QL
681
K72X
Birds

FIELD KEY
TO THE LAND BIRDS
EDWARD KNOBEL

Observe: Tails and Breasts. (Breasts of the young of 8, 9, and 10 are like 11a.)

Observe: Ears, and breast, if streaked or barred.

Side of Neck.

Observe: If breast is spotted, streaked, or barred.

Observe: If breast is not streaked.

Observe: If bright colored.

Observe: { If not spotted or streaked. Light around eyes. Dark around eyes.
The tails. The throats and wing-bars.

Observe: If breast is streaked.

If not streaked.

Observe: If black-throated.

Breasts not streaked.

Observe: If streaked in front.

FIELD KEY TO THE LAND BIRDS

30
201
X/2X
Birds

FIELD KEY

TO THE

LAND BIRDS

ILLUSTRATED

BY

EDWARD KNOBEL
r/1

BOSTON
BRADLEE WHIDDEN

1899

Copyright, 1899
BY
BRADLEE WHIDDEN

ROCKWELL AND CHURCHILL PRESS
BOSTON

CONTENTS

HEN-LIKE BIRDS.

	PAGE
QUAILS AND PARTRIDGES	4
PIGEONS	7
HAWKS	8
OWLS	13
CUCKOOS	15
WOODPECKERS	16
KINGFISHERS	18
GOATSUCKERS	19
HUMMING-BIRDS	20

PERCHING BIRDS.

FLYCATCHERS	21
LARKS	23
CROWS	24
BLACKBIRDS, STARLINGS	26
FINCHES AND SPARROWS	28
SWALLOWS	38
WAXWINGS	39
SHRIKES	40
GREENLETS, VIREOS	40
WOOD WARBLERS	41
THRASHERS AND WRENS	46
NUTHATCHES AND CHICKADEES	48
KINGLETS AND GNATCATCHERS	49
THRUSHES	50

FIELD KEY TO THE LAND BIRDS.

THE object of this field book is to enable any lover of birds, without previous knowledge or study of the subject, to identify readily any of our wild birds.

As a bird rarely remains long in one spot, it is necessary to be able to handle the book quickly. Therefore the student is requested to familiarize himself with its simple plan before attempting to use it in the field.

Scientifically, birds are classified according to their feet and bills, which are too small and obscure to serve for the identification of birds in the field; but their size, shape, color, markings, habits, and sometimes their calls can be easily observed. For this reason families have been somewhat broken up in arranging the plates, though in the text the usual classification has been followed.

In the arrangement of the plates the plan has been to group the birds according to their size. On Plates I. and II. are all our birds the size of a common crow or larger; on Plates III. and IV. the birds about the size of the robin, blue jay, or pigeon. On Plates V., VI., and VII. are all the birds about the size of a sparrow — on Plate V. those with gay plumage, on Plate VI. those not speckled, and on Plate VII. those which are speckled and brown. On Plates VIII. and IX. are all the birds smaller than a sparrow, like the warblers and wrens. All the birds on each plate are drawn in the same proportion, but the large birds on Plates I. and II. are of course drawn on a much smaller scale than those on Plates III. and IV., and these latter on a correspondingly smaller scale than those on Plates V., VI., and VII.

On each plate those birds which resemble each other

in color or otherwise are placed close together, to enable the student to observe their differences readily and quickly, and at the foot of each plate are a few remarks to draw attention to points of difference between birds that closely resemble each other. Unless otherwise specified, the male bird in spring plumage has been chosen for representation, as in some cases he changes his coat later in the year, and becomes similar to the female. The females and young are usually similar to the males in shape and marking, with the black, however, turned to gray or brown, and the other colors grayish or faded. Whenever there is a radical difference the female or young, as well as the male, has been represented in the plates, and minor variations have been mentioned in the text.

Some birds stay with us in the North the year around; some breed here in the summer and spend the winter farther south; while others are here during the winter, and breed to the northward in the summer; and a great number pass through in the spring and fall, breeding to the northward and wintering to the southward. These facts are important to the student, as the number of birds to choose from varies with the season. For example, there are thirty-two sparrows and finches, of which

1 is an all-the-year-round bird,

12 are winter birds, spending the summer northward,

2 are birds of passage, here only in the spring and fall, and

17 are summer birds, spending the winter South.

KEY.

Birds the size of a crow or larger,	Plates I. and II.
Birds about the size of a robin, jay, etc.	Plates III. and IV.
Birds about the size of a house sparrow :	
<i>a.</i> Bright colored	Plate V.
<i>b.</i> Without speckles	Plate VI.
<i>c.</i> Brown with speckles	Plate VII.
Birds smaller than a house spar- row	Plates VIII. and IX.

EXAMPLE OF THE MANNER OF USING THIS BOOK.

Suppose you meet with an owl in the woods. It is larger than a crow, and must therefore be on Plate I. or II. On Plate I. there is no bird like it, on Plate II. there are three owls resembling it. The first, No. 21, the great horned owl, is so much larger than this bird, compared with the crow on the same plate, that it cannot be the one you want. Nos. 22 and 23 are alike in size and color. One has larger ears than the other, but you may not be able to see these in your owl on the tree. The long-eared owl, No. 22, has the feathers of the belly barred, that is, the spots run in bars crosswise of the feathers; while the short-eared owl, No. 23, has the breast and belly streaked, that is, the spots run lengthwise of the feathers. Which is like your owl?

HEN-LIKE BIRDS.— *Gallinae*.

BILL. — Hard, short, stout, bent but not pointed.

FEET. — Hind toe small and elevated.

WINGS. — Short.

FOOD. — Seeds, buds, and insects.

These birds build their nests and live mostly on the ground, and stay the year around in the same district.

1. QUAIL, BOB-WHITE. *Colinus virginianus*. — Length, 10 inches. Chestnut and black above; underparts white, with black and chestnut markings. Female and young similar in color, the dark parts being faded and the white parts buffish or grayish. Quails spend the summer in fields, meadows, or on the borders of woodlands, and in winter retire to thick woods or swamps. During the breeding season each pair of birds stays by itself, but later they flock together in from one to several families. At

night they sleep on the ground in a circular bunch, all tails toward the centre and heads outwards, on guard against a hostile surprise. When flushed the whole flock rise at once and generally keep together, flying low for a short distance. Then they alight, on the ground, rarely on trees, and immediately each bird runs for cover and hides. When flushed again the birds rise singly, and fly in different directions. After a quarter of an hour or so, when all seems safe, the leaders call the scattered flock together again.

During hard winters and deep snow Quails suffer greatly and often starve, as their food consists mostly of grain and grass seed. They require gravel also to digest their food, and at these times are often found hunting for it in stone walls and in the cuts along roadsides. They never go far from their own districts, even if hard hunted, and when they feel safe become so tame as to feed with the hens around houses and barns. Besides being hunted by man they are relentlessly persecuted by hawks, foxes, and cats, and their nests are robbed by skunks and crows.

This is the only Quail east of the Rocky Mountains, to the south and west of which there are several other species.

2. SPRUCE PARTRIDGE. CANADA GROUSE. *Dendragapus canadensis*.—Length, 15 inches. Gray and brown above; underparts white, barred and spotted with black; a red spot above the eye; tail black, with tips and outer feathers red-brown. Female similar, but without the black on throat, breast, and belly. This bird lives in the Northern spruce forests, and feeds on the spruce buds, of which a strong taste permeates the meat, rendering it valueless for food.

3. PARTRIDGE. RUFFED GROUSE. *Bonasa umbellus*.—Length, 17 inches. Brown above,

with gray and black spots; underparts white, with black and gray bars; a black ruff on the side of the neck; tail gray or red-brown. This is a thorough wood bird, feeding on seeds, berries, and insects, and in winter on buds, particularly those of apple and black birch trees. Young Partridges are able to run almost as soon as they are hatched, and when surprised jump and hide like mice. The old birds are celebrated for the ingenious tricks by which they draw any danger away from the young and centre the enemy's attention on themselves. With much ado they play at being wounded or crippled, and allow man or dog almost to touch them, fluttering farther and farther until they think the young ones quite safe. Then they suddenly disappear, behind a tree or stone wall, and fly unseen back to the young, leaving their pursuer wondering where they have gone. Partridges stay together in flocks until early fall, and then seem to live singly, though often in close neighborhood on some favorable feeding ground. They remain in a district or even in a single favorite spot for several seasons, and when not hunted are not shy, though never really tame. They are never found in open grounds, and even on their grasshopper hunts stay on the edges of the woods.

4. PRAIRIE HEN, PINNATED GROUSE, *Tympanuchus americanus*, AND HEATH HEN, *Tympanuchus cupido*, are, with the exception of a few very small differences, exactly alike. Length, 18 inches. Buff above and white below, barred with black and brown; the side of the neck adorned with a tuft of long, narrow, and straight feathers. The Prairie Hen inhabits the prairie lands of the Mississippi, though not in so great numbers as formerly. The Heath Hen used to inhabit the Eastern coast, but is now reduced to a few birds on Martha's Vineyard, which, though protected, do not seem to prosper.

PTARMIGAN. WILLOW GROUSE. *Lagopus lagopus*. — Length, 15 inches. An Arctic bird, sometimes found in winter in the Northern States. Entirely white except the outer tail-feathers, which are black; in summer it is brown with black bars. It has no ornamental feathers at the side of the neck, but its feet are covered with feathers to the toe-nails.

WILD TURKEY. *Meleagris gallopavo*. — Length, 48 inches. One of the finest game birds, now nearly extinct east of the Mississippi.

SHARP-TAILED GROUSE. *Pediocaetes phasianellus*. — Length, 18 inches. Resembles the Partridge, but is more speckled, and has a pointed tail. A Northwestern bird, sometimes found in the markets.

PIGEONS. — *Columbae*.

BILL. — Slender, of medium length, deeply grooved at the nostrils.

FEET. — Hind toe even with the front toes.

WING. — Long, swift fliers.

FOOD. — Seeds, grain, acorns, beech-nuts, etc.

5. WILD OR PASSENGER PIGEON. *Ectopistes migratorius*. — Length, 16½ inches. Slate blue above; underparts reddish; no black dots below the ear. Female and young, brownish gray above; grayish below. This is a wood bird, breeding northward and in the mountains, and wintering in the South. It was formerly found in countless swarms, but is now nearly exterminated.

6. MOURNING DOVE. *Zenaidura macrura*. — Length, 11 inches. Grayish brown above; under-

parts pinkish gray. It resembles the Passenger Pigeon, but is smaller and has a few black spots below the ear. It is usually found single or in pairs, in fields or by the roadside. A summer bird.

BIRDS OF PREY. — *Raptores*.

BILL. — Short, stout, strongly curved, sharp pointed.

FEET. — Strong, with long, curved, pointed nails or talons (vultures excepted).

FOOD. — Living animals, as birds, mice, frogs, snakes, insects. Rarely carrion.

HAWKS.

7. RED-TAILED HEN-HAWK. *Buteo borealis*. — Length, 20 inches. Grayish brown above; underparts white, with streaks on breast and sides; tail bright rust red, with few narrow bars. Males and females are alike, but the young are more thickly streaked on the underparts, and have a gray tail with many narrow black bars. This is our strongest hawk, and is common in wooded districts. It is his habit to sit for hours on a dead limb of an isolated tree, waiting for something to turn up. At other times he hunts circling high in the air, calling to his mate, who flies low over the bushes to start the game. The call-note sounds somewhat like chee-ee-ee-ee. The prey of these hawks is anything they can manage, from rabbits and hens down to mice, snakes, and even insects. They are most destructive to Quails, and will watch a flock day after day, pouncing upon them as soon as they leave cover to go to the open fields to feed. This hawk stays all the year in his chosen district.

8. RED-SHOULDERED HEN-HAWK. *Buteo lineatus*. — Length, $18\frac{1}{2}$ inches. Gray and brown above; underparts white, covered thickly with rust-colored bars; bend of wing rich chestnut; tail black, with four or five narrow white bars. Males and females are alike, and the young are similar, but with the bars on their quills and tail tawny instead of white, and the underparts white with brown streaks, like No. 11a on plate, with no reddish anywhere except on the shoulder. This hawk is not quite so strongly built as the Red-tail, but his habits are similar. His call sounds like key-you, key-you.

9. BROAD-WINGED HAWK. *Buteo latissimus*. — Length, 16 inches. Dark gray, brown above; conspicuous dark cheek patches; underparts mostly tawny buff; tail black, with two narrow white bars. Males and females are alike; the young have the underparts white with brown streaks, and the tail with six to eight white bars.

The young of these three species of *Buteo* are similar, but may be distinguished from each other by the following marks: the gray tail with narrow black bars of the Red-tail; the red shoulder and barred quills of the Red-shoulder; and besides the smaller size, the dark cheek patches of the Broad-wing. Another distinguishing mark is: the Red-tail and Red-shoulder have the first four quills of their wings notched on the inner van, whereas the Broad-wing has only three quills notched. They all differ from the *Accipiters* by their tail markings, by being much more strongly built, and by having no round white spots on the feathers of the back between the shoulders.

10. GOSHAWK. *Accipiter atricapillus*. — Length, 22 inches. Ash gray, darker above; top of head, quills, and tail black; a white line over the eye. Males and females are alike, but the young differ greatly from the old birds. The young of all three

species of *Accipiter* resemble each other closely in color and markings, and are distinguishable only by the difference in their size. They are brown above, with a large round white dot on the feathers of shoulder and back; underparts white with brown streaks (see No. 11a on plate); tail black and gray bars, of about even width.

The Goshawk is a fine hawk; though more lightly built than the *Buteos* he makes up by his extraordinary boldness for what he lacks in strength. He will sometimes sit on the roof of a hen-house, pick up a hen in the yard, and carry her off. He is somewhat rare here, and comes to us only as a straggler, his real home being to the northward.

11. COOPER'S HAWK. *Accipiter cooperi*. — Length, 19 inches. Bluish gray above; underparts white, thickly barred with reddish buff; tail with black and gray bars, and *rounded* at the end. Males and females are alike, and the young, 11a, are similar to young Goshawks. This is our common Chicken-hawk, and stays with us throughout the year, though less numerous in winter.

12. SHARP-SHINNED HAWK. *Accipiter velox*. — Length, 12 inches. Exactly like a small Cooper's Hawk, except that the tail is square at the end. Both these hawks are very destructive to chickens and game birds, even more so than the larger hawks, as they overmatch the strength of the latter by their own swiftness and boldness.

13. DUCK-HAWK. PEREGRINE FALCON. *Falco peregrinus anatum*. — Length, 17 inches. Bluish gray above; underparts light buff and white, streaked, barred, and spotted with black. It has a conspicuous black patch under the eye, and the sharp tooth on the upper bill that is characteristic of all falcons. The young are similar, but blackish brown above. In flight this hawk resembles a pigeon. It

is a straggler anywhere, mostly after ducks and other water birds, and is one of our finest hawks.

14. PIGEON-HAWK. *Falco columbarius*. — Length, 12 inches. Slate gray above; underparts buff with black streaks. Young black above, with an indication of a red-brown collar around the neck. Otherwise this hawk is like a diminutive Duck-Hawk, but preys on land birds and small animals. It breeds to the northward and winters in the South, and is the least shy of all our hawks.

15. SPARROW-HAWK. *Falco sparverius*. — Length, 11 inches. Back and tail chestnut; wing coverts blue-gray; underparts white and buff, barred and spotted with black. Female and young have wing coverts chestnut. This bird is sometimes called the Killi Hawk, after its call. It is a summer bird, and a most elegant little hawk.

16. MARSH-HAWK. MEADOW HARRIER. *Circus hudsonicus*. — Length, 20 inches. Light pearl

gray above; underparts whitish. Female and young very different from the male, being dark reddish or yellowish brown all over, except the tail coverts, which are conspicuously white in both sexes, a mark distinguishing this from all other hawks. This is the commonest hawk, and is often seen flying low over the meadows, hunting for frogs and mice. He keeps to the same district all summer, goes South in winter, and often returns to the same place the next year, building his new nest on the top of those of previous years. Though large, he is weak, and shakily built, and even small birds have no respect for him.

17. ROUGH-LEGGED HAWK. *Archibuteo lagopus Sancti Johannis*.—Length, 22 inches. Brown; face and upper part of tail feathers whitish, but very variable, being sometimes entirely black. He may, however, always be recognized by his feathered legs. Though a large, strong bird he preys almost entirely on mice and reptiles. A Northern hawk, sometimes found here in winter.

18. OSPREY, OR FISH-HAWK. *Pandion haliaetus carolinensis*.—Length, 23 inches. Black above and white below. The Fish-hawk is easily recognized by his long wings and heavy flight. It is interesting to watch him as he hovers over rivers and ponds in search of fish. He sails perhaps two or three hundred feet above the water, and when he sees a fish near the surface suddenly stops, apparently fastened in the sky, making no visible motions. After a few moments he drops like a shot for about fifty feet, and poises nailed in the sky as motionless as before. He repeats this process until he is about twenty-five feet from the water, and there he stays until the fish offers him a good chance. Then, quick as lightning, he dives entirely below the surface, and shortly after emerges with the fish in his talons. He then shakes off the water, and flies in his heavy way to some favorite tree, where he can devour his prey. This is a summer bird, wandering South in winter.

19. BALD EAGLE. *Haliaeetus leucocephalus*.—Length, 35 inches. Black; head, neck, and tail white; bill and feet yellow. Young entirely black. The Bald Eagle is sometimes to be seen high in the air, sailing above a hunting Fish-hawk, and waiting to rob him of his fish.

20. GOLDEN EAGLE. *Aquila chrysaetos*.—Length, 35 inches. Top of head and back of neck rich yellow-brown; body dark brown. A Rocky Mountain bird, rare to the East.

SWAINSON'S HAWK, similar to the Red-tail, sometimes straggles to the East. He may be known by a large red or brown patch on the breast.

The white, the gray, and the black Gyrfalcons, Northern birds, have been known to stray to the Eastern United States.

OWLS.

21. GREAT HORNED OWL. *Bubo virginianus*.—Length, 22 inches. Gray and brown above; white or buff underneath; everywhere spotted and barred with black. This owl is a bird of great strength, and lives in wooded districts, preying on rabbits and poultry. It stays

with us summer and winter.

22. LONG-EARED OWL. *Asio wilsonianus*.—Length, 14 inches. Resembles the Great Horned Owl in everything except size. This and the next species are our commonest owls, and are often seen at evening hunting over the meadows. This species differs from the next by having longer ears and barred breast-feathers.

23. SHORT-EARED OWL. *Asio accipitrinus*.—Length, 15 inches. Upper parts buff and gray, speckled with dark brown; underparts buff, streaked with black, not barred; ears small. This owl feeds in

meadows on little birds and especially on mice. He migrates South in winter.

24. SCREECH-OWL. *Megascopo asio*. — Length, $9\frac{1}{2}$ inches. Similar in color and shape to the Great Horned Owl. It preys on little birds and mice, and stays both summer and winter in the same locality.

25. SNOWY OWL. *Nyctea nyctea*. — Length, 25 inches. Pure white, or with small black spots, which are larger in the female, forming regular bars; no outside ears. Its home is from Labrador northward, but in winter stragglers come to the United States. This owl hunts in the daytime.

26. BARRED OR HOOT-OWL. *Syrnium nebulosum*. — Length, 20 inches. Gray, barred everywhere with blackish brown, except from the breast downward, where it is streaked; no outer ears. It is a stupid owl, not at all shy, and may be found sitting almost anywhere. It belongs in Northeastern America, migrating southward in winter.

27. SAW-WHET OR ACADIAN OWL. *Nyctato acadica*. — Length, 8 inches. Cinnamon brown, streaked, barred, and spotted with white. This is our smallest owl. Its summer home is northward of the United States, but it straggles South in winter.

GREAT GRAY OWL. *Scotiapter cinereum*. — Length, 27 inches. In appearance like an enormous barred owl, except that the upper breast is streaked and the lower barred.

RICHARDSON'S OWL. — Length, 10 inches. Resembles the Acadian Owl.

HAWK-OWL. — Length, 15 inches. Dark brown, spotted and barred with white; easily known by its very long tail and daytime habits.

These owls all live in high northern latitudes, but have been known to come to the Northern States in winter.

CUCKOOS. — *Cuculidae*.

BILL. — Medium-sized and bent.

FEET. — Small; two toes in front and two behind; nails small.

FOOD. — Caterpillars and other insects.

28. YELLOW-BILLED CUCKOO. *Coccyzus americanus*. — Length, 12 inches. Grayish brown

above; underparts grayish white; bill yellow. This is a tree bird, rarely seen on the ground. He flies quietly from tree to tree all day long, searching for caterpillars. Commoner West.

29. BLACK-BILLED CUCKOO. *Coccyzus erythrophthalmus*. — Length, 12 inches. Similar to the Yellow-bill, except that the bill is black, the white spots on the tail smaller, and that there is a bare red spot around the eye. This bird is also called the Rain Cuckoo, as his calls are particularly loud and frequent just before a rain. A summer bird, commoner East.

WOOD PECKERS.—*Picidae.*

BILL. — Strong and straight.

LEGS. — Not feathered.

TOES. — Four, two in front and two behind, or three, two in front and one behind. Nails strongly curved for climbing.

FOOD. — Insects, particularly wood-boring insects in the trunks of trees.

For the purpose of catching these insects Woodpeckers are provided with a long, string-like tongue

which has a barbed hook at the point. They insert this tongue into the holes bored by the insects, and pull out their prey. When the tongue is not long enough they hammer and chisel holes with their strong bills, and thus reach the insect. They build

their nests in tree-trunks, excavating holes for them in a similar way.

30. YELLOW-HAMMER, FLICKER, GOLDEN-WINGED WOODPECKER. *Colaptes auratus*. — Length, 12 inches. Head ash gray with a red spot where the neck begins; back brown with black bars; tail black; underparts white with round black dots, and a black patch on the breast; wings and tail golden yellow underneath; in the males a black stripe from the corner of the mouth to the neck, wanting in the female. This is the commonest woodpecker east of the Rocky Mountains. In his habits he differs from the other woodpeckers, which are mostly solitary wood birds, by being very sociable, feeding often on the ground. He seems rather more at home near habitations than in the deep woods, being fond of orchards and gardens. Beside feeding on insects he eats berries, in company with robins and other birds. Like the other woodpeckers, he is always busy, but seems to enjoy life more than his brethren.

31. LOGCOCK. PILEATED WOOD-PECKER. *Ceophloeus pileatus*. — Length, 17 inches. A large red crest on the top of the head; throat and sides white; at the corner of the mouth a red stripe, wanting in the female; the rest of the body black. Formerly common in large wooded districts, now becoming extinct in the Eastern part of the country.

32. HAIRY WOODPECKER. *Dryobates villosus*. — Length, $9\frac{1}{2}$ inches. Black and white; at the back of the head a red spot, wanting in the female.

32a. DOWNY WOODPECKER. *Dryobates pubescens*. — Length, $6\frac{3}{4}$ inches. In color and markings like the Hairy Woodpecker, except the outer tail-feathers, which are white on the Hairy Woodpecker, and white with blackish bars on the Downy Woodpecker. Its coat is soft and silky. Both these birds stay summer and winter, and rarely leave the woods.

33. YELLOW-BELLIED WOODPECKER.

Sphyrapicus varius. — Length, $8\frac{1}{2}$ inches. Top of head and throat red; cheeks white; belly light yellow; elsewhere black and white, spotted and barred. Winters southward.

34. THREE-TOED ARCTIC WOODPECKER. *Picoides arcticus*. — Length, $9\frac{1}{2}$ inches. Forehead with a yellow spot; wing coverts and back black; underparts white; sides barred with black. Female similar, but without the yellow spot. Lives in the Arctic regions, but in winter wanders south to the Northern States.

AMERICAN THREE-TOED WOODPECKER. *Picoides americanus*. — Length, $8\frac{3}{4}$ inches. Similar to the Arctic Woodpecker in domicile and habits, but has the back barred with white.

RED-HEADED WOODPECKER. *Melanerpes erythrocephalus*. — Length, $9\frac{3}{4}$ inches. Head and neck bright crimson; back and tail black; underparts and tail coverts white. In the young the head and neck are gray-brown. This bird is very common in the Western States, but rare on the Atlantic coast.

RED-BELLIED WOODPECKER. *Melanerpes carolinus*. — Length, $9\frac{1}{2}$ inches. Top of head, from bill to neck, red; belly with a reddish tint; rest of body white, more or less barred, spotted, and speckled with black. This is a Southern bird, occasionally straying northward.

KINGFISHERS. — *Alcedinidae*.

BILL. — Large, stout, straight.

FEET. — Small; middle and outer toes joined half their length.

35. BELTED KINGFISHER. *Ceryle alcyon*. — Length, 13 inches. Head black; upperparts bluish gray with small white dots; underparts white with a

band across the breast, gray in the male, reddish in the female and young. The favorite haunt of the bird is near rivers and ponds, where he perches on some dead limb overlooking the water. Here he watches for fish, and if frightened from his perch flies away with clattering chatter to some similar spot, where he resumes his watch. When he sees a fish he hovers over the spot for a few instants, dives in and brings it out. Then he shakes off the water from his plumage, and flies to his perch with his prey. If the fish is too large for him to manage alive he either perforates its skull with a stroke of his strong bill and lets it die, or else, watching till it comes to the surface, he flutters over it and pecks out its eyes. This bird moves southward in winter.

GOATSUCKERS. — *Caprimulgidae.*

BILL. — Small, mouth large and wide, beset with bristles.

FEET. — Small; three toes in front and one behind.

FOOD. — Insects.

36. WHIPPOORWILL. *Antrostomus vociferans.* — Length, $9\frac{1}{2}$ inches. Brown and buff, mottled and speckled everywhere with black; across the throat a band, white in the male, buff in the female. This bird is well known by his evening and night calls, from which he gets his name. He feeds on insects, which he catches on the wing, flying low and resting every few minutes on some rock, fence, or broad limb of a tree, where he sits lengthwise instead of crosswise like most other birds. During the daytime he sleeps on the ground in shady woods and does not rise till almost stepped upon. Both this and the next species are with us during the summer, wintering in the South. They both fly voluntarily only at night.

37. NIGHT-HAWK. BULLBAT. *Chordeiles virginianus*. — Length, 10 inches. Resembles the whippoorwill in a general way, but may always easily be recognized by a broad white patch on the wing. He flies high in the air, catching insects and manœuvring like a bat. He is rarely seen in the daytime, when he sleeps, perched lengthwise on the limb of an old tree, and so closely matching the bark and lichens that it is difficult to distinguish him even when you know him to be there.

38. CHIMNEY SWALLOW. SWIFT. *Chaetura pelagica*. — Length, $5\frac{1}{2}$ inches. Dark brown, lighter on the throat; black around the eye; tail-feathers stiff and pointed. In every way like a swallow in appearance, but for some structural points placed here. The Chimney Swallow nests in chimneys and in hollow trees. He may be observed sailing swiftly high in air, or flying above an unused chimney, suddenly stopping like a shot and dropping in. He flies only in the daytime, and is a common summer bird, wintering South.

HUMMING-BIRDS. — *Trochilidae*.

BILL. — Long and slender, mouth small.

FEET. — Small.

FOOD. — Honey and insects.

39. RUBY-THROATED HUMMING-BIRD. *Trochilus colubris*. — Length, $3\frac{1}{2}$ inches. Blackish above, with a green-gold shine; wings and tail with a purplish shine; underparts white; ruby red on throat. Females and young similar, but without the red throat. The Ruby-throat resembles a Hawk-moth in his ways, hovering from flower to flower, thrusting in his long bill, and then darting like a shot to some favorite bare branch for a few minutes' rest. Peach-tree blossoms and lilies seem to be his favorite flowers. A summer bird.

PERCHING BIRDS. — *Passeres*.

BILL. — Variable.

TOES. — Four, on a level; hind toe as long as middle toe, and having usually the longest nail of them all.

TAIL. — Of twelve feathers.

FLYCATCHERS. — *Tyrannidae*.

BILL. — Broad and flat, hooked at the point.

FOOD. — Insects caught on the wing.

The Flycatchers are summer birds. They perch on the limbs of trees, and rarely visit the ground. In color and size they strongly resemble the Vireos, but may be known by the following marks :

1. A Flycatcher sits upright and motionless on the end of a dead limb, waiting for an insect to fly by. He catches it on the wing, and generally returns to the same perch.

A Vireo hops busily from branch to branch, searching for insects under the leaves, or in the crevices of the bark.

2. The Flycatcher's head and sides are of the same color, without stripes or light lines.

The Vireos have a whitish line above or sometimes around the eye.

3. On close observation it may be seen that the Flycatcher's bill is broad and flat, beset with long bristles, while the Vireo's bill is narrow and thick, without bristles.

40. KINGBIRD. *Tyrannus tyrannus*. — Length, 8½ inches. Gray above, darker on wing and tail; an orange spot half hidden on the top of the head; underparts white. The favorite haunts of the Kingbird are orchards, and dead limbs on the edges of meadows,

ivers, and ponds. He leaves his perch to catch passing insects, and returns to the same spot. He is a determined foe to crows and hawks, which, though double his size, he drives from his quarters. His nest is usually on some branch overhanging the water. A common summer bird.

OLIVE-SIDED FLYCATCHER. *Contopus borealis*. — Length, $7\frac{1}{2}$ inches. Resembles the Kingbird in shape, and is dark gray all over, except the throat, belly, and behind the wing, where he is white. Rare,

41. CRESTED FLYCATCHER. *Myiarchus crinitus*. — Length, 9 inches. Gray-brown above; tail red-brown; throat and breast gray; belly yellow. His habits are similar to those of the Kingbird, except that he prefers the tops of trees. He has a peculiar fashion of lining his nest with cast-off snakeskins.

42. PHOEBE, PEWEE. *Saynornis phoebe*. — Length, 7 inches. Blackish gray above; underparts soiled white, gray, and yellow; no wing bars. Always untidy looking. One of the earliest birds to arrive in the spring. He builds his nest in the barn or woodshed, raising two or three broods a year in the

same nest, and rebuilding it the following year in the same place. He acts with the confidence of an old acquaintance, staying around the house and barn all summer, and everybody feels inclined to take him for the same individual bird returning every spring.

43. TRAILL'S FLYCATCHER. *Empidonax traillii*. — Length, 6 inches. Olive-brown above; wing and tail black; wing with two bars; throat white; breast and side grayish; belly yellowish.

44. WOOD PEWEE. *Contopus virens*. — Length, $6\frac{1}{2}$ inches. Very dark gray above; underparts yellowish grayish white. Similar to Phoebe, only darker, and having two rows of light spots on his wing.

45. YELLOW-BELLIED FLYCATCHER. *Empidonax flaviventris*. — Length, $5\frac{1}{2}$ inches. Dark olive-brown above; tail and wing darker, wing with two rows of light spots; underparts yellow, belly brightest.

46. LEAST FLYCATCHER. *Empidonax minimus*. — Length, $5\frac{1}{4}$ inches. Resembles Phoebe in color, but with purer grays. Wings with two rows of light dots. All these Flycatchers resemble the Phoebe in appearance and in habits, except that their home is in the woods.

LARKS. — *Alaudidae*.

BILL. — Rounded.

FOOT. — Nail of hind toe very long.
Walking or running ground birds.

47. HORNED OR SHORE LARK. *Otocoris alpestris*. — Length, $7\frac{3}{4}$ inches. Head and throat yellowish with black markings; back pinkish brown and gray; underparts white. A winter visitor in open fields and meadows, flying or running about in large flocks.

PRAIRIE HORNED LARK. — Similar to the Shore Lark, but smaller, and white on head and throat instead of yellow.

CROWS. — *Corvidae*.

BILL. — Large, stout, and strong.

FEET. — With prominent scales or shields.

At home in trees or on the ground, walking or hopping. All-the-year-round birds.

48. BLUE JAY. *Cyanocitta cristata*. — Length, $11\frac{3}{4}$ inches. Blue above with black and white marks ;

underparts white and gray. One of our handsomest birds, being conspicuous both for its color and for its graceful motions. Its voice is characterized both by melodious tunes and by abominable shrieks. The Blue Jay strolls all day from tree to tree in company with others of his kind, robbing birds' nests, hunting insects, stealing chestnuts and acorns, and frequently alarming the woods with his shrieks, because a dangerous intruder has shown himself somewhere. He also plunders cornfields and berries.

49. CANADA JAY. MEAT BIRD. WHISKY JACK. *Perisoreus canadensis*. — Length, 12 inches. Face and neck white ; back of head black ; otherwise

of a gray color, which is darkest on wings and tail. Similar to the Blue Jay, but not so handsome in coloring; possessed of unbounded impudence and curiosity. He lives in the Northern forests, and begins to breed early in March, while there are still two months of severe weather.

50. COMMON CROW. *Corvus americanus*. — Length, $19\frac{1}{2}$ inches. Black, with a purplish and blue gloss. The Crow excels among all birds by his intellectual faculties. He is bold and daring when he feels himself safe, but shrewd, cunning, and shy where he is suspicious of evil intent, being popularly said to smell a trap, or the powder in a gun. He seems to study the character of every inhabitant of his district, giving one person a wide berth, while he allows another to come within a few yards of him. His food consists of anything eatable, from chickens and mice to insects, worms, and corn. He is one of the worst destroyers of birds' nests, and though relentlessly persecuted by boys and gunners, he manages to hold his own, like the fox and the English sparrow. In the woods he appropriates police duties, and drives off such unwelcome intruders as cats, owls, hawks, and foxes.

51. RAVEN. *Corvus corax principalis*. — Length, $26\frac{1}{2}$ inches. Similar to the crow, but much larger. Rare; found in heavily wooded districts northward.

52. FISH OR SHORE CROW. *Corvus ossifragus*. — Length, 16 inches. Similar to the crow. It feeds on the refuse of the sea, and roosts far inland, flying back and forth, morning and evening, in great, noisy swarms.

BLACKBIRDS, STARLINGS. — *Icteridae*.

BILL. — Triangular, straight, sharp-pointed.

FOOD. — Seeds, fruit, insects.

Mostly walking birds, at home both on trees and on the ground. Summer birds, wintering southward.

53. BOBOLINK, REED-BIRD, OR RICE-BIRD. *Dolichonyx oryzivorus*. — Length, $7\frac{1}{4}$ inches. Back of neck yellowish; shoulder and tail coverts white; elsewhere black. Female and young differ greatly from the male, being yellowish brown, streaked and marked with black above. They resemble large sparrows, but walk instead of hopping. The bobolink lives in meadows and marshes, perching frequently on bushes, rarely on trees. It is never found on high land or in the woods. With us these birds live in pairs, but in the South in winter they collect in the wild-rice fields in immense flocks.

54. COWBIRD. *Molothrus ater*. — Length, 8 inches. Head and neck dark brown, the rest black. Female and young gray-brown, lighter below. Found mostly in pastures in company with cattle, perching upon their backs, and feeding under their feet, apparently in a very friendly manner. It is suspected, however, that this bird utilizes his big friends only to attract the insects that he eats. The Cowbird is remarkable for not building a nest of its own. The female lays her eggs in the nests of other birds, and leaves to them the hatching and rearing of her young.

55. RED-WINGED BLACKBIRD. *Agelaius phoeniceus*. — Length, $9\frac{1}{2}$ inches. Black; the shoulder bright scarlet edged with buff. Female blackish above with buff streaks; white below, with black streaks. This bird frequents marshes and swampy meadows, perching on bushes, seldom on trees except in the

spring, when he arrives in large, noisy flocks. Never found in the woods.

56. MEADOW LARK. *Sturnella magna*. — Length, $10\frac{3}{4}$ inches. Upperparts yellowish buff and rusty, with black bars and streaks; throat yellow; breast and belly white with black marks; bill blue; outer tail-feathers conspicuously white. Flight like that of a Quail, but with a peculiar fluttering. The Meadow Lark prefers to perch on a rock or tussock rather than on bushes. It is found in dry meadows and grass land, never in the woods.

57. BALTIMORE ORIOLE, GOLDEN ROBIN. *Icterus galbula*. — Length, $7\frac{1}{2}$ inches. Bright orange and black. Female similarly marked with dull brown, with a wash of dull orange all over. Though a true tree-bird, rarely seen on the ground, the Oriole does not frequent the woods. It prefers orchards and roadside trees, in settled districts, and builds its curious hanging nest suspended from a branch often directly over the road.

58. ORCHARD ORIOLE. *Icterus spurius*. — Length, $7\frac{1}{3}$ inches. Similar to the Baltimore Oriole, but dark rich chestnut instead of orange, and more lightly built throughout. Female differs greatly from the male, being grayish green above and grayish

yellow underneath, resembling a Vireo in color. From Southern New England southward.

59. RUSTY BLACKBIRD. *Scolecophagus carolinus*. — Length, $9\frac{1}{2}$ inches. Bluish black. Female slate gray, duller below. Comes in flocks in the spring like the Red-wing, but does not stay. It breeds in high northern latitudes, and winters in the South.

60. PURPLE GRACKLE. CROW BLACK-BIRD. *Quiscalus quiscula*. — Length, 12 inches. Glossy green and purplish black. Female similar, but duller. These are among the first birds to arrive in the spring, coming in large, extremely noisy flocks. Later they divide into smaller flocks, and take possession of some cedar swamp as a breeding-place. They usually build their nests higher than the Red-wings in pine or cedar trees, and keep somewhat in company during the breeding season. They also feed in fields and pastures at some distance from the water, which the Red-wing never leaves. These birds are said to rob birds' nests.

FINCHES AND SPARROWS. — *Fringillidae*.

BILL. — Strong and conical.

FOOD. — Mostly seeds, also buds and insects.

These are tree and ground birds, and move mostly by hopping.

61. PINE GROSBEAK. *Pinicola enucleator*. — Length, 9 inches. Slaty gray with a shade of crimson all over. Female and young a similar gray with a dull yellowish shade. This birds breeds far to the northward, and comes south in winter, feeding on the berries of the mountain ash and the cedar. It is a dull, quiet tree bird, rarely seen on the ground.

62. PURPLE FINCH. RED LINNET. *Carpodacus purpureus*. — Length, $6\frac{1}{4}$ inches. Grayish brown, shaded with bright crimson from the head downwards and on the tail coverts; underparts gray and white. Female resembles the female Rose-breasted Grosbeak (Pl. III. 89) in markings and color, but is much smaller. The Purple Finch stays all summer, and in winter collects in small flocks, which rove about from place to place.

63. HOUSE OR ENGLISH SPARROW. *Passer domesticus*. — Length, $6\frac{1}{2}$ inches. Top of head and underparts gray; back of neck and back chestnut; black markings on throat, breast, and back, and around bill and eyes. Female grayish yellow-brown above, lighter below; without the black marks on throat and breast. The English sparrow stays around dwellings throughout the entire year, being rarely seen in the open country. He has no song, but is endowed with superior intellect, being in this respect comparable to the crow alone, though unlike that bird he never becomes really tame. He is quarrelsome, plucky, of unbounded impudence, very cautious and suspicious. These sparrows have undoubtedly a language by which they understand each other. They have attached themselves to the white man's household for thousands of years, like dogs, cats, fowl, horses, and cattle, but unlike these animals have never become his slaves.

64. AMERICAN CROSSBILL. *Loxia curvirostra minor*. — Length, $6\frac{1}{4}$ inches. Grayish olive green above, underparts lighter; no white spotted bars on wing coverts; bill small. Male shaded all over with somewhat yellowish crimson; wing and tail black. This is a dull, quiet bird, feeding on pine seed. It breeds to the north, straying southward in winter.

65. WHITE-WINGED CROSSBILL. *Loxia leucoptera*. — Length, 6 inches. Similar to the American Crossbill, but shaded with deep crimson; two

conspicuous white bars on the wing, and a larger bill. Both the Crossbills are tree birds, rarely seen on the ground. They are usually seen in evergreen trees, climbing quietly, like parrots, and eating the seeds from the cones.

66. REDPOLL. *Acanthis linaria*.—Length, $5\frac{1}{2}$ inches. Gray-brown with buff streaks above and on breast; belly white; throat black; shaded all over with more or less crimson or pink. Female and young similar, but without the pinkish tints. The Redpoll breeds in the Arctic regions, and is a common winter visitor here, coming in flocks, and feeding on the seeds of grass and other plants on the ground and in bushes.

67. GREATER REDPOLL. *Acanthis linaria rostrata*.—Length, $5\frac{1}{2}$ inches. Resembles the Redpoll, but is larger and darker colored.

68. AMERICAN GOLDFINCH. *Spinus tristis*.—Length, 5 inches. Lemon yellow; cap, wings, and middle of tail black; wing bars and outer tail-feathers white. Female, and in winter the male, grayish green above, yellowish below; without a black cap. Feeds on weeds and grass seeds on or near the ground. Stays all the year, in small roving flocks.

69. PINE SISKIN. FINCH. *Spinus pinus*.—Length, 5 inches. Buff above; underparts white; streaked all over with black. Though resembling the last three species in habits, he is more of a tree-bird, usually found among evergreens, feeding on the seeds. These birds breed to the north, and in winter come irregularly southward in small flocks.

70. SNOWBIRD. SNOW BUNTING. *Plectrophenax nivalis*.—Length, $6\frac{3}{4}$ inches. Rust-colored above; wings brown; underparts pure snow white. The Snowbird breeds in Arctic regions, and comes southward in winter as far as the snow extends, feeding on grass seeds. It is a true meadow bird, never alighting on a tree, and walks or runs like the larks,

never hopping. It comes in flocks, sometimes with other birds.

71. LAPLAND LONGSPUR. *Calcarius lapponicus*. — Length, $6\frac{1}{4}$ inches. Upperparts buff and chestnut, streaked with black; underparts and outer tail-feathers white; nail of hind toe very long. Otherwise like the Snowbird.

72. BAY-WING GRASS FINCH. VESPER SPARROW. *Pooecetes gramineus*. — Length, 6 inches. Grayish brown above; underparts buff and white; wing coverts bright red-brown; streaked with black all over except on throat and belly; outer tail-feathers white. A summer bird, wintering in the Southern States. He inhabits fields and grass land, and lives on the ground, but is not, like the two preceding species, averse to perching on trees.

73. IPSWICH SPARROW. *Ammodramus princeps*. — Length, $6\frac{1}{4}$ inches. Pale ashy brown, streaked above; white and little streaked underneath; a yellow spot in front of the eye, and one on the bend of the wing; a white line over the eye; no red-brown on wing coverts. A seashore sparrow, wintering here and breeding to the north.

74. SAVANNA SPARROW. *Ammodramus sandwichensis savanna*. — Length, $5\frac{2}{3}$ inches. Brown above; underparts white, much streaked with black and red-brown; tail blackish; forehead black with a narrow light line in the middle. This sparrow is common in summer, being found in fields and grass land, particularly at the seashore.

75. YELLOW-WINGED OR GRASS-HOPPER SPARROW. *Ammodramus savannarum passerinus*. — Length, $5\frac{1}{3}$ inches. Yellowish buff; wing coverts greenish yellow; top of head black with a light middle line; back of head chestnut; back marked and streaked with black; underparts not marked; tail-feathers pointed. Female with breast and sides streaked. A small, chunky sparrow, winter-

ing South, found in summer in the fields among the weeds.

76. HENSLOW'S SPARROW. *Ammodramus henslowii*. — Length, 5 inches. Head and neck greenish brown, with a broad light line in the middle of the head; back and wings red-brown; underparts white and buff streaked with black; tail-feathers narrow and sharp-pointed. This is another field-sparrow, preferring wet meadows, where he runs mouselike in the grass. If obliged to take to his wings he flies only a short distance before he falls into the grass again and runs. A summer bird, wintering in the South.

77. SHARP-TAILED SPARROW. *Ammodramus caudacutus*. — Length, $5\frac{3}{4}$ inches. Greenish brown above, with a broad buff line over the eye and around the ear, which is gray; underparts white streaked with black with buff on sides; tail-feathers narrow and sharp-pointed. A field sparrow, found in salt marshes near the coast. A summer bird, wintering in the South.

There are varieties of this Sparrow: Nelson's, the western species, is strong buff at the sides with hardly any streaks; while the Acadian, the northern species, which passes us in its migrations, is cream buff at the sides, streaked with gray.

78. SEASIDE SPARROW. *Ammodramus maritimus*. — Length, 6 inches. Grayish brown above; underparts grayish white, streaked indistinctly with gray-brown. Remarkable for his bill, which is large for a sparrow, and for having no red-brown on his back. A summer bird, living in salt marshes, more numerous to the southward.

79. WHITE-CROWNED SPARROW. *Zonotrichia leucophrys*. — Length, $6\frac{3}{4}$ inches. Head black, with a white patch on the top; a broad white line from the eye to the back of the head, with a similar black one below it; neck and underparts gray, buffish at the sides; upperparts gray-brown. A winter visitor,

passing from the far North, where it breeds, to the United States, where it winters. Found in woods, swamps, and hedge-rows.

80. WHITE-THROATED SPARROW. *Zonotrichia albicollis*. — Length, $6\frac{3}{4}$ inches. Resembles the White-crown, but has only a narrow white line on its head instead of a white patch; a white line above the eye, and a yellow spot before the eye; throat a sharply defined white; back red-brown. This sparrow breeds to the north of us and winters to the south, and during the period of migration is found in wood-swamps and brushwood, quietly feeding in small flocks.

81. TREE OR WINTER SPARROW. *Spizella monticola*. — Length, $6\frac{1}{2}$ inches. Top of head, a line behind the eye, and back, red-brown; underparts grayish white, with a black and red-brown patch on the breast. This sparrow breeds far to the northward, and winters here in flocks, often in company with Juncos. It feeds before barn doors or in fields, on weeds or grass seed.

82. CHIPPING SPARROW. CHIPPY. *Spizella socialis*. — Length, $5\frac{1}{2}$ inches. Forehead and line through the eye black; top of head and back red; underparts gray and whitish; bill black; upper tail coverts gray. In the fall it loses its red cap and becomes streaky on the top of the head, like the young. This is our common little summer sparrow, seen feed-

ing near the barn or roadside, and building his nest in bushes. Winters in the South.

83. FIELD SPARROW. *Spizella pusilla*. — Length, $5\frac{2}{3}$ inches. Front of head light; top of head, cheek, and back, red-brown; underparts gray and whitish, buffish on breast and sides; bill light-colored; tail coverts brown. Resembles the Chippy, but without black lines anywhere on the head. His favorite grounds are gardens, pastures, and edges of fields, where he breeds among the shrubs along the fences. He is not a true field-sparrow, like the various species of *Ammodramus*. A summer bird, wintering in the South.

84. JUNCO. SNOWBIRD. *Junco hyemalis*. — Length, $6\frac{1}{4}$ inches. Head and neck slate gray; back brown and black; underparts and outer tail-feathers white. The Junco breeds to the north, and in winter comes to us in flocks, feeding at barn doors and along the roadsides.

85. SONG SPARROW. *Melospiza fasciata*. — Length, $6\frac{1}{2}$ inches. Head and back gray, red-brown, and black; two conspicuous black streaks from the bill downward on each side; underparts white; sides buffish with broad black and red-brown streaks. This sparrow is the well-known singer on roadsides and the edges of woods. A summer bird, sometimes staying all winter.

86. SWAMP SPARROW. *Melospiza georgiana*. — Length, 6 inches. Forehead black; top of head, back, wings, and tail red-brown, streaked on the back with buff and black; underparts grayish, not streaked; throat and belly light; breast brownish. The favorite haunts of this sparrow are wet meadows and reed-swamps; he is rarely found elsewhere. A summer bird, wintering South.

LINCOLN'S SPARROW, a Western species, has sometimes been seen here during the migrations. It has fine streaks on breast and sides.

87. FOX SPARROW. *Passerella iliaca*. — Length, $7\frac{1}{4}$ inches. Upperparts red-brown, tail brightest; head grayish; underparts white with red-brown and black streaks. This sparrow breeds far to the northward and winters in the South. During the migrations early in the spring and late in the fall this quiet and melancholy bird is often seen on the edges of wood-swamps, or in the alder bushes.

88. TOWHEE. CHEWINK. *Pipilo erythrophthalmus*. — Length, $8\frac{1}{3}$ inches. Belly and outer tail-feathers white; sides chestnut-red; otherwise black. Female similar, but brownish gray where the male is black. A summer bird, wintering South. He is conspicuous in shrubs and hedges on account of his long tail and sharp, loud, warning notes.

89. ROSE-BREASTED GROSBEAK. *Habia ludoviciana*. — Length, $8\frac{1}{2}$ inches. Belly, patch on wing, and spots on tail and bill white; breast and sides pink, otherwise black. Female brown above, with a white line through the eye; throat white; belly light buff with brown streaks. A summer bird, wintering in South America. Found in woodlands, and distinguished for his fine voice.

The CARDINAL, a more southerly bird, rarely comes as far north as New York. Bright red with a large topknot; black around bill and throat; grayish on back and tail.

90. INDIGO BIRD. *Passerina cyanea*. — Length, $5\frac{1}{2}$ inches. Bright deep blue on the forehead, changing gradually to bright metallic green on the tail. Female dark red-brown on back and breast and around the eye; underparts buff with no streaks or spots. A summer bird, wintering in Central America. Found among bushes.

91. DICKCISSEL. BLACK-THROATED BUNTING. *Spiza americana*. — Length, 6 inches. Resembles the English Sparrow, but differs in having a light line over the eye and a yellowish breast. A Western summer bird, rarely found East.

92. SCARLET TANAGER. *Piranga erythromelas*. — Length, $7\frac{1}{4}$ inches. Bright scarlet; wings and tail deep velvety black. Female and young olive green above and yellowish gray below; wings and tail blackish; resembling a Vireo in color. Later in the season the male changes his colors to those of the female. The Tanager is a wood bird, rarely seen on the ground or in low shrubs; feeding on berries, fruit, and insects. A summer bird, wintering in South America.

The great number of species of Sparrows, and the similarity of their coloring and habits, make it difficult to distinguish one from another. As most species are here for only one season, and inhabit certain localities, they may be divided into smaller groups, which will facilitate their identification.

All the year around.

Only the English Sparrow, 63, never seen in the woods nor far from dwellings. Sometimes the Song Sparrow, 85.

Likely to be met in summer.

- I. In marshes, near the seashore: 72, Bay-wing; 74, Savanna; 77, Sharp-tail; 78, Seaside.
- II. Inland, in wet or dry meadows and open fields: 72, Bay-wing; 75, Grasshopper; 76, Henslow's; 86, Swamp; 83, Field.
- III. On roadsides, in shrubbery or among small trees:
 - a. Not spotted at all: 68, Goldfinch; 90, Indigo Bird.
 - b. Not streaked in front: 79, White-crown; 80, White-throat; 82, Chippy; 83, Field; 91, Dickcissel; 63, House or English.
 - c. Streaked on breast: 62, Purple Finch; 72, Bay-wing; 85, Song; 87, Fox.

Likely to be met in winter.

- I. In open grounds, meadows, and fields: 70, Snow-bird; 71, Longspur; 73, Ipswich.
- II. In trees and shrubs, on roadsides or in swamps:
 - a. Breast not streaked: 81, Tree; 84, Junco; 79, White-crown; 80, White-throat; 68, Goldfinch; 63, English.
 - b. Breast streaked: 66, Redpoll; 69, Siskin; 87, Fox.

SWALLOWS.—*Hirundinidae.*

BILL.—Very small, with a large, cleft mouth.

FEET.—Small.

FOOD.—Insects caught on the wing.

These birds are generally seen on the wing, sparingly perching. They migrate south in the winter, some species going as far as Southern Brazil.

93. PURPLE MARTIN. *Progne subis.*—Length, 8 inches. Glossy blue-black. Female and young black above; brownish gray below; belly white. The Martin builds its nest on houses and barns, or in boxes hung in trees.

94. CLIFF OR EAVE SWALLOW. *Petrochelidon lunifrons.*—Length, 6 inches. Steel blue above; forehead white; side of head chestnut; a gray-brown ring around the neck; breast gray-brown; belly white; upper tail coverts red-brown. Builds under overhanging rocks, or the eaves of barns, basket-like nests made of mud.

95. BARN SWALLOW. *Chelidon erythrogaster.*—Length, 7 inches. Forehead and throat red-chestnut; upper parts steel-blue black; underparts white;

outside tail-feathers very long and white spotted. Builds its nest in barns. Generally hunts low.

96. TREE SWALLOW. *Tachycineta bicolor*. Length, 6 inches. Steel-blue black above; white below. Young brownish gray above. Originally nested in hollow trees, but now prefers barns and boxes.

97. BANK SWALLOW. *Clivicola riparia*. — Length, $5\frac{1}{4}$ inches. Upper parts and breast brownish gray; throat and belly white. Nest in colonies in sand-banks, in which they dig holes three feet deep for their nests.

ROUGH-WINGED SWALLOW. *Stelgidopteryx serripennis*. — Length, $5\frac{3}{4}$ inches. Brownish gray above; throat and breast brown; belly white; outer quill on the wing rough-edged. A Southern and Western species.

WAXWINGS. — *Ampelidae*.

BILL. — Short and notched at tip.

HEAD. — Crested; some feathers with waxlike red spots.

FOOD. — Berries and cherries.

98. CEDAR BIRD. WAXWING. *Ampelis cedrorum*. — Length, $7\frac{1}{4}$ inches. Grayish red-brown above; underparts whitish gray with a yellow tint; tip of wing and tail-feathers lemon yellow, with or without a red spot in the centre resembling a drop of sealing-wax. Mostly a northern bird, though occasionally breeding in the United States. He generally arrives in small flocks in the spring and fall, and stays off and on through the whole winter. He feeds on cedar berries, and if he is here at the right season, on cherries. A genuine tree bird, rarely seen on the ground.

BOHEMIAN WAXWING. *Ampelis garrulus*. — Length, 8 inches. Resembles the Cedar Bird in every-

thing except size, being much larger. He summers in the Arctic regions, and comes south to winter in the West, being rarely found in the East.

SHRIKES. — *Laniidae.*

BILL. — Strong, toothed, hooked like a hawk's.

FOOD. — Insects, mice, and sparrows.

99. NORTHERN SHRIKE. BUTCHER BIRD. *Lanius borealis.* — Length, $10\frac{1}{2}$ inches. Gray above; wing and tail black; outer tail-feathers and underparts white, barred finely with gray. Female similar, but more strongly barred with gray-brown. The Butcher Bird summers in the far North, and comes South in winter, following flocks of Juncos and snowbirds, on which he feeds. He perches, hawk-like, on telegraph poles and bare branches, waiting for his prey. He flies low, close to the ground.

100. SOUTHERN SHRIKE. LOGGER-HEAD. *Lanius ludovicianus.* — Length, 9 inches. Bluish gray above, with black on the ear, and in front of eye, tail, and wing; underparts white, breast grayish, but not barred. In his ways similar to the Northern Shrike. A Southern and Western bird, rare in the East.

GREENLETS, VIREOS. — *Vireonidae.*

BILL. — Not so wide as it is thick, hooked at point.

FOOD. — Insects.

The Vireos are all tree birds, rarely seen on the ground, and summer birds, wintering in the South. In size and coloring the Vireos strongly resemble the Flycatchers. For distinguishing marks see p. 21.

101. RED-EYED VIREO. *Vireo olivaceus*. — Length, $6\frac{1}{4}$ inches. Greenish gray above; underparts and a line above the eye white; eye red; no light wing bars.

102. PHILADELPHIA VIREO. *Vireo philadelphicus*. — Length, $4\frac{3}{4}$ inches. Similar to the Red-eye, but pale yellow underneath.

103. WARBLING VIREO. *Vireo gilvus*. — Length, $5\frac{3}{4}$ inches. Similar to Red-eye, but paler and more brownish in color; no light wing bars.

104. YELLOW-THROATED VIREO. *Vireo flavifrons*. — Length, 6 inches. Olive gray on head and back, fading to gray on tail coverts; light parts of head yellow, fading to white towards the belly; two white bands on the wing.

105. WHITE-EYED VIREO. *Vireo noveboracensis*. — Length, $5\frac{1}{4}$ inches. Similar to the Yellow-throat, but eyes and throat white.

106. BLUE-HEADED VIREO. *Vireo solitarius*. — Length, $5\frac{1}{2}$ inches. Bluish gray on head and neck; greenish gray on back; a white band from the bill to and around the eye; throat and belly white; two light bars on wing.

WOOD WARBLERS. — *Mniotiltidae*.

BILL. — Slender, pointed, but not hooked.

FOOD. — Insects, which they busily hunt from tree to tree.

Small woodland birds, often bright and handsomely colored. A few species stay in summer to breed here, but most pass through, breeding far to the north, and returning in the fall to winter in the tropics.

107. BLACK AND WHITE CREEPER. *Mniotilta varia*. — Length, $5\frac{1}{2}$ inches. White, streaked and marked with black. Hunts woodpecker-

like on tree trunks for insects in the crevices of the bark.

108. WORM-EATING WARBLER. *Helminthus vermivorus*. — Length, $5\frac{1}{2}$ inches. Greenish brown above; underparts white; a black line in the middle of the head, one above the eye, and one from the eye to the back of the neck.

109. GOLDEN-WINGED WARBLER. *Helminthophila chrysoptera*. — Length, 5 inches. Top of head and patch on wing yellow; back blue-gray; underparts white; a black patch on the eye and another on the throat.

110. NASHVILLE WARBLER. *Helminthophila ruficapilla*. — Length, $4\frac{3}{4}$ inches. Head and neck blue-gray, with a small chestnut spot on the crown of the head; back olive-green; underparts yellow; no white on wings. Winters in tropics.

111. TENNESSEE WARBLER. *Helminthophila peregrina*. — Length, 5 inches. Head and neck blue-gray; back olive-green; underparts, edge of wing, and outer tail-feathers white. Winters in Central America.

112. BLUE YELLOW-BACKED OR PARULA WARBLER. *Campsothlypis americana*. — Length, $4\frac{3}{4}$ inches. Head, shoulder, and tail coverts blue-gray; back green; white markings on wing and outer tail-feathers; underparts yellow with reddish marks on the sides; red or black band on breast.

113. CAPE MAY WARBLER. *Dendroica tigrina*. — Length, 5 inches. Top of head and a line under the eye black; cheek and ear red; back olive green; underparts and tail coverts yellow; a white patch on the wing.

114. YELLOW WARBLER. *Dendroica aestiva*.—Length, 5 inches. Yellow, upperparts greenish; underparts streaked with red-brown.

115. BLACK-THROATED BLUE WARBLER. *Dendroica caerulescens*.—Length, $5\frac{1}{4}$ inches. Blue-gray above; sides of head, throat, and sides black; belly white; a white patch on wing.

116. YELLOW-RUMPED OR MYRTLE WARBLER. *Dendroica coronata*.—Length, $5\frac{2}{3}$ inches. Bluish gray; throat and belly white; a yellow patch on the top of the head, one on the tail coverts, and one on the side; two white bars on the wing.

117. BLACK AND YELLOW OR MAGNOLIA WARBLER. *Dendroica maculosa*.—Length, 5 inches. Cheeks and forehead black; crown blue-gray; back olive green; throat and tail coverts yellow; belly white; a white line over the eye; a white patch on wing; most tail-feathers white in the middle.

118. CHESTNUT-SIDED WARBLER. *Dendroica pennsylvanica*.—Length, 5 inches. Top of head yellow; back gray or green; ear, underparts, wing bars, and spots on tail white; sides chestnut; a black patch before and behind the eye.

119. BAY-BREASTED WARBLER. *Dendroica castanea*. — Length, $5\frac{2}{3}$ inches. Forehead and around the eye black; top of head and breast chestnut; back brown-gray; side of neck, wing bars, belly, and tip of outer tail-feathers white.

120. BLACK-POLLED WARBLER. *Dendroica striata*. — Length, $5\frac{1}{2}$ inches. Top of head black; sides of head white; back, wing, and tail ash gray; underparts and wing bar white.

121. BLACKBURNIAN WARBLER. *Dendroica blackburniae*. — Length, $5\frac{1}{4}$ inches. Black and orange, brightest on throat and breast; streaks on back, broad wing bars, and belly white.

122. BLACK-THROATED GREEN WARBLER. *Dendroica virens*. — Length, 5 inches. Bright olive green above; a yellow line over eye and cheek; throat and breast black; two wing bars and belly white.

123. PINE WARBLER. *Dendroica vigorsii*. — Length, $5\frac{1}{2}$ inches. Upperparts olive green; around eye and throat yellow, fading to white on belly; two whitish wing bars; mixed with gray everywhere except on throat.

124. YELLOW PALM WARBLER. YELLOW RED POLL. — *Dendroica palmarum*. — Length, $5\frac{1}{2}$ inches. Top of head chestnut; back olive brown; tail coverts green; throat, breast, and around eye yellow; belly grayish white; no wing bars.

125. PRAIRIE WARBLER. *Dendroica discolor*. — Length, $4\frac{3}{4}$ inches. Olive green above, spotted with red-brown on back; underparts bright yellow; wing bars and belly lighter yellow; a black line through the eye and one on the cheek.

126. OVEN BIRD. GOLDEN-CROWNED THRUSH. *Seiurus aurocapillus*. — Length, 6 inches. Olive brown above; white with brown streaks below;

a golden yellow cap on the top of the head. Common in shady woods.

127. WATER THRUSH. — *Seiurus noveboracensis*. — Length, 6 inches (see 136). Olive brown above; white with brown streaks below; buff line above and behind the eye. Found around trout-brooks and swift rivers.

128. LOUISIANA WATER THRUSH. *Seiurus motacilla*. — Length, $6\frac{1}{4}$ inches. Not streaked on throat and belly; line above the eye, starting from behind, pure white; otherwise like 127.

129. CONNECTICUT WARBLER. *Geothlypis agilis*. — Length, $5\frac{1}{2}$ inches. Bluish gray, throat lighter; belly white; top of head and tail greenish gray, lighter on sides.

130. MOURNING WARBLER. *Geothlypis philadelphia*. — Length, $5\frac{2}{3}$ inches. Head bluish gray, changing to black on breast; back olive green; underparts yellow; no wing bars nor light eye-ring.

131. MARYLAND YELLOW-THROAT. *Geothlypis trichas*. — Length, $5\frac{1}{3}$ inches. Olive green above; sides of head black; throat and breast yellow; belly white. Female without the black.

132. YELLOW-BREASTED CHAT. *Icteria virens*. — Length, $7\frac{1}{2}$ inches. Olive green above; a line above and around the eye white; throat and breast yellow; belly white; sides grayish.

133. WILSON'S WARBLER. — *Sylvania pusilla*. — Length, 5 inches. Forehead, throat, and around the eye yellow; on hind head a black cap, wanting in the female; back and breast olive green; belly white.

134. CANADIAN WARBLER. *Sylvania canadensis*. — Length, $5\frac{2}{3}$ inches. Olive green above; throat and breast yellow; a white line above and around the eye; belly white; no wing bars or tail spots.

135. AMERICAN REDSTART. *Setophaga ruticilla*. — Length, $5\frac{1}{2}$ inches. Black; sides of breast, wing bar, and middle of tail-feathers pink; belly white. Female whitish instead of pink, and brown instead of black, being lighter on the throat.

136. AMERICAN PIPIT. TIT-LARK. *Anthus pennsylvanicus*. — Length, $6\frac{1}{2}$ inches. Resembles a Water-thrush, but has wing bars and outer tail-feathers spotted with white, and throat and belly not streaked. Hind toe-nail very long. In open fields near the seashore in large flocks.

THRASHERS AND WRENS.— *Troglodytidae*.

BILL. — Slender, pointed, but not hooked, similar to the Warbler's bill.

The chief point of difference is in the length of the first few quills on each wing. In the Warblers the first three quills are of about the same length, while in the *Troglodytidae* the first two are much shorter than the next few.

The Thrashers are fine singers, and haunt the outer edges of woods, feeding on berries and insects.

The Wrens inhabit stone walls and woodpiles, like ground squirrels, and hunt there for worms and insects. The Marsh Wrens inhabit the reeds in river marshes. All are summer birds except the Winter Wren and the Brown Creeper.

137. CATBIRD. *Galeoscoptes carolinensis*. — Length, 9 inches. Slate gray; cap and tail black; under tail coverts chestnut. Besides making his cat-

like calls he is a beautiful singer and not shy. He is fond of gardens and shrubbery.

138. BROWN THRUSH. THRASHER. *Harporhynchus rufus*. — Length, $11\frac{1}{2}$ inches. Red-brown above; white with black streaks below; tail long and rounded. Lives in the undergrowth and bushes, feeding on the ground on berries and insects under the leaves. He too has a beautiful voice.

139. HOUSE WREN. *Troglodytes aedon*. — Length, 5 inches. Cinnamon brown above; white below; finely barred with black all over.

140. WINTER WREN. *Troglodytes hyemalis*. — Length, 4 inches. Dark cinnamon brown above; brownish below; heavily barred with black.

141. SHORT-BILLED MARSH WREN. *Cisothorus stellaris*. — Length, 4 inches. Upperparts black, white, and buff, streaked; white underneath; wing and tail barred.

142. LONG-BILLED MARSH WREN. *Cisothorus palustris*. — Length, $5\frac{1}{4}$ inches. Head brown above, with a white line over the eye; back black with white streaks; upper tail coverts cinnamon; underparts white; wing and tail barred.

143. BROWN CREEPER. *Certhia familiaris americana*. — Length, $5\frac{2}{3}$ inches. The Creeper differs

from the Wrens chiefly in his long stiff tail, with pointed feathers, and in his woodpecker-like way of feeding on insects in the bark of trees. Upperparts mottled white, black, and buff; reddish brown above the tail; tail gray-brown; underparts white.

NUTHATCHES AND CHICKADEES. — *Paridae*.

BILL. — Chickadees, straight and very short.

Nuthatches, of medium length, the lower bill bent upward.

First quill short in both Nuthatches and Chickadees.

The Nuthatches are short-tailed, and hunt woodpecker-like, singly and quietly on tree-trunks for insects and grubs. The Chickadees are long-tailed, and hunt over the branches of trees in loose flocks, always calling and hustling, never at rest.

144. WHITE-BREASTED NUTHATCH. *Sitta carolinensis*. — Length, 6 inches. Top of head black; back bluish gray; underparts white.

145. RED-BREASTED NUTHATCH. *Sitta canadensis*. — Length, $4\frac{2}{3}$ inches. Top of head and a line through the eye black; throat and line above the eye white; back bluish gray; underparts reddish buff.

146. CHICKADEE TITMOUSE. *Parus atricapillus*. — Length, $5\frac{1}{4}$ inches. Head black; back gray; cheeks, breast, and belly white; sides washed with buff.

HUDSONIAN CHICKADEE. *Parus hudsonicus*. — Like the common Chickadee, but a little smaller, and having the head brown and cheeks less white, and the sides reddish. It is sometimes found in winter in company with the common Chickadee.

TUFTED TITMOUSE. *Parus bicolor*. — Length, 6 inches. Only forehead black and a gray tuft, otherwise like 146. A common Southern bird.

KINGLETS AND GNATCATCHERS. — *Sylviidae*.

BILL. — Slender, warbler-like, with an upward turn.

FOOD. — Insects, grubs, and cocoons on trees. First quill very short.

These birds rarely visit the ground, though they are often found on low bushes.

147. RUBY-CROWNED KINGLET. *Regulus calendula*. — Length, $4\frac{1}{2}$ inches. Upperparts greenish gray, with a bright red spot on the top of the head; underparts a grayish, soiled white; wing and tail blackish, wing with two white bars. Female similar, but without the red spot. The Ruby-crown visits chiefly evergreen woods, but travels with and like the Chickadees through all kinds of brushwood. A northern bird, found here only in winter.

148. GOLDEN-CROWNED KINGLET. *Regulus satrapa*. — Length, 4 inches. Top of head bright yellow, with an orange line in the middle, and a broad black line above the forehead and the eye; upperparts brownish green; wing and tail blackish; under-

parts whitish gray. Otherwise like the Ruby-crown, with which it associates in the winter.

148a. BLUE-GRAY GNATCATCHER. *Poliophtila caerulea*. — Length, $4\frac{1}{2}$ inches. Upper parts blue-gray, a black line on the forehead and above the eye; tail white and black; underparts grayish white. This is a Southern bird, but has been found in summer as far north as Maine.

THRUSHES. — Turdidae.

BILL. — Notched at point.

FOOD. — Insects, worms, berries, cherries, and grapes.

First quill very short, the next three of about equal length.

Some species of Thrush prefer for their domicile gardens and orchards, even in villages and cities. Others during their season never leave the shadiest part of the woods. All but a few stragglers go South in winter. Most of the species are fine songsters.

149. WOOD THRUSH. *Turdus mustelinus*. — Length, $8\frac{1}{4}$ inches. Bright red-brown on head, becoming gradually a darker grayish brown toward the tail; underparts white, with many large round black spots.

150. WILSON'S THRUSH. VEERY. *Turdus fuscescens*. — Length, $7\frac{1}{2}$ inches. Upperparts red-brown; underparts white, with small red-brown spots; sides white.

151. GRAY-CHEEKED THRUSH. *Turdus aliciae*. — Length, $7\frac{1}{2}$ inches. Olive brown above, white around eye; throat and belly white; breast very light buff, spotted with black; sides grayish.

152. OLIVE-BACKED THRUSH. *Turdus ustulatus swainsonii*. — Length, 7 inches. Upperparts dark brown, buff around the eye; throat and

breast buff; belly white, spotted with black; sides brownish gray.

153. HERMIT THRUSH. *Turdus aonalaschkae pallasii*. — Length, 7 inches. Upperparts brown; tail bright red-brown; underparts white with black spots; sides brownish gray.

The similarity of our thrushes in size, color, and markings makes it advisable to draw the observer's attention to some easily recognizable points.

Upperparts red-brown; underparts spotted with the same color. 150, Wilson's Thrush.

Red-brown on head shading to dark brown towards the tail; underparts with round black spots. 149, Wood Thrush.

Red-brown on tail shading to dark brown towards the head; underparts with triangular and roundish black spots. 153, Hermit Thrush.

Upperparts uniform dark brown, white around the eye and throat. 151, Gray-cheeked Thrush.

Upperparts uniform dark brown, buff around the eye and throat. 152, Olive-backed Thrush.

154. AMERICAN ROBIN. *Merula migratoria*. — Length, 10 inches. Head and tail black, with a few white spots around the eye; back slate gray; underparts reddish chestnut; throat and belly white. Young similar, but with less red, black spots on breast, and roundish white spots on neck and back.

Though found abundantly in gardens of villages and suburbs, and rarely in the deep woods, the Robin is often seen at home on hillsides, far from human habitations, provided there is a chance of a huckleberry crop, and small cedars or pines are at hand for nesting. When he arrives in the spring he surveys his grounds, and if he finds a few cherry trees, a strawberry bed, a lawn, and an evergreen tree in close neighborhood, he is suited to a dot. Should there be no tree where he can be safe from the house-cat, he may build in a woodpile or grape-vine trellis. He does not care for the grapes, however, as by the time

they are ripe the young are able to fly, and can forage for themselves anywhere. On his return in the spring the Robin will act as if he owned the place, doing exactly as did the bird of the year before, even sitting on the same branches, so that one almost believes him to be the identical bird come back to his old quarters. Robins collect in large flocks in the South during the winter, but some small flocks sometimes stay in thick cedar swamps all winter long, and appear with the first bright days in early spring.

155. BLUEBIRD. *Sialia sialis*.—Length, 7 inches. Upperparts blue; underparts rusty red; belly white. Female duller, paler, and grayish; young with light round spots on the back and blackish edges on the breast feathers. One of the earliest birds to return in the spring, often coming so early as to be caught by a snowstorm. Almost every farm orchard harbors a pair, but gardens near villages are less in their favor. The Bluebird is quiet and Fly-catcher-like in his manners. He sits for a while on an apple-tree limb or telegraph-pole, notices a worm in the grass, flies down and picks it up, and returns to his place of lookout.

INDEX.

	Page
BLACKBIRD, crow	28
red-winged	26
rusty	28
BLUEBIRD	52
BOBOLINK	26
BOB-WHITE	4
BULLBAT	20
BUNTING, black-throated	35
BUTCHER BIRD	40
CARDINAL	35
CATBIRD	46
CEDAR BIRD	39
CHAT, yellow-breasted	45
CHEWINK	35
CHICKADEE, Hudsonian	48
CHIPPY	33
COWBIRD	26
CREEPER, black and white	41
brown	47
CROSSBILL, American	29
white-winged	29
CROW	25
fish	25
shore	25
CUCKOO, black-billed	15
yellow-billed	15
DICKCISSEL	35
DOVE, mourning	7
EAGLE, bald	13
golden	13
FALCON, peregrine	10
FINCH	30
bay-wing grass	31
purple	29

	Page
FLICKER	17
FLYCATCHER, crested	22
least	23
olive-sided	22
Traill's	23
yellow-bellied,	23
GNATCATCHER, blue-gray	50
GOATSUCKERS	19
GOLDFINCH, American	30
GOSHAWK	9
GRACKLE, purple	28
GROSBEAK, pine	28
rose-breasted,	35
GROUSE, Canada	5
pinnated	6
ruffed	5
sharp-tailed	7
willow	7
HARRIER, meadow	11
HAWK, broad-winged	9
Cooper's	10
duck	10
fish	12
marsh	11
pigeon	11
red-shouldered	9
red-tailed	8
rough-legged	12
sharp-shinned	10
sparrow	11
Swainson's	13
HEATH HEN	6
HUMMING BIRD,	
ruby-throated	20
INDIGO BIRD	35

	Page		Page
JAY, blue	24	PTARMIGAN	7
Canada	24		
JUNCO	34	QUAIL	4
KING BIRD	21	RAVEN	25
KINGFISHER, belted	18	RED POLL	30
KINGLET, golden-crowned	49	greater	30
ruby-crowned	49	yellow	44
LARK, horned	23	REED-BIRD	26
meadow	27	REDSTART, American	46
prairie horned	23	RICE-BIRD	26
shore	23	ROBIN, American	51
LINNET, red	29	golden	27
LOGCOCK	17	SHRIKE, Northern	40
LOGGERHEAD	40	Southern	40
LONGSPUR, Lapland	31	SISKIN, pine	30
MARTIN, purple	38	SNOWBIRD	30, 34
MEAT BIRD	24	SNOW BUNTING	30
NIGHT-HAWK	20	SPARROW, chipping	33
NUTHATCH, red-breasted	48	English	29
white-breasted	48	field	34
ORIOLE, Baltimore	27	fox	35
orchard	27	grasshopper	31
OSPREY	12	Henslow's	32
OVEN BIRD	44	house	29
OWL, Acadian	14	Ipswich	31
barred	14	Lincoln's	34
great gray	14	Savanna	31
great horned	13	seaside	32
hawk	14	sharp-tailed	32
hoot	14	song	34
long-eared	13	swamp	34
Richardson's	14	tree	33
saw-whet	14	vesper	31
screech	14	white-crowned	32
short-eared	13	white-throated	33
snowy	14	winter	33
PARTRIDGE	5	yellow-winged	31
spruce	5	SWALLOW, bank	39
PEWEE	22	barn	38
wood	23	chimney	20
PHOEBE	22	cliff	38
PIGEON, passenger	7	cave	38
PIPIT, American	46	rough-winged	39
PRAIRIE HEN	6	tree	39
		SWIFT	20
		TANAGER, scarlet	36
		THRASHER	47

	Page
THRUSH, brown	47
golden-crowned	44
gray-cheeked	50
hermit	51
Louisiana water	45
olive-backed	50
water	45
Wilson's	50
wood	50
TITLARK	46
TITMOUSE, chickadee	48
tufted	49
TOWHEE	35
TURKEY, wild	7
VEERY	50
VIREO, blue-headed	41
Philadelphia	41
red-eyed	41
warbling	41
white-eyed	41
yellow-throated	41
WARBLER, bay-breasted	44
black and yellow	43
Blackburnian	44
black-polled	44
black-throated	
blue	43
black-throated	
green	44
blue yellow-backed	42
Canadian	45
Cape May	42
chestnut-sided	43
Connecticut	45
golden-winged	42

	Page
WARBLER, magnolia	43
mourning	45
myrtle	43
Nashville	42
Parula	42
pine	44
prairie	44
Tennessee	42
Wilson's	45
worm-eating	42
yellow	43
yellow palm	44
yellow-rumped	43
WAXWING	39
Bohemian	39
WHIPPOORWILL	19
WHISKEY JACK	24
WOODPECKER, American	
three-toed	18
downy	17
golden-winged	17
hairy	17
pileated	17
red-bellied	18
red-headed	18
three-toed	
Arctic	18
yellow-bellied	
lied	17
WREN, house	47
long-billed marsh	47
short-billed marsh	47
winter	47
YELLOW-HAMMER	17
YELLOW-THROAT,	
Maryland,	45

Sum

la

SMITHSONIAN INSTITUTION LIBRARIES

3 9088 00272774 1

nhbird QL681.K72X
Field key to the land birds ...