day long song and field sparrows sang their simple trills in the meadows. You saw “across the lawns, beneath huge trees a thousand rings of spring.”

By April tenth, the cottonwood was a kind of receiving station to all newcomers, and began to put on its spring attire. The brown buds started to thicken and shine in the warm sunshine. The glossy polish applied gave them a wet, waxy look. Not long after each sprig wore its flowery catkins. Red, woolly tassels dangled from the tree, which were soon dropped to the ground, where they lay curled up on the grass, looking very creepy and worm-like.

About this time chipping and vesper sparrows came and the ruby-crowned kinglets stopped off on their spring migrating tour.

A fortnight later a spring train brought the towhee buntings, purple martins, and chimney swifts. The towhees or chewinks returned to the woods but the swifts and martins made the place their summer quarters. That night a whippoorwill called several times from a scrub oak standing near.

The next day April showers played upon the earth. Thunder, lightning, and rain kept the heavens in action. On the following morning the grassy plots and fields were green and growing. The leaf buds on the cottonwood continued to respond to the generating power of heat and moisture, and began to throw off their thick scaly wrappings. A pair of black and white warblers searched the tree for their noonday meal. Later in the day, a yellow palm warbler paid his first visit to the cottonwood.

Perhaps no bird brought such a volume of music to the old tree, as the brown thrasher. Perched on an upper branch, he sang his medley which seemed to make all earth rejoice.

The wrens were always welcome guests, and no matter what the weather was, their exuberant songs flowed freely from some branch or twig. They came on April 28th, a week or more before the thrashers.

The morning after, the killdeers in an aerial flight escaped the tree top as they flew in a loose flock to the wooded hills beyond, their light breasts glinting in the warm sunshine.

The last train of summer residents arrived in May, the great month for birds. Few days passed without

bringing some new visitor. The old cottonwood began to wear its summer garb for the thick green leaves were almost full size. On the fifth day of the month a yellow-billed cuckoo spoke its low "Good Morning" as it flew over the meadow fence, and at the noon hour a ruby-breasted humming bird buzzed about the bushes that grew under the tree.

The second week in May, kingbirds and orioles had landed. The Baltimore and orchard orioles visited the tree but the one day in the season. The kingbirds spent the summer. They were not very agreeable visitors and too often made it unpleasant for the song sparrows and phoebes. The rose-breasted grosbeaks and indigo buntings loved the thick woods too well to favor the cottonwood with even a single call.

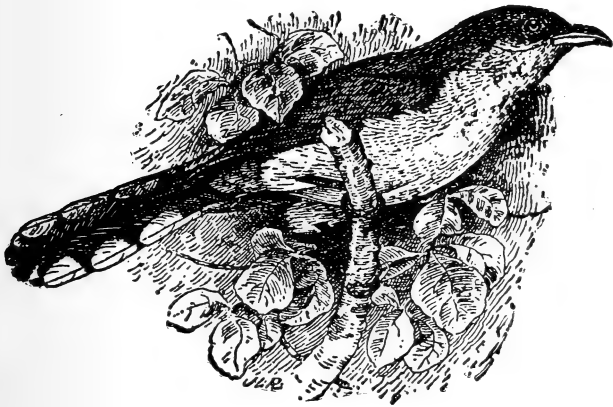
In the last half of May, a few warblers flitted in the upper branches. The warbler family was large enough but only ten members stopped at the cottonwood en route to other regions. In that spring migration were the redstart, the Maryland yellowthroat, and the palm, pine, parula, yellow, black and white, black-throated blue, chestnut-sided, and black-burnian warblers.

In June a red-eyed vireo sang its sweet strain over and over as it peered under the leaves for aphids and tree flies. Boblinks sat on the rail fence and let their "bobolink, spink, spank, spink" fall like the twangs of a banjo.

Of the gnatcatcher family, the blue-gray species was the most punctual in its return to the cottonwood. Seldom an August passed but that their weak, lisping

notes were heard, as they rapidly skipped about from limb to limb. They usually came about the time the first leaves began to drop from the tree, and no doubt helped themselves to the small aphids escaping from the leaf galls.

So close had we lived to the old cottonwood that it was an occasion of great regret when the birds of its youth returned to it no more. Once scarlet tanagers, a score or more, fired their torches of scarlet into the somber branches, now, rarely one red flash was seen. Cedar waxwings came no longer. On its fiftieth birthday the census of 1913 showed that fewer birds visited the tree than at any previous year.



YELLOW-BILLED CUCKOO

**AUTUMN'S LAST CONTRIBUTION.**

When the last blood-red leaf drops beneath the tree that gave it birth, you look upward at the bereft one and wonder what merciless power has wrought such destruction. There it stands stripped and naked, its bare branches brushed against a cold sky.

Yesterday a wild wind waged its war upon the few scattered forms of color on tree and vine. Here a flag of crimson sumac was beaten down, there, the few scarlet signals in the maple tree were swept away. Beyond the hills the elms have yielded their last pieces of ragged uniforms, and the three-leaved ivy no longer drapes the dark tree trunks in vermilion and crimson; the gray coils alone expose its poisonous nature. Not a leaf curl is left to mark the identity of the slender hickory whose towering head was bare more than a fortnight ago.

From beneath the ironwood tree comes the sound of something dripping like Autumn's tears from a passing cloud. The tree is bare save for its hop-like strobiles shaken in the faces of chickadees that are bent on getting them. Suspended in air, with heads hanging downward, they pull the seeds—little nut-brown bags, from the strobiles. Flying to the limbs, a vigorous pecking follows and the seed scales fall on the dried leaves below. You yearn for a taste of this woodland fruit. The strobile is rubbed in the palm of the hand and the tiny bits of dainties eaten. They are good, but such delicate sweetmeats are for the chicka-

dees, not for you. Would you know the reason why? Then go to the woods for your answer. A little later they are feeding in the white-ash trees. Not many of the brown winged seeds are taken from the creaking branches, for the fruit of this tree is bitter and they need but little of it.

Here and there, a few species of the oak family, clothed in siennas and leathery browns, stand ready to defy the elements. They cling to their leaves till springtime, when they are put off as the new ones come forth. Except for these oaks, which add some warmth and color to a deciduous woodland, the scene spreads gray and cold before you. Your eyes search in vain for the flaunting orange, reds and yellows of leaf and flower, which, less than two moons ago, gave so much warmth and gayety to the landscape. Browns and tans, sobered and seared, grays and blacks, suggestive of death and destruction envelope you. And ere you are aware, your mood is chill and melancholy. You see only the dark values, hear only the weird calls, touch only the forbidden things.

The lack of color, the absence of bright blossoms and green leaves, the silent and desolate woodland depresses you and the thirst for something warm, something fragrant and brilliant, becomes unquenchable. A mad desire for the beautiful seizes you. The burning bush is robbed of its fire-red berries; the crimson rose hips broken from the stalk are cherished for their warmth of color. The blue fruit of the Solomon seal is gone, but your hands reach upward to the dark fruit

on the black haw tree. How good it is! Mellowed by autumn frosts the black drupe slips smoothly from the flat stones. Beyond the ravine stands a tree with greenish-yellow fruit. It is the wild crabapple, wild and woody. Beneath it half-buried under the dry leaves lies a goodly portion of its yield, not very palatable to be sure and bitter-sour, but you carry away pocketfuls to be stewed in sugar sirup and eaten with friends who like whatever smacks of woodland flavor.

Soon you are under the nut bearing trees, gathering the few remaining walnuts and chucking them into gaping pockets. You are reluctant in rejecting the imperfect fruit, so the small dark nuts are taken from leafy beds and carried home with other forest treasures.

Accustomed to the riotous brilliant scenes of early autumn, your sense of color is displeased and you find it difficult to adapt yourself with ease to an environment so unattractive and foreboding. But where one sense is not gratified another often receives a two-fold measure of joy and pleasure. Your ears are alert for every sound of the woodland. You almost fear to tread upon the dry leaves lest their noisy rustle drown the weak bird notes your ears are tuned to hear. You hold your breath. Yes, it is just as you thought. It is the squeaky note of the brown creeper. There he goes! Up and down the trunk of the big oak looking so much like a piece of bark that your eyes must watch carefully to follow the flat form creeping around the bole and branches of the tree. From another part



of the woodland comes the familiar "yank, yank" of the white-breasted nuthatch, plodding deliberately around the tree trunk, halting now and then to take some palatable morsel hidden away in the bark. With each new sound, your enthusiasm waxes greater, and you are beginning to feel that after all, things are not as dull and weird as you had thought. The thicket is quite alive, all action, motion, sound. A flock of chickadees make the woods ring with their cheery "chick-a-dee-dees."

Clear as a flute, are the notes from the top of a tall shellbark hickory. At last the singer of the flute-like song condescends to come nearer. Skipping downward from twig to branch, he reaches the lowest round of branches, where he pours out a succession of clearly whistled "petos" that make you call out "Bravo." Thank God for the tufted titmouse! His song, vibrant with joy and goodwill, expels the last sad note from your responsive heart.

### A WORD ABOUT MUSEUMS AND PARKS.

Our cities have no room for birds except in their museums, parks and gardens. Even the prolific house sparrow has left the crowded streets. And Broadway and Fifth Avenue are as empty of bird life as an Egyptian desert.

But the city folk are nevertheless interested in birds for they let as many as will live in their parks where they may be visited by people of every name and nation. And they give special attention to dead ones, too. For after strictly scientific post mortems are made, they pay very respectful tribute to the honored dead by exhibiting their dried forms in glass cases in museums.

A visit to a museum is to me much like a long drawn-out funeral of the Dead Past. But even funerals are often profitable to the living, so I usually find myself one of the followers in the procession, viewing the remains, that I may lay claim to my share of scientific lore.

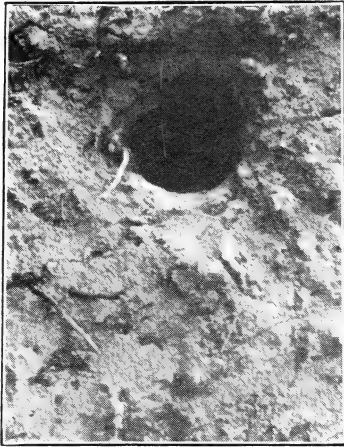
So it was in search of scientific data that I was hustling off to the Museum of Natural History, New York, on a hot July day. I went directly to the bird section labeled "Birds of North America." Yes, there they were; species from every latitude of the country, from Labrador to Panama, from the Atlantic to the Pacific. Thrushes, finches, sparrows, buntings, warblers, creepers, and all the rest; no bird family but that had its individual mummied form, standing in its re-



*A thrasher's retreat—Hawthorn thicket.*



*Young Meadowlark in hiding.*



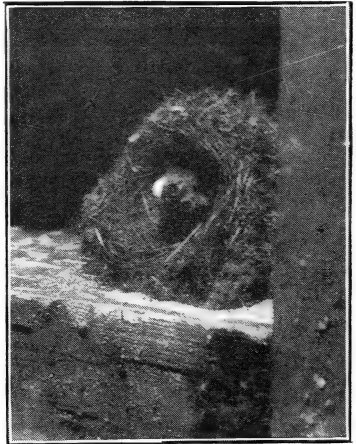
*A dark tunnel to a bank swallow's nest.*



*Young Phoebe eleven days old.*



*Phoebe's nest in vacant house.*



*Two young barn swallows.*

spective case designating the feathered tribe to which it belonged.

In this superb museum, I found the best collection of birds in the country. In thus speaking I have not forgotten the National and Columbian or Field museums, both of which have excellent bird exhibits. Nor have I failed to appreciate the value of the many small exhibits of birds in our capitols and state houses.

A good museum is a wonderful place for research. It is a kind of reference library of prized treasures, a dictionary of select relics and antiquities, a catalogue of the world's products, and a storage place for the best output of men's brains.

But the nature lover has little interest in museums; his work is with living creatures and not with lifeless forms. You cannot know birds from visiting museums, and yet many a child brought up in the city has gotten such inspiration from seeing the mounted specimens that it has taken him to places where the live ones are found.

I remember with exceeding joy of taking a number of boys and girls to a bird exhibit in a small college. Some of the boys knew from thirty to forty birds, but when they saw the mounted specimens they were much surprised to find how many markings they had never observed at all. One of them remarked that he had never noticed the red patch on the back of the flicker's neck. Another one said, "I know now how the swift holds himself in the chimney." Thereafter they were better observers and better bird students.

What a blessed thing it is that parks afford some protection to bird life! Were it not for the city park, many a child would never know the birds. In these open-air breathing places not only children but men and women come into some realization of the joyous freedom of country life.

As early as nine o'clock on Sunday morning, July 20th, I visited Central Park, New York. It was swarming with people of every class and country. Every seat was crowded with men and women who had come to rest or to read. Many of them looked too tired to even listen to the caroling of the robins and thrushes in the well-kept shrubbery. I was seized with an impulse to carry them—the city-bound poor, cramped in their tenements—to the beautiful country where they might read in Nature's storybook. But for the lack of means many a right impulse has failed to produce any material good, so I left the park, its people and its poverty.

I must admit to having a number of pleasurable hours in the Zoölogical Gardens at Bronx Park. Not more than a few rods from one of the entrances a wood thrush greeted me with his rapturous song. How he chirped and fluttered in the dark leaf masses! I was glad to know that he was happy, as well as all others of his kind.

Following the directions of the signboards, I came upon the bird house. Such noises as I heard; chirping, chatting, trilling, screeching, squeaking, a confusion of tongues in birddom! And yet what stories they might

be telling each other of their native haunts; palmetto groves, live oaks, swampy marshes, grassy plains, murmuring pines, rocky cliffs, weedy lakes, and forests, primeval. What an aggregation of birds! Birds from almost every country on the face of the earth. Parrots and cockatoos from the West Indies, gulls and rails from the Gulf of Mexico, terns and herons from Florida. Birds of brilliant plumage from tropical zones, birds in modest attire from temperate latitudes. All caged and cared for in one big open house. I wondered how they managed to live so happily and peacefully. One cage contained five different species, all of whom seemed in the best of spirits. I wondered, too, what would happen if their wire cages should be thrown open that they might make their escape. Would they return to their native haunts? Why should they, when they are so well cared for? I know of no zoölogical garden in the country where conditions for bird life are as ideal as they are in Bronx Park. Little of the artificial is to be seen. In some parts nature has been but slightly disturbed. The tall trees, the low shrubs, the thick bushes, the low gullies, the shallow pools of water, and the gentle undulations of the park are features of landscape gardening that birds like.

There has been some legislation providing for the conservation of forests which is proving a great blessing to the country. Most of the states now have forest reservations, some of which contain many thousands of acres. They are of inestimable value to the

country, not only because of their climatic influences, as affecting the rainfall and temperature of various sections but also as preservatives of the Nation's fauna and flora. Some states have been slow to recognize these values and have not as yet set aside their best wooded districts as parks for the people. Too often this hesitation has been caused by their failure to see any mercenary profit in such investments. The legislators, doubtless, reason that no material benefits could be derived from the reservations, forgetting their aesthetic and economic value and that instead of providing incomes would only prove an additional expense to the state.

Perhaps, the natural resource legislation most needed today is that which will provide for the setting aside of wooded tracts lying near our larger towns and cities. Inasmuch as many towns have no parks, and the cities too few, this question of the people's needs is imperative. Large tracts of forests in possession of private individuals or companies should be owned and controlled by municipalities as parks for the people.

These woodland places should not be robbed of their naturalness; the trees should not be pruned, the birds killed, nor the flowers destroyed. Neither should they be equipped as great circus tents with all their menagerie. But should a park not be maintained in its natural state, provided with proper protection for the people who visit it? In such a park a city child could have the freedom of the out-of-doors and feel as little restraint as does the country boy on his father's farm.



A city often does not appreciate the woods within its limits, until after it has been destroyed. An illustration of this fact came under my recent observation, when a town in northern Ohio failed to purchase an historic tract of land lying near one of its picturesque streams—the Maumee.

In this woodland, diversified with low hills, gullies, and ravines, there was an excellent stand of oaks, elms, hickories, and also a number of sassafras, poplar and walnut trees. The woods had been the home of more than fifty species of birds, and over sixty varieties of wild flowers had grown along the ravines and in the open spaces. It was private property and the owner had the trees felled and the timber sold, converting what was once a pretty woodland tract into common cow pasture. "What a shame!" the people said. But it was too late. The children had been robbed of their rights, the birds of their nesting sites, and the town of its natural charm and beauty.

Purely insectivorous birds are worth their weight in gold, and bird-houses for their encouragement and protection, just as essential as watering places for live stock.

### HERE AND THERE.

The nature lover in his rambles through the country is sure to see something that is a source of comfort to him. He is likely to find companions that prove to be agreeable and interesting. He may be many miles from home and quite alone as regards human folk, and yet not lonely, for every foot of earth has its story to tell.

When his steps are directed toward places where he meets those of his own kind, he has no way of knowing whether a particular personage is a member of the great family of Smiths or Jones, and can form no opinion as to their possible behavior. He can claim no kinship to the traveler in the park and to the man on the public highway. They are to him as strangers in a foreign land. Should he deign to speak to them, he may meet with a cold rebuff or a sarcastic sneer. From neither face nor fashion can he tell whether he will be received as a friend or as a foe. He may ask a simple question of direction and his interrogation may be answered with a sharp penetrating look as though he were an offender of the public good or a violator of the country's laws.

How different it is with the creatures of nature's world. Once you know them, you are sure of some response that is pleasurable. The blue jay's squall, whether from the horse chestnuts in Ohio or the live oaks in Florida, has the same screeching sound. You know that he is a blue jay and you expect him to speak

and behave as all blue jays do. When you have learned his characteristics, you conclude that in a measure you expect to find the same traits of character in all other members of his family. Any change in his habits or voice would occasion great surprise. And yet, like many human folks whom we think we know but do not, he is apt to surprise us with some hitherto unknown eccentricity or peculiarity of manner or speech.

So I was taken wholly by surprise one morning when from the bare red maples came a hollow-like chuckle. It may have been just a little undertone chat, not meant for a human auditor. But I would have vowed that it was the song of another bird had I not been near enough to see that no other bird was about.

To find that the birds and flowers you have known at home, are found in other regions is always a source of abounding pleasure. The mere fact that you have seen that blossom elsewhere or heard the same song in your own door-yard creates a feeling of homeliness and quiet enjoyment. With what pleasure I remember when touring over the Briar Cliff Road in Westchester County, New York, the thrill of joy I felt as an indigo bunting broke into an ecstatic song. Above the low snapping of the Winton car, his voice ran sweet and clear. I knew that the buntings were singing at home. As we rolled slowly along, sparrows started from the bushes and once a redstart flung a flash of crimson into the dark woods.

At another place, the great trees stretched their long branching arms high above the roadbed, making a

magnificent archway. Under this leafy canopy we motored for some rods. But there was an empty stillness about the place, broken only by the low hum of the car. Not a single bird broke the silence and sanctity of the majestic trees. My eyes followed the arched branches that formed the leafy roof between us and the blue sky, and I listened for some warbler's call note if not a song. But not a note or flutter did I hear till we emerged into the open again. I have wondered since what influences at work compelled silence in those tall-plumed trees on that exceedingly rare June morning. Perhaps, the road was too much improved, or maybe too many tourists disturbed the peace of the woodland creatures. But these are only ventures, doubtless on other days the trees were tenanted. Often local conditions may exist for which it is hard to account with certainty. One day a particular wood may be as silent as death, the next day it may be peopled with life flamboyant and gay. Nature has her moods and so have we, silent and secretive at one time, noisy and garrulous at another.

When Cripple Creek is mentioned to me, I vividly recall the great gold-mining camp, hemmed in by the high hills and peaks of the Rockies; the excursions to the Portland, Stratton, and Independence mines; and the rather care-free, unconventional life of the people of this mining district.

I remember too with joy the ride to the New Haven mine. How our car passed between great stone walls, past the rocky cliffs, climbing higher and higher till the track we came over lay in miniature beneath and

beyond us. Past mines and plants we flew: Wild Horse Mine, Homestead Anchona, Leland, Midget, Moon Anchor, Gold King, C. O. D. and Cyamide—names suggestive of the sentiment of the prospectors. From the station we walked to the top of the hill. Our path wound around and over the gorgeously adorned summit covered with Colorado wild flowers. *Gilia*, beautiful masses of white and lilac-purple, swayed in the wind, columbines nodded a pleasant "Good morning," wild larkspur, blue and purple, fringed our pathway. Lupine, vetches, yarrow, harebells, wild sunflowers, and Indian pinks proclaimed their beauty to the sight-seer.

But the memory picture I like to think of most is not of mines nor of men, but of a thin growth of quaking asp on the hill near New Haven mine, where I heard my first pine warbler. For a moment I stood breathless, fearing to move lest I should frighten away the singer. His whole being seemed shaken into song. And what a setting for the singer! The silvery white leaves and branches quivering in the light mountain breeze formed an airy stage from which he entertained his auditor. I cannot forget how wonderful he looked! He had come from the pines that skirted the foothills, and, no doubt, was a migrant that had strayed farther westward than his tribe. I might have made his acquaintance nearer home in the pines of the Adirondacks, but I would have missed the scenic beauty of the Rockies. I shall ever be glad that he called me to the quaking asp on that warm July morning in 1903.

## FROM THE PORCH SWING.

What joys come to one in the porch swing! Would that every woman who lives in the country had one! For, in most of our states, the major part of the year is warm enough that you can sit some small part of the day in it and discover the sights and sounds of your own dooryard. The unending panorama of growth and beauty in nature passes before you. Something new, something strange, awakens your interest as each newborn day brings its mystery, its loveliness, its life and death. One day it is the play of clouds that lifts the eyes skyward. On other days it may be the show of colors in field and garden, or the white daisies starring the neglected meadow, or the glory of an October woodland that makes you realize the joys of living.

You are indeed fortunate if your porch is so ideal in its exposure that from it you may see the woods and fields at close range. It is worth while to have the trees so near your piazza that you can hear the bird calls and watch the flickers slip in and out of their dark tree-trunk tunnels. And yet, many people are blessed with just such an outdoor watch tower without ever looking for the signals nature puts out.

**May 24th.**

The towhee buntings and tufted titmice are singing. The rains and high temperature of preceding days have worked wonders with the growing things. The air is so hot and humid that one experiences a feeling like

that of being steeped in tropical vapor. Life and growth are continuously making such marvelous transformations that expectancy is lost in mystery. The catbird's nest of yesterday held three greenish blue eggs. Today, we find in it three little fuzzy, squirmy fledglings. The robin's nest above the door is empty. The young ones left this morning for the woods across the road. I hear their chirping notes. Chipping sparrows are now busy bringing food to their nestlings in the cedar tree but a few feet away. I love to see their trim little bodies hop over the lawn, halting now and then to pick up some bit of food.

What song is that which comes from the blue cedar? The singer is quite lost to view. There now, he flies to the fence and in this exposed position, I can see how closely the color of his little drab body harmonizes with the lilac grays of the weathered post. But his song, the mating song, what an appeal it is to her in the near-by tree. A succession of call notes, a few notes much like the chickadee's "de, de, de," a sweet trill gently uttered completes the repertoire. Once, twice, thrice he sings it through. It is the blue-gray gnatcatcher's message to his mate and her world. Doubt you that she is listening? If we sing our own song, speak our own message, will we not always find a listener? Is there not a response to every song that is one's own?

#### June 22nd—Morning.

How much one misses if he does not see the sun rise or set at least once a month. This is the longest

day of the year and I mean to make the most of it by thus rising before sun-up. It is but 4:30 and already the illumination has begun in the east. The soft blue-gray masses piled to mid-heaven are silently dissolving into great stretches of filmy whiteness. Below the rifted grays appear mild yellows, tender green, subdued violet and lavender. The gray curtain becomes more translucent. Light breaks through the soft, filmy veil of vapor, filling the eastern sky with wonderful beauty. The display continues. Clouds of spotless white like piles of fleecy wool, are scattered as sheep lost from the parent flock. In an hour, a decided transformation is wrought. In the north, the sky is as a billowy sea. Great blue vapory waves crested with whitecaps are slowly rolling southward where clouds are awaiting the orders for change.

#### Evening.

Nor is the illumination less beautiful this evening. The setting sun is flashing its lights in the western sky with such beauty and brilliancy that one is "disturbed with the presence of elevated thoughts." Above the dark green wall of the forest, the west is a rich rose into which is slowly slipping the big round, red sun; above the rose zone other reflections of equal beauty—golden yellow, green, blue and lavender—are seen.

A constant transformation is going on. Every minute the sky reflects new beauty in various tints and shades of color which are so harmoniously blended that the eye cannot tell where the one begins or the



other ends. This transformation is so silent, so gradual, so diffused that the inward eye, conscious of ever-changing beauty, knows not how nor when it is wrought.

As the broad, red sun slowly sinks from view behind the shadowed tapestry of the woods more beauty glorifies the heavens. The skyline becomes an irregular blackened wall against a background of orange cadmium. Deep vermilion, pale green, quiet blues and grays reach up to the blue of mid-heaven. Then again, instantaneously, on this suffused color shower, the great sun turns its yellow lights, illumining the perfect whole with ineffable beauty—love—God.

#### August 29th.

Today the woods give one a feeling for Corot. A slight grayness has crept into the foliage. The oaks are a duller blue-green than a month ago and the hickories are beginning to show their first touches of autumn coloring. A cool northwest wind has been whistling through an atmosphere soft and dreamy, urging into motion the silvery-green masses with their dry, upturned leaves. Almost mysteriously the woodland has taken on an aspect, light and feathery.

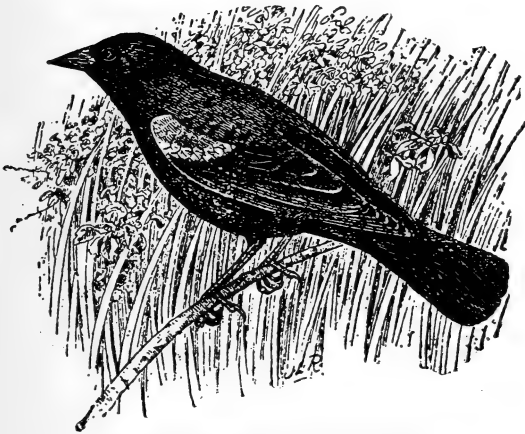
Little color, except green, is to be seen but hints of it lurk low in the meadows and overgrown pastures. The lower wild strawberry leaves are orange-red, the white oak shrubs show crimson galls, and on the long-trailing grasses is the bright scarlet fruit of the red haws. But the landscape as a whole is toned down and has lost much of the luxuriant greenness of mid-

summer. A month ago a deciduous woodland would have been the study of an Inness, distinctly American, but today it has a strange, foreign aspect—dry, dull, dreamy.

When the hickories begin to turn, the wild cherries are ripe. Their rich blue-black color attracts both man and bird. The fruit has a bitter tang, which makes it all the more palatable to those who like the wild, racy flavors found in the untamed fruits of woods and fields. In my love for the wild fruit, I shall remain a child always. Nothing gives me greater joy than to get down on the ground in the fence-rows and search for the wild strawberries, or to wander out to the tangled blackberry patch and reap the harvest of fruit and brambles; or to tramp along a deserted country road in autumn and glean the purple grapes from the vines that clothe the fence with such riotous beauty. I can think of no happiness that comes to me so uncultivated, unalloyed, and so unadulterated as that which comes with the experience of finding new beauty in the familiar out-of-doors.

I have always admired the delicate, flesh tints in the ripening leaves of the wild plum, maple, sumac, and woodbine, but this admiration has grown in intensity since I heard the guide's story in the New York Art museum of the making of the peach bloom vases. The potter who shaped these rare vases spent a lifetime in toil and experiment before he discovered the process that produced the wonderful lustre and color found in these exquisite pieces of pottery. To the touch they

are as hard as flint and yet to the eye they give that luscious rosiness and softness that you see in the blossoms and ripe fruit of the peach. So perfect are these art creations that they have baffled the skill of the best imitators. No reproductions have been made that can approach such effects in color and tone. Nature in one day with soil, and sun, and sea works out a bit of harmony—while man may spend a century in creating the beauty he sees therein.



RED-WINGED BLACKBIRD

### WHEN THE ICE IS ON THE TREES.

Not often do we step from the warm hearth-fires of our homes into the out-of-doors and find that the little sphere in which we move has been transformed into a world of ice. But such was the case January 26, 1913. All through the night before, the clouds had slowly sifted their chilling mist which froze as it fell. Walks, streets, footpaths were glazed with an icy coating clear, smooth, and shining. On this sleek surface people trod carefully, always with their eyes fixed upon the crystal world in which they were moving, for under the ice-coating, probably seven-eighths inches in thickness, even the most familiar things looked strange and staring. "How beautiful it is!" were the words on the lips of every passer-by.

In the sunshine, the valley looked as if Tiffany were exhibiting a display of cut glass, gems, and jewels. Look where you would, beauty of design and color met your eyes. There you saw the glitter of a diamond, here the ice crystals reflected the beauty of an amethyst, an emerald, a sapphire. In the shadows it was as if some god of the frozen world had by some magic power suddenly transformed the landscape into an icy fairyland. Fire would have destroyed the landscape, blackened and consumed it. Wind would have torn its way through the woodlands, filling the air with a confusion of flying things. Water would have washed, clayed, and sanded, taking away here and building up there—paying toll for its liberty in de-



*Again the woodland had been transformed into a Crystal World.*



*The willows bowed, bent and broken.*



*Two active members of The Liberty Bell Bird Club.  
From feeding the chickens to feeding the birds  
is only a step.*

## THE FIRST LESSON



*A Food Shelter in operation; snow  
12 inches deep.*

posits of earthy sediments. But the ice god—slow, silent, scintillating—in the blackness of one night had congealed the tears of heaven—and we saw a crystal world.

Along the river whose usually swift current was held fast by its thick ice coat, the willows stood, bowed, bent, and broken. From a distance they looked like frozen surf and seaweed cast upon a storm-beaten coast. All was quiet there, save the faint clicking of the icy withes as they beat upon each other with the motion of the wind. No comfort there now for the tree sparrows who on other days loved to sit in the swinging willows and bask in the sunshine. The cockspur thorn, so perfectly crystallized, looked as if it had been shot from the glass blower's tubes. Twigs and spines had lost their sharpness under the thick masque of ice that covered them. Would the catbird, could she have seen it, recognized her old nesting tree now glittering and glinting with pendant icicles? The heavy icy cylinders formed over the twigs and branches of the oaks, elms, and maples gave them a wonderful bearing. In these armors of ice their weighted heads drooping low, looked strangely unnatural. When the sun broke through the grayness of the morning, the delicate gradations of color reflected from the icy surface produced the most subtle and superb harmonies. It was easy to imagine fabulous tales of folks painting ice-scapes of a crystal world.

While in the realm of beauty, we little think of

distress, not till we experience it are we awake to a sense of our unfortunate surroundings. Throughout the ice-bound region electric wires lay upon the earth, trains slacked their speed and lost time. Traffic was delayed and many discomforts came to those who depended upon scheduled deliveries. But these inconveniences were but for the day, for by the strenuous efforts of the working-world, human wants and necessities were soon supplied. But the bird residents which peopled the fields and open woods did not fare so well. The heavy sheathing of ice which wrapped every weed head, every bole and branch of bush and tree, cut off the food supply of the seed-eating species.

Pretty and picturesque as the icescape was to human folk, it meant death and destruction to many of the feathered tribe. To live in such a chilly environment was enough to congeal the blood in the heart of the warmest creature but it was not the low temperature that was causing distress among the birds—they were short of rations and some were starving. For not until the close of the third day was the ice coating sufficiently removed to make food-getting possible. Finches, and song and tree sparrows probably suffered most for they were largely dependent for their food upon the weed seeds in old pastures and meadows. Blue jays and woodpeckers often chiseled and hammered through the ice in search of the embedded morsels. Nuthatches, chickadees, and titmice, were driven to the dooryards, hoping to find something there to appease their hunger. Notwithstanding the



food sent out to the many feeding stations, many birds were not reached and went supperless to bed those January nights. The sight of a philanthropist feeding a multitude of hungry children creates in us feelings, humane and sympathetic. Do we not find a parallel scene in the ten-year-old lad, out in the open common, feeding a flock of starving birds?

If you will protect the birds in the winter, they will protect you during the summer when the fly and mosquito are spreading disease and death, that's when the birds are busiest.



Mrs. American Barn Owl is quite content with her homely name, satisfying her artistic nature with a harmonious costume of buff, overlaid with grayish, spotted with white and dotted with black. She is the radical leader of all progressive movements among her sisters, refuses to make a nest and goes out at night unaccompanied. She maintains her independent economic status in the civic plan of the bird Republic by ridding the community of meadow-mice, rats, beetles, shrews, gophers and other undesirable settlers in the fields.

## The Practical Side of Bird Life

By Fred High

This is a practical age and the question that naturally comes to our mind is, Does it pay? Why all this fuss about birds? Wouldn't it be time more profitably spent if we were to study how to better serve humanity?

The author has shown how the birds are man's untiring employees as well as being counted among his true friends and unsurpassed entertainers. The farm, the orchard, and the garden are their habitat. Their speech is a song.

Let's take a single case as an example. According to the Government reports the American sparrow family, in 1910, saved the sum of \$89,260,000 to the farmers in consuming weed seeds that cause such losses as the above figures show. 72,000 weed seeds have been found in the stomach of a single duck, which proves that a duck hunter is one of the enemies of humanity.

A few years ago the American hen was looked upon as a sort of consort for the farmer's wife. Eggs furnished the pin money for the women folk. But today the chicken business totals more than \$650,000,000 for meat and eggs, to say nothing of the by-products of feathers.

We have fought a fierce political battle on the problem of gold and yet that year there were \$40,000,000 less gold produced than involved in the poultry business.

Eggs have gone up from two cents for a baker's dozen of thirteen to \$1.00 for twelve. The latter price is often paid for specially selected eggs for high class hotel, restaurant, and drug store trade, and \$50 a dozen for eggs for setting purposes is not unusual, while a single hen is worth as much as a farm in Texas and a married one, together with her family, often costs more than a city residence. Samona County, California, alone has produced more than 10,000,000 dozen eggs in one year.

Hens lay for us but we have to provide feed for them, house them and care for them as though they were prima donnas, for chickens and Grand Opera Singers are equally sensitive to the gentlest zephyrs, and both are temperamental.

Birds work for us so faithfully that every time a hen cackles or a rooster crows over the fact that they annually add \$650,000,000 to our wealth, the little birds snicker tee-he and sing of their glorious work, accompanied by nature's symphony orchestra, for they have saved us \$1,000,000,000 and cost us little effort and less money for feed and shelter.

Chicken shows are more numerous and more profitable than a circus. Why not have a bird show? We have our Arbor Day to plant trees, now what is needed is to make April 9th our national bird day.

Bird farming is one of the great industries of the future. Just as fox farming has produced \$16,000,000 profit in the last couple of years, so will the wild birds prove veritable Klondykes to the wise men of the near future.

As the new practice of medicine is based upon prevention rather than cure—the bird life of our community ought to be studied with care for here are to be found the natural enemies of many disease bearing insects. “Even the Night Hawks,” says the Philadelphia Farm Journal, “are great sportsmen and are such expert aeronauts that no winged insect is safe from them. They contribute greatly to the healthfulness of the section where they live, by disposing, in a most effective and hygienic manner, of several species of mosquitoes, among them, the Anopheles, the transmitters of malaria. Night Hawks belong to the Whip-poorwill family, and subsist entirely upon winged insects which they capture while gracefully sailing around at eventide.”

Dr. Edward Amherst Ott, in his war on poverty, has been figuring at the loss caused by rats and the last heard from him his figures were so high that they looked almost as though some enthusiastic Prohibitionist had figured out the cost of booze, and yet the common Barn Owl lives on rats, mice, beetles, shrews, gophers and other undesirable squatters in the fields that are intended for corn, wheat, oats and other food grain. So Owl farms are not an iridescent dream.

The National Association of Audubon Societies is

doing a wonderful work in the field of research and gathering the facts, classifying them, and from this mass there is coming into use several new sciences, much useful, practical knowledge, and a greater love for nature. Its National headquarters are at 1974 Broadway, New York, and a card to that address will bring much valuable information about this movement. The colored illustrations used in this volume were furnished by The National Audubon Society.

On January 1, 1913, Mr. Wilmer Atkinson, Editor of the Farm Journal of Philadelphia, organized the Liberty Bell Bird Club with one member. On February 1, 1915, the club had 300,000 members. Its sole object is to save the song and insectivorous birds, and it asks the co-operation of every bird lover.

The need of such a club is readily seen when the government reports are studied and we find that ninety per cent of the bird life in this country has been destroyed, and that \$1,000,000,000 a year is lost by the farmers and fruit growers by the ravages of insects.

We read with ever refreshing interest the story of the plagues of Egypt that Pharoah encountered thousands of years ago, quite forgetful of the fact that in one year the birds of Massachusetts alone consumed 21,000 bushels of insects.

The Liberty Bell Bird Club has brought the battle for birds before about 4,000 county superintendents of schools, 125,000 teachers, and has introduced bird study into more than 7,000 schools. There are no dues, no assessments, no fines, no fees, no expense of any kind,

all that is asked is valiant service for the birds. Both the author and the publisher of this book are members and are glad to help along the good work that is being done by this splendid organization.

Can we bring back the birds? The Saturday Evening Post some time ago devoted a half page to that very subject, describing how J. Warren Jacobs of Waynesburg, Pa., conceived the notion that even departed birds would "come back" to their old haunts, in spite of steam whistles, quarry blasts and the general racket of forge and factory if given an intelligent welcome, so in 1896 he built a bird house, designed with a view of attracting martins. This mansion contained twenty rooms and great was his delight when he discovered an old scout flying around on an investigation tour, and as he saw "to let" on every side, he was not long in deciding to move in. He hastened away to lead his good mate to their new home. The next day Mrs. Martin inspected every room in the house while Mr. Martin sat on the chimney of his new home looking for neighbors; and in less than a week there were eight couples in Jacobsville, as the martins call it. At that time there were less than two dozen martins in Waynesburg. Last year 1,200 of them left there about the 28th of August for their flight south to the West Indies, Central and South America.

On September 17, 1908, 25,000 of these real aviators were gathered from all parts of Pennsylvania, West Virginia, Ohio, and states still farther north and they halted for the night at New Martinsville, W. Va., an

Ohio river town about forty miles south of Wheeling, which, if it wasn't named in their honor deserved to be, at any rate they took the city. They had gathered for their flight south.

The martin is the friend of man as man is the friend of the martin. The noble Redman of the forest was the first to build a rude house for him and it was he who started the evolution that has changed the martin's home from a hollow tree to a house built after all the modern plans of architecture.

The pictures of the Jacob's Martin House are worth studying. That prince of men, philanthropist and friend of the race at Detroit, Michigan, who tied a string to an old tin can, called it a Ford and away it ran, has ordered a dozen of these bird mansions for his home and factories. He knows the pleasure that the Purple Martin brings to those who watch its busy life. Wm. Rockefeller has six of them at his Bay Pond, N. Y., home. Mrs. Potter Palmer has one in Florida where she migrates during the cold weather. Two thousand others have these bird mansions on their private property. City parks and public places are dotted with them. They are shipped to all parts of this country. Russia, before the days when men set out to kill each other and wipe the human race off the map, was a constant buyer of Purple Martin Mansions.

Mr. Jacobs has a bird house factory—his business is a profitable one. It is only in its infancy. There is a great future for the manufacturer of bird houses as a business.



Mr. Jacobs says: "The Purple Martin is today at the threshold of a stimulating and prosperous advance, which during the next few years will spread its progeny over territory where it has not been seen for years. A large amount of correspondence during the past few years shows a widespread desire and longing to re-establish the martin in communities from which the birds long ago departed."

In Illinois we have a state law that compels the teaching of kindness to birds and animals in our public schools. We see the value of teaching the young that we are past the age of barbarity and that we have learned a part of our lesson from the story of the buffalo.

When a man with as many diversified interests as those which daily confront Henry Ford, the much written about automobile builder, can take time from his many activities to give his personal attention to the better protection of song and insectivorous birds, it is time for most of us to give thought to this great economic problem.

Mr. Ford has a farm of four thousand acres that is situated at Dearborn, Michigan—about ten miles from Detroit. The Rogue River flows through it, and Mr. Ford has had it dammed to make a wider series of drinking places for the birds. He has placed about five hundred bird houses in this bird haven, and he finds no trouble in keeping his houses occupied.

He has many houses and feeding stations arranged, and the thick undergrowth, and the big roots from

fallen trees, are all good shelters, but especially fine is an arrangement of rails and cornstalks. Fence-rails, some distance apart, are laid on the ground, then a layer crosswise, and so on until a series of five or six rows is made. Around and on top of these rails are placed corn-stalks until the rails are entirely covered. A better shelter can hardly be made. The birds work in through the stalks, and there is always plenty of dry and warm spaces between the rails. The water cannot get through and food is thrown between the rails. Hundreds of birds use these throughout the winter. In the spring the shelters are burned and new ones are built in the fall. These corn-stalk shelters are from ten to thirty feet long.

It is a great sight to see the motor cars leaving Detroit for the Ford Farm, loaded with food for the birds, and to follow them to the places where this food is placed so his little feathered friends can banquet on grain, seeds, suet, doughnuts, and hot cakes, and to hear their little twitter of delight and songs of thankful praise for these favors.

Their menu reads like this: rolled oats, cracked wheat or cracked corn; hemp, millet, or sunflower seeds. Flapjacks are hung on the trees; doughnuts are put where they can be easily found to finish up a short order lunch. Suet is provided in big quantities, and is placed in wire cages so it cannot be carried away in large pieces. The grains are placed on the trays in the feeding stations, in boxes, thrown under the corn-stalk shelters and, for shy birds, scattered on the

ground under the feeding houses. The feeding is done daily and the birds visit the stations in flocks and eat up the supply clean.

A daily report shows the feeding stations were visited by 100 myrtle warblers, 110 song sparrows, 150 juncos, 41 white-throated and white-crowned sparrows, 98 tree sparrows, 204 goldfinches; also many white-breasted nut-hatches, downy woodpeckers, robins, and larks. Many other varieties are expected to stay there this coming winter.

Thousands of wild berry plants have been set out for the birds and, for the ducks and shore birds, wild rice has been planted in the swamps. Many of these, like the mergansers, stay all winter.

Water is provided in winter. Mr. Ford has built a box with an electric heater which keeps the water tepid. No bird suffers from thirst on the Ford Farm.

The fifteen or more feeding stations are all securely built. The trays are at the top so that the birds can eat in comfort. The rain and snow cannot reach the feed.

The Ford Farm is not a show-place. There is not a caged bird on the farm. The farm is for the birds and every effort is made to make it an ideal breeding place for them.

The birds have become very tame and some are absolutely fearless. The wrens and woodpeckers build right up to Mr. Ford's bungalow, and in a strip of ground 30x200 feet near the bungalow, twenty-three nests were found of fifteen varieties of birds.

All the native birds of Michigan are on the farm, and

many others. Prairie chickens, quails and pheasants are there and rapidly multiplying.

If you are interested in this story of Henry Ford's bird farm, send a postcard to the Ford Automobile Factory at Detroit and ask for the literature that this great hearted humanitarian has gathered, and he will mail it to you free of charge. I know, for I tried it.

So important are the birds, that the Agricultural Department of our National Government has lead in the research work that has wrought such wonders in recent years. The scientific information that is the basis of our bird knowledge, is largely due to the fostering care given to this great movement by those in authority.

The department has issued many valuable and practicable booklets, pamphlets, and bulletins that are accomplishing wonderful results. The general diffusion of practical ways of protecting the song and insectivorous birds is already felt as an economic factor.

The pen sketches used in this book were made for use in the Government campaign to educate the people to a better appreciation of the value of the common birds to society.

The department has just completed the 1915 bird census, the most complete ever taken. It shows that the robin heads the list as the most numerous bird in America, with the English sparrow as second. In the northwestern states there are an average of six pairs of robins for each farm of fifty-eight acres.

On each acre of farmland covered by the census

there was an average of one pair of birds. The record of density came from Chevy Chase, Md., a suburb of the national capital, where 161 pairs were found nesting on 23 acres. Thirty-four species of birds were represented.

The present bird population, it is pointed out, is much smaller than it ought to be, having in mind the fact that birds feed largely on insects. It would be a very easy matter to increase the number of birds to almost any desired figure, by more protection and better care.

"It is an interesting fact disclosed by the government census," says the *Christian Science Monitor*, "that breeding birds prefer thickly inhabited centers of population to forests. This gives mankind a larger responsibility for the preservation of bird life than it was supposed to have before. In other words, the census shows that the widespread belief that the human family and birds are in any sense antagonistic is not true."

The department has issued a bulletin that is ready for distribution announcing the result of the census of 1915 that is very interesting.

Cities maintain Zoös at great expense for they are great educators and humanizers. The crowds that flock to them are all made better by a greater knowledge of the animals that are about us.

We are coming more and more to appreciate the truth of the philosophy in that great book of Sir Edwin Arnold, "The Light of Asia," where Gautama asks the

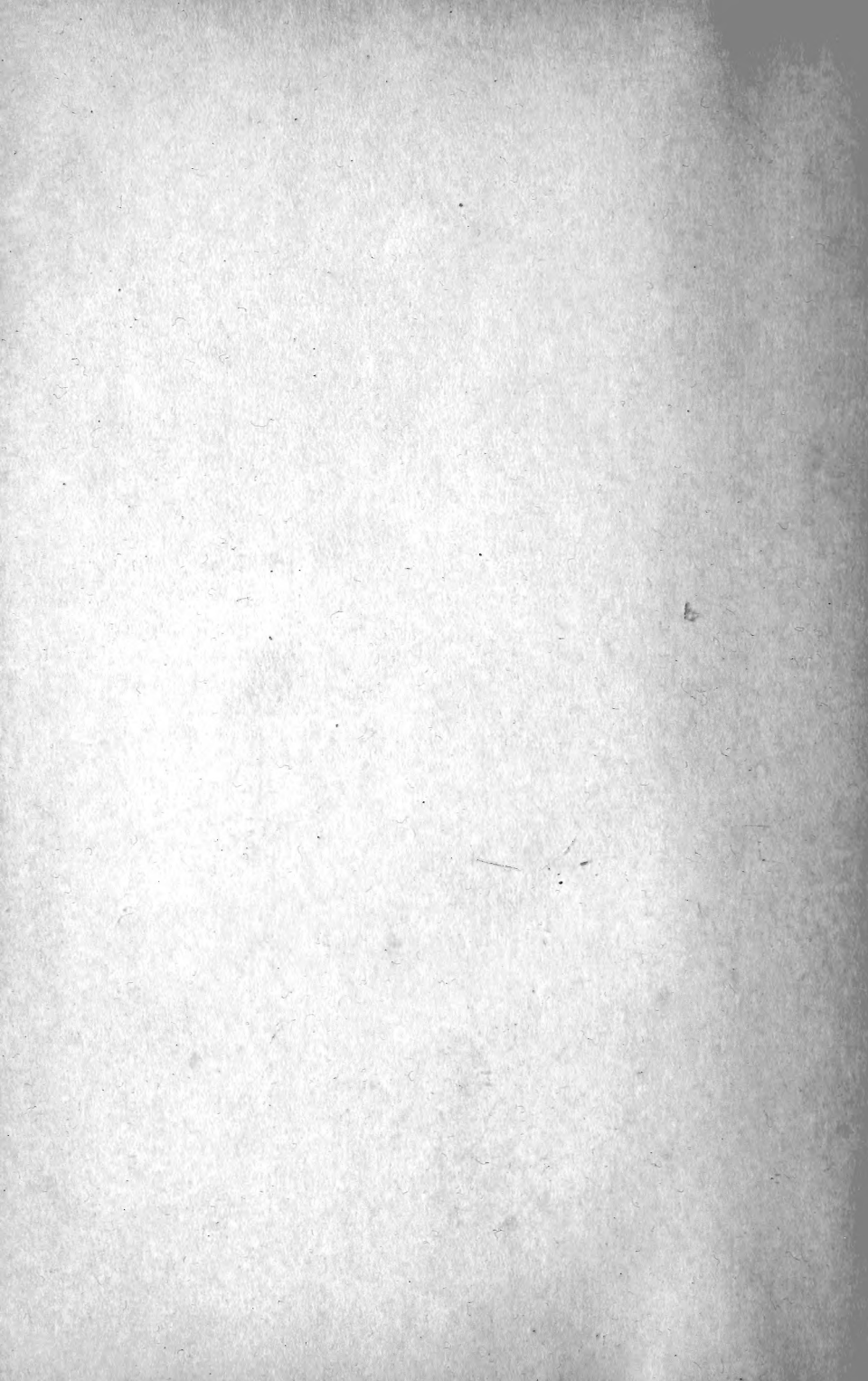
shepherd driving his flock to the temple to be slain as a sacrifice: "How can you expect mercy from the God above when you show none to the creatures beneath you?"

Our humane societies are aimed at the abuse of animals—they are great organizations, they do great work—they are humanizing the human race for no man can love his wife who is cruel to his horse, and if he is brutal to his dog, it's a sure thing that his children know not the warmth of the tender heart of real love.

The way to prevent cruelty is to teach the beauty of love and the power of kindness. An anti-cruelty society is a first step and a necessary one, but for permanent results we must circulate just such little eye-openers as this little book with its philosophy which might be termed the gospel of the larger love that was implied in the command of Jesus when He said: "Go ye into all the world, and preach the Gospel to every creature."

There is only one gospel that every creature can understand, and that is the gospel of love.









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