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A Year with the Birds

A guide to the naming of 100 birds commonly to be seen in Connecticut

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A number of poems and other quotations in this pamphlet are taken from Bird-Lore, a magazine of popular ornithology and the official organ of the Audubon Societies, and these are republished through the courtesy of its editor, Mr. F. M. Chapman.

^{*}Twelve of the above plates are reduced copies of the illustrations in color made by Louis Agassiz Fuertes for Frank M. Chapman's report on *The Economic Value of Birds to the State*, issued by the Forest, Fish, and Game Commission of the State of New York in 1903. The thirteenth plate, by the same artist, is copied from *The Year Book* of the U. S. Department of Agriculture for 1903.

A WORD TO THE TEACHER

The following pages have been arranged especially for the use of teachers in rural districts where wood, meadow, and orchard often surround the schoolhouse itself and the daily walk to and from school is through bushy lanes and along tree-bordered highways. Every possible chance for seeing the birds and "wanting to know" them lies close at hand, but for this very reason, the public library wherein lie the books that would answer the constantly arising questions may be many miles away, and it is as yet impossible to supply either bird charts or traveling libraries in sufficient numbers to furnish each school with a set at the same time.

It must not for a moment be thought that any attempt is made in this brief pamphlet to add to the information given in the many excellent and complete books now in circulation, but merely to give in a form that may be kept in the desk corner, for rainy days and odd moments, a few hints upon the migrations, winter feeding, and protection of some of our common birds, that may lead both teacher and pupil to more detailed study when opportunity offers.

If by having this pamphlet to keep in the desk a teacher can help a group of children to name even a dozen birds, they will listen more eagerly to the many books in the libraries that tell fascinating stories of them.

No set introduction to birds as a topic of school work, or rather recreation, will be found necessary. If the children do not, as is common, ask questions about the birds of the neighborhood, the teacher should take the initiative by asking pupils who live in widely-separated locations about the birds found about their yards or farm buildings, using the Robin, known to everyone, as a standard of size. "Larger or smaller than a Robin" is about the only gauge that children can give until they have begun to both train the eye to see and the tongue to transmit the impression accurately.

In fact the training of the eye to correct seeing is one of the great advantages of bird study to the average child, quite aside from the value of the information gained, for this accurate gauge by the eye will always be a benefit in whatever calling may be followed, adding alike to the pleasure and profit of life.

When a strange child comes to school the first desire of his mates is to know his name and nationality, from whence he came, where he lives, whether he is merely a visitor or to be a permanent resident in the community. All this must be weighed and well considered before the newcomer is admitted to the friendship of his mates, and it may be that there will be some prejudices against him that the teacher must either remove by explanation or overcome by reason and example.

It is very much the same with a bird. After fixing upon his name as an individual his identity should be still further established by finding to what family he belongs and then placing this family in one of

the seventeen great orders of the bird world. These two last may seem difficult and useless to those who only seek to know the bird's everyday name, but in the end it will help to keep the name in the memory to know the kinship of families as well.

There are many little points of comparison that cannot be seen unless the dead bird is held in the hand, and then only a Wise Man, perhaps, would be able to point it out. It is with the living bird, on the wing or in its nest in the bushes, that we are concerned; not with the poor little dead thing with its limp neck and bloody, rumpled feathers.

We should not learn enough from such a bird to in any way make up for taking its life; it would be both wasteful and against the law. So we must be content to believe what the Wise Men say, who must study the dead birds in order to preserve and keep them in public museums, that they may teach the world how wonderful a thing bird life is, and show us that we must do all we can to protect it. Therefore the descriptions of these one hundred Connecticut birds, which every little girl and boy living outside a large town will have a chance to see at some time during the year, are given of those points that would be likely to attract the attention at some little distance.

One hundred birds may seem a very large number at first, and yet it is only about a tenth of all the wonderful birds to be found in North America. At the same time these one hundred birds comprise the most conspicuous and interesting average that it is reasonable to expect to identify in a State having both shore front and river valley, as well as hill country of considerable altitude.

The birds thus selected are listed in the order of families for reference, but in the simple descriptions by which it is hoped to aid the children in naming them and become interested in their habits the birds are grouped according to the seasons of the school year when they are likely to be most observed.

The Bird

What is a bird? Of course you all know, but can you put it in words?

A bird isn't a plant; it is an animal, you say?

Yes; but a cat is an animal, and a snake, and a horse; and we are animals ourselves.

"A bird is a flying animal."

Very true, but so is a bat, and, as you know, a bat has fur and looks very like a mouse, and a bird does not.

Ah, you give it up. Very well, listen and remember. A bird is the only animal who has feathers! With his hollow bones filled with buoyant warm air, and covered with these strong pinions, he rows through the air as we row a boat through the water with the oars, steering himself with his tail made of stiff feathers and shaped to his particular need, and with small feathers laid close, overlapping each other like shingles, and bedded on an undercoat of down, is he clothed and protected both from heat, cold, and wet.

The eye of the bird is different from ours, for it magnifies and makes objects appear much larger to it than they do to us. Also while with other animals, each group has practically the same kind of feet or noses, birds have these two features built on widely different plans, so that when you grow wise and are trying to really study birds you will find that you must be guided to the orders in which they belong often by their beaks and feet.

Barnyard Ducks, as you know, have webbed toes for swimming, and flat bills to aid them in shoveling their natural food from the mud.

Birds of Prey, like the Hawks and Owls, have strong hooked beaks and powerful talons or claws, for seizing and tearing the small animals upon which they feed.

The Woodpeckers (all but one) have two front and two hind toes, to help them grasp the tree bark firmly as they rest, while they have strong-cutting, chisel-like beaks, which they also use for tapping or drumming their rolling love songs.

While the insect-eating song birds have more or less slender bills and four toes, three in front and one behind, for perching crosswise on small branches, the seed-eating songsters, such as Sparrows, have similar feet, but short, stout, cone-shaped bills for cracking seeds and small nuts.

So you can see that in spite of the fact that all birds wear feathers, and have wings, a tail, beak, and a pair of legs, they may still be very different from each other.

A Turkey Gobbler doesn't look much like a Robin, nor a Goose like a Swallow, yet they are all four birds! They all four bring forth their young from eggs; but the little Turkeys and Goslings are covered with feathers when they peep out of the shell and are able to walk, while the young Robins and Swallows are at first blind, naked, and helpless; so you can see that there is something special to be learned about every bird that flies or swims.

OUT OF THE SOUTH

A migrant song-bird I,
Out of the blue, between the sea and the sky,
Landward blown on bright, untiring wings;
Out of the South I fly,
Urged by some vague, strange force of destiny,
To where the young wheat springs,
And the maize begins to grow,
And the clover fields to blow.

I have sought
In far wild groves below the tropic line
To lose old memories of this land of mine;
I have fought
This vague, mysterious power that flings me forth
Into the North;
But all in vain. When flutes of April blow,
The immemorial longing lures me, and I go.

-Maurice Thompson

THE BIRD YEAR AND THE MIGRATION

People who think of birds at all know that they are not equally plentiful at all times of the year, but that they have their seasons of coming and disappearing, as the flowers have, though not for exactly the same reason.

We are accustomed to see the plants in the garden send up shoots through the bare ground every spring, unfold their leaves and blossoms, and, finally, after perfecting seed, wither away again at the touch of frost.

Of these plants, as well as some large trees, a few are more Ep. -35

hardy than others, like the ground pine, laurel, and wintergreen, and are able to hold their leaves through very cold weather, and we call them evergreens.

You notice that the birds appear in spring even before the pussy-willows bud out, and that every morning when you wake the music outside the window and down among the alders on the meadow border is growing louder, until by the time the apple trees are in bloom there seems to be a bird for every tree, bush, and tuft of sedgegrass.

By the time the timothy is cut and rye harvested you do not hear so great a variety of songs. The Robin, Song Sparrow, House Wren, and Meadowlark is still in good voice, and an occasional Catbird, but the Bobolink has dropped out, and the Brown Thrasher no longer tells the farmer how to plant his corn: "Drop it, drop it, cover it up, hoe it, hoe it;" and very wise he is, too, for the corn is all planted.

Later still, when the stacked cornstalks fill the fields with their wigwams, like Indian encampments, the pumpkins are gathered in golden heaps, and the smoke of burning leaves and brush pervades the air, you hear very few bird songs, for many birds have either dropped silently out of sight or collected in huge flocks, like the Swallow, swept by and disappeared like clouds, while others, like the Purple Grackle or Common Crow-Blackbird, walk over the stubble and cover the trees, making such a creaking, crackling noise that one would surely think that their wings as well as voices were rusty and needed oiling.

What has become of the birds? Where do they go when they disappear?

Being warm-blooded animals they cannot dive into the mud and hide, like fishes, or crawl into cracks of tree bark and wrap themselves up in coccoons, like insects. Neither do they drop their feathers and die away as tender plants drop their leaves and disappear.

People once thought that Swallows dived through the water into the mud, where they rolled themselves into balls and slept all winter. They thought this because Swallows are seen in early autumn in flocks about ponds and marshes, where they feed upon the insects that abound in such places. People thought that as Swallows were last seen in these places before they disappeared that they must have gone under the water; but this was merely guessing, which is a very dangerous thing

to do when trying to find out the plans that Nature makes for her great family.

Later yet, when the snow begins to fall, there is no bird music, only the hoot of an Owl, the shrill cry of the Hawks, the "quack, quack" of the Nuthatch, that runs up and down the tree trunks like a mouse, in gray and white feathers, the jeer of the Jay, and the soft voice of the Chickadee, who tells you his name so prettily as he peers at you from beneath his little black cap.

But the Catbird, Wren, Bobolink, Oriole, the Cuckoo, that helped clear the tent caterpillars from the orchard, the Chat, that puzzled the dogs by whistling like their master, the beautiful Barn Swallow, with the swift wings, that had his plaster nest in the hayloft, the Phœbe, that built in the cowshed, and the dainty Humming-bird, that haunted the honeysuckle on the porch and hummed an ancient spinning-song to us with his wings, — where are they all?

And why is it that while those have disappeared, some few birds still remain with us in spite of cold and snow?

THE FLIGHT OF THE BIRDS

Whither away, Robin, Whither away?

Is it through envy of the maple-leaf,
Whose blushes mock the crimson of thy breast,
Thou wilt not stay?

The summer days were long, yet all too brief The happy season thou hast been our guest.

Whither away?

Whither away, Bluebird, Whither away?

The blast is chill, yet in the upper sky
Thou still canst find the color of thy wing,
The hue of May.

Warbler, why speed thy Southern flight? Ah, why, Thou, too, whose song first told us of the spring, Whither away?

Whither away, Swallow, Whither away?

Canst thou no longer tarry in the North,

Here where our roof so well hath screened thy nest?

Not one short day?

Wilt thou — as if thou human wert — go forth

And wanton far from them who love thee best?

Whither away?

- Edmund Clarence Stedman

THE FALL MIGRATION

If you watch the birds you will soon notice that some eat only animal food, in the shape of various bugs, worms, and lice, while others eat seeds of various weeds, and grasses, and also berries. There are many birds that, like ourselves, eat a little of everything both animal and vegetable.

For instance, the Swallows live on insects of the air, except sometimes in the autumn flocking they feed for a short time on bayberries. The Phœbe is an insect eater; also the Catbird, though he is fond of strawberries and cherries for desert.

You know that when frost comes the air-flying insects are killed, and the gnats, mosquitoes, and flies that have worried the horses and cattle disappear. For this reason the birds that depend upon these bugs must follow their food supply, and move off further southward where frost has not yet come.

This is the reason why so many birds who feed on winged insects leave us in early autumn, before it is cold enough to make them uncomfortable; they must follow their food.

There are other birds that when they no longer have nest-lings to feed can pick up a living from berries and seeds, like the Robin, or live the greater part of the season upon seeds, like the Sparrows. These birds are not driven away by the first frost, but many stay about until the weather is uncomfortably cold, and some few remain all winter, like the Meadowlarks, Nuthatches, Jays, and Woodpeckers, who, having stout beaks, can dig out grubs and insects from among the roots of grass and from tough tree bark; but these too must move on if ice coats the trees or snow buries their ground-feeding places.

As a great many birds spend the nesting season north of Connecticut they pass by on their way southward, and, if the feeding is good, stay with us sometimes several weeks, so that the flocks of Robins seen here in October are likely to be those that nested in the north, while our own birds are gradually drifting down the extreme south, where they winter.

This great southward journey of the birds, that begins as early as August and lasts at some seasons if the winter is open almost until Christmas, is called the fall migration, and when it is over the birds remaining with us are classed as Winter Residents.

MARCH

March! March! They are coming
In troops to the tune of the wind;
Red-headed Woodpeckers drumming,
Gold-crested Thrushes behind.
Sparrows in brown jackets hopping
Past every gateway and door.
Finches with crimson caps stopping
Just where they stopped years before.

-Lucy Larcom

THE SPRING MIGRATION

Sometimes it seems that winter has only fairly set in here in Connecticut when people living south of Virginia notice a disturbance among the Grackles, Redwings, Robins, etc., that tells that they are about to start on their spring migration back to their more or less northward nesting ground, young and old together. For, like ourselves, a bird remembers the place where it was raised, and always tries, if possible, to make its own home in the same neighborhood, and we note the coming of a few often before March 1st.

In the autumn migration most birds travel in mixed flocks, of all sexes and ages; but in spring the males are apt to take the lead, as if to make sure that all is right, and we often hear the bugle call of the male Baltimore Oriole a week or more before his mate answers in her rather fretful voice.

All through March, April, and May the birds come on; every morning will show the trained eye some new arrival until by June 1st they have all either settled down to the home life of the nest, or the northward bound have passed on to their summer haunts.

We are so accustomed to have the birds appear and disappear each year that unless we stop and think we do not realize how wonderful these journeys are, or the perils by land and water that beset these frail birds of the air.

Some of you children feel that you have traveled a great way when you have been to Boston, New York, or, perhaps, Chicago. Take out your geography, and turn to the map of North and South America. Put your finger on Brazil; it is here that the Barn Swallow whom you watched darting in and out the hayloft window may have wintered. The frail Huming-bird goes to Central America with its sooty cousin the Chimney Swift, while the Nighthawk, together with many of the dainty Wood Warblers, make secret excursions through the

tropics, and if they could tell us what they did and saw it would make even the Wise Men open their eyes.

One thing you will notice in this spring migration: the dull colored birds appear the earliest, and the bright ones, like the Tanager, Oriole, Chat, and the brilliant warblers, do not usually come until at least some of the trees are in leaf and offer them shelter. If these bright birds traveled about when everything is bleak and bare they would have no protection against their enemies the Hawks and other Birds of Prey, as they are called.

Nature is such a wise, far-seeing mother that she provides for all emergencies, if man does not meddle and upset her plans.

The Nest

When oaken woods with buds are pink,
And new-come birds each morning sing,
When fickle May on summer's brink
Pauses, and knows not which to fling,
Whether fresh bud and bloom again,
Or hoar-frost silvering hill and plain,

Then from the honeysuckle gray
The Oriole with experienced quest
Twitches the fibrous bark away,
The cordage of his hammock-nest,
Cheering his labor with a note
Rich as the orange of his throat.

High o'er the loud and dusty road
The soft gray cup in safety swings,
To brim ere August with its load
Of downy breasts and throbbing wings,
O'er which the friendly elm-tree heaves
An emerald roof with sculptured eaves.

Below, the noisy world drags by
In the old way, because it must;
The bride with heartbreak in her eye,
The mourner following hated dust;
Thy duty, winged flame of spring,
Is but to love, and fly, and sing.

O happy life, to soar and sway
Above the life by mortals led,
Singing the merry months away,
Master, not slave of daily bread,
And, when the autumn comes, to flee
Wherever sunshine beckons thee!

NEST BUILDING

When the spring migration is over, we call those birds who have decided to stay with us and build their homes Summer Residents, and it is from these that we must learn of the home life of birds.

The visitors who stop a while on their way to other places we may learn to call by name, but we can never really know them any more than we can a chance visitor who boards a few weeks in our vicinity.

The nesting habits of birds and the manner in which they build their homes vary according to the necessity and skill of the species. (See "Citizen Bird," which may be found in Traveling Libraries Nos. 3, 6, 10, 12, 13, 19, 21, 34, 40.)

In their house-building you will find that the birds know almost as many trades as human beings, for among them are weavers, basket-makers, masons, and carpenters, as well as workers in felt, hair, and feathers.

Many water birds merely make a hollow in the sand or gather a few bits of grass together for a nest.

The Grouse, Quail, and Woodcock scratch up a few leaves in a ground hollow or between stumps, for, like domestic fowl, they always nest on the ground, and, their color, being dull, blend with it, and you may almost step on one of these birds when it is on its nest and never know it.

The dull-brown Sparrows build nests of grasses set in a low bush or between its roots, but the flaming Oriole weaves himself a snug hammock high out on a swaying elm bough and the Scarlet Tanager builds high in an oak. The Blue Jay weaves small roots into a firm nest set well above reach, while the Bluebird lines a hollow in a tree or takes an abandoned Woodpecker's hole for his home. The Woodpeckers chisel out homes in tree trunks, and Robins and Cliff and Barn Swallows use more or less mud, and plaster the inside of their homes.

In autumn, when the young have flown, you can collect many of these nests and study their beautiful workmanship. But pray keep your hands off them while they are in use, for it is not being either kind or polite to meddle.

How do you think your mother would feel if somebody climbed in at the window and tumbled up your baby brother's crib, perhaps spilling him out on the floor, or at least frightening him badly, in order to find out if he slept on a mattress or a feather bed, or if the crib itself was made of wood or metal?

At the time of the spring migration, the birds that have been living in flocks all winter put on fresh feathers, and court and separate into pairs just as people do when they marry and begin housekeeping. Naturally they feel very happy, and have a great deal to say to each other, and this is what makes birds break into song when the spring comes to give them new life.

Though some few females can sing, it is the males who make the beautiful music that we hear in the spring mornings. The female is too busy with her housekeeping to do more than answer, but her husband's song cheers her while she is brooding, and he probably tells her how pretty her new feathers are, and how much he loves her, too.

Among our gayly-colored birds, unlike people, it is the male who wears the brightest clothes. The Scarlet Tanager and the Goldfinch both have plain, greenish-olive colored wives. The female Blue Jay is of a less bright hue than her mate, and the mate of the Rosebreasted Grosbeak wears a buff, brownish-streaked vest.

Why? Because as the mother bird spends more time about the nest than the father, if she wore bright clothes she would attract too much attention, and cruel hawks, squirrels, and thieving people would find it too easily; and Nature's first thought is always of the care and protection of young life, whether of plant, bird, or beast.

Almost all of our birds feed the young nestling with animal food, even if they themselves are seed eaters; for little birds must grow quickly, and you would hardly believe the number of worms and flying things it takes to turn one little Robin from the queer helpless, featherless thing that it is when it hatches from the egg, into the clumsy, clamoring ball of feathers, with awkward wings and hardly a bit of a tail to balance it, that it is when it leaves the nest.

No human father and mother work harder to feed their children than do these feathered parents, who toil cease-lessly from sunrise until sunset to bring food and share by turns the protection of the nest.

THE MOULTING

After the nesting season is over, and a pair of birds have raised two, and, as with the Wrens, sometimes three broods,

the feathers of the parents become worn and broken, and not fit for winter covering, nor are the wing quills strong enough for the fall flight.

At this time, when the young birds are able to care for themselves, the pairs no longer keep alone together, but, leaving their nesting haunts, travel about either in a family party or in larger friendly flocks, and, although some birds like the Song Sparrow and Meadowlark sing throughout the season, the general morning chorus and the nesting season end together, in early or middle July.

It is quite difficult to name the birds when young and old travel in flocks, for when a male is bright colored and the female dull, the first coat of the young is often such a mixture of both that it is easily mistaken for a wholly different and strange bird.

In August or September almost all of our birds change their spring feathers. This is called moulting. And the brightly colored birds often drop their wedding finery for dull-colored traveling cloaks, so that they may not be seen when they fly southward through the falling leaves.

After this season father Tanager, of the scarlet wedding coat with black sleeves, appears in yellowish-green, like his wife, and the little Tanagers sometimes have mixed green, yellow, and red garments, for all the world like patchwork bedquilts pieced without regard to pattern.

The jolly Bobolink also, who in May was the prize singer of the meadows, and disported in a coat of black, white, and buff, now wears dull brown stripes, and, having forgotten his song, he mixes with the young of the year and becomes merely the Reed Bird of the gunners. But in early spring they will moult again, and, before the nesting time, reappear among us with every black feather polished free from rusty edges and glistening as of old.

When father Tanager comes back he is brave in red again, though it takes little Tommy Tanager several moultings to grow an equally red coat.

Even with the more quietly marked birds their markings are less distinct after the summer moult, so that what is known as the bird's perfect or typical plumage is in many species that of the nesting season alone.

VII

THE USES OF BIRDS

WHAT THE BIRDS DO FOR US

Perhaps you have never thought very much about the birds. You are so accustomed to seeing them fly about and to hearing them sing that you do not realize what a strange, unnatural, silent thing springtime would be if the birds should all sud-

denly disappear.

Yes, indeed, the world would be sad and lonely without these beautiful winged voices. But something even more dreadful would happen should they leave us: the people of the world would be in danger of starving, because the birds would not be here to feed on the myriad worms and insects that eat the wheat and corn and fruits upon which we together with other animals depend for food.

The insects gnawing at the roots of the pasture grasses would destroy both the summer grazing for the cattle and the hay for winter fodder; if worms destroyed the forests there would be no trees for firewood, and also the lack of shade would make the sources of our rivers dry up and we should soon suffer for water.

Girls and boys might never think of this, but the Wise Men who live at Washington, and form the association known as the Biological Survey, as well as those of the Departments of

Agriculture in each state, thought of this long ago.

They have worked hard and proved the truth of this whole matter, and now know exactly upon what each kind of bird feeds; and laws are everywhere being made to protect the useful birds from those who are either so stupid or so vicious that they think a bird is something to be shot or stoned, and that the robbing of nests of eggs is a clever thing to do.

Any child who stops to think must realize one thing: As almost all birds live on animal food during the nesting season, and feed their young with it, and many kinds eat it all the year, it follows that the more birds we have the fewer bugs there will be.

Also those birds who feed on seeds and wild fruits destroy quantities of weed seeds that would spring up and choke the

crops, while they sow the seeds of wild fruits and berries, because these seeds being hard are dropped undigested.

"But," says some one, "the Robins and Catbirds came in our garden and bit the ripe side of the strawberries and cherries that father was growing for market, and we had to shoot them to the strawberries and the strawberries are shoot them.

shoot them to make them stay away."

This is all true: some birds will steal a few berries, but for this mischief they do good all the rest of the long season; so pray ask your father to put a light charge of powder, a "blank cartridge," as it is called, in the gun, that it may give the birds warning to keep off, but not kill them; and let him save all the bullets and shot for the coward Crow, who not only pulls the sprouting corn but robs smaller birds of both eggs and young squabs, and for the Hen and Chicken Hawks.

In the short descriptions of the one hundred Connecticut birds I have tried to tell of the chief food of each, so that you may put a good mark beside its name in your memory, and try to realize that these birds, beautiful as many are, still have a deeper claim upon you. I wish you to see that they as well as you are citizens of this great Republic and do their part for the public good, which, next to the care and love of home, should be the chief ambition of us all, men or women.

The Wise Men know this and they have made laws to protect the birds and other animals from cruelty and destruction, just as they have made laws to protect all other citizens. Listen to what your state forbids you to do, — to the laws that if you break you must and should be punished:

VIII

WARNING! WHAT THE LAW OF YOUR STATE SAYS ABOUT BIRDS

(Condensed for the comprehension of children)

No person shall kill, catch, or have in possession, living or dead, at any time, any wild bird other than a game bird, nor any part thereof, except the English Sparrow, Crow, Great Horned Owl, or the Hawks, other than the Osprey or Fish Hawk. No person shall take, destroy, or disturb, or have in possession the nest or eggs of any wild bird.

Partridge (or Ruffed Grouse), Woodcock, and Quail may be killed and possessed during October and November only; and the sale of these birds or shipment out of the state is forbidden.

Ducks, Geese, Snipe, Plover, Rail, and Coot may be killed from September 1st to April 30th.

Gray Squirrels may be killed during October and Novem-

ber only.

Rabbits may be killed in October, November, and December only.

It is forbidden to use ferrets, snares, nets, or traps for wild

game at any season.

It is forbidden to kill Deer in this State.

Hunting or Shooting on Sunday is forbidden.

It is unlawful to kill Fish Hawks, Eagles, Gulls, Terns, Loons, Divers, Grebes, Doves, Wild Pigeons, Yellowhammers, Meadowlarks, or Herons at any time. (These are not game birds in the reading of the law.)

All who break these laws are liable to fines varying from

\$10 to \$100, with officer's fee of \$20 added to the cost.

CRUELTY TO WILD ANIMALS

There are many children of foreign birth who would not break the laws of this country if they knew of them, but perhaps do so innocently because they either do not know, or do not speak English well enough to understand them fully, and think that in this country where they have so much liberty they are free to do as they like about everything.

There are also those American, I am sorry to say, as well as foreign born, who have a cruel streak in them, and first show it by cruelty to helpless, harmless animals. This should be stopped, as much for their good as future citizens as for the welfare of the wild animals themselves, for the child who will kill or torture a dumb beast has the germs of murder in him that may later in a fit of passion break out toward a fellow being.

What do you think of boys — yes, and girls, for I saw one this spring — who would spend an afternoon in stoning the hanging nest of an Oriole until the nestlings, dying, stopped their pitiful cries and fell to the ground in the rags of their wonderful home, while their parents circled about in agony? Sad to say these were American born children, too, who very

well knew right from wrong.

When children have this evil mind the laws of the state must be used to cleanse, just as the law may enter the house and do away with contagious disease. Cruelty is often as infectious as sickness; and it is, in fact, a sickness of the mind.

Protect the Birds

If birds are protected and encouraged to nest about the farm and garden, they will do their share in destroying noxious insects and weeds, and a few hours spent in putting up boxes for Bluebirds, Martins, and Wrens will prove a good investment. Birds are protected by law in many states, but it remains for the agriculturists to see that the laws are

faithfully observed.

The practical value of birds in controlling insect pests should be more generally recognized. It may be an easy matter to exterminate the birds in an orchard or grain field, but it is an extremely difficult one to control the insect pests. It is certain, too, that the value of our native Sparrows as weed destroyers is not appreciated. Weed seed forms an important item of the winter food of many of these birds, and it is impossible to estimate the immense numbers of noxious weeds which are thus annually destroyed. -F. E. L. Beal, B.S.

IX

HOW WE CAN PROTECT BIRDS

HOUSING AND FEEDING

We can help birds simply by not hurting them and leaving them as free as possible to live out their joyous lives; but we can do much more if we will leave some little bushy nooks about the farm or garden, where they may nest in private, place food in convenient places during the long, cold winter months for those birds that remain with us, and make it a rule never to raise more kittens than we need to keep barn and house free of rats or than we can feed and care for.

Silly people, who shirk responsibility, often say: "Oh, I couldn't think of drowning a kitten;" and yet they will let dozens of them grow up unfed and uncared for, or leave a litter by the roadside, until in many places a breed of gaunt, half-wild cats roam about destroying the eggs and young of song birds, game birds, and domestic fowls alike.

A nice, comfortable house or barn cat is one thing, but the savage outcast is quite another, and should no more be let live than a weasel or skunk.

HOUSING AND FEEDING

When places become thickly settled, and villages grow into towns and towns into cities, one of the first things that troubles the father and mother of a family is to find house room, a suitable place to live, that shall be healthful for the children and yet not be too far from the father's work, and many and many a family have had to move to inconvenient places because such a home could not be found near by.

Strange as it may at first seem, our little fellow citizens, the birds, have this same trouble.

In an open, half-wooded farming country there are plenty of nesting haunts, and running brooks and ponds for the birds who need water by their homestead. But presently perhaps a railway comes by, the land is bought up and the woods cut down for railway ties, the brush is cleared from old pastures and they are turned into house lots. Old orchards are done away with, and everything is "cleaned up."

This is as it should be, and a sign of progress; but where are the birds that nature has told to nest in tree hollows, like the Bluebird, Chickadee, the Tree Swallow, Downy and Hairy Woodpecker, and the jolly Yellowhammer, to find homes?

You will often hear people say, "It is too bad the Bluebirds are dying out;" but if somewhere about the place you will fasten a hollow log or a square bird box with a single round opening in it to a high fence post or to a pole set up on purpose, you will soon see that the Bluebirds have not died out, but that they have been discouraged in their househunting.

It is a mistake to make bird houses too large, or to have many rooms in them, unless you are hoping to attract Purple Martins, who like to live in colonies. Birds like a whole building to themselves quite as well as people, and they do not like people to come too close and peep in at their windows and doors either.

Autumn and winter are the best seasons for making and placing bird boxes; it gives time for them to become "weathered" before nesting time, and birds are apt to be suspicious of anything that looks too new and fine.

It is also a kind act for those who live on farms to leave a few stacks of cornstalks or a sheaf of rye standing in a fence corner as a shelter for the game birds, who are often driven by cold to burrow in the snow for cover, and frequently, when the crust freezes above them, die of starvation.

Doing this is wise as well as kind, for it helps to keep alive and increase these valuable food birds, and makes better sport for the farmers in the time when the law says they may go a-hunting. Of course in every school there are children who do not live on farms, but these can club together and do what they can to feed and shelter the birds that come about the schoolhouse.

A SCHOOLYARD RESTAURANT

As you have already learned, some birds eat insects and others seed foods, or, to put it another way, some birds prefer meat and some bread; so if you wish to suit all kinds you must feed them with sandwiches, made of both bread and meat.

"Sandwiches for birds!—how foolish!" I hear some one say. Stop and think a moment, and you will see that it is merely a way of expression, a figure of speech, as it is called.

Give the birds the material, crumbs, cracked corn, hayloft sweepings, bits of fat bacon, suet, or bones that have some rags of meat attached, and they will make their own sandwiches, each one to its taste.

If this food is merely scattered upon the ground it will attract mice, rats, and other rodents, but if a regular lunch counter is prepared for the food you will find that the birds will appreciate the courtesy, become liberal customers and run up a long bill; this, however, they will pay with music when spring comes.

A SUGGESTION FOR THE LUNCH COUNTER

Every school has a flag pole, and, while some are fastened to the building itself, many stand free and are planted in the yard.

Around this pole a square or circular shelf about eight inches wide can be fastened, four feet from the ground, and edged with a strip of beading, barrel hoops, or the like. A dozen tenpenny nails should be driven on the outside edge at intervals, like the spokes to a wheel, and the whole neatly painted to match the pole.

Then each week one child should be appointed as *Bird Steward*, his or her duties being to collect the scraps after the noon dinner hour and place them neatly on the counter, the crusts and crumbs on the shelf and the meat to be hung on the spikes.

Nothing will come amiss — pine cones, beechnuts, the shells of hard boiled eggs broken fine, apple cores, half cleaned

nuts; and if the children will tell their parents of the counter, they will often put an extra scrap or so in the dinner pail to help the feast. Or the fortunate children whose fathers keep the market, the grocery store, or the mill, may be able to obtain enough of the wastage to leave an extra supply on Friday, so that the pensioners need not go hungry over Sunday.

All the while the flag will wave gayly above little Citizen Bird, as under its protection he feeds upon his human brothers' bounty.

AN ADIRONDACK LUNCH COUNTER

In the Adirondacks in March, 1900, the snow fell over four feet deep, and wild birds were driven from the deep woods to seek for food near the habitation of man. It occurred to me that a lunch counter with "meals at all hours" might suit the convenience of some of the visitors to my orchard, so I fixed a plank out in front of the house, nailed pieces of raw and cooked meat to it, sprinkled bread crumbs and seeeds around, and awaited results.

The first caller was a Chickadee. He tasted the meat, seemed to enjoy it, and went off for his mate. They did not seem in the least afraid when I stood on the veranda and watched them, and after a time paid but little attention to the noises in the house; but only one would eat at a time. The other one seemed to keep watch. I set my camera and secured a picture of one alone. While focusing for the meat one Chickadee came and commenced eating in front of the camera, and a second later its mate perched on my hand as I turned the focusing screw.

I saw the Chickadees tear off pieces of meat and suet and hide them in the woodpile. This they did repeatedly, and later in the day would come back and eat them if the lunch counter was empty.

My observation in this respect is confirmed by a lumberman, who noticed that when eating his lunch back in the woods the Chickadees were very friendly and would carry off scraps of meat and hide them, coming back for more time and again.

The next day another pair of Chickadees and a pair of White-breasted Nuthatches came. The Nuthatches had a presumptuous way of taking possession, and came first one and then both together. The Chickadees flew back and forth in an impatient manner, but every time they went near the meat the Nuthatches would fly or hop toward them, uttering what sounded to me like a nasal, French no, no, no, and the Chickadees would retire to await their turn when the Nuthatches were away.

The news of the free lunch must have traveled as rapidly in the bird world as gossip in a country town usually does, for before long a beautiful male Hairy Woodpecker made his appearance, and came regularly night and morning for a number of days. Hunger made him bold, and he would allow me to walk to within a few feet of him when changing

plates in the camera. It was interesting to note his position on the plank. When he was eating, his tail was braced to steady his body. He did not stand on his feet, except when I attracted his attention by tapping on the window, but when eating put his feet out in front of him in a most peculiar manner. This position enabled him to draw his head far back and gave more power to the stroke of his bill, and shows that Woodpeckers are not adapted for board-walking.

Of course the smaller Downy Woodpeckers were around; they always are in the orchard toward spring. I also had a flock of Redpolls come a number of times after a little bare spot of ground began to show, but, although they ate seeds I put on the ground, they would not come up on the lunch counter and did not stay very long. Beautiful Pine Grosbeaks came, too, but they preferred picking up the seeds they found under the maple trees. The American Goldfinches, in their Quaker winter dresses, called, but the seeds on some weeds in the garden just peeping above the snow pleased them better than a more elaborate lunch, and saying "per-chic-o-ree" they would leave. — F. A. Van Sant, Jay, N. Y., in Bird-Lore.

X

The Birds of Autumn

When school opens the early part of September the birds' family life as well as the moulting season is over, and they are gathering in flocks, and shift about constantly, even before they start on their journey south.

If you have not learned the names of the brightly-colored birds in springtime you will not name them now, for they are wearing their dull traveling cloaks, and even the plainly-dressed sparrows and thrushes are not as distinctly marked as in spring. You will at once see that the Robin, whose breast in spring was the brick-red color of a new flower pot, has grown paler, and the Bluebird's cinnamon-colored vest has also faded.

Yet there are some birds that you will notice now perhaps for the first time, though they have been about all the season, and others that drop in from the north one by one for either a long stay or a short visit.

The Swallows are flocking, and the Crow-Blackbirds are walking all over the fields, while the saucy Jays, the largest of our three blue birds, come about boldly and begin to keep an eye on the nut and acorn crop. The Song Sparrow, our dear little friend, sings now and then, but his cousin, the White-throat, will be coming, and perhaps whisper softly, "All day whittling-whittling," as he feeds under the bushes.

Some morning you will see a few slate-gray birds with white vests and two white tail feathers, that show when they fly. These are Juncos, from the north, and they will stay about all winter, if you make the lunch counter attractive.

If there are some old apple trees near by, trees with cracks full of grubs and insects that are hiding for the winter, any fine morning you will see a pair of black and white striped birds, one with a red patch on the back of its head.

These are Mr. and Mrs. Downy Woodpecker, the smallest of their tribe, and they are great bug killers. If you did not know you might think that they were sucking sap, because of

the little holes their chisel bills leave behind, but they are merely pulling out the insect hiding in the hollow. They can tell just where it is by tapping with the beak, as a man can tell by tapping a wall with his hammer the precise spot where a stud is and where the wall is hollow.

About this time the Downy's friend, the handsome Yellow-bellied Sapsucker may appear; but you will not care to have him stay long, for he does suck sap, and if he stays too long in one spot the trees will suffer. Then there is the Flicker, the big pigeon woodpecker, with his wings lined with dull gold, speckled back, with a white spot over the tail, and a red mark on the nape of neck.

You will look and rub your eyes and look again. Is it a mouse running upward round and round the tree? No, for it has feathers and a sharp, curved bill, and it is a little, brownish bird with a light breast, much smaller than an English Sparrow, and as it creeps about its dark eyes spy out hundreds of insects in the bark — the Brown Creeper.

Quack, quack, and a short-tailed bird of chunky build, gray back, black head, and white breast comes running down the tree head foremost, and stops to look at you still in this same strange position. It is the White-breasted Nuthatch, and he will stay all winter if you will put suet on the lunch counter, as well as his little chum, the white-faced, black-capped Chickadee, who is looking down at him from above and calling his own name merrily at the same time, as if he did not wish to be mistaken for anyone else.

Before it is time for folks to go a-hunting some morning you may see a flock of young Quail, or Bob-whites, cross the road, all running together like chickens, for they have never yet heard a gun and so they do not fear man. Bob himself is shy in autumn and silent except for the few sweet notes of his "scatter call" by which he signals to a scattered flock.

This is the time that when a boy sees little round holes in the mud by the spring in the morning he knows that a Woodcock has been feeding there the night before.

October comes, and the leaves fall slowly if it is a late season, As the twigs of some trees grow bare you will, if you look carefully in evergreens or among apple boughs, see two little birds, one smaller than any other bird except a Winter Wren or a Humming-bird; it has a dull olive-green back, with a

cap of bright orange bordered with black, and whitish under parts. This is the Golden-Crowned Kinglet, from the north. Its friend is an inch longer and has a back of bluish gray streaked with black, and ornamented with four small, yellow patches, one on the crown, one on the rump, and one on each side of the breast. It is the Myrtle Warbler. At this season these spots are not as clear as in spring, but the rump spot is quite distinct. You will need to become acquainted with this bird, because he will be about all winter.

What is that mite in dark brown feathers with a short pert tail, that is playing hide and seek about the woodpile? The Winter Wren, surely, Jennie Wren's little cousin, and just as amusing as she, even if a bit more shy. These days you will see the Hawks sailing above and calling, and the Hoot and Screech Owls will come nearer the house. Do not shoot at them; only the Great Horned Owl of lonely places does harm. The smaller ones hunt the ground mice from the gardens and fields; if you do not believe me look under the tree where these birds roost, and you will often find little balls made of the fur and bones of hurtful rodents that the owl could not digest and so spat up.

If you live near a large pond or salt marsh tract you may see Ducks and Geese settling at night to rest either on the water or among the weeds, or possibly you may chance upon a great Heron standing in a pool fishing, or hear a Loon give his laughing cry, or see a Grebe, that at a little distance you may mistake for a duck, dive, and, in a flash, come to the surface of the water a hundred feet away.

The Herring Gulls are also back from their breeding places, and chatter noisily as they gather on the sandbars or move out in a body to feed.

The yellow, blackcapped Goldfinches of summer are now greenish-brown, but you can tell them by their dipping flight. If suddenly a flock of them scatters in great alarm, ten to one either a swift Sharp-shinned Hawk has dashed among them or else a Shrike or Butcher Bird, who, though not a Hawk, has a powerful head and cruel hooked beak.

At this time the birds of summer have slipped away — but it only serves to make those who remain of more importance — until at last when Thanksgiving Day comes, if there has been hard frost, even the Woodcock, Redwings, Grackles,

Cowbirds, Kingfishers, and friendly Chipping Sparrow will have vanished.

XI

WINTER BIRDS IN CONNECTICUT

This is the time to keep the lunch counter well supplied, and to leave the door of the woodshed open on the side away from the wind when it snows, if there is no brush heap at hand or clump of cedars or other evergreens where birds may seek shelter, for these frail beings cannot long withstand hunger and cold when they come hand in hand, and of the two they dread cold the most.

At this time the permanent resident birds will be seen at intervals, though a birdless week may sometimes come and you will think they are all frozen, but with sun and a south wind they will be either seen or heard again.

The following list of common permanent residents and winter visiting land birds of the middle eastern states you will find useful for learning what birds you may reasonably expect to find. The resident are:

Bob White
Ruffed Grouse
Red-shouldered Hawk
Meadowlark (in South Conn.)
Long-eared Owl
Screech Owl
Great Horned Owl
Downy Woodpecker
Robin
Bluebird
Song Sparrow

Red-tailed Hawk
Sharp-shinned Hawk
Barred Owl
Cedar Waxwing
Hairy Woodpecker
Flicker
Blue Jay
Crow
Meadowlark
Am. Goldfinch
Purple Finch

Chickadee

Winter visitors:

White-breasted Nuthatch

Horned Lark
Snowflake
Longspur
Redpoll
Am. Crossbill
White-throated Sparrow
Snow Owl
Tree Sparrow

Junco Myrtle Warbler Northern Shrike Winter Wren Golden-crowned Kinglet Brown Creeper Pine Grosbeak The commonest of the several winter duck of the beaches is the noisy Old Squaw, while sometimes the Loon also winters about open water. The Black Duck is an occasional winter guest; also the Black Coot, Bufflehead, and Broadbill.

XII

BIRDS IN SPRING

THE ANGLER'S REVEILLE

What time the rose of dawn is laid across the lips of night, And all the drowsy little stars have fallen asleep in light, 'Tis then a wandering wind awakes, and runs from tree to tree, And borrows words from all the birds to sound the reveille.

This is the carol the Robin throws
Over the edge of the valley;
Listen how boldly it flows,
Sally on sally:

Tirra-lirra, down the river,
Laughing water all a-quiver.
Day is near, clear, clear.
Fish are breaking,
Time for waking.
Tup, tup, tup!
Do you hear? All clear.
Wake up!

The phantom flood of dreams has ebbed and vanished with the dark, And like a dove the heart forsakes the prison of the ark; Now forth she fares through friendly woods and diamond-fields of dew, While every voice cries out "Rejoice!" as if the world were new.

This is the ballad the Bluebird sings,
Unto his mate replying,
Shaking the tune from his wings
While he is flying:

Surely, surely, surely,

Life is dear

Even here.

Blue above,

You to love,

Purely, purely, purely.

There's wild azalea on the hill, and roses down the dell, And just a spray of lilac still abloom beside the well; The columbine adorns the rocks, the laurel buds grow pink, Along the stream white arums gleam, and violets bend to drink.

This is the song of the Yellowthroat,
Fluttering gaily beside you;
Hear how each voluble note
Offers to guide you:

Which way, sir?
I say, sir,
Let me teach you,
I beseech you!
Are you wishing
Jolly fishing?
This way, sir!
Let me teach you.

Oh come, forget your foes and fears, and leave your cares behind, And wander forth to try your luck, with cheerful, quiet mind; For be your fortune great or small, you'll take what God may give, And all the day your heart will say, "'Tis luck enough to live."

This is the song the Brown Thrush flings
Out of his thicket of roses;
Hark how it warbles and rings,
Mark how it closes:

Luck, luck,
What luck?
Good enough for me!
I'm alive, you see.
Sun shining, no repining;
Never borrow idle sorrow;
Drop it! Cover it up!
Hold your cup!
Joy will fill it,
Don't spill it!
Steady, be ready,
Love your luck!

-Henry Van Dyke in Bird-Lore

REDWINGS AND PUSSYWILLOWS

How do the birds know when spring has come? How can they tell the difference between a warm day in December and a warm day in March? We cannot tell, but they do know all the same.

The Grackles and Redwings will not return for the warmest December sun; but let the March sun but blink and they are up and away, and often steal a march on shy Pussywillow herself.

These birds usually return to Connecticut in March, reaching the southern border as indicated:

Purple Grackle Redwing Song Sparrow Robin Bluebird Woodcock Phæbe

Meadowlark
Cowbird
Fox Sparrow
Kingfisher
Mourning Dove
Field Sparrow

In April we may look for these. The regular coming of the birds depends upon the season. If mild they come gradually, if stormy by fits and starts, sometimes almost in mixed flocks:

Great Blue Heron
Purple Finch
Vesper Sparrow
Chipping Sparrow
Tree Swallow

First half

Barn Swallow
Green Heron
Spotted Sandpiper
Whip-poor-will
Chimney Swift
Towhee

Last half

Black and White Warbler Oven Bird House Wren Brown Thrasher Catbird Wood Thrush

Purple Martin Bark Swallow

IN APPLE BLOSSOM TIME LOOK FOR ORIOLES AND ALL THE BRIGHTLY COLORED BIRDS

In May you must get up early and keep both eyes and ears wide open if you would name this month's share of our one hundred birds. All that have not come must do so now or never, though crippled or sick birds may straggle along at any time.

Yellow-billed Cuckoo
Nighthawk
Humming-bird
Kingbird
Baltimore Oriole
Bobolink
Indigo Bird
Rose-breasted Grosbeak

Scarlet Tanager
Red-eyed Vireo
Yellow Warbler
Maryland Yellow-throat
Yellow-breasted Chat
Redstart
Veery

XIII

Birds Commonly to be Seen in Connecticut

In the list of Orders and Families of Birds, as arranged by the American Ornithologist's Union, the rational arrangement of beginning with the lowest and ascending in the scale is followed, hence the less familiar Water Birds would come first.

In this group of brief biographies I have begun with the highest order, the Perching Song Birds, because these are usually the most well-known.

I have in the key grouped the birds roughly, in regard to their general colors as seen in the field, after the method employed successfully in my book *Birdcraft*, from which the technical descriptions have been taken by kind permission of the Macmillan Co. for use in this pamphlet only.

The letters placed after the name of the bird in the biography indicate the time of year that they are with us in Connecticut:

- S. R., Summer Resident. Coming in spring and remaining to nest.
- S. V., Summer Visitor. Coming for a time after nesting season.
- R., Resident. Species seen all the year, many or few according to weather.
- W. V., Winter Visitors. Birds of the north visiting us in winter.

KEY TO ONE HUNDRED BIRDS.

I LAND BIRDS

Birds Bright or Brick-red, Orange, or with Red Markings

Breast and belly brick red. Above olive gray, black head. Black tail, white spots on outer quills. Throat streaked black and white. Bill yellow, dark tip. Dark feet.

AMERICAN ROBIN. See page 47.

Blue-black above, white belly, sides and wing linings orange-salmon. Feet and bill black. Flits about in trees. Spring and summer.

AMERICAN REDSTART. See page 67.

Rich scarlet. Wings, tail, and feet black. Spring and summer.

SCARLET TANAGER. See page 75.

Above strawberry-red with gray fleckings. Wings and tail brown. Heavy blackish bill. Winter bird.

PINE GROSBEAK. See page 78.

General color Indian-red. Wings and tail brownish. Beak distinctly crossed at tip. Winter bird of cone-bearing trees.

American Crossbill. See page 80.

- Red, conspicuously crested. Black throat and band around beak. Beak light red; feet brown. Summer and winter migrant. Uncommon. CARDINAL. See page 142.
- Black head, throat, and upper half of back. Wings black, larger coverts tipped and inner feathers edged with white. Middle tail quills black, everywhere else orange-flame. Feet and bill slatish black. Spring and summer.

BALTIMORE ORIOLE. See page 97.

Breast rose-carmine, which color extends under the wings. Above black; belly, rump, three outer tail quills, and two spots on wings white. Heavy brown bill. Summer.

Rose-Breasted Grosbeak. See page 89.

Crown, chin, and throat bright red. Above black, white, and yellowish; below greenish yellow. Tail black, white on the middle feathers, white edge to wing coverts. A tree-creeper. Bill pointed, about as long as head.

YELLOW-BELLIED SAPSUCKER. See page 114.

Head, neck, and throat crimson. Back, wings, and tail bluish black. White below, much white on wings, and white rump. A tree-creeper. Bill horn-colored.

RED-HEADED WOODPECKER. See page 114.

Birds Conspicuously Blue

Azure-blue above. Wings blue with blackish tips, upper breast brick-red, lower parts white. Bill and feet black. All the year.

BLUEBIRD. See page 49.

Deep blue, in some lights having a greenish cast. Wings and tail washed thinly with brownish. Bill dark above. Spring and summer.

Indigo Bunting. See page 91.

Lead-blue above; head finely crested; wing coverts and tail bright blue, barred with black. Below grayish white with a black collar. All the year.

Blue JAY. See page 102.

Above lead-blue, variegated with black. Below whitish, two dull blue bands across breast. Long crest; straight bill longer than head. Spring, summer, and autumn.

Belted Kingfisher. See page 118.

Birds Either Yellow or with Conspicuous Yellow Markings

Above rich olive-yellow, breast and under parts golden yellow. Breast streaked with light brown. Feet brown. Summer bird.

Yellow Warbler. See page 62.

Crown, sides of breast, and rump yellow, less bright in fall and winter. above slate color, striped and streaked with black. Whitish below. Bill and feet black.

MYRTLE WARBLER. See page 64.

Under parts, including wing and tail coverts, yellow, grading to white on middle of belly. Above olive, head masked with black. Bill black; flesh-colored feet. Summer.

MARYLAND YELLOW-THROAT. See page 65.

Brilliant yellow throat, breast, and wing linings. Olive-green above; strong, curving blue-black bill; feet lead-colored. (Larger than the preceding species, voice strong.) Summer.

YELLOW-BREASTED CHAT. See page 66.

Body, all but wings, tail, and frontlet, clear gamboge yellow. Frontlet black; wings black, varied with white. In winter dull olive.

American Goldfinch. See page 82.

LARGE GROUND-FEEDING BIRDS

Under parts bright yellow, black throat crescent. Paler in autumn. Much variegated above, general color brown. Bill stout and straight, strong legs, a walker. A ground feeder and meadow bird. All the year.

MEADOWLARK. See page 95.

Birds Conspicuously Black, Dusky, or Dark Gray

Above olive-gray; head black. Wings dark brown; tail black, with white spots on the two outer quills. Entire breast and belly pale brick-red. Throat streaked with black and white; white eyelids. Bill yellow, dusky at tip; feet dark. All the year.

AMERICAN ROBIN. See page 47.

Clear, deep slate above; under parts light gray. Crown and tail black; vent rust-red. S. R.

CATBIRD. See page 56.

Dark bluish slate all over, except lower breast and belly, which are grayish white, and form a vest. Several outer tail feathers white, which are conspicuous in flying. Bird of autumn and winter. Autumn, winter, spring.

SLATE-COLORED JUNCO. See page 87.

Head, neck, breast, back, and middle tail feathers black. Belly and spots on outer tail feathers white. Sides light bay. Red eyes, black bill, light-brown feet. S. R.

Towner. See page 89.

Above black; belly, rump, three outer tail quills, and two spots on wings white. Breast rose-carmine, which color extends under the wings.

Rose-Breasted Grosbeak. See page 89.

Above bluish ash, lighter on the rump and shoulders; below light gray, waved with darker lines. Black bar on each side of head; wings and tail black, outer quills of latter white-tipped. Blackish beak; legs bluish black. Winter bird.

Northern Shrike. See page 68.

Black head, chin, tail, and under parts. Buff patch on back of neck; also buff edges to some tail feathers. Rump and upper wing coverts white. Bill brown. Meadow bird. R.

BOBOLINK. See page 92.

Conspicuous birds of autumn and winter, feeding on tree branches and trunks. Crown, throat, and neck black; cheeks white. Brownish gray above; below white, shaded to gray. Wings and tail gray, with white edgings. Bill and feet black.

CHICKADEE. See page 52.

Body flat and compact. Above slate-blue; top of head and nape black. Wings blackish, edged with slate; belly white, growing rusty toward vent. Bill dark lead color; feet dark brown. Tree-creepers; most conspicuous in autumn and winter.

White-breasted Nuthatch. See page 53.

Glossy, metallic black, iridescent tints on head, tail, and wings. Tail long; feet black. S. R.

Purple Grackle. See page 94.

*Crows

Large bird, glossy, purplish black. Wings appear saw-toothed in flying, tail extending beyond wings. Bill and feet black. All the year.

AMERICAN CROW. See page 100.

BIRDS OF THE AIR, DASHING FROM THEIR PERCH TO SEIZE INSECTS

Above dark ash; head, wings, and tail black; orange-red streak on poll.

Beneath grayish white, darkest on breast, tail terminating in a white band. S. R.

KINGBIRD. See page 104.

BIRDS OF THE AIR FEEDING ON THE WING

A sooty-brown, swallow-like bird, building in chimneys. Wings longer than tail, which is nearly even, the shafts of the quills ending in sharp spines. S. R.

CHIMNEY SWIFT. See page 110.

Brown or Brownish Birds, of Various Sizes and Markings

BROWN OR OLIVE BACKS; RATHER LONG, SLENDER BILLS. LIGHTISH BREASTS,
MORE OR LESS SPECKLED. ALL FINE SONGSTERS, RUNNING OR HOPPING ON THE GROUND

^{*}The Common Starling recently introduced from Europe and now found in Southern Connecticut will be found on page 99.

Above tawny-brown, deepest on head; whitish eye ring. Sides of throat light buff, middle of throat, breast, and belly white, sprinkled on the sides with heart-shaped dark brown spots. Bill dark brown; feet flesh-colored. S. R.

Wood Thrush. See page 44.

Above evenly tawny. Throat buff, flecked on sides with fine arrow-shaped brown spots. Under parts white; no eye ring; feet light. S. R.

VEERY - WILSON'S THRUSH. See page 45.

Long bird. Reddish brown above; beneath, yellowish white, spotted with brown on breast and sides. Two light bars on wings. Very long tail. Feet light colored.

Brown Thrasher. See page 58.

- Olive-brown above; whitish eye ring; two brown stripes on head, enclosing dull orange crown. White below, with brownish spots in center of breast, running into streaks on the sides. Brown feet.

 OVENBIRD. See page 64.
- Dark brown above, minutely barred with blackish. Under parts gray, with brownish wash and faint bandings. Fairly long tail. Bill black above, lower mandible light; feet brown. S. R.

House Wren. See page 59.

Color similar to last species, except the under parts, which are rusty and dimly, but finely, barred with dark. Tail and bill short; the latter dark and slender. W. R.

WINTER WREN. See page 60.

Above brown. Crown and part of back streaked with black and white. White beneath, washed with rusty across breast and along sides. Wings and tail barred. Very short bill. S. R.

SHORT-BILLED MARSH WREN. See page 61.

Above clear brown, whitish line over eye, neck and back streaked sparingly with white. Wings and tail brown; the latter barred. Bill nearly as long as head.

LONG-BILLED MARSH WREN. See page 61.

SPARROW-LIKE BIRDS, WITH STOUT BILLS. GENERAL PLUMAGE BROWN, GRAY, OR RUSTY, MUCH STREAKED AND SPOTTED, AND OCCASIONALLY WASHED WITH REDDISH PURPLE. ONE SPECIES HAS A WHITE THROAT AND ONE A WHITE CROWN

Sparrows. See page 76.

BIRDS WITH SOFT, QUAKER-COLORED PLUMAGE OF BROWNS AND DRABS; NOT BARRED, STRIPED, OR SPOTTED

Crested; short, blunt, broad, black bill

Black frontlet. Crest, breast, throat, wings, and tail purplish ash. Secondary wing quills tipped with waxy red points. Tail feathers banded with yellow, and sometimes tipped with red, like the wings.

CEDAR WAXWING. See page 69.

Not crested; head about the same length as long curving bill. Tail long

Powerful bill; lower mandible yellow. Above olive, with gray and metallic tints. Two middle tail feathers olive, outer quills black, with conspicuous white spots. Wings washed with bright cinnamon. Under parts grayish white. S. R.

YELLOW-BILLED CUCKOO. See page 117.

Above general coloring same as last species. Black bill, red eyelids. White spots on tail inconspicuous. S. R.

BLACK-BILLED CUCKOO. See page 117.

- MOTTLED BROWN AND BLACK BIRDS (OTHER THAN TRUE HAWKS AND OWLS)
 FLYING AND FEEDING CHIEFLY AT TWILIGHT AND NIGHT
- A long-winged bird of twilight and night. Large mouth, fringed with bristles. Plumage dusky and Owl-like, much spotted with black and gray. Wings mottled with shades of brown. Lower half of outer tail quills white. S. R.

Whip-poor-will. See page 106.

A bird of day, as well as of night. Mottled black and rusty above; the breast finely barred and with a V-shaped white spot on throat. Wings brown, a large white spot extending entirely through them, conspicuous in flight. White bar on tail. S. R.

NIGHTHAWK. See page 108.

Daintily Plumed Small Birds Feeding About the Branches and Terminal Shoots of Trees

Tiny bird of autumn and winter. Flame-colored crown spot, edged with yellow and enclosed by black line. Above olive-green and yellowish olive, which is more decided on wings, rump, and tail. Whitish line over eye; under parts yellowish gray. Bill and feet black.

GOLDEN-CROWNED KINGLET. See page 51.

BIRDS WITH BILLS SLIGHTLY HOOKED AT TIP; PLUMAGE OLIVE ABOVE AND WHITE OR YELLOWISH BELOW; FEEDING IN THE TREES; LOUD AND CONSTANT SINGERS

S. R. RED-EYED VIREO. See page 67.

Tree-creeping Birds of Various Sizes, Seen Upon the Trunks and Branches, Feeding Upon Insects and the Larvae in the Bark

Body flat and compact. Above slate-blue, head and hind neck black. Wings blackish, edged with slate. Belly white, rusty toward vent. Most conspicuous in autumn and winter. R.

WHITE-BREASTED NUTHATCH. See page 53.

Above lead-colored, brownish on wings and tail. Crown and sides of head and neck black. Under parts rust-red. Bill lead color, feet lead-brown. Bird of autumn and winter. R.

RED-BREASTED NUTHATCH. See page 55.

Above brown and white striped, the brown being of several shades, growing reddish on rump. Throat, breast, and belly grayish white; tail pale brown. Slender, curving bill. Bird of late autumn and winter. W. R.

Brown Creeper. See page 55.

Small bird. Above striped black and white. Breast white in middle, black stripes on sides. Wings and tail black, with white markings. Bill and feet black. S. R.

Black-and-white Creeper. See page 62.

Above black and white, white stripe on middle of back, red stripe on head. Under parts grayish white; wings black and white. Bill blunt, stout, and straight, nearly as long as head. R.

HAIRY WOODPECKER. See page 113.

Closely resembling the last species, but smaller. Wings and tail barred with white. R.

DOWNY WOODPECKER. See page 113.

Above black, white, and yellowish; below greenish yellow. Tail black, white on the middle feathers, white edge to wing coverts. Crown, chin, and throat bright red. Bill about as long as head, more pointed and slender than last species. R.

YELLOW-BELLIED SAPSUCKER. See page 114.

Head, neck, and throat crimson. Back, wings, and tail bluish black. White below, much white on wings and white rump. Bill about as long as head.

RED-HEADED WOODPECKER. See page 114.

Above golden brown, barred with black. Black crescent on breast, red band on back of head. Round black spots on belly; black cheek patch. Wing linings gamboge-yellow, rump white. Bill slender, curving, and pointed. R.

FLICKER. See page 110.

Winter Birds of Meadows and Uplands

Soft brown and white plumage; bill and feet black. Birds seen in large flocks, feeding upon seed-stalks that rise above the snow. W. V.

Snowflake. See page 84.

Head, breast, and rump washed with rich crimson over a ground of gray and brown. Back, wings, and tail dusky; dusky white beneath. Tail short and forked; wings long and pointed. Crimson wash not conspicuous as the bird flies. W. V.

REDPOLL. See page 81.

Birds of the Air, Constantly Upon the Wing and Feeding as They Fly

WITH PLUMAGE MORE OR LESS IRIDESCENT OR TINTED WITH METALLIC COLORS

Birds flying over low meadows, streams, and beaches; tails more or less forked; wings sharply pointed. Bills dark, widely triangular. S. R.

SWALLOW FAMILY. See page 70.

Very small birds, feeding about flowers; bill long and needle-like. Metallic green above, grayish below; glistening ruby throat, and deeply forked tail. S. R.

RUBY-THROATED HUMMINGBIRD. See page 110.

- PLUMAGE NOT IRIDESCENT OR METALLIC, BUT SOOTY BROWN, OLIVE, OR GRAYISH ABOVE, AND WHITE, GRAY, OR YELLOWISH BELOW
- A Swallow-like bird, building in chimneys. Deep sooty brown. Wings longer than the tail, which is nearly even, the shafts of the quills ending in sharp spines. S. R.

SWIFT FAMILY. See page 110.

II BIRDS OF PREY

Stoutly-built Birds, with Large Heads, Facial Eye Disks, Etc.

NO FEATHERED HORNS

Mottled dark brown, rusty, and grayish. Striped on breast with dark brown. Face feathers white tipped; wings and tail barred with brown. Legs and dark feet fully feathered. Bill ivory-colored; eyes blue-black. R.

BARRED OWL. See page 120.

HORNED OWLS

Above finely mottled with brown, ash, and dark orange. Long, erect ear tufts. Complete facial disk reddish brown with darker inner circle; dark brown, broken band on wings and tail. Breast pale orange with long, brown stripes. Legs and feet completely feathered. Bill and claws blackish. R.

AMERICAN LONG-EARED OWL. See page 118.

Inconspicuous ear tufts, facial disk with a dark ring enclosing a lighter one. Plumage varied from bright orange to buffy white with bold stripes of dark brown. Darker above, and more mottled below, growing whiter toward vent. Legs feathered with plain buff. Bill and claws dusky blue-black. R.

SHORT-EARED OWL. See page 119.

- Conspicuous ear tufts, bill light horn color. Plumage either grayish or rust-red and mottled; tail and wings equal. Feet covered with short dark feathers. Claws dark. A small common Owl. R. Screech Owl. See page 121.
- Diurnal Birds of Prey, with Smaller Heads than the Last Group, Conspicuously Hooked Bills and Claws, no Horns or Perfect Facial Disks. Flight Graceful and Rapid; Plumage Plain, Streaked or Mottled

PLUMAGE BRIGHTLY COLORED OR MUCH VARIED

Tail long. Eyes reddish brown. Above bluish gray, deepest on head. Beneath whitish, barred on the sides and breast with rusty and dark brown. Small head, long legs, slender feet. Flight dashing. R.

SHARP-SHINNED HAWK. See page 123.

Similar to last species, but larger. Tail rounded and barred with dusky or rufous. Feet rather stout, greenish yellow. R.

Cooper's Hawk. See page 124.

Tail rust-red, with a black band near end. Above dark brown variegated with white, gray, and tawny; below whitish and buff, streaked below with brown. Bill horn-colored. R.

RED-TAILED HAWK. See page 124.

PLUMAGE DARK BROWN, GRAY, OR WHITISH, NOT KED OR RUSTY

- Above bluish gray; below white, mottled with brown. Wings brownish, long, and pointed. Tail long; upper tail coverts white. Bill and feet black. A summer Hawk of moist lands. S. R. MARSH HAWK. See page 123.
- A fishing Hawk seen flying over large bodies of water. Plain dark brown above, the tail having a white tip and a band of dark brown. Head, neck, and lower parts white; breast plain; or sometimes spotted faintly with brown. Bill bluish black; feet grayish. S. R.

AMERICAN OSPREY. See page 125.

III (a) GAME (b) SHORE AND (c) WATER BIRDS

(a) Pigeon-like Birds with Delicately Shaded and Often Glossy Plumage

General coloring bluish fawn. Above olive-brown, varying to bluish gray; neck and head washed with metallic tints. Below a dull purplish, changing to reddish brown. Bill black; feet lake-red. S. R.

Mourning Dove. See page 126.

Birds with Mottled Feathers, Etc.

(Seen scratching on the ground like barnyard fowls)

Crown slightly crested. White forehead, eye line, and throat patch, edged with dark. Above variegated reddish brown. Below whitish, warming on the sides to reddish, with dark bars. Bill rusty black; legs not feathered. R.

BOB-WHITE. See page 127.

Slightly crested head, yellowish eye stripe, and neck mottled with reddish and dusky brown. Back variegated chestnut; lower parts lighter, with dark bars. Long tail, which spreads fanlike. Neck ruff of dark feathers; feathered legs. R.

Ruffed Grouse. See page 131.

Small and Medium-sized Birds of Boggy Meadows, Etc., Slender Bills, Usually Much Longer than the Head

Eyes large, set in upper corner of head. Short, thick neck, and compact body. Above variegated with brown, black, tawny, and gray; below brown, ranging from buff to tawny. Legs very short. Bill longer than head, straight and stout. S. R.

AMERICAN WOODCOCK. See page 132.

Slender, flesh-colored bill tipped with black, longer than the head. Above Quaker gray, with an iridescent lustre, spotted and streaked with black. White eye line. White below, dotted with black; feet flesh-colored. S. R.

SPOTTED SANDPIPER. See page 133.

(b) *Long-legged, Long-necked, Long-billed, Large Birds; Living in Wooded Swamps

Long black crest, the two longest feathers of which are shed in the summer moult. Upper parts and tail bluish slate, below black and white streaked, forehead and crown white. Bill yellow and dusky; feet and legs dark. (Very large Heron, often four feet long.) S. R.

GREAT BLUE HERON. See page 133.

Head with lengthened crest. Above dark glossy green, sometimes with an iridescence. Edging of wing coverts reddish. Neck a rich shade of chestnut, with purplish wash; white streak on the throat; under parts whitish, shading to ash below. S. R.

Green Heron. See page 134.

Above either dull or greenish black; tail, wings, and neck grayish. Throat and forehead whitish. Below livid white. Crest of three long white feathers often rolled into one. Bill black; legs yellow. S. R.

BLACK-CROWNED NIGHT HERON. See page 135.

(c) Water Birds

Ducks. See page 133.

OFF-SHORE BIRDS SEEN IN FLOCKS ON SANDBARS AND BEACHES AT LOW TIDE

Above grayish blue or "gull-blue," head and tail lighter; white below. Bill yellow, feet flesh-color. R.

AMERICAN HERRING GULL. See page 139.

Bill long, coral-red at base, black toward end, and tipped with yellow. Upper head and back of neck black. Entire back and wings light gray with a bluish wash. Tail coverts, most of tail, and wing linings white; below white and gray. Legs and feet light red. S. R.

COMMON TERN. See page 140.

Stout-bodied Diving Birds of Fresh and Salt Water

Bill black, edged with yellowish. Head, throat, and neck iridescent green, blue, and purplish. Triangular patches of black and white streaks on either side of the throat, almost joining at the back, and narrowing in front. Sides of breast streaked with black and white; under parts white. W. V.

Loon. See page 141.

^{*}The Snowy Heron from whose wedding plumage the "Egrets" of the Milliners are made, belongs to this family, see page 143.

Some bristling, frontal feathers, but no regular horns. Above dark brown, showy black markings on chin and throat. Breast and lower throat yellowish brown, irregularly spotted and barred on the upper parts; lower parts glossy white. Wings brown, gray, and white. Bill much spotted. W. V.

PIED-BILLED GREBE. See page 141.





XIV

ORDER PASSERES: PERCHING BIRDS SUB-ORDER OSCINES: SINGING BIRDS

Family Turdidae: Thrushes

Wood Thrush: Turdus mustelinus. S. R.

Plate II Fig. 1

Length: 7.50-8 inches.

Male and Female: Above tawny, deepest on head, tail olivaceous. Sides of throat light buff, middle of throat, breast, and belly white; sprinkled on sides with heart-shaped or triangular dark-brown spots. Whitish eye ring, bill dark brown, feet flesh-colored.

Song: A melody in which some notes have the effect of a stringed accompaniment. The syllables are uttered deliberately, about four seconds apart—"Uoli—a-e-o-li, uoli—uoli—uol—aeo-lee-leé!"

Season: Early May to October.

Nest: Of small twigs with a mud lining, sometimes saddled upon the boughs of evergreens not far from the trunk, or in small trees and bushes.

Eggs: Four usually, similar in color to the Robin's, but smaller.

Next to the American Robin, the Wood Thrush is the most widely known of its tribe. This bird is called shy by many writers, but here in Connecticut it is both abundant and sociable, feeding about the lawn in company with Robins, though it keeps more in shelter, skirting the shrubbery, as it scratches. Two pairs nested last season in the spruces below the lawn. Their nests so closely resemble the best efforts of the Robin, and the eggs being of a like color, that I had mistaken them until I saw the Thrushes in possession. These nests were made wholly of sticks, and lined thinly with clay; but two others that I found in the woods showed more varied materials. One was placed, some six feet from the ground, in a cedar bush close to a pool. The mud used to line the nest was full of Sphagnum, and of the water-soaked seed vessels of the sweet-pepper bush, which, mingled with dry beech leaves, made the nest very picturesque, while the mud was barely visible through the bedding of the

runners of *Potentilla*, to whose stems some identifying leaves still clung.

The Wood Thrush builds the middle or last of May, and as it comes often the very first day of the month and continues singing well into July, it gives us a goodly season of song. Wood Robin is one of its local names, but this is used, somewhat at random, for other Thrushes.

Burroughs says: "If we take the quality of melody as a test, the Wood Thrush, the Hermit Thrush, and the Veery Thrush stand at the head of our list of songsters."

The food of this Thrush consists of injurious insects and wild fruits, so that both farmer and gardener should think well of it. Aside from this its exquisite song would secure it a welcome in every copse or garden, even if it helped itself to a few cultivated berries.

THE WOOD THRUSH

He has a coat of cinnamon brown,
The brightest on his head and crown,
A very low cut vest of white
That shines like satin in the light,
And on his breast a hundred spots,
As if he wore a veil with dots;
With movement quick and full of grace,
The highbred manner of his race;
A very prince of birds is he
Whose form it is a joy to see.

And music — was there ever heard A sweeter song from any bird? Now clarion-like, so loud and clear Now like a whisper low and near, And now, again, with rhythmic swells And tinkling harmony of bells, He seems to play accompaniment Upon some harp-like instrument.

- Garrett Newkirk in Bird-Lore

WILSON'S THRUSH; VEERY: Turdus fuscescens. S. R.

Length: 7-7.50 inches.

Male and Female: No eye ring. Above evenly olive-brown, with a tawny cast. Throat buff, flecked on the sides with fine arrow-shaped brown spots. Breast and under parts white. Bill dark above, lower mandible light. Feet light.

Song: Ringing, echo-like. Professor Ridgway indicates it thus: "Taweel 'ah — taweel 'ah, twil-ah, twil-ah!"

Season: Early May to October.

Nest: Built either upon or near the ground, of sticks and twigs like that of the Wood Thrush, but lacking the mud.

Eggs: Like Robin and Wood Thrush, of a greenish blue, but smaller than either.

The Veery, the most slender and graceful of the Thrushes, is with us all the season, but it is so shy and elusive in its ways of slipping through the trees and underbrush in swampy woodlands that it seems scarcely an actual presence. Change a word in Wordsworth's verses on the Cuckoo and the description is perfect:

"O Veery! shall I call thee bird, Or but a wandering voice?"

When it first arrives, and before mating, the Veery is seen frequently in the garden, prying under dead leaves and in low bushes like all its insect-eating kin, but when it retires to the woods to nest all but the voice seems to vanish. That wonderful, haunting voice! It was a woodland mystery to me not so very long ago; a vocal Will-o'-the-Wisp. Leading on and on, up and down river banks, into wild grape tangles and clinging brush, then suddenly ceasing and leaving me to return as best I might.

Though the Veery sings in the morning chorus, and at intervals during the day, it is at twilight that we love best to hear him.

On a broken branch of a towering pine
Sits a small brown bird of modest mien.
The sunlit red from the western sky
Comes aslant the vine-clad trunk between.

Even the Catbird's song is stilled,

The scent from the meadow is cool and damp,

The van of the army of darkness comes

Into the forest and pitches camp.

At once there follows a song so fine,
So mellowed by distance, yet wondrous near.
At first we're doubtful if it be him—
So tender and muffled, so ringing and clear.

Chiming and trilling and answered afar,

Simple but bearing some mystic good;

For listen, the silence it does not mar,

Though filling each nook of the echoing wood.

— From "Wilson's Thrush," by W. G. Barton

AMERICAN ROBIN: Merula migratoria. R.

Length: 10 inches.

Male: Above olive-gray, head black, wings dark brown, tail black with white spot on two outer quills. Entire breast brick-red. Throat streaked with black and white. White eyelids. Bill yellow, dusky at tip; feet dark.

Female: Paler throughout, resembling the autumn plumage of the male.

Song: A vigorous interrogative melody, cheerful but somewhat lacking in variety. "Do you think what you do, do you think?" Call note, "Quick! Quick!"

Seasons Present all the year. The migratory flocks come in March and leave in October and early November.

Nest: On a horizontal branch, in a tree crotch, hedge, or strong vine.

Made of small sticks, plastered more or less and lined with mud.

Eggs: 4, of the peculiar green-blue, known by the name of the bird.

The Robin is found throughout the United States east of the Great Plains, and is represented farther west by a slightly different subspecies. It extends far north through Canada, and is found even in Alaska. Although the great bulk of the species leaves the northern states in winter, a few individuals remain in sheltered swamps, where wild berries furnish an abundant supply of food.

The Robin builds its nest in orchards and gardens, and occasionally takes advantage of a nook about the house, or under the shelter of the roof of a shed or outbuilding. Its food habits have sometimes caused apprehension to the fruit grower, for it is fond of cherries and other small fruits, particularly the earlier varieties. For this reason many complaints have been lodged against it, and some persons have gone so far as to condemn the bird. The Robin is, however, too valuable to be exterminated, and choice fruit can be readily protected from its depredations.

An examination of 330 stomachs shows that over 42 per cent. of its food is animal matter, principally insects, while the remainder is made up largely of small fruits or berries. Over 19 per cent. consists of beetles, about one-third of which are useful ground beetles, taken mostly in spring and fall, when other insects are scarce. Grasshoppers make up about one-tenth of the whole food, but in August comprise over 30 per cent. Caterpillars form about 6 per cent., while the rest of the animal food, about 7 per cent., is made up of various insects, with a few spiders, snails, and angle-worms. All the grass-

hoppers, caterpillars, and bugs, with a large portion of the beetles, are injurious, and it is safe to say that noxious insects comprise more than one-third of the robin's food. — $F.\ E.\ L.\ Beal,\ B.\ S.$

"In early March the Robins come flocking from the south, and those seen before this time are usually the roving winter residents. At first they sing most freely at noon or late in the afternoon, when their notes mingle with the peeping of the marsh-frogs, but with milder weather the Robin becomes the bird of dawn, whose persistent, regular melody unites the whole chorus.

"From this time until late July, at morning before twilight and at intervals all through the day, he sings, varying the accentuation of the melody, even while its range remains the same. At dawn he says, 'Cheerily, cheerily, cheer up, cheer up!' While one who sings every afternoon in the apple tree by my window says plainly, 'Do you think what you do, do you think what you do, do you think?'

"Wilson Flagg, who is always unique if sometimes inaccurate, writes, 'There is no bird that has fewer faults than the Robin, or would be more esteemed as a constant companion.' Passing over his habit of helping himself to the ripest cheek of cherry or strawberry — which is a trifling harm when compared with his good reputation as an insect destroyer, and which from a bird's standpoint of course is not a fault at all, — he has two radical defects that detract from the pleasure of his society. He is extremely and unnecessarily noisy in his cries of alarm when any one approaches his nest, not only in this way calling attention to its location, but setting the entire bird colony in an uproar. His sharp, useless call, given vehemently, often without cause, reminds one of the silly housewife who ran down the village street crying 'Fire! Fire!' — because, the damper being closed, her stove smoked." — M. O. W., in Birdcraft.

ROBIN'S MATE

Everybody praises Robin,
Singing early, singing late;
But who ever thinks of saying
A good word for Robin's mate?

Yet she's everything to Robin, Silent partner though she be; Source and theme and inspiration Of each madrigal and glee.

For as she with mute devotion
Shapes and curves the plastic nest,
Fashioning a tiny cradle
With the pressure of her breast,

So the love in that soft bosom

Moulds his being as 'twere clay,

Prints upon his breast the music

Of his most impassioned lay.

And when next you praise the Robin,
Flinging wide with tuneful gate
To his eager brood of love-notes,
Don't forget the Robin's Mate.

-Eliza Gilbert Ives

BLUEBIRD. Siala sialis. R.

Length: 6.50-7 inches.

Male: Azure-blue above. Wings blue with some dark edgings. Breast brick-red, lower parts white. Bill and feet black.

Female: Dull blue above. Breast paler and more rusty. Young with speckled breast and back.

Song: A sweet plaintive warble, seeming to say, "Dear! dear! think of it, think of it!" Burroughs says it continually calls "Purity, Purity"; in either case the accent is the same.

Season: A resident species, though the majority come early in March and retire to the South in late October.

Nest: Hardly to be called a structure, as it is usually merely a lining in a decayed knothole, a birdhouse, or the abandoned hole of the Woodpecker.

Eggs: 4-6, pale blue, shading sometimes to white.

"The common and familiar Bluebird (fig. 22) is an inhabitant of all the states east of the Rocky Mountains from the Gulf of Mexico northward into Canada. It winters as far north as southern Illinois in the Mississippi Valley, and Pennsylvania in the east; in spring it is one of the first migrants to arrive in the northern states, and is always welcomed as an indication of the final breaking up of winter. It frequents orchards and gardens, where it builds its nest in hollow trees, or takes advantage of a nesting box provided by the enterprising farmer's boy.

"So far as known, this bird has not been accused of stealing fruit or of preying upon any crops. An examination of 205 stomachs showed that 76 per cent. of the food consists of insects and their allies, while the other 24 per cent. is made up of various vegetable substances, found mostly in stomachs taken in winter. Beetles constitute 28 per cent. of the whole food, grasshoppers 22, caterpillars 11, and various insects, including quite a number of spiders, comprise the remainder of the insect diet. All these are more or less harmful. The destruction of grasshoppers is very noticeable in the months of August and September, when these insects form more than 60 per cent. of the diet.

"Bluebirds are so well known that it seems unnecessary to urge anything more in their favor; but in view of the fact that large numbers were destroyed during the severe storm of 1895, more than ordinary vigilance should be exercised in protecting them until they have regained their normal abundance." — F. E. L. Beal.

"When Nature made the Bluebird she wished to propitiate both the sky and the earth, so she gave him the color of one on his back and the hue of the other on his breast, and ordained that his appearance in spring should denote that the strife and war between these two elements was at an end. He is the peace-harbinger; in him the celestial and terrestrial strike hand and are fast friends." — John Burroughs.

BLUEBIRDS' GREETING

Over the mossy walls,
Above the slumbering fields,
Where yet the ground no fruitage yields,
Save as the sunlight falls
In dreams of harvest yellow,
What voice remembered calls—
So bubbling fresh, so soft and mellow?

A darting, azure-feathered arrow
From some lithe sapling's low curve fleet
The Bluebird, springing light and narrow,
Sings in flight, with gurglings sweet.

Family Sylviidae: Warblers, Kinglets

Subfamily Regulinae: Kinglets

GOLDEN-CROWNED KINGLET: Regulus satrapa. W. R.

Plate III Fig. 1

Length: 4 inches.

Male: Flame-colored crown spot edged with yellow and enclosed by black line. Above olive-green and yellowish olive, which is more decided on wings, rump, and tail. Under parts yellowish gray. Whitish line over eye. Bill and feet black.

Female: Crown yellow, no flame color or black line.

Song: A sharp call and a few notes. Mr. Brewster gives them as "Tzee-tzee-tzee, ti-ti-ter-ti-ti-ti-ti!"

Season: A fairly constant winter resident.

Nest: Bulky for the size of the bird. A ball of hair, moss, etc., often lined with feathers, placed on the high bough of an evergreen.

Eggs: 6-10, white, thickly speckled.

The dainty little Golden-crowned Kinglet shares with the Winter Wren and Hummingbird the distinction of being one of the three smallest birds in the United States. It is ranked as a winter resident, for, coming from the north with the Ruby-crowned species, it lingers well into the winter, passing southward in rigorous seasons, for a time in January and February, but returning very early in March en route to its northern breeding-grounds.

It has a decided preference for evergreens and searches tirelessly by the hour for insects in the rough bark, but it is so very small and restless that it may easily escape notice. My first discovery of the bird in the garden was in December, while looking in the spruces for the source of what I supposed to be the wiry note of some belated insect. A gleam of sunlight shooting through the branches touched the flaming crown of the Kinglet, who was quite close and eveing me inquisitively.

Owing to their hardiness, combined with their activity and small size, these Kinglets do a great deal toward the saving of both fruit and forest trees by clearing the twigs and buds of insects in their daily search for food.

Ruby-crowned Kinglet: Regulus calendula

Length: 4-4.50 inches.

Male: Vermilion spot on crown (which, however, does not always appear until the second year). Ash-gray head, back olive-gray, yellowish on tail. Wings brownish olive with yellow and white

edgings. Breast and under parts yellowish gray. Edges of eyelids white. Bill black, feet dark brown.

Female: Lacking the red head spot.

Song: A thin, metallic call note, like a vibrating wire. Song full, varied, and melodious; often heard here in the spring migration.

Season: In the migrations April-May and October-November.

Breeds: Mostly north of the United States.

In late autumn, even after a light November snow, these cheery, sociable, little birds come prying and peering about the orchard or garden fruit trees, examining every twig or nook which may conceal insects with profound interest. They remain at the most only a few weeks, but make us a similar visit in April on the return trip. I only know its call note, though its full song is often heard in the spring migration, and is said to be rich and sweet. Mr. Nehrling, who has heard it sing in central Wisconsin and northern Illinois, speaks of the "power, purity, and volume of the notes, their faultless modulation and long continuance." Dr. Coues says of it, "The Kinglet's exquisite vocalization defies description."

Family Paridae: Nuthatches and Titmice

CHICKADEE; BLACK-CAPPED TITMOUSE: Parus atricapillus. R. Plate I Fig. 1

Length: 5.50 inches.

Male and Female: No crest. Above gray with a brownish tinge. Crown and nape and chin and throat black; sides of head white. Below white, shading to light gray with brown wash. Wings and tail gray with white edgings. Bill and feet lead-black.

Song: Cheerful, conversational. "Chickadee-dee-dee-dee!" varied in winter with "Day, day, day!" and a whistle "Pè-we, pè-we."

Season: A resident.

Nest: Made of all sorts of soft material — wool, fur, feathers, and hair, placed in holes in tree stumps.

Eggs: 6-8, white, thickly sprinkled with warm brown.

This hardy little fellow, always cheery and lovable, is a familiar figure in our light woods and garden trees in autumn and winter, seeming, by his good-nature and energy, to be trying to console us, in a measure, for the loss of the tree-haunting summer Warblers.

The Chickadee adapts himself to all surroundings and to all circumstances, suiting his appetite to what he can find;

when insects fail, taking kindly to seeds, berries, cone-kernels, and crumbs.

The Chickadee breaks the silence of many winter days with his jovial notes, and fairly begs for companionship:

Chic-chicadeedee! saucy note
Out of sound heart and merry throat,
As if it said, "Good day, good sir!
Fine afternoon, old passenger!
Happy to meet you in these places,
Where January brings few faces."

-R. W. Emerson

THE REV. MR. CHICKADEE, D.D.

A little clergyman is he, With black and white cravat; He bears a coveted degree, And wears a soft silk hat.

With happy heart and merry voice, He braves the cold and heat; And to the loved one of his choice He whistles soft and sweet.

So overflowing is his strain,
That he could dub "D.D."
Young theologues with meagre brain
And bump of vanity.

His sect is congregational,

The wild woods are his church,
The wind his "choir invisible,"

His pulpit is a birch.

The sermon we should not forget:

"Happy and cheerful be,
Have diligence, be brave, don't fret,"
Says Chickadee, D.D.

- Florence A. Van Sant, Jay, Essex county, N. Y., in Bird-Lore

Family Paridae: Nuthatches and Titmice

Subfamily Sittinae: Nuthatches

WHITE-BREASTED NUTHATCH: Sitta carolinensis
Plate I Fig. 2

Length: 5.50-6 inches.

Male and Female: Body flat and compact. Above slate-blue. Top of head and nape black. Wings slate, edged with brown. Outer tail feathers brownish with white bars. Belly white, rusty to-

ward vent. Bill dark lead-color, feet dark brown. Female paler with color boundaries less distinctly marked.

Song: A call, "Quank-quank!" and a few other notes.

Season: A common resident, roving about all winter.

Nest: In tree holes, which it excavates with great patience, and lines

with feathers, moss, etc., after the fashion of Titmice.

Eggs: Often 10, white, speckled with red and lilac.

This Nuthatch, who is our most conspicuous bird-acrobat, persistently walking head downward and performing various tortuous feats while he searches for food, is a resident of the eastern United States, only leaving the most northerly parts of his range for a short time in winter.

Though this bird may be about all the summer it is rather quiet and shy in the nesting season, and it is not until the bright summer birds suddenly vanish and the red leaves of the fine-figured Virginia creeper cling to the tree trunks that we begin to notice the Nuthatches in their costumes of gray and white, set off with a black cap and collar.

Then we see them running head downward along the treetrunks, woodpecker fashion, and, if we set up a lunch counter, we may count upon them as regular customers.

As insect eaters and grub destroyers they are in the first grade and at the head of the class.

They have the curious habit of sleeping head downward, and one cold night last winter I found that a pair who fed daily about the great apple tree were sleeping snug and warm behind a lantern that was fastened to a board against the side of the tree to light the approach to the house.

TO A NUTHATCH

Shrewd little hunter of woods all gray, Whom I meet on my walk of a winter day, You're busy inspecting each cranny and hole In the ragged bark of yon hickory bole; You intent on your task, and I on the law Of your wonderful head and gymnastic claw!

The Woodpecker well may despair of this feat—Only the fly with you can compete.

So much is clear; but I fain would know
How you can so reckless and fearless go,
Head upward, head downward, all one to you,
Zenith and nadir the same to your view.

-Edith Thomas.

RED-BREASTED NUTHATCH: Sitta canadensis. W. R.

Length: 4.50-4.75 inches.

Male: Above lead-colored, brownish on wings and tail. Crown and sides of neck black. White stripe over eye, meeting on brow. Under parts rust-red. Bill dark lead-color, feet lead-brown.

Female: Paler, crown and back of one color.

Song: Note — "Day-day-day-dait!"

Season: A winter resident in Connecticut, but seen most frequently in early spring and late autumn.

This species, like the preceding, and the whole family, in fact, walk head down around the trunks of trees, and often roost in this singular fashion. Their bright coloring makes them particularly noticeable among the leafless trees. They come about the garden every spring, but more particularly in late November, when I have noted them in numbers; they search the bark of the orchard trees, at this time, with all the care of the Kinglets. Notwithstanding, this species does not seem to be considered by some authorities a common bird in Connecticut.

Possibly they favor me because of the reputation of the lunch counter in the apple tree.

Family Certhiidae: Creepers

Brown Creeper: Certhia familiaris americana. W. V.

Plate III Fig. 2

Length: 5.50 inches.

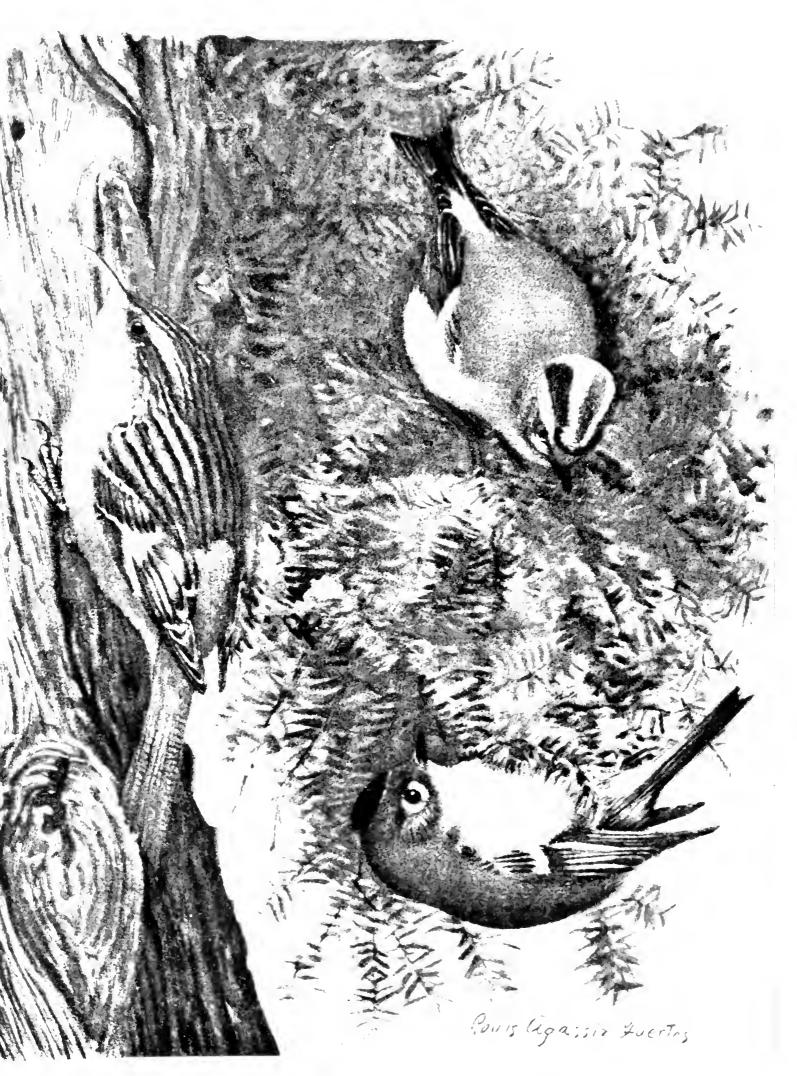
Male and Female: Above brown and ashy-white striped, the brown being of several shades, growing more red on rump. Tail pale brown. Throat, breast, and belly grayish white. Slender, curving bill, black above, yellowish below. Feet brown.

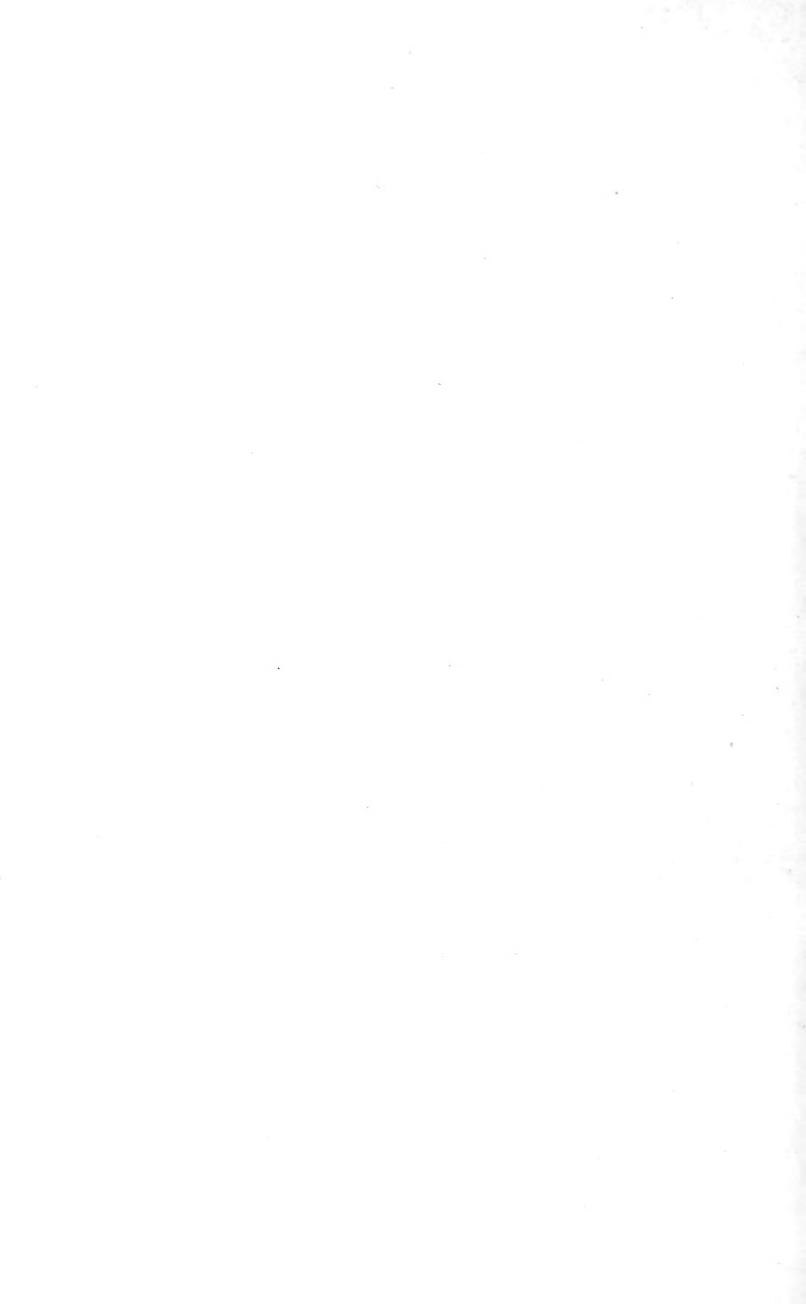
Song: Wild and sweet, but difficult of syllabication. Call note short and lisping.

Season: Winter resident, common from September to April.

The Brown Creeper is one of the tree-trunk birds that, together with the Woodpeckers and Nuthatches, are chiefly to be seen when prying their food from the crevices of the bark. The Creeper is the most difficult to observe of them all, for his coloring is a mixture of browns and grays that blend with the bark upon which he rests.

He has a very peculiar way of going up the tree-trunk, as if ascending a spiral staircase and then flitting backward to the bottom and climbing all over again.





At a distance this Creeper moves and looks like a mouse in feathers, but close at hand it will be seen that it has beautifully-marked plumage, a fine, curved, needlelike bill, and that the feathers of the tail, which he spreads like a bracket to support himself when at rest, end in sharp points, that give it a firm grip.

On a mild winter day, when the top sash was lowered, one of these Creepers flew into my room and clung to a picture frame, so that I had a good chance to examine it, and, though it was there but a few moments, its bright eyes saw some small insect, probably a spider, in a picture cord, which it quickly snapped up.

THE LITTLE BROWN CREEPER

"Although I'm a bird, I give you my word
That seldom you'll know me to fly;
For I have a notion about locomotion,
The little Brown Creeper am I,
Dear little Brown Creeper am I.

"Beginning below, I search as I go
The trunk and the limbs of a tree,
For a fly or a slug, a beetle or bug;
They're better than candy for me,
Far better than candy for me.

"When people are nigh I'm apt to be shy,
And say to myself, 'I will hide,'
Continue my creeping, but carefully keeping
Away on the opposite side,
Well around on the opposite side.

"Yet sometimes I peek while I play hide and seek,
If you're nice I shall wish to see you;
I'll make a faint sound and come quite around,
And creep like a mouse in full view,
Very much like a mouse to your view."

- Garrett Newkirk in Bird-Lore

Family Troglodytidae: Wrens, Thrashers, Catbirds, Etc.

CATBIRD: Galeoscoptes carolinensis. S. R.

Length: 8.50-9 inches.

Male and Female: Above clear, deep slate. Under parts lighter gray. Crown and tail black. Vent rust-red. Bill and feet black.

Song: A brilliant recitative, varied and inimitable, beginning, "Prut! prut! coquillicot! really, really, coquillicot! Hey coquillicot! Hey! Victory!" Alarm cry, "Zeay! zeay!" like a metallic mewing.

Season: Early May to October and November.

Nest: In bushes, of the type of the nests of the Thrushes, but without clay.

Eggs: 4-6, clear green-blue.

What should we do without the Catbird, the merry, mischievous mocker, all dressed in a parson's suit of dark drab, with a solemn black cap on a head that is as full of tricks as his throat is of music?

"Ah," you say, "yes, I know that he is a jolly musician, but my father says that he bites the best strawberries and cherries, and always on the ripest cheek!"

Well, so he does *sometimes*; but his ancestors lived on that spot where your garden stands before yours did, and you have more ways of earning a living than he has. Give him something else to eat.

The remedy is obvious: cultivated fruits can be protected by the simple expedient of planting wild species or others which are preferred by the birds. Some experiments with Catbirds in captivity showed that the Russian mulberry was preferred to any cultivated fruit that could be offered.

The stomachs of 213 Catbirds were examined and found to contain 44 per cent. of animal (insect) and 56 per cent. of vegetable food. Ants, beetles, caterpillars, and grasshoppers constitute three-fourths of the animal food, the remainder being made up of bugs, miscellaneous insects, and spiders. One-third of the vegetable food consists of cultivated fruits, or those which may be cultivated, such as strawberries, raspberries, and blackberries; but while we debit the bird with the whole of this, it is probable—and in the eastern and well-wooded part of the country almost certain—that a large part was obtained from wild vines. The rest of the vegetable matter is mostly wild fruit, such as cherries, dogwood, sour gum, elderberries, greenbrier, spice berries, black alder, sumac, and poison ivy.

Although the Catbird sometimes does considerable harm by destroying small fruit, the bird can not be considered injurious. On the contrary, in most parts of the country it does far more good than harm, and the evil it does can be reduced appreciably by the methods already pointed out.

THE CATBIRD

He sits on a branch of yon blossoming bush,
This madcap cousin of Robin and Thrush,
And sings without ceasing the whole morning long!
Now wild, now tender, the wayward song
That flows from his soft, gray, fluttering throat.
But often he stops in his sweetest note,
And, shaking a flower from the blossoming bough,
Drawls out, "Mi-ew, mi-ou!"

-Edith Thomas

Brown Thrasher: Harporhynchus rufus. S. R.

Length: 11 inches.

Male and Female: Above reddish brown, darker on wings. Beneath yellowish white, with brown, arrow-shaped spots on breast and sides. Wings with two whitish bands. Tail very long. Female paler. Bill black, lower mandible yellow at base; feet light.

Song: Bravura style, with frequent colloquial strains.

Season: Last week in April to early in October.

Nest: In low shrubbery or thickly-leaved tree, a boldly-made structure of grape-vine, bark, grasses, twigs, and rootlets. In sandy localities, generally on the ground.

Eggs: 4, green, sometimes paling to white, thickly speckled with brown.

Song Thrush, Red Thrush, Brown Mocking-bird, Mavis, are four of the local names for this most exultant and (quantity and quality considered) dashing of our song-birds. He arrives from late April to early May, and, after a week or so of almost uninterrupted music, settles down and prepares his nest.

The Brown Thrasher breeds throughout the United States east of the Great Plains, and winters in the south Atlantic and Gulf States. It occasionally visits the garden or orchard, but nests in swamps or in groves standing upon low ground. While it generally prefers a thickly-grown retreat, it sometimes builds in a pile of brush at a distance from trees. On account of its more retiring habits it is not so conspicuous as the robin, although it may be equally abundant. Few birds can excel the Thrasher in sweetness of song, but it is so shy that its notes are not heard often enough to be appreciated. Its favorite time for singing is the early morning, when, perched on the top of some tall bush or low tree, it gives an exhibition of vocal powers which would do credit to a Mocking-bird.

Indeed, in the south, where the latter bird is abundant, the Thrasher is known as the Sandy Mocker.

The food of the Brown Thrasher consists of both fruit and insects. An examination of 121 stomachs showed 36 per cent. of vegetable and 64 of animal food, practically all insects, and mostly taken in spring before fruit is ripe. Half the insects were beetles, and the remainder chiefly grasshoppers, caterpillars, bugs, and spiders.

Wild fruits and seeds, a few cultivated berries, and a few odd kernels of corn and grain make up its food; but it pays for these many times over by the May beetles it eats at the same time.

House Wren: Troglodytes aëdon. S. R.

Length: 4.50-5.25 inches.

Male and Female: Dark brown above, minutely barred with blackish. Under parts gray with brownish wash and faint bandings. Fairly long tail. Bill black above, lower mandible light; feet brown.

Song: A merry roulade, sudden, abruptly ended and frequently repeated.

Season: Middle of April to October.

Nest: A loose heap of sticks with a soft lining, in holes, boxes, etc. Eggs: 6-10, cream-color, so thickly spotted with brown that the whole egg is tinged.

The diminutive House Wren frequents barns and gardens, and particularly old orchards in which the trees are partially decayed. He makes his nest in a hollow branch, where perhaps a Woodpecker had a domicile the year before; but he is a pugnacious character, and if he happens to fancy one of the boxes that have been put up for the Bluebirds he does not hesitate to take it. He is usually received with favor, and is not slow to avail himself of boxes, gourds, tin cans, or empty jars placed for his accommodation.

As regards food habits, the House Wren is entirely beneficial. Practically, he can be said to live upon animal food alone, for an examination of 52 stomachs showed that 98 per cent. of the stomach contents was made up of insects or their allies, and only 2 per cent. was vegetable, including bits of grass and similar matter, evidently taken by accident with the insects. Half of this food consisted of grasshoppers and beetles; the remainder of caterpillars, bugs, and spiders. As

the House Wren is a prolific breeder, frequently rearing from twelve to sixteen young in a season, a family of these birds must cause considerable reduction in the number of insects in a garden. Wrens are industrious foragers, searching every tree, shrub, or vine for caterpillars, examining every post and rail of the fence, and every cranny in the wall for insects or spiders. They do not, as a rule, fly far afield, but work near home, and if suitable nesting boxes are provided them they may be induced to stay where they will do the most good. Almost anything will serve for a house, an old cigar box, a tomato can, a teapot, or a boot.

It does not seem possible to have too many Wrens, and every effort should be made to protect them and encourage them to nest about the house.

WINTER WREN: Troglodytes hiemalis. W. V.

Length: 3.90-4.10 inches.

Male and Female: Color very similar to House Wren, but the under parts rusty, dimly and finely barred with dark. Tail and bill short, the latter dark, and slender; feet dark.

Song: Strong and very musical; not often heard here. Call note, "tr-r-r-r-r."

Season: Winter resident, arriving often in October. A summer resident of northern New England.

Nest: In odd nooks, crevices, logs, etc. Of twigs mixed with moss, hair, and feathers.

Eggs: 5-8, pure white, finely dotted with purple and brown.

Long after the last House Wren has left his box, and his scolding wife Jenny has given up housekeeping and started on a summer outing for her health, you will see a tiny, brown bird hopping about the brush-heap or wood-pile. If you do not think much about it you will mistake the bird for a House Wren, but if you have an eye for size you will see that it is smaller, and when the snow comes, and the merry little bird is still there, you may be sure that it is the Winter Wren, the second of the three "littlest" American birds.

Last year a Winter Wren with only one leg spent the winter with us, and it was a lesson in patience to see how bravely he held his own against wind and weather and hopped about steadying himself with his wings.

SHORT-BILLED MARSH WREN: Cistothorus stellaris. S. R.

Length: 4.50.

Male and Female: Brown above; white beneath, washed with rusty. Crown and part of back streaked with black and white. White line over eye. Very short bill. Brown feet.

Song: "Che, 'chet, de-de-de-de!"

Season: May to September.

Nest: In marshy meadows; either suspended between weeds and grasses or on a tussock. Closed at top, with entrance at side.

Eggs: 6-9; pure white.

A bird of wet meadows and reedy marshes, very shy and elusive, diving the grasses as a seabird does in the water. This as well as the next species has a habit of building several nests more than it uses. The reason for which is largely a matter of conjecture, though it has been thought to be a device for luring prowlers away from the real nest that contains the eggs.

LONG-BILLED MARSH WREN: Cistothorus palustris. S. R.

Length: About 5 inches.

Male and Female: Above clear brown. Whitish line over eye. Neck and back streaked sparingly with white. Wings and tail brown, the latter barred. Below, white, washed with pale brown. Bill nearly as long as head. Dark above; lower mandible light. Feet brown.

Song: Suggestive of the House Wren, but less agreeable, and at times quite harsh.

Season: Summer resident. Early May to September.

Nest: Along river borders. Made of sedge and grasses suspended between tall reeds, above tide level. Rather bulky, with entrance on one side.

Eggs: 6-10, chocolate-brown.

These Wrens have all the alert ways and nervous habits of the family. They inhabit marshy and reedy river wastes, and often build their torch-shaped nests in little colonies. They are abundant summer residents all along the Housatonic River, from Stratford upward, following the course of tide rivers in preference to smaller streams. It has a clear song, but there are some notes in it that suggest a marsh frog.

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2 AMERICAN REDSTART

BLACK-AND-WHITE WARBLER

Family Mniotiltidae: Wood Warblers

BLACK-AND-WHITE WARBLER OR BLACK-AND-WHITE CREEPER: Mniotilta varia. S. R.

Plate IV Fig. 1

Length: About 5 inches.

Male and Female: Above striped black and white. White stripe on top of head, bordered by black stripe. White stripe over eye. Black cheeks and throat, separated by a black line. Breast white in middle, black stripe on sides. Wings and tail black; wings with two white crossbars and some white edgings, tail with white markings on outer quills. Bill and feet black. Female paler stripings, less distinct. Strong resemblance to the Dozony Woodpecker.

Song: Feeble and lisping, "Weachy, weachy, weachy, 'twee, 'twee, 'twee,' tweet."

Season: April to late September.

Nest: Low down, either on a stump or the ground, composed of bark, grass, leaves, hair. Very difficult to find.

Eggs: 4-5, white, dotted thickly with red and brown.

The Black-and-White Warbler is one of the most familiar and sociable of the Warblers. At first you will doubtless think it a small Woodpecker, as it is seen principally scrambling around tree trunks searching for the insect food upon which it, together with the entire family of Warblers, subsists.

This Warbler is not a pretty bird, and reminds one of the Nuthatches more than of the graceful family to which it belongs.

In watching the manœuvres of all bark-feeding birds, you must keep in mind that the eyes of birds are powerful magnifiers, and that to them objects appear twenty-five times as large as they do to us.

YELLOW WARBLER: Dendroica aestiva. S. R.

Summer Yellowbird

Length: 4.75-5 inches.

Male and Female: Above rich olive-yellow, brightening on the rump; breast and under parts golden-yellow. Breast streaked with cinnamon-brown. Wings and tail olive-brown edged with yellow. Bill lead-colored; feet light brown. Female darker with streaks on breast faintly marked or absent.

Song: Rapid warble, "Sweet - sweet - s

Season: First week in May to middle September.

Nest: In the crotch of some terminal branch of a fruit tree, or stout shrub, made of the frayings of milkweed stalks lined with fern wool and hair.

Eggs: 4-5, greenish or grayish white, spotted and blotched with lilac tints and red-browns.

In early May, often on May-day itself, if the weather is clement, when the marsh-marigolds are vanishing from the swamps, and the cherry trees are in bloom, the Yellow Warblers descend upon the gardens and orchards.

They come like whirling leaves, half autumn yellow, half green of spring, the colors blending as in the outer petals of grass-grown daffodils. Lovable, cheerful little spirits, darting about the trees, exclaiming at each morsel that they glean. Carrying sun glints on their backs wherever they go, they should make the gloomiest misanthrope feel the season's charm. They are so sociable and confiding, feeling as much at home in the trees by the house as in seclusion.

"This is probably the best known representative of the large and very attractive Warbler family. This bird, unlike the majority of the family, frequents gardens and the edges of streams and ponds, and its bright song and color render it more noticeable than many of its relatives. The Yellow Warbler reaches New England about the first of May, and soon has completed a neat cup-shaped nest of soft fibrous material, placed either in a fork of an apple tree or in some low bush. eggs, from four to five in number, are grayish or greenish white, blotched or spotted with lilac or brown. The female is not as brightly colored as the male, and lacks the orange streaks on the breast. The song of the bird differs at different times, sometimes it is loud and shrill, at other times more gentle and plaintive. It sings constantly from its arrival to its departure, which takes place toward the end of August. The winter months are spent in tropical America. The Yellow Warbler's food consists chiefly of insects, which it seeks among the leaves with the restless activity characteristic of the family. The female frequently shows a high degree of intelligence in ridding herself of the egg which the Cowbird often lays in her This she accomplishes by building another bottom over the intruder's egg and laying again. Three-story nests have occasionally been found." — Ralph Hoffman, in Audubon Bird Chart Guide.

MYRTLE WARBLER: Dendroica coronata. W. R.

Yellow-rumped Warbler

Length: 5.50 inches.

Male: Slate color, striped and streaked with black. Crown, sides of breast, and rump yellow. Below whitish; upper breast black. Two white crossbars on wings; tail with white spots. In winter, brownish olive; yellow of rump constant, but lacking on crown and breast. Bill and feet black.

Female: Resembling the winter male.

Song: A few notes only — "Twhip-twéeter-twéeter."

Season: Most plentiful Warbler in the migrations, and also a winter resident.

Nest: In low shrubs, particularly evergreens.

Eggs: 4-6, the usual Warbler variety.

You will notice this little Warbler in his dull winter plumage chiefly by the fact that he appears when any bird is a rarity, but when he puts on his spring plumage he becomes a real dandy in his gold-trimmed suit.

OVENBIRD; GOLDEN-CROWNED THRUSH: Seiurus aurocapillus. S. R.

Length: 5.75-6.50 inches.

Male and Female: Olive-green above, white eye ring, two brown stripes on head, enclosing an orange crown. White below, with brownish spots in the center of breast running into streaks on the sides. Brown bill, legs and feet flesh-colored.

Song: Call note, "Teacher-teacher!" given in gradual crescendo. The love-song liquid like that of the Water Thrush, but seldom heard.

Season: May to October.

Nest: A ball of leaves and grasses on the ground with a side opening, hence the name Ovenbird, though the nest bears a closer resemblance to the earth huts the Italian laborers build.

Eggs: 4, cream-white, specked with brown-purple.

With the Ground Warblers we come again to birds with musical voices, who, even if they do wear more sober plumage, are a welcome change from the lisping prettiness of the previous groups.

Like many another Warbler you will hear the Ovenbird far oftener than you will see it, for it hides both its ovenlike nest and itself well in the leaves, and you would never imagine its loud call from high in the air could come from so slender a throat.

Burroughs says: "The Ground Warblers all have one

notable feature, — very beautiful legs, as white and delicate as if they had always worn silk stockings and satin slippers. High Tree Warblers have dark brown or black legs and more brilliant plumage, but less musical ability."

OVENBIRD

See him as he struts around!

Who could be more dignified?

Perhaps it is his golden crown

That lends that air of foolish pride.

With olive back and spotted breast,

He thinks he's cousin to the Thrush!

Well, I'll tell you, but don't tell him,

He's but a little warbler! Hush!

— Faith C. Lee in Bird-Lore

MARYLAND YELLOW-THROAT: Geothlypis trichas. S. R.

Length: 5-5.50 inches.

Male: Above grayish olive on head, clearing to bright olive on rump.

Under parts, under wing and tail coverts, beautiful yellow,
grading to white in middle of belly. Forehead and sides of head
masked with black, separated by ash-white line from crown.
Black bill; flesh-colored feet.

Female: Smaller, and colors less distinct; mask wanting, as it is also in the young.

Song: "Follow me, follow me, follow me!"

Season: From May to September. Common summer resident.

Breeds: From Georgia northward.

Nest: Large and deep, sometimes partly roofed over; made of broad grasses, either on ground or in bushy tangles.

Eggs: 4-6, white, sparsely sprinkled with brown.

Range: Eastern United States, mainly east of the Alleghanies, north to Ontario and Nova Scotia; in winter, South Atlantic and Gulf states and the West Indies.

Next to the Yellow-Wood Warbler, this Ground Warbler is the best known and merriest of the entire clan, and easily identified by his mask, yellow throat, and distinctive song.

THE MARYLAND YELLOW-THROAT

While May bedecks the naked trees. With tassels and embroideries, And many blue-eyed violets beam Along the edges of the stream, I hear a voice that seems to say, Now near at hand, now far away, "Witchery-witchery-witchery!"

An incantation so serene,
So innocent, befits the scene;
There's magic in that small bird's note.
See! there he flits—the Yellow-throat;
A living sunbeam, tipped with wings,
A spark of light that shines and sings,
"Witchery-witchery-witchery!"

—Henry Van Dyke

YELLOW-BREASTED CHAT: Icteria virens. S. R.

Length: 7.50 inches.

Male and Female: Olive-green above; brilliant yellow throat, breast, and wing linings. Whitish belly, white line over eye, and white spot beneath. Brownish glaze on wings and tail. Strong, curving, blue-black beak. Feet lead-colored.

Song: A varied whistle, with a decided ventriloquistic quality, interspersed with mocking syllables.

Season: Common summer resident. May to September.

Nest: Bulky, made of leaves, bark, and dead twigs, lined with grasses; placed in briary and inaccessible bushes.

Eggs: 3-4, often of unequal size, white, mottled with buff and spotted with red and lilac.

A bird easily recognized by its large size and brilliant color. The Chat has reversed the motto so often preached at children, and is *heard* more than *seen*. When seen, however, it is the picture of healthy, well-groomed beauty, with a voice at once powerful and melodious, and a reputation for shyness of disposition, which trait takes the form of a bewitching elusiveness that it seems to know is very attractive.

Its call notes, and the mocking gibes which it utters from the bushes to the distraction of the bewildered passer-by, are wholly different from the fervent spring song. Then it yields to an ecstasy of feeling, and soars singing into the air, trailing its long legs behind like a Heron, and looking, it must be confessed, very foolish; but after a few weeks it abandons its aerial gymnastics and contents itself with taunting, teasing, and misleading both man, beast, and bird.

If you chance to find yourself in a lonely brush-grown lane and a clear, ringing whistle makes you think that some one is calling you, think twice before you are led into the tangle, for most likely it is Sir Deceiver, the Chat, and if you follow his voice you may stumble into a leaf-covered spring hole.

AMERICAN REDSTART: Setophaga ruticilla. S. R.

Plate IV Fig 2

Length: 5-5.50 inches.

Male: Above brilliant blue-black, white belly, sides of body and wing linings salmon-orange, which color sometimes flushes the breast. Some orange on base of wings; tail feathers half orange and half black. Bill and feet black.

Female: Brownish olive above and the orange of the male replaced by vellow.

Song: Resembling that of the Yellow Warbler, "Sweet, Sweet, Sweeter!" but the word is only used three times, while it is repeated seven times by the Warbler.

Season: May to September; a common summer resident.

Nest: A carefully made structure of moss fibres and sometimes horsehair, set in a forked branch usually about twenty feet from the ground; I have seen one at the top of a small spruce.

Eggs: Indistinguishable from other Warblers.

In brilliancy of flame-like coloring the Redstart only yields precedence to the Scarlet Tanager, Baltimore Oriole, and the Blackburnian Warbler, and, in contrast to the dark evergreens, it seems a wind-blown firebrand, half glowing, half charred.

A dainty and beautiful bird, with a habit of fluttering backward like a butterfly, that will help you to identify it; while besides its beauty, it does valiant work by eating the insects of terminal sprays, and never a bit of harm.

Family Vireonidae: Vireos

RED-EYED VIREO: Vireo olivaceus. S. R.

Plate V Fig. 2

Length: 5.75-6.25 inches.

Male and Female: Olive-green above, crown ash with a dark marginal line. White line over eye and a brownish stripe through it. Below whitish, shaded with greenish yellow on sides and on under tail and wing coverts. The iris ruby-red. Bill dusky above and light below, feet lead-colored.

Song: Emphatic staccato and oratorical—"You see it—you know it—do you hear me? Do you believe it?"

Season: Common summer resident; late April through September.

Nest: Cup-like, pensile in slender forked branch of maple, birch, or apple tree; made of bark fibres, cobwebs, bits of paper, scraps of hornets' nests, etc.

Eggs: 3-5, usually 4, white, with brown spots on the larger end.

The Vireos are a very interesting family, which, though it may be somewhat overlooked in the general spring chorus, comes to the front in the latter part of May. Of the six Vireos that inhabit New England, five are reasonably plentiful, and of these the Red-eyed is the most familiar. You cannot fail to name this Vireo, for he is omnipresent; if you do not see him, you hear him; if he chances to be silent, which seldom happens, he peers at you with his sparkling, ruby eyes that look out between a white line and a brown stripe. Wilson Flagg has forever identified him with the name of the *Preacher*, in reference to his elocutionary powers. "You see it—you know it,—do you hear me? Do you believe it?" he hears the Vireo say, and if you keep these words in your mind you will recognize the bird the first time that you hear his song.

RED-EYED VIREO

When overhead you hear a bird
Who talks, or rather, chatters,
Of all the latest woodland news,
And other trivial matters,
Who is so kind, so very kind,
She never can say no,
And so the nasty Cowbird
Drops an egg among her row
Of neat white eggs. Behold her then,
The Red-eyed Vireo!

-Faith C. Lee in Bird-Lore

Family Laniidae: Shrikes

NORTHERN SHRIKE: Lanius borealis. W. V.

Butcher-bird

Length: 9-10.50 inches.

Male and Female: Powerful head, neck, and blackish beak with hooked point. Above bluish ash, lighter on the rump and shoulders. Wide black bar on each side of head from the eye backward. Below light gray with a brownish cast, broken on breast and sides by waved lines of darker gray. Wings and tail black, edged and tipped with white. Large white spot on wings, white tips and edges to outer quills of tail. Legs bluish black.

Song: A call note, and in its breeding-haunts a sweet, warbling song. Season: A roving winter resident; seen from November to April.

Breeds: North of the United States.

Nest: In a low bush; a basis of sticks, upon which is matted and felted

a thick, warm superstructure of bark-strip, grass, and soft vegetable substance. (Coues.)

Eggs: 4-6; marblings of reddish brown and purple covering the gray-green ground.

Range: Northern North America, south in winter to the middle portions of the United States (Washington, D. C.; Kentucky, Kansas, Colorado, Arizona, northern California).

The Northern Shrike, though somewhat irregular in its comings and goings, is always present in varying numbers as a winter resident. In common with all winter birds, its movements are guided by the food supply, and if severe cold and heavy snows drive away the small birds and bury the mice upon which it feeds, the Shrike must necessarily rove.

Grasshoppers, beetles, other large insects, and field mice are staple articles of its food in seasons when they are obtainable; in fact, next to insects, mice constitute the staple article of its diet, and protection should be accorded it on this account, even though we know the Shrike chiefly as the killer of small birds. The victims are caught by two methods: sneaking, - after the fashion of Crows, - and dropping upon them suddenly from a height like the small Hawks. In the former case the Shrikes frequent clumps of bushes, either in open meadows or gardens, lure the little birds by imitating their call notes, and then seize them as soon as they come within range. They often kill many more birds than they can possibly eat at a meal, and hang them on the spikes of a thorn or on the hooks of a cat-briar in some convenient spot, until they are needed, in the same manner as a butcher hangs his meat, and from this trait the name Butcher-bird was given them.

Family Ampelidae: Waxwings

CEDAR WAXWING: Ampelis cedrorum. R.

Cedar-bird

Plate V Fig. 1

Length: 6.50-7.25 inches.

Male and Female: Above grayish cinnamon. Crest, breast, throat, wings, and tail purplish cinnamon. Black line from back of crest, extending through eye, and forming black frontlets. Secondary wing quills tipped with waxy points. Tail feathers banded with yellow, and sometimes red tips. Bill and feet black.

Song: A buzzing call—"Tweé, tweé, zeé." "A dreary whisper,"
Minot calls it.





Season: A resident, breeding here, and wandering about in flocks the remainder of the year, feeding upon various fruits, and in winter upon cedar berries.

Nest: A deep bowl made of twigs, lined with grass and feathers, and much miscellaneous material, either in a crotch, or saddled on the limb of a stout cedar bush or a tree, preferably the apple tree.

Eggs: 3-5, blue-white, with brown and lilac spots.

You will at once recognize the Cedar Waxwing by its crest, yellow tail tips, red wing appendages, and straight black bill. Its feathers are more exquisitely shaded than those of our more brilliantly colored birds.

The Cedar Waxwing, or Cherry Bird, inhabits the whole of the United States, but is much less common in the west. Although the great bulk of the species retires southward in winter, the bird is occasionally found in every state during the colder months, especially if wild berries are abundant. Its proverbial fondness for cherries has given rise to its popular name, and much complaint has been made on account of the fruit eaten. Observation has shown, however, that its depredations are confined to trees on which the fruit ripens earliest.

THE SWALLOWS.

There are seven common species of Swallows within the limits of the United States, four of which have, to some extent, abandoned their primitive nesting habits and attached themselves to the abodes of man. As a group, Swallows are gregarious and social in an eminent degree. Some species build nests in large colonies, occasionally numbering thousands; in the case of others only two or three pairs are found together; while still others nest habitually in single pairs.

Their habits are too familiar to require any extended description. Their industry and tirelessness are wonderful, and during the day it is rare to see Swallows at rest except just before their departure for the south, when they assemble upon telegraph wires or upon the roofs of buildings, apparently making plans for the journey.

A noticeable characteristic of several of the species is their attachment to man. In the eastern part of the country the Barn Swallow (*Chelidon erythrogastra*) now builds exclusively under roofs, having entirely abandoned the rock caves

and cliffs in which it formerly nested. More recently the Cliff Swallow (Petrochelidon lunifrons) has found a better nesting site under the eaves of buildings than was afforded by the overhanging cliffs of earth or stone which it once used, and to which it still resorts occasionally in the east, and habitually in the unsettled west. The Martin (Progne subis) and White-bellied Swallow (Tachycineta bicolor) nest either in houses supplied for the purpose, in abandoned nests of Woodpeckers, or in natural crannies in rocks. The other species have not yet abandoned their primitive habitats, but possibly may do so as the country becomes more thickly settled.

Field observation will convince any ordinarily attentive person that the food of Swallows must consist of the smaller insects captured in mid-air, or perhaps in some cases picked from the tops of tall grass or weeds. This observation is borne out by an examination of stomachs, which shows that the food consists of many small species of beetles which are much on the wing; many species of Diptera (mosquitoes and their allies), with large quantities of flying ants and a few insects of similar kinds. Most of them are either injurious or annoying, and the numbers destroyed by Swallows are not only beyond calculation, but almost beyond imagination.

The White-bellied Swallow eats a considerable number of berries of the bayberry, or wax myrtle. During migrations and in winter it has a habit of roosting in these shrubs, and it probably obtains the fruit at that time.

It is a mistake to tear down the nests of a colony of Cliff Swallows from the eaves of a barn, for so far from disfiguring a building the nests make a picturesque addition, and their presence should be encouraged by every device. It is said that Cliff and Barn Swallows can be induced to build their nests in a particular locality, otherwise suitable, by providing a quantity of mud to be used as mortar. Barn Swallows may also be encouraged by cutting a small hole in the gable of the barn, while Martins and White-bellied Swallows will be grateful for boxes like those for the Bluebird, but placed in some higher situation.

-F. E. L. Beal, B.S.

Family Hirundinidae: Swallows

PURPLE MARTIN: Progne subis. S. R.

Length: 7.50 inches.

Male and Female: Deep, glossy, bluish purple, turning to black on

wings and tail, which is forked. Bill dark; feet black. Female more brownish and mottled, below grayish white.

Song: Very soft and musical, beginning "peuo-peuo-peuo."

Season: Late April to early September.

Nest: A little heap of leaves; in the East in boxes, but in the West in hollow trees.

Eggs: 4-6, glossy white.

Without being precisely a common bird, the Purple Martin is with us every summer, and its iridescent coat is a familiar sight. Its size and color easily separate it from the rest of the family, and the sweet song completes the identification.

A little after dawn, in early May, you may see pairs of these Martins hovering in mid-air, half caressing, half quarrelling, while from time to time you will hear the liquid "peuopeuo-peuo" merging into a more throaty ripple, like laughter.

BARN SWALLOW: Chelidon erythrogaster. S. R.

Length: Variable, 6-7 inches.

Male and Female: Glistening steel-blue back, tail deeply forked.

Brow and under parts rich buff, which warms almost to brickred on throat. A partial steel-blue collar. Tail shows white
band from beneath. Female smaller and paler.

Song: A musical twitter like a rippling, merry laugh — "Tittle-ittle-ittle-eè."

Season: April to September.

Nest: A shallow bracket, made of pellets of mud and straw, placed on or against rafters, etc.

Eggs: 4-6, white, curiously spotted with all shades of brown and lilac.

The Swallows belong to the air, as the Warblers do to the trees and the Thrushes to the ground. Swallows, unless when gathering before the fall migration, are seldom seen perching, except upon telegraph wires, and they leave these with such sudden and forking flight that they seem spurred by the electric current. If, in the daylight hours, you see a bird in rapid but nonchalant pursuit of insects, you may safely assume that it is either a Swallow or the Chinney Swift, for the Flycatchers have a different flight, the Nighthawk is more ponderous, and Whip-poor-wills seldom take to the air between dawn and dusk.

Every child who has lived on a farm or played about a barn with an open hayloft knows this Swallow. In spite of its beauty of flight and friendliness boys sometimes treat these birds cruelly, killing them with sticks or shooting at them as they flock over the ponds to feed.

Tree Swallow: Tachycineta bicolor. S. R. White-bellied Swallow

Length: 6 inches.

Male and Female: Entire upper parts iridescent green, inclined to black on wings and tail. Under parts soft white. Bill black; feet dark. Female dull.

Song: A warbling twitter.

Season: April to the middle of September. A few stragglers remain later.

Nest: In dead trees, often in great colonies; here I have seen two or three pairs occupying old Woodpecker holes in telegraph poles.

Eggs: 4-9, usually 6, pure white.

She is here, she is here, the Swallow!
Fair seasons bringing, fair years to follow!
Her belly is white,
Her back black as night.
— Greek Swallow Song, J. A. Symonds, Trans.

The Tree, or White-bellied, Swallow seems nearly to correspond with the bird which was the herald of spring in Greece; for though our Swallow is a beautiful green above, except when at close range or when the light glances across its feathers, it appears black. The Tree Swallow, in times before the country was inhabited by white men, like many of its family, lived in hollow trees, but it now nests in Martin boxes and other convenient nooks, though it may be still found colonizing in old sycamores and willows.

SWALLOW MANOEUVRES

On October 3, 1899, my attention was called to a huge flock of Tree Swallows about a quarter of a mile from my home. These birds are abundant here from July to October, but on this occasion at least 2,000—estimating from photographs and from the counting of the live birds—were collected on the telegraph wires and in the adjoining fields, and not a single specimen of any other species could be found in the flock.

On the wires were hundreds at a time, crowded together between three poles; they seemed to have lost their usual fear of man, remaining even when carriages went under them, and not always starting up when the wires were struck by a stone—a temptation to throw which the passing small boys found it impossible to resist.

Beside the road is a small brook with two or three exposed

pools, and here was a great oval whirl of birds, all going in the same direction, each in passing dipping for a drink, then rising to re-take its place in the line. Now and then some returned to the wires or others joined the drinkers, but the numbers were so great that a collision seemed unavoidable.

A large part of the flock had settled in a pasture some distance away, in so close a group that they made a spot of blue on the short grass. Crossing over to these I found them quietly enjoying the sunlight, and, as I approached from the southwest, all had their backs toward me, showing to perfection the beautiful steel-blue of the feathers. Most of the time they were still, though now and then one undertook to walk a few inches, if, indeed, such a ridiculous hobble could be called a walk. But forty feet was near enough for a person—then those nearest me rose, and, passing over the others, alighted in front of them, and so they moved regularly on before me.

Some of this portion of the flock were on a wire fence near at hand; a very small proportion, though over one hundred, were on a single wire between five posts, and these were so fearless than when the last one flew I was but two steps away.

Four or five times during an hour and a half the birds on the telegraph wires rose in a body, with those drinking at the brook, while the flock from the pasture hurriedly crossed the intervening fields to join them. For a moment the very air seemed full of Swallows; then, rising higher, they separated into smaller flocks, turning back and forth, meeting again, describing curious figures as smoothly and easily as if going through a long-practiced drill. After a few minutes, they either returned, a few at a time, to their former perches or gradually scattered over the fields and woods, and in a little while came streaming back, a long river of Swallows, to alight once more.

As the morning advanced their numbers gradually diminished, and at 3 P. M. about thirty remained. For three or four days after that these Swallows were present in great numbers, continuing their drill, after which I noticed no more than usual.—Isabella McC. Lemmon, Englewood, N. J., in Bird-Lore.

BANK SWALLOW: Clivicola riparia. S. R.

Sand Martin

Length: 5 inches. The smallest of our Swallows.

Male and Female: Above dull mouse color, wings and tail brownish; below white, with a brownish breast band. Bill and feet dark.

Song: A giggling twitter.

Season: Common summer resident, arriving in May.

Nest: In tunneled holes in clayey banks; made of grass and lined

with a few feathers.

Eggs: 4-6, pure white.

The Bank Swallow is the plainest, as well as the smallest, of the family. His back is the color of the damp mottled gray sand with which he is closely associated, and he shows no glints of purple, steel-blue, and buff, like his brethren, but wears a dusky cloak, fastened about his throat with a band of the same color.

Swallows over the water,
Warblers over the land,
Silvery, tinkling ripples
Along the pebbly strand;
Afar in the upper ether
The eagle floats at rest;
No wind now frets the forest,
'Tis Nature at her best.
The golden haze of autumn
Enwraps the bloom of May—
Fate grant me many another
Such perfect summer day.

- Charles C. Abbott

Family Tanagridae: Tanagers

SCARLET TANAGER: Piranga erythromelas. S. R.

Length: 6.75-7 inches.

Male: A rich scarlet. Wings and tail black. Feet deep horn-color. Female: Olive-green above; dull olive-yellow below. Wings and tail dusky.

Song: Mellow and cheerful—"Pshaw! wait—wait—wait for me, wait!" Call note, "Chip-chur!"

Season: Arrives the middle of May, and leaves in late August. No longer common.

Nest: Rather flat and ragged; made of sticks, root fibres, etc.; placed on the high horizontal branch, preferably, of an oak or pine.

Eggs: 3-5, dull green, thickly spotted with brown and mauve.

A few years ago the Scarlet Tanager was as familiar hereabout as the Yellow Warbler, or the Wood Thrush; but now it has, in a great measure, left the gardens and frequented woodlands, and become the resident of lonely woods. To-

gether with all of our brilliantly plumed birds, it has been persecuted almost out of existence. Now that this bird slaughter is against the law in all communities that pretend to be civilized, the killing is at least abated, but the Tanager's confidence in humanity has not yet returned.

One good thing about this Tanager is that if you do see him you will know him at once, for he is our only *scarlet* bird.

WEED WARRIORS

THE SPARROWS

Sparrows are not obtrusive birds, either in plumage, song, or action. There are some forty species, with nearly as many sub-species, in North America, but their differences, both in plumage and habits, are in most cases too obscure to be readily recognized, and not more than half a dozen forms are generally known in any one locality. All the species are more or less migratory, but so widely are they distributed that there is probably no part of the country where some can not be found throughout the year.

While Sparrows are noted seed eaters, they do not by any means confine themselves to a vegetable diet. During the summer, and especially in the breeding season, they eat many insects, and probably feed their young largely upon the same food. An examination of the stomachs of three species the Song Sparrow (Melospiza), Chipping Sparrow (Spizella socialis), and Field Sparrow (Spizella pusilla) - shows that about one-third of the food consists of insects, comprising many injurious beetles, such as snout-beetles or weevils, and leaf-beetles. Many grasshoppers are eaten, and in the case of the Chipping Sparrow these insects form one-eighth of the food. Grasshoppers would seem to be rather large morsels, but the bird probably confines itself to the smaller species; indeed, this is indicated by the fact that the greatest amount (over 36 per cent.) is eaten in June, when the larger species are still young and the small species most numerous. Besides the insects already mentioned, many wasps and bugs are taken. Predaceous and parasitic Hymenoptera and predaceous beetles, all useful insects, are eaten only to a slight extent, so that as a whole the Sparrow's insect diet may be considered beneficial.

Their vegetable food is limited almost exclusively to hard

seeds. This might seem to indicate that the birds feed to some extent upon grain, but the stomachs examined show only one kind — oats — and but little of that. The great bulk of the food is made up of grass and weed seed, which form almost the entire diet during winter, and the amount consumed is immense.

Anyone acquainted with the agricultural region of the Upper Mississippi Valley can not have failed to notice the enormous growth of weeds in every waste spot where the original sward has been disturbed. By the roadside, on the borders of cultivated fields, or in abandoned fields, wherever they can obtain a foothold, masses of rank weeds spring up, and often form impenetrable thickets which afford food and shelter for immense numbers of birds, and enable them to withstand great cold and the most terrible blizzards. A person visiting one of these weed patches on a sunny morning in January, when the thermometer is 20° or more below zero, will be struck with the life and animation of the busy little inhabitants. Instead of sitting forlorn and half frozen, they may be seen flitting from branch to branch, twittering and fluttering, and showing every evidence of enjoyment and perfect comfort. If one of them be killed and examined, it will be found in excellent condition — in fact, a veritable ball of fat.

The Snowbird (Junco hyemalis) and Tree Sparrow (Spizella monticola) are perhaps the most numerous of all the The latter fairly swarm all over the northern states in winter, arriving from the north early in October and leaving in April. Examination of many stomachs shows that in winter the Tree Sparrow feeds entirely upon seeds of weeds; and probably each bird consumes about one-fourth of an ounce a day. In an article contributed to the New York Tribune in 1881 the writer estimated the amount of weed seed annually destroyed by these birds in the state of Iowa. Upon the basis of one-fourth of an ounce of seed eaten daily by each bird, and supposing that the birds averaged ten to each square mile, and that they remain in their winter range two hundred days, we shall have a total of 1,750,000 pounds, or 875 tons, of weed seed consumed by this one species in a single season. Large as these figures may seem, they certainly fall far short of the reality. The estimate of ten birds to a square mile is much

within the truth, for the Tree Sparrow is certainly more abundant than this in winter in Massachusetts, where the food supply is less than in the western states, and I have known places in Iowa where several thousand could be seen within a space of a few acres. This estimate, moreover, is for a single species, while, as a matter of fact, there are at least half a dozen birds (not all Sparrows) that habitually feed on these seeds during winter.

Farther south the Tree Sparrow is replaced in winter by the White-throated Sparrow, the White-crowned Sparrow, the Fox Sparrow, the Song Sparrow, the Field Sparrow, and several others; so that all over the country there are a vast number of these seed eaters at work during the colder months reducing next year's crop of worse than useless plants.

In treating of the value of birds, it has been customary to consider them mainly as insect destroyers; but the foregoing illustration seems to show that seed eaters have a useful function, which has never been fully appreciated. — $F.\ E.\ L.\ Beal.$

Family Fringillidae: Finches, Sparrows, Grosbeaks, Etc.

PINE GROSBEAK: Pinicola enucleator. W. V.

Length: 9.10 inches.

Male: Heavy bill, giving it almost the appearance of a Parrot. Above general color strawberry-red, with some gray fleckings, deepest on head and rump. Wings and tail brown; some feathers edged with lighter brown and some with white. Below paler red, turning to grayish green on belly. Bill and feet blackish.

Female: Ash-brown, with yellowish bronze wash on rump, head, and breast.

Song: "A subdued, rattling warble broken by whistling notes."

Season: A winter visitor whose appearance is as irregular as the length of its stay.

Nest: Saddled on a branch or in a crotch. Twigs, roots, and fibres below, with a soft upper section.

Eggs: 4, a greenish blue ground with dark brown spots.

This finely colored Grosbeak comes to us only in winter, and can be easily identified at a season when such brilliant birds are rare. It is a resident of northern New England, and, however much it may wander about in the more southern states, it can only be regarded as an irregular and capricious migrant.

Purple Finch: Carpodacus purpureus

Length: 5.75-6.25 inches.

Male: Until two years old resembles a dull-colored, heavy-billed sparrow; when mature, the head, shoulders, and upper breast have a wash of raspberry-red, lower parts grayish white, wings and tail dusky with some reddish brown tips. Bill and feet brown.

Female: Olive-brown, clearer on rump, and streaked above and below with dusky brown. Whitish beneath, and streaked on sides of breast with arrow-shaped marks.

Song: Joyful and sudden—"O, list to me, list to me, hear me, and I'll tell you—you, you!"

Season: March to November; a common summer resident, individuals remaining sometimes all winter.

Nest: In a bush or tree, of grass and fibre, and lined with horsehair; a flat nest.

Eggs: 4-5, greenish white, scratched and spotted with black and lilac.

Burroughs, with his fine sense of perception and language combined, at once locates this Finch. "His color is peculiar," he says, "and looks as if it might have been imparted by dipping a brown bird in diluted poke-berry juice. Two or three more dippings would have made the purple complete."

In looking for this Finch, then, you must rely greatly upon his song, remembering that he may or may not be red colored on the head and back, and that whether he is or not, you will find it difficult to discover.

English Sparrow: Passer domesticus

House Sparrow; Gamin, Tramp, Hoodlum. (Coues.)

Length: 5 inches.

Male and Female: Ashy above, shoulders and back striped with black and chestnut. Dark chestnut mark over eye and on sides of neck. Chestnut and white bar on wings, bordered by a black line; tail gray. Bill blue-black; feet brown. Female paler; wing bars indistinct.

Song: A harsh chirp.

Season: A persistent resident.

Nest: Rough, and loosely made of straws, sticks, or any material which circumstances offer.

Eggs: 4-8, greenish white, speckled with chocolate and lavender.

This unfortunate Sparrow, bearing a load of opprobrium which he deserves, though largely through no fault of his

own, has for some time been furnishing an avi-social problem to both England and America. In the first-named country, even the investigation of a special committee of the House of Commons has failed to ascertain with anything approaching certainty, whether this Sparrow's services as an insect-destroyer equal his own destructive qualities.

In Australia, it is said that the fifty birds originally imported now flock by millions, and make the third of the triad of emigrants with which unthinking people have scourged the country, the other two being rabbits and the Scotch thistle.

Here in America the Sparrow is an absolute and unmitigated nuisance, but for this, the unwise and superficial theory that brought him over is chiefly to blame.

The state of Connecticut does not protect this bird, and it may be destroyed at all seasons, but take care that it is done quickly and completely. No animal, even a snake or rat, should be tortured or left to a lingering death.

No living thing was created to be a nuisance, and the animals that prove to be such are victims of circumstances and must be humanely dealt with.

AMERICAN CROSSBILL: Loxia curvirostra minor. W. V.

Length: 6 inches.

Male: General color Indian red. Head shaded with olive. Back and shoulders brown with red edgings to the feathers; wings and tail brown. Beak crossed at the tip.

Female: General color greenish yellow. Dull yellowish tints on the head, throat, breast, and rump. Wings and tail brown with lighter edges to some feathers.

Song: Winter note; a snapping chirp. Season: An irregular winter visitor.

Nest: Among the twigs or in the fork of a tree, having a base of bark and sticks, and being lined with finer materials.

Eggs: 3-4, greenish, marked with brown and lilac at larger end.

This bird of evergreens and cold weather, the Red Crossbill, is chiefly a winter visitor here, varying greatly in abundance. It is impossible to confuse it with any other bird, as the color is of a different shade from the red of the Pine Finch and Cardinal, and its warped bill is a distinctive mark. The beak seems especially constructed for snapping the scales from the cones, whose seeds furnish its food.

THE LEGEND OF THE CROSSBILL

On the cross the dying Saviour
Heavenward lifts his eyelids calm,
Feels, but scarcely feels, a trembling
In his pierced and bleeding palm.

And by all the world forsaken,
Sees he how with zealous care
At the ruthless nail of iron
A little bird is striving there.

Stained with blood and never tiring,
With its beak it doth not cease.
From the cross 't would free the Saviour,
Its Creator's Son release.

And the Saviour speaks in mildness:
"Blest be thou of all the good;
Bear, as token of this moment,
Marks of blood and holy rood!"

So that bird is called the Crossbill; Covered all with blood so clear, In the groves of pine it singeth Songs, like legends, strange to hear.

- From the German, by H. W. Longfellow

REDPOLL: Acanthis linaria. W. V.

Redpoll Linnet

Length: 5.50 inches.

Male: Head, neck, breast, and rump washed with rich crimson, over a ground of gray and brown. Back, wings, and tail dusky; dusky white beneath. Tail short and forked; wings long and pointed. Bill very sharp, and either yellow, tipped with dusky, or black; feet dark.

Female: Dingy, having the crimson only on the crown.

Song: A Canary-like call note and a lisping song; sometimes given when flocking as well as in the breeding season.

Season: A winter visitor from the north.

There is a great surprise in store for you if you have never seen a flock of the dear little Redpolls, settling down to feed among the weeds after a snow storm, and fairly warming the cold landscape by their rosy feathers.

Thoreau's soliloquy upon these winter birds, as he stood looking over the late November landscape, is too beautiful to quote merely in part. He says: "Standing there, though in

this bare November landscape, I am reminded of the incredible phenomenon of small birds in winter, that erelong, amid the cold, powdery snow, as it were a fruit of the season, will come twittering a flock of delicate, crimson-tinged birds, Lesser Redpolls, to sport and feed on the seeds and buds just ripe for them on the sunny side of a wood, shaking down the powdery snow there in their cheerful feeding, as if it were high midsummer to them. . . . They greet the hunter and the chopper in their furs. Their Maker gave them the last touch, and launched them forth the day of the Great Snow. He made this bitter, imprisoning cold, before which man quails, but He made at the same time these warm and glowing creatures to twitter and be at home in it. He said not only let there be Linnets in winter, but Linnets of rich plumage and pleasing twitter, bearing summer in their natures. . . . I am struck by the perfect confidence and success of Nature."

AMERICAN GOLDFINCH: Spinus tristis. R.

Wild Canary, Thistle-bird, Yellowbird

Length: 4.80-5.20 inches.

Male: Body, all but wings, tail, and frontlet, a clear gamboge-yellow. Frontlet black. Wings black, varied with white. Tail blackish with spots of white on interior of quills. Bill and feet flesh-colored. In September the black frontlet of the male disappears, his colors pale, and he resembles the female and young. In April the spring moult begins, and often is not completed until middle May.

Female: Above brownish olive, below yellowish.

Song: A wild, sweet, Canary-like warbling. Call note, "Ker-chee-wee-chewee, tira-lira-lee!"

Season: Resident in this section, but the numbers increase in May and diminish in October.

Nest: Round, very neat, and compact; of grass and moss, lined with seed and plant down, usually in a branch crotch.

Eggs: 4-6, blue-white, generally unmarked.

The American Goldfinch, known under many titles, is as familiar as the Robin, Catbird, and Wren, but its beauty and winning ways always seem new and interesting. In southern Connecticut, as well as in locations further north and east, it is resident, and is revealed through its various disguises of plumage by its typical dipping flight.

Scatter some canary seed or seedleads of sunflowers,

zinnias, or other composites about your lunch counter and you will have Goldy for a winter companion, even though he may not wear his best clothes.

VESPER SPARROW: Poöcaetes gramineus. S. R.

Bay-winged Bunting

Length: 5.75-6.25 inches.

Male and Female: Above brown, varied with dusky. Lesser wing coverts bright bay. Below soiled white, striped everywhere except on the belly with brown. No yellow anywhere. Outer tail feathers partly white, appearing conspicuously like two white quills when the bird flies. Upper mandible brown; lower and feet vellowish flesh-colored.

Song: Sweet and clear, less loud than the Song Sparrow's — "Chewee-chewee, tira-lira-lee!"

Season: Common summer resident; April to October.

Nest: Sunk to the rim in the grass or ground, quite deep; of grasses; as carefully made as if it were a tree nest.

Eggs: 4-6, thickly mottled and spotted with brown.

This is the Sparrow which is identified by the red-brown shoulders and the two white tail quills, and who, though living near the ground, often soars singing into the air. Its song, though less constantly heard, is as familiar as the Song Sparrow's, and its habit of singing from late afternoon until twilight has given it the name of Vesper Sparrow.

THE VESPER SPARROW

It comes from childhood land,
Where summer days are long
And summer eves are bland—
A lulling good-night song.

Upon a pasture stone,
Against the fading west,
A small bird sings alone,
Then dives and finds its nest.

The evening star has heard
And flutters into sight.
Oh, childhood's vesper bird,
My heart calls back Good night.

-Edith Thomas





I TREE SPARROW

2 SNOWFLAKE

SNOWFLAKE: Plectrophanes nivalis. W. V.

Snow Bunting
Plate VI Fig. 2

Length: 7 inches.

Male and Female: Summer plumage white, with the exception of black back, white-banded wings, tail, and band across back.

Winter plumage soft browns and white—dead-leaf colors and snow. Bill and feet black.

Song: Thoreau says, "a soft, rippling note."

Season: A midwinter visitor, especially in snowy seasons.

Nest: Thickly lined with feathers set in a tussock.

Eggs: 4-6, variable in size and color, whitish speckled with neutral tints.

A bird well named, for the Snowflake, hurried from the north by fierce winds and weather, comes to us out of the snow-clouds. Traveling in great flocks, which are described as numbering sometimes a thousand, they settle down upon the old fields and upland meadows, subsisting upon various seeds. Their winter plumage, by which we alone know them, is exquisitely soft and beautiful, and the birds themselves have a wonderfully mild and spiritual expression as if they had come from an unknown region, and craved a little food and shelter, but conscious that while here they are the veriest birds of passage.

After a northeasterly storm you may expect to see these useful and beautiful weed eaters scattered over the lowlands, often feeding in company with Tree Sparrows, the winter prototype of the sociable Chippy, who leaves us at cold weather.

THE SNOWBIRD

When the leaves are shed
And the branches bare,
When the snows are deep
And the flowers asleep,
And the autumn dead;
And the skies are o'er us bent
Gray and gloomy since she went,
And the sifting snow is drifting
Through the air;

Then mid snowdrifts white,

Though the trees are bare,

Comes the Snowbird bold

In the winter's cold.

Quick and round and bright,
Light he steps across the snow.
Cares he not for winds that blow,
Though the sifting snow be drifting
Through the air.

- Dora R. Goodale

WHITE-THROATED SPARROW: Zonotrichia albicollis. W. V.

Length: 6.50-7 inches.

Male and Female: A plump, handsome bird. White throat and crown stripes. Back striped with black, bay, and whitish. Rump light olive-brown. Bay edgings to wings, and two white cross-bars; under parts gray. Yellow spot before eye. Female crown, brown, markings less distinct.

Song: Sweet and plaintive—"Pee-a-peabody, peabody!"

Season: Abundant migrant; also a winter resident from September to May.

Nest: A deep grass nest partly sunken in the ground or in a low bush. Eggs: Variable, greenish, and thinly speckled with reddish brown to gray, blotched heavily with chocolate.

This is unquestionably the most beautiful of all the Sparrows, not excepting the great Fox Sparrow, and its rich velvety markings and sweet voice have made it one of the welcome migrants, and the few that remain through the winter are carefully fed and cherished.

TREE SPARROW: Spizella monticola. W. V.

Winter Chip-bird

Plate VI Fig. 1

Length: 5.75-6.25 inches.

Male and Female: Bright bay crown. Gray stripe over eye, cheeks, throat, and breast. Dark brown back with feathers pheasant-like, edged with orange and brown. Wings dark brown with paler edgings and two white bars. Bill black above, lower mandible yellowish, feet brownish black.

Song: In winter a twittering trill.

Season: Winter resident; October to April.

Nest: Of grass, bark, and feathers; on ground, in a bush, or occasionally in a tree.

Eggs: 4-7, light green, finely sprinkled with reddish brown.

Like the Junco, the Tree Sparrow is a winter resident, though not so constant and abundant as the former. It is much larger than the Chipping Sparrow, which it so closely resembles as to be called the Winter Chip-bird, coming at a

season when the sociable Chippy has gone south. Why it is called Tree Sparrow is not so plain, as it does not build in trees as frequently as the Chippy, and it haunts low bushes.

Chipping Sparrow: Spizella socialis. S. R.

Hair-bird, Chippy.

Length: 5-5.25 inches.

Male and Female: Dark chestnut poll, gray stripe over eye, brown stripe through it. Stripes along back, dark orange and brown. Wings and tail dust-brown. Under parts light gray. Young with some black streaks on crown. Bill black; feet light.

Song: An insect-like tremolo, varying a little in tone from a locust. Call note, "Chip-chip!"

Season: Common summer resident; April to October.

Nest: In bushes and also high trees, made of fine grasses and lined with horsehair—hence the name, Hair-bird.

Eggs: 4, greenish blue, with dark brown speckles.

Who can fail to know the Chippy, whose mite of a gray-brown body is set off by a chestnut-colored velvet cap, whose chirp, as he hops about the door craving crumbs, is as familiar as his pretty air of sociability.

FIELD SPARROW: Spizella pusilla. S. R.

Length: 5.25-5.75 inches.

Male and Female: Pale red beak. Bright bay on the back between wings. Crown dull chestnut, no black or white. Whitish wing bars, tail longer than wings, below grayish white; very light-colored feet.

Song: Very pleasing and melodious, "Whee-whee-iddle, iddle, iddle, iddle, ee!"

Season: Common summer resident.

Nest: Of grass, in low shrubs or on ground.

Eggs: 4, cloudy white, spotted and specked with brown.

This is the tuneful Sparrow of fields and meadows that, rising as you approach, goes with a wavering flight to the next rift of grasses, never letting you come near it, and yet not appearing to be shy.

SLATE-COLORED JUNCO: Junco hyemalis. W. V.

Snowbird

Length: 6-6.50 inches.

Male and Female: Dark bluish slate all over, except lower breast and belly, which are grayish white and form a vest. Several outer tail feathers white, conspicuous in flying. Female, with a more rusty cast and vest less distinct. Bill flesh-white, dusky at tip.

Song: A crisp call note, a simple trill, and a faint whispering warble, usually much broken, but not without sweetness. (Bicknell.) Song sometimes heard before it leaves in spring.

Season: Common winter resident; late September to April.

Nest: On ground, Sparrow-like.

Eggs: 4-6, white, peppered with reddish brown.

Better far, ah, yes, than no bird
Is the ever-present Snowbird;
Gayly tripping, dainty creature,
Where the snow hides every feature,
Covers fences, field, and tree,
Clothes in white all things but thee.
Restless, twittering, trusty Snowbird,
Lighter heart than thine has no bird.

-C. C. Abbott

Song Sparrow: Melospiza fasciata. R.

Length: 6-6.50 inches.

Male and Female: Brown poll, somewhat striped. Above gray and brown, thickly striped. Gray stripe over eye; brown stripe each side of throat; dark stripes across upper breast, forming a black spot in front. Beneath gray, slightly striped. Bill dark brown; feet pale brown.

Song: "Olit, olit, olit—chip, chip, chip, che-char—che-wiss, wiss, wiss!" (Thoreau, "Walden.") "Maids, maids, maids, hang on your teakettle-ettle!" (A local interpretation. Thoreau, "Summer.")

Season: March until November. Individuals remain through the year.

Nest: Location variable; on ground or in low bush.

Eggs: Grayish white, spotted, marked, and clouded with browns and lavender.

The Song Sparrow is the darling among the Song-birds; the Goldfinch's gay coat, the Bluebird's confidential murmur, or the melody of the Thrushes cannot rival him in our affections, even though they may possess superior qualities. Plain as his coat is, he carries his identity in the little black streaks that form two spots on his breast, and all the year we may hope to hear his simple domestic ballad. Thoreau says:

"Some birds are poets and sing all summer. They are the true singers. Any man can write verses in the love season. We are most interested in those birds that sing for the love of the music, and not of their mates; who meditate their strains and amuse themselves with singing; the birds whose strains are of deeper sentiment."

An abundant resident throughout New England, and one of the best-known birds. It is extremely abundant in early spring and late fall months, becoming less numerous in the depths of winter, which it passes in the most secluded places, where the density of the cover protects it from the full vigor of the blasts.

The Song Sparrow flushes with music as soon as winter relaxes in the least, finding full voice in March.

THE MYTH OF THE SONG SPARROW

His mother was the Brook, his sisters were the Reeds,
And they every one applauded when he sang about his deeds.
His vest was white, his mantle brown, as clear as they could be,
And his songs were fairly bubbling o'er with melody and glee.
But an envious Neighbor splashed with mud our Brownie's coat and vest,

And then a final handful threw that stuck upon his breast.

The Brook-bird's mother did her best to wash the stains away,
But there they stuck, and, as it seems, are very like to stay.

And so he wears the splashes and the mud blotch, as you see,
But his songs are bubbling over still with melody and glee.

— Bird-Lore, Ernest Seton-Thompson

Fox Sparrow: Passerella iliaca. In migration

· Length: 6.50-7.25 inches.

Male and Female: The largest and reddest of the Sparrows, the size of the Hermit Thrush. Above red-brown, varying from dark to bright chestnut, brightest on rump and tail. Breast light gray, arrowhead markings on throat and breast, sides streaked with reddish brown. Bill dark above, lower mandible yellowish, feet pale.

Song: A sweet, varied warble, sometimes heard during migrations. Call note a feeble zip-zip.

Season: In migrations. Common in March, April, October, and November. Found by Mr. Averill as late as December 29th.

Nest: Usual Ground Sparrow nest.

Eggs: Greenish white, speckled with red-brown.

Ep. -40

The Fox Sparrow's principal part in New England is that of a spring and fall passenger. It enters the country early in October, becomes generally distributed during that month, and it may be seen in southerly districts all through November.

Returning it reaches Connecticut early in March, and generally takes about six weeks to complete the spring migration.

Conspicuous as it is by its size and beauty, it is furthermore one of the most accomplished singers of its tribe. While with us it haunts shrubbery or undergrowth of all kinds, keeping much on the ground, where it is fond of rambling and scratching much like a Thrasher or Towhee. — Stearns and Coues.

Towhee: Pipilo erythrophthalmus. S. R. Chewink, Ground Robin

Length: 7.50-8.75 inches.

Male: Head, neck, chest, back, and all but outer tail feathers black. Belly and spots on outer tail feathers white, sides light bay. Bill black; feet light brown.

Female: Drab or brownish where the male is black.

Song: Clear and ringing, "Tewéek — tewéek — towhee — blure — towhee blure!"

Season: Common summer resident; late April to October.

Breeds: In its range generally.

Nest: On the ground; of grass, fibres, hair, etc.; large but well concealed by underbrush.

Eggs: White, heavily speckled with brown.

The Towhee arrives at the end of April and remains in southern New England districts, at least all through October.

It is a vivacious and rather jaunty tenant of shrubbery and undergrowth of all kinds, deriving its curious names of "Towhee" and "Chewink" from the sound of its characteristic notes. By some it is called "Marsh Robin," the color of its sides being something like that of a Robin's breast and the decided preference of the bird for low, watery situations.

Rose-breasted Grosbeak: Habia ludoviciana. S. R.

Length: 7.75-8.50 inches.

Male: Breast rose-carmine, which color extends under the wings. Above black; belly, rump, three outer tail quills and two spots on wings white; white bill.

Female: Brownish, sulphur-yellow under wings; no rosy tint; heavy brown bill.

Song: A delightful, rolling warble, often heard toward evening. Season: Common summer resident; May 1st to middle September.

Nest: A perfect circle, neatly made of fibres and grass, lined with finer grasses, placed in a low tree, or more frequently a thorn bush in old pastures near the edge of woods.

Eggs: Dirty green, with dark brown spots and speckles.

You will always remember the day when you first see this Grosbeak. Its song may be familiar to you, though you are wholly unconscious of it; for in the great spring chorus you may mistake it for a particularly melodious Robin, who has added a few Oriole notes to his repertoire. The Grosbeak's song, however, has a retrospective quality all its own, and shared by neither Robin or Oriole, — a sort of dreaminess, in keeping with its habit of singing into the night. Gibson says that its song is suffused with color like a luscious tropic fruit rendered into sound.

It also has a knack of rhythmic song that makes it seem to be repeating syllables and insisting upon their meaning.

From the farmer's standpoint it is of great value, as, in addition to many other large insects, it devours potato bugs.

A TALKING ROSE-BREASTED GROSBEAK

Early last summer, while standing on my back steps, I heard a cheerful voice say, "You're a pretty bird. Where are you?" I supposed it to be the voice of a Parrot, but wondered how any Parrot could talk loud enough to be heard at that distance, for the houses on the street back of us are quite a way off.

Almost before I had done laughing, the voice came again, clear, musical, and strong—"You're a pretty bird. Where are you?"

For several days I endured the suspense of waiting for time to investigate. Then I chased him up. There he was in the top of a walnut tree, his gorgeous attire telling me immediately that he was a Rose-breasted Grosbeak.

At the end of a week he varied his compliment to, "Pretty, pretty bird, where are you? Where are you?" With a kind of impatient jerk on the last "you."

He and his mate stayed near us all last summer, and though

I heard him talk a hundred times, yet he always brought a feeling of gladness and a laugh.

Our friend has come back again this spring. About May 1st I heard the same endearing compliment as before.

Several of my friends whom I have told about him have asked, "Does he say the words plainly? Do you mean that he really talks?" My reply is, "He says them just as plainly as a bird ever says anything, so plainly, that even now I laugh whenever I hear him."

He is not very easily frightened, and sometimes talks quite a while when I am standing under the tree where he is.

— Emily B. Pellet, Worcester, Mass., in Bird-Lore.

Indigo Bunting: Passerina cyanea. S. R.

Length: 5.50 inches.

Male: Deep blue (in some lights, having a greenish cast), deepest on head; rump, wings, and tail washed thinly with brownish. Bill dark above, lighter below.

Female: Above, warm brown, whitening on breast.

Song: Sweet but weak — "Tshe — tshe — tshe — tshay!"

Season: Middle of May to third week in September. Nest: In bushes, bulky and rude, of leaves and grass.

Eggs: Bluish or pure white, with brown spots.

Beautiful plumage and a very small voice is the sum of the Indigo Bunting's attractions. It comes about the middle of May with the Scarlet Tanager, and if you should chance to find these birds in company, as sometimes happens, resting on the same rough fence rail, while a Goldfinch swings near them among the wayside grasses, you will have seen the primary colors as illustrated in bird life.

Everyone admires the beauty of the Indigo bird — its plumage of dark blue, with green reflections when in a certain light.

Its color is not that of the Bluebird, but more nearly resembles a piece of indigo. Though it never comes very near to our windows it does not appear to be shy, and it prefers the bushes of our garden enclosures to those of the forest. — Wilson Flagg.

Family Icteridae: Blackbirds, Orioles, Etc.

BOBOLINK: Dolichonyx oryzivorus. S. R.

After moult Reed-bird

Length: 6.50-7 inches.

Male: Black head, chin, tail, wings, and under parts. Buff patch on back of neck; also buff edges to some tail and wing feathers. Rump and upper wing coverts white. Bill brown. In autumn similar to female.

Female: Below yellowish brown. Above striped brown, except on rump, with yellow and white tips to some feathers. Two dark stripes on crown.

Song: A delightful, incoherent melody; sung oftentimes as the bird soars upward.

Season: Early May to October.

Nest: A loose heap of twigs and grass on the ground in low meadows and hayfields; common, but very difficult to discover.

Eggs: 4-6, clear gray, with clouds and markings of dark brown.

The Bobolink, the bird of two lives in one! The wild, ecstatic black and buff singer, who soars above the May meadows, leaving a trail of rippling music, and in autumn the brown striped bird who, voiceless but for a metallic "chink," is hunted through the marshes by the gunners.

"The bobolink is a common summer resident of the United States, north of about latitude 40°, and from New England westward to the Great Plains, wintering beyond our southern border. In New England there are few birds, if any, around which so much romance has clustered; in the south none on whose head so many maledictions have been heaped. The bobolink, entering the United States from the south at a time when the rice fields are freshly sown, pulls up the young plants and feeds upon the seed. Its stay, however, is not long, and it soon hastens northward, where it is welcomed as a herald of summer. During its sojourn in the northern states it feeds mainly upon insects and small seeds of useless plants; but while rearing its young, insects constitute its chief food, and almost the exclusive diet of its brood. After the young are able to fly, the whole family gathers into a small flock and begins to live almost entirely upon vegetable food. This consists for the most part of weed seeds, since in the north these birds do not appear to molest grain to any great extent. They eat a few oats, but their stomachs do not reveal a great quantity of this or any other grain. As the season advances they

gather into larger flocks and move southward, until by the end of August nearly all have left their breeding grounds. On their way they frequent the reedy marshes about the mouths of rivers and on the inland waters of the coast region, subsisting largely upon wild rice. After leaving the northern states they are commonly known as reed birds, and, having become very fat, are treated as game." — $F.\ E.\ L.\ Beal,\ B.S.$

THE O'LINCON FAMILY

A flock of merry singing birds were sporting in the grove,
Some were warbling cheerily and some were making love.
There were Bobolincon, Wadolincon, Winterseeble, Conquidle—
A livelier set were never led by tabor, pipe, or fiddle,
Crying "Phew, shew, Wadolincon; see, see Bobolincon
Down among the tickle-tops, hiding in the buttercups;
I know the saucy chap; I see his shining cap
Bobbing in the clover there—see, see, see!"

Oh, what a happy life they lead, over the hill and in the mead; How they sing, and how they play! See, they fly away, away!

Now they gambol o'er the clearing—off again, and then appearing; Poised aloft on quivering wing, now they soar, and now they sing:

"We must be all merry and moving; we must be all happy and loving; For when the midsummer is come, and the grain has ripened its ear, The haymakers scatter our young, and we mourn for the rest of the year.

Then, Bobolincon, Wadolincon, Winterseeble, haste, haste away."

— Wilson Flagg

COWBIRD: Molothrus ater. S. R. and R.

Length: 7.50-8 inches.

Male: Head, throat, and shoulders glistening dark brown; all other parts iridescent black. Bill dark brown; feet rusty black. A walker.

Female: Dull, brownish gray.

Song: A whistle and a few short, rasping notes. Call note, "Cluck-see!"

Season: March to November; occasionally winters.

Nest: Builds none, but lays its eggs at random in the nests of other birds, usually choosing those of species smaller than itself.

Eggs: Almost an inch long, white, speckled with brown and various shades of gray.

The Cowbird is the pariah of bird-dom, the exception that proves the rule of maternal fidelity and good housekeeping. It is the bird that you see so frequently in pastures, following the cows as they feed and picking up the insects that are dislodged from the turf.

We should have but little fault to find with them except for their habit of laying their eggs in the nest of other birds, instead of building for themselves and rearing their own young. In fact, they make so much trouble in the families of birds of beauty and great value that we should be glad if the whole species could be exterminated.

RED-WINGED BLACKBIRD: Agelaius phoeniceus

Length: Very variable; 8.25-9.85 inches.

Male: Rich blue-black; scarlet shoulders, edged with yellow.

Female: Finely speckled with rusty black, brown, and orange. Shoulders obscurely orange-red.

Song: A rich, juicy note — "Oucher-la-ree-é!"

Season: Late March to October. Sometimes winters.

Breeds: Through summer range.

Nest: A bulky pocket hung between reeds or stems of alders, etc.; made of rush blades and grass, and lined with finer grasses.

Eggs: 4-6, light blue, fancifully marked with lines, dots, and patches of black and lilac.

Range: North America in general, from Great Slave Lake south to Costa Rica.

The Redwinged, or Swamp, Blackbird is found all over the United States and the region immediately to the north. While common in most of its range, its distribution is more or less local, mainly on account of its partiality for swamps. Its nest is built near standing water, in tall grass, rushes, or bushes. Owing to this peculiarity the bird may be absent from large tracts of country which afford no swamps or marshes suitable for nesting. It usually breeds in large colonies, though single families, consisting of a male with several wives, may sometimes be found in a small slough, where each of the females builds her nest and rears her own little brood, while her liege lord displays his brilliant colors and struts in the sunshine. In the Upper Mississippi Valley it finds the conditions most favorable for the countless prairie sloughs and the margins of the numerous shallow lakes form nesting sites for thousands of Redwings; and there are bred the immense flocks which sometimes do so much damage to the grain fields of the west. After the breeding season is over, the birds collect in flocks to migrate, and remain thus associated throughout the winter.

The Redwing eats very little fruit, and does practically no harm in the garden or orchard.

While it is impossible to dispute the mass of testimony which has accumulated concerning its grain-eating propensity, the stomach examinations show that the habit must be local rather than general. As the area of cultivation increases and the breeding grounds are curtailed, the species is likely to become reduced in numbers and consequently less harmful. Nearly seven-eighths of the Redwing's food is made up of weed seed or of insects injurious to agriculture, indicating unmistakably that the bird should be protected, except, perhaps, in a few places where it is too abundant. — $F.\ E.\ L.\ Beal,\ B.S.$

MEADOWLARK: Sturnella magna. R.

Length: 10.75 inches.

Male and Female: Much variegated above, general color brown. Bill stout and straight. Crown with brown and black streaks, black line behind eye. Tail black with white outer quills; wings edged with yellow. Under parts yellow, black crescent on throat.

Strong legs, a walker. Female paler.

Song: Clear and piercing—"Spring o' the Y-e-a-r!"

Season: A resident, the migrants remaining from April until late October.

Nest: Of dried grass; placed on the ground; usually concealed by a tuft of grass, which makes a partial roof.

Eggs: 4-6, brilliant, white, speckled with purple and reddish brown.

One of our most cheerful and beautiful "all the year round" birds. It was once killed as a game bird, but now our state rightly protects it, both for its beauty and the good it does the farmer in killing insects that destroy the roots of meadow grass and grain.

"The Meadowlark is a common and well-known bird occurring from the Atlantic coast to the Great Plains, where it gives way to a closely related sub-species, which extends thence westward to the Pacific. It winters from our southern border as far north as the District of Columbia, southern Illinois, and occasionally Iowa. Although it is a bird of the plains, finding its most congenial haunts in the prairies of the west, it does not disdain the meadows and mowing lands of New England. It nests on the ground, and is so terrestrial in its habits that it seldom perches on trees, preferring a fence rail or a telegraph pole. When undisturbed, it may be seen

walking about with a peculiar dainty step, stopping every few moments to look about and give its tail a nervous flirt or to sound a note or two of its clear whistle.

"The Meadowlark is almost wholly beneficial, although a few complaints have been made that it pulls sprouting grain, and one farmer claims that it eats clover seed. As a rule, however, it is looked upon with favor and is not disturbed.

"In the 238 stomachs examined, animal food (practically all insects) constituted 73 per cent. of the contents and vegetable matter 27 per cent. As would naturally be supposed, the insects were ground species, such as beetles, bugs, grasshoppers, and caterpillars, with a few flies, wasps, and spiders. A number of the stomachs were taken from birds that had been killed when the ground was covered with snow, but still they contained a large percentage of insects, showing the bird's skill in finding proper food under adverse circumstances. . . .

"Briefly stated, more than half of the Meadowlark's food consists of harmful insects; its vegetable food is composed either of noxious weeds or waste grain, and the remainder is made up of useful beetles or neutral insects and spiders. A strong point in the bird's favor is that, although naturally an insect eater, it is able to subsist on vegetable food, and consequently is not forced to migrate in cold weather any farther than is necessary to find ground free from snow. This explains why it remains for the most part in the United States during winter, and moves northward as soon as the snow disappears from its usual haunts.

"There is one danger to which the Meadowlark is exposed. As its flesh is highly esteemed the bird is often shot for the table, but it is entitled to all possible protection, and to slaughter it for game is the least profitable way to utilize a valuable species." — $F.\ E.\ L.\ Beal,\ B.S.$

THE MEADOW LARK

A brave little bird that fears not God, A voice that breaks from the snow-wet clod With prophecy of sunny sod, Set thick with wind-waved goldenrod.

From the first bare clod in the raw cold spring, From the last bare clod when fall winds stray, The farm boy hears his brave song ring, And work for the time is a pleasant thing.

- Hamlin Garland

Baltimore Oriole: Icterus galbula. S. R. Golden Oriole, Hang-nest, Golden Robin

Length: 8 inches.

Male: Black head, throat, and upper half of back. Wings black, with white spots and edges; tail quills spotted with yellow. Everywhere else orange-flame. Bill and feet slatish black.

Female: Paler, the black washed with olive. Below dull orange.

Song: Somewhat shrill and interrogative, but withal marital. In the breeding season they have an anxious call—"Will you? Will you really, really, truly?" Female's note a plaintive "I w-i-ll."

Season: First of May to the middle of September.

Nest: A pensile pocket, woven of milkweed, flax, fine string, or frayings of cotton, rope, etc.; suspended at the end of a swaying branch at considerable distance from the ground.

Eggs: 4-6, whitish ground, scrawled with black-brown.

Brilliancy of plumage, sweetness of song, and food habits to which no exception can be taken, are some of the striking characteristics of the Baltimore Oriole. In summer this species is found throughout the northern half of the United States east of the Great Plains, and is welcomed and loved in every country home in that broad land. In the northern states it arrives rather late, and is usually first seen, or heard, foraging amidst the early bloom of the apple trees, where it searches for caterpillars or feeds daintily on the surplus blossoms. Its nest commands hardly less admiration than the beauty of its plumage or the excellence of its song. Hanging from the tip of the outermost bough of a stately elm, it is almost inaccessible, and so strongly fastened as to bid defiance to the elements.

By watching an Oriole which has a nest one may see it searching among the smaller branches of some neighboring tree, carefully examining each leaf for caterpillars, and occasionally trilling a few notes to its mate. Observation both in the field and laboratory shows that caterpillars constitute the largest item of its fare. In 113 stomachs they formed 34 per cent. of the food, and are eaten in varying quantities during all the months in which the bird remains in this country, although the fewest are eaten in July, when a little fruit is also taken. The other insects consist of beetles, bugs, ants, wasps, grasshoppers, and some spiders.

THE BALTIMORE ORIOLE

O Golden Robin! pipe again That happy, hopeful, cheering strain! A prisoner in my chamber, I
See neither grass, nor bough, nor sky;
Yet to my mind thy warblings bring,
In troops, all images of spring;
And every sense is satisfied
By what thy magic has supplied.
As by enchantment, now I see
On every bush and forest tree
The tender, downy leaf appear—
The loveliest robe they wear.

The tulip and the hyacinth grace The garden bed; each grassy place With dandelions glowing bright, Or king-cups, childhood's pure delight. Invite the passer-by to tread Upon the soft, elastic bed. And pluck again the simple flowers Which charmed so oft his younger hours. The apple orchards all in bloom — I seem to smell their rare perfume, And thou, gay whistler! to whose song These powers of magic art belong, On top of lofty elm I see Thy black and orange livery; Forgive that word! a freeman bold, Of choice thou wearest jet and gold, And no man's livery dost bear, Thou flying tulip! free as air!

Come, Golden Robin! once again That magic, joy-inspiring strain!

- Thomas Hill

Purple Grackle: Quiscalus quiscula. S. R., long season

Crow Blackbird

Length: 12-13.50 inches.

Male and Female: Glossy metallic black, iridescent tints on head, tail, and wings. Iris bright yellow, tail longer than wings, feet black. Female more dull and smaller.

Song: A crackling, wheezy squeaking; call note, a rasping chirp.

Season: Common summer resident. I have also seen them in every month but January and February.

Nest: A carefully built nest of rather miscellaneous materials, mudlined, usually in trees, sometimes in a hollow tree. In evergreens in many localities, but never here, orchards being their favorite spot.

This is the bird that flocks in early autumn and, settling down to feed on lawn or meadow, makes a noise as if all the door-hinges in the country were rusty and creaking. Then, suddenly taking alarm, the flock will rise and, alighting on some near-by tree, make it look as if a black cloud had fallen from the sky upon it.

Some people think it is a bad bird for the agriculturist, but Mr. Beal says: "It is evident that a bird so large and so abundant may exercise an important influence upon the agricultural welfare of the country it inhabits. The Crow Blackbird has been accused of many sins, such as stealing grain and fruit and robbing the nests of other birds; but the farmers do not undertake any war of extermination against it, and, for the most part, allow it to nest about the premises undisturbed. An examination of 2,258 stomachs showed that nearly one-third of its food consists of insects, of which the greater part are injurious."

Family Sturnidae: Old World Starlings

THE COMMON STARLING: Sturnus magnus. R.

Length: 8.5 inches.

Male and Female: Black plumage shot with metallic green and blue lights. In full plumage upper feathers edged with buff, giving a speckled appearance, which disappears as the feathers are worn down, leaving the winter plumage plain and dull. Yellow bill in summer, in winter brown.

Note: A sharp flock call and a clear and rather musical two-syllable falling whistle.

Nest: Behind blinds in unoccupied buildings, in vine-covered nooks in church towers; also in bushes.

Eggs: 4-7, greenish blue.

This bird is a foreigner, imported to New York city some fourteen years ago, we are beginning to fear not wisely, for the birds are rather quarrelsome and, being larger than the English Sparrow, though not so hardy, are able to wage war upon birds like Robins, etc.

The first birds, less than a hundred in number, were set free in Central Park, New York city. Now these have increased to numerous flocks that in Connecticut have gone as far east as New Haven, and here in Fairfield and several villages near-by are acclimated and quite at home, though the bitter and lasting cold of the winter of 1903-4 thinned them out considerably.

Whether they prove a nuisance or not they are very noticeable birds, looking to the first sight as they walk sedately across a road or field like Grackles with rumpled plumage. A second glance will show that this is but the effect of the buff specks that tip all the upper feathers, while the distinct yellow bill at once spells Starling!

In England they may be seen on the great open plains following the sheep as they feed, very much as the Cowbird follows our cattle, and in that country are very beneficial as insect destroyers. It is to be feared that the difference in climate and the absence of animal food in winter in the northern parts of the range may change their habits, as it did with the English Sparrows, who, being imported to kill canker worms in city streets and parks, soon turned their attention to nipping the buds from trees, shrubs, and vines.

Family Corvidae: Crows, Jays, Etc.

AMERICAN CROW: Corvus Americanus. R.

Length: 18-20 inches.

Male and Female: Glossy black, with a purplish tinge. Wings which appear saw-toothed when flying. Bill and feet black. Female a less brilliant black.

Song: A quavering "Kar-r-r-er-r!" in spring. Call note, "Caw-w!" Season: Resident.

Nest: Consisting of a platform of coarse sticks, upon which rests the nest proper, made of smaller twigs and deeply lined with cedar bark. Tall trees are chosen; preferably evergreens.

Eggs: 4-7, greenish ground, stained and spotted with brown; variable both in size and color.

The Crow may have his reputation somewhat bettered by what the wise men say about his food. He may not be as black as he is painted, but he is too black for us in Connecticut: he robs birds' nests, and causes trouble in both orchard and hen-yard, and he is dismal to boot, and his voice jars our musical nerves. He must go, and, if other states need him, we shall not interfere with any community, even if they start a crow trust.

"There are few birds so well known as the Common Crow, and, unlike most other species, he does not seem to decrease in numbers as the country becomes more densely populated. The Crow is commonly regarded as a blackleg and a thief. Without the dash and brilliancy of the Jay, or the bold savagery of

the Hawk, he is accused of doing more mischief than either. That he does pull up sprouting corn, destroys chickens, and robs the nests of small birds has been repeatedly proved. Nor are these all of his sins. He is known to eat frogs, toads, salamanders, and some small snakes, all harmless creatures that do some good by eating insects. With so many charges against him, it may be well to show why he should not be utterly condemned.

"The examination of a large number of stomachs, while confirming all the foregoing accusations, has thrown upon the subject a light somewhat different from that derived solely from field observation. It shows that the bird's nesting habit, as in the case of the Jay, is not so universal as has been supposed; and that, so far from being a habitual nest robber, the crow only occasionally indulges in that reprehensible practice. The same is true in regard to destroying chickens, for he is able to carry off none but very young ones, and his opportunities for capturing them are somewhat limited. Neither are many toads and frogs eaten, and as frogs are of no great practical value, their destruction is not a serious matter; but toads are very useful, and their consumption, so far as it goes, must be counted against the Crow. Turtles, crayfishes, and snails, of which he eats quite a large number, may be considered neutral, while mice may be counted to his credit.

"In his insect food, however, the Crow makes amend for sins in the rest of his dietary, although even here the first item is against him. Predaceous beetles are eaten in some numbers throughout the season, but the number is not great. May beetles, "dor-bugs," or June bugs, and others of the same family, constitute the principal food during spring and early summer, and are fed to the young in immense quantities. Other beetles, nearly all of a noxious character, are eaten to a considerable extent. Grasshoppers are first taken in May, but not in large numbers until August, when, as might be expected, they form the leading article of diet, showing that the Crow is no exception to the general rule that most birds subsist, to a large extent, upon grasshoppers in the month of August. Many bugs, some caterpillars, mostly cutworms, and some spiders are also eaten — all of them either harmful or neutral in their economic relations. Of the insect diet Mr. E. A.

Schwarz says: 'The facts, on the whole, speak overwhelmingly in favor of the Crow.'

"In estimating the economic status of the Crow, it must be acknowledged that he does some damage, but, on the other hand, he should receive much credit for the insects which he destroys. In the more thickly settled parts of the country the Crow probably does more good than harm, at least when ordinary precautions are taken to protect young poultry and newly-planted corn against his depredations. If, however, corn is planted with no provision against possible marauders, if hens and turkeys are allowed to nest and to roam with their broods at a distance from farm buildings, losses must be expected." — F. E. L. Beal.

Subfamily Garrulinae: Jays

Blue Jay: Cyanocitta cristata. R.

Length: 11-12 inches.

Male and Female: Lead-blue above, head finely crested, a black collar uniting with some black feathers on the back. Below grayish white. Wing coverts and tail a bright blue barred transversely with black.

Song: A whistling bell note in the breeding season, the usual cry a screaming "Jay, jay, jay!"

Season: Resident.

Nest: Bulky, in appearance like that of the Crow, but only one-quarter the size.

Eggs: 5-6, about an inch long and broad for the length, brownish gray, with brown spots.

When you see Jays in small flocks circling the trees in early spring and gathering their crop of chestnuts in the fall and acorns in early winter, you admire their brilliant coloring, jaunty crest and bold flight, merely wishing perhaps that their cry was less harsh.

But how do these birds amuse themselves in the period between April and September, in their breeding and moulting season, when they are comparatively inconspicuous, for they go into the woods to breed and become almost silent, — it is a case of still waters running deeply? Day by day they sally out of their nesting-places to market for themselves and for their young, and nothing will do for them but fresh eggs and tender squabs from the nests of the song birds; to be followed later by berries, small fruit, and grain.

O JAY

O Jay! Blue Jay! What are you trying to say? I remember, in the spring You pretended you could sing; But your voice is now still queerer, And as yet you've come no nearer To a song. In fact, to sum the matter, I never heard a flatter Failure than your doleful clatter. Don't you think it's wrong? It was sweet to hear your note, I'll not deny, When April set pale clouds afloat O'er the blue tides of sky. And 'mid the wind's triumphant drums You in your white and azure coat, A herald proud, came forth to cry "The royal summer comes!"

— George Parsons Lathrop

Family Alandidae: Larks

HORNED LARK: Octocoris alpestris. W. V.

Shore Lark

Length: 7-7.50 inches.

Male: Upper parts brown with pinkish cast, most marked on neck and rump. Black crescent on breast; black bar in front of head, extending to side of head, forming two tufts or horns; frontlet, throat, and neck pale yellowish; below whitish, streaked with black; bill dark; feet black.

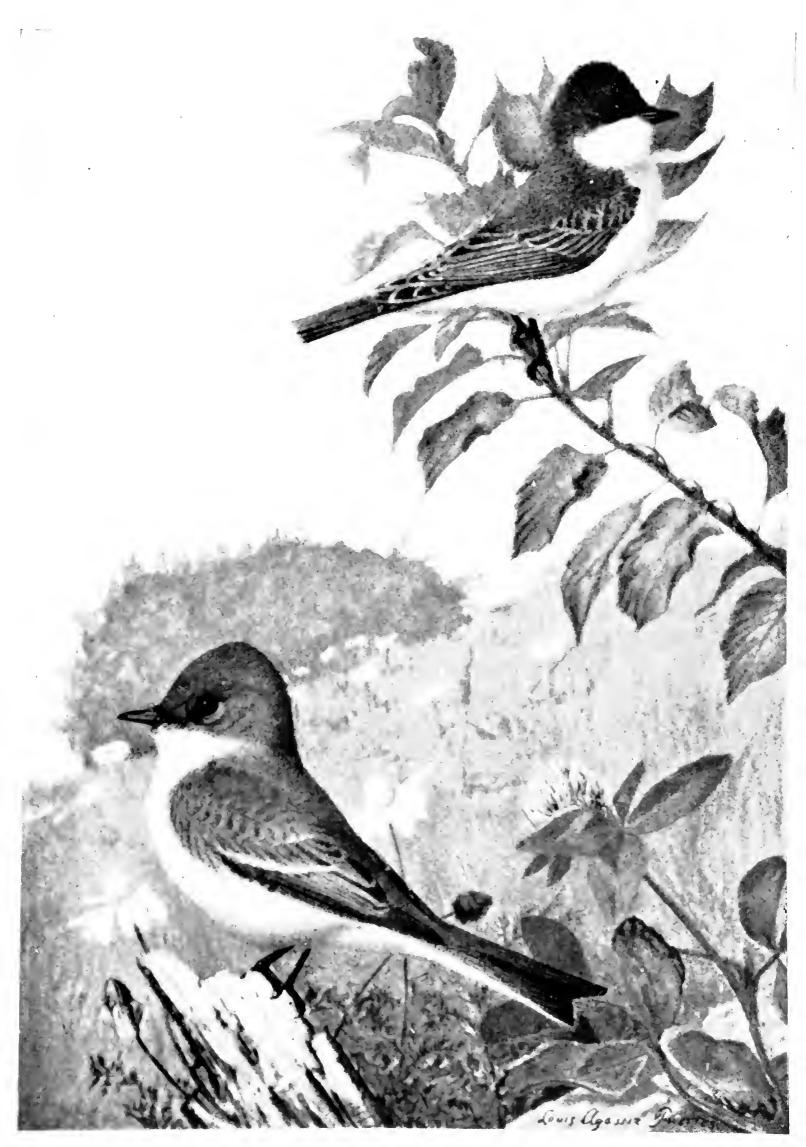
Female: Paler and somewhat smaller.

Song: Only a call note here, but a charming song in the breeding-haunts.

Season: Winter resident along shore; October to April.

These Larks, if the snow is not too deep, settle in the marshmeadows, where they pick up a living from various seeds; or, if the snow has covered the fields, they take refuge in sheltered spots by hayricks and even near houses. I have seen them quite close to the village, picking up oats under a shed where straw had been thrashed recently. According to Audubon, they have, in the breeding-range, the habit of singing as they soar in the air, after the manner of the European Skylark.





SUB-ORDER CLAMATORES: SONGLESS PERCHING BIRDS

Family Tyrannidae: Tyrant Flycatcher

KINGBIRD: Tyrannus Tyrannus

Bee Martin

Plate VII Fig. 1

Length: 8 inches.

Male and Female: Above black, orange-red streak on poll. Beneath grayish white, darkest on breast. Tail terminating in a white band. Bill and feet black.

Note: A piercing call note — "Kyrie-K-y-rie!"

Season: Common summer resident; May to September.

Nest: Bulky and deeply cupped, made of sticks and grass, lined with matted fibres, usually in a conspicuous position on a horizontal branch in orchards or thin woods.

Eggs: Nearly an inch long and almost round, cream or bluish white, boldly scratched and spotted with brown and lilac. Very handsome and richly colored.

"The Kingbird is essentially a lover of the orchard, and wherever the native groves have been replaced by fruit trees this pugnacious bird takes up its abode. It breeds in all of the states east of the Rocky Mountains, and less commonly in the Great Basin and on the Pacific coast. It migrates south early in the fall, and generally leaves the United States to spend the winter in more southern latitudes. . . .

"The Kingbird manifests its presence in many ways. It is somewhat boisterous and obtrusive, and its antipathy for Hawks and Crows is well known. It never hesitates to give battle to any of these marauders, no matter how superior in size, and for this reason a family of Kingbirds is a desirable adjunct to a poultry yard. On one occasion in the knowledge of the writer a Hawk which attacked a brood of young turkeys was pounced upon and so severely buffeted by a pair of Kingbirds, whose nest was near by, that the would-be robber was glad to escape without his prey. Song birds that nest near the Kingbird are similarly protected.

"In its food habits this species is largely insectivorous. It is a true flycatcher by nature, and takes a large part of its food on the wing.

[&]quot;Three points seem to be clearly established in regard to the food of the Kingbird: (1) that about 90 per cent. consists Ep. -41

of insects mostly of an injurious species; (2) that the alleged habit of preying on honey bees is less prevalent than has been supposed; (3) and that the vegetable food consists almost entirely of wild fruit. These facts, taken in connection with its well-known enmity for Hawks and Crows, entitle the Kingbird to a place among the most desirable birds of the orchard and garden." — $F.\ E.\ L.\ Beal.$

PHOEBE: Sayornis phoebe

Water Pervee

Plate VII Fig. 2

Length: 6.75-7.25 inches.

Male and Female: Above deep olive-brown; straight black bill. Outer edges of some tail feathers whitish; an erectile crest. Beneath dingy yellowish white; feet black.

Note: "Phæbee, phæbee, pewit, phæbée!"

Season: April to October. Common summer resident.

Nest: In its native woods the nest is of moss, mud, and grass bracketed on a rock, near or over running water; but in the vicinity of settlements and villages it is placed on a horizontal bridge beam, timber supporting porch or shed.

Eggs: Pure white, somewhat spotted.

Among the early spring arrivals at the north, none are more welcome than the Phœbe. Though naturally building its nest under an overhanging cliff of rock or earth, or in the mouth of a cave, its preference for the vicinity of farm buildings is so marked that in the more thickly settled parts of the country the bird is seldom seen at any great distance from a farmhouse except where a bridge spans some stream, affording a secure spot for a nest. Its confiding disposition has rendered it a great favorite, and consequently it is seldom disturbed. It breeds throughout the United States east of the Great Plains, and winters from the South Atlantic and Gulf States southward.

The Phœbe subsists almost exclusively upon insects, most of which are caught upon the wing. An examination of 80 stomachs showed that over 93 per cent. of the year's food consists of insects and spiders, while wild fruit constitutes the remainder. The insects belong chiefly to noxious species, and include many click beetles, May beetles, and weevils. Grasshoppers in their season are eaten to a considerable extent, while wasps of various species, many flies of species that annoy cattle, and a few bugs and spiders are also eaten regularly. It is evident that a pair of Phœbes must materially





τ NIGHT-HAWK

2 WHIP POOR WILL

reduce the number of insects near a garden or field, as the birds often, if not always, raise two broods a year, and each brood numbers from four to six young.

The vegetable portion of the food is unimportant, and consists mainly of a few seeds, with small fruits, such as wild cherries and elder berries.

There is hardly a more useful species than the Phœbe about the farm, and it should receive every encouragement. To furnish nesting-boxes is unnecessary, as it usually prefers a more open situation, like a shed or nook under the eaves; but it should be protected from cats and other marauders.

Wood Pewee: Contopus virens. S. R.

Length: 6-6.50 inches.

Male and Female: Dusky olive-brown above, darkest on head, throat paler, middle of belly yellowish, growing lighter below. White eye ring and two whitish wing bars. Feet and bill dusky or black.

Note: "Pewee-a, — peweeà, peer!"—as much a song as that of many birds classified as Song-birds.

Season: May to October.

Breeds: Throughout its range.

Nest: Flat; its evenly rounded edge stuccoed with lichens like that of the Hummingbird; hardly to be distinguished from the bough on which it is saddled.

Eggs: Creamy-white, with a wreath of brown and lilac spots on the larger end.

In early May the Wood Pewee comes to the garden lane and whispers of his presence with his plaintive little ditty, and in the autumn the same lonely call is virtually the only wood note left. In spite of his name, he is not exclusively a wood-bird, but comes through the garden, following shyly in the Phœbe's wake. But he only trusts his precious nest to some mossy woodland limb, a trifle softened by decay, where he blends his house with its foundations by the skillful use of moss and lichens.

Family Caprimulgidae: Goatsuckers

WHIP-POOR-WILL: Antrostomus vociferus. S. R.

Plate VIII Fig. 1

Length: 9-10 inches.

Male and Female: A long-winged bird of the twilight and night. Large mouth, fringed with bristles. Plumage dusky and Owllike, much spotted with black and gray. Wings beautifully mottled with shades of brown; lower half of the outer tail quills white in the male, but rusty in female.

Note: "Whip-poor-will, whip-poor-will," repeated usually five times in succession, followed by a jarring noise during flight.

Season: Late April to September. Common summer resident, except near the shore.

Nest: Builds none, but substitutes a mossy hollow in rock or ground. Eggs: 2, creamy-white, marked freely, and spotted with brown.

This weird bird, with its bristling, fly-trap mouth, who sleeps all day and prowls by night, comes to us late in April, if the season is warm, clamoring and waking strange echoes in the bare woods, and in early September, mute and mysterious, he gathers his flock and moves silently on, for the Whip-poor-will has not at any time even a transient home to abandon; like the pilgrims of old, the earth is his only bed.

THE WOOD THRUSH AND THE WHIP-POOR-WILL

When the faintest flush of morning Overtints the distant hill,

If you waken,
If you listen,

You may hear the Whip-poor-will.

Like an echo from the darkness,

Strangely wild across the glen,

Sound the notes of his finale,

And the woods are still again.

Soon upon the dreamy silence
There will come a gentle trill,
Like the whisper of an organ,

Or the murmur Of a rill,

And then a burst of music,
Swelling forth upon the air,
Till the melody of morning
Seems to come from everywhere.

A Thrush, as if awakened by
The parting voice of night,
Gives forth a joyous welcome to
The coming of the light.

In early evening twilight
Again the Wood Thrush sings,
Like a voice of inspiration
With the melody of strings;

A song of joy ecstatic,

And a vesper hymn of praise,

For the glory of the summer

And the promise of the days.

And when his song is ended,
And all the world grows still,
As if but just awakened,
Calls again the Whip-poor-will.

Garrett Newkirk in Bird-Lore

NIGHTHAWK: Chordeiles virginianus. S. R. Night-jar

Plate VIII Fig. 2

Length: 9-10 inches.

Male: Mottled black and rusty above, the breast finely barred, with a V-shaped white spot on throat. Wings brown and large, white spot extending entirely through them, being conspicuous in flight; white bar on tail. In the female, the white markings are either veiled with rusty or absent.

Note: A skirling sound while on the wing — "Skirk — S-k-i-rk!"

Season: May to October; common summer resident.

Breeds: Gulf states to Labrador.

A most valuable insect-eating bird, with nothing of the Hawk about it but the name.

A NIGHTHAWK INCIDENT

A discussion of the specific distinctness of the Whip-poor-will and Nighthawk, following an address to Connecticut agriculturists, some years ago, led to my receipt, in July, 1900, of an invitation from a gentleman who was present, to come and see a bird, then nesting on his farm, that he believed combined the characters of both the Whip-poor-will and Nighthawk; in short, was the bird to which both these names applied.

Here was an opportunity to secure a much-desired photograph, and, armed with the needed apparatus, as well as specimens of both the Nighthawk and Whip-poor-will, I boarded an early train for Stevenson, Conn., prepared to gain my point with bird as well as with man.

The latter accepted the specimens as incontrovertible facts, and readjusted his views as to the status of the birds they represented, and we may therefore at once turn our attention to the Nighthawk, who was waiting so patiently on a bit of granite out in the hay fields. The sun was setting when we reached the flat rock on which her eggs had been laid and young hatched, and where she had last been seen; but a fragment of egg-shell was the only evidence that the bare-looking spot had once been a bird's home. The grass had lately been mowed, and there was no immediately surrounding cover in

which the bird might have hidden. It is eloquent testimony of the value of her protective coloring, therefore, that we should almost have stepped on the bird, who had moved to a near-by flat rock, as we approached the place in which we had expected to find her.

Far more convincing, however, was her faith in her own invisibility. Even the presence of a dog did not tempt her to flight, and when the camera was erected on its tripod within three feet of her body, squatting so closely to its rocky background, her only movement was occasioned by her rapid breathing.

There was other cause, however, beside the belief in her own inconspicuousness to hold her to the rock: one little downy chick nestled at her side, and, with instinctive obedience, was as motionless as its parent.

So they sat while picture after picture was made from various points of view, and still no movement, until the parent was lightly touched, when, starting quickly, she spread her long wings and sailed out over the fields. Perhaps she was startled, and deserted her young on the impulse of sudden fear. But in a few seconds she recovered herself, and, circling, returned and spread herself out on the grass at my feet. Then followed the evolutions common to so many birds but wonderful in all. With surprising skill in mimicry, the bird fluttered painfully along, ever just beyond my reach, until it had led me a hundred feet or more from its young, and then, the feat evidently successful, it sailed away again, to perch first on a fence and later on a limb in characteristic (lengthwise) Nighthawk attitude

How are we to account for the development in so many birds of what is now a common habit? Ducks, Snipe, Grouse, Doves, some ground-nesting Sparrows and Warblers, and many other species, also feign lameness, with the object of drawing a supposed enemy from the vicinity of their nest or young. Are we to believe that each individual, who in this most reasonable manner opposes strategy to force, does so intelligently? Or are we to believe that the habit has been acquired through the agency of natural selection, and is now purely instinctive? Probably neither question can be answered until we know beyond question whether this mimetic or deceptive power is inherited. — By Frank M. Chapman, in Bird Lore.

Family Micropodidae: Swifts

CHIMNEY SWIFT: Choetura pelagica. S. R.

Chimney Swallow

Length: 5.25 inches.

Male and Female: A deep, sooty brown. Wings longer than the tail, which is nearly even, the shafts of the quills ending in sharp spines.

Note: A loud, Swallow-like twitter.

Season: Late April to September and October; a common summer resident.

Nest: A loose, twig lattice glued by the bird's saliva, or sometimes tree-gum, to the inside of chimneys; or in wild regions to the inner walls of hollow trees.

Eggs: 4-5, pure white, and long for their width.

This bird, popularly known as the Chimney Swallow, but which is more closely related to the Nighthawk, may be easily distinguished from the Swallows when flying, by its short, blunt tail. You will never see it perching as Swallows do; for, except when it is at rest in its chimney home, it is constantly on the wing, either darting through the air, dropping surely to its nest, or speeding from it like a rocket. The Chimney Swift secures its food wholly when flying, and is more active at night than in the day. In the breeding season its busiest time is that preceding dawn, and it then works without cessation for many hours. The whirling of the wings as the bird leaves the chimney makes a noise like distant thunder, and if there is quite a colony the inhabitants of the house may be seriously disturbed, and the presence of the nests often introduces bedbugs, as they are to a certain extent parasites of these birds. This makes him an undesirable tenant, and in modern houses, where the flues are narrow and easily clogged, wire is stretched over the chimney mouth to keep him out.

Family Trochilidae: Humming-birds

RUBY-THROATED HUMMING-BIRD: Trochilus colubris. S. R.

Length: 3.75 inches.

Male: Above metallic green; belly white. Wings and tail ruddy black, the latter deeply forked. Glistening ruby-red gorget.

Female: Colors less iridescent; gorget lacking, tail with rounded points.

Note: A shrill, mouse-like squeak.

Season: Common summer resident; May to October.

Nest: A dainty circle an inch and a half in diameter, made of fernwool, plant-down, etc., shingled with lichens to match the color of the branch on which it is saddled.

Eggs: 2, pure white, the size of soup-beans.

This is the only native Humming-bird of eastern North America, and it is impossible to confuse it with any other bird in its range.

THE HUMMING-BIRD

Is it a monster bee,
Or is it a midget bird,
Or yet an air-born mystery
That now you marigold has stirred,
And now on vocal wing
To a neighbor bloom has whirred
In an aëry ecstasy, in a passion of pilfering?

Ah! 'tis the Humming-bird,
Rich-coated one,
Ruby-throated one,
That is not chosen for song,
But throws its whole rapt sprite
Into the secrets of flowers
The summer days along,
Into most odorous hours
It's a murmurous sound of wings too swift for sight.
Richard Burton

THE WOODPECKERS

"Five or six species of Woodpeckers are familiarly known throughout the eastern United States, and in the west are replaced by others of similar habits. Several species remain in the northern states through the entire year, while others are more or less migratory.

"Farmers are prone to look upon Woodpeckers with suspicion. When the birds are seen scrambling over fruit trees and pecking at the bark, and fresh holes are found in the tree, it is concluded that they are doing harm. Careful observers, however, have noticed that, excepting a single species, these birds rarely leave any important mark on a healthy tree, but that when a tree is affected by wood-boring larvæ the insects are accurately located, dislodged, and devoured. In case the holes from which the borers are taken are afterwards occupied and enlarged by colonies of ants, these ants in turn are drawn out and eaten.

"Two of the best-known Woodpeckers, the Hairy Woodpecker (Dryobates villosus) and the Downy Woodpecker (D. pubescens), including their races, range over the greater part of the United States, and for the most part remain throughout the year in their usual haunts. They differ chiefly in size, for their colors are practically the same, and the males, like other Woodpeckers, are distinguished by a scarlet patch on the head.

"An examination of many stomachs of these two birds shows that from two-thirds to three-fourths of the food consists of insects, chiefly noxious. Wood-boring beetles, both adults and larvæ, are conspicuous, and with them are associated many caterpillars, mostly species that burrow into trees. Next in importance are the ants that live in decaying wood, all of which are sought by Woodpeckers and eaten in great quantities. Many ants are particularly harmful to timber, for if they find a small spot of decay in the vacant burrow of some woodborer, they enlarge the hole, and, as their colony is always on the increase, continue to eat away the wood until the whole trunk is honeycombed. Moreover, these insects are not accessible to other birds, and could pursue their career of destruction unmolested were it not that the Woodpeckers, with beaks and tongues especially fitted for such work, dig out and devour them. It is thus evident that Woodpeckers are great conservators of forests. To them, more than to any other agency, we owe the preservation of timber from hordes of destructive insects.

"One of the larger Woodpeckers familiar to everyone is the Flicker, or Golden-winged Woodpecker (Colaptes auratus), which is generally distributed throughout the United States from the Atlantic coast to—

"It has been customary to speak of the smaller Woodpeckers as "Sap-suckers," under the belief that they drill holes in the bark of trees for the purpose of drinking the sap and eating the inner bark. Close observation, however, has fixed this habit upon only one species, the Yellow-bellied Woodpecker, or Sapsucker (Sphyrapicus varius). This bird has been shown to be guilty of pecking holes in the bark of various forest trees, and sometimes in that of apple trees, from which it drinks the sap when the pits become filled. It has been

proved, however, that besides taking the sap the bird captures large numbers of insects, which are attracted by the sweet fluid, and that these form a very considerable portion of its diet. In some cases the trees are injured by being thus punctured, and die in a year or two, but since comparatively few are touched the damage is not great. It is equally probable, moreover, that the bird fully compensates for this injury by the insects it consumes.

"Many other Woodpeckers are found in America, but their food habits agree in the main with those just described. These birds are certainly the only agents which can successfully cope with certain insect enemies of the forests, and, to some extent, of fruit trees also. For this reason, if for no other, they should be protected in every possible way." -F. E. L. Beal.

ORDER PICI: WOODPECKERS, ETC.

Family Picidae: Woodpeckers

HAIRY WOODPECKER: Dryobates villosus. R.

Length: 9-10 inches.

Male and Female: Above black and white, white stripe on middle of back, red stripe on head. Wings spotted and striped with black and white, four outer tail feathers white. Under parts grayish white. Bill blunt, stout, and straight, nearly as long as head. Female lacks red spot on head.

Note: A short, tapping sound.

Season: Resident; shifting about in light woods.

Nest: In holes in trees at moderate height.

Eggs: 5, clear white, but, according to Samuels, owing to their transparency, they have a pink tint before they are blown.

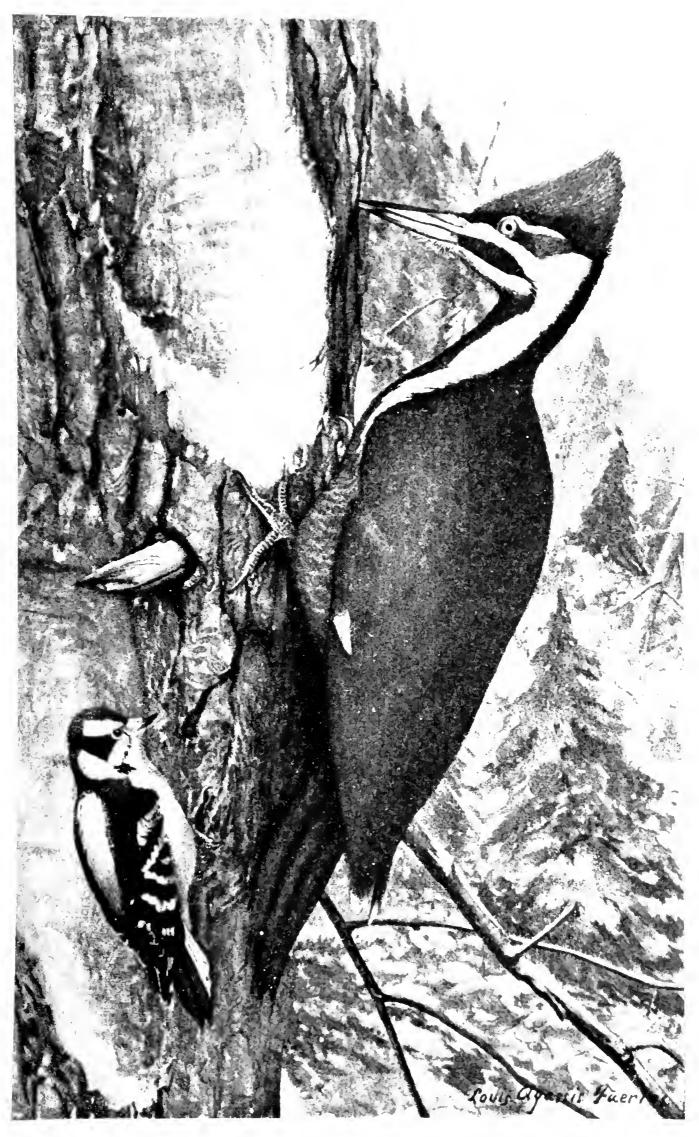
A common Woodpecker, though somewhat more shy and less frequently seen near dwellings than the Downy, except in cold weather, when it is pressed for food. At this time it will be a most constant customer of your lunch counter.

DOWNY WOODPECKER: Picus pubescens. R.

Plate IX Fig. 1

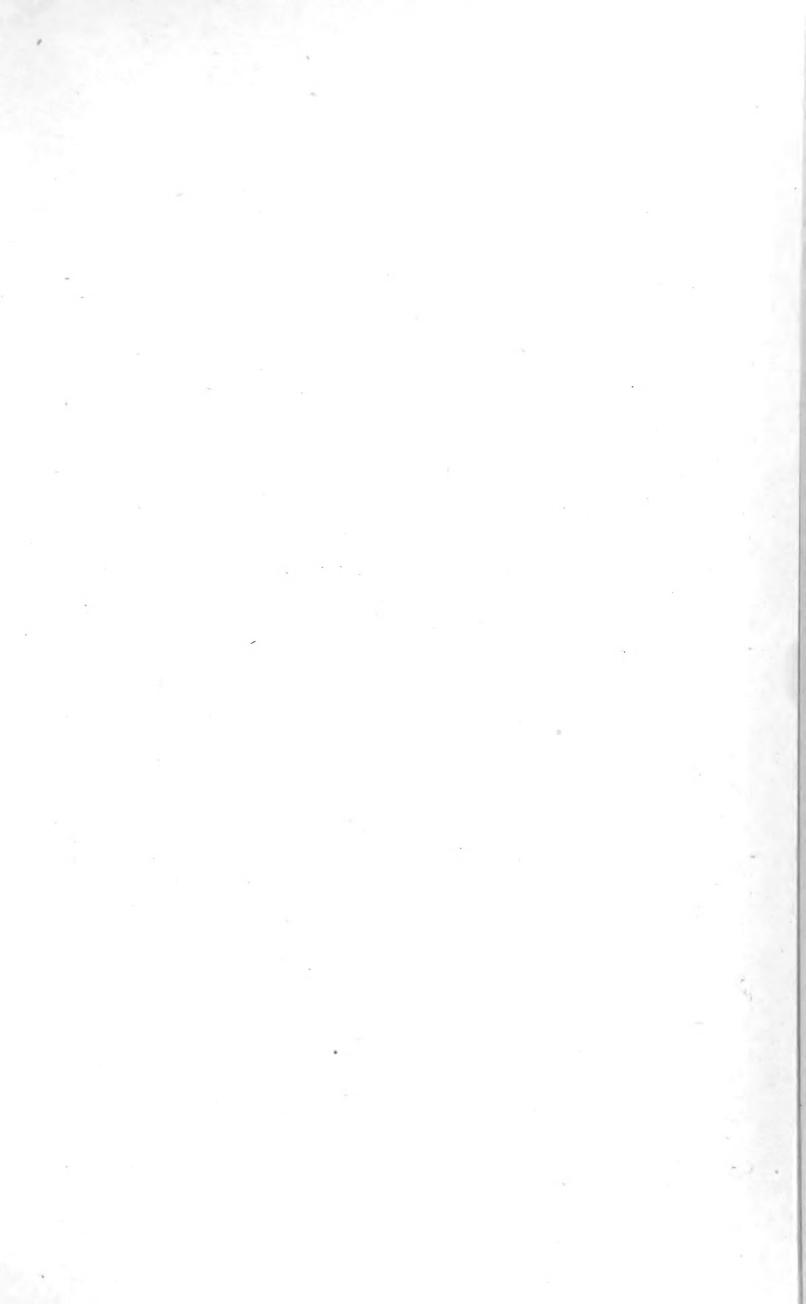
Length: 6-7 inches, the smallest of our Woodpeckers.

Male and Female: Closely resembling the last species. Wings and tail barred with white; the narrow, red head band of the male is replaced by a white stripe in the female.



OUR LARGEST AND SMALLEST WOODPECKER

1 DOWNY 2 PILEATED





SAPSUCKER

2 BLACK-BILLED CUCKOO

Note: A short, sharp note and a rattling cry, which starts and ends in an abrupt precision, suggestive of a mechanical contrivance set off with a spring. This it uses in lieu of a song. (Bicknell.)

Season: An abundant resident.

Nest: In tree hole, varying from low apple to high forest trees.

Eggs: Similar to those of last species, but smaller.

The Downy Woodpecker, the persistent apple-tree borer, is a miniature reproduction of the Hairy Woodpecker, except that its tail is *barred* with black and white.

RED-HEADED WOODPECKER: Melanerpes erthrocephalus. R. and V.

Tricolor

Length: 8.50-9.50 inches.

Male and Female: Head, throat, and neck crimson. Back, wings, and tail blue-black. White below. White band on wings, and white rump. Bill horn-colored, and about as long as head.

Note: A guttural rattle, similar to the cry of the tree-toad. In April a hoarse, hollow-sounding cry. (Bicknell.)

Season: A casual resident, and an abundant but irregular migrant, especially in the fall.

Nest: Usually a hole near the top of a blasted tree in mixed woods. Eggs: Glassy white.

YELLOW-BELLIED SAPSUCKER: Sphyrapicus varius. V. Plate X Fig. 2

Length: 8.25-8.75 inches.

Male: Above black, white, and yellowish; below greenish yellow. Tail black, white on middle feathers, white edge to wing coverts. Crown, chin, and throat bright red. Bill about as long as head, more pointed and slender than in last species.

Female: Throat and head whitish.

Note: A rapid drumming with the bill on the tree branch or trunk serves for a love-song, and it has a screaming call note.

Season: In migrations; more abundant in fall than in spring; also a winter visitor.

Nest: In an unlined hole, which is often 18 or 20 inches deep.

Eggs: 5, pure white.

This bird, an occasional sucker of sap, differs in many respects from the ordinary Woodpeckers, as it often pursues insects into the air and returns to its perch, like a Flycatcher. It also eats nuts, and berries and other fruits, and may be often seen searching for them on twigs so slender that they bend with its weight. The traces of his carpenter work on

the trees are very interesting, often looking like strange carved traceries, and then again whole squares of bark will be torn off, showing the inner bark and causing the sap to escape. — See Stearns and Coues, N. E. Bird Life.

THE SAPSUCKER

A bacchant for sweets is the Sapsucker free!

"The spring is here, and I'm thirsty!" quoth he:

"There's good drink, and plenty, stored up in this cave;

'Tis ready to broach!" quoth the Sapsucker brave.

A bacchant for sweets! "'Tis nectar I seek!"

And he raps on the tree with his sharp-whetted beak;

And he drinks, in the wild March wind and the sun,

The coveted drops, as they start and run.

He girdles the maple round and round—
'Tis heart-blood he drinks at each sweet wound;
And his bacchanal song is the tap-tap-tap,
That brings from the dark, the clear-flowing sap.

Edith M. Thomas in Bird-Lore

FLICKER: Colaptes auratus. R.

Golden-winged Woodpecker; Yellow-hammer, High-hole, Clape

Length: 12-13 inches.

Male: Above golden brown, barred with black. Black crescent on breast, red band on back of head. Round black spots on the belly, black cheek patch. Wing linings and shafts of wing and tail quills gamboge-yellow. Rump white. Bill slender, curving, and pointed, and dark lead-color; feet lead-color.

Female: Lacks black cheek patches.

Note: "Wick-wick-wick!" Also a few guttural notes. "A prolonged, jovial laugh." (Audubon.)

Season: Resident, but most plentiful from April to October. Nest: In partly decayed trees in orchard, garden, or wood.

Eggs: Usually 6, white.

Next to the rare Pileated Woodpecker, or Log Cock, the Flicker is our largest New England Woodpecker, and at the same time the most abundant. Until a short time ago it was shot as a game bird in Connecticut for the sake of its plump, pigeon-like flesh, but now, happily, it is protected, and if any one shoots it under any pretext whatever he is breaking the law.

MR. FLICKER WRITES A LETTER

People:

Tell me where you scare up
Names for me like "Flicker," "Yarup,"
"High-hole," "Yucker," "Yellow-hammer"—
None of these are in my grammar—
"Piquebois jaune" (Woodpick yellow),
So the Creoles name a fellow.
Others call me "Golden-wings,"
"Clape," and twenty other things
That I never half remember,
Any summer till September.

Many names and frequent mention Show that I receive attention, And the honor that is due me; But if you would interview me Call me any name you please, I'm "at home" among the trees. Yet I never cease my labors To receive my nearest neighbors, And 'twill be your best enjoyment Just to view me at employment.

I'm the friend of every sower,
Useful to the orchard grower,
Helping many a plant and tree
From its enemies to free—
They are always food for me.
And I like dessert in reason,
Just a bit of fruit in season,
But my delicacy is ants,
Stump or hill inhabitants;
Thrusting in my sticky tongue,
So I take them, old and young.

Surely we have found the best Place wherein to make our nest—Tunnel bored within a tree,
Smooth and clean as it can be,
Smallest at the open door,
Curving wider toward the floor.
Every year we make a new one,
Freshly bore another true one;
Other birds, you understand,
Use our old ones, second-hand—
Occupying free of rent;
They are very well content.

To my wife I quite defer,
I am most polite to her,
Bowing while I say, "kee-cher."
Eggs we number five to nine,
Pearly white with finish fine.
On our nest we sit by turns,
So each one a living earns;
Though I think I sit the better,
When she wishes to, I let 'er!

FLICKER.

- Garrett Newkirk in Bird-Lore.

ORDER COCCYGES: CUCKOOS, KINGFISHERS, ETC.

Family Cuculidae: Cuckoos

YELLOW-BILLED CUCKOO: Coccyzus americanus. S. R.

Length: 11-12 inches.

Male and Female: Powerful beak, about as long as head; lower mandible yellow; above olive with gray and metallic tints; two middle tail feathers olive; outer quills black, with white spots; wings washed with bright cinnamon; under parts grayish white.

Note: "Kuk-kuk-kuk!" a harsh, grating sound.

Season: Late April to September.

Breeds: From Florida to New Brunswick.

Nest: Rudimentary; only a few sticks laid in a bush or on a forked bough.

Eggs: 4-8, pale green, sometimes little more than a greenish white.

This is the long, slender bird of graceful flight that does such good work in freeing our orchard of the sling nests of the tent worm.

BLACK-BILLED CUCKOO: Coccyzus erythrophthalmus. S. R.

Rain Crow

Plate X Fig. 2

Length: 11-12 inches.

Male and Female: Black bill; eyelids red. Above, general coloring same as last species. White spots on tail, small and inconspicuous.

Note: "Kow-kow-kow! kuk-kuk!"

Season: May to late September.

Breeds: Through North American range.

Nest: In a bush; a few sticks, with no edge to confine the eggs.

Eggs: Hardly distinguishable from the last species.

Our Cuckoos have nothing in common with the European birds, that lay their eggs in the nests of others and are most shiftless citizens in spite of their merry voices and bright feathers. Our birds are sober-minded insect eaters, even if they are rather poor housebuilders.

Family Alcedinidae: Kingfishers

Belted Kingfisher: Ceryle alcyon. S. R.

Length: 12-13 inches.

Male and Female: Long crest. Straight bill, longer than head; head appearing large for size of body. Above lead-blue, somewhat variegated with black. Below whitish. Two dull blue bands across breast. White transverse bands and spots on the short tail. Female has rusty bands across breast.

Note: A harsh, rattling cry, as familiar along river banks as the Jay's scream in the woods.

Season: A common summer resident, which might almost be classed as a resident, as it comes in March, and in mild seasons often winters.

Nest: In hollow trees and in earth burrows; 6-8 feet deep.

Eggs: 6-8, crystal white.

The Kingfisher may be easily named, as he sits on his usual perch, a dead stump or limb jutting over the water, by his large, long-crested head, which gives his body a bobtailed appearance. Living entirely upon fish, he is driven from small streams to the larger rivers by the closing in of the ice, but in open winters I have seen this bird in every month from November to March.

ORDER RAPTORES: BIRDS OF PREY

Family Bubonidae: Horned Owls

AMERICAN LONG-EARED OWL: Asio wilsonianus. R. Cat Owl.

Length: 14-16 inches.

Male and Female: Above finely mottled with brown, ash, and dark orange. Long, erect ear tufts. Complete facial disk, reddish brown with darker inner circle; dark brown broken bands on wings and tail. Legs and feet completely feathered. Breast pale orange with long brown stripes. Bill and claws blackish.

Note: A variety of hoot, also a moaning mew.

Season: Resident.

Nest: A rude structure which may be built either on the abandoned nests of Hawks, Crows, or Herons, on the ground, or in hollow stumps.

Eggs: 4-6, the usual soiled white.

This valuable bird is intermediate in size between the common Great Horned Owl and the little Screech Owl. It takes its common name from the conspicuous tufts of feathers, erroneously called ears, which it can erect over its head. These contain eight or ten feathers, and are about as long as the middle toe with the claw. This bird is tawny above, while below it is grayish white with streaks and bars of brown, black, and tawny, while the feet and legs are tawny and unspotted. It is from thirteen to sixteen inches long, and has a spread of wings of about thirty-nine inches.

The Long-eared Owl is strictly nocturnal in its habits, as is the common little Screech Owl, and differs in this regard from the Short-eared Owl and a few others, that may hunt in the day time. While a few may be found in our state during the winter, it generally migrates southward at this season. Sometimes several birds may be found in a colony or group.

"Although quiet during the day, and apparently indisposed to venture into the strong light, when started it is able to thread its way rapidly through the most intricate passages and to evade obstructions, demonstrating that its vision is in no way defective. The bird is not wild, and will allow itself to be closely approached. When conscious that its presence is recognized it sits upright, draws the feathers close to the body, and erects the ear tufts, resembling in appearance a piece of weather-beaten bark more than a bird. It makes a very gentle and interesting pet, and will afford great amusement by its antics. An individual which the writer once had would allow itself to be dressed in a doll's hood and shawl by the children. When too roughly handled it would fly to the top of the door, though in a few minutes it would return to them and appear to be interested in all the details of their play. — A. K. Fisher.

SHORT-EARED OWL: Asio accipitrinus. R.

Length: 13.75-17 inches.

Male and Female: Inconspicuous ear tufts, facial disk with a dark ring enclosed in a lighter one. Plumage varied from bright orange to buffy white, with bold stripes of dark brown, darker above and more mottled below, growing whiter toward vent. Legs feathered with plain buff. Bill and claws dusky blue-black. Note: A quaver.

Season: Summer resident, remaining until late fall.

Nest: Of hay and sticks; commonly on the ground in a little hollow or clump of bushes.

Eggs: 4-7; dirty white.

A valuable bird, that preys upon meadow mice and other small vermin, and is wholly useful to the agriculturist.

This is also called the Marsh Owl, or Swamp Owl, from the fact that in this state it is often seen in the lowlands hunting for mice during the daytime. It is found over the greater portion of the entire earth, except Australia, although during the summer with us it is rare, as it then dwells north of our state. In the fall great numbers of these birds pass to the southward, working over the low meadows and gathering their food day by day as they go. It is not an uncommon thing to see them fly up, as one crosses such a field during the latter part of autumn. Ten or a dozen may be found on the ground searching the grass for their food, although they do not live in flocks, but scattered over the fields some rods apart. The common name is given to them because of the so-called ear tufts, which are very short and inconspicuous, being much shorter than the middle toe with the claw. The color of the bird varies from bright tawny to buffy white, with conspicuous large brown stripes. The feathers toward the center of the disk immediately around the eye are black. The eyes themselves are dark, and not as large as in the other kinds of Owls. The bird is from 13 to 17 inches in length, and has a spread of wings of about 43 inches. — Fisher.

BARRED OWL: Syrnium nebulosum. R.

Length: 18-20 inches.

Male and Female: Eyes blue-black, instead of the usual yellow iris.

No ear tufts. Plumage mottled dark brown, rusty, and grayish.

Striped on breast with dark brown. Face feathers white tipped.

Wings and tail barred with brown. Legs and dark feet fully feathered and faintly barred. Bill ivory-colored.

Note: A loud, guttural call. "Koh! Koh! Ko, Ko, hó!" or "Whah, whah, whah, whah-aa!" (Nuttall.)

Season: Resident in Conn.

Nest: In hollow tree or in crotch at some height from the ground.

Eggs: 4-6, laid in February, March, and April.

This bird is also sometimes called the Hoot Owl and the Rain Owl. It is distinguished from the other Owls by its large size, the yellow color of its bill, the dark eyes, and dark bars or marks across its breast. It is of a grayish color, and the cross bars on its breast are dark. While the preceding bird is a northern species, this one is southern. It is found in Pennsylvania throughout the year, and is common through the wooded regions of the state, especially where there is much large timber. It flies by early twilight and at night, and nests in the hollow trees or the old nests of larger birds, or sometimes building its own nest among the branches of trees. In this state it nests in March and April, or sometimes a little later. It lays two or three eggs, which are white and about two inches long and one and three-fourths inches in diameter. They remain concealed during the day time in the deep, darker portions of woods, although they occasionally hunt food during a clouded day as well as by twilight.

Screech Owl: Megascops asio. R. Little Horned Owl

Plate XI

Length: 8-10 inches.

Male and Female: Conspicuous ear tufts. Bill light horn-color. Two distinct phases of plumage belong to this species, having, as Dr. Fisher says, "no relation to sex, age, or season." In one state the Owl is mottled grayish and black, and the other rust-red. Feet covered with short feathers; claws dark.

Note: A hissing alarm note—"Shay-shay!" and a moaning, quavering wail, which is not loud, but penetrating.

Season: Common resident.

Breeds: Through range; in April and early May.

Nest: In hollow trees; sometimes in orchards, near dwellings, and on wood borders.

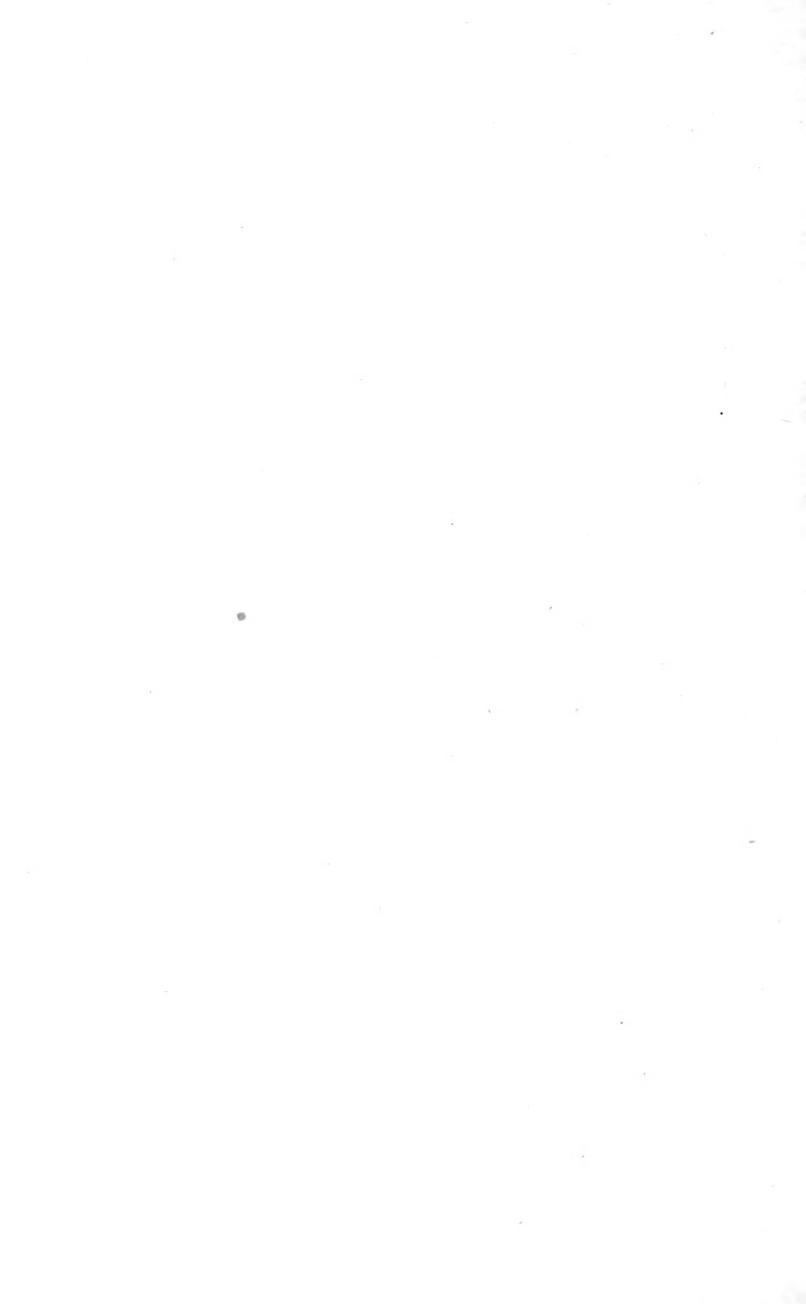
Eggs: 4-6, almost spherical.

A pretty and useful Owl, killing cutworms and the larger beetles, as well as mice, etc.

"This is the best known Owl in America, owing to its abundance and its habit of residing near the abode of man. It is found throughout the entire year in this state, and nests in all parts of the country. This little bird is known as the Screech Owl, the Mottled Owl, Gray Owl, and Red Owl. It represents what is called dichroism, as it has the two-color



SCREECH OWLS IN BOTH RED AND GRAY PLUMAGE



phase. In the same nest some may be gray and others red. This difference is so great that one would readily take specimens of the different colors to be birds of different species, yet this does not depend upon age, sex, or season. It is from six and one-half to ten inches long, with an extent of wings of from twenty to twenty-four inches.

"The ear tufts are large and conspicuous, and a stripe is to be seen along each side of the back, and a blackish line along the shafts of the feathers. It is often found in buildings, but more frequently in hollow trees, especially in old apple trees.

"The low, wailing, moaning notes of this Owl are not loud, but their character enables them to be heard a considerable distance; they suggest, without resembling, those of the common dove. They may be heard at any time from dusk to dawn, and on rare occasions in the daytime." — Fisher.

THE EARLY OWL

An Owl once lived in a hollow tree,
And he was as wise as wise could be.
The branch of learning he didn't know
Could scarce on the tree of knowledge grow;
He knew the tree from branch to root,
And an Owl like that can afford to hoot.

And he hooted until, alas! one day
He chanced to hear, in a casual way,
An insignificant little bird
Make use of a term he had never heard.
He was flying to bed in the dawning light
When he heard her singing with all her might:
"Hurray! hurray! for the early worm!"
"Dear me," said the Owl, "what a singular term!
I would look it up if it weren't so late.
I must rise at dusk to investigate.
Early to bed and early to rise
Makes an Owl healthy, and stealthy, and wise!"

So he slept like an honest Owl all day,
And rose in the early twilight gray,
And went to work in the dusky light
To look for the early worm at night.
He searched the country for miles around,
But the early worm was not to be found;
So he went to bed in the dawning light
And looked for the "worm" again next night.

And again and again, and again and again, He sought and he sought, but all in vain, Till he must have looked for a year and a day For the early worm in the twilight gray.

At last in despair he gave up the search,
And was heard to remark as he sat on his perch
By the side of his nest in the hollow tree:
"The thing is as plain as the night to me—
Nothing can shake my conviction firm;
There's no such thing as the early worm."

-Oliver Herford

Family Falconidae: Falcons, Hawks, Eagles

MARSH HAWK: Circus hudsonius. S. R.

Harrier, Blue Hawk

Length: 17-19 inches; female averaging two inches longer.

Male: Above bluish gray; below white mottled with brown. Wings brownish, long, and pointed; tail long; upper tail coverts white.

Female: Dark reddish brown; below rusty with spots. Bill hooked and black, longer than the Owl's; feet black.

Note: All Hawks have a screaming cry, but it is of little aid in identifying species.

Season: A common summer resident; may winter.

Nest: On the ground, one foot in diameter, of grasses, etc.; in swampy meadows or among rushes in marshes.

Eggs: 4-5, whitish; sometimes with irregular blotches of brown and gray shell marks.

The Marsh Hawk is the most harmless and beneficial of its family; it feeds upon reptiles, locusts, grasshoppers, and small mammals, and never disturbs domestic poultry.

In this locality it is more plentiful in the bogs near fresh ponds, and in the vicinity of rivers, than in the salt-marshes.

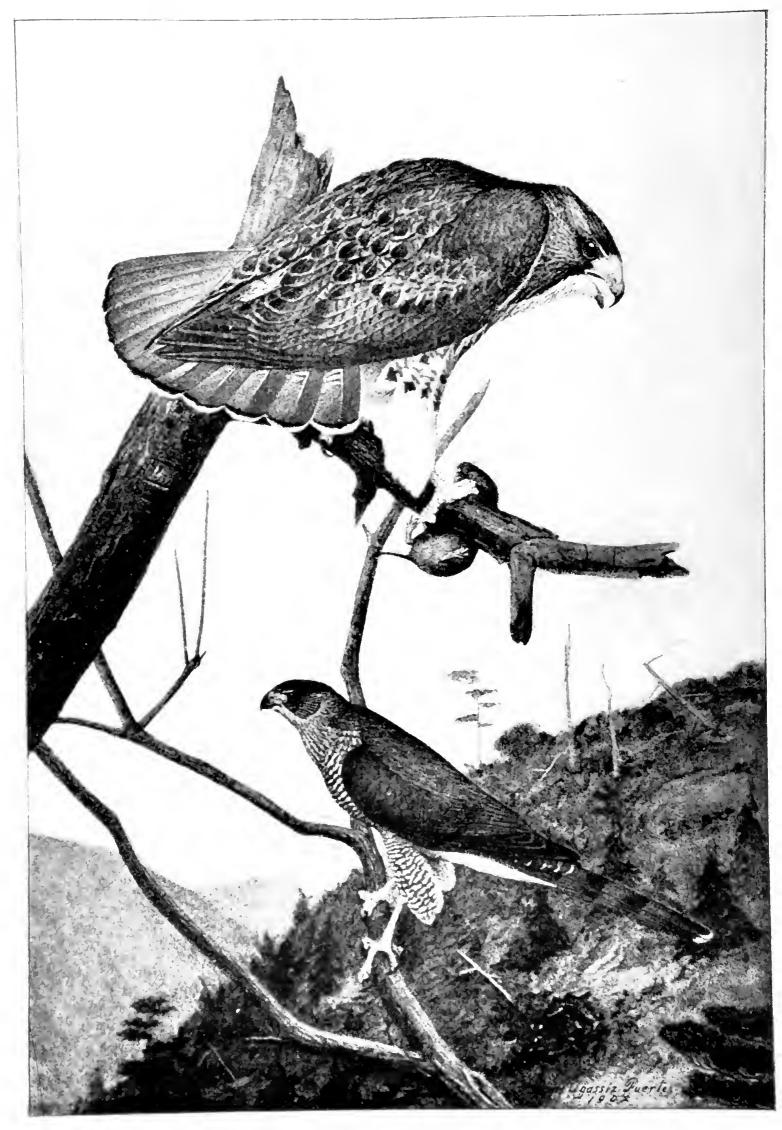
It is the summer-day Hawk, and the species most frequently seen in the warmest months. It flies by night as well as day, however, and is often a companion of the Screech Owl in its nocturnal rambles.

SHARP-SHINNED HAWK: Accipiter velox. R.

Length: 12 inches; female 14 inches.

Male and Female: Wings longer than tail. Eyes reddish. Above bluish gray, deepest on head. Beneath whitish, barred on the sides and breast with rusty and dark brown. Tail even or notched. The young are spotted more or less on the back and streaked below. Head of this and next species smaller than last, while legs and tail are relatively longer. Feet slender.





1 RED-TAILED HAWK2 COOPER'S HAWK

Season: A common resident; coming about farms and even city parks in the winter.

Nest: Occasionally on a rocky ledge, but usually in some thick evergreen at a moderate height from the ground; a bulky platform of sticks with an upper story of bark, leaves, and moss.

Eggs: 4-5, purplish white, spattered heavily with dark brown; sometimes the spots form a wreath at the large end.

This small and very common Hawk is possessed by a spirit of dash and daring altogether out of proportion to its size. Dr. Abbott, in speaking of the rapidity of its movements, says: "It is feathered lightning. He ceases to be before you realize that he is."

A robber Hawk of the worst kind, brave, bold, and cruel, sparing neither farmyard fowls or wild birds.

Cooper's Hawk: Accipiter cooperi

The bad Chicken Hawk

Plate XII Fig. 2

Length: 15-16 inches.

Male and Female: Uniform bluish gray above, top of head blackish; tail crossed by several blackish bands; below white, with breast and sides barred with dusky or rufous. This species resembles the last, but is distinguishable by its greater size and rounded tail. Feet rather stout, greenish yellow.

Season: Common summer resident from March to December; occa-

sionally winters.

Nest: In the tops of trees in thick woods, some authors say in evergreens; those I have seen have been in hickories.

Eggs: 3-4, bluish white, either plain or spotted with reddish.

A mischievous harrier of all birds from barnyard fowls to song birds, doing by craft what it cannot accomplish by daring alone.

RED-TAILED HAWK: Buteo borealis

Red Hawk, Hen Hawk

Plate XII Fig. 1

Length: 19-22 inches; female, 22-24 inches.

Male and Female: Above dark brown, variegated with white, gray, and tawny; below whitish and buff, streaked across belly with brown. Tail rust-red, with a black band near end; in young, tail gray with numerous narrow brown bars. Moderate, horn-colored bill; feet stout and strong.

Season: A common resident.

Nest: Built in March, in a tall tree in deep woods. A bulky affair of sticks with an upper nest; lined with soft bark like the Crow's.

Eggs: 2-3, dirty white, thickly blotched with purplish brown.

Owing to different phases of plumage, it is often difficult to identify the larger Hawks on the wing; but the *red tail* is a distinctive mark of the adults of this species at all seasons.

AMERICAN OSPREY: Pandion haliaëtus. S. R.

Fish Hawk

Length: About 24 inches; female larger.

Male and Female: Plain dark brown above, the tail having a white tip and a band of dark brown. Head, neck, and lower parts white; breast plain, or sometimes spotted faintly with brown. Bill bluish black; feet grayish.

Note: "Phew, phew, p-hew!" Season: April to November.

Breeds: From Florida to Labrador.

Nest: In trees near or over water; a bulky nest on the plan of the Eagle's.

Eggs: 2-3, variable in size and color; average, 2½ x 1¾ inches.

The familiar brown, Eagle-like bird, with very large talons, which is seen hovering over sound, creek, and river, particularly in spring and early fall. The Fish Hawk, as it is popularly called, follows schools of fish, and, dashing from considerable height, seizes its prey with its stout claws. If the fish is small, it is immediately swallowed; if it is large (and it will secure occasionally shad, bass, etc., weighing five or six pounds) it is taken to a convenient place and torn to bits. –

THE FISHERMAN'S HYMN

The Osprey sails above the sound;
The Geese are gone, the Gulls are flying;
The herring shoals swarm thick around;
The nets are launched, the boats are plying.

Yo, ho, my hearts! let's seek the deep,
Raise high the song, and cheerly wish her,
Still as the bending net we sweep;
"God bless the Fish Hawk and the fisher!"

She brings us fish—she brings us spring,
Good times, fair weather, warmth, and plenty;
Fine store of shad, trout, herring, ling,
Sheep's-head and drum, and old wives' dainty.

Yo, ho, my hearts! let's seek the deep,
Ply every oar, and cheerly wish her,
Still as the bending net we sweep;
"God bless the Fish Hawk and the fisher!"

She rears her young on yonder tree;
She leaves her faithful mate to mind 'em;
Like us, for fish she sails to sea,
And, plunging, shows us where to find 'em.

Yo, ho, my hearts! let's seek the deep,
Ply every oar, and cheerly wish her,
While slow the bending net we sweep;
"God bless the Fish Hawk and the fisher!"

Alexander Wilson.

ORDER COLUMBÆ: PIGEONS

Family Columbidae: Doves and Pigeons

Mourning Dove: Zenaidura macroura. S. R.

Length: 12-13 inches.

Male and Female: General appearance when in the trees, a bluish fawn color. Above olive-brown, varying to a bluish gray, neck and head washed with metallic tints. Below a dull purplish, changing to reddish brown. Two middle tail feathers as long as the wings. Bill black, feet lake-red. Female duller.

Note: A plaintive mournful "Coo-o, coo-o!"

Season: Once common summer resident, March to November; now scarce.

Breeds: From southern Canada to the Gulf of Mexico.

Nest: A few loose sticks, sometimes laid on an old Robin's nest.

Eggs: 2 white.

This is a naturally gentle and confiding bird, but is subject to such persecution from the gunners that it is usually considered wild and shy. In portions of the country where it is seldom molested few birds are less timid in the presence of man. During the breeding season, generally May in New England, the woods resound with the cooing of the ardent and affectionate creatures; but at other seasons the dove is a remarkably silent bird. — Stearns and Coues.

BOB WHITE

"I own the country hereabout," says Bob White;

"At early morn I gayly shout, I'm Bob White!

From stubble field and stake-rail fence
You hear me call without offense,
I'm Bob White! Bob White!

Sometimes I think I'll ne'er more say Bob White;
It often gives me quite away, does Bob White;
And mate and I and our young brood,
When separate, wandering through the wood,
Are killed by sportsmen I invite
By my clear voice—Bob White! Bob White!

Still, don't you find I am out of sight
While I am saying Bob White, Bob White?"
— Charles C. Marble

ORDER GALLINÆ: GALLINACEOUS BIRDS

Family Tetraonidae: Grouse, Partridges, Etc.

BOE WHITE; QUAIL: Colinus virginianus. R.

Plate XIII

Length: 10.50 inches.

Male and Female: Crown feathers slightly crested. White forehead; eye line and throat patch edged with dark. Above variegated reddish brown flecked with black, white, and tawny. Below whitish, warming on the sides to reddish, with dark streaks. In female the forehead, throat, and eye stripes are buffy. Bill rusty black.

Note: "Bob-white! Bob-white!" Sometimes also "Poor-Bob-white."

Season: Resident.

Breeds: Throughout range; pairs here in April.

Nest: Small twigs and grass in a ground hollow.

Eggs: 10-15, white and blunt.

THE ECONOMIC VALUE OF THE BOB WHITE

No birds have so firm a hold on public interest as the game birds. The laws enacted on their behalf exceed in number a hundred fold those relating to other kinds of birds. Among game birds the Bob White is held by many to be pre-eminent. Easily accessible over a wide area of the country, small enough of size and swift enough of wing to test the sportsman's skill, delicious enough to please the epicure, to most sportsmen it is without a peer, the king of our feathered game.

The name "Bob White" is derived from a fancied resemblance to this word in the familiar utterance of the bird.



BOB-WHITE EATING BEETLES IN POTATO FIELD



It has been adopted by several writers because of the inaccuracy of the two names by which the species is usually known—Quail in the north and west and Partridge in the south. The name "Quail" properly belongs to a smaller migratory bird of a different genus, found in the Old World, the Quail of the Bible story; while "Partridge" in New England, universally applied to the Ruffed Grouse, is strictly the name of another Old World genus, though also used to designate the group to which Bob Whites, Quail, Partridges, and other closely related birds belong.

The æsthetic pleasure derived from the presence of the Bob White has a certain definite value. Much money has been spent for merely the enjoyment of the beauty and companionship of birds. For the protection of Gulls and Terns along the Atlantic coast thousands of dollars have been appropriated at the instance of bird lovers, in whose eyes these delicate creatures are the crowning grace of a marine landscape. To pastoral inland scenes - wood lots in a green mist of young leaves, summer grass fields and bushy pastures, brown stubble and skeleton cornfields — the Bob White adds a charm, homely but no less enjoyable. As it calls in summer from the fence post or runs fearlessly across the road, the stroller can see it closely enough to admire its trim, alert figure, and its tasteful color pattern of black, white, and brown, set off by delicate tintings of blue. Its mellow whistle seems a proffer of goodfellowship, investing even a solitude with cheerful friendliness, while the plaintive covey call, heard in the growing darkness as it summons a scattered flock to its nightly resting place, is one of the tenderest of evening sounds. Many people, appreciating these features of its presence, welcome the bird for the pleasure of its company, and are ready to spend time and money to keep it undisturbed in their neighborhood. The writer has known several men who, for this purpose, incurred considerable expense in posting land and hiring keepers to prevent poaching. There are no doubt many who, in similar ways but with smaller outlay, set up some measure in money for the æsthetic value of the Bob White.

In three ways the Bob White is of strictly economic importance—as a destroyer of noxious seeds and insects; as a delicate and nourishing food; and as an object of sport.

THE BOB WHITE AS A WEED AND INSECT DESTROYER

A study of the Bob White was undertaken by means of field observations, experiments with captive birds, and examination of the contents of crops and stomachs in the laboratory. The results obtained may be thus summed up: The Bob White is probably the most useful abundant species on the farm. It is one of the most nearly omnivorous birds, consuming large quantities of weed seeds, and destroying many of the worst insect pests with which the farmer has to contend. It does not injure grain, fruit, or any other crop.

PRESERVATION OF THE BOB WHITE

The value of the Bob White as a destroyer of weeds and injurious insects, as an article of food, and as an object of sport gives importance to the question of its maintenance. siduously is it sought by sportsmen and market hunters that under lax laws it might easily become very scarce, especially should inclement weather, as sometimes happens, greatly impede the natural increase. On the other hand, gallinaceous birds are prolific, and with proper protection the Bob White might be readily increased to the point of abundance. West of the Mississippi it has extended its natural range, as more and more land has come under cultivation, until now it is found as far west as eastern Colorado. In the east there is considerable fluctuation in its numbers, owing to the far greater proportion of sportsmen by whom it is sought. Each fall the birds are reported scarce or plentiful according to the locality from which the report is made.

Although the Bob White is hardy, has enormous fecundity, and takes kindly to civilization, encouragement and propagation of the bird is not an easy undertaking. During the breeding season, as well as in severe winters, it has to struggle hard for existence. Mowing machines destroy its nests, Crows steal its eggs, and domestic cats, as well as foxes and certain Hawks, prey on its young. During the winter, especially in the northern part of its range, it is sometimes destroyed in great numbers by deep and crusted snows. The greatest need in severe weather is a food supply that will not be rendered inaccessible by a heavy snowfall. The berries of sumac, wax myrtle, and bayberry, and the hips of the wild rose furnish a

palatable supply of such food. Bayberry and wax myrtle are eaten eagerly along the coast, where they thrive, but sumac is generally the most important of these staples. Nine-tenths of the food of a dozen Bob Whites shot in North Dakota during December consisted of the bright carmine berries of the sumac, some of the birds having eaten from 200 to 300 of them. The food supply can be improved, and owners of game preserves and others who wish to have the Bob White as a neighbor can insure the presence of a greater number of birds to the acre if they will adopt this means of securing them. northern states buckwheat planted late will give an abundance of food for the young, growing birds. In damp situations climbing false buckwheat and smartweed yield them an excellent support that will continue well into the winter. south the cowpea makes a good winter supply, and millet, kafir corn, and bald barley planted late are also excellent. Hairy vetch, alfalfa, tick trefoil, Japan clover, and the hog peanut furnish excellent food for the Bob White. Sunflower and ragweed seeds are also palatable and nutritious. Acorns, chestnuts, and beechnuts are utilized, especially by those birds that are kept in the woods by gunners. In Florida pine seeds are eaten in winter. During summer the running blackberry is an important article of food.

Suitable cover is especially important in order that the birds may escape from Hawks. Thickets of rose, blackberry briers, holly, laurel, and cat brier, adjacent to the birds' feeding grounds — that is, along the edges of fields — afford the best refuge from winged enemies. Young pine woods are the safest retreat when the enemy carries a gun. If grain is provided in winter for the birds, it should be scattered along the edge of cover, so that they will not be imperiled when they take it. The birds must have, also, good roosting places. An ideal situation is a field covered with broom sedge, intermingled with briers. A good water supply is of course essential.

Experience has shown that in suitable situations the Bob White will thrive if a chance be given it, and the friends of the birds should see that such a chance is afforded. The Audubon societies, with a total membership of 65,000 to 70,000, which cherish the bird for the pleasure it brings to eye and ear; the sportsman, who loves the whir of its brown wings

bursting from the stubble; and the farmer, whose enemies it destroys and whose resources it enriches, should work together to secure for its preservation laws adequate and generally enforced. — Sylvester D. Judd, Ph.D., Assistant Ornithologist, Biological Survey, in Year Book, U. S. Dept. Agriculture, 1904.

RUFFED GROUSE: Bonasa umbellus. R.

Partridge (New England), Pheasant (Middle and Southern States)

Length: 16-18 inches.

Male and Female: Slightly crested head; yellow eye stripe; neck mottled with reddish and dusky brown. Back variegated chestnut; lower parts lighter, buff or whitish, with dark bars. Long tail, which spreads fan-like, reddish gray, beautifully barred. Neck ruff of dark feathers, with iridescent green and purple tints, which, in the female, is dull. Claws not feathered.

Note: A Hen-like cluck.

Breeds: In woodlands, through range.

Nest: On the ground, among dry leaves; frequently a bunch of leaves between the roots of a chestnut.

Eggs: 10-15, rich buff, usually plain, sometimes specked with brown.

This is the beautiful game bird whose habit of standing on a log, stump, or fence and beating its wings rapidly up and down with a drumming sound has startled many a boy and girl on their first visit to the spring woods.

THE RUFFED GROUSE

When the pallid sun has vanished Under Osceola's ledges, When the lengthening shadows mingle In a sombre sea of twilight, From the hemlocks in the hollow Swift emerging comes the Partridge; Not a sound betrays her starting, Not a sound betrays her lighting In the birches by the wayside, In her favored place for budding. When the twilight turns to darkness, When the fox's bark is sounding, From her buds the Partridge hastens, Seeks the soft snow by the hazels, Burrows in its sheltering masses, Burrows where no Owl can find her.

-Frank Bolles

PARTRIDGES

(Ruffed Grouse)

Under the alders, along the brooks,
Under the hemlocks, along the hill,
Spreading their plumage with furtive looks,
Daintily pecking the leaves at will;
Whir! and they float from the startled sight —
And the forest is silent, the air is still.

Crushing the leaves 'neath our careless feet, Snapping the twigs with a heavy tread, Dreamy October is late and sweet, And stooping we gather a blossom dead; Boom! and our heart has a thunderous beat As the gray apparition flits overhead.

- Alonzo Teall Worden

Family Scolopacidae: Snipes, Sandpipers, Etc.

AMERICAN WOODCOCK: Philohela minor. S. R.

Length: 10-11 inches. Female an inch longer.

Male: Eyes large, set in upper corner of head. Short, thick neck and compact body. Above variegated with brown, black, tawny, and gray. Below brown, ranging from buff to tawny. Legs very short. Bill longer than head, straight and stout.

Note: A peep and a whistle. "P't-ul! P't-ul!" and "peent, peent." (Brewster.)

Season: A summer resident; February to December.

Breeds: Through range, in April and May.

Nest: A hollow in the ground, lined with a few leaves.

Eggs: 4 usually, varying from stone-gray to buff, with indefinite brown markings and gray cloudings.

The king of our game birds, to be distinguished from the Snipe, which it resembles, by its heavier build, shorter legs, and plain red-brown under parts. Though grouped with shore birds, it is more frequently to be found in sheltered bogs and in woods bordering swamps than by lakes or rivers.

This bird feeds chiefly at night, but when in passing through the woods or along the edge of a well-screened roadside brook you see sharp holes in the mud, as if made by a knitting needle, you may be sure that a Woodcock has been "boring" for food with his bill, that has a tip so sensitive that he can feel worms with it like a finger.

Family Scolopacidae: Sandpiper

SPOTTED SANDPIPER: Actitis macularia

Teeter; Tip-up

Length: 7.50 inches.

Male and Female: Slender, flesh-color bill, black tipped, longer than the head. Above Quaker-gray, with an iridescent lustre, spotted and streaked with black. White eye line. White below, dotted with black; feet flesh-colored. More dull throughout in winter.

Note: A gentle "peet-weet - peet-weet!"

Season: Common summer resident.

Breeds: Throughout temperate North America.

Nest and eggs: Resembling last species.

This is the familiar little bird of roadside brooks and moist meadows, where the marsh marigold of spring is followed by the cardinal flower and gentian of autumn.

The Spotted Sandpiper possesses all the delicacy and beauty of a song bird, and it seems as much an act of cruelty to hunt it down for sport as if it was a Thrush or Oriole. It does not live in flocks.

TO A TIP-UP

Slim unbalanced bird A-tip upon the sands, Here's a friendly word, A mental shaking-hands.

Ludicrous enough,
But not more so than I;
Of such teet'ring stuff
Is all mortality.

-John Vance Cheney

ORDER HERODIONES: HERONS, ETC.

Family Ardeidae: Herons, Bitterns, Etc.

GREAT BLUE HERON: Ardea herodias. S. R.

Blue Crane

Length: 42-50 inches.

Male and Female: Long, black crest, the two longest feathers of which are shed in the summer moult. Upper parts and tail bluish slate, below black and white streaked, forehead and crown white. Feathers about neck long and loose. Bill yellow and dusky; legs and feet dark. This Heron can be recognized by its great size and bluish slate back; it is not distinctly blue at all.

Season: Common, nearly resident, may breed. (Averill.)

Breeds: Locally through range.

Nest: Usually a rude pile of sticks in a tree.

Eggs: 3, large, and of a dull bluish green.

Without question the Great Blue Heron, locally called the Blue Crane, is one of the most picturesque birds that we have in New England, and only divides the honors with the Bald Eagle and the Great Horned and Snow Owls. In many places they appear in small flocks, but I have never seen them here, except as individuals or occasionally in pairs.

THE BLUE HERON

Where water-grass grows overgreen
On damp, cool flats by gentle streams,
Still as a ghost and sad of mien,
With half-closed eyes the Heron dreams.

Above him in the sycamore
The Flicker beats a dull tattoo;
Through pawpaw groves the soft airs pour
Gold dust of blooms and fragrance new.

And from the thorn it loves so well The Oriole flings out its strong, Sharp lay, wrought in the crucible Of its flame-circled soul of song.

The Heron nods. The charming tunes
Of Nature's music thrill his dreams;
The joy of many Mays and Junes
Wash past him like cool summer streams.

What tranquil life, what joyful rest,

To feel the touch of fragrant grass,

And doze like him, while tenderest

Dream-waves across my sleep would pass!

— Maurice Thompson

Green Heron: Ardea virescens. S. R.

Poke

Length: 16-18 inches.

Male and Female: Head with lengthened crest. Above dark glossy green, sometimes with an iridescence. Edging of wing coverts reddish. Neck a rich shade of chestnut, with a purplish wash, white streak at the throat, and under parts whitish, shading to ash below. Legs and bill yellowish.

Season: Common summer resident.

Nest: Of sticks, in a tree, seldom high up.

Eggs: 3-6, pale green.

That this Heron is the commonest and best known of its family, is attested by the numerous local names it bears.

"Fly-up-the-Creek," "Chalk-line," and "Chuckle-head" being a few of the list to which every small boy feels it his duty to add one, usually of a very uncomplimentary nature.

BLACK-CROWNED NIGHT HERON: Nycticorax nyticorax naevius. S. R. Qua Bird; Quawk

Length: 23-26 inches.

Male and Female: Above either dull or greenish black; tail, wings, and neck grayish. Throat and forehead whitish. Below livid white. Crest of three long, white feathers rolled into one. Bill black; legs yellow.

Season: Common summer resident; April to October.

Nest: Nest not large, built in a very slovenly manner in tree tops, usually in communities.

Eggs: 3-4, pale sea-green.

Another common Heron, only second to the Green in abundance. Here it frequents inland ponds in preference to the salt-marshes, and, though I have not found its nests, I have seen the birds all the way from Mill River to Redding under circumstances that point to their breeding in single pairs.

They are nocturnal, as the name indicates, and when you come upon them in their roosts by daylight they are dazed and sleepy, and use an effort to pull themselves together, but at twilight their heavy, dark bodies may be seen flying overhead, identified beyond question by the cry, "quok-quok," uttered at regular intervals.

ORDER ANSERES: LAMELLIROSTRAL SWIMMERS

Family Anatidae: Ducks, Geese, Etc.

Subfamily Anatinae: River Ducks

BLACK DUCK: Anas obscura. R.

Dusky Duck

Length: 22 inches.

Male and Female: Bill greenish yellow. Above dusky, but not black; feathers edged with rusty brown. Neck, throat, and sides of head streaked with grayish and dark. Below brownish. Speculum violet and black; in the male tipped with white. Legs red.

Season: A resident, but more plentiful in the migrations.

Breeds: From New Jersey to Labrador.

Nest: A mat of marsh grasses on the ground.

Eggs: 8-10, a drab yellow.

This Black Duck (which is not black) is a great favorite among sportsmen, on account of its delicately flavored flesh. It is plentiful about the larger ponds all through the autumn, and I have seen it on the mill pond in December when there was thin ice on the margin.

THE DUSKY DUCK

September nights have scarcely felt
The first cool breath of autumn time
Ere high the Black Duck pinions fan
Our shore-line in their flight sublime.

At first these swift fowl skim the cloud, And high in lessening circles sweep; Then slow to lonely bays descend, Glad to repose their wings in sleep.

And so for passing weeks they haunt
The inland marsh and muddy creek,
Where in the shallows or the grass
Their pastime or their food they seek.

Most shy, at midday they disport
In ocean surf or ample bay;
But when the evening shades pervade
And fades the twilight of the day,
Then with a soaring flight they rise
And seek some lonely marsh remote,
Some salt-pool in the meadow scoop'd;
And here their quacking numbers float,
And here the watchful fowler lies
In ambush for the dusky prize.

-Isaac McLellan

Wood Duck: Aix sponse

Summer Duck

Length: 18-20 inches.

Male: A sweeping crest of golden green like the head; sides of head with much purple iridescence. White stripe from reddish bill to the eye, and from behind eye to throat. Front of neck and upper breast ruddy, with white specks, other lower parts white; a black and white crescent before the wings, sides more or less waved with black, white, and yellowish. Above brilliant iridescent hues, — purple, bronze, green, etc.; speculum green. Feathers on flanks lengthened, and variegated black and white. Legs and feet yellowish.

Female: Crest slight or wanting. Gray head and neck, below mottled

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gray, brown, and white, above glossy brown. Wings like the male, but the contrasts much reduced.

Note: "Peet-peet, oe eek! oe eek!"

Season: A summer resident.

Subfamily Fuligulinae: Sea Ducks

AMERICAN GOLDEN-EYE: Glaucionetta clangula americana

Whistler

Length: 17-20 inches.

Male: Head with puffy feathers, and neck glossy green. Above blackish; below generally whitish. Much white on the wings. Iris golden yellow, a round, white spot before the eye. Feet orange-colored; bill black, tipped with yellow.

Female: Head snuff-brown, upper parts brownish, lower parts marked

with grayish; less white on wings.

Season: Common winter resident. Breeds: From Maine northward.

Range: North America; in winter south to Cuba.

The American Golden-eye and the three following species are Sea Ducks, whose rank and fishy-smelling flesh excludes them from the list of Game Ducks. They are seen about the creeks and beaches at a time when there is little bird life present, and are interesting on this account. The Whistler is a title the Golden-eye receives from the loud noise made by its wings during flight, which is accomplished with wonderful velocity.

Bufflehead: Charitonetta albeola

Length: 12.75-15 inches.

• Male: Above black; neck, shoulders, and all below white. Head puffy, purplish green, with a large white patch on the nape extending to front of eyes. Wings largely white; tail black. Bill short, about 1 inch.

Female: Above blackish with white streak on each side of head, below whitish.

Season: Winter resident; November to April.

Breeds: From Maine northward through the Fur Countries to Alaska.

Range: North America; south in winter to Cuba and Mexico.

A handsomely plumed Duck with a puffy head; to be found by inland ponds and rivers that remain unfrozen.

OLD SQUAW: Clangula hyemalis. R.

The Old Wife

Length: Depending on the tail development, up to 23 inches.

Male: In winter, head and neck white, with gray cheeks; above varied with black and white. Breast blackish; belly white. Four middle tail feathers blackish and very long. Wings grayish; no speculum. Bill black, tipped with orange; feet dark.

Female: Dusky brown, paler on throat, whitish below. White patch around eye-and on side of neck.

Season: Common winter resident.

Breeds: Far north.

A clamoring, noisy Duck, but also having a sonorous musical voice. It has the same habit of diving as the Bufflehead, and is even less particular about its food than the last two species. It locates usually on the reedy creek bars and inlets from Long Island Sound. Dr. Coues says it frequents large inland waters; and Professor Koch, that it is a visitor on the Susquehanna River in April.

Subfamily Anserinae: Geese

CANADA GOOSE: Branta canadensis. R.

Wild Goose

Length: 3 feet or more.

Male and Female: Dark ash; head, neck, and tail black; cheeks and throat white; bill and feet black. Short, rounded tail of pointed feathers. Wings dark brownish with paler edges. Below a dirty white. Bill and feet black. Female paler.

Season: Familiar winter resident, but most common in the fall migration, when numbers remain until very cold weather, and return all through the early spring.

Breeds: Chiefly northward, but sometimes in the northern United States.

This Wild Goose, even when only seen casually, is easily identified by its great size, being almost twice as large as the Brant, the only other common species. Its distinctive mark, other than size, is a broad, white band that extends like a handkerchief folded cornerwise under its chin and tied on the top of its head.

The flight of the Goose is heavy, but very impressive. Geese usually form in two columns, meeting in front on either side of the experienced leader, forming a wedge.

WILD GEESE

A far, strange sound through the night,
A dauntless and resolute cry,
Clear in the tempest's despite,
Ringing so wild and so high.

Darkness and tumult and dread,
Rain and the battling of gales,
Yet cleaving the storm overhead,
The wedge of the Wild Geese sails.

Pushing their perilous way, Buffeted, beaten, and vexed; Steadfast by night and by day, Weary, but never perplexed;

Sure that the land of their hope
Waits beyond tempest and dread,
Sure that the dark where they grope
Shall glow with the morning red!

O birds in the wild, wild sky!
Would I could so follow God's way
Through darkness, unquestioning why,
With only one thought to obey!

- Celia Thaxter

AMERICAN HERRING GULL: Larus argentatus smithsonianus. R. Winter Gull

Length: 24-25 inches.

Male and Female: Winter dress: above pure light gray, head and neck streaked with dusky, under parts and tail white, the latter having an imperfect dusky bar; wing coverts mottled with gray. Bill yellow.

Season: Common winter resident, coming in late August and remaining until March.

Breeds: From the Great Lakes and Maine northward.

Nest: Hollow in the ground lined with a little grass or a few seaweeds.

Eggs: 2-3, ground color dirty white, tinted with pale blue or green deepening to brown, with numerous brown and black spots and markings.

The common Gull, both of coast and interior, seen in great flocks about the beaches, and on the flats and sand bars at low water. From middle autumn until the birds in general are returning in the spring, these Gulls enliven the solitude of the shore with their chatter, and their shrill, high-keyed voices can be heard above the waves and storm.

THE SEA-GULL

Oh, had I but thy wings when storms arise,
Gray spirit of the sea and of the shore!
When the wild waters round thee rave and roar,
Calm art thou 'neath the tumult of the skies.

Thy plume hath spanned the deep's immensities;
Above her vast and ever-shifting floor
Thou, on thy gray wing roaming, still dost soar,
Forever drawn to where the distance lies.

From the dim sea's unknowable extreme

Thou comest, wandering through lone waterways

To cliffs empurpled and cerulean bays;

Then, resting near some cavern's emerald gleam,

Thou seem'st the soul of halcyonian days—

The restful spirit of the sea supreme.

— Lloyd Mifflin

COMMON TERN: Sterna hirundo. S. R.

Sea Swallow

Length: 14.50 inches.

Male and Female: Bill long, coral-red at base, black toward end and tipped with yellow. Upper head and back of neck black. Entire back and wings light gray with a bluish wash. Tail coverts, most of tail, and wing linings white; belly and sides of breast grayish white; other lower parts white. Legs and feet light red.

Season: Summer resident, breeding about the eastern part of Long Island Sound.

Breeds: From the Arctic coast, somewhat irregularly to Florida and Texas.

Nest: None; eggs laid on the sand and indistinguishable from those of other species.

The characteristics of this Tern are the black cap, coralred bill, legs, and feet.

The Terns are not distinctly different from the Gulls, the size of some being identical; but the Terns have a more trig, thoroughbred build, and bear the same relation to the more ponderous Gulls that a yacht does to a trading-craft of equal tonnage. The Terns have long, sharply pointed wings that give them a Swallow-like dash in flying either over the surface of the water when fishing, or above the reed beds when searching for insects, some species being partly insectivorous. This free, angled flight has given this species the name of Sea Swallow.

Family Urinatoridae: Loons

LOON: Urinator imber. W. V.

Great Northern Diver

Length: 31-36 inches.

Male and Female: Head, throat, and neck iridescent green, blue, and purplish. Triangular patches of black and white streaks on either side of the throat, almost joining at the back and narrowing in front. Above spotted black and white. Breast streaked on sides with black and white; under parts white. Bill dark yellowish green.

Season: Winter resident; most common, however, in the migrations September to May.

Breeds: Northward from the northern tier of States.

This Loon appears here more as a wandering visitor than a winter resident, for those who remain after the general migration are constantly shifting about. Its plumage is very rich and velvety, though, as in the case of so many Waterbirds which we see only in the autumn and winter, the fully plumed adult males are in the minority, and the more dully feathered young predominate.

The Loon dives and swims in the same manner as the Grebes. It only inhabits the interior while the lakes and rivers remain unfrozen.

PIED-BILLED GREBE: Podilymbus podiceps.

Dipper; Dabchick.

Length: 13 inches.

Male and Female: Some bristling frontal feathers, but no regular horns. Above dark brown; showy black markings on chin and throat. Breast and lower throat yellowish brown, irregularly spotted and barred, on the upper parts; lower parts glossy white. Wings brown, gray, and white. Bill spotted with blue, white, and dusky, and crossed by a black band, hence Pied-billed.

Season: Common migrant; on Housatonic River in September and October.

Breeds: Through range.

Nesting: Habits similar to the last species.

Range: British Provinces, southward to Brazil, Buenos Ayres, and Chili, including the West Indies and the Bermudas.

The most common Grebe on the eastern coast, and, though said to breed through its range, is not noted as a resident hereabout. It frequents fresh water, even more freely than salt, and Dr. Langdon gives an interesting account of its

inland breeding-habits in his "Summer Birds in an Ohio Marsh": "The little floating island of decaying vegetation, held together by mud and moss, which constitutes the nest of this species, is a veritable ornithological curiosity. Imagine a 'pancake' of what appears to be mud, measuring twelve or fifteen inches in diameter, and rising two or three inches above the water, which may be from one to three feet in depth; anchor it to the bottom with a few concealed blades of 'saw grass,' in a little open bay, leaving its circumference entirely free; remove a mass of wet muck from its rounded top, and you expose seven or eight soiled, brownish white eggs, resting in a depression, the bottom of which is less than an inch from the water; the whole mass is constantly damp. This is the nest of the Dabchick, who is out foraging in the marsh, or, perhaps, is anxiously watching us from some safe corner near by. . . .

TWO NOTABLE WANDERERS SEEN OCCASIONALLY IN CONNECTICUT.

> THE CARDINAL: Cardinalis cardinalis Cardinal Grosbeak, Virginia Nightingale

Length: 8-9 inches.

Male: Magnificent red, conspicuously crested; black throat and band around beak. Wings at some seasons washed with gray. Bill light red; feet brown.

Female: Brownish yellow; crest, wings, and tail reddish.

Song: A full, rich whistle, - "Cheo-cheo-cheo-cheo!" Female also sings.

Season: A notable bird of the Southern States, straggling as far north as Massachusetts.

Breeds: Through its range.

Nest: Bulky and loosely made of bark, leaves, and grass placed in a

Eggs: Pale gray, marked with brown, varying from red to chocolate. Range: Eastern United States, north to New Jersey and the Ohio Valley (casually farther), west to the Plains.

As a cage bird the Cardinal has been familiar to nearly every one; although in confinement he soon loses the brilliancy of his plumage, he often keeps his full song. He is regarded as a semi-tropical species, yet in the breeding season he strays into the New England states, and I have seen them here in Fairfield, Conn., in early December, backgrounded by evergreens and snow. Now the law forbids the caging of the Cardinal and the species may once more become familiar in its haunts.

Snowy Heron: Andea candidissima

The Egret

Kin to the Great Blue, Green, and Black-crowned Night Herons, having snowy white plumage, black legs, yellow feet and black-tipped bill.

Length: About two feet.

This bird is famous as being the "Bonnet Martyr of the Milliners." A tuft of delicate long plumes falling below the tail ornaments its back in the breeding season only. These are so prized by plume-hunters that they are torn from the parent birds almost before they are dead, and nestsful of young are left to perish miserably.

Though this Heron, now fast being exterminated, is seen at its best in full plumage only in its native haunts, I have been fortunate enough to see specimens single and in pairs half a dozen times within a few miles of home, — in the Fairfield salt marshes, near Stratford, and by the Aspetuck Mill Pond. In no sense can this Heron, any more than the Cardinal, be called a Connecticut bird; but I have recorded them here for an object lesson, as examples of beautiful birds that were being slowly exterminated through the thoughtlessness of men and women.

The Cardinal only recently saved from the lingering death that meets the caged wild bird, — the Heron still martyred to trim a bonnet!

To all healthy beings life is sweet. Children, protect the birds, — hands off, — live and let live!

