

FEATHERED GAME
OF THE
NORTHEAST

WALTER H. RICH



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Feathered Game of the Northeast

By
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WALTER H. RICH

WITH ILLUSTRATIONS BY THE AUTHOR

NEW YORK
THOMAS Y. CROWELL & CO.
PUBLISHERS



Feathered Game
of the
Northeast

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Published September, 1907.

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TO MY WIFE,

MOST PATIENT OF READERS

AND GENTLEST OF CRITICS

THIS BOOK IS AFFECTIONATELY DEDICATED.

PREFACE.

The writer is aware that there are many excellent bird books, but while most of these are of wider scope, either covering the broad field of general ornithology or dealing with the entire bird life of a large area of country, there are few which treat solely of the groups of special interest to sportsmen,—especially to the sportsmen of New England. This work is devoted to the so-called “game birds,” and while the author’s intent has been to write of them to the man whose nature study has been conducted in the open and mostly over a gunbarrel, it is his hope that all lovers of the birds and the out-of-doors, and even the scientific ornithologist as well, may find his page of interest and profit.

Treating the subject from the standpoint of fair sportsmanship, the writer has endeavored to discountenance the reckless and needless slaughter by those whose ambition it is to make a record killing, and he asks of the thoughtful

sportsman, who beats the covert in search of health and sport, and of the working naturalist, that they meet on this common ground and work loyally together in an effort to save our wild life from the extermination which threatens. The protection of our wild creatures, particularly of our game birds, seems to be the most important question in the sportsman's outlook upon the future—a question calling for much foresight and no little self-denial in its proper solution. The present generation is feeling the results of that selfishness of the past, so well summed up in its two stock arguments: "O, well, if I don't kill them someone else will, and the game will last *my* time, anyhow!"

Will it, you who listen to our old men's tales of shooting days in the not-so-long-ago? Will it, you who have gunned the marsh? Where are the plover flocks which once swept across its wide expanse? Will it, market hunter and slayer of the wild pigeon? Will it, chicken hunter, you who left your dead to rot in August's sun? Will it, hide hunter of the buffalo days?

If the reader can look with indifference upon the works of these, let him permit things to take their ruinous course,—let him do nothing to re-

strict any man in killing when, where, or how he will. But if he wishes to save our weaker brethren of the wilderness, that they may furnish to those who come after us the joys they afford to-day, he will lend his best effort, when someone with the interests of our game supply at heart tries to put off the opening day of a shooting season until the birds have become full-fledged, or he will strengthen the hands of those who endeavor to stop spring shooting, or to close our markets to the sale of game. These things I say to the great brotherhood of sportsmen.

To the individual gunner this admonition may not come amiss: do not, even though within your legal right, continue to kill after a fair bag has been made. It would be a wise plan for each and all of us who carry a gun to paste in our shooting hats cards bearing the motto:

“Don’t forget to leave enough for seed.”

And now, reader, this book is committed to you in the hope that you may find herein something to remind you pleasantly of your own exploits on wooded hillside, or ’mid rustling reeds, or on sunlit seas, and with the wish that

you may forgive its many short-comings, "Of which," as honest Izaak says, "if thou be a severe, sour-complexioned man, then I here disallow thee to be a competent judge."

WALTER H. RICH.

Falmouth, Maine, June first, 1907.

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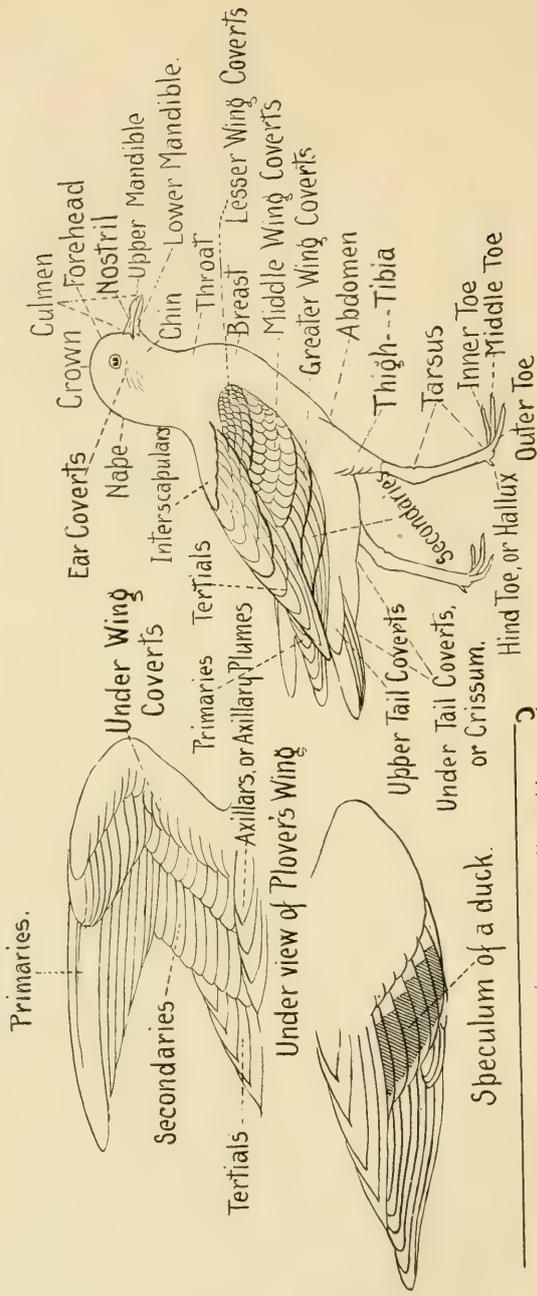
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OUTLINE DRAWINGS

Showing Arrangement of Plumage.



BEE-TLE-HEAD PLOVER.

"Above" or Upper Parts. That portion, including upper surface of wings and tail, which is above a line drawn from corner of mouth along the side of neck and body to root of the tail. "Below," remaining parts below this line.

"Length" is measured from tip of the bill to the end of the tail.
 "Extent" is measured from tip to tip across spread wings.

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FEATHERED GAME OF THE NORTHEAST

THE SPRUCE GROUSE.

(*Canachites canadensis.*)

The Spruce Grouse, Canada Grouse, Swamp Partridge, or Black Grouse,—for by all these titles this bird is known,—is a dweller on our North American continent from Newfoundland to the Columbia river, thence northward into Alaska, and from the northern portions of the United States to the limits of the spruce forests of the sub-Arctic lands, thus leaving only northwestern Montana, Oregon, Washington, and northward along the coast through British Columbia for its cousin, Franklin's Grouse. Little they care for cold or snow. They seem to be resident at all points of their habitat. The range of the Spruce Grouse extends much farther into the north than that of the ruffed grouse. It is somewhat smaller than this aristocratic relative, and in its shape is nearer to the

quails and the ptarmigans than to the other grouse.

Their homes are in the boggy portions of the woods—swampy ground carpeted in summer with moss and trailing vines, deep-shaded with spruce and hemlock—where quaking bogs and mire over which they pass with light and nimble steps make the footing of the pursuer treacherous in the extreme—almost impassable haunts at any other than the winter season. In the summer months they feed upon the insects, wild fruits and berries of the woods and at this season their flesh can scarcely be distinguished from that of the ruffed grouse in flavor. Indeed, upon examination of the barrels of “birch partridges” which were annually destroyed in the Maine woods by illegal snaring, (now happily almost a thing of the past because our markets are closed to the sale of game), many Spruce Grouse were to be found, having been passed off upon the dealer as ruffed grouse, and as this better bird were they sold to inexperienced buyers. But with the coming of the snow the days of plenty have passed and there is little left for them but the leaves and buds of the various evergreens which make the forests of

the northern swamps. At this time their flesh becomes very dark and to most palates is unpleasantly bitter. It is but justice to say, however, that under like conditions the flesh of the ruffed grouse is little better. There are those who claim to prefer this flavor—this strong reminder of the spruce tops. If, then, your friends should speak ill of the table qualities of either of these fowls, be sure that they have been experimenting with some winter bird whose unchanging and long-continued fare of spruce buds has not been the “sweet savour” best suiting your epicure’s taste. Let us confine ourselves, then, to the legitimate hunting season and we shall have no such bitter gastronomical disappointments. I have seen men eat Spruce Grouse twice a day for a week in October with relish unabated at the end of the time, nor did they think themselves much abused thereby.

As is the habit of the family their nests are built upon the ground; a tiny hollow lined with dry leaves and moss, protected from the weather and shielded from view by the overhanging boughs of spruce or fir tree. They lay from ten to eighteen eggs,—commonly nearer

the lesser number,—rather pointed at the smaller end, of a dull, creamy-buff color, and splashed and freckled with brown or chestnut spots. As a rule the nesting season in Maine is about the first of April, but grows later as we go farther north.

As has been before stated, the appearance of this bird is like the quail rather than the grouse, and in its gait and movements it is most graceful and attractive. The prevailing color is a dusky bluish gray, with minute barrings and mottlings of black. The breast is black with lines of white feathers across it low down, and other white feathers in greater numbers appearing on the flanks and under the tail. On the throat a black patch bordered by a white band extending downward from each eye and meeting under the throat. An area of naked skin, bright vermilion, above each eye. Tail black, each feather terminated by a spot of deep orange yellow. Feet feathered to the toes. Length sixteen to seventeen inches; thus the male.

The female is more like the ruffed grouse in appearance, the general tone of coloring being a rufous brown with crossbars and mottlings of



SPRUCE GROUSE.

dusky brown and black, though there are some traces of the male bird's color plan also, such as the white feathering on the flanks and below, but there should be no difficulty in distinguishing one from the other at a glance, since, aside from its smaller size, the Spruce Partridge lacks the "Elizabethan ruff" on the neck, has no crest and is feathered to the toes.

In southern New England this bird is probably now never taken, though in the old days it was seen occasionally. In Maine the Spruce Grouse is very rare in the southern parts, being occasionally found in the neighborhood of Umbagog lake in Oxford county, growing more common as we approach the northern lumber regions and on the wooded slopes of the mountains, but still nowhere in the State equally numerous with the ruffed grouse. They become more abundant as we go farther north.

This bird is vastly inferior to the ruffed grouse in the qualities for which the latter is so highly prized by sportsmen, being neither so crafty, strong and fleet of wing, nor, in a word, so "game."

The northern lumbermen speak slightingly of its intellect, giving it the complimentary title

of "fool hen," because, being unacquainted with the kindly ways of man in dealing with his weaker brethren, when an intruder comes into its seldom-troubled domains it will only fly up into the nearest tree to sit craning its neck and staring while the clumsiest bungler that ever pulled trigger may shoot it as it perches, —even staying upon its roost to scold and strut with its tail cocked over its back if the marksman's first trial should be unsuccessful. Thus does it meet the usual fate of trustful innocence. It is well known that in distant regions where little hunted the ruffed grouse will sometimes do the same, though I think one would meet with small success in an attempt to take the "birch partridge" with a slipnoose on the end of a stick, as may often be done with these birds. When the Spruce Partridge has become better acquainted with the gunners, and later generations of hunted grouse have dodged shot among the tree tops until a wholesome fear of man has been implanted in their breasts, they will not fail to meet the demands of the most exacting sportsman or they are no true grouse.

A friend tells me of a scene he came upon in Flagstaff, "in the Dead River country," where a

little schoolhouse had been crowded up against the wall of the woods. A knot of squealing youngsters, wild with excitement, were dancing around two of the older boys who, armed with a Fourth of July cannon made of a .45 calibre shell wired upon a block of wood, were trying to down a cock spruce grouse which was scolding and strutting on a bough about ten feet from the ground. Never did a gun crew work more earnestly. Powder, turned into the arm with trembling hands, was wadded with long moss from the nearest tree—the projectile the first pebble that would fit its muzzle. Then one gunner gripped the block tightly and aimed while the other scratched a match and applied it to the touchhole. Bang! Wild screeches and uproar! But Mr. Grouse merely gave his tail another flirt and continued to strut. Now, any boy present could have “fixed him” at the first attempt with a rock, but no,—they were sportsmen raised in a sportsman’s country and they were going to shoot him or lose him like gentlemen and thus be true to Dead River traditions. So the war went on until a lucky shot tumbled the bird from his perch minus half his head.

Because of the distance of their haunts from

civilization these, with the ptarmigans, will probably be the last of our grouse to be exterminated. At present their only disturber is the hunter of big game who may want a showy "bird piece" for his dining room. It is a very pretty fowl for such a purpose, too, but the sportsman rarely kills more than the pair needed, for at that season their table qualities are not such as to induce him to put in the last day of his stay in camp in shooting the heads off Spruce Grouse to supply a toothsome morsel for friends at home, as he generally does with the ruffed grouse.

During a snowstorm the Spruce Grouse usually flies up into the densest clump of spruce or fir trees in the neighborhood, and under their thick, arching branches, snow-laden and bending, he finds shelter from the weather and food in abundance. He may not leave the tree for several days if undisturbed and the storm continues. The question of temperature troubles him little, and with his wants all provided for, the Spruce Grouse is more independent in his mode of life than any of his feathered neighbors, for when other birds are scurrying about for something to eat and perhaps going hungry,

this gentleman finds plenty of food in his shelter, and sits in comfort, "at ease in his own inn."

The Franklin's Grouse, before mentioned, is very near to this typical bird, the main difference being the lack of the terminal spots of orange in the tail of the male; in his case the tail is either plain black or narrowly tipped with white, and the tips of the upper tail coverts in both male and female are white. The lady also has whitish instead of orange tips to the tail feathers. If otherwise different there is rather less of white in the rest of the plumage of this than in the common species.

In choice of food, habits and mode of life the two species are in perfect accord.

THE HEATH HEN

(*Tympanuchus cupido*.)

It is probable that in former times the Prairie Chicken flourished in many places suitable for its occupancy from the Atlantic to its present home, but now the broken and scattered remnants of those once thriving communities are to be found only in very small num-

bers and in a few widely separated localities. In most of these places their value is recognized and by rigid protection it is hoped to save this interesting eastern race from extinction.

Unfortunately, from various causes, their increase (if increase there be) is very slow, and it will be long before their numbers will warrant anything less than complete protection. I greatly fear that this eastern race is doomed.

Eastward of the present range of the Prairie Chicken probably the only colony remaining is that of Martha's Vineyard, though possibly a few may be left on the eastern end of Long Island. In both places they are rigidly protected by law, but there seems to be a complete understanding among the natives dwelling near the breeding grounds which permits any one of them to gather Heath Hens in perfect security, and makes the whole community a nest of spies upon the stranger who may covet a specimen.

The market price of the Heath Hen's skin at the dealer's shop runs from twenty-five to forty dollars, though of course, no dealer dares quote the same in his published lists. The remuneration to the gunner as his portion of the spoil is

usually fixed at five dollars, which leaves a fair margin of profit for the merchant.

In some of the places where the eastern race once lived birds from the prairies have been released, but little has been said concerning them and the result of the experiment is not generally known. Probably they have not increased to the extent of becoming a pest to the farmers on whose lands they dwell!

By no means the equal of the ruffed grouse (to the writer's thinking the standard of game bird excellence) in game qualities either of brain or wing power, still the Chicken is a fine bird and those sportsmen who are privileged to shoot them are to be envied for many a pleasant outing. We of New England have our compensation, however, and should never complain while wise laws and their growing respect among our people combine to keep up our stock of ruffed grouse.

For the most part the Prairie Hen of the west is a dweller in the open rolling plains, taking to the timber only on rare occasions for shelter from the weather or when much harassed. The habits of the eastern species are in the

main those of the western representative, with such variations as may result from its different surroundings, such as a greater fondness for brushy covers than has its brother of the prairies. For safety's sake, and no doubt seeing the advantages which such a country affords, it has become almost as much of a woods bird as the ruffed grouse. It is probable that the bird of the eastern section was always more of a forest dweller than a citizen of the open.

The courting habits of the Heath Hen are probably the same as those of the western race, the males performing the same booming serenade at sunrise, and it is natural to suppose that they dance and fight as enthusiastically in the mating season as is the custom of the typical bird of the plains.

The western bird has been more fortunate than our own. With their enormous wheat fields to fatten upon the Chickens might have thriven wonderfully, and had it not been for the market shooter and the slaughterer for count they might have outlasted any game bird of the continent; but ever the army of sportsmen gains new recruits, and each year sees a greater drain upon a diminishing supply. Newer



HEATH HEN.

grounds must be sought out to make a good showing, and so each year the Chickens are thinned out in their old haunts or driven farther west. Unless existing game laws are respected and enforced even more strictly than heretofore the day is not far distant when these fowl will be as rare in the west as to-day in their former eastern homes. A feeder on grains and seeds, berries and various insects, its flesh is tender and of good flavor during its happier season though growing a trifle strong during the winter months. It is considered a prime table delicacy and thousands are killed for the market each year, which fact leaves a fine chance for game law improvement.

At the beginning of the shooting season the Chickens lie very close, often running along just in front of the dogs with heads showing above the short grass, clucking nervously and springing into the air by twos and threes with steady and only moderately speedy flight, so that a quick shot may use several cartridges before all are gone. It often happens that some old male remains to rise unexpectedly when all the covey is thought to have gone, and catching the tyro with empty or open gun, as often

as not escapes. At the season's opening they are easy marks and readily killed, but when later they "pack" for the winter they are strong fliers and wary enough, giving only the longest of shots. The shooting at this season really calls for some degree of skill.

Our bird nests in June or even in the first half of July, which seems late for this latitude, making its nest on the ground in a brushy shelter, and laying from six to twelve eggs, usually nearer the smaller number. The eggs are of a greenish gray color.

In its markings the Heath Hen does not differ materially from the ordinary form of Prairie Chicken though of slightly darker coloring. The description of one will pass for the other and is as follows: the Pinnated Grouse, as this bird is named in the books, (so called from the neck-tufts, like small wings, the distinguishing mark of the genus) varies in length from sixteen to eighteen inches. Upper parts dull pale yellow or whitish, regularly barred across the body and wings with dark brown and dusky; throat pale yellow with a few scattering speckles of dusky color. Under parts marked much like the upper, but the barrings more

regular, though less distinct and on a paler ground. Tail short, rounded, and carried more erectly than is the usual manner with the grouse, dusky in color, the feathers crossed by uncertain barrings of lighter shade. Crissum white. On each side of the neck are the long, narrow tufts of feathers, the type character, (in the western bird numbering ten or more and somewhat rounded at the tips, but in the Heath Hen less than ten in number, shorter and more pointed at the ends) and beneath these are two bare patches of skin which in the mating season are distended with air until they resemble small oranges. There is a slight crest on the head. Feet feathered to the toes with short, hair-like feathers. The female is marked like the male, but is somewhat smaller, of lighter and less decided colors. Her neck-tufts also are considerably smaller. The eastern bird is, if in any way different, a little smaller, darker colored, and perhaps shorter-legged than is the typical bird of the west. A distinct whitish spot on the tips of the scapulars is also a distinguishing character of the eastern race.

The Heath Hens do not gather into packs as winter comes on, (perhaps because, all told,

there are not enough of them to make a respectable pack) but seem to have adopted much the same mode of life as the ruffed grouse—a proceeding which will tend to increase their chances of long life, for so long as their jackets will command a fair price at the collector's shop someone will try to compass their destruction.

THE RUFFED GROUSE. PARTRIDGE.
BIRCH PARTRIDGE

(*Bonasa umbellus*.)

This noble fellow is a dweller in most of our New England woodlands, thriving and flourishing under conditions which would be fatal to almost any other species. He is a hardy bird with a range of great extent, for from Alaska's snow and ice to the sunny mountain slopes of the Carolinas and Georgia this gallant grouse is found, bearing equally well the breath of the northern winter and the heat of the southern sun. There is scarcely a portion of our country where, under fitting conditions, our hero (in the south a pheasant, in the north a partridge, and in point of fact neither the one nor the other) is not found, and where found, resident.

The species is not strictly migratory, though in the northern parts of its range it moves southward at times with the severest weather, and may change its haunts at any time from natural causes, so that a locality may be very sparsely populated with grouse at one season only to swarm with them the next.

In the different portions of their range these birds vary in their coloring, the bird of Oregon and neighboring States being in the most highly developed specimens a deep chestnut with warm reddish shades in his plumage, and the barrings on the flanks and under parts much heavier than in the typical bird. This variety is *Bonasa umbellus sabinii* in the scientists' list. The Rocky Mountains have another variety, whose range is from Alaska, in the Yukon valley, southward to Colorado; a race of paler coloring and somewhat smaller size. The body color is made up of grayish tones and has very little of chestnut or reddish shades in the markings. From its color scheme this is often called the Gray Ruffed Grouse, *Bonasa umbellus umbelloides*. In the intermediate districts they grade imperceptibly one into the other. In the grouse of Maine we find a wide variation in color.

Some specimens might almost pass for the most distant varieties—red as Sabine's or as light as those of the Rockies, and that, too, from the same nest. There is still more "feather-splitting"—a division of the eastern race into the variety, *Bonasa umbellus togata*, so named from the size of the ruffs, said to be more developed in this variety than in the typical bird. The body color is darker and the barrings on the flanks are heavier and blacker, also more and heavier dark markings on the buff of the throat than in the ordinary bird. This variety also averages of larger size. The birds included in this classification are those of the northern and northeastern portions of the continent, westward to Manitoba. This is held to include the ruffed grouse of all our northern tier of States, westward as far as the Dakotas, and east and north through Canada. Thus our bird of Maine is a *togata*, but why need we care? By any other name he'd be as "foxy." Our Ruffed Grouse cannot be improved upon whatever he is called. Long may he flourish in our woods and hills!

The typical bird is supposed to dwell

throughout the remaining eastern and south-eastern portions of the United States.

The Ruffed Grouse is about eighteen inches long, erect, sprightly and graceful in carriage and bearing, a pretty walker and a wonderfully speedy runner, as anyone may prove to his entire satisfaction when he tries to capture a wounded bird, for when to the aid of its nimble feet it brings its half-spread wings, and with its toes barely touching the ground, half flies, half runs, only a good dog can overtake him.

In color he is a beautiful chestnut brown, marked and penciled with gray and brownish black spots on neck, back, and breast—the colors to blend with the shade of dead grass and brown pine needles with the sunlight sifting down through the trees. There is a slight crest on his head, and on each side of the neck are the beautiful, glossy feather tufts from which the species takes its name. The “ruffles” are lustrous purplish-black or bronze-brown—are smaller, it is said sometimes even lacking, in the females, and in no case of these that I have noticed have the dark feathers which make them

met across the forebreast as in the males. It has been stated that the bronze ruff is the distinguishing mark of the hen, but my own observation would indicate that, in general, the red bird often has a bronze ruff, and the black or purplish ruff is found on the gray bird without regard to sex. It may be that the bird of three or four years of age is more likely to sport the dark ruffles, but I am not prepared to state it for a fact. The beautiful fan-like tail is finely barred with black on a gray or red-brown ground, with a broad subterminal band of black, each feather ending with an ashy gray tip. In the female the subterminal bar across the tail feathers is usually broken, or at least much less noticeable on the central pair, and while not an invariable rule, it is, with the interruption of the ruffle feathers across the breast, a pretty safe mark for distinguishing the sexes. How far these distinctions may hold in the typical bird I know not. My experience has been almost entirely with the northern bird, *togata*, which is surely not the least worthy member of the family.

The male bird will average three or four ounces heavier than the female, running from

twenty-two to twenty-seven ounces. The heaviest bird of my own killing pulled the scales down to twenty-eight ounces, and this with an empty crop. The largest "partridge" that I ever saw weighed made a record of twenty-nine and one-half ounces. I am well aware that "competent judges" will "estimate" and furnish much more imposing figures, but I have noticed that these do not always tally with the scales.

During our driving New England snow-storms partridges will sometimes take refuge from the cutting blasts or for a night's shelter from the cold by plunging from the wing into the heaped-up drifts, thence to emerge when the storm has passed. It is said that they are at times closed in by an icy sleet following upon the snow and making a crust through which they cannot break. In such cases the unfortunate prisoners are apt to furnish an unexpected feast to some prowling fox whose famine-sharpened nose has traced them out. This may cause more destruction than is realized, but the danger is probably more theoretical than actual. There is usually small need to burrow at all in this latitude; furthermore, do you not think

that a heavy fall of snow in worse than zero weather (and nothing less would drive them to cover) with a rise of temperature sufficient to thaw or rain, and then a "freeze," each following the other and all taking place within the probable space of ten hours' time is a very great rarity even in a region as noted for weather eccentricities as is our dear New England? From the many snug wigwams made by the pendant branches of evergreens or sturdy roofs of "junipers," over-arched with snow, sheltering some storm-harassed partridge and furnishing plenty of food of foxberry leaves and berries, which I see in my own range of woods I have small belief in any serious reduction in our grouse population from this cause. In such shelters as these it is almost impossible to be so closed in that Mr. Grouse cannot get out when he desires. Many times when an ice-storm has been blamed for the apparent scarcity of grouse they have only departed on one of their regular "spring movings." Surely, when the buds commence to swell and the "green things growing" start up through the remaining ice-blanket we do not expect the bird to stay

in the thick growth and tall timber which made his winter home.

The burrowing habit is common to nearly all northern grouse. With this species it is more common in the extreme northern part of its range, where the snowfall is heavier and the snow itself less likely to "crust."

Rocky, birch-clad hillsides, deep ravines with tangles of brush and slender streams winding through their depths,—the thickest, most impenetrable cover that the woods afford—these are their favorite spots. A finer game bird, a brainier dweller in the wilds it is hard to find. All the more so when he has made the acquaintance of Nimrod and his hammerless gun. This for the bird near civilization, for if we believe all we hear of him in the "big woods" we shall have small respect for his judgment. Still, we must make due allowance in "a hunter's yarn," which, as we know, gives us "the truth, the whole truth,"—and as much more as we can swallow.

About April they begin to mate and the woods resound with the "long roll" of the male, "drumming" his serenade to the lady of his

choice. Perhaps we should say "ladies," for he usually has several wives and would take more if he could get them. He struts up and down on some old fallen tree, with his tail erect and widespread to its fullest extent, then suddenly dropping it and pressing it closely to the log, his short, powerful and deeply concaved wings beat a continuous roll, slowly at first, but rapidly increasing in speed and volume, then dying away again. This noise sounds like the rumble of far-off thunder and may be heard a long distance on a still day. The manner in which this "drumming" is produced was a question for a long time undecided, many different theories being advanced. The old idea was that he struck his wings upon a hollow log, but if this were the case how does he drum upon stones, sound logs, or the top rail of a fence? The solution most generally accepted is that this strange music is caused by the vibration of the stiff quill feathers in their rapid motion through the air, these never touching the body. The sound is very difficult to locate and from its peculiarly muffled tone accurate judgment of the performer's distance is almost impossible. The bird will use the same



RUFFED GROUSE.

spot for his drumming for a long time, coming day after day to his chosen station. One old "drumming log" is still in use near where I am writing, although the screen of spruces formerly protecting it has been cut down these three years and it is now fifty yards to the nearest cover. Mr. Grouse, if he survives the perils of the fall months, will return next season; if not, another will "take the stump" in the good cause and continue the business at the old stand.

The courtship over and happily ended, the hen builds her nest in some secluded and safely hidden nook and begins housekeeping. Her home is a very modest affair, quite unpretentious. On the ground, in the shelter of a fallen tree or in the shadow of a juniper bush a small depression is rounded out and lined with leaves, grass and dry pine needles—very little of the artistic but all for convenience and utility—simplicity itself. It contains from seven to sixteen eggs, creamy white, rather pointed at one end, and as may be guessed, when the youngsters arrive the mother bird has no lack of employment in caring for them, for at this season she leaves the male entirely and sets up housekeeping alone lest he destroy the nest and

eggs. When the chicks are half grown the family is again united, the male bird usually joining during the latter part of August.

The mother bird thus left to her own devices, displays great bravery in defense of her young, and will often fly at an intruder in the same fashion as a hen defending her brood. I remember once when accompanied on a stroll through the woods by a bull terrier dog, that we came suddenly into a little opening among the trees and well-nigh stepped into a brood of little "cheepers." The dog being in advance, mother partridge made a furious dash at him, and when the astonished animal refused to be frightened, she made still another desperate charge right into his face, when he at once struck her down and stood with this new species of hen under his feet, making as though he would finish her at once, but, being an obedient fellow, and perhaps with the remembrance of former whippings for chicken killing, he reluctantly let her go with no more damage than a few ruffled feathers. She lost no time in getting away when set free, for her point was won and not a chick was in sight.

Failing by force to repel an invasion on her

domain, she next tries cunning, and will drag herself along the ground for some distance just in front of her eager pursuer, and only when he thinks to seize the crippled and wing-broken bird does she dash from the ground and whiz away to the safety of the nearest thick growth. Meanwhile the young birds have crept into the brush, slipped under dead leaves, flattened themselves upon the ground, it may be at your very feet, and lie there motionless, disappearing as if by magic from a spot which one second before was fairly alive with chirping and peeping little yellowish-brown fluffy balls running in every direction. Once safely hidden they remain quiet and still until the danger is past and they hear again the low, mellow call of the mother bird as she gathers her brood to run and feed as though nothing had happened. Few are the farmers' boys who have not "'Most caught a pa'tridge, only'"—and in that last word is the whole matter in a nut-shell—they didn't, in just this way. Yet it is no matter for wonderment that Master Barefoot is deceived by these tricks, for a more perfect piece of acting is not to be seen.

Do you know a burnt patch in the woods, or a

clearing that the lumberman has made, now growing up with blackberries, raspberries, and all the underbrush which so quickly covers up these unsightly scars on mother Nature's face? Then some bright September morning while the dew still glitters on blade and leaf, take your dog and gun and beat it up. A little amphitheatre overgrown with berry bushes and low brush, walled in on every side by a sturdy growth of pines, spruces or hemlock, dark green and solid in their masses. One lone dead stub towers above the smaller and younger growth of the clearing. Gray and desolate it stands, bristling with the ragged and broken remains of its former lusty youth, and at its feet the bare ledge stone shows through its garment of moss, pine needles and scanty grass. Here is a low stump which a dozen changing seasons have almost levelled with the ground, and on its sides and at its base the marks of the partridges' scratching feet as they search for the grubs and worms, tenants at will of its inner chambers. On one side a shallow, round hole scooped out of the dry earth shows where the bird has made his dust bath and lain basking in the sun during the warm afternoons. And on

this knoll—Whir-r-r! Quick, now! Too late! He dives down a ravine at the right and when he comes again into view he is too far away for shot to harm him. Where was the dog? I don't hear his bell. Ah! There he is—creeping cautiously up to a clump of blackberry bushes. Carefully, now, for every quick-witted, sharp-sighted grouse in the clearing is on the alert since that first bird tore down the gully at full speed. See that puppy! Isn't that a picture for you? He performs like a veteran! He stiffens, and trembling with suppressed joy and eagerness, turns a cautious glance behind to see if you know the critical state of things, as slowly turns back again and stands a marble statue against the background of green waving brakes and moss-grown stumps. A second later you hear the resentful scolding—"Quit-quit! Quit-quit!"—a rapid patter of nimble feet on the dry leaves—Whir-r-r-r! Away he goes—a mere brown streak at lightning speed!

Perchance you have stopped their headlong rush many times before; in that case you may stop this one—if you have luck. It may be that this is your first experience, when it is

probable that you will stand open-mouthed and stare with all the eyes in your head, until, diving into the green depths a hundred yards away, goes another lost opportunity. You may even do as did another of my acquaintances near the beginning of his sylvan career. He had stood "at gaze" at every rising grouse and was empty-handed in a cover where by moderate shooting skill he might have made a fair bag, for the season was just beginning and the young birds were lying well. He declared he would do better at the next point (as they all do) and when the next bird flushed he threw his gun to his shoulder and shouted, "Bang!" with all his lungs. He had the right idea, however, and can now hold his own with the most of them.

That roaring, rushing flight is likely to confuse any but a veteran. Yet no owl can fly more noiselessly than he when he is so minded. I know many a good duck- and snipe-shot that will invariably forget to shoot when Mr. Grouse dashes out—Steady, now! Another point! Whir-r-r! Away he goes and as you pull trigger he swerves suddenly from his course and you have missed him. Yes, your muttered re-

mark was apt and appropriate, but better luck next time. The dog moves up and points just where the last bird burst out from among the junipers, and you laugh and say, "One on you, old boy!" and come carelessly up to stand by his side as you reload. At the snap of your gun as you close it another bird dashes out almost from beneath your feet. What a chance! Straightaway, and as steady as a standing mark! The shot of a lifetime! Bang! And as the gentle breeze carries off the thin blue haze of the nitro you catch a glimpse of his falling body. Thud! The strong wings beat a rapid tattoo upon the dead leaves, scattering the brown pine needles, then are still. The feathers drift down wind in a cloud, and reloading as you go, you hasten to gather him in. For a short time the fun is fast and furious; the covey puts for the thick of the woods singly and in pairs, leaving toll, let us hope, and giving you rare sport. When all have left the open you go down into the gully where the noon-day sun scarcely penetrates. At the bottom a slender stream complains and gurgles as it tumbles over mossy stones and twists under fallen tree trunks. There he goes! Your gun

is at your shoulder but you see him only dimly and mark his course mostly by the shaking twigs and so decide to wait until he tops you fallen tree and comes more clearly into view. Thus you learn that you must take this fellow when you can, for he knows better than to rise into your open view like that. Such a move might do for a woodcock, but this master of sylvan strategy knows a trick worth two of that. He dives below the log, runs into the rankly growing brakes and fifty yards beyond again takes wing to fly in safety into a thick hemlock on the side hill. You lower your gun and exclaim, "Well, I'll be hanged!" (or words to that effect), and a red squirrel, sole witness of your defeat, goes scurrying up the spruce tree at your side and jeers and chuckles and "sassess" you with all the wild-wood impudence at his command. No opportunity should be allowed to pass unimproved if you are to make a good score. Your percentage of kills to cartridges used is bound to be small, so don't try to "fatten your average" by picking shots. Under ordinary conditions one cannot make a bag of Ruffed Grouse and be sparing of his ammunition. It is often necessary to shoot

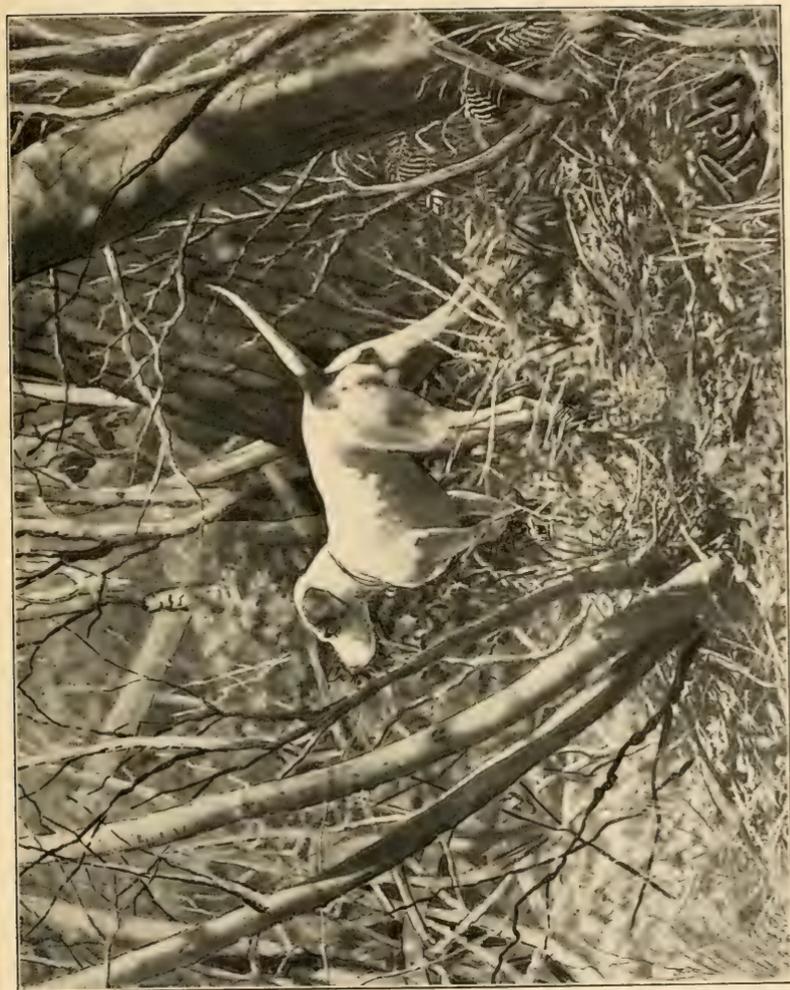
through the brushy screen at the sound of their wings—pull trigger at the glimmer of a feather, or through the leaves where the bird may be—taking every chance, however slight, to bring this game to bag. I think all “brush gunners” will agree that this is not the easiest bird to hit when once on the wing—a mere flash of quick-moving, roaring wings, and a glimmer of sunlight on his russet-brown back—gone! Perhaps the cunning rascal marked where you stood and ran swiftly to get a thick hemlock between himself and your gun, then a leap into the air, an arrowy flight, and when you have hurried to one side to get a sight at him he is two gunshots away.

“Don’t they ever give you a sitting shot?” O, yes! When you are tangled up on the points of a wire fence, with one barb stuck into the middle of your back just where it cannot be reached with either hand, and another inducement to profanity has a grip on the leg of your trousers,—at such times a grouse will often “flap” lazily from the ground into a tree right over your back and perch where you can see him only by twisting your neck almost off, but shoot? O, no! There he will sit and criticise

the language in which you voice your benevolent wishes for the future welfare of the inventor of that style of fence (may they be fulfilled!) until he sees signs of the barbs letting go their hold, when he is away like a bullet, his wings a mere haze as they roar through the branches.

Occasionally the farmer's cur is "trained" for a "pa'tridge dawg;" that is to say, his natural propensities to bark and "yap" are turned to some account. He runs in upon the young flocks, which instantly take to the trees; the dog then makes such a noise with his continual yelping and running about that the birds see and hear nothing but this miserable intruder, and so allow the mighty hunter to creep unobserved within easy distance, maybe to take a resting shot at their motionless bodies. Often honest cocker spaniels are degraded by this low practice. In the mind of the sportsman this stands almost as high as driving a doe to water and paddling a canoe alongside to blow her brains out with a charge of buckshot.

There is a widespread notion that when a flock is thus "treed" a pot-shooter may secure several birds before they will take alarm and fly if he will take care to shoot the lowest one



“Trembling with suppressed joy and eagerness, he turns a cautious glance behind to see if you know the critical state of things, as slowly turns back again and stands a marble statue against the background of green waving brakes and moss-grown stumps.”

first and thus avoid alarming the flock by the dead birds' tumbling down among them. I do not say this cannot be done; I only say that I have never seen it done—hope I never shall—and while this may take place in the northern wilderness, the shooter who counts on getting more than one chance at a roosting flock in the covers near civilization is laying up material for his own disappointment. The Ruffed Grouse in my locality, at least, have passed this stage in their intellectual development these many years, and in the east generally, the sportsman fairly earns all of these birds which his skill and good fortune combine to bring into his hands.

Though any lawful season is a good time to hunt this game, most sportsmen prefer the sport when October's frosts and winds have swept some of the brown leaves from the branches in the covers, when with the glorious autumn weather, the brilliant colors of the flaming maples, the softer tones of oak and birch, chestnut and beech trees, the life-giving October air, together with a fair prospect of capturing this gallant bird, there could scarcely be a better season to put in a happy day in the

woods. Add the fact that the bird itself, now full-fledged and confident in the powers of its wings, lies closer at this latter part of the season, thus giving a much better chance, and one may easily see why the sportsman will prefer this month. Many are the fine opportunities on the rocky hillsides where the leafless birches show their white shafts against the dull gray ledges; where the dead leaves, frost-killed and damp on the mossy rocks, give back no sound to the stealthy foot-fall of the gunner. Among the bare brown stems and boughs the grouse goes away like a shooting star and is seen much more clearly than in September's profusion of green leaves. It is well for two men to work together in such a place, as the Grouse will commonly fly up over the ledge when flushed, and there will be more chance of capturing the birds if one gun be posted on the lower level and its companion be on the ridge. If the bird is not shot at the chances are that it will alight just over the brow of the hill and lie close next time. If, however, the gunner be above him when he darts away he must trust to luck and his own eyes to tell him the direction which his intended victim takes, as commonly

the bird will fly straight down to the bottom and when out of sight turn sharply to one side for another hundred yards.

If I may have but one month for partridge shooting give me November. Lowery skies, the threat of a storm in the chill air, when the birds are putting in provisions for the days of hunger which a snowstorm makes; or the first bright day after the storm has passed and the birds have come out on the sunny spots to bask in the warmth they now appreciate. I shall ever hold one old hill in warm remembrance for many days of glorious sport along its rocky spurs. A high, gray ledge, pine- and hemlock-covered on the crown and base, its slopes clad with sumac, blackberry bushes, wild rose bushes, scattered scrub pines and small birches, the naked rocks half buried in the junipers, and a few lordly chestnut trees towering over all. My last day of the season as a sample of many: two days of rain and sleet, cold and miserable, and on the third day the storm breaking and the afternoon sun flooding the hillsides. From a sense of duty I had hunted the alder coverts and the thick growths which had sheltered them on other days, where a few difficult shots had

made no returns. But we are on the old ledge in more open cover at last. Scarcely have we cleared the denser growth when the dog comes to a halt. A warning glance at his master and he commences trailing. Through the thickets which straggle away from the main body of the woods,—advanced guards creeping out among the rocks,—down into the junipers below, on and on, stopping here and there to point as the bird halts, ever careful lest he start the game too soon, waiting until his master gains a place where he may shoot if the bird rises. Aha! Frozen for keeps! Just the tip of his white stern showing past the green wall of the junipers. Whir-r-r-r-r! Bang! Bang! “Da—er—Thunderation!” Away scales Mr. Grouse, dropping down the hillside like an arrow slanting earthward after a flight. Near the foot he turns and careers out over the tops of the trees to disappear among them three hundred yards away. “Well, little dog, a good pointer and a good gun are clean wasted on such a master. But how should I know he would throw a summersault like that? Both loads went yards over his back and I defy anyone to have pointed

a gun-muzzle below him. Well, better luck next time, let us hope."

Fifty yards farther on, the same careful drawing to a final "stagey" pose. Whir-r-r-r! and a big cock partridge dashes up into the shelter of the birches above us. Bang! "Fetch him, good boy! That's better. That's"—In the act of holding the bird to his master's hand the dog has wheeled and pointed, carefully putting down his trophy and moving in a step or two. The monologue flags, then ceases. Right at the dog's side I wait, then give a low chirrup for him to go on. This one I must have and things look most promising. Whir-r-r-r! Bang! "*What!*" Bang! and at the second shot the bird tumbles in a cloud of feathers, a long forty yards away, close to the thick woods on the hilltop. Together, dog and I, we scramble through the briars to the summit, the pointer just a bit in front. He pulls up short and points. "All right, old man. Yes, it was just here he fell. Fetch! No? Well, I *can* pick him up myself," and so I do—er—not! With a thunderous roar of hurrying wings the bird flushes under foot, rocketing into the tree

tops, followed by two hasty shots, one from the hip, the other with the gun-butt under my armpit, and taken completely unaware, both charges tear great rents through the yellow-leaved chestnuts and screening pines, but for the bird only causing more haste where already speed was not lacking. My dog, with a comical wriggle of his tail to show his appreciation of the joke on his master, takes a few steps to the left and brings to my astonished gaze the bird we had seen fall. When shall I learn to trust entirely to that keen nose and fine wit which is by far the most important member of our partnership?

With the last trophy safely stowed, we move on to further conquests. Over a stone wall out into a low spot between two spurs of the hill. An old apple tree and a few thick pines make the setting of a picture which has for a centre of interest the motionless figure of the white pointer dog. Forty yards away two grouse rise and tear away up hill. Two hasty shots sent after them just as they turn the crest of the ridge never ruffle a feather, but the reports start four more close at hand, which offer the easiest of shots to my empty weapon. I rush

a couple of cartridges into the chambers and aim at the hindmost just as the woods are closing in upon it, but return to sanity, just then catching sight of the fact that all this time old Level-head hasn't moved a muscle. In an instant more I stand beside him, pull my hat down a bit tighter, draw a couple of long breaths, test the safety catch of the gun to be sure it is in the right place, and by these processes of mental philosophy manage to steady my nerves a trifle. A low cluck to the dog and he moves in, his tail wagging ever so slightly. Again he stops, and at my approach up jump two big fantails, not ten feet away, bursting out from the junipers with the roar of a tornado. A quick snapshot (a clear case of suicide on the bird's part, for I know not where I held) accounts for one, and holding well over the other, who is climbing skyward to clear the trees, he, too, comes down! Can I believe it? A double! This is not one of the shots I forget when recounting this day's doings!

Up on the hill-top where we go in pursuit we find the other members of the covey. But things are different here. Cover is plenty and though the birds lie close enough, the ever-

greens behind which they invariably flush make impervious screens for certain noisily-departing forms going comet-like among the trees. I note that I do not kill each bird that rises; that however I plan to get a shot the bird makes other arrangements. I remember the newspaper hero who has killed a thousand "partridges" in a day on his English estate and wonder what his average would be here. Still, in no niggardly spirit, I continue driving good ammunition into the tree trunks and shooting unprofitable holes into the "circumambient ether;" but this is a part of the fun—this, and the prying of rose thorns out of my shins, to be done later on. So we press on, ever keeping up a brisk action with the rear guard, hoping to drive them through this cover into another rock-, birch-, and scrub-pine paradise beyond the thick. Here we have a better chance and again we find our opportunity. The dog is beating up hill and down across my path. He whirls and stands braced as though he feared someone might push him against the bird. I rush to a flat, table-like rock which commands a good view of the surroundings and stand facing the dog, awaiting developments. Scarcely am I

placed when almost from under foot out dashes a big red beauty and curls around my head in a nerve-tangling curve. I try to turn with him and just clear his steering gear with the first cartridge, to steady down and make a good clean kill with the second as he is entering the tall timber. Mr. Dog retrieves him proudly, glad to see his master score an average of one kill to five cartridges.

It is grand sport to stop their swift career (if you can, for not every bungler can do this trick) and it makes the pulses leap to see them come hurtling to the ground. The birds are now no weaklings—no half-fledged youngsters still running with the mother, but plump and well-grown beauties and the best game which the New England gunner, or for that matter any other student of the smoothbore, ever brings to bag.

For success all the requisites of the true sportsman and the highest quality of work by the dog are needed. The bird may lead your dog a long chase through the timber, over rocks, through briars and brush, keeping him “roading” and “pointing” until both have distanced the gun, and at such times he makes a

sore trial of your treasure's temper and staunchness. Next time perhaps he may flush from under your very feet. In most cases his flight is not longer than from three to four hundred yards, so that, knowing your ground, you may get another chance if you fail to stop him the first time. It takes a good load of shot and that well placed, too, if this bold rover is to be your prize. He will fly till his last breath,—yes, and set his wings and scale even after that; or if only wing-broken will run and skulk and crawl into brush heaps until pursuit is useless. Many a grouse carries his death with him as he flies the hunter, when, if only followed, he would be found perhaps a hundred yards away, still and lifeless. They are the “grittiest” birds that dwell in our land.

Perhaps some brother sportsman has seen a grouse when wounded and seemingly crazed, fly straight upward, struggling to the last gasp, then all at once collapse and come tumbling to the earth like a stone. Usually such birds are found to be shot through the eyes and brain. I lost one once in this manner, for he fell into the top of a clump of unclimbable “old original



RUFFED GROUSE SHOOTING.

piners" in such a fashion that there was no dislodging him.

One word as to the Ruffed Grouse's habit before the dog: I believe the dog is the most important element in the grouse shooter's good- or ill-fortune. I know that many sportsmen berate our hero because "he won't lay to a dog." There are cases where we cannot blame the bird. Neither you nor I would stay in the neighborhood of a dog which tears through the brush like an express train, or whose master is continually yelling commands and compliments at his riotous brute. It is enough to shatter stronger nerves than those of Mr. Grouse. Alas, the language we have heard! And that, too, directed at dogs that a few short hours before were vaunted by their masters as simply matchless in their glorious perfections of nose, brain and "bird-sense."

For success in grouse-shooting a cautious, close-working dog is the most important thing in the outfit; one that loves to pit his own brains and skill against the craft of the bird; whose eye is ever alert to the slightest sign from his master, realizing that the gun also has a part to

play in the day's sport; who only wants a low whistle or a wave of the hand for guidance, needing no spoken command. I lay great stress upon silence, believing that most wild creatures are less afraid of the report of a gun than of the human voice. The successful grouse dog is the most finished product of the dog trainer's art, making glad the heart of his master. If your four-footed friend excels in his work on ruffed grouse be satisfied that he is a good performer on any game bird, and will never cause his master to blush for him in any company. "A marvel," you say? My dear sir, the only marvel is that we will not take the pains to bring our dogs to this pitch of perfection.

The good grouse dog is rare. Not every puppy can be trained to the requirements. It almost seems that the good one on ruffed grouse, like a poet, "is born, not made." Certainly poets are the heavier and less valuable crop. Training will do much for the dog, but all too often this branch of his education is confined to his first experience, when with all a puppy's life pulsing through his veins, his cup of joy bubbling over, he comes suddenly upon a covey of ruffed grouse. That divine scent

wells up into his nostrils, and, wild with the joy of that soul-stirring moment, amazed at their roaring wings, is it wonderful that he does not perform like a veteran? My sportsman friend, did *you yourself* score on your first hurtling grouse? Have you always controlled your startled nerves, making the most of every favorable opportunity? I trow not! Then shall we not have a little patience and with more experience reverse our first unfavorable decision? Maybe a good grouse dog is lost there—who knows? But the puppy gets no chance to atone for his mistake and commonly is never again allowed to look at ruffed grouse if his master can prevent, so that this is all the schooling he gets in the ways of hunting this bird. His master, instead of taking the pains needful to teach his companion, becomes at once a woodcock enthusiast and condemns the grouse and all who admire him, finishing the puppy's education on "timberdoodles" alone. Yet it is only a matter of patience and tact, and more of the same patience and tact, but great is the reward thereof!

Having in mind the nature of ruffed grouse haunts, the difficulty of two legs keeping pace

with four, and the ease with which a hunter may go wrong if his dog, for the moment out of sight in the thick growth, makes a sudden change of direction in the trailing, I believe that the dog that is never more than forty yards from the gun,—better yet if he keeps closer and no potterer even if he does, my dear unbeliever—that stops instantly at the first whiff of scent that touches his nostrils; trails slowly and carefully, knowing just how far he may crowd his game and never overstepping that limit,—will get for his master more and better shots than the more dashing, field-trial, wider ranging dog of better nose and even greater bird-finding ability. We all know, however, that this latter style is the more fashionable—and the more common: Also that their owners are very enthusiastic over wood-cocking—(and it *is* a noble sport; far be it from me to disparage it)—and are apt to speak disrespectfully of the grouse because it has so little of the accommodating disposition of their favorite, who generally does his best to help the sportsman score a kill, even patiently waiting until the gunner can hunt up his dog when he has at last ceased whistling and shouting and has decided that his

prize beauty is "somewhere on a point, (that is, if he hasn't run away clear out of the county.')" The parenthesis, of course, under his breath along with some other comments which do not sound as well. Now Mr. Grouse does not believe in such tactics: as a result he will be planning his annual increase to the game supply long after the moths have finished that dining room ornament which was "The last woodcock killed in this section, Sir! And it's too bad they were all killed off, isn't it?"

The Ruffed Grouse is a great rover. When the young become strong and able to fly well the flocks roam through the woods from one feeding ground to another—here to-day, to-morrow gone. In the fall they haunt the hard wood growths along the lake shores, and the rocky, oak-grown margins of the sea, moving from place to place as they tire of the spot or food begins to fail, crossing to near-by islands, for however much they may dislike to fly across bodies of water in the "Big Woods," they do not hesitate to make long flights over the small arms of the sea, and in more cultivated districts, flying on occasion a mile at a stretch. As the season advances they come

nearer to the farms and orchards, and old apple trees in the woods or a deserted orchard hidden away from travelled roads and near the forests are favorite spots and much frequented by them, as are likewise in their proper season the gullies where the ripe, red "thorn plums" are to be had for the picking. In berry and fruit time their food is almost entirely of this sort. In fact, from his readiness to eat almost any of Mother Nature's cookery the Ruffed Grouse is in prime condition the year around.

There is scarcely a game bird so satisfactory from all points of view as is our hero: a brave, strong-flying bird, a brainy and worthy antagonist from the sportsman's standpoint, and in the estimation of the epicure a great delicacy.

Although numerous attempts have been made to domesticate the Ruffed Grouse nearly all such have failed. The wild instincts of the free forest rover have usually triumphed over the easy but dull round of barnyard life even in chicks raised and cared for by the domestic hen, as they have almost invariably departed for the woods as soon as they were able to shift for themselves, or if unable to escape have

pined away and died for the lack of their forest freedom.

Would that someone might solve this problem of grouse-breeding if only to aid in restocking our covers. But the prospect brightens each year with the education of our people and the consequent growing sentiment in favor of rigid game protection. Give the Ruffed Grouse half a chance and he will take care of the matter of future game supply. There is nothing in our wilds so thoroughly able to take care of itself as Mr. Bonasa Umbellus. Let us be duly thankful therefor.

THE WILLOW GROUSE. PTARMIGAN.

(*Lagopus lagopus.*)

Very rare in New England. When found it is only in the northernmost sections and in the coldest weather, when a few straggle away from the great flocks which come down out of the north at the approach of winter, for it is partially migratory and changes quarters southward at this season. In earlier times these birds seem to have been not uncommon in northern and eastern Maine in the winter

months, but of late years very rarely indeed is one taken.

The Willow Grouse inhabits a wide range of country, including the northern parts of Europe and Asia and the whole of North America from the northern boundary of the United States far into the Arctic regions, in summer spreading out over the almost treeless "barren lands" which extend along the shores of the Arctic ocean, and in winter retreating to the shelter of the thick woods which stretch away northwesterly mile after mile across Canada from the Atlantic to the Pacific.

It is a dweller on the rocky heaths and swampy grounds, and not so fond of the woods as are most northern grouse. As a rule, the Ptarmigan takes to the forests only when obliged to do so for safety or when driven by stress of weather, coming out into the openings as soon as ever the sun gets a bit of ground uncovered in the spring.

During the summer months they live upon berries and insects. Through the long Arctic winter they subsist on the buds of the brush and dwarfed willows which are scattered through the frozen bogs.

They are somewhat nocturnal in their habits,



WILLOW GROUSE.

mostly preferring to feed about sundown or during the night.

In their breeding habits they resemble the rest of the family, building their nests upon the ground, generally at the base of some great rock or in a clump of stunted birches or Arctic willows or at the edge of an opening in the woods. They lay from eight to ten eggs, of a buff color, heavily blotched with dark red-brown spots.

Unlike the ruffed grouse Mr. Ptarmigan is a good husband and assists in the upbringing of his offspring,—rather an unusual thing among the grouse family, where as a rule the male is a polygamous old rascal, perhaps because he is unable to choose between the fair ones and so plays no favorites. Therefore when disturbed with their young instead of resorting to the craft and strategems of the “partridge” in similar stress, the male bird will dash about the head of an intruder, in his desperate attack coming near enough to be killed with a stick if one be mean enough to do such a thing. All this time the young are running away and hiding in obedience to the mother bird’s anxious warnings.

Fortunately for them their enemies are

nearly all in fur and feathers, the Arctic fox and snowy owl, though the Indian takes a generous share, generally during the fall migrations, when, as they are easily trapped, the Ptarmigan becomes an important item in his diet. Since they dwell in a country full of larger game and because of their distance from sportsmen of shot-gun propensities, they are not much hunted, but those sportsmen who have made shooting trips to Newfoundland have enjoyed rare sport with them and are enthusiastic in their praise. They claim that the Ptarmigan is equal to any of the grouse family in game qualities and speak highly of its habits before the dog. Its flesh, also, ranks well, that of the young bird being especially delicate.

When they rise from the ground their wings do not make such a clatter as do those of the ruffed grouse when he starts,—probably because of the soft and fluffy quality of the feathers,—but their flight is easy, strong and well sustained.

Their plumage during the breeding season and summer months is a mixture of white and reddish brown, finely barred with black. No two specimens will be found to be marked ex-

actly alike. The dress of each bird is continually changing,—(they moult three times a year)—varying the proportion of each colored area and seeming to put on the new coat a feather at a time before the last suit is fairly donned. In winter they are snow white except the tail feathers, which are black, white tipped, and the wing quill shafts, also black. There is a red patch above the eye as in the spruce grouse. The legs and feet are covered, even down to the ends of the toes, with fine, hair-like feathers which make them a good pair of snow shoes. It needs sharp eyes to see them where they crouch in the snow when clad in their winter garb, lying motionless in the drifts, or when in summer their coat of reddish brown matches so well the dead grass and bare rocks of their chosen wilderness.

If pursued they may dash off to a safe distance, then coming to earth may run a little way, then suddenly squat upon the ground, remaining motionless until the danger has passed or they are forced to fly to prevent capture. If the snow be on the ground they may dash headlong into the loose drifts, making their way well into them, to remain hidden; or mayhap

passing some distance through them to creep carefully out and fly noiselessly away when safe to do so. They often dive into the snow for shelter or to pass the night in winter, dashing into it from the air and working their way far under the drifts for safety's sake. They are said to be very careful not to touch their feet to the snow in entering it in this little piece of strategy, in order not to leave a scent for any prowling fox to trace them out.

In size the Willow Grouse is a trifle smaller than the spruce grouse—(length about fourteen inches)—but its heavily feathered body looks larger than it really is.

Out of the ten different races of Ptarmigans, many so nearly alike that even a scientist cannot always name them to a certainty without the knowledge of the locality in which a specimen was taken, this is the only visitor to New England, and this one but rarely.

The bird at the left in the plate is in the winter dress; the bird at the right is in the summer plumage.

THE "QUAIL." BOB WHITE.
PARTRIDGE.

(Colinus virginianus.)

Because of the wide extent of country over which he dwells, and because of his large acquaintance among the shooting fraternity the "Quail" may make a strong claim for the honor of being the prime game bird of America—the bird known and with good reason appreciated by the largest number of our sportsmen. There are many good reasons for this popularity, chief of which are his thoroughly game habits, close lying before the dog, beautifully direct flight, and the comparatively open nature of the country in which he is usually found. All these combine to make quail-shooting magnificent sport.

"Bob White," as he gives us his name in his merrier moods, is found on the continent of North America from the Atlantic ocean to the Rocky mountains, from Canada to the Gulf, has crossed the border into the northern states of the Mexican Republic, and is a citizen of the island of Cuba. The bird has also been intro-

duced into several localities west of the Rockies and is said to be thriving and flourishing in these new homes.

Unhappily for the sportsmen of Maine, New Hampshire and Vermont, in New England the Quail is resident only in the southern part, and is at any season but a rare straggler northward of Massachusetts. It is likely that our winter weather is too severe for him, or it may be that we lack grains and seeds for him to feed upon when the snows have come. At all events, though the sportsmen's clubs of these sections have often liberated Quails in the hope that they might thus make a valuable addition to our list of game birds, they have rarely stayed with us longer than the first season, raising our hopes with their cheerful whistling through one brief summer and then disappearing to return no more. Whether they have moved southward at the approach of cold weather (by no means an unusual occurrence in the north, I think) or have failed to survive the winter, seems to be an open question. It is probable that the former is often the true reason for their disappearance, for with the small chance of a grain or seed diet when New England's winter

has fairly closed in upon us, their prospect for food must be slight indeed, and, knowing this, Bob White takes no chances. In most cases the birds for stocking our covers have been obtained from southern localities, which fact would seem to argue a less fitness to endure the rigors of our winters. If the experiment were to be tried with birds procured from the northern part of the habitat of the Quail perhaps the result would be more satisfactory; surely there would be a larger percentage to survive the winter among those that remained with us. It is probable that such birds could be successfully transplanted here, needing only a chance to forage in some buckwheat field during the two coldest months. (Just notice how rarely a Quail is found frozen to death with a full crop.) At all other seasons they would surely be bountifully supplied with everything necessary to Quail comfort. "Bob White" has been successfully transplanted into Sweden, and it certainly seems as though he ought to do as well in northern New England. But where we have failed Dame Nature is doing better, and little by little these birds are becoming accustomed to our climate and conditions and are

gradually spreading northward as well as westward. We northerners may well be pleased to gain such gallant little citizens. In these new surroundings they are said to be taking more and more to grouse habits, both in strategy and in mode of life, evincing a disposition to hide in trees when much harried, and for the night—traits which are not common further south.

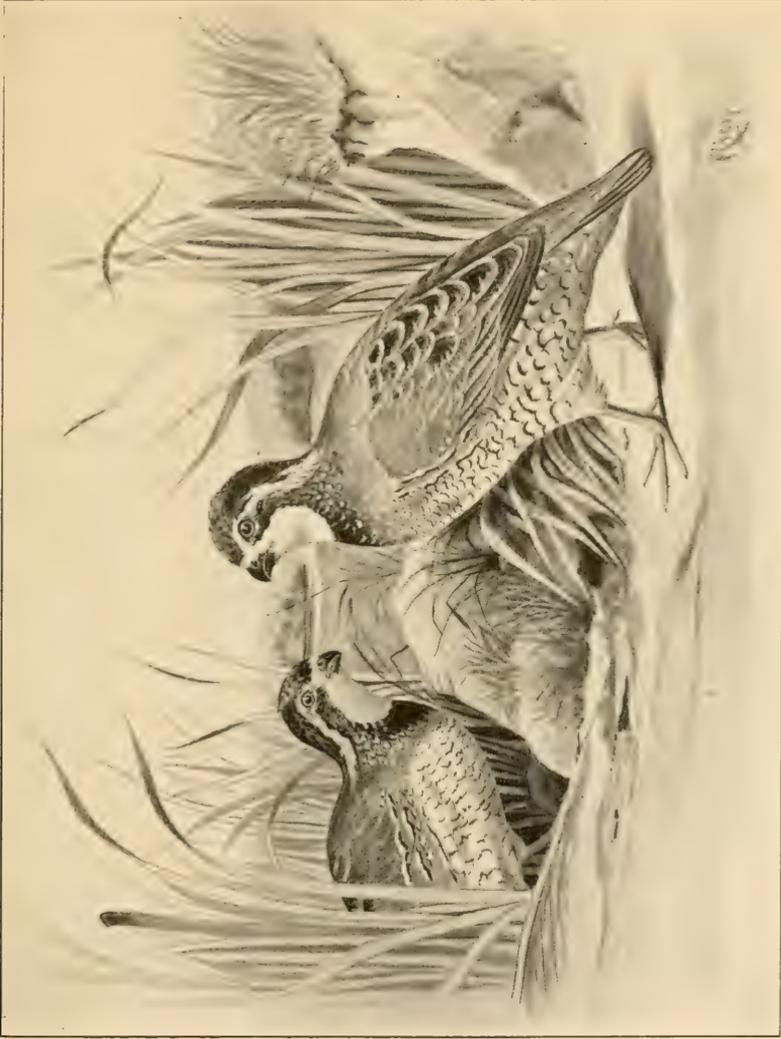
All through the fall and winter months the birds keep together in good-sized flocks, but at the approach of the breeding season the peace and quiet of the covey is changed for fierce and savage contests among the males in strife for the favors of their charmers. The covey begins to break up, and as each valiant little knight wins his fair lady by force of arms they seek together some fitting nook in the fence corner or in the edge of the brush and there make their home. About May they begin to build their nest, making it upon the ground, of leaves and dry grasses. Often it is deep and cup-shaped, sometimes domed over and having an entrance on the side. The number of eggs varies. Probably ten youngsters to a brood is a liberal estimate for the north, though anywhere from twelve to twenty eggs or even

more may be found in a nest, in which case they are arranged in tiers with the small ends inward and downward. Usually the larger settings are the result of "co-operative housekeeping" when two females use the same nest. Good husband that he is, the male bird does his share of the duties of incubation as well as keeping watch while the female sits. He also aids in the care of the young when they have made their appearance, covering them with wings and body in the same fashion as does the female, and in case of danger to the brood boldly confronts the enemy while the mother bird conducts the retreat. If the female is alone at such times she acts much as does the ruffed grouse in a like crisis, feigning to be crippled and keeping just out of the reach of her pursuer she leads him a long chase, suddenly recovering and dashing away if the pursuit is too close. The brood meantime scatters in a dozen different directions, gathering again when the old bird sounds the "assembly." After the young birds have gained more strength all this is easily avoided by their taking to wing—each one heading for the nearest growth and seeking concealment in the brush.

In the Southern States it is likely that two broods are sometimes raised in a season but this is certainly not the rule in New England. Where this does occur the male assumes all responsibility for the first brood, thus leaving his mate free to care for the newcomers.

During the summer Bob White leads a merry, happy-go-lucky life, with few, if any cares, but the winter months for such as remain in New England after the fall shooting is over must be a dreary time of hardship and hunger. In many cases they wander away to more favored districts further south. All through the northern range there seems to be a partial migration of Quail southward at the approach of winter—not all, but a part of the Quail population leaving their summer homes until the spring commences. Those which remain to brave our snow and cold are apt to haunt the settlements and the outskirts of the villages, often inviting themselves to breakfast with the farmer's hens and becoming for the time quite tame. The Quail has been domesticated with much success and breeds quite readily in captivity.

Though not brilliantly colored "Bob White" is a beautiful bird. His back and wings are



BOB WHITE.

of a reddish brown hue, mottled and banded with yellow, black, and a bluish gray, which gives his plumage a purplish bloom. His breast is of the same reddish tinge, fading into a grayish white, these colors irregularly barred with fine jet black lines. The feathers of the top of the head are a trifle elongated and may be erected into a slight crest. A white band beginning at the base of the bill runs over each eye to the nape. On the throat is a broad patch of snowy white, bordered with black, as is also the line above the eye, just mentioned.

The female is similarly marked, though paler in hue, and the lines over the eyes and the patch on the throat are dull yellow. The male bird is about ten inches long, and in extent of wings fifteen inches; female a trifle smaller. Weight averages between six and eight ounces.

"Bob White" varies much in his shading and depth of color in the different parts of his range. In general the northern Quail is larger, stronger of flight and rather more brilliantly colored than the bird of the south and southwest; the Bob White of the last named section is especially pale in coloring. But even in the

same covey are found birds differing widely in degree of coloring.

“Bob White” starts up in the morning, shakes out his feathers, and leaving the little circle which with his mates he has formed for the night—heads outward, everyone, so that each member shall have plenty of space for action if forced to fly—he trips away across the dewy fields for his favorite feeding grounds. Here he arrives about the time the sun has warmed the air and the world has fairly thrown off its slumber. Across the sunny meadows he takes his way, pausing to pick a berry here, and gathering in now a cricket, now a grasshopper, and putting away a good breakfast with a hearty relish. The ripening wheat, the buckwheat fields, or the corn-patch, if it is in a quiet place, is likely to receive a visit from him. In fact, almost any spot, whether brush or open, is apt to hold him if there is a dainty there which he appreciates.

The quail man’s heart is glad: there is a lull in the money-getting and he finds again a chance to tread the fields and brushy corners so dear from the memories of glorious days of sport. His hour has come at last. Over the

fence the sportsman goes, his dog all a-wriggle with joy. Toiling to keep up and envying his comrade that extra pair of legs, the man ploughs through the briars and pushes his way through thick-growing alder clumps along the springy gullies, into the birches—the same haunts which charm the grouse—and strides down the fence line, broad-margined with its tangle of weeds, rosebriars and blackberry bushes, with scrubby pines and young trees of various sorts growing along its devious way. A gravelly path across the fields lies athwart the pointer's track and as he runs the tell-tale scent suddenly reaches the quivering high-lifted nostrils. He plows the sand with all four feet in the effort to stop, then wheels at right angles and draws on a few steps to halt with tense muscles and glaring eyes. He has them! The sportsman pauses to admire the scene before the spell is broken, and his heart throbs high with pleasure and pride in the performance of this, his chiefest jewel. Then at his close approach, with the rustle and roar of many striving pinions the air is suddenly filled with flying forms—little balls of brown with a haze at each side where are their buzzing wings.

Each in a different course they bustle away and in his haste the novice mayhap "shoots into the bunch," to find to his surprise that there is a whole lot of sky with no Quail flying in it. The veteran usually, but not invariably, remembers to choose a bird and may get one with each barrel. Because of their close lying the bulk of the shots are straight away and so are fairly easy, but the cross shots at short range—O, my! Still, all in all, I think quail shooting is easier than any wood shooting in New England at grouse or 'cock, partly because Mr. Quail seldom, if ever, uses that favorite trick of *Bonasa*, tangling his enemy's legs into a knot as he tries to follow the bird's swift circle around the shooter's head. Several times I have seen shooting companions thus caught with legs askew sit down suddenly from the recoil of their weapons in an attempt to stop a curling grouse. Kills are few in such cases. Then, too, the woodcock's towering start and erratic course when alarmed is to most sportsmen a much more difficult proposition than the bee-line directness of Bob White.

As a rule when a covey is flushed they fly only a few hundred yards. Perhaps next time

they scatter in every direction when started from the ground and may then be picked up in detail. In most cases the covey keeps to one particular neighborhood, rarely going far away, and may usually be found when wanted. In the early part of the season they are likely to be found in the brushy covers, but at the close are oftener in the open.

While it lasts the Quail's flight is a terrific burst of speed. It requires more than ordinary shooting ability to make a good average of birds in proportion to the number of cartridges used; especially is this so in the thick covert. He will carry off a good load of shot, too, will Mr. Quail, for the little fellow has that high order of courage, the heritage of his family, which keeps him still doing his best just so long as he can flutter a feather. In quail shooting in the open, however, it seems as though a good "clay-bird" shot should account for a fair percentage of his cartridges, since the gamey "bluerock" flies much like the Quail.

Much has been said of the Quail's ability to "retain his scent." May it not be that the bird is only trying to conceal itself and by hugging its feathers closely and never stirring

from the spot on which it has alighted thus reduces its body scent to a minimum and leaves no footscent to assist its enemy? The best of dogs may sometimes walk straight through a covey thus hidden and unless some frightened bird stirs or breaks away he has little chance of discovering their presence. Whether the bird is voluntarily "withholding its scent" or is merely making itself as small as possible in order to avoid detection in this hugging the feathers down is an open question. There is no doubt that dogs are sometimes unaccountably at fault in such cases. I have seen something similar in the woodcock covers, when a woodcock, killed cleanly in the air and fallen into a slight hollow in the ground, its wings folded close to its sides, head and beak underneath, has made a good dog some minutes' work to locate it. But when with the gunbarrels the bird was stirred ever so slightly, the dog hunting fifteen yards away, puzzled and totally at loss, wheeled to a point on the instant and came quickly in and retrieved the bird. Even the ruffed grouse gets credit for the same thing in less measure, because she is very careful in her manner of approaching and leaving

her nest, nearly always coming up on the wing and alighting almost in it, and when leaving making a flight as soon as she is fairly clear of her eggs. Rarely, indeed, does she walk to or from her treasures, so that she may leave no trail for her enemies to follow to her undoing. Of course in all these cases the bird's scent is much less because of the thorough airing out which the feathers get in their hustling flight, but I much doubt any ability to withhold their scent in either one of them. In the case of the Quails more often than not it is the fault of the shooter in his carelessness in marking or of the dog in his lack of nose than that the birds have "retained their scent." However, should this strange disappearance of the birds occur it is only a matter of waiting until they have begun to move about,—as they will in a very short time—in order to get good shooting at the scattered members of the bevy. Once the flock has been well broken up the single birds usually hug the ground very closely when the dog has found them. I have almost caught one in my hand thinking it a bird which I had just seen fall and which lay within six feet of it.

THE BEETLEHEAD PLOVER. BLACK-
BREASTED PLOVER.

(Squatarola squatarola.)

The Beetlehead! What visions of blue water, barren sandbars, seaweed-covered ledges, and lonely, wind-swept, desolate islands this name brings up to the shore gunner's mind! What pictures of splendid birds flashing over the water or scaling down in swift career to the sandy margins where the sea is ever breaking, and the wary visitors feeding, ready at a sign of danger to take wing and away. Cautious and vigilant to the last degree and very keen of sight, they are the most intelligent of their family and among those least often captured by the New England gunner in spite of their comparatively large numbers.

Among the best known of the shorebird family is this large and strikingly appareled bird, called also (for, because of its wide dispersion this species is distinguished by many titles) the Black-breasted Plover, Whistling Field Plover, Ox-Eye, Swiss Plover, Bull Head and Chucklehead, these last two from his somewhat heavy

and stocky head and neck, and not in the slurring manner in which these names are commonly used. But whatever the name he is one that commands the hearty admiration of the sportsman, and well may the Beetlehead be appreciated, both in the lonely places where he dwells and at the table, for he is one of the finest of our shorebirds in the qualities which the marsh gunner prizes, as well as a sweet morsel for the epicure.

They are principally seen on our shores during the migrations, coming in large flocks during the latter part of April and the first of May, northward bound to their breeding grounds, returning in smaller bunches from August through September and the first half of October, going as far south for winter quarters as the West Indies and sometimes even to Brazil. Their migratory flights mainly take place at night, the birds resting and feeding during the day.

During the spring flights they are for a short time abundant on our coasts. Caring little for the muddy flats and even less for the marshlands, they feed along the rocky shores and bare sea beaches, dashing in upon each re-

treating wave to seize the choice bits thrown up and stranded on the edges. They run nimbly and gracefully about in an eager scramble for their rations, searching seaweed and drift stuff for the myriad wrigglers found therein. Yet, let the gunner peep ever so carefully over the edge of the bank where he lies hidden and each wary feeder becomes at once a motionless statue. Had he not seen their animation a moment before he might think he had come upon a wooden congregation of decoys. While he is still they make no movement, but let him stir, either for nearer approach or to draw back from view that he may get a better position, and the instant his head goes out of sight behind the long salt grass the flock noiselessly takes wing with easy, graceful flight, alighting some hundreds of yards away to feed comfortably until the dangerous admirer, with stealthy caution and much toilsome trudging through the shifting sand dunes once more approaches too near for safety, when the same performance again takes place. It makes little difference how the approach is managed, the result is generally the same; the gunner peers cautiously at the spot



BEETLEHEAD PLOVER.

where a moment since the flock was busily feeding, and seeing them not, soon discovers them two hundred yards away, apparently just as ready to tease him as before. They seem less suspicious of a boat, however, and will sometimes permit a gunner to get within easy range in this way. The smaller flocks in the fall will decoy quite readily or come with eager questionings to the mimicry of their whistling note.

By the middle of June they are nearly all on their breeding grounds, mostly in those ice-bound regions of the north, where the lonely wastes for a few brief months are warmed by the sun into a semblance of summer. Here are the homes of the myriads of birds whose passing hosts spend a brief season in our land to feed and rest from their journeyings. Among these the Beetleheads are numbered, and in such solitudes their young families are reared and trained up to the strength needful for their long flights.

A shallow hole scooped out in the sand and lined with dry grass and moss constitutes the home of this, the finest of the plover family; and the nest, when ready for the hatching, us-

ually contains four drab or clay-colored eggs with dark brown splashes upon them. The nesting season begins about the first to the middle of May, and by August, or even earlier, straggling birds have begun their wanderings, moving lazily and comfortably from place to place along-shore. Often parties of them linger in our borders until fairly "warned out" by the frosts of approaching winter.

These are more maritime than are the golden plovers, which mainly make their migrations overland. The Beetleheads seem to prefer the sea-coasts for their travels, it may be for safety, perhaps also for the certainty of abundant food. They are sometimes fairly numerous inland during the fall months, making "short cuts," maybe, in order to favor the younger travellers. Northern and eastern New England is not so well acquainted with this bird, the greater part of the flights, both spring and fall, passing us by in a direct course over the water between the southern cape of Nova Scotia and Cape Cod. Comparatively few of the migrant waders visit the coast line between these points. The few that do so are mostly birds which have bred within our borders or

passersby driven inshore by the southeast storms so eagerly looked for by the marsh- and bay-gunners of these waters. Thus, while we seldom get any shooting at shore-birds here before the middle of August or the first of September, our brother sportsmen of Massachusetts commonly have good sport on plover and curlew as early as the middle of July.

The Beetleheads, as are the other "bay snipe" on Cape Cod, are mostly shot from blinds and over decoys set out on the sea beaches—the blind usually a pit in the sand with the gunner lying quietly hidden until the game has come in close. Large bags of the various kinds of plover and curlew are often made in this fashion, for as the compact flocks wheel over the "tolers" and turn to leave when they discover the cheat they give the most favorable opportunity for the experienced bay-man to rake their ranks with deadly effect.

They make a pretty picture as the flocks sweep rapidly past in close order, with clear and musical call, the sharply contrasted blacks and whites of their plumage alternately showing and being hidden by the swiftly moving wings as they career along, now slanting to

the right, now veering to the left, now the jet black breasts, now the gray backs and the white spots on the rumps and tail coverts showing like foamy fleckings from the breakers over which they skim. To my mind this is the prince of all the plover tribe—the worthiest member of a noble family.

Probably the Beetlehead is the fleetest of wing among the bay birds, the “golden” being the only one having the right to challenge his title.

Many gunners confuse this bird with the golden plover, and indeed the two are much alike, yet in addition to the Beetlehead’s greater size there is one marked difference on which the species is founded and which makes the Beetlehead unmistakable in any plumage—he has a hind toe, small and rudimentary, ’tis true, but plainly showing in every one of the species. The “golden,” as is the case of all our other true plovers, lacks this. For his other markings, in his full dress uniform—(we all want our pictures taken in our wedding clothes, and so, it is likely, does our beautiful visitor)—above the Beetlehead is colored with a mixture of black, dusky gray and white, the darker

shades prevailing in the centres and the white mostly on the tips and edges of the feathers. The upper tail coverts white with but little of the dark shading; forehead, crown and down the side of the neck snow white, as are also the linings of the wings, under tail coverts, tibiae and vent. The tail is barred with black and white. Sides of the head as far back as the eye, side of the neck, breast and remaining under parts, primaries, axillary plumes, bill, legs and feet are black. Male and female are marked alike though the lady may have brownish tones in the blacks. Comparatively few gunners are acquainted with him in this plumage, knowing him better in his fall dress of mottled black and white, when the breast marking is somewhat dingier and does not, as a rule, show the solid area of black, nor are any of the contrasts of color so marked, yet he may be recognized at once by his large size and the hind toe, the mark of the species.

The bird at the right in the plate is in the plumage of the young of the year—the winter dress of the adult bird also, though the mature bird generally retains some trace of the black breast in the dusky markings below. In this

plumage, (the "pale-belly," as the shore gunner then calls the bird in distinction from the black-breast full dress) there is often a yellowish tinge on the feathers of the back which makes the resemblance to the golden plover still greater.

The length of this species varies from eleven to twelve and one-half inches; the extent of wings from twenty-two to twenty-four inches. Weight from seven to nine ounces.

THE AMERICAN GOLDEN PLOVER.

(*Charadrius dominicus.*)

The Golden Plover is somewhat smaller than the last species, is three-toed, is of slenderer figure and has a smaller and slimmer bill. His coloration is darker, and in the full breeding dress with the jet black breast is even less often seen in the United States than is his cousin, the beetlehead. As a rule he prefers the inland country to the seashore, and is especially partial to barren and burnt ground. A piece of newly plowed land offers great attractions to the migrant flocks. In one place where the writer often shoots, on the borders

of the marsh are many acres of hay fields. One season some twenty acres of this was turned over and the brown mold laid bare to the sun and rain. During all that fall not a passing flock of "Goldens" but would stop and make a call there. More were killed in that one season in that place than in the five together preceding it. When a flock arrived they would quarter the ground, wheeling here and there in erratic flight, until satisfied that all was safe, then finding a suitable place would suddenly alight and scatter at once to feed.

Their beautiful dark eyes are full and soft, of remarkable size and brilliancy for a shore bird. The head, like that of the last species, is large, and the forehead is equally bulging and prominent, rising at a sharp angle from the bill. The call is a mellow piping note, flute-like and clear, and while not so powerful as many another bay bird produces, has great carrying qualities and is heard much farther than would be thought. With a little practice the gunner may easily imitate it—a great assistance toward filling his game bag, for they decoy well and come readily to a skillful call. Altogether the Golden Plover is a fine bird from the bay

gunner's view point—easy, graceful and strong in flight, nimble and swift of foot—indeed, what plover is not?

They arrive in New England rather later in the spring than do the beetleheads, and return to warm latitudes earlier. They nest in the Arctic regions, as do most of the shore birds, which gives us very little opportunity for observing their breeding habits. The winter months are passed in the Southern States and beyond to the southward. Many are found at this season on the grassy plains which make the cattle ranges of Texas and northern Mexico, and some even go to the extreme southern part of South America, so that their range is a wide one. The family is represented in Europe and Asia, also, the Old World bird varying but little from our own. Only an expert could distinguish one from the other, and he not always.

Most writers claim that this bird is much more common in New England than is the beetlehead. While this may be so, my own experience has been to the contrary, and I think that most gunners on the coast of Maine will take my view of it. I think I have seen in one great flock during the spring flight more



GOLDEN PLOVER.

beetleheads than I have seen of Goldens in all my life.

The Golden Plover feeds in the fields and highland pastures, haunting much the same ground as the upland plover, living upon slugs, beetles, earthworms and grasshoppers, nor passing by the sweet berries of the fields. In the West they tell us stories of these birds following the plow when the farmer turns up the soil of the prairies, and of their coming so close that the ploughman knocks them over with his whip as they curl and wheel about his head. This sounds like a—well, a “fairy tale,” to the eastern gunner, at any rate most of our sportsmen are satisfied to hunt Golden Plovers with a hard-hitting, close-shooting shotgun.

During the migration fair shooting is sometimes to be had at Goldens in our island fields, when the gunner, putting out decoys and being well hidden, calls the passing flocks. They rarely refuse to come to these false friends, not once only but even returning for the second discharge, unwilling to desert a comrade in distress. Of course no such bags are made here as in their western ranges. If the sportsman comes suddenly upon a single bird it will

sometimes seem to be confused and may only run a short distance, when if it thinks itself unobserved it will crouch in the grass and remain motionless until the gunner either has forced it to fly or has passed on.

The bird in its spring plumage is marked as follows: forehead and a stripe over the eyes white; upper parts generally brownish black, speckled with yellow and white, these lighter spots mostly on the tips and edges of the feathers. The tail grayish brown with black bars. Below, the throat and breast a brownish black, growing lighter toward the lower parts; axillars and linings of wings dusky or ashy; feet and legs black. Such a bird rarely falls to the New England gunner as this is his summer plumage. As we see him in the fall the under parts are ashy gray, faintly and irregularly splashed with dark brown or black; top of the head yellow with dusky lines; stripe over the eye grayish; for the rest much as in the spring plumage. The females are marked like the males save that the black breast has taken on a brownish hue. Have seen a few adult birds wearing the breeding dress into the fall and winter months.

The Golden Plover is about ten and one-half inches long, and in wing spread about twenty-two inches. Weight from five and one-half to six ounces. It may be needless to add that the bird is a delicate morsel for the table.

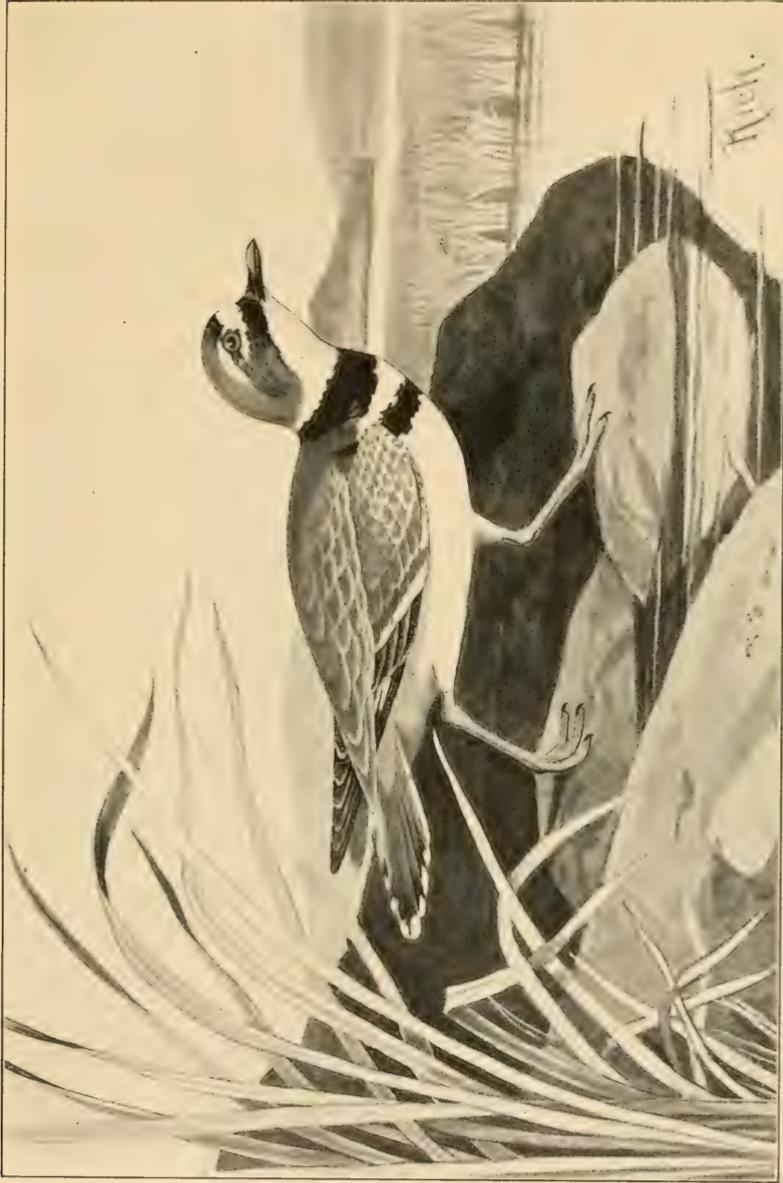
THE KILDEER PLOVER. "KILDEE."

(*Oxyechus vociferus*.)

The chief of the small family of "ring plovers;" the largest and most beautiful of these birds in our territory. He has named himself and we have taken him at his word, "Kildeer! Kildeer!" A noisy, active, restless little bird, and not very common in New England as compared with the numbers found in the West.

They are not so much given to gathering into flocks nor are they so partial to the seashore as are their smaller brethren. The Kildeer is mostly found in the fields and high grounds, ploughed lands or marshes rather than the sea beaches. In the full plumage a beautiful bird; above, brownish gray, with a greenish, satiny gloss, and many feathers edged with golden brown; rump and upper tail coverts of

bright and varying shades of golden yellow or light chestnut. The forehead with a band of white running from eye to eye, black-bordered above and joined by a narrow thread above the eye with the white patch behind, this gradually changing into the grayish brown of the hind head. A black band from the base of the bill, passing below the eye through the ear coverts and fading into the brown of the nape. Throat white, this color carried entirely around the neck in a narrow collar. Below this two collars of black; the first completely, the second partially, encircling the body, and between these an incomplete band of white. Wings the same shade of brownish gray as on the back, with a crossbar of white formed by the tips of the greater coverts. Primaries black, with a considerable area of white on the outer webs of the inner one. For the rest below, pure white. Central tail feathers dark greenish brown, growing blackish toward the ends, tipped with tawny or white. Side tail feathers lighter, with several dark barrings, the outer pair nearly white, less distinctly barred. Bright orange on eyelids. Bill black; legs pale yellow. Length from nine to ten and spread of wings about



KILDEER PLOVER.

twenty inches. As a rule the Kildeer is not very wary.

This species is a dweller in North America from the Saskatchewan country southward. It is found in the winter months in the West Indies, Central America and northern South America. It breeds anywhere throughout this wide range of territory, usually laying from two to four eggs, dull drab or cream color, with brownish blotches upon them.

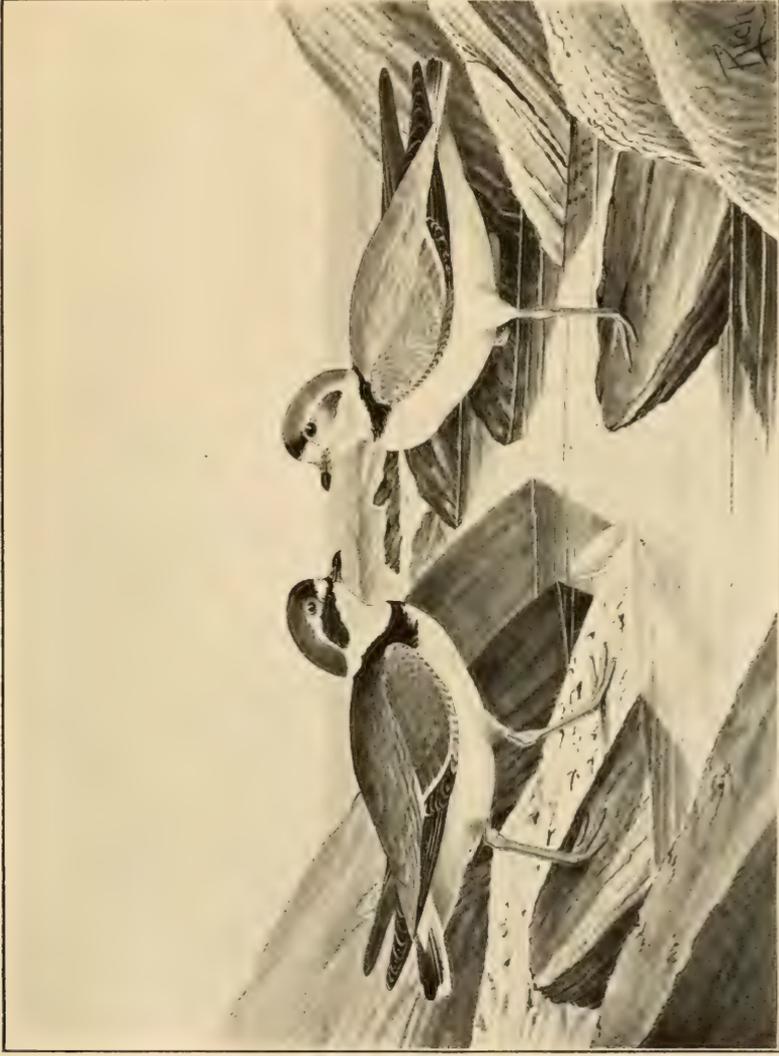
SEMIPALMATED PLOVER.

(*Ægialitis semipalmata*.)

Common on almost every sandbar and mudbank along our coast are the "ringnecks," filling the air with their soft and pleasant piping. Their notes, at times wild and mournful, are always in accord with the swash of the sea. Inhabiting the same ground and often associating with the smaller sandpipers, where not much molested they show the same trustful and confiding disposition as these little neighbors, but where the "summer boarder" harries them daily they soon become as wild and wary as any of the shorebirds.

There are several species of this family found in our territory, but the Semipalmated Plover is the usual victim in a game bag. The Belted Piping Plover is less common, and rarest of all in New England is Wilson's Plover which occasionally strays here from his warmer range. It is barely possible that the Snowy Plover, (*Aegialitis nivos*a) a western bird, may visit us at times.

Along our sea beaches—the outer ones which are not so much frequented by human kind—in August and the first half of September their flocks are happily feeding, running nimbly about, chasing each receding wave with tireless feet, and as rapidly retreating before each incoming comber. They are apparently a happy and good-natured little company, never quarreling nor wrangling among themselves, and, unfortunately for their own safety, are only too willing to investigate if they hear a neighbor's call. The gunner need not be very carefully hidden if he can imitate their note, as small bunches are almost certain to come in and give him a chance as they are skimming past. However, few sportsmen disturb their peace,



SEMIPALMATED PLOVER.

PIPING PLOVER.

and it is mainly the small boy, the natural enemy of all living creatures, who decimates their ranks.

The two common species are often found in one flock, but with us and in most localities the most numerous race is the Semipalmated, marked as follows: bill short and stout, black with orange-yellow base; forehead prominent, rising sharply from the bill as in others of the tribe; above, a dark brownish gray, matching well "the ribbed sea sand," their home. It is astonishing how well this protective coloring hides them when by accident they are still for a moment. Below pure white. Throat white, the lower part of this patch passing completely around the neck in a narrow ring. Below this a wide black collar entirely around the neck. A patch of black at the base of the bill, running back below the eye and bordering the white forehead, which is again sharply defined by the black of the crown. A ring of bright orange about the eye. Primaries blackish. Tail same color as the back, but growing darker toward the ends of the feathers; tips white, as are also the outer pairs

of feathers. Legs flesh color, feet considerably webbed between the middle and outer toes. Length from seven to seven and one-half inches; extent of wings about fifteen inches.

THE PALE RINGNECK, OR PIPING PLOVER.

(*Ægialitis meloda.*)

Though much less common in the east than the last, this species is fairly abundant all alongshore, associating with the semipalmated plover and in mode of life differing in no wise from him. The "whistle" differs from that of the last species. As the name indicates he is lighter in coloring, of less decided tones, and may be picked out at once in a flock of the more common species of ringnecks among which he appears to be snow white. The bird is pale brownish ash above; below, like all the family, pure white, as is also the forehead, side of the head, throat, and a collar from the throat encircling the neck. Below this collar is a black band of less and variable extent, sometimes completely encircling the neck but oftener the circle is broken in front. The tail

coverts are white. Tail dusky in the centre, outer pairs of feathers growing white. Wing quills dusky with whitish patches. Eyelids orange. Bill as in the last species but not so brightly colored. This species is also webbed between the middle and outer toes, but not to so great an extent as in the preceding. The Pale Ringneck is a trifle smaller than the Semipalmated Plover. Both birds inhabit the inland country as well as the coast, but in New England are rarely found away from the seashore.

The bird at the right in the plate represents this species.

THE BELTED PIPING PLOVER.

(*Ægialitis meloda circumcincta*.)

This bird is so similar in his markings to the Pale Ringneck that one must be a very close student to detect the difference. He may perhaps be a little grayer in his tones. He is not so often taken on New England shores, his range lying more to the westward.

The principal characteristic of this variety, which is of somewhat doubtful value in or-

nithology, lies in the fact that the ring of black very nearly meets on the forebreast or may entirely encircle the neck; its ring is supposed to be larger and the color darker than in the ordinary Piping Plover. There is so much variation in the amount of collar worn by them that it is often very hard to say to which form a specimen belongs.

WILSON'S PLOVER.

(*Octhodromus wilsonius*.)

This is a rare straggler from the south, seldom taken north of Long Island, but in its southern wanderings often going to Brazil, Peru, and even farther on. He can scarcely be mistaken for any other member of the family, for the widely different shape and color of his bill as well as its larger size will place him at once. He also lacks the orange ring around the eye.

The bird breeds throughout its range, scarcely making a nest, but laying its three or four eggs in a hollow in the warm, dry sand above the reach of the tide. This plover is mainly a dweller on the sea coast.



WILSON'S PLOVER.

Its markings and peculiarities: bill black, long for this family, thick and large. Forehead white, this color carried back over the eyes to the nape. Top of the head brownish gray, blackening at the forehead; the nape same color as the top of the head. Blackish stripe from the base of the bill to the eye but not beyond. Throat and entire under parts except the half collar of black are pure white, the white of the throat completely encircling the neck. Primaries blackish, lighter at the bases, inner ones with outer edges of white. Central tail feathers dusky, darkening toward the ends and white-tipped. Outer pair or so white.

Female much like the male except that the black markings have become a rusty brown in her dress.

AMERICAN OYSTER CATCHER.

(*Hæmatopus palliatus*.)

The American Oyster Catcher is but seldom seen on the coast of northern New England, probably being scarcer on these ranges than in any other part of his habitat. It does not gather into large flocks nor does it to any ex-

tent frequent the inland country, scarcely ever going farther from the sea than does the tide water in the rivers.

All along the eastern shores of the two Americas this bird is found, northward to Labrador or farther in the summer months, and wintering from the Middle Atlantic States to and beyond the tropics, far down the South American coast. It is also found on the Pacific side of the continents, but the more common species there is the Black Oyster Catcher.

The Oyster Catcher's bill is remarkably stout and well fitted for its purpose, that is, for driving into "sea urchins," knocking "wrinkles" off the rocks and burrowing into the sand for razor fish and small crabs, for he eats any of the marine shellfish which he can capture.

The bird is large and showy, and as it behooves him for his safety's sake, wary in proportion as he looms above his shore-bird neighbors. Scarcely to be approached at any season, few are captured and they are fairly earned by good and careful work. Decoys and enticing whistlings avail naught, for the bird is either unsocial or aristocratic and well satisfied with his own society.



OYSTER CATCHER.

The coloring of this species is arranged in solid masses and is sharply contrasted. The bill is long and heavy, chisel pointed, deepest at a point one-third of its length from the head, and in color bright red, growing orange yellow at the tip. Head, neck and fore breast black. Back and wings dusky brown. The rump mainly like the back, but on the edges of the tail coverts growing white, this color also showing on the bases of the tail feathers, and these going through the shades of brown and dusky to jet black at the tips. Wings like the back in color, with a crossbar of white formed by the ends of the greater coverts and some of the secondaries. Linings of the wings and entire under parts white. Eyes red with a circle of orange about them. Feet and legs stout, of a pale pinkish color. The length of this species varies from seventeen to twenty inches, and its spread of wings between thirty-three and thirty-five inches.

There are several other species of oyster catchers. Nearly every sea coast in the world affords them sustenance and is inhabited by some member of the family.

THE TURNSTONE. "CALICO BACK."
CHICKEN PLOVER. ROCK PLOVER.

(*Arenaria morinella*.)

Where the sea beaches are not too thickly populated with human visitors the Turnstones are quite common during the summer and early fall, from the middle of July to the middle of September. These "Chicken Plovers," as the shore-dweller has named them, are most interesting little birds, scurrying along the beach, putting their stout little beaks under the pebbles to turn them over so as to expose to view the myriad "wrigglers" dwelling beneath them; it is even said that they will drive their beaks through the armor of the less thoroughly protected shellfish, such as the "sea urchins," and the like. They handle quite a pebble when they set to work upon it, putting the bill beneath and turning it with a sudden jerk of their stout little necks, or when this will not do it, by settling back upon their legs and suddenly straightening them at same time with the effort of the head and neck, or even pushing against it, man-fashion, with their breasts. In



TURNSTONE.

the air the Turnstones are very pretty birds, bearing a strong resemblance to the beetle-head when on the wing, except when they alternate scaling and swift wing beats as is their habit. When flying they have a curious chattering conversational note, almost like that of the English sparrow. They are said to swim well and to make nothing of alighting upon the water from their flights. Have never seen them do so but do not doubt their seamanship. They do not gather into large flocks save during their migrations, at ordinary times being found in bunches ranging in number from two or three to a dozen birds.

The Turnstone is a dweller in almost every corner of the world. He is found along both coasts of our continent, well up into the north in summer,—on the Pacific coast to Alaska, on the Atlantic shores certainly to Labrador and probably well beyond, all along the Arctic coast. In the winter months they leave us for the milder breezes and bluer waters of the Mexican Gulf, and many go far down both coasts of South America.

Though far more common on the ocean shores they are at times taken on the Great

Lakes and other large inland waters. On the coast line they rarely penetrate into the tide water and estuaries, choosing rather the ledges rising from the deep water and the rocky shores of remote and seldom-visited islands well out from the mainland, where all undisturbed they may live their happy and innocent lives. As for their coloring we might almost say that no two are marked alike, the depth of color and its arrangement being subject to wide variation in different specimens. In general their upper parts are irregularly splashed with black and white and dark brown, with some patches of light red or chestnut. Below, mostly white, but black on lower throat and breast. Crown streaked with black and white. Forehead, cheeks, side of head, throat and nape white. On the side of the neck black and white in irregular patches. Back, rump and upper tail coverts white, with a dark patch through central line of rump and tail coverts. Tail white with dusky patch near tips of the feathers, these finally tipped with white. Scapulars, secondaries and wing coverts mottled with black and chestnut. Some of the greater coverts white, often making a crossbar of this

color in the wing. Under wing coverts white. Eyes and bill black; feet pale orange.

The female is not so brightly colored, lacking much of the light red, which in her dress is replaced with dark brown. The fall bird of either sex is not so brilliantly attired as is the spring migrant, but even then is a beautiful piece of coloring. The length of this species is between eight and nine inches; the extent of wing varies from sixteen to eighteen inches.

Besides the present species the Pacific coast boasts another—the Black-headed Turnstone, closely akin to our bird. The two are chums where their ranges come together, from Southern California northward.

THE AVOCET.

(*Recurvirostra americana*.)

This striking and graceful bird, like many of his family, is a lover of the Great West and so is not often taken in New England. It is far less common on the eastern half of our continent than beyond the Rockies and in the northeast is an exceptionally rare visitor.

In their chosen range they favor the salt

pools and the muddy ponds, feeding along the edges and even wading in so deep as to immerse the whole head and neck in the water as they probe into the muddy bottom with their bills.

In many respects this bird is one of the most remarkable of the waders, with its striking markings of plumage, long, slender and upturned bill, long legs and webbed feet, and being also heavily and closely feathered underneath, there is no difficulty in its swimming or wading. Indeed, it makes nothing of alighting in deep water from its flights when it so wishes, and it can swim as well as a duck. It is certainly well fitted for any exigency of life. We are told that it is very noisy and less wary in habit than is conducive to its safety.

The Avocet is extremely long-legged, probably proportionately more so than any other wader unless it be the "stilt." Its plumage is mainly white, changing to a rusty or cinnamon brown on the head and neck, paling at the base of the bill, darkest on the head and fading gradually into the white of the breast and body. The interscapulars and a part of the scapulars are black. Wings for the most part black, but



AVOCET.

some of the secondaries and the linings of the wings are white. The tail short and squarely cut, pearl gray or light ashy. Iris bright red. Bill long, slender and generally up-curved, is black in color. Its long legs are a dull, pale blue, with lighter webs, these sometimes flesh-colored. Length from sixteen to twenty inches; wing spread varying from thirty-two to thirty-six inches.

The wings and tail are often very short for this family, thus their measurements may vary widely in different specimens, but there is no chance for confusing the Avocet with any other of our birds, for his cinnamon head, short and square-cut tail, to say nothing of the slender, long and up-curved bill and the webbing of the feet will identify him at once.

The range of this species is from the Saskatchewan southward through the United States to Central America and the West Indies.

THE STILT.

(*Himantopus mexicanus*.)

Having much the same range as the avocet, though perhaps more southerly in its habitat,

and extremely rare in New England, is another curious bird, the Stilt, also called Longshanks, and the Lawyer.

The Stilt is from fourteen to fifteen inches long and from twenty-four to twenty-eight inches across his wings; these are proportionately considerably longer than the avocet's, when folded, extending quite a little beyond the tail. Above, mainly black if the bird is at rest, as the wings are closed over the white upper parts and the tail. The black is also carried over the back of the neck and the top of the head, around the eye, leaving the forehead and a patch on the eyelids and behind the eye white, as are also the sides of the neck, throat, head below the eyes and the entire under parts. The rump and tail coverts are white; the tail grayish white. The bill is black, very slender, usually straight, though sometimes a trifle bent upward from the centre. Legs and eyes carmine.

Its range is virtually the same as the avocet's, going farther south in winter, to Peru and Brazil as well as the West Indies, and in its northerly flights rarely going beyond the United States.



STILT.

THE RED PHALAROPE.

(*Crymophilus fulicarius.*)

The Red Phalarope is the "odd one" of his family (any one of which is odd enough), heavier in his build, having a shorter and a thicker bill and a longer tail than the other two. About the base of the bill and on the forehead is a blackish mask. A patch of white running back from this through the eyes and nearly meeting its fellow on the nape. Back of head, hind neck and down the back tawny yellow and blackish, the light color on the tips and edges of the feathers. Rump whitish. Tail long and rounding, dark brownish ash. The wing coverts dark slatey gray, the tips of the greater coverts making a crossbar of white. Primaries dusky, with white shafts. Below, a rich purplish red, this color also on the sides of the neck and upper tail coverts, deepest on the breast and paling toward the edges of the area thus marked. The female, as is the peculiarity of this family, is much brighter in her hues than is her mate. Bill dull yellow, growing dusky at the tip. Feet and legs yellow; toes lobed and

webbed as in the Red-necked Phalarope, but not to so great an extent. The length of this species is usually about seven and one-half inches; the extent about fourteen.

The fall dress is widely different with no sign of red below or the tawny on the edges of the feathers of the back and wings. Most of head and entire under parts are white, with circum-ocular patch and spot on the nape of dusky. Sides ashy gray; above everywhere ashy, the wings considerably darker, and with decided crossbar of white. Bill almost all black. This is the plumage of most of the specimens taken in New England.

The present species and the Northern Phalarope are found more commonly in New England, the former the less common, and both preferring the coast line for their wanderings.

THE NORTHERN PHALAROPE.

(*Phalaropus lobatus*.)

Next in order and smallest in size is the Northern, or Red-necked Phalarope, the most common of this family along our coast. Considerably less brilliant in plumage than is either

of his brethren, this little bird is found pretty much all through the Northern Hemisphere, spending the summer months far away within the Arctic circle, and in winter migrating even to the tropics. A great traveler for such a small one. He is likely to be found in any part of our continent but favors the sea coast. Flocks of them ("Sea Geese," the sailors call them) are often found resting quietly on the water miles from land and feeding on the insects in the drift stuff.

I remember how surprised I once was at seeing what seemed to be three sandpipers paddling about in the water alongside a bridge over a tide water bay. A large amount of the suburban travel into Portland, Me., was over this bridge and there was a continual rumble of electrics, heavy teams and lighter vehicles, with plenty of foot passengers also. I stopped to investigate, and as the tide was high and the birds not more than fifteen feet away it was easy to see that the little fellows were Northern Phalaropes. I watched them for some time as they swam at ease, turning and darting as sailor-like as any of the waterfowl could have done, and only paddling away finally when a small boy,

unable longer to repress nature, "shied a rock" at them. Such fearlessness, or heedlessness, or innocence, whichever it was, I have never seen in a wild bird.

In the breeding dress this bird is dark slatey gray above, darkest on the head; on the back having numerous mottlings of brownish yellow, many of the feathers finely edged with white. The dark color on the head runs back from the bill below the eye, leaving a white area below margined about by this color and the red-brown patch on the neck, which extends from the nape in a narrow belt across the upper breast, nearly encircling the throat. All other under parts white. The upper tail coverts like the back though with broader white margins to the feathers. The wings, when closed extending beyond the tail, are dusky, the tips of the greater coverts making a broad white bar across them. Quills with shafts whitish, darkening toward the tips. Bill small and slender, proportionately shorter than in Wilson's and black in color, as are likewise the feet and legs. The toes have a marginal membrane, scalloped on the edges, making lobes on each joint. The membrane also extends between the toes out to



NORTHERN PHALAROPE. WILSON'S PHALAROPE. RED PHALAROPE.

the second joint, thus making a very good propelling agent of the foot.

The bird in the fall is often a plain gray and white little fellow which at first glance will pass for a "sandpeep," but its slender bill and peculiarly formed feet will mark it at once. Like the others this species is heavily feathered below to resist the water.

The Northern Phalarope is about seven inches long, with a sail-spread of about thirteen inches.

WILSON'S PHALAROPE.

(*Steganopus tricolor.*)

This is the largest and perhaps the handsomest of the family. A striking bird which ranks high in point of beauty of plumage among the waders.

Wilson's Phalarope is by no means common in New England, nor for that matter anywhere east of the Mississippi valley, though abundant from that region westward. Its summer range takes it north to the region of the Saskatchewan, and in the winter it goes down the coasts of South America even to Patagonia. They breed at any point in their range, pre-

ferably in the northern marshes, laying three or four eggs, drab colored with brownish spots. If these birds were "humans" Mrs. Phalarope would probably be "strong-minded" and march in the front rank of the army of "new women," "going gadding," and lecturing against "that tyrant, Man!" As it is, being only a bird, she is content to make Mr. Phalarope do all the duty in hatching the eggs and rearing the youngsters, while the lady of the family wears the good clothes, puts on the style and does the ornamental for the pair. She even does the courting in the spring, thus again reversing the general order of things in bird life. She is larger as well as more gaudy in her dress than is her poor, down-trodden mate. This species is distinctively American, as might be guessed from the independence of the lady bird in her domestic affairs.

In its breeding dress the female Wilson's Phalarope is marked thus: bill quite long and very slender, tapering nearly to a needle point. The nostril is almost lost in the feathers at the base of the bill. Forehead and crown a beautiful bluish ash, the same color running down to the nape, there whitening and continuing to the

back in a narrow stripe, losing itself in the ashy gray of the back. A strip of black from the base of the bill passing below and behind the eye and down the side of the neck where it changes into purplish chestnut behind and sienna brown in front, this gradually fading into the white of the throat and under parts. Above, ashy gray, mottled and flecked with deep red-brown. Rump and upper tail coverts nearly white. Wings folding quite a little beyond the tail, brownish gray, with fine white tips to the coverts. Primaries dusky, the shafts white, darkening at the ends. Tail grayish brown with tiny edging of white. Entire under parts white, the feathers thick and close like those of a water fowl. The legs rather long and flattened laterally as though ("I axes the lady's parding" but she will wear 'em) her trousers had just been creased; the feet black, with long, slender toes having a marginal webbing. Iris brown. Length from eight and one-half to nine inches; extent about fifteen inches.

The male is smaller, and much duller in markings and color. The brightness of his lady's garb is very faintly shown in his clothes. A plain, sad-colored, gray and white, hen-pecked

husband is he, but unmistakable among his shorebird neighbors from the oddities of his bill and feet.

AMERICAN WOODCOCK.

(*Philohela minor.*)

The Woodcock arrives in New England from his winter quarters much earlier than is commonly supposed. The writer has seen him in the vicinity of Portland, Me., as early as February 10th, though ordinarily he does not reach this latitude before the last of March, the weather, of course, having much to do with his coming. Things start up early in the sheltered openings of the forest and on the sunny hill-sides. Here the woodranger may be agreeably surprised some fine spring morning at meeting Mr. Woodcock near some big ant hill which is undergoing repairs at the hands of its tenants and being made ready for the year's work. This will supply his wants until the alder covers are ready for him.

In the latter half of April if the season be warm and forward, the Woodcock builds its nest in a secluded nook—a slight affair of dead

leaves and soft grasses woven together in a shallow depression,—at the foot of a dead stub, it may be,—and lays its complement of four or five dull clay-colored eggs, thickly speckled with brown spots. It is said, and probably truly, that the cock bird assists in the incubation and in the care and up-bringing of the young. The Woodcock has a healthy appetite and is a great feeder, so that no short watch off the nest would keep the female plump and round as is her wont.

Should spring rains or cold storms play havoc with nests and eggs, with renewed courage they try again, for this tenacity of purpose is necessary for the continuance of the species, and the birds, realizing the exacting demands of the sportsmen of the country, are hard pushed to meet their requirements. It may be that in their southern breeding grounds two families are sometimes raised in a season, but I much doubt that such is the case at all in New England. Would that it were!

How many of our sportsmen have ever seen the Woodcock at his spring love-making? It is certainly a curious performance and well worth a trip into the covers to see. With the

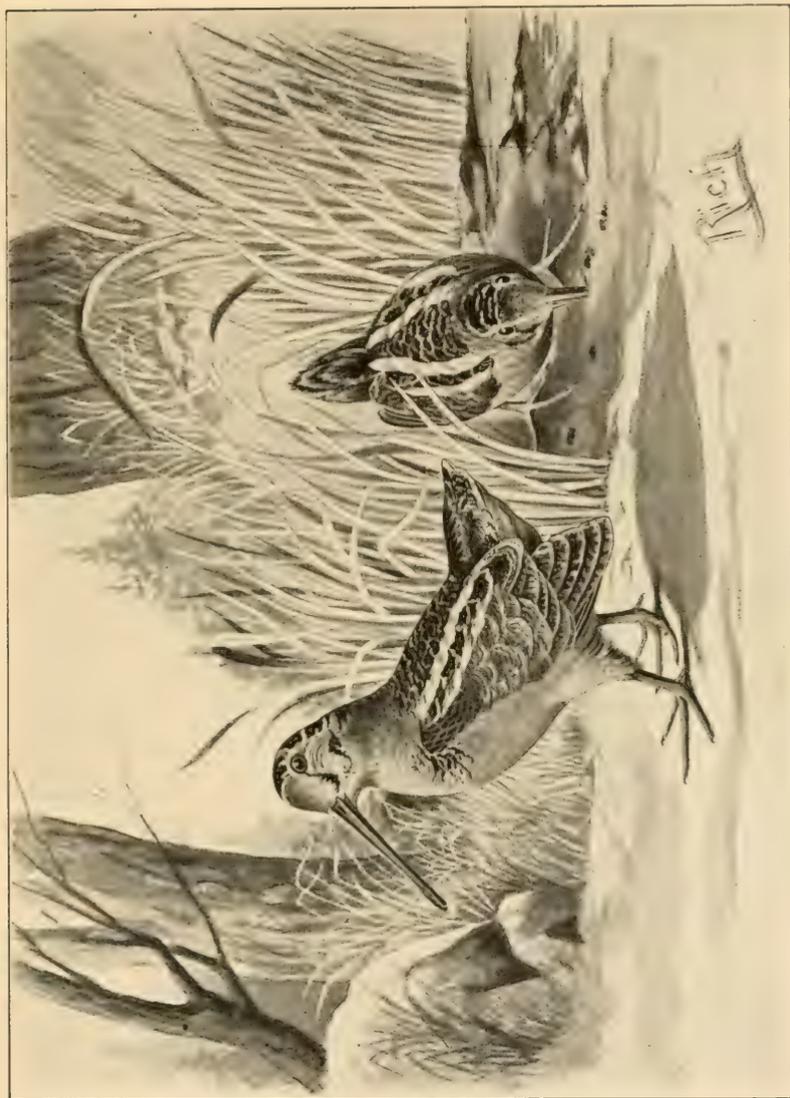
coming of darkness he begins his little play; first, as one observer represents it, a guttural "spneak! spneak!" several times repeated and the sound not unlike the note of a nighthawk; with drooping wings and spreading tail he struts like a turkey cock, and finally leaping into the air on whistling wings he circles in ever-widening, higher-mounting spirals to perhaps a height of fifty yards or more, and after flying about high up in the gloom he pitches down in slanting, darting flight, the music still sounding, to the side of the mate he has left in the brush. Again and again he repeats this until he tires of his amusement or her ladyship commands his attendance.

Those of the young which I have had the opportunity of examining closely were killed by a pointer puppy which had joined me for a Sunday stroll. These were of a light brownish yellow color, with several dusky or dark brown stripes—one from the bill to the eye; one on top of the head down over the hind neck; a spot behind the eye and another below it; the back mottled with black and grayish buff; a dark stripe on the rump. At this age when scurrying over the leaves and through the grass

in search of safe hiding places they looked not unlike "chipmunks," as we call our ground squirrels. If disturbed with her brood the mother bird has been known to take up a little one, holding it closely pressed between her legs and body, and fly away to safer quarters, returning and making separate trips until in this manner the whole brood has been placed in a less dangerous neighborhood.

This gentleman is not a hardy bird but a lover of ease, comfort and plenty. So he chooses his homes mainly in mild climates, and while in our Middle States he is to some extent resident, with us here in the north he is only a visitor during our warmer seasons, our New England winters leaving him small chance for a living. They regularly breed from the central United States (and rarely even further south—I believe there are records of this occurrence in the State of Florida) almost if not quite to the Arctic Circle. In their fall flights they go even to South America, though it is doubtful if many venture so far. Their migratory flights take place at night, so that a cover which to-day is barren and profitless, to-morrow may be full of scurrying brown birds busily engaged in boring

and honey-combing the soft mold in an eager pursuit of breakfast after their journeyings. In fact, these birds are decidedly nocturnal in their habits. The main business of their lives is transacted by the light of the moon, and during the day (when out of season) they take their rest from their midnight wanderings, basking in the sun in the openings among the birches of the side-hills, "lazying around" in the brushy ledges until their healthy appetites again demand attention. About sundown they brighten up and begin their hunt for food, flying out into the open glades to push their long noses into the moist soil of the brook banks. In Russia the sportsman takes advantage of this habit and about sunset places himself in the edge of the woods bordering some likely feeding ground, and facing the western light, shoots them as they fly out to feed. This is called "stand shooting," a method, I think, almost untried in America. My nearest approach to it happened one evening when with dog and gun I started for a nearby cover to see what was the prospect for sport with grouse in the morning. It was early in November, when after a long drought a fierce rainstorm had raged for sev-



AMERICAN WOODCOCK.

eral days, and as the breeze out of the northwest drove the broken rearguard of the storm seaward I came into the woods. The sun was setting and in the western sky the promise of better weather was heralded in the red and gold glowing on the cloud rims. As the daylight faded and the enclosing walls of fir took on an added gloom, I saw an occasional Woodcock drop into an alder swamp which skirted the edge of the woods. At times a pair, but oftener a lone straggler dashed silently across the sky from the wooded hills, and darted down to feed in the thicket along the brook, and for a short time there was good fun in the edges of the cover, taking them as they came in or letting my dog flush them and doing my best to "snap" them as they came up sharply outlined against the sky. It was uncertain shooting and hard to tell when the barrels were properly pointed. In half an hour I could not see to shoot, but went home content—two partridges and five 'cocks. I have tramped all day many a time for less, but I dare not say how many birds were missed in that short time. There was evidently a flight on, and I promised myself great fun on the morrow, but again, as all too

often happens in things of sport, the pleasures of anticipation were greater than those of realization, for when the morrow came I walked all day and although there were evidences aplenty of the presence of Woodcock, I found but one bird and got but one shot which was beautifully missed. (O, yes, I miss one now and then!)

But I must also mention a newer and more original method as developed by a friend—a practice not much in vogue as yet, but perhaps fraught with great possibilities. This gunner was on a ledge among our outer islands shooting “coots” late in October, when he saw a strange bird coming to his decoys. After some staring at the newcomer he awoke to the situation in time to send a charge of number two shot after him and succeeded in killing a fine Woodcock. I mention this as the only instance which I have known of a Woodcock being killed over decoys.

In his moonlight travels the Woodcock is apt to visit the cornfields or the orchards, even coming into the farmer’s dooryard. When crossing his lawn after dark the granger may chance to hear the rolling whistle and mayhap dodges

the flying form seen dimly as it dashes through the bending apple boughs into the darkness away. The bird may have been pulling angle-worms under the apple trees, for he is as fond of this kind of bait as is the Sunday trout-fisher. Mr. Longbill brings up in strange places when on his nightly rambles, even visiting the city gardens alongside some main thoroughfare of the town. He may be said to have some liking for civilization. Apparently he is more fond of a country partially under cultivation than of the solitary wastes yet unreclaimed. The Woodcock is rarely seen west of the Mississippi except in a very few favored sections.

What becomes of these birds during the hot days of July and August is an open question with many sportsmen. This is the moulting season, when it is probable that they leave the lowland bogs for the cool air of the hills and the never-failing springs which the "dog days'" heat cannot dry up. If so they show their usual good sense. Some sportsmen—and these mainly persons of veracity, that is, as gunners and fishermen average (for when the Wise Man says, "All men are liars," it must

be remembered that sportsmen are only human)—some sportsmen tell us that they have often shot woodcocks in the mountain bogs at this season, when no birds could be found in their usual haunts in the lowlands. Game laws were then almost unheard of or at best only honored in the breach by the larger body of the shooting population, and men's consciences permitted them to kill woodcocks in July and August! The birds wander back into their former homes generally in time to assist in the proper celebration of the opening day of the season, though sometimes waiting for the first "cold snap" to stir them out.

The more I hunt them the more firmly I am convinced that our long-billed friends are "mighty onsartin." They may be found at any time in the most unlikely and unheard-of place. I frequently find them on the top of a barren ledge whose only covering is low juniper bushes. I often cross this ridge in my partridge shooting (it lies between two of my favorite grouse patches), and seldom fails to disturb at least one or two 'cocks here each time. Probably they are only digesting their meals.

But who is this gray-bearded, wild-looking

man who comes striding through the tangle of alders and brush? Why that baleful light in his eye? The clouds of shifting, dancing “no-see-ums” flicker before his face—a colony of the little pests has gathered on his exposed neck,—the great grandfather of all the mosquitoes is at work sinking a well on the end of his nose, and a swarm of smaller pirates has settled on each brown hand, but all unmindful of these he strides on, with tense and mighty grip upon the barrels of his gun, for hushed is the tinkle of his pointer’s bell, and dimly showing among the alder stems he sees his dog, one foot raised, in statuesque pose, rigid and glaring into a small boggy opening just ahead. Another step the gunner takes when up with merry whistling goes the plump brown bird into the sunlight. The gun flies to the sportsman’s shoulder; a sharp report breaks the Sabbath-like stillness of the woods and through the thin mist of the nitro he sees the lifeless body falling to the ground. The small brown gnome of the woodland has finished his course. Now we know what all this means. This is the ever-glorious fifteenth of September,—“Woodcocks are ripe,” and for two months the man

has had this particular bird in his mind, watching it almost from the egg, protecting it from the "sooner" gunner, and looking forward to this blissful moment "even as you and I" have done each year, my brother of the "scatter gun."

Steady and swift as it is, his flight lacks the dash and headlong rush of the ruffed grouse when he bursts through all leafy obstructions to his course, nor is it commonly so long extended when the bird is flushed unless it has been much harassed. Usually he flutters through the interlacing boughs, rises just above the tops, dashes a few yards away and drops into the brush again. His flight seldom carries him out of the cover if it pleases him and contains plenty of food.

The Woodcock commonly lies close and furnishes great sport to the gunner who has a well-trained dog. For this game a dog needs a more than average good nose, therefore the puppy that promises well on Woodcock is apt to stand high in his master's estimation, ranking even before that other treasure, his twenty-six-inch-barreled "sprinkle gun," for replacing wood

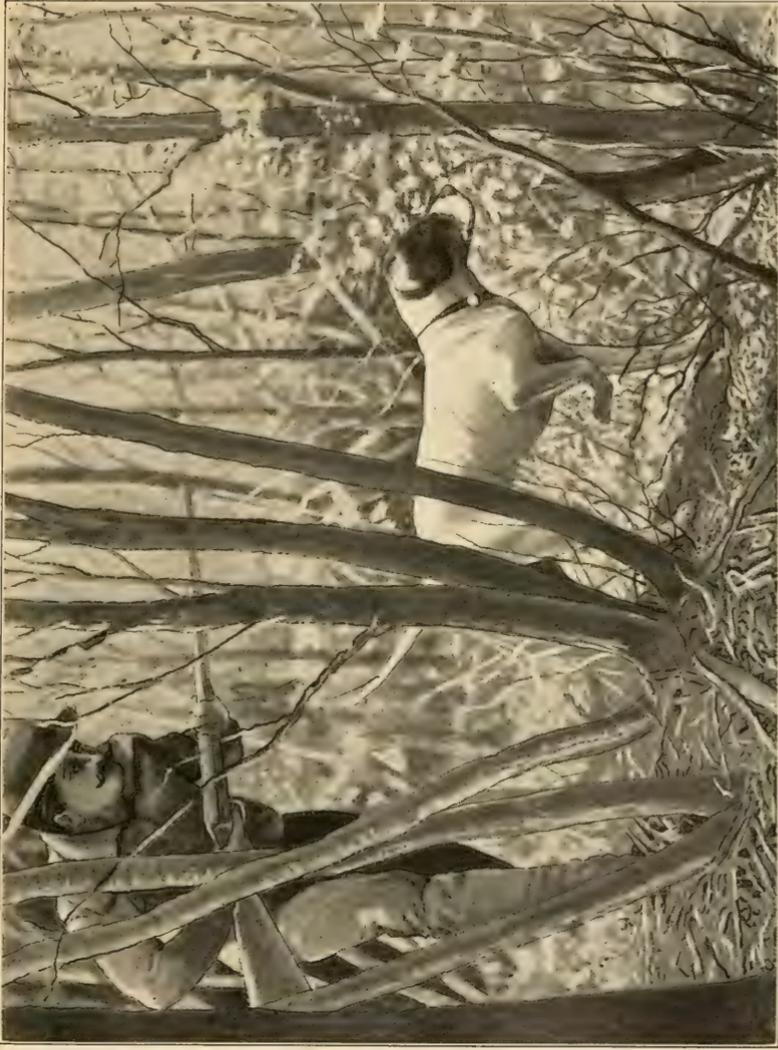
and iron is but a question of dollars and cents, but the dog—ah! That's another matter!

It is a pretty sight to see Mr. Woodcock strut along ahead of your dog, looking for all the world like a small boy stepping proudly off with his hands in the pockets of his first trousers. Suddenly he crouches on the ground—a leap and he has cleared the alder tops, hovering an instant to get his bearings or make sure he is clear of the brush, then away! He makes a pretty picture as he buzzes over the tops of the low growth, his head half turned, with watchful eye upon his enemy, and the merry whistle of his pinions growing fainter as he goes, but it is a more pleasing sight to most of us to see him shut his wings and come turning over and over to the ground after the little short-barreled gun has been well handled. Still, let that second's hesitating hovering pass unimproved and the chances are that he will escape.

The Woodcock loves the thickest, densest cover of the woods, where there may be no chance to raise the gun to the shoulder, the tangle of crossing branches catching the bar-

rels as they come up and effectually blocking any further proceedings until too late. Often the birds are trotting comfortably about in a growth of alders where a dog can scarcely penetrate, much less a sportsman do good work. In such places, before the frosts have taken the summer's heat from the still air of the woods, woodcocking is likely to be very warm business, but when the colder weather has driven them from their summer homes in the bogs of Labrador and the bracing northwest winds come down with their promise of more cold to follow, there are few shooting trips pleasanter than a day in the woodcock covers. Many a gray-headed veteran follows the sport as eagerly now as he did thirty, aye, forty years ago, when he made his first essay. I call to mind one poor fellow who went out for just one more try at the birds—he was seventy-one—and his summons came to him alone in the woods where next day they found him peacefully asleep. He had had good luck, his game-bag was full of woodcocks, and his face was as happy as a child's.

Probably woodcock shooting is the most popular sport with the gun which is followed in New England, yet why it should rank before grouse-



“He sees his dog, one foot raised, in statuesque pose, rigid and glaring into a small boggy opening just ahead.”

shooting is to me a puzzler, unless it is because a woodcock permits a dog to take more liberties. "Make a sport easy and you have made it popular!" Shall we give the first honors of the forest to the Woodcock solely because he allows his destroyer to tread upon his tail feathers before flying from danger? That seems to be his chief claim to the distinction, for he is admittedly inferior to the ruffed grouse in brains, speed and power of flight, and in lead-carrying grit, to say nothing of his smaller size. To my mind there is no bird in America to compare in game qualities with our ruffed grouse. But perhaps I am not an unprejudiced witness in this case. I know that it will take a long course of treatment to cure me of the "partridge habit," and once cured (if such a thing be possible) there will always be the danger of relapse. Right well I know which would receive my attention if woodcock and grouse were to rise together before my dog. Many a time the thunder of the ruffed grouse's flight has called me away from the woodcocks up into the birches on the side hill, leaving a fair chance of shooting "timberdoodles" for the much smaller prospect of capturing Br'er Grouse,

and I have known many a woodcock enthusiast to follow me in such case, despite the fact that my withdrawal left him undisputed possession of the cover. I am quite willing to give the 'cock the second place, subject, of course, to the "quail man's" protest, though for myself I think woodcocking requires more skill on the shooter's part than does the shooting of quail, due to the Woodcock's towering and twisting flight, and the generally thicker cover where Mr. Longbill is found. This does not apply to fire-slaughter as practiced in the south.

The American Woodcock is a trifle smaller than his European relative and of much darker coloration. To soothe our national vanity I will add that he is much smarter and more resourceful than the Old World product. The habits of the two are very similar. In color our bird is a warm reddish brown, mottled on the back and wings with jet black. Many feathers, mostly on the shoulders, of a pale blue-gray color. Most of the feathers of the back and wings are tipped with deep tawny yellow. On the breast a ruddier tinge which deepens on the flanks to a beautiful reddish- or golden-brown. The male bird is from ten to eleven inches long,

between sixteen and eighteen inches in extent, and weighs from six to eight ounces. The female is a trifle larger and the average weight may be an ounce or so heavier. Have heard from sportsmen of "Timberdoodles" weighing twelve ounces, but such birds are not common and I, at least, have never seen one. The largest Woodcock of my own capturing weighed nine and one-half ounces. When I brought him down I would have gambled that he weighed not less than a pound. I have seen one that, though not in plump order, weighed ten and one-quarter ounces, was twelve inches in length, and had a wing-spread of twenty inches. It was by all odds the largest Woodcock that I have ever seen and in good condition should have been a record breaker for weight.

Mr. Timberdoodle is an odd-looking bird. His striking personality will command the attention of anyone who may meet him. A plump and chunky body is he, with a head several sizes too large for him, set off by a long bill and a pair of dark, beady eyes, soft and full, placed high up and well back in his head so that he commands a wide range of vision and sees nearly as much behind him as ahead. It

is even said that at times he watches an enemy behind him so closely as to dart headlong into a tree trunk and kill himself. This statement probably belongs under the heading, "Interesting if true." Such cases are extremely rare. Most of us have too firm a faith in the bird's ability to take care of himself to believe much in this theory.

With fear and trembling I approach the statement I am about to make. Many fierce arguments have been provoked and much scorn and contumely have been heaped upon me because of it—but here goes: it is not commonly known among sportsmen that the American Woodcock will sometimes take to a tree when disturbed. I have seen two birds do so, and (dare I confess it?) I shot the first one as he sat. It was my first Woodcock and I needed him; also I was but fifteen years old—let these palliate the offense; moreover, the ethics of sport in that section did not then forbid the shooting of a roosting bird when it could be done. I know of six other instances, in each case the bird unshot at and unhurt, where reputable sportsmen have seen the same thing. It was in one case a woodcock gunner of long ex-

perience, who, when I had told him that I had seen a woodcock perched in a tree, listened with a politely incredulous smile, saying nothing, but looking—"Well, I may want to tell you a 'buster' to match that when I have the time to manufacture it." He is now convinced, for he has seen with his own eyes. I have in mind another case where a man killed one that was perching in an apple tree at dusk—shot him with a club, too—but there! I see that my reputation for truth-telling is entirely gone!

Yet why should not a Woodcock alight in a tree? He passes his entire life in the thickest tangle of the woods, and what is there strange in his settling on a limb if he likes? "But," said one scoffer, "the Woodcock's foot is not in the least fitted for the perching habit; he could never keep on a limb." Certainly he is as well fitted for it as a woodduck, a hooded merganser, a whistler, a goose, or an upland plover, and there seems to be no difficulty for the same people to believe that the snipe, his first cousin and much more a bird of the open country, will fly up into a tree when alarmed near its nest. The habit in the case of the Woodcock also seems to be more common dur-

ing the nesting season, when few gunners are in the covers and so are less likely to see this strange sight. Within a week I have been informed of two well authenticated instances of this fact, though probably it was the same bird in each case as the two happened within a few yards of each other and a nest is near by.

With us in New England these seem to be two great flights of Woodcocks in the fall, the opening of the season finding here only those birds which have bred in our borders. These we carefully gather, in order to make room for later arrivals, which are due about October tenth to twentieth,—the first flight. The second excursion comes about the time the first cold storm of the fall strikes. These later birds are from the extreme northern breeding range of the family and usually average larger in size and of lighter color than the local birds. Our russet brown beauty of September is much ruddier in shade than are these November visitors. It seems the rule among most migrant birds that those breeding in the northern ranges average larger in size and less brilliant in color. This statement as to comparative size does not apply to the “Labrador twisters”

of the veteran woodcock gunner,—the few stragglers picked up after the flights have gone by, which are mostly old males and extremely small. How they can twist and fly! If the average Woodcock had their ability the future supply of “Long-bills” would be assured.

My latest kill on Woodcock was on November 25th; but the fault is mine, for I failed to advance this record five days by making a beautiful two-cartridge miss on November 30th of last season and for two weeks later there was an occasional bird to be found, although there had been a four-inch snowfall in the meantime. I have known of their staying near an open spring hole even later than this. (Maine records.)

One word here on game protection: May the day soon come when all spring shooting shall be stopped: When the sale of game in the markets shall be prohibited: When the law shall everywhere regulate to a reasonable figure the number of birds which a man may take in a day's hunt: These laws to apply everywhere that game is hunted. These things must come soon or the question of game protection will be solved for good and all—and not to your

wish and pleasure either, my brother sportsman. I am glad to say that much of this has been accomplished in my own State, and nothing that has been done before has been of so great benefit to the cause of game protection and propagation. The good results of closing the markets have already been proven in the marked increase of the ruffed grouse in our covers. Though but a few years' time has elapsed the advantages have been conclusively shown and the future promises even better things.

But big bags of Woodcocks are growing more and more uncommon. Even in covers once rated as "sure finds" and held good for fair shooting under any and all conditions the "blank day" is not the uncommon thing it once was. If any of our game birds should be protected, and of course they should, surely the Woodcock's need is greatest of all. The family raised each season is very small—rarely are there more than four in the brood—and it is no wonder that the species is growing yearly less numerous when we remember how persistently they are hunted from the British Provinces to the Gulf, having no peace in any part

of their range except during a few months of spring and early summer in the north. With the exception of one State there is no protection whatever for Woodcocks in the South.

They are certainly decreasing with terrible rapidity. For the season just passed I am unable to find in a tolerably large acquaintance of brush gunners one man whose total of Woodcocks was not materially less than in any former season. My own score was less than half the usual number, while of ruffed grouse I captured a half more than in any former year, and I think this was a general condition of things with the shooting fraternity in this section. With all the hunters' demands upon him Mr. Bonasa Umbellus is more than holding his own.

Of course, in the case of the Woodcock or any migratory bird, legislation by any one State or section of the country can do little for its preservation, so that everywhere bird lovers and sportsmen alike must work together, and that right soon, if they would save this noble game bird from extinction in the not far distant future. Brother sportsman, wherever you are, will you lend a hand?

WILSON'S SNIPE. AMERICAN SNIPE.
"ENGLISH SNIPE." "JACK SNIPE."

(*Gallinago delicata*.)

Through a common and widespread error this American citizen is often called the "English Snipe." This last is one of the species of the Old World, an extremely rare visitor from Greenland, to which place it occasionally strays from Europe. The difference between the two birds is slight, however, and in size, form, habits and general appearance they are nearly identical. The distinguishing points, then, are these: the European species, poor thing, has only from twelve to fourteen feathers in his rudder, and the barrings on the flanks and axillars are much fainter than is produced under a republican form of government. Our own fortunate fellow citizen (as you have probably noted a thousand times when they have risen before your gun) is the possessor of from sixteen to eighteen tail feathers and heavy black barrings on the flanks and axillars, but it is the fashion with some gunners to suppose when they have taken an exceptionally fine bird that

they have captured an "English Snipe," thinking he must be a "better" bird than our own.

Wilson's Snipe, under his many names, is widely and favorably known in this country. His winter range takes him to South America and his spring flights carry him far into the north. This last movement sometimes commences in March and is usually over by the last of April or the first of May. They remain with us later in the fall than do any other of the shore-birds. The writer has shot belated travelers after Jack Frost had placed his signet upon all the feeding places and "pondholes" above the reach of the tide.

The Snipe has a peculiar habit called "drumming," not widely different from the woodcock's spring-time vagaries, and, like these, performed when on the wing. This is said to occur both during the spring and fall months, even more often in the latter season. As to this I cannot say, since few Snipe are seen in my section during the breeding season nor is spring shooting looked upon with much favor here, probably more because of game scarcity at the time than from any unusual virtue of our citizens. Thus far the writer has seen this per-

formance but once, and then in the legitimate shooting season. It was a bright October day when a single Snipe, the sole dweller in the marsh-land near by, entertained me in something after this manner: The bird mounted upward fully one hundred yards, flying at great speed in wide circles, then suddenly dropped like a stone almost to the earth, his wings half closed and moving rapidly. This was repeated several times. The "drumming" sound is supposed to be due to the action of the air upon the stiff wing quills in their rapid motion, and the music thus produced is very like that made by the small boy when "humming a nail." At times a number of Snipe join together in this performance. When this occurs they are apt to be very wild and difficult of approach, so we are told.

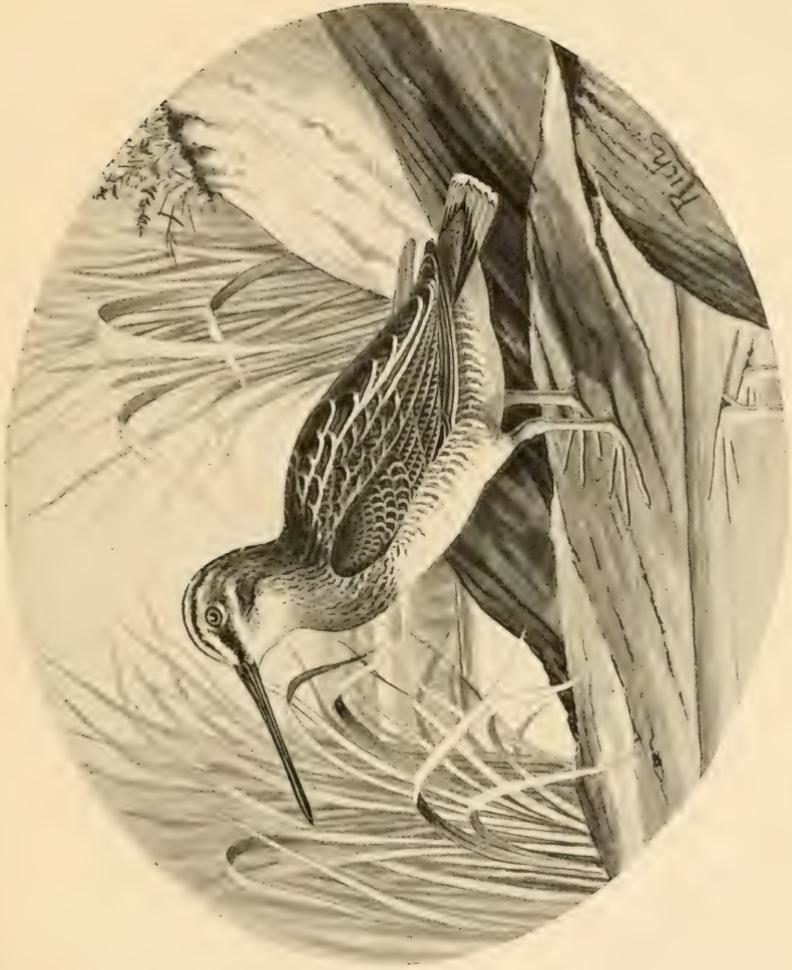
The Snipe nests in some dry tussock in the midst of the marsh, usually laying four eggs, of a grayish green color, splashed with dark brown spots. The young generally appear during the latter half of June. A few of these birds breed in the extensive marshes about the Maine lakes, wandering into the tide-waters late in September, but the best snipe shooting

on these coasts comes after one or two sharp frosts have closed their free lunch in the swamps of the interior, driving the birds from their summer ranges and reminding them that it is time to look for pleasanter quarters further south. They form no large flocks, coming along in "wisps" of two or three, mostly at night, but, I think, not infrequently by day. Authorities are divided as to this bird's habit of migration, some saying that the Snipe always migrates by night, but from my own observation I am satisfied that he travels in the daylight also. I remember seeing a flock of seven (the largest number that I ever saw traveling together) arrive in the marsh in mid-afternoon, and my companion and I had the pleasure of making it our own "personally conducted excursion" before it left. What seems most remarkable to us was the fact that when we flushed them, after making a few circles in the air, they would come back to our whistles just as a bunch of plover might have done. This is almost the only occasion on which I have seen them pay any attention to a call, and presume that then the little family did not want to be separated—nor did we our-

selves want it split up, so, apparently everybody was pleased for once.

The Snipe is a fine fellow and a worthy acquaintance for any gunner. He usually lies well to the dog and gives forth a fairly strong scent which a good dog will perceive at some distance. He closely resembles his highly esteemed cousin, the woodcock, in his mode of life, getting his living by boring in the mud of the swamps and boggy places, both sea marsh and inland, feeding on the worms and larvae found there just as the woodcock does in the moist places in the upland and the woods. I have often known of Snipe being shot in a woodcock cover, and in one instance it took six cartridges to bring him to grass—this, too, by good woodcock shots. That they were greatly surprised at seeing him there and at hearing his indignant “Sca-a-a-ipe! Sca-a-a-ipe!” as he dodged about among the branches may have had something to do with their poor shooting. It may also be that the thickly growing brush added a few extra aerial gymnastics to a flight which is under any conditions sufficiently erratic for most wing-shots.

As a rule it is in the spring that I meet Mr.



SNIPE.

Snipe in the woods, along the brook-banks and in the drain-holes in the fields; perhaps because the marshes are then swept bare of cover by the ice of winter. He is commonly content with the salt marshes alongshore in the fall migrations, but at any season will go into any place, whether marsh or upland, which can furnish him a square meal and a soggy, moist soil for his long bill to probe and bore into. You may meet him in many a seemingly unlikely spot: I remember how near I was to losing a fine shot at a Snipe because of too little confidence in my dog,—a youngster,—who was apparently pointing a flock of hens in a farmer's dooryard, within twenty yards of the house and a mile at least from any snipe country. The puppy stood firm and refused to leave his post until his slow-witted master should come and do his part. I am glad to say that I did not disappoint my dog that time.

When in our New England marshes one of October's perfect days follows a sharp frost—and if the wind comes briskly out of the north-west it is no harm—such a day means that it is time to visit that stretch of mire and salt grass which you know affords the best cover for Snipe

and that there is a fair prospect of getting a good bag of birds, provided, always, that you can handle a gun with the skill needful to cut down the squeaking gray streak which doubles and twists away in front of you. He gets under way about as soon as any bird that flies, and unless he lies close you must do the very quickest and most accurate work to stop him. There is, in my humble opinion, no marsh gunning to be compared with snipe-shooting over a good dog, with birds plenty and not too wild. As a rule they do not like to leave a good feeding ground and so allow the sportsman to come close before flushing, thus a man who knows his ground may make a fair bag of birds without a dog; but, to make an Irishman's "bull," the pleasure is doubled when shared with your four-footed chum, for his every lithe movement, graceful line and beautiful pose is plainly seen.

Probably no bird which comes under the sportsman's eye has such a reputation as a dodger. He may throw summersaults sidewise or endwise, or he may travel as straight as a honey-laden bee, but however he may steer his course he will have a full head of steam on and

move plenty fast enough, be sure of that! When he flushes close to the gun he is very apt to think that a little irregularity on his part may add interest to the occasion, and in such lines he is very much at home. Some of his curves would make a "ball tosser's" fortune. If, however, we wait until the cunning rascal has twisted his little twist and finally straightened out for some more healthy scene we may cut loose with a fair chance of gathering him, for he is not "hard lived" and a few pellets will stop him. But even this plan will not always bring about their destruction, for some old veterans of the bog will corkscrew for a hundred yards with their heads over their shoulders and their keen eyes following your every movement, dropping suddenly to earth and running a short distance to flush even wilder next time. Such citizens are hard to deal with; still, we can work down upon them with the wind and so have a larger percentage of cross shots where it is only a question of proper leading, or we may take some day when there is a strong breeze blowing and work with the air in our faces. We shall thus have a fair chance, as they invariably rise against the wind

and do not then twist so much, often offering for a moment an almost stationary mark, which, if you are a "snap shot," makes your opportunity. May you improve it ever! My own system is to snap at them as quickly as possible and make ready at once to miss another. For myself, I prefer to work across and against the breeze, thus giving the dog more advantage. The dog's part is ever more than half the pleasure for me—perhaps because it is so much better done.

You can see many signs of their occupancy as you trudge through the mire—the borings in the black, oozy mud, the "whitewash" where they have fed—and in the stubble where the farmer has cut "salt hay" for bedding for his cattle you start them singly and in pairs, keeping dog, gun and yourself well occupied in downing the swift-flying "longbills" which have arrived during the night. No other of the "bay snipe," as the game waders are termed, furnish so good sport for dog and gun as does Wilson's Snipe. Probably the Grassbird ranks next in game qualities, as the others are not to be hunted with a dog but are shot over "stools" or by stealthy approach. If you have hunted

the place much you will know just where to find the birds, and have in mind every stretch of mud, pondhole and clump of grass where you have found them before. Sometimes you may see the Snipe arriving in the marsh. Suddenly he appears to you—where he came from you know not—but there he is! With rapid wing strokes he dashes around the marsh a hundred yards up, seeking a suitable place on which to rest and feed. His shining wing flickers in the sun as the light colored under parts are brought into sight and covered again, and he shows up sharp and clear against the blue October sky as he goes darting over the tall waving grass and stretches of blue water, circling about in silence—a marked contrast to any other shorebird, which would have called and whistled his arrival to every dweller in the marsh, both friend and foe. Small success attends your most alluring whistle for rarely does the Snipe pay attention to any enticing call. Our hero is unsocial and seldom cares for society, even of his own aristocratic set, rarely traveling in bunches of more than three birds and more often coming alone. Now he has found a place to his liking and half closing his

wings he pitches headlong downward, almost perpendicularly to the ground. Surely he must be dashed in pieces on the earth—but no,—a bending of his body, a sudden spreading of his wings when only a foot from the ground and he alights upon his feet as gently as ever thistle-down rested upon the summer sea. A wary glance about him, and satisfied that all is well, he begins feeding.

Now after him! Across the narrow creek with its slippery, shaky edges, and the brown water hurrying seaward with the falling tide. Carefully, now! It is deep here. The pointer plunges in and with half a dozen rapid strokes gains the other side. Balancing on grassy hummocks which quiver beneath your tread you follow him. Fifty yards ahead there is a small “pond-hole,” margined about with black mud and short, red-topped grass, and this, you are sure, is his journey’s end. The dog is well in advance, going along with a springy, slashing stride, but he pulls up short, almost “turning a handspring” in his sudden stand. You approach and wait, with nerves a-tingle, for the bird to flush, then order your dog on, only to find that he will not move.



A GOOD SNIPE COUNTRY.

At this you beat up the grass in front and on either side, quartering in all directions, but still no Snipe, and in wonder and disgust you are tempted to give it up, your faith in your favorite sorely shaken. But the dog stands firm, and just here you plunge thigh deep into a hidden drain-hole. "Scaipe! Scaipe!" Up between your feet with startled squeak springs the object of your search. Away like a streak the little gray imp goes, darting, dodging and zig-zagging, now right, now left, and all the time adding to the distance between himself and the threatening danger. You wrench yourself up to the solid ground with a desperate effort and pull yourself together, for it will never do now to let him get away unscathed, and when by some unaccountable accident you

"Hustle him down wi' a slug in his wing,"

(for they do sometimes blunder into a charge of shot), before he is added to the collection in your game bag let us look at his markings and peculiarities. The pup has retrieved him beautifully, sitting up to deliver the prize into your hand with scarcely a feather ruffled. You handle him with much satisfaction for he is a good bird and you feel that you have fairly earned

him. He may weigh six ounces if appearances count for anything. He is ten inches or so in length, and in extent about eighteen inches. His head is mainly black with a strip of pale yellow ochre over the crown, and on each side of the head another stripe of the same color running to and above the eyes. Neck all around streaked with black and pale brownish yellow, the black predominating behind. The wing quills and upper coverts are brownish black, these last with tawny reddish and yellowish markings. On his back the same dark brown color, the scapulars, edged with golden yellow and chestnut, making long stripes on each side when the bird is at rest with closed wings. The rump is black, the feathers tipped with white; inside of wings, axillars and the flanks white with regular barrings of black. Tail feathers black, tipped with a rich chestnut band, which is again divided by a narrow black line, and the ends of the feathers lighter chestnut, fading to a whitish hue. His belly is white; throat and breast yellowish, with straggling lines of dull brown.

Let us hope that you will appreciate him at the table. If you are a judge of the good things

of life there is little room for doubt that you will, for at any season the Snipe is tender and of good flavor.

And so the sportsman tramps cheerily across his mucky pleasure-ground, his eyes alight with a soul-satisfying content as his dog careers about in graceful quartering, head high and tail a-switching. No fear that he will pass a single twister—not he! Oho! Another one! Mark that sudden swerve up-wind—those quivering nostrils as he “snuffs the tainted gale.” And now, like the work of some grand sculptor, he stands motionless in the open sunlight, beauty and life in every line and curve, his muscles tense and rigid, awaiting his master’s coming. No less eager than his dog, and hastening as fast as hip boots and sucking mire will allow, the sportsman moves up. He gets himself into position to shoot quickly, tests the safety catch to be sure his weapon is ready, and then chirrup to his dog to move in. Whiz-z-z! Something streaks it from the grass and mire just ahead of the dog—“Scaipe!—Scaipe!”—a rasping note emitted from a small form fast turning out corkscrews of ever-growing distance. Bang! Bang! May the recording

angel turn a deaf ear to the all-too-energetic expressions of the sportsman, who is gazing earnestly into space before him with disgust in every lineament and blistering eloquence hurrying from his tongue! Two empty cartridge cases idly smoking in the mire represent another waste of ammunition, and still the would-be slayer stares, unable to believe the evidence of his eyes. Yet the reason for his failure is not far to seek—our friend, as someone has beautifully said, has “shot zig just as the Snipe turned zag.”

There is no fear that the sportsman of the east will deserve opprobrium because of too much snipe-slaughter. That is hardly possible under our game conditions. Here are no such chances as the spring flights afford our western brothers. Somehow Snipe are rare in that season, and even in the fall months a dozen Snipe to a gun in a day is a good killing in most New England marshes. Still, with the “yellowlegs” and “grassbirds” and on occasion the stray teal and black duck, our gunners will make a satisfactory bagful. To many the uncertainty as to what the charge may be unloosed at next lends an added charm to

marsh gunning, but for myself, my shooting ability furnishes all the charm of uncertainty needed.

THE BROWN-BACK. DOWITCHER.
RED-BREASTED SNIPE.

(*Macrorhamphus griseus*.)

At certain seasons this is a common bird all along the Atlantic coast line, choosing the long stretches of sandy beach rather than the home of Wilson's snipe in fresh water bog and salt marsh. These birds are but little known in New England save on the seashore, where during the migrations they are for a few days abundant, then are gone and nothing more is seen of them until the next flight arrives. They appear on our beaches on their northward journey sometimes during the latter half of April though oftener late in May, and stay with us but a day or so at most, returning to the south more leisurely, generally in August. They breed far away in the north and in their fall migrations often follow the retreating sun into the southern hemisphere, journeying southward to Brazil.

Unlike Wilson's snipe, which travels in small bunches of two or three birds, or at the most the members of a family making up the party, the Brown-backs fly in large flocks more after the habit of the sandpipers, which family they resemble in many other particulars.

Less wary than the average of the shorebirds, ordinarily but little difficulty is experienced in getting within shot range. They fly in solid masses and their flocks in close order offer the best of chances to the shooter whose ambition is to make a big bag of birds, so that they are killed in great numbers if the gunner happens upon them during their short stay on our coast. All things considered it is fortunate for them that they arrive unexpectedly and depart without notice after no long stay. Indeed, it is a matter for wonder that the shorebirds were not exterminated long ago. It would almost seem impossible to keep up the supply in the face of the gunner's demands, especially when we remember how small are the families raised.

The fall migrations do not bring so many of these birds upon our shores as do the spring flights. It may be that the returning tourists pass to the westward of us, or perhaps out to



BROWNBACK.

sea; but whatever the reason the fact remains. Those which do visit us are less inclined to hurry their departure than in the spring when untrammelled by young birds of limited flight powers.

If the gunner's good genius leads him to the beach on the day of their arrival he may chance to have some sport that will long be remembered. Down on some long sandbar in the early morning, snug in his shallow pit or grass-hidden blind with his life-like bunch of decoys set twenty yards or so away, the lucky fellow is almost certain to make a good bag of birds. In the air their flocks are the most compact of all the bay birds, and in search of food they pass over the beach and waves at from ten to fifteen feet above the surface. Their migratory flights are often made at a considerable height, though if a whistle can reach them they are apt to come down for investigation. Hearing the mimicry of their own notes and anxious to aid those who have been cut down by the discharge they will return to the decoys not once but many times until the flock has been sadly reduced.

In the west there is a variety of this bird

averaging slightly larger, a little darker in color and having a somewhat longer bill, *Macrorhamphus griseus scolopaceus*. This is as rarely taken on the range of the eastern variety as is the eastern bird in the country of his relation, but if they chance to meet they travel together in most cousinly fashion.

Our eastern bird is marked thus: above, black, varied with reddish brown, tawny yellow, and on the back with white; these last colors mainly on the tips and edges of the feathers. Top of the head dusky; a whitish line running from the base of the bill over the eye; a dusky patch extending from the bill to the eye. Throat, breast and sides russet brown and reddish, paler underneath and with dusky marks and barrings. Tail and its upper coverts black, with white or light reddish barrings. Rump white, showing sharply as the bird flies. Bill and feet greenish black; feet slightly webbed, so that the bird, like most shorebirds, is a fair swimmer at need. The female is similarly colored though a trifle paler and is a bit smaller than her mate. Though not so "stocky" in figure, the Brown-back is altogether snipe-like in appearance.

The length of this species is from ten to eleven and one-half inches; its extent from seventeen to nineteen inches; bill from two to three inches long, varying much in specimens. A prime favorite with the shore gunner and a fine table bird, tender and well flavored.

THE STILT SANDPIPER.

(*Micropalama himantopus.*)

Supposed to be found in all parts of the continent, this is a rare bird in any part of North America and of even more uncommon occurrence westward of the Rockies. This species breeds in the summer range of the family in the far north and in winter goes away to the south with the other shorebirds into their ranges of the West Indies, Central and South America. As a rule it travels in small flocks of its own kind or associates with the dowitchers and lesser yellow-legs, to the advantage of both these species, for the Stilt Sandpiper either has less confidence in mankind or is gifted with a more critical taste in music and is not so readily deceived by the marsh gunner's whistle as are its friends. In its nesting, food and life habits

very similar to the little yellow-legs. Very few nests have been found, however.

The summer and winter plumages differ considerably from each other, the breeding dress being quite like that of the brownback while the winter bird is mainly clad in ashy grays and white. Above, the summer dress is dusky or black of varying intensity, the edges and tips of the feathers marked with white or reddish yellow. A dusky line running from the eyes to the bill, and above the eyes a streak of light brownish red. Tail feathers gray, whitening on the edges, and sometimes in the centres the same shade. Upper tail coverts white with black bars. Wing quills dusky, blackening at the tips. Below, reddish with black and white barrings and streakings; bill, legs and feet dull greenish black. The bird is about eight and one-half inches long; in extent from sixteen to seventeen inches.

An odd-looking bird whose long legs make it merit well the name of Stilt Sandpiper. It can hardly be mistaken by anyone having an acquaintance with the family.



STILT SANDPIPER.

BAIRD'S SANDPIPER.

BAIRD'S SANDPIPER.

(*Actodromas bairdii*.)

Though probably not so rare here as commonly supposed, this sandpiper is nowhere numerous along the coast of North America. It is generally distributed throughout the interior of our country, and while very rare on the Pacific coast of North America south of Alaska, is said to be a regular visitor to the west coast of South America.

This variety differs but little in its habits and mode of life from our better known "peeps" except that as a rule it travels in smaller flocks and is less dependent on mud flats or marsh for its living. It is as much at home in the mountain pasture or prairie land as anywhere, and like the "upland," is content to dwell in the highlands, far from ordinary shorebird haunts. In such places its food is of grasshoppers, bugs and berries. In the east, Baird's Sandpiper is found in the company of any of our own varieties.

This bird breeds in the Arctic regions arriving early on the the nesting grounds, and laying

four eggs for its contribution toward the continuance of its race.

In appearance this species is very near to the white-rumped sandpiper, with the same general scheme of coloring though of grayer tones and with dusky instead of white on the rump as in the other. The two are close together in measurements; if there is any difference Baird's is a trifle the smaller, being about seven inches long and about fifteen inches in sail spread. The edges of the feathers are lighter—reddish yellow in this bird—and the feet and legs are black. The young bird in August and the old bird in winter dress are even paler, and at any age and in any plumage Baird's Sandpiper is noticeably lighter in color than is the white-rumped. But if there is any doubt as to the identity of a specimen the white or dusky color of the rump will place the bird at once. The only other "peep" likely to be mistaken for this one is the "grassbird," or pectoral sandpiper, which is considerably larger and has darker centres and ruddier edges to the feathers of the upper parts.

THE "PEEPS."

SEMIPALMATED SANDPIPER.

(*Ereunetes pusillus.*)

LEAST SANDPIPER.

(*Actodromas minutilla.*)

WHITE-RUMPED SANDPIPER.

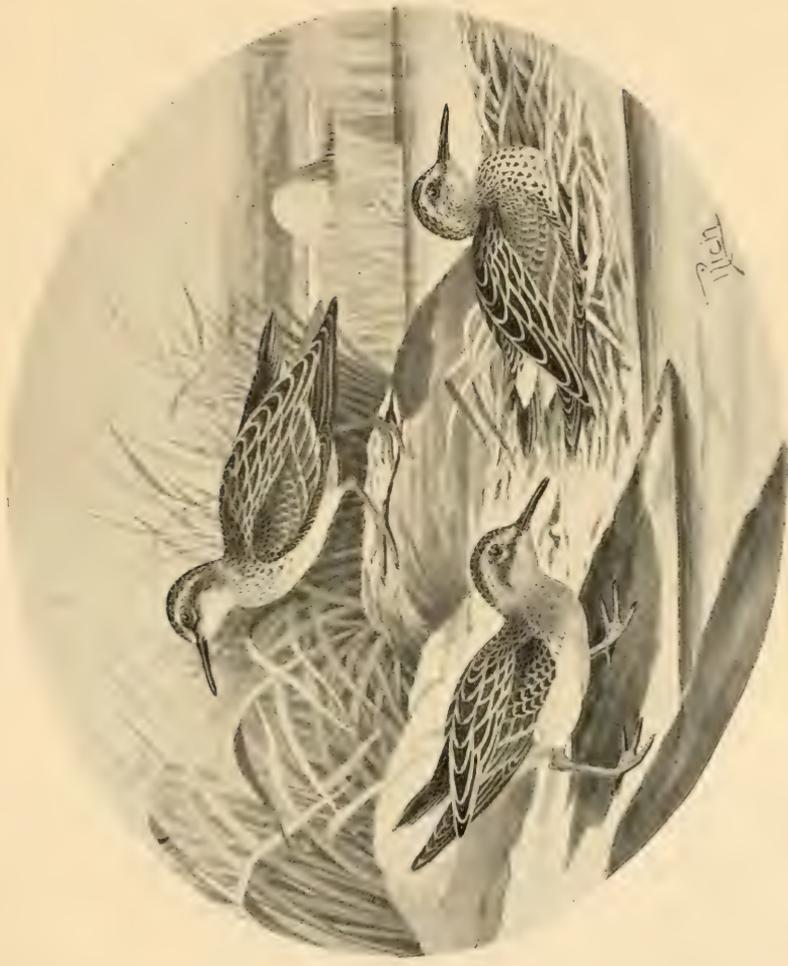
(*Actodromas fuscicollis.*)

What will become of the beginners in the art of wing shooting when the little "Sand-peep's" gentle "peet-weet" is no more to be heard along the muddy banks of our marshes and tide-waters? This is a grave question for coming generations to solve, for the poor persecuted little "peep" furnishes the object lesson in the very first school—the kindergarten, as it were—of the shotgun crank's education.

Gentle, confiding and unsuspecting in their nature, their trustful simplicity is the cause of great loss of life among their close-flying flocks. The small boy with his ancient musket has wrought great havoc in their ranks, and even the older gunner sometimes takes a post-gradu-

ate course long enough to get the material for a "sandpeep pie." Poor little things! For the one mouthful of goodness which makes your small bodies thus must you suffer!

Out in the marsh grass when the late summer has come, during the latter half of August, for a short time the flocks of fleet-winged little birds come scurrying in with gentle, flute-like piping, flying in from outer islands and barren ledges where they have rested during the high tide. Now the fast receding water is leaving bare the soft black ooze of the "flats," full and overcrowded with snails and tiny marine creatures, a veritable storehouse of good things to be had for the taking. Against the watery background their white bodies gleam an instant, and the little fellows show like a thin wreath of spray borne on the wind. As they dart in erratic flight another turn brings the dark backs into view, and next second they are lost as they skim across the patches of grass just beginning to show above the tide. Presently they "pitch" in a sheltered, muddy cove, and in their heedless innocence may have alighted almost at the feet of their enemy. At once they scatter and begin to feed, running



SEMIPALMATED SANDPIPER. WHITE-RUMPED SANDPIPER.
LEAST SANDPIPER.

prettily with nimble and graceful steps over the slimy surface which bears their light forms easily. Mark how their pursuer flounders, well nigh mired in the chase. At length a considerable number being together for a brief instant, he fires. Another barrel when the frightened little creatures are in the air, and for a hundred yards the cripples drop out and struggle to get ashore to hide in the grass.

The average gunner as he happens upon these little flocks seldom troubles them. If the beach be covered with their squads and companies he may take aim along his gun barrels at their most compact masses and figure out the probable destruction which the pressure of his finger might cause, then throwing the gun into the hollow of his arm, goes out of his way that he may not disturb their happiness. But all too often comes the deadly flash with its fatal effects, and many are killed and others, less fortunate, are crippled, to fall behind the flock and with their last strength struggle ashore to await their release.

On the high tide they collect on the ledges standing out of the water and huddle in a bunch on the sunny side. They love to cuddle down

on the drifting "thatch" in the quietest corners of the marsh. When pushing for rails the gunner often interrupts their noon-day nap, almost driving his craft over them before they take wing, returning at once when the boat has passed.

The spring migrations take place during April and May, and they nest far into the north. It is usually as late as August fifteenth before they begin to arrive in any numbers in New England marshes, where they stay well into October.

The most common of the Sandpipers here are the Least and the Semipalmated. Both these little fellows range over a large part of our hemisphere, the latter travelling from the West Indies, Central and South America to the extreme north, mainly on the eastern slope of the continent. The Least Sandpiper is even more of a wanderer, for besides covering the same wide range of country as his cousin he finds time to visit Europe occasionally.

The Least Sandpiper as we see him in his summer dress is colored above with dusky brown and black through the centres of the feathers, the edges tinged with reddish brown

and white; rump blackish; tail feathers dusky, growing grayer toward the outer feathers; wing quills dusky; a blackish line from the bill to the eye, and above this a white line. Below, mainly white. Dusky specklings on a pale reddish brown ground on lower throat, breast and neck. Upper throat white. Feet dull greenish. Iris brown. Length about five and one-half inches; extent nearly eleven inches.

The Semipalmated Sandpiper is much like the foregoing in color, and the two are often found together. This bird is a very little larger—perhaps half an inch longer—and somewhat grayer in coloring, but in any case may be known by the partial webbing of the toes. This species also nests northward to the Arctic shores.

The White-rumped Piper is almost large enough to be worth shooting. It is from seven to eight inches long, with a wing spread of fifteen inches. This is the sandpiper most commonly found in the marshes during September and October, here associating with the "grass-birds." It is also a common species inland, and everywhere one of the most unsuspecting of the shorebirds, paying no more heed to an in-

truder than polite curiosity demands. When found on the seacoast it is generally met along the rocky shores, and from this fact is called by many shore dwellers the "rock peep" to distinguish him from the smaller species, citizens of the "mud flats." He is marked much like the others but a trifle grayer in color and has a greenish-black bill and feet. Breast, front and sides of neck yellowish brown, streaked with dark brown and black lines. Above, dusky brown and black, with lighter edges to the feathers; upper tail coverts pure white. Tail feathers blackish, growing lighter toward outer feathers, these white-edged. Below, white, spotted and streaked with dusky and brownish lines on the sides. This species is common on the eastern half of our continent and is occasionally found in Europe. It does not breed in the United States, but goes far north, as is the habit of the family. This bird is also called "Bonaparte's Sandpiper."

THE GRASSBIRD. PECTORAL SAND-
PIPER.

(Actodromas maculata.)

One of our commonest marsh birds. Few of our feathered friends are more widely known than is the Grassbird. He is found at the different seasons in North, Central and South America, the West Indies, Greenland, Europe and Asia. With us he is but a migrant visitor and is not known to nest within New England's borders, or for that matter, elsewhere in the United States. In fact, very little is known of their breeding habits as there are very few records of the finding of either nests or eggs. It is supposed that they nest in the Arctic regions generally.

They begin to arrive in our latitudes on their southern way during August, and their flocks continue to arrive and pass along until the severer weather of the fall commences, by which time they are all in the sunny south and safe from any danger of frost bite. Their migratory flights commonly take place at night, as is the rule of the bay birds. They come along

in flocks averaging from twenty to fifty members, rarely more, and split up into small parties upon arrival in our marshes, gathering again into larger bunches when they resume their travels.

The Grassbird is swift of wing and snipe-like in many respects, lying well to the dog and affording good sport when so hunted. From this similarity of habits, their proper behavior in dog society, their occasional darting flight—sometimes dodging from side to side when much alarmed—they are called “Jack-Snipe” by many gunners, a term more widely applied to Wilson’s snipe. Where this name is given the Grassbird the true snipe is usually called the “English snipe.” The Grassbird is known by many other names in the different localities which he visits, among them “Grass Snipe,” “Marsh Plover,” and “Meadow Snipe,” most gunners insisting on calling him a Snipe, except in New England, where he is generally known as the “Grassbird.”

In times past these birds were not much molested, being thought beneath the gunner’s notice and not worth the ammunition needed for their destruction, but in the present game scar-



GRASSBIRD.

city conditions are changed, and now, since the Grassbirds are the most numerous species of the "bay snipe" in New England marshes, as a consequence they pay the heaviest tribute to the sportsman. On ordinary days of shore-bird shooting there are nearly always more of this species in the marsh gunner's game bag than of any other. Of course there are never-to-be-forgotten days when "it rained beetle-heads," or the "goldens" were out in force, but as luck generally runs this statement will hold good. Ordinarily there is small difficulty in approaching a flock; the younger birds are especially tame and even curious, often coming within a few yards of a gunner to examine the disturber of their peace; but again the old campaigner will dash away upon sight with loud, derisive whistling and a darting flight, like the snipe's, which, with his smaller size makes fully as difficult shooting as does Mr. Longbill.

The Pectoral Sandpiper, as this bird is called by the scientist, is a lover of the low-lying wet meadows, either of the salt- or fresh-water marshes, seldom found on the sea beaches or the muddy flats, but when the salt hay has been cut

in the sea marshes of New England there are usually many of this family running about, probing into the soft, oozy soil, and feeding on the worms, snails and slugs so abundant there. They are very welcome to the gunner since they are good table birds, fat and well-flavored at any season. Grassbirds come readily to the gunner's call, single birds or flocks coming equally well to the imitation of their note. Their whistle is almost identical with that of the smaller sandpipers and the two are often found in company.

During the courtship the male bird inflates the skin of his throat and breast to such an extent that it hangs down upon his breast like a bag. From this circumstance comes the name, Pectoral Sandpiper. Yet he is probably no more "puffed up" at his success than is the human bridegroom at the same important epoch in his career.

The Grassbird's clothing is of sober tints; the top of his head brown with black markings, these mainly in the centres of the feathers; throat white; sides of the head and around neck pale yellowish brown with small black streaks running through it. Superciliary stripe of white,

loral patch dark brown. Scapulars and tertiaries dark brown and black with buff or whitish edges. Wing coverts light grayish brown with lighter, even whitish, edges to the feathers. Primaries dark brown. Rump and tail coverts brownish black. Tail with dark brown central feathers, growing lighter toward the sides, outer pair margined with white. Feet and legs dull olive. In length from eight to nine and one-half inches, and ranging from fifteen to seventeen in extent. An overgrown least sandpiper in appearance.

THE PURPLE SANDPIPER. "ROCK-
WEED BIRD."

(*Arquatella maritima*.)

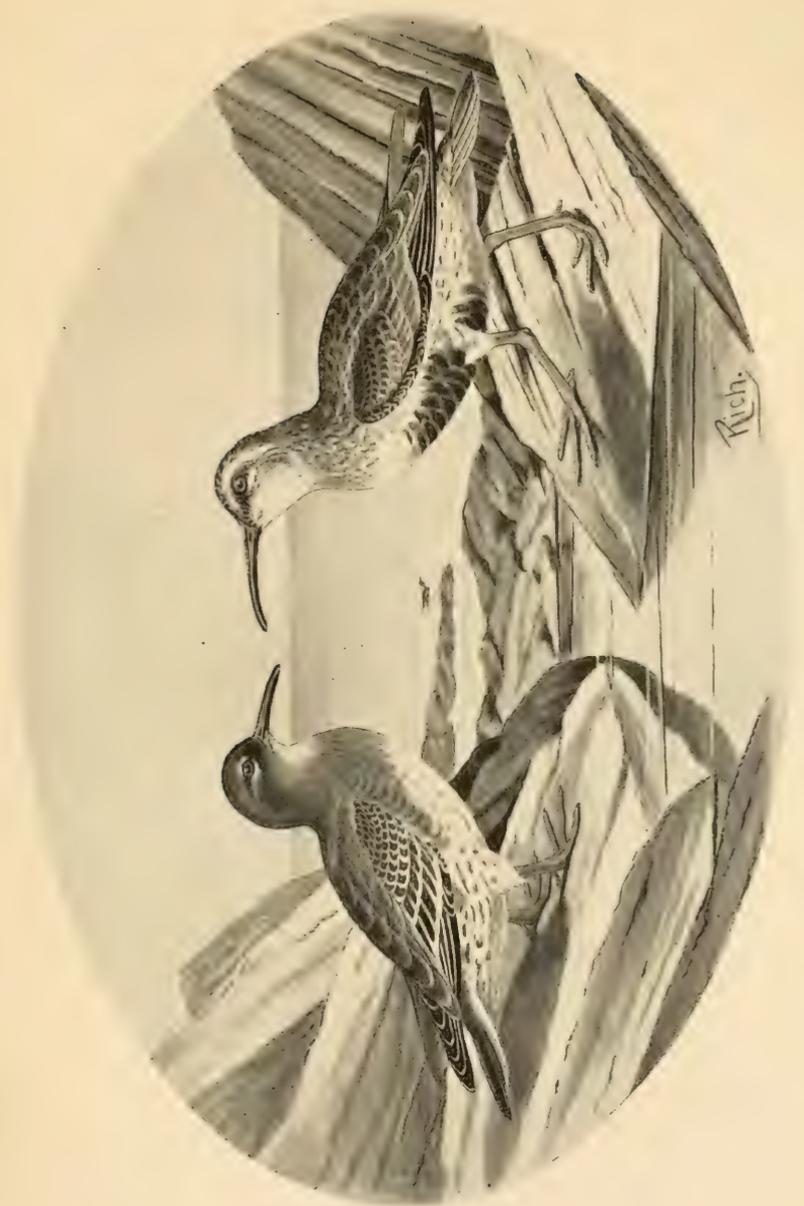
With the winter comes the Purple Sandpiper out of the north, seeking warm weather in January and February on the New England coast! But then, he has his own ideas as to climate.

This is a dweller on the sea ledges, truly named the "Rockweed Bird," for on the brown and slippery masses of seaweed on the deep-water ledges he finds the snails and marine creatures which furnish his table. Only on the

shores of the outer islands where he has no company but the swash of the waves and the seething hiss of driving snow as it is swallowed up in the sea is the Purple Sandpiper at home. Hardy indeed is he and no stress of weather seems to trouble him. He is the only resident awake when the sleepy prowler, planning death and destruction to the sea ducks, is headed for his hiding place among the rocks, and in the gray mist rising from the ocean he looks to the heavy eyes of the gunner almost as large as a duck himself.

Easy of approach and fearless because seldom molested, since on account of timing their visits to our coasts during the winter season the shore-bird shooter entirely misses seeing them and the winter gunner is after larger game, they pay little heed to an approaching boat. A generous supply of suitable clothing keeps them comfortable in any weather. They may be seen dozing complacently in the sun on a winter afternoon when the mercury has gone down out of sight in the glass, for their homes and chosen haunts are in the north, and only the closing up of those waters by the winter's ice forces them into our latitudes at all.

This "hardy Norseman" has the figure of the



PURPLE SANDPIPER.

RED-BACKED SANDPIPER.

typical sailorman, thickset and heavy, more compact in his build than any other of his family which visits us. This may be because he has not had to dodge shot and run from the summer gunner all through the hot weather; thus he gets a chance to put on flesh.

Having seen them only in the winter, and since they are taken here at no other season, it may be best to describe them in the dress of that season. Above, colored on the centres of the feathers a deep bluish black with a purplish gloss, the edges and tips of the the feathers bluish ash. Greater, middle and lesser wing coverts and scapulars white-edged. Primaries and tail feathers dusky. Below, the throat and breast bluish ash, this color extending along the sides, paler and whitening on the edges of the feathers. Remaining lower parts mainly white. Legs and feet flesh-colored; bill about one and one-quarter inches long, slightly down-curved, dusky green with flesh-colored base. The length of this bird is about nine inches; extent from fifteen to sixteen inches.

This species rarely goes much south of New England, perhaps to the Middle States, and though chiefly found on the seacoast is an occasional visitor to the Great Lakes.

THE RED-BACKED SANDPIPER.
BLACK-BELLIED SANDPIPER.
AMERICAN DUNLIN.

(*Pelidna alpina sakhalina.*)

Very generally scattered over North America, but mainly dwelling on the coasts. Breeds in the far north. They are more common in the United States during the seasons of migration than at any other time, being then fairly abundant all along the coast line. Their journeyings are performed in large flocks and in their travels of the winter months they even visit South America. The family has its representatives in the Old World, so closely resembling our own species that only an expert (and he not always) could distinguish between them.

In the breeding dress, the upper parts are a deep reddish brown, with the central parts of the feathers dusky or black. Rump and tail coverts nearly black; tail feathers, wing quills, (outer webs of these still darker) and coverts dusky gray, the greater coverts often tipped with white. Secondaries mostly white. Below,

THE RED-BACKED SANDPIPER 167

white; throat and upper breast thickly speckled with dusky, and an abdominal area of black, varying much in size. Bill and feet black, the bill somewhat down-curved at the tip. Have seen birds shot in September wearing nearly such a plumage as this. In the winter coat much of the red has disappeared and the black of the belly is also lacking. A plain, slatey-gray above and pure white below, but there is scarcely any bird with which to confound him. Length eight or nine inches; sail spread about fifteen inches. The American variety may average rather larger than his Old World brother. The Dunlins are very generally known by the bay gunners as "Fall Snipes," and are reasonably abundant during August and September, growing more numerous as the autumn advances to reach their greatest numbers near the end of the shooting season. Rather late visitors and among the last to go south in the fall.

In New England these birds are rarely seen away from the salt marshes of the coast and unless in large flocks of their own kind they are apt to be found in company with the "grass-

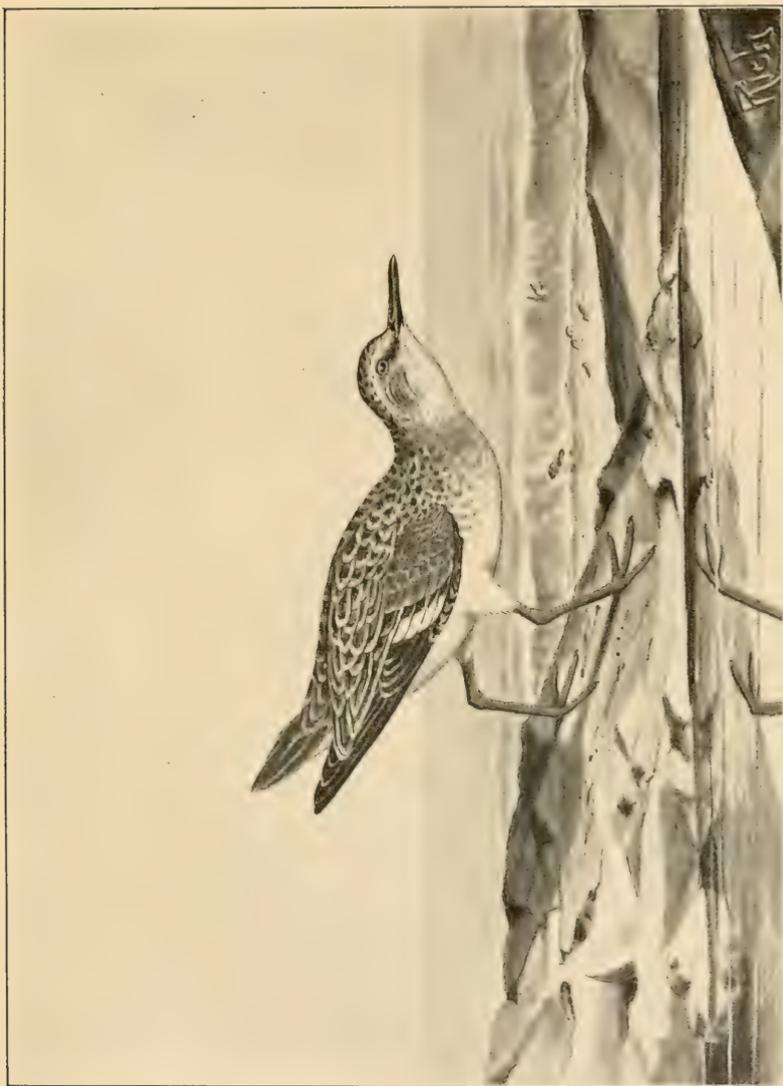
birds" or the dowitchers. They are very welcome in the game-bag of the marsh gunners for, although they are not large, they are always fat, of good flavor and fine table birds.

THE SANDERLING. "BEACH BIRD."

(*Calidris arenaria*.)

The Sanderling is an inhabitant of almost every country and clime, passing the nesting season within the Arctic Circle and migrating to and beyond the tropics in the winter. Though sometimes found on the shores of the larger inland lakes, with us the bird is almost entirely maritime. They are quite common here in New England, a visitor to our sandy beaches in August usually finding plenty of these birds, either in small flocks of their own kind or united with the smaller "sandpeeps" or the "ringnecks." Their favorite feeding places are at the edges of incoming waves, just keeping out of their reach as they advance and charging back as the water goes down.

Generally the Sanderling is unsuspecting and will allow close approach unless in a locality where much disturbed. It is large enough to be



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worth the ammunition necessary to its capture and is a very fair bird for the table—that is, enough of them are. It comes readily to call, whether of “peep,” “ringneck,” or other of its acquaintances, for it is very sociable in its nature, and the gunner who is seeking the ingredients for a shorebird pie can not do better than use these birds for material.

He is a plump and “chunky” little fellow, his build and figure reminding us of the “beetle-head.” The fall adult and the young of the year are not so brilliantly colored as are the spring birds. For the most part the fall coat is made up of modest and sober colors—gray, black and white. The breeding dress is brighter, the upper parts mottled with ashy, black, and light reddish brown, with these colors also on the sides of the neck and throat, the black in broad areas through the centres of the feathers, the light colors on the edges and tips. A white area at the base of each of the inner primaries, together with the greater part of the secondaries, also white, make a conspicuous mark of this color when the wing is spread. Rump and upper tail coverts dusky with fine edgings of white. Bill and feet black.

The Sanderling's foot looks like a smaller model of the beetlehead's with its three short, stout toes; it has no hind toe—the only one of our sandpipers thus constructed.

This bird is a dweller on the sea-beaches, mainly those of the outer shores. Very rarely is it that they come into the long stretches of "flats" or tide-water marshes so dear to the other members of their family.

The length of this species is about eight inches; extent from sixteen to sixteen and one-half inches.

THE ROBIN SNIPE, GRAY BACK, OR
"KNOT."

RED-BREASTED SANDPIPER.

(*Tringa canutus.*)

World wide in its range, this bird is known in both hemispheres; in America mostly on the eastern coast, though occasional stragglers are found on the beaches of the Great Lakes. This is a beautiful bird, the largest of the sandpipers.

Not very wary and coming quite readily when "whistled," they suffer considerably from the



ROBIN SNIPE.

gunner when fighting. They are very fair birds for the table and are well esteemed by the shore gunner. Like the greater number of the shore birds they make their summer homes in the far north and there rear up their families. In their winter travels they go well down the coast of South America.

In their breeding dress the upper parts are dusky brown, the feathers with lighter tips and edges; scapulars yellowish on the edges. Rump dark grey with more or less distinct dusky barings. Upper tail coverts white with wavy bars of dusky. Tail grayish, outer feathers whitish. Below, brownish red, fading on flanks and tail coverts to gray or white. Line of same reddish hue over each eye. Bill quite stout and rather longer than is the rule in this family, dusky green in color, as are also the feet and legs.

The autumn plumage of the young bird is a beautiful bit of feather work although made up of no bright colors. Above, everywhere except on rump and tail coverts, a delicate ashy grey, each feather margined about by a fine edging of white with a narrow subterminal line of black within this last, giving to the plumage a peculiarly rich and elegant effect. Even the black

primaries are white-margined. Below everywhere white, on the throat and neck faintly and irregularly streaked, and on the flanks marked with wavy bars, of black.

THE GREAT MARBLED GODWIT.

(*Limosa fedoa.*)

With the exception of the "sickle-billed curlew" this is the largest of our shore-birds. This species is mainly found in the interior through the central portions of the continent where usually its migratory flights are made, and, except well to the southward, it is not common along the Atlantic coast; especially rare on New England's shores.

The bird looks like an overgrown "brown-back" with his red color and long, snipe-like bill. The wings are ample, extending well beyond the short, square-cut tail. He is a big fellow, measuring from seventeen to twenty inches in length, and having a spread of wings varying from thirty-three to thirty-seven inches. His general color is a light brownish red, everywhere on the back this shade showing on the edges and tips of the feathers, the central field of each being



MARBLLED GODWIT.

jet black. The breast and along the sides are marked to a greater or less extent with dusky lines across the feathers. The linings of the wings are marked with the same red color of the upper parts, usually brighter here and on the breast. Wing quills dark brown, growing dusky at the tips. No white anywhere on the bird except on the shafts of the primaries. Bill flesh-colored, growing dusky toward the tip. Legs blackish, the toes stout and flattened underneath, margined about by a considerable membrane. Sexes marked alike.

Nests like the "upland," anywhere in open fields, or in the marshes in the more usual shorebird manner. Eggs three to four, grayish green, faintly splashed with brownish spots.

It is a great pity that we do not see more of the Godwits in our territory for as a game bird and a delicacy for the table they rank well. Their flesh is equal to that of any of the smaller shorebirds and superior to that of most of them.

HUDSONIAN GODWIT.

(Limosa hæmastica.)

The whole of North, Central and South America is the habitat of this species. In North America most common on the eastern half, and while nowhere abundant, this is the godwit most often taken in New England. It is very rare on the Pacific coast, or, in fact anywhere west of the Rockies. It is considerably different from the species last described, and of smaller size. The black rump and white tail coverts will show the distinction at once, to say nothing of the barrings in black and white on the under parts; also the linings of the wings are blackish. These are the most striking differences; for the rest, above, blackish, with a greenish gloss, the edges of the feathers scalloped with red-brown, tawny yellow and grayish. Primaries dusky with white shafts, darkening at the tips. Coverts dusky, tipped with white. Rump black. Upper tail coverts white. Tail feathers black, white at base and white-tipped. Below, reddish chestnut, crossed with irregular black bars; lower breast, flanks and under tail coverts more heavily barred and having con-



HUDSONIAN GODWIT.

siderable white. Bill dull orange, blackening at the tip. Legs black. Length from fourteen to sixteen; extent from twenty-two to twenty-five inches.

In winter the colors of its plumage are much lighter. The upper parts a grayish brown with very little of the showy colors of the breeding dress. To the casual observer it closely resembles the willet, showing the same sober hues as does *Symphemia* at this season, though white patch on primaries and bluish legs of willet to say nothing of the differences of the tails, should distinguish between the two at once.

This species is said to decoy readily and to be easily lured by a good imitation of its note, though wary and cautious beyond most shore-birds if it suspects danger. In more favored localities they are said to travel in large flocks, but in New England the rule is some half-a-dozen in a bunch, or more commonly a single lone traveler on his way to the southland. Very rarely are they taken in our borders during the spring migration.

Nests mostly in the far north, along the Arctic shores. Eggs, three to four, brownish olive, splashed with darker spots.

THE WILLET.

(*Symphemia semipalmata*.)

This bird seems to be closely related to the "yellow-legs" and is somewhat like it in its coloration, but is considerably heavier in figure and of greater size, having also a stouter and heavier bill. The Willet does not go so far north as does his cousin of the yellow stockings and throughout North America is more southern in his range, few of these birds breeding much beyond the northern boundaries of the United States. They pass the winter months in South America and along the shores of the Gulf of Mexico.

The Willet is colored thus: above, ashy gray, mottled with black. Rump dusky; tail coverts mainly white. Tail grayish white, faintly black-barred, with the outer feathers nearly white. Below, white with blackish arrowheads as in the "yellowshanks." Axillars, edges and linings of the wings blackish. Primaries nearly black with the white bases of the feathers half hidden by the coverts. Some of the secondaries also white, thus making a considerable area



WILLET.

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of this color in the wing. Bill dusky: Legs dull bluish; feet half-webbed, so that if the occasion calls for it they can swim, though seldom is this attempted unless hard pushed. In length from fourteen to sixteen inches; extent from twenty-four to twenty-six.

This bird is very noisy and has a piercing, far-reaching note from which the name of the species has been taken. It is not easy of approach, but is wary and restless in the extreme.

Its food is procured along the muddy edges in the same manner and of the same sort as makes the menu of the "yellow-legs." The nesting habits also are nearly identical with those of *Totanus*. The eggs vary in number from three to four, dull greenish in color, brown-spotted.

THE WINTER YELLOW-LEGS.

(*Totanus melanoleucus*.)

The "Tell-tale," "Tattler," or "Winter Yellow-leg Plover," as the various names are given him in different localities where he is known, is a common visitor in our New England marshes, both on the seacoast and on the boggy

edges of our inland lakes and rivers. He is a shy, watchful and wary fellow, usually difficult of approach, and gets his name, the "Tattler," because he invariably arouses all the game within hearing of his piercing whistle as he takes wing at the sight of the skulking gunner. After Mr. Yellow-legs' kindly warning every bird in the marsh is on the alert and watchful if it does not go out with its long-legged friend. If the "Winter" is with them, silent and content, the game birds in his vicinity feed on and enjoy themselves with a sense of perfect security, but let his monitory note be heard and the chances are that every duck, snipe or plover within hearing will be up and away with their watchful picket. How many good shots at unsuspecting ducks has this bird spoiled with his alarming whistle! And how much vain profanity has been bestowed upon his unmindful head!

He is a tall and graceful bird, elegantly proportioned, with a long neck and bill, and a leg of marvelous length and slenderness. A speedy and easy runner, a graceful walker, and on the wing one of the bravest birds that ever gladdened the sportsman's eyes. Being partially

webbed on his middle and outer toes he is a fair swimmer at need.

Lonely sea-beach, rockweed-covered ledge, or wind-swept expanse of waving grass with its bright strips of water reflecting the blue above—these are the haunts of the many birds numbered among the “bay snipe,” and though the woodcock enthusiast and grouse hunter is inclined to belittle this style of shooting it is not every bungler who can “make a double” on these swift coursers of the marsh, and it is very pleasant in the bright August days for the sportsman to sit in his innocent looking blind at the edge of a promising pool or to wander from one feeding ground to another—from muddy creek to brown-margined “pond-hole,” with his gun ever ready for the chance which fortune may send him. A clear, bright day, the sun glinting in diamond points on the blue waves and glistening on the sails far out at sea; the dazzling white of the sandbanks and the bar which marks the river’s mouth showing through the breaks in the tall grass; and the mellow pipings of the birds as the flocks sweep past in full career; all go to make a day’s outing fit to offset a year of care and worryment. How

many such there are in our memory! Away on the wings of the breeze goes the thought of the note which falls due next week—gone from mind for the first time since 'twas given—and crowding in its wake go a thousand petty vexations of business. Unfortunate that mortal who cannot count some of these happy days among his experiences. It is a lasting gain—this day—for the pleasure of a shooting trip is not all in the moment of action; full often by our winter's blaze we live again our happy days afield, afloat; recall deep craft or sylvan lore displayed; some shorebird music deftly played; headwork by dog or shooting skill undue recalls the day and so its joys renew.

In the earlier part of the season the different bay birds, the beetleheads, the goldens, yellow-legs, turnstones or curlews are found each in its chosen grounds. In the marsh is where your luck may bring you a goodly bag of Yellow-legs; in these luxuriant tangles of rank-growing grass lurk the rails, whose celerity and swiftness of foot more than atone for any apparent weakness of wing. Here in the colder weather when the frosts have dulled the bright greens of the grass, changing them to the yel-

lows and reddish browns which betoken that our summer is gone—here it is that the crafty snipe will dart and twist with erratic and confusing flight to dodge the charge with which you fain would cut him down. At this season, too, it may chance that in some of these reed-edged pools the black duck is leading its family, now full-fledged, keen eyed and already abnormally sharp in the world's harsh methods. But now 'tis late summer, and through the sultry air from a distance comes the "Winter's" cry, far away and faint, the bird itself out of sight. In answer to the gunner's mimicry comes back again the note from another quarter. His circling flight has taken him a mile away, but still, mellow and musical, his far-reaching whistle, softened by the distance, is heard in answer to each luring call, and away in the sky the gunner sees him—a mere speck against the clouds. If the imitation is good and the bird is in social mood he comes nearer, calling again and again, quartering the marsh with his watchful eye alert for friend or foe. Now the sportsman lies close, well hidden by the stack of marsh grass—a perfect match for his hunting coat of dingy, yellowish brown,—or crouches in the waving

reeds with his decoys placed about the edges of some convenient "pond-hole." Soon Mr. Yellow-legs is seen wheeling about just out of gunshot, his long legs stretched out straight behind him and his head turning from side to side in search of his answering friend. He sights the decoys, and now his call is one short, sharp, questioning note. The deceiver answers just as he asks, and the bird sweeps down with set wings, then skimming along ten feet above the grass, discovers the cheat and starts, too late, away. A sudden flash from the screening reeds, and all in a heap, as neck, wings and legs roll into one shapeless lump, the bird comes to earth; a convulsive kick, a tremulous flutter of feeble wings, a gasp, and he lies still upon the grass,—“another victim of misplaced confidence.” Look at him! One of the finest shore-birds which we have on our coasts, either to shoot or for the table. Perhaps the next will be a flock of half a dozen, when the gunner may make his “double” with much satisfaction to his vanity. Marsh gunning is fair and legitimate sport only when the gunner will do his shooting at birds on the wing. It certainly degenerates into “pot-shooting,” or worse, when,



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as too often happens, the birds are allowed to settle in among the decoys and feed while the "sportsman" waits until a number are bunched along the muddy shore of the pool where a raking shot with the first barrel shall make sure of a bagful to display to admirers at home. The average marsh bird is confiding and trustful in disposition and so readily induced to give the shooter a chance that there is really no excuse for such a custom as this. Let one of the whole long-legged race come within hearing of a plover call and the rest of the story lies altogether with the gun artist. Of course now and then there is a shore bird shooter with loftier ambitions. Such a one may graduate into the higher schools of upland gunnery, and for him these furnish good practice for the making of a wing shot.

The "Winter Yellow-leg," so called in distinction from the smaller "Summer," is not a true plover, nor is the latter, both belonging to the Tattler family, a group more nearly related to the snipes. The kinship is plainly indicated by the bill, long, and somewhat sensitive at the tip, as in Wilson's snipe, but in the northeast hardly one gunner in a hundred ever thinks of

these birds as anything but plovers, or would know what bird was meant if called anything but a "Winter," or a "Summer, Yellow-leg Plover," so general is the use of these names in New England.

The "Winters" seldom gather into large flocks of their own kind save in the spring migrations, generally preferring to associate with other species, as the "Summers," smaller sandpipers, grass-birds, etc. They are found mostly on the soft, oozy edges of the "pondholes" in the marshes, along the muddy "flats" of the tide-waters and in the bog holes of the fresh water swamps. In the far north, on the bank of inland pond or marsh, they build their nests and raise their broods of four or five long-legged, odd-looking youngsters which run about almost from birth, following their parents in a scramble for daily rations, escaping danger by squatting down in the long grass and keeping perfectly quiet until the coast is clear.

The "Winter" arrives in New England about the middle of April and breeds from this latitude northward, most of them going further on. The nest, though sometimes built on an old stump, is oftener a slight hollow scooped out of

the ground in the drier parts of the marsh and lined with dead grass and moss, and the male bird, though he is said to take no part in the incubation, stays near at hand and aids in the care of the young. About the middle of August they begin to leave their breeding places and scatter over the surrounding country, lingering in New England into November.

The coloring and habits of the two species are nearly identical. The principal difference is that of size, the "Winter" averaging from twelve to fourteen inches long, with an extent of about twenty-four inches. The "Summer" is ten or eleven inches in length, with a wingspread averaging twenty-two inches. The bill of the larger species is somewhat up-curved, as if slightly bent in the middle, while that of the "Summer" is proportionately shorter and straight. The legs of the "Summer" are a little longer in comparison with the size of the bird. The weight of the larger species will run from eight to nine and one-half or even ten ounces; the smaller species seldom weighs over seven ounces, and usually less.

The description of one bird's markings will answer almost equally well for the other, and

is as follows: above, grayish black, the body of the feathers dark, with spots and streaks of white along their margins; head and neck streaked with black lines on a grayish ground. Small superciliary stripe of white. Throat white. Under parts white, streaked with dusky spots and lines on lower throat, neck and breast. Sides and flanks barred and having also numerous arrowheads in black. Under tail coverts also black-barred. Tail marked with black and white in regular bars, the central feathers darker and so less distinctly barred. Rump and upper tail coverts white; legs bright yellow and very long. Bill black.

THE "SUMMER YELLOW-LEGS."

(*Totanus flavipes*.)

The "Summer" is a later arrival in the spring and leaves earlier for the south than does the "Winter," *flavipes* not going so far north and leaving for warm climates during August and September. These, too, are more apt to gather into large flocks, while their bigger relatives seldom "bunch up" with more than five or six in a flock, except, as before stated,



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during the spring migrations. This species is more numerous along the Atlantic coast than is the preceding, and the early fall finds many "Summer Yellow-legs" on the muddy flats of the tide-waters. Fine sport may be had, both here and in the marshes, for, like the larger species, these birds come readily to decoys or to a good imitation of their whistle. If there is any difference in the willingness of these two birds to come to decoys I think that the "Summer" is the more neighborly. I believe this species is much less wary as well as weaker in flight powers and of less shot-carrying ability. I must confess that I prefer shooting "Yellow-legs" of either tribe over "stools" to any other kind of shore-bird gunning, always, and of course, excepting the sport of knocking down Wilson's snipe when there are enough of them to practice on.

In August, supposing the mosquitoes do not eat him alive, the marsh gunner is likely to get more of the smaller "Yellow-legs." In September the "Winters" will outnumber them two to one. Both rank well as table birds and are always in good condition.

For plumage and markings the description of

the "Winter Yellow-legs" will answer equally well for this bird.

Beyond the Rockies this species does not seem to be so numerous as the larger Yellow-legs, though it is said to be fairly common in Alaska. In their migrations both travel down to the southernmost point of the American continent, so that their range, from Cape Horn to Greenland and Alaska, makes a large extent of territory.

THE SOLITARY SANDPIPER.

(*Helodromas solitarius.*)

With most gunners the "Solitary" is an old acquaintance, well known to all who hunt in the marshes. Usually he is found where the brooks and small streams come out from the sheltering cover of the woods and less often in the open stretches of waving grass or stubble and pond-hole which delight the hearts of the other members of his family. A quiet woodland nook, a gently flowing stream with moss-grown rocks and turfy banks suits well this bird's taste. Caring little for society, silent and shy in disposition, hermit-like, he prefers the retirement

and peace of the meadow brook to the changing scenes of the wider world of his big cousins, the "winter" and "summer yellow-legs." Around some lonely pool in pasture land or meadow he gleans his fare of insects and larvæ scarcely ever breaking the quiet of his haunt with a whistle, for he is the silent member of the family, more taciturn than any of the tribe, and content with the company of his own thoughts.

This bird is not confined to the marshes of the coast; he is fully as likely to be found in the interior, and is a common visitor in almost any suitable spot on the North American continent. If you come suddenly into a narrow run-way, its high protecting banks shutting out the rest of the world with a thick wall of brush and trees, and overgrown with long grass, with still and shallow waters, stagnant and slow,—the chosen haunt of bittern and heron,—on muddy edge or slimy stone standing sentinel over all is the "Solitary." Sometimes his mate is near by or perhaps his nearly grown family has not yet left the parental care, and all make off in haste the instant you have fairly shown yourself. You note that his flight is much like that of the spotted sandpiper, his wings down-curved in the

same fashion. Our hero is more dignified in his manner, as befits his larger size. The homes and life habits of the two are probably very similar.

When you flush him he goes skimming away just above the water; alighting on a rock at the edge, he stretches his wings aloft to their fullest extent, then carefully folds them so that each feather is in its proper place, and begins feeding again, gathering the insects, slugs and water bugs with the healthy appetite common to all citizens of the great out-of-doors.

He is a beautiful bird, though modestly appareled; something smaller than either "winter" or "summer yellow-legs," but built on the same graceful lines and plainly showing all the characteristics of his family—long in the legs, strong of wing, and equally good at the table as are the other two. I think he makes a good impression when, after being skinned, wrapped in a thin piece of fat pork and enclosed in a big potato he has been well baked.

Sometimes in the sea marshes when the tide is rising a number of these birds may be captured by taking a stand among the pond-holes near high water mark, of course being well hid-



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den, and shooting them as they come in from the flooded lower levels. As you arrive you cast a glance along the mud and ooze, and seeing nothing, turn away. Just then a slight motion catches your eye and what had seemed a small lump of mud suddenly changes into a very lively little bird, bobbing and bowing at you very politely and not more than twenty yards away. Now he extends his wings upward to their full spread and jets his tail as he runs nimbly along, then one downward stroke of his pinions and he rises lightly from the ground and skims away just above the surface of the pool. Perhaps he is a young bird or has been but little disturbed and so knows not the danger of his situation, in which case he may go ten yards and alight again to gaze with curious eyes. There is scarcely another bird which flies with so little apparent effort. His strokes are slow and regular, a short sailing between each motion, but he moves very fast. Let him be alarmed and he will quicken his speed until he seems only a black streak in the air, and as he rises to top the surrounding trees it needs good and quick work with the gun to stop him. Start him up suddenly and he dashes from the

ground with a sharp, piercing cry and perhaps darts into the brush, for if cornered in a runway margined with trees he will not hesitate to dive into their protecting cover where almost any other marsh bird would double back and make for the open ground at any risk to itself, and so give the gunner a chance to score.

Of its nesting habits little is known for certainty and eggs are still rarely seen in collections. It is supposed to breed anywhere in its range, preferably throughout the northern portions, that is, from the northernmost States of the Union through the wooded country to Alaska. In winter it goes far away to the south, and though some remain in the Gulf States most pass this season in Mexico and Central America. Not a few go well down into South America.

This species is about nine inches long, with an extent of wings averaging from sixteen to seventeen inches. Upper parts a glossy greenish brown, streaked on head, throat and neck with dusky; showing considerable white here also, especially on the sides of the head and throat. Upper tail coverts and rump same shade as the back, but showing some white,

black-barred, on the lateral tail coverts. Sides, axillars and linings of the wings white, regularly barred with black. Tail barred with black and white, the black predominant on the central, where crossbars are less pronounced, and the white most prominent on the outer feathers. Primaries and edge of wings blackish; rest of wing mainly like back. Bill nearly black; legs not so long proportionately as in the "yellow-legs," in color dusky green.

THE SPOTTED SANDPIPER.

(*Actitis macularia*.)

Common all over North America wherever there is water and about as well known a bird as we have on our lists is the Spotted Sandpiper. If in the early spring one should visit the rocky expanses of sea beach, some unfrequented spot on the shore of our islands, or the quiet glades where the brooks and the tide waters meet and mingle their currents, almost the first sound to greet one's ears would be the sharp and piercing "Peet-Weet!" of this tiny but loud-voiced little bird as with his mate he scurries away. With wings deeply down-curved he dashes in

his darting flight to a safe distance, alighting on some large stone, flirting his tail, balancing on tip-toe and bobbing his head, never for a second standing still or ceasing his endless dance.

He is a brilliant conversationalist, (a trait common to most of his family), and is ready and willing to prove it, evidently feeling that he must make amends for his small size by being the noisiest member of his tribe. If suddenly driven to flight he makes the air resound with his sharp "Peet-Weet!"—"Peet-Weet!" and when he has alighted again he quavers out a long, tremulous "W-e-e-e-t!"

The Spotted Sandpiper arrives in New England from his winter quarters in the Southern States, Mexico, or the Tropics, in May and sets up housekeeping soon after. He seems more accustomed to civilization than any other of the shorebirds and fears less the neighborhood of man. Probably the reason lies in the fact that the gunner seldom troubles him because of his small size and also because, since they do not gather into flocks as do the other sandpipers and smaller shorebirds, he can get but one at a shot, thus he thinks it a small return for his outlay of ammunition. With this freedom



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from pursuit and the semi-protection thus afforded, they often nest near the farmhouse, in the orchards, and near the highways where no other of their kind would ever think of making its home. Their nests are made in almost any spot near water, be it sea, lake, pond or mountain brook, and a very simple affair is this humble home—a mere hollow on the ground lined with soft dead grass. This usually contains four eggs of a dull clay color, splashed with irregular dark spots. If the bird is flushed from the nest she commonly flies off in silence, making no show of annoyance, in marked contrast to her usual noisy mood, and if surprised with her young family plays all the tricks and wiles known to other birds and used in a like situation.

Strolling one August day on the banks of a creek much frequented by these birds I came upon a Spotted Piper which seemed greatly distressed at my presence. The cause was not far to seek. Out on a point of mud at the water's edge was another piper of much lighter color than usual and I proceeded to make its acquaintance. On approaching there was no difficulty in discovering what it was—an unfledged

youngster with his wing quills still in their blue sheaths and never a sign of feathers. Presently it scuttled away and hid in a thick clump of grass. After a short search the frightened little skulker was brought out from his retreat. A little gray and white mass of down—as “gawky” a bunch of infantile innocence as I have ever seen. Its bill, legs and feet nearly as large as the old bird’s, the head almost too much for the feeble neck to sustain. Making as yet no attempt at flight, it ran with wings outspread and carried just as the old bird carried hers, down-curved and drooping, so long even at this age that the little adventurer often stepped on them, making him perform various unexpected acrobatic feats.

During the time I kept the youngster prisoner the old bird shrieked and whistled and tumbled about, dragging first one wing and then the other in her attempts to draw my attention to herself, coming almost within hand reach and then darting into the air, screeching abuse, defiance, appeal,—the little fellow answering all the time with a feeble, chicken-like “peeping.”

When at length I let my captive go free he

made at once for the stream, here all of thirty yards wide and with a swift current. In he plunged and struggled gamely for the other side, but his feeble efforts were soon exhausted in the swirl and he was swept into a brush heap and dragged under. I rescued him and held him in my hands until rested and warmed—for there was a chill east wind coming in from the sea—then finding a sheltered spot in the sun I left him alone. Here he stayed contentedly until, when I had gone to a safe distance, the mother bird came back and after scolding him well finally led him away through the grass.

This little chap was brownish gray above, with a black stripe from the base of the bill over the crown to the nape, there meeting two others which came to this point from the eyes. Another dark stripe, somewhat larger, came down through the middle of the back to the root of the tail. Everywhere below grayish white. The wings quite long and pointed, drooping as if there were no strength in them yet, and all made up of blue feather casings.

At this time the “yellow-legs” of both species had begun their journeyings, and even while

our little drama had been taking place a bunch of eight "summers" had come in and settled at about thirty yards distance to look on.

The bird is known by a number of names, most of them derived from his habit of "bobbing" and balancing up and down. Among these are "Tip-up," "Teeter-Tail," "Teeter-Bob," and "Peet-Weet," this last from his note of alarm. The "Teeter-Bob" is a merry, restless little fellow, never for a moment quiet. He is about seven and one half inches long and thirteen inches in extent of wing. Above, dull olive brown with a silken sheen and lustre to his plumage; fine lines of black on head and neck; wavy crossbars of the same color on the back and wing coverts; upper tail coverts and central feathers of the tail of the same olive brown hue; tail feathers tipped with white, the outer ones having several incomplete barrings of this color. Under parts all white with numerous black polka dots plentifully sprinkled in on throat, breast and flanks, the spots growing fewer and paler toward the lower parts. These spots are missing in the fall dress. Wing quills brownish black; bill flesh-colored, black-tipped.



RUFF.

A wounded bird of this sort will often strike out to swim for safety, and though making no great progress when depending only on its little feet for paddles, it can make a great rate of speed below the surface where with half-spread wings it flies beneath the water.

THE RUFF. (Male.) THE REEVE. (Female.)

(*Pavoncella pugnax*.)

This curious bird is a very rare straggler from the Old World, where it makes its home throughout the northern hemisphere. A large proportion of the specimens of this species which have been taken on the North American continent have been found on the coast of New England. As the name would indicate these are fighters; that is, they make great pretences of fighting, but their quarrels seldom result in any serious damage to either combatant. If they had a business manager and a newspaper puffer in their train we might easily find their human imitator.

The male in spring plumage is marked above with chestnut, brown and black; rump blackish,

but lighter and somewhat reddish at the side. Below, white; breast, sides and crissum black with white spottings. Tail brown with chestnut and white barrings. Quills dusky, with white shafts. Wing coverts dusky gray. Bill black, yellowish at base. Legs dull yellow. The face bare of feathers and covered with small, yellow, wart-like growths. The long neck feathers are almost never alike in their coloring on any two specimens—in fact, there is a wide variation in the color arrangement all through. The “ruff” is an adornment for the spring love-making, only worn by the males, and may be of any color or combination of colors between pure white and jet black. The length of this species from twelve to thirteen inches; extent from twenty-two to twenty-three inches.

The female is quite a little smaller and not such a striking bird. She lacks the “ruff,” as before stated, also the peculiar growths on the face, and looks much like the “grassbird,” though considerably larger.

THE UPLAND PLOVER.

GRASS PLOVER. PRAIRIE PIGEON.

BARTRAM'S SANDPIPER.

(Bartramia longicauda.)

This beautiful bird dwells on our continent in almost every part east of the Rockies, is occasionally seen in Europe, and has been reported from Australia. It breeds from the Middle States of the Union northward to the Yukon and spends the winter in the Southern States, Central and South America, starting for these winter quarters generally during the latter part of September.

As is the case with most of the migrant waders, we, of New England, see a very small part of this vast army of winged pilgrims, the bulk of the flights passing over the western country, where this species is especially abundant, traveling in flocks of thousands during the seasons of migration. When the law's protecting shield is taken away the market gunners kill great numbers of these birds every year, for the Uplands on the western prairies become extremely tame, almost beyond the belief of the

eastern gunner. But it is only in the sparsely settled portions of New England—in the comparatively few stretches of open country,—large hayfields or pastures—that the Upland dwells and raises his family. From the nature of our section it is only to be expected that fewer of this species are found here than in the West, where every condition is favorable and all things are as though especially planned for their comfort and happiness.

Here in New England they begin to nest during the latter part of May. At this season the male is very attentive to his mate, seldom leaving her for any length of time, and even then, model husband that he is, he does not stray far from home. The nest is a flimsy affair of dry grass lining a shallow hollow in the ground. The eggs, generally four in number, are clay-colored and speckled over with brownish spots.

All through the warm days of spring and early summer the Upland enjoys perfect peace and security. The meadow grass and daisies grow tall and stout around the nest, shading and sheltering the little home so snugly hidden away from all disturbers. When the little ones have struck out for themselves the fat and lazy

insects are buzzing and flying sleepily in the fields, the grasshoppers and crickets are "too lazy to get out of their own way," the strawberries are plenty and sweet, and until now all things have been just as the bird would have had them. By the time the farmer is ready to cut the ripened hay the little, long-legged grasshopper killers are large enough to look out for themselves and strong enough for a long flight if it is necessary. So the haying time is the first hint they have that all the world is not happiness and peace, and oftentimes, until bitter experience has shown them the need of caution they will hardly get out of the way of the men at work in the fields. I have watched a young Upland for two hours at a stretch, walking it up from the grass and calling it back by an imitation of its note. Rarely would it go a hundred yards away and every whistling call was quickly answered. I stood in plain sight, but the bird would curl and wheel about my head, at times almost within hand reach, then dropping to the ground within twenty paces distance, would run through the grass to get a nearer view of the visitor, peeping from behind a thick growing clump, then running to another,

often coming within ten feet of me and all the time conversing in its own tongue with soft, twittering notes. What a graceful creature it was, and how daintily it stepped! This was just before the haying season. In two weeks' time I went again to the same place and could not get within a hundred yards of any bird. It takes but little to teach them caution. Soon they will fly at the first sight of man; and no wonder, for once the hay is gathered in, all is ready to hunt and harry them from their favorite fields. The farmers' boys have usually had about two weeks of fun with the Uplands when the shooting season commences here (Maine), on August first, and as they are the first game birds to come into season they are greatly appreciated and eagerly hunted the instant the law is off. During this month they are found in the lately-mown hayfields, where hunting Uplands in the glare of August's sun with never a tree for shelter is rather warm work. Early in the morning, some time before daylight, they may be heard as they wheel about in the blackness overhead, all the time sending down their gurgling call. Long before the first streak of light has shot across the sky they are busily en-

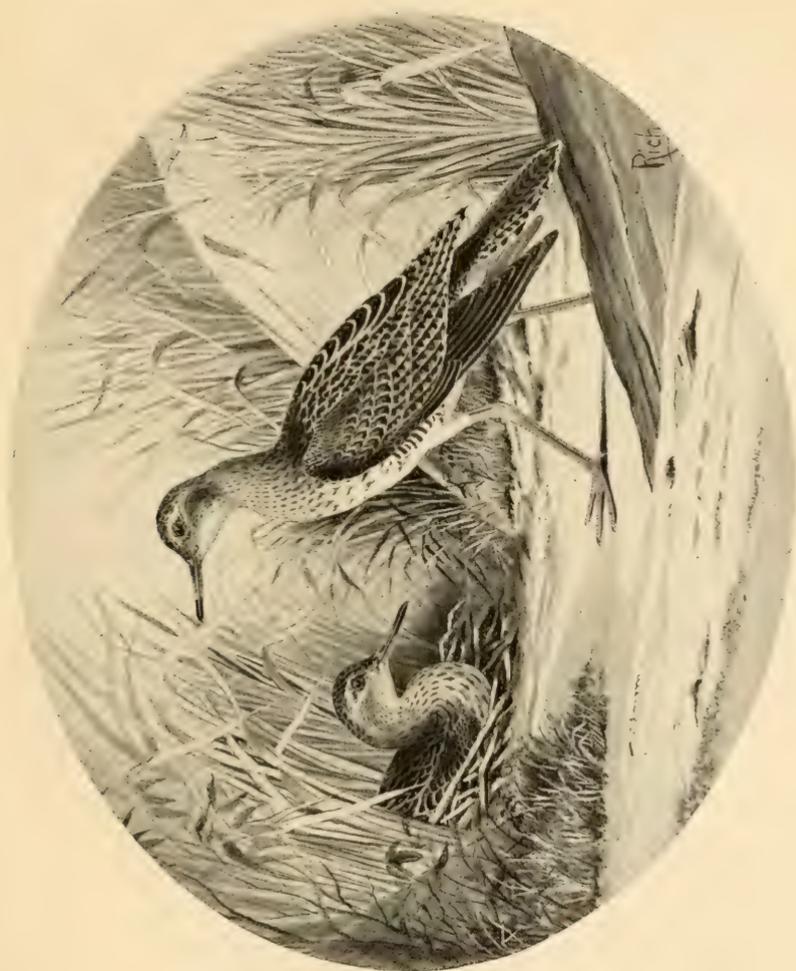
gaged in breakfasting on the insects, now chilled with cold, dull and stupid in the dew-laden grass. Then is the time to be upon the grounds and beat up the fields, for, like most wild creatures, they may be more readily approached in the early morning and about sun-down than at other times of the day.

The most popular way of hunting these birds hereabout is to make up a large party in order to more thoroughly cover the fields and grassy flats which they inhabit, as in this way more birds will be found. The larger the force the better, for, as a friend who had a just appreciation of my abilities with the scatter gun once said in inviting me to attend such an excursion, "You'd better come,—you know those that can't shoot can scare 'em up for the others."

As a sport for a lazy man gunning Uplands can hardly be considered a glittering success. It means much hard work with a large element of uncertainty as to results. The sportsman must be willing to keep trying all the time if he would make a creditable showing, and so he plods across the fields under the glare of the sun and wonders where the birds may be. He drives clouds of insects up from beneath his

feet—grasshoppers in blundering flight butt their heads against him as though they thought to put him to rout with their headlong charge,—bumblebees cross his path with droning note, and swallows career about him, making a feast off the tiny myriads which his march disturbs. Right and left go scurrying brown sparrows, and other small fowl rise unexpectedly from the stubble. Flocks of rusty-looking bobolinks, scarcely to be known as the gay birds of two months ago, dash out from the oat patch with chirping discontent, and over all the breath of summer and perchance the air like a furnace.

Suddenly another note, a gurgling, rippling, bubbling whistle, cuts short the gunner's day dream, and as it sounds a second time he comes out from his sleepy state with a sudden start. It was that for which he has listened. Look where he may—right or left, above, ahead, behind, he sees no bird, but still the flute-like note is heard, and at last, a hundred yards away, his eye catches the flicker of sunlight on a pair of brown wings just as they are folded from their flight. That soft and mellow whistle has some peculiar quality, which, when it comes dropping



UPLAND PLOVER.

down from the summer sky, makes it the most difficult of all sounds to accurately locate.

Now the sportsman's troubles commence, for that one bird if it pleases (as it usually does) can furnish him a whole day's "sport" by tantalizingly keeping just out of range. As the name indicates, they dwell mostly in the open hayfields, moving on rapid feet through the grass in pursuit of the insects which make their principal food. In such places as these any near approach to them is most difficult, as the Upland, after his domestic duties are done and his family is brought up, is a very shy and wary bird, commonly springing up and away before the gunner can get within shot reach, whistling merrily his rolling, liquid note as he goes.

Slender and graceful, long of limb, one of the swiftest fliers of a fleet-winged family, the Upland has been unusually favored among our dwellers of the wilderness, and comparatively few of them fall a prey to the gunner. He can run fast—faster than any man—and will give a dog a good race. It is laughable to see a gunner lose his breath and temper in trying to catch a wounded bird.

The Upland's call is somewhat similar to the "winter's," equally clear and musical and rather more mellow in tone. Not so powerful as the whistle of the "yellow-legs," nor so long extended, it is in most cases three clear, quickly-sounded notes, which are heard much farther than would at first be thought. They have also, a low, twittering note in conversation among themselves,—a sound like gurgling water, but not sufficiently like it to cure your August thirst contracted in pursuit of them. When a flock is disturbed in their home fields, the scattered members keep up a continual chorus of this music from one bunch to another as they wheel about in search of safe grounds to rest upon. Seen on the wing when moving carelessly about in the mere enjoyment of flight, traveling from knoll to knoll and not alarmed, they will remind the observer of some of the smaller hawks from their swift, sharp strokes alternating with an easy, sailing flight. The gunner will notice, however, this difference from the sailing of the hawks—that, in shore-bird fashion, they carry their wings deeply down-curved.

There is little profit in trying to call them.

They pay scant attention to any such attempts at scraping an acquaintance, and though they may answer, will continue upon their way without any effort at sociability. Sometimes to get a fair shot advantage may be taken of the cattle if they are grazing in the fields, as the Uplands for a long time familiar with and so having no fear of these quiet neighbors, suspect no danger from their close approach. The gunner may urge the grazing cow gently toward the birds, keeping himself well hidden behind her until near enough. It is needless to say that the same trustful animal will not consent to be for a second time a movable blind for the gunner, for until the shock to her nervous system has passed off she is likely to be as wary as the birds themselves, trotting off at once and shaking her horns in a decided negative at any attempt to renew the acquaintance.

A barren, rocky pasture, fit only for the sheep to graze in, and whose sandy soil is overgrown with a crunching carpet of dry moss and lichens is often a very good ground for Uplands and they may be seen scurrying about in squads of half-a-dozen or more, running races for some particularly fat cricket or grasshopper. But

think not to approach them here,—if you can see them how much more do you yourself loom up? At the first attempt to get within range away goes every bird in sight with a loud chorus of whistling derision, flying a hundred yards, alighting to run as much farther and then beginning to feed with watchful eye upon the stranger, each ready to leave in an instant.

A western friend tells me of the method of hunting Uplands in his country, on the prairies: a comfortable way of gunning in hot weather. Two or three men drive in a wagon over the grass ground to approach the birds, which will generally allow a team to come quite near. When the birds begin to show signs of uneasiness the sportsmen jump out and blaze away. Our westerner thought that it might be a good plan of campaign for New England, but one trip was enough to change his mind. The rugged nature of our country and the prospect of lifting the outfit over a stone wall or picking the horse off a barbed wire fence every few minutes somewhat upset his theories before the day was over.

I wish to note a circumstance which to me seems quite unusual: on one plover excursion my companion and I saw an Upland rise from

the grass and without being shot at or in any way disturbed, alight in the top of a tall maple tree, fully fifty feet from the ground, and stand balancing and swaying on the topmost branch as easily as any robin might have done, staying there until at our getting within gunshot it flew away,—and continued flying despite our best efforts at stopping it. We have not found any of our shooting acquaintances who have seen the like, although the Upland makes a regular practice of perching upon fences and low stumps, and one bird, after leading me a long, hot chase through field and pasture, finally aggravated his offense by alighting on a woodpile in a farmer's dooryard, well out of reach of my gun, but not fifty feet from where the proprietor was "hitching up" his team. That bird is still enjoying good health for all that I know to the contrary. About the last of August the scattered families unite in one large flock and depart for the nearest marsh, remaining in its drier levels until near the middle of September, when they leave for the south, where they pass the winter in our Southern States, particularly on the grassy plains of Texas and New Mexico. Here during the cold weather there

are countless numbers of them. Many go farther on to the cattle ranges of Mexico, and some go far down into South America, even to the pampas of Argentina, leaving for their northern summer homes about the end of March.

There may be two minds as to the palatable qualities of many a duck, quail, or even grouse, for all these have some peculiarities which do not appeal to the uneducated palate, but the man who can not appreciate the tender flesh and delicate flavor of the Upland Plover must be hard indeed to suit. To my mind the Upland ranks equal to any game bird of America as a table delicacy. They get surprisingly fat in the fall, sometimes even to splitting their skins upon striking the ground when brought down by the gunner.

Above, the Upland is mostly of dusky hue, with a greenish, satiny sheen to the feathers, mottled with tawny and whitish yellow, the light colors mostly on the edges and tips of the feathers; the top of the head and back darkest and the yellow tones predominant on neck, breast and wings. The rump dull blackish, this color carried down over the central feathers of the tail, with these barred as are the other

feathers; but the outer ones are much lighter, shading from the dark central feathers through ever-lightening tones of orange-brown to creamy white on the outer pair, all showing subterminal black bars and white tips. Scapulars and inner secondaries are regularly barred with black on a dusky ground. Chin white, shading into the yellowish brown of the forebreast and neck, and these parts streaked with fine dusky lines on the sides, growing larger and heavier on the throat and taking the shape of arrowheads on the breast. Axillars and linings of the wings pure white, very evenly barred with black; for the rest of the under parts yellowish white. Primaries brownish black, the first white-shafted and brokenly barred with white on inner webs. Barrings often show on other primaries, though generally obscured. Bill yellow, black-tipped. Feet dull yellow; iris dark brown. Length from eleven to thirteen inches; extent from twenty-two to twenty-four inches. Sexes marked alike.

BUFF-BREASTED SANDPIPER.

(*Tryngites subruficollis*.)

Not a common bird in New England, but of more common occurrence in the interior of the continent. The whole of North America is the habitat of this species. It breeds throughout the Arctic regions and migrates for the winter months even as far as South America. Has been taken frequently in Europe.

The Buffbreast bears a close resemblance to the upland plover in coloring, and to some extent in form, though the tones of its plumage are lighter and the bird is considerably smaller. On two occasions I have had gunners bring me what they thought to be young or small uplands which turned out to be Buff-Breasted Pipers.

The habits and food of this and the last species are nearly the same and their choice of homes is much alike, with the difference that this bird is fonder of the muddy edges of "pond-holes" and a snail diet than is the upland plover.

For its markings, as follows: above dark brown or blackish, with broad brownish yellow



BUFF-BREASTED PLOVER.

THE SICKLE-BILLED CURLEW 215

edges to the feathers. Primaries and secondaries dusky brown, darkening at the ends and white-tipped. Webs of secondaries and inner webs of primaries grayish white, speckled and blotched with black—a marking which locates this bird at once. Axillars and linings of wings whitish or pale reddish. Iris brown; bill black; legs greenish. Tail feathers shading like the upland's from dark brown, almost greenish, on the central to light brownish yellow on the outer ones, these tipped with white and with a sub-terminal bar of black. Central tail feathers slightly longer than the others. Male and female marked alike. Length from seven and one-half to eight inches; extent varying from fifteen to sixteen inches.

THE SICKLE-BILLED CURLEW.

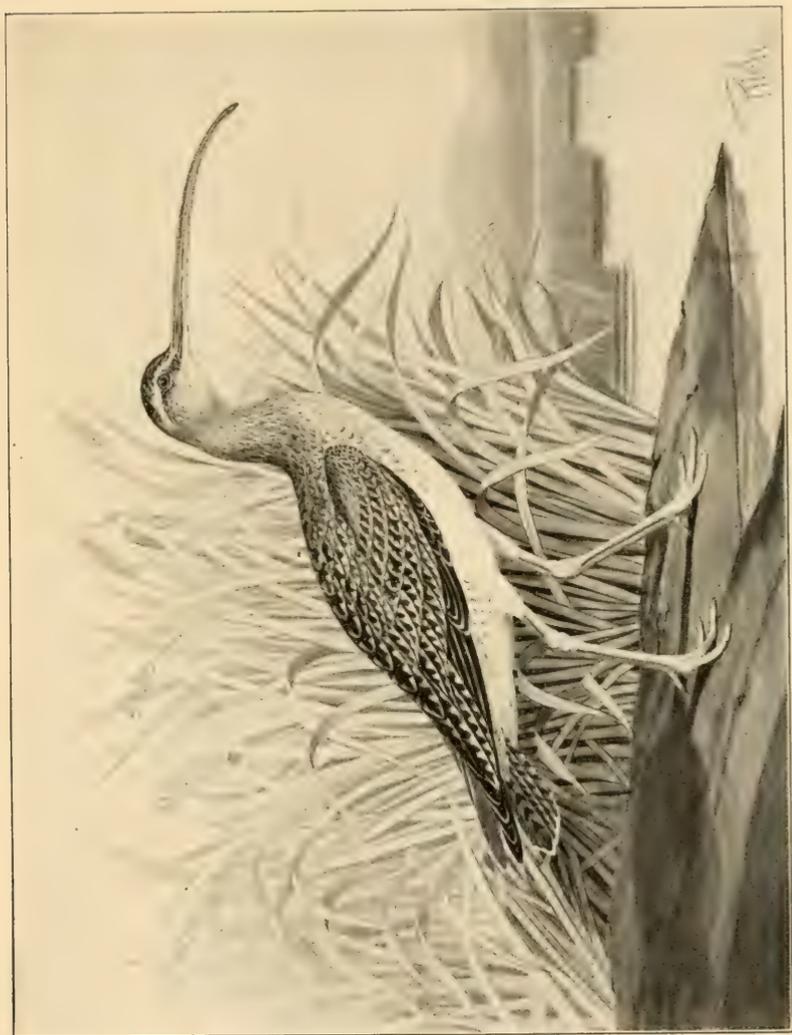
(*Numenius longirostris*.)

The Sickle-billed Curlew is of great size; the largest of the game waders. It is a long time since one has been taken in northern New England, and while more are captured in the southern portions, even there it is not numerous. The few that have been procured have nearly all

been killed on Cape Cod during the fall flights where, when the birds are moving, decoys and skillful use of a plover whistle are more productive of good results than elsewhere in our section. All the curlews decoy readily and are loth to leave a wounded friend, so that a gunner may get several shots into a flock if he has downed a bird or two with his first barrel.

This species is a lover of warm weather, seldom going north beyond the temperate zone, and breeding in almost any part of its habitat. During the winter months they are quite abundant on the plains of Mexico and Texas and all along the shores of the Gulf of Mexico to Central America. They are quite common throughout our southwestern States and on the sandbars along the coasts of our South Atlantic States during the breeding season. The clutch of eggs numbers three or four, dingy gray, and nearly, if not quite, as large as hens' eggs.

The bill is often of great length, though varying much in specimens according to the age and development of the bird, running from four to eight inches. This is mainly black, though much of the under mandible is yellowish. In adult birds the bill is considerably down-curved at the tip.



SICKLE-BILLED CURLEW.

THE SICKLE-BILLED CURLEW 217

The male and female are marked alike. Top of the head indistinctly streaked with black, reddish and whitish; same colors on hind neck and here more distinct. Above, brownish black, spotted with tawny yellow and reddish brown scalloped on the edges of the feathers; wing coverts with reddish tones predominant. Primaries dusky, mottled with red-brown. Secondaries and tail feathers reddish brown with regular barrings of black. Below, light reddish brown, darkest on breast and under wing coverts, paler on the throat, in fact, here nearly white. Lower throat and breast streaked with blackish, the markings growing larger and darker on the sides of breast and body, in these places becoming well defined arrow heads and bars of black. Lining of wings and crissum unspotted. Legs grayish brown; the toes short and stout, flattened beneath, and widely margined on the edges. Length very variable; from twenty-four inches upward, according to the age of the bird and consequent development of the bill. Extent from thirty-eight to forty inches.

The Sickle-bill is a fine bird, in quality of flesh equal to any of the smaller waders and superior to most, ranking high as a table delicacy.

When dwelling on the coast its food is mostly of crabs of the smaller sorts, sea snails and "wrigglers" of various kinds, but in the inland country its table is furnished with grass-hoppers and berries and the same menu which is set before the "upland plover" in the same places. They often make long trips for delicacies of this sort when dwelling on the coast, and the low, berry-covered heaths lining the shores furnish great attractions to migrant flocks.

HUDSONIAN CURLEW. "JACK CURLEW."

(*Numenius hudsonicus*.)

Of the two species which we may call common to New England this is the one more rarely taken within our borders. In the main it is found here during the season of the fall migrations, when it inhabits either the outer sea islands, the sandy ocean beaches or the sea marshes, but most of all the uninhabited grassy islands well offshore. It is one of the wariest of the waders, shy and difficult of approach, though sometimes giving good sport over de-

coys if the sportsman is well concealed. Like the last species, on the marshes and inland it is fond of berries and small fruits, but on the seacoast subsists mostly on snails and marine creatures.

This bird is considerably smaller than the "sickle-bill" and is not so brightly colored. He is from fifteen to seventeen inches long and has a sail spread of about thirty-three inches. The top of the head is dusky brown with a white stripe through the centre and along each side. A dark strip from the bill through the eye to the ear coverts. Above, dusky browns and blacks, mottled with whitish and dull yellow, the dark shades making the body color. Tail grayish brown with indistinct black bars. Primaries dusky brown with lighter mottlings. Linings of the wings pale red-brown with dusky barrings,—markings which will serve to distinguish this from young and undeveloped specimens of the Sickle-bill. Under parts grayish white. Lower throat and upper breast with dusky streaks, these becoming arrowheads or broken barrings on breast and flanks. Legs and feet blackish; bill blackish, flesh-colored at base,

stout, curving, from three to four inches long. The length of the bill varies greatly in different specimens.

This species is not so numerous as either of the other two, but it is an occasional visitor in every part of our continent, dwelling in the north during the summer months and in winter migrating with other travelers of the air far into the south, to Central and South America.

ESQUIMAUX CURLEW. "DOUGH BIRD."

(*Numenius borealis*.)

The smallest and most numerous of our curlews. This species is marked very nearly like the Hudsonian, but in ruddier tones. The bill is considerably shorter than in the last species—from two and one-half to three inches long. In length this bird is from twelve to fourteen inches, in extent from twenty-seven to twenty-nine. The colors, both light and dark, are more decided than in *hudsonicus*. Probably none of these birds breed in our borders, but go to the Arctic portions of the continent, wandering in the fall all through the United States. In all



HUDSONIAN CURLEW.

ESQUIMAUX CURLEW.

this territory, surely in the northern half, this is the most numerous species of curlew. In the cold weather it joins the rest of its family in the warm climates, sometimes going down into the pampas of Argentina for winter quarters.

It nests on the plains of the interior, the number of eggs commonly four, greenish gray in color, with mottlings of varying hue, though in most cases brown.

Inland it lives much like and is often found with the upland plover and the golden plover in their prairie ranges, but to the New England gunner it is only a chance acquaintance met on the sea ledges, the marshes alongshore and on the outer islands. They are fairly regular summer visitors, both this species and the Hudsonian curlew, to those grassy solitudes, deserted islands far off shore, where sea fowl and shore birds are seldom disturbed by any creature more dangerous than the sheep which are pastured there.

Though quite wary they will decoy well if the sportsman is hidden and can imitate their call passably. The flesh of this and all other members of the family is of good flavor and is in good condition at all seasons of the year. The

curlews, when able to procure such food, are very fond of berries and will travel long distances to obtain them. In the fall months they are surprisingly fat after this diet.

They arrive in New England, northward bound, in April or the first of May, but do not tarry on their journey, rarely stopping more than a day or two for food and rest. Their southern migration is performed more leisurely, the birds arriving during the first half of August, even the middle of July at times, and lingering on through their "vacation time" well into September.

The curlews are very popular with the shore gunner and always welcome in his game bag. The sportsmen of this section still speak impressively of the great flight of these birds which landed upon our coast some twenty years ago. They haunted the high lands, the hay fields, and the "upland" country generally,—a matter of great surprise to the most of our baymen, who had been accustomed to find them mainly in the marshes and thought these places their only legitimate grounds. They were moving southward leisurely, only going a few miles each day, so that they stayed nearly a week

with us and the slayer of plover and baybirds had a treat of which they still speak longingly. There were literally thousands of them. Every field of ordinary size had its flock or its gunner lurking in the shadow of a rock or hidden in a clump of weeds with a bunch of decoys before him, intent on breaking all former records of slaughter. The thoughts of the juicy "feeds" of those days make my mouth water yet.

THE KING RAIL.

(*Rallus elegans.*)

Just what percentage of the population of our marshes is made up of the rail family it is difficult to say, but it is surely a large proportion. They are constantly changing residence and there is a large "floating population" having no fixed abode. Often rails are numerous in localities where their human neighbors never suspect their presence. I once showed the contents of my game bag to a man who lived on the edge of my favorite marsh; in it were a number of rails and he was curious to know what they were, saying that he had lived there all his life (where I had shot hundreds of them)

without ever having seen one before. He readily named the different shorebirds which were taken in the same place.

The rails are a numerous family and one of wide dispersion, there being at the proper season some representative in every habitable quarter of the globe. The characteristics of the different members of the family are everywhere the same; the bodies, thin and compressed, making up for a lack of "beam" by a much greater depth than usual; the legs long and very muscular, with large feet and long toes to assist in their traveling easily over the floating grasses and drift stuff so plentiful in their favorite haunts. Their wings are short and rounded, and have nothing like the sail area of the "bay snipe." From this fact their flight is widely different from the free, bold and powerful action of the plover-snipie group. Indeed it is such an effort for the Rail to lift his heavy body, long legs and plebeian feet clear of the ground that every member of the tribe has an inborn dislike of flying, and so, if pursued, he runs, skulks among the grass stems, crawls into the drain holes and the half-subterranean passages made by the muskrat and mink, and only



KING RAIL.

when at the last resort does he rise with clumsy haste, his big feet dangling gracefully below him, and flap heavily away, coming to the ground again as soon as ever he can with safety to seek a surer refuge in the grass. Yet in spite of all this they must be capable of a long-sustained flight, for they often cross large bodies of water in their migrations.

But whatever the case with their wings there is never a suspicion of feebleness in their long, muscular legs, and it is to these members that they trust mostly for escape from danger. They swim well at need, when their long-toed feet are very serviceable as paddles. Under water their wings are called to the aid of their feet and they make rapid progress, only coming up where they may put their heads out through the drift stuff in safety.

The King Rail, the largest and handsomest of the family in North America, is a near relation of the clapper rail which is perhaps better known, but the King Rail is dressed more stylishly and in brighter colors. This bird seems to prefer the fresh water, only rarely being taken on the marshes of the seacoast. He is said to be even more of a stranger to New

England than is the clapper rail. There are perhaps half a dozen authentic records of its capture in the State of Maine during a period of eighteen years, one of these falling to the writer's credit on the 19th of September, 1895. So far as is known but three other specimens have been taken, two of these from the Dyke Marsh in Falmouth, (from which place came my own specimen) since the record of the first specimen, taken on Scarborough Marsh, October 8, 1881, by Mr. A. G. Rogers. I have never known of the capture of a clapper rail in the same neighborhood or anywhere near, although our marshes are all of the sea and the clapper rail is supposed to prefer such places to the swamps of the fresh water; moreover, the clapper is said to be a more common species than the King Rail in all parts of the Atlantic coast line. In the southern part of New England the King Rail is more common than with us.

This bird is almost an exact counterpart of the Virginia Rail, so familiar to all marsh gunners, but made up into a larger package. His length varies from seventeen to nineteen inches; extent from twenty-three to twenty-five inches. As may be seen this is the largest of our rails



CLAPPER RAIL.

as well as the most beautifully colored. Upper parts varying from olive-brown to black—the edges of the feathers the lighter and the blacks on their centres. The scapulars and many of the back feathers widely margined with grayish green. Wings and tail greenish brown. Wing coverts quite pronounced reddish-brown. Neck and breast reddish-brown, paling on throat and chin nearly to white. Flanks barred in black and white sharply defined.

Like the rest of his race he passes the winter in the south—(some few may remain in southern New England)—and his habits and mode of life are the same as those of the rest of his big-footed family. He prefers the unapproachable and impenetrable stretches of the marsh, and among the flags and cat-tails where he dwells he may laugh at pursuit except on the highest water. He is a feeder on both vegetable and animal matter and his flesh is only fair for the table.

THE CLAPPER RAIL.

(*Rallus crepitans.*)

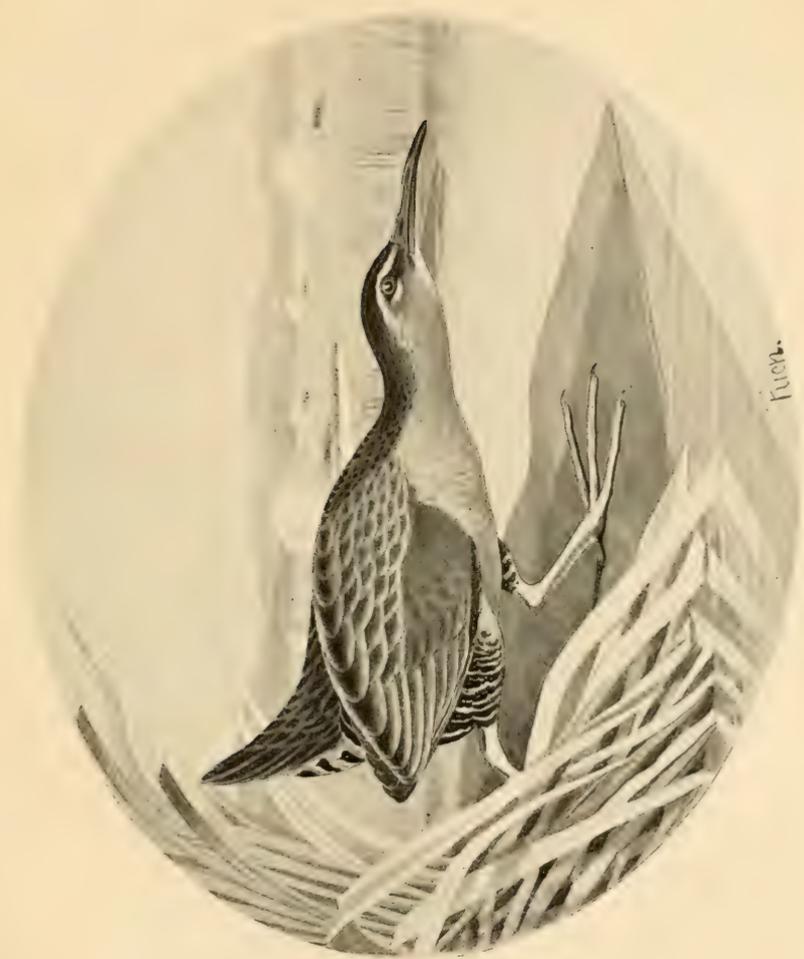
A bird of uncommon occurrence, seldom captured by the New England gunner. In its

form and habits much like the familiar Virginia rail, and similarly marked, though its general coloration is grayish or yellowish-brown. Its plumage with its blending colors lacks the bright tones of reds and browns sharply contrasted with the blacks as they appear in the Virginia.

In the breeding season these birds are very noisy and keep up a continual clatter, whence their name. A dweller in the marshes, mainly those of the seacoast, he is found all along the Atlantic seaboard of the United States, as far north as New England during the breeding season, and spending the winter months in the Southern States and even farther toward the tropics. This species is far more abundant in its southern range than elsewhere.

Their nesting habits are much as in the other species; a little above the high tide level a sort of platform of reeds and dry grasses matted together just out of the water constitutes the nest. This contains anywhere from six to ten eggs, in color creamy white, freckled with red-brown spots.

The adult bird is of brownish-olive hue above, with dusky streaks through the centres of the



VIRGINIA RAIL.

feathers, these colors fading to a grayish tinge on the edges. Everywhere the colors are dull and uncertain, shading and blending gradually one into the other. Below, a pale yellowish brown, growing grayish on the throat. Flanks, axillars and linings of the wings dusky gray with small narrow bars of white. The whole tone of the bird is ashy gray. Wing quills and tail dark brown; eyelid and a small line over the eye white. Legs and feet dull greenish. Length from fourteen to sixteen inches; extent about twenty inches; female a little less. Being more of an animal feeder than is the sora its flavor is hardly as good as that of the more common bird, though by no means to be despised.

THE VIRGINIA RAIL.

(*Rallus virginianus*.)

Inhabiting the same territory as the sora, or Carolina rail,—though preferring those spots where the fresh water springs bubble up through the mucky ooze of the marsh,—is the next most numerous species, the Virginia Rail. This is a very showy bird, somewhat larger and more brilliantly colored than the sora, and fur-

nished with a long, stout, curved bill with which to procure his food,—insects, snails, and the like—for he is principally an animal feeder. On this account his flesh is scarcely as good as that of the sora.

The Virginia Rail's nesting habits are the same as the other members of the family, with a larger complement of eggs, there being from seven to ten in a setting, dirty white in color, and splashed with purplish spots. The Virginia may sometimes raise two broods in a season, but probably not often in New England.

This bird is marked as follows: above, streaked with dark brown and brownish olive, the wing coverts a deep red brown; top of head and back of neck dark brown; below a rich red brown, brightest on the breast and fading out toward throat and belly; flanks and insides of wings blackish, barred with white. The length of this species ten inches, extent fourteen. Bill about one and three-quarters inches long. Female smaller than the male and lighter colored.

A past master in the art of skulking, no water rat can pass through tangled grass and cat-tails as rapidly as he, when running with his head

low and wings pressed to his sides, he forces his thin body in its rapid course, doubling back and forth in devious ways to the despair of all dogs. A few trips after rails would spoil the best bird dog that ever lived. Such a thing as "laying to a dog" does not appear in any of their codes.

THE SORA RAIL. CAROLINA RAIL.

(*Porzana carolina*.)

This is the most common species in New England as elsewhere on the eastern half of our continent. Almost entirely a vegetable feeder, in our sea marshes its "staff of life" is the long white seeds of the marsh grass, or "thatch," as it is called, which lines the edges of the tide waters and marshy shores, and this, with the snails and "wigglers" so abundant there, forms its entire menu. It is said that in a marsh where much shooting is done they will sometimes fill themselves up with shot, which, it is claimed, they mistake for some kind of seed. Though we have seen many a rail filled with shot it was never willingly on the bird's part, and I think it is our privilege to doubt this statement

until proven. Let us not trust entirely to the rails' crops for our lead while we may buy elsewhere. The average rail is very well content with the "thatch" seed, which is plainly a very nutritious food, for the rails on such diet are always fat and in good order.

Rail-like, the Sora flushes only as a last resort, preferring, if in danger, to run and skulk through the grass, and will worm and twist its way among the closest-growing stalks with considerable speed—a proceeding for which the shape of its body peculiarly fits it. On the wing they are slow and clumsy, flying heavily with their long legs hanging, and unless obliged to continue their course they will generally drop at once into the grass and run a little further before hiding, hugging the cover even closer at the next attempt to put them up. Yet these same birds somehow travel from the mainland to Cuba in their migratory flights, which take place at night and mostly on the full of the moon.

In New England the rail is almost wholly a migrant. It is rarely that any of them brave the rigors of our winters, and the few that attempt it do so only in the southern parts. In



SORA RAIL.

the spring they arrive here about May and leave for their winter quarters soon after the first sharp frosts, though I have known of their staying here (Maine) until December twentieth in a mild season.

The Sora makes its nest of soft dry grasses on a little hummock just above the high water limit, and lays from four to six eggs, in color a dull gray, splashed with brownish spots. The young are covered with black down and are very active almost from their arrival, running about among the reeds like mice. From their retiring habits and unobtrusive natures the rails probably suffer less from hawks or other marsh birds' enemies than do any of their neighbors.

My best sport at rail-shooting has been during the high tides on the full of the moon in September, when the sea had filled all the nooks and corners of the marsh and driven the birds in from their resting places on the long grass and hummocks scattered through it. When the tide was up they took refuge along the edges—up in the fields—in the brush-grown coves, where, when they flushed among the alders it was almost woodcocking—in fact, anywhere to find cover. A good spaniel is the best four-

footed assistant in this sport, both for finding the game, retrieving the dead and capturing skulking wounded birds. When beating up the edges, suddenly the dog would stand, then creeping cautiously up would stop again, with his head cocked on one side, listening to the rail's mouse-like, squeaking cries. At the word he would send them fluttering heavily into the air, the proper moment to shoot. You need no heavy charge in this shooting. Your shots will all be at close range and you will have plenty of time. But to miss! That is simply disgraceful!

Perhaps the best way to hunt rails is for two men to take a light, flat-bottomed skiff and pole through the grass, shooting in turn. While rails are not shot here in any such numbers as in the Jersey marshes, any reasonable sportsman should be satisfied with his day's fun, for by pushing through the "thatch" in most New England sea marshes a fair bag of these birds may generally be made. On the high tides—the full moon tides which are the best times to try this—the rails may be seen running on the edges, splashing about on the long grass-stems, which, matted together, will permit them to

pass along as well as if on dry ground, or swimming as buoyantly as ducks in the stretches of clear water, bobbing their heads much as does a hen when walking. Whether walking or running (and they are seldom still for an instant) they are continually flirting their tails about, usually carrying them jauntily erect. In the spring these high tides are often very destructive to rail's nests and eggs.

If the Sora is wounded, but uninjured in the legs, you may as well give up all idea of capturing it without a dog; for it runs rapidly through tangled and matted grass, where you would scarcely expect it to make any headway, and it can swim as well under water as on the surface. It is not uncommon to see them dive and cling to the bottom as long as possible, only letting go when half-drowned, and then making their way to some hiding place in the grass where they may put their heads out in safety.

The rail is an easy mark for the shooter because of its slow and steady flight, except when traveling before a brisk breeze, when, of course, it moves fast enough. However, rail shooting requires a bit more skill than "potting" swallows on a telegraph wire, even though it may

have less of the nerve-racking intensity which makes the chief charm of a rough and tumble with a "grizzly."

The Sora, *the* rail to the great number of gunners, is about nine inches long and in wing-spread about fourteen inches. The adult birds, both male and female, are marked as follows: upper parts a greenish brown, mottled with black; many of the feathers having a fine edging of white. The bill, short, thick and stout, of greenish yellow color; a black mask on the face; cheeks, throat, breast and under parts a dull ashy blue, lightening towards the lower parts. Flanks barred with black and white, the colors becoming more pronounced toward the crissum. The young birds in the fall are similarly marked, but in less decided colors, having a reddish or buffy shade on the neck and breast, and a gray or whitish patch on the throat. These have no trace of the black mask on the face.

The Sora Rail is usually introduced to the epicure in the form of a pie, and it is in this stage that it makes the best showing, for its flesh is tender and of delicate flavor. A rail



YELLOW RAIL.

BLACK RAIL.

pie which is constructed of rails is a most succulent morsel, a very different creation from a pie built from street-scavenging English sparrows, which is not uncommonly the material used when the flight of soras has been small.

THE YELLOW RAIL.

(*Porzana noveboracensis.*)

This pretty little fellow is a visitor along the eastern coast and in some of the inland marshes of eastern North America. The range of its migration is extensive, reaching from Hudson bay to the Gulf of Mexico or even further south. Nowhere in all this stretch of country is it abundant, yet while most naturalists seem to think it a rare visitor in New England, especially so in the northern parts, there is some reason to believe that it is more numerous here than is generally supposed. Indeed, from my own experience I should say that it is more common here than the Virginia rail, for within the last three years I have known of the capture of possibly fifty specimens of the Yellow Rail near Portland, Me., and have myself taken

at least half that number, while of the Virginia rails scarcely twenty have been killed in the same time.

The Yellow Rail seems to be quite hardy, staying here after the other species have deserted us and the ice has made in the pond-holes of the marsh. The writer has shot them when there had been severe cold for November and after a snowfall of three or four inches.

He is a beautiful little bird,—his body color a golden yellow, the feathers of his back and wing coverts jet black with yellow edges, and here and there speckled with tiny white spots. His breast is a deep golden yellow, growing paler below. Flanks and inside of wings barred with black and white. Crissum golden yellow. Length about six inches, extent ten or thereabout. This is the smallest of the rails ordinarily found in New England, though that extremely rare straggler here, the black rail, is even smaller.

The Yellow Rail is a more inveterate skulker and, if possible, harder to flush than any other of the family. Out of the first six specimens which the writer obtained five were captured by the dog and the sixth only escaped the same



CORN CRAKE.

fate by being shot almost off the dog's nose as he drove it up from the ground.

In form and habits the Yellow Rail is very similar to the sora, but he dwells in the drier levels of the marsh and in the meadow lands, where the shorter grasses offer less impediment to his feebler powers. His food is principally of seeds, and his flesh (what there is of it) is equally as good as that of the sora.

THE BLACK RAIL.

(*Porzana jamaicensis*.)

Of all the feathered dwellers in or visitors to New England this is the rarest. There are very few records of its capture in our borders. In fact, few are taken anywhere in the United States, though it may be more common than is generally supposed, since, because of its small size and retiring disposition it might easily be overlooked. Its range lies mostly to the southward of the United States. The bird is more common in the West Indies, Central and South America, where it visits as far south as Chile.

In length this little fellow is from five and one-half to six inches; in extent about nine and

one-half inches. Above, its body color is a bluish black with minute specklings and barrings of white. Below, dark slate color, a little lighter on under side of wings, belly and flanks; under wing and tail coverts barred with white.

EUROPEAN CORN CRAKE.

(*Crex crex*.)

Seldom found in this section, nor, in fact, in America anywhere, but in this vicinity (Portland, Me.) one, and possibly two specimens have been taken. The one saved was shot on the 14th of October, 1889, in the "Dyke Marsh" in Falmouth, Me., and is now occupying a place of high honor in the collection of my friend, Dr. Henry H. Brock, of Portland. The specimen was in fine condition and in almost perfect plumage. Above, dark brown and black, mottled with lighter browns and yellows; the wing coverts a deep reddish brown,—burnt sienna is about the shade. Below, yellowish and ashy gray, paler on throat and belly; flanks and crissum with dusky brown bars; a brownish stripe from the bill through the eye. Bill and eyes brown; legs and feet pale yellow. In length



PURPLE GALLINULE.

some ten and one-half inches; extent about thirteen inches.

There are perhaps half a dozen records of the capture of this species on the North American continent.

THE PURPLE GALLINULE.

(*Ionornis martinica*.)

Another distinguished southerner of rare occurrence here. His habits, shape and general appearance are much the same as those of the more common Florida Gallinule, but his markings are more brilliant. His head, neck and under parts are a deep, purplish blue, shading on the belly into black; sides and linings of the wings bluish green. Crissum white. Above, an olive green with a bluish cast on wing coverts and neck. Frontal shield blue; bill bright red with yellow tip. Legs yellow. Length from ten to twelve, extent about twenty-two inches. A most beautiful bird and sure to command attention when captured.

Nesting habits as in the more common species, the Florida gallinule. From ten to a dozen eggs form the complement for a nest.

The two species are found over much the same territory though the present one is of somewhat more southern habitat.

FLORIDA GALLINULE.

(*Gallinula galeata*.)

This species, quite common in the South Atlantic and Gulf States, is only occasionally met in New England and corresponding latitudes, though specimens are rarely taken in the Maritime Provinces of Canada. In northern New England it is one of the least common of the marsh dwellers. It is seldom that more than two are taken in a season in this section, most years passing without the capture of a specimen being recorded in Maine.

The Florida Gallinule loves the tranquil waters—the still lagoons overgrown with sedge and grass,—for there the floating vegetation offers the best chance for obtaining food. Much preferring the fresh water ponds and streams, this bird is rarely seen in the salt marshes and then usually he is some stray traveler on his way toward warm weather. In gait these birds are much like the domestic fowl, bobbing their



FLORIDA GALLINULE.

heads in the same manner when walking. They are good runners and in case of danger have a great talent at disappearing; like their cousins, the rails, they are more prone to run and skulk than to fly. They are fairly good swimmers, as well, sitting lightly and easily on the water, keeping up the motion of their heads and flirting their tails up and down in rail fashion as they go. They are feeders upon both animal and vegetable matter, the grass seeds and the worms and snails of the bogs being equally acceptable to them.

Most of their traveling is done at night. It is even said that their migrations (must we believe this?) are performed on foot—a sort of feathered “tramp.” Their legs are stout, and except that the toes are long, slender and without lobes, as in the rails, and that the bird is somewhat smaller, it closely resembles the “coot,” or “mud hen,” so well known to duck hunters. The long toes spreading out over a comparatively wide surface so distribute the weight of the bird that it can run with the greatest ease over the broad-leaved water plants and matted floating grasses.

In its breeding dress the Florida Gallinule

is colored as follows: back brownish green, becoming a dusky color on the wings and tail. Edge of wing white, crissum white with a broad central patch of black running through it to the end of the tail. Frontal plate red. Bill red with yellow tip. Iris red-brown. Legs and feet willowy green, nails black. The bird is from twelve to fourteen inches long, and from twenty to twenty-two inches in extent.

The bill and frontal plate in all specimens before mentioned as having been taken near Portland lacked the bright colors of the full plumaged bird, these being replaced by dusky green; all fall specimens.

The nests of this species are loosely made of grass stems placed at the water's edge on tussocks of earth or even in some half-floating drift-stuff. A nest often contains as many as a dozen eggs. The Gallinule breeds anywhere in its range.

THE COOT. WHITE-BILLED MUD-HEN.
"CROW DUCK."

(Fulica americana.)

A common bird in our marshes, well known to the duck hunter, and remarkable principally for its long, lobed toes. This bird is a sort of connecting link,—an intermediate family between the gallinules and the waterfowl proper. It closely resembles the gallinules save that its feet are furnished with wide lobes on the toes, much like the feet of a grebe, while the gallinule has the long, slender toes of the rail family.

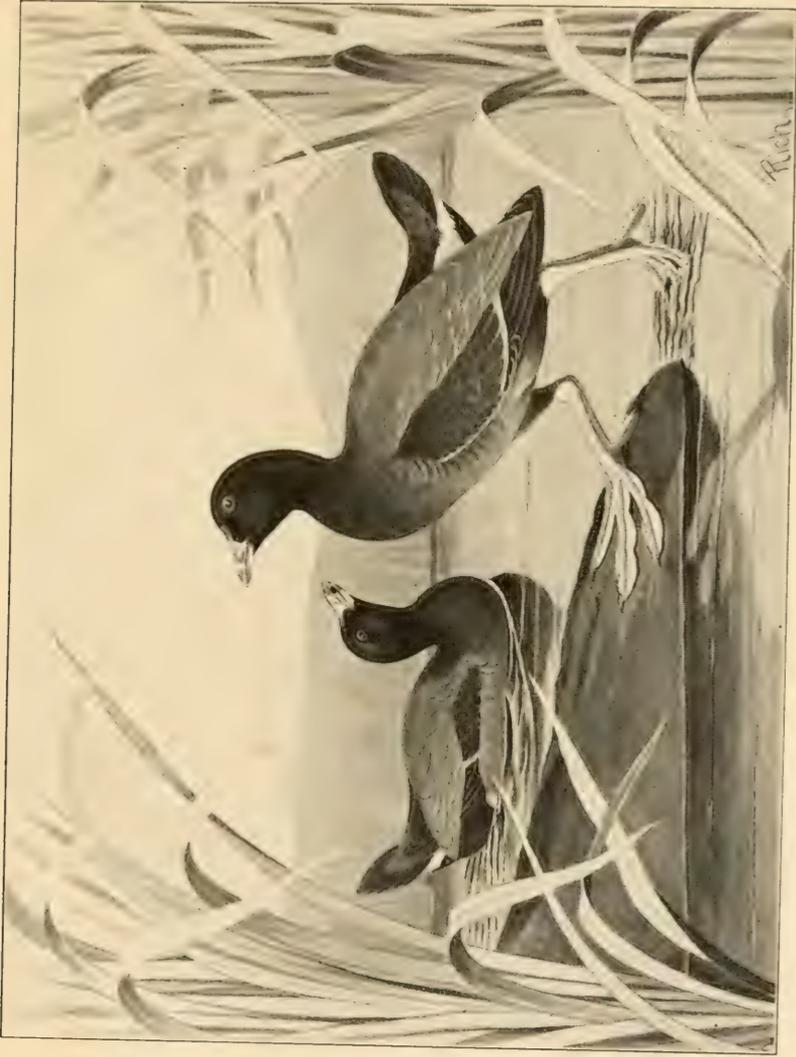
The Coot is most common in the fresh water ponds and lakes, avoiding the rivers and appearing only casually in the sea marshes, plainly preferring the still waters and stagnant fens where there is an abundance of water insects and vegetable matter. They swim well and dive as deftly as any duck. The writer has met them several times swimming in a broad arm of the sea, almost the open ocean.

The Coot arrives in our latitude about the middle of April and goes about its nesting at once, sometimes raising two broods in a sea-

son. From eight to twelve eggs are laid in a nest fashioned after the same classic architecture as the rail's,—often, as in the gallinules, on the anchored floating stuff of the ponds. The period of incubation is about three weeks. The young birds are very active, taking to the water about as soon as they are hatched and are at once able to take care of themselves. At this time they are covered with a thick, black down, and present a striking likeness to the domestic chicken at the same stage of development. The bill, white and showing the spot on each mandible as in the adult, is even more conspicuous than in the older birds.

These birds as a rule have less success than the rails in raising their families, as they are oftener in the open water in plain view of the hawks and other persecutors in fur and feathers.

The Mud-hen looks like an overgrown rail and has many of the rail's peculiarities; also its dislike of flying, though not in so marked a degree. It has, too, the same labored, lumbering flight, rising as heavily and flying as slowly. If forced to rise from the water it splashes and spatters along for some distance,



MUD HEN OR COOT.

half flying, half running, as do some of the heavier and clumsier sea-fowl.

This bird gets much of its food by diving and swims well under water, using its wings in conjunction with its long, lobed feet, which are a most serviceable pair of paddles.

In summer the separate families keep by themselves, but when in the fall the young are fully fledged and ready for business flocks of considerable size are formed preparatory to migrating. Our sportsmen seldom trouble the Coots in ponds where much duck shooting is done from blinds, since their flocks often serve to decoy passing birds, which, seeing the Coots swimming unconcernedly about, alight near them, taking it for granted that all is safe because of their presence. Perhaps, too, the quality of their flesh may account in part for their immunity from pursuit and the semi-protection afforded them, though the bird is a cleanly feeder and lives for the most part on vegetable food.

The general tone of the Coot's plumage is a dark slate color, growing lighter and grayer below, darkening on the head and neck. Dusky greenish on the back; tail blackish; crissum

white, also the edge of the wing. The under parts are covered with a thick coat of black down beneath the feathers as in the ducks. The bill is whitish, marked at the end by a dull, reddish patch. Frontal shield chestnut. Legs and feet greenish. Iris bright red. Length from fourteen to sixteen inches; extent from twenty-three to twenty-six inches.

THE GREATER SNOW GOOSE.

(*Chen hyperborea nivalis*.)

This species is one of general distribution in North America, though in comparison with the numbers found in the West the Snow Goose is of rare occurrence in New England, and here, as in the rest of the Atlantic States, it is entirely maritime. These birds breed in the far north, mostly on the Arctic shores of the continent and on the almost unknown islands beyond, and their only visits to New England are made during the migrations. Even then they stay scarcely longer than is necessary to rest and lay in a stock of provisions for another flight. They arrive on their journeying to the north a few days later than does the Canada goose and commence



SNOW GOOSE.

their southern movements before the larger species.

Few New England gunners have any personal acquaintance with this bird, but in the West, on the plains, in the marshes and along the Pacific coast they are very abundant during the flight seasons. Their large flocks seen at a distance on the brown grass look like the remains of some great snow drift not yet conquered by the sun. In its eastern habitat it passes the winter months in the South Atlantic and Gulf States, and on its western range it winters in Texas and on the coast of Southern California in great numbers. On the Atlantic coast line they become much more abundant southward, where practically all the Snow Goose population of the eastern half of the continent congregates for the cold weather.

Its plumage is very striking—for the most part of snowy whiteness, with a speckling of rusty brown on the head, darkest at the base of the bill and gradually fading into the white of the neck. Primaries blackish; eyes brown; feet dull purplish red with black nails. The bill very stout, deep and rather narrow, pale purplish with white nail. In weight the Snow

Goose varies from six to eight pounds, thus not so large as the Canada. The length of this species is between twenty-eight and thirty inches, with a wingspread of from fifty-eight to sixty-two inches.

There are two other species of Snow Geese in North America, both inhabiting the western half of the continent,—the Lesser Snow Goose (*Chen hyperborea*), a race which probably intergrades with the present species, breeding in Arctic America and Alaska and in winter coming south to the central plains, or on the coast to southern California,—and Ross' Snow Goose (*Chen rossii*), the smallest of North American geese, mainly a maritime race, breeding far away in the north, and often associating with the Lesser Snow Goose, from which it may be distinguished by the wart-like growth at the base of the upper mandible. This species has much the same range as its relative just named, though, as mentioned, Ross' Goose is more often taken on the coast. Neither of these small geese are taken on the Atlantic coast. None of these birds are much given to coming to decoys.



WHITE-FRONTED GOOSE.

THE WHITE-FRONTED GOOSE.

(*Anser albifrons gambeli*.)

A rare bird all along the coast line of New England, and in fact, on the entire Atlantic coast, of more frequent occurrence in the West, especially on the Pacific coast in winter. This species breeds only in the far north, all across the American continent, perhaps more abundantly on the northwestern ranges.

The sexes are identical in markings, which are as follows: head and neck brownish; a white patch around the base of upper mandible, with a blackish margin behind it. Above dusky gray; below whitish, smirched on the breast with black of varying extent and depth of color, from which marking they are sometimes called "Speckle-bellies," a most classical appellation. The crissum, upper tail coverts and sides of the rump are white. Bill pale pink with white nail. The young of this species is somewhat different: a darker bird, lacking the white on the head and having no black below. The length of this species is from twenty-three to twenty-five inches, extent from fifty-eight to

sixty inches. Its habits are very nearly identical with those of the better known Canada goose, flying in the characteristic V-shaped flocks and ranking about equal with that species in table qualities.

This goose is represented in the Old World by a species so close to our own race that it is doubtful if even an expert could with certainty distinguish between them. Apparently the difference is entirely one of size, our own species having a trifling advantage in this.

THE CANADA GOOSE.

(*Branta canadensis*.)

What is the first harbinger of spring? Surely the long files of the geese threading their airy pathway are the surest signs that grim old winter has begun to relax his grip upon the earth. The boldest mayflower—the pluckiest grassblades are not yet reckless enough to push their tiny heads above the mud and ice which make up the desolation called early spring in New England. These merely listen to their herald's trumpet note—then wisely turn over for another nap. But never a whit cares the

good gray Goose, for, high up, safe from all harm from human foe, their swift-moving wedges keep steadily northward over city and farmland, forest, lake, plain and open sea. Anon comes down the distant clamor of the flock—the wily old leader as he calls to the lag-gards, perhaps encouraging them with the praises of the region whither they are bound, that the weary followers may keep up good heart, for there are some who fain would rest their wings and make a brief halt on the water below. But not so the old gander. He remembers vividly the dangers of that treacherous place, for not yet has the calamity of last fall's flight passed from his memory,—when the tired youngsters were allowed to settle upon its waters for rest. He knows full well what was their rest!

Far below in city street or muddy country road the sportsman stands up-gazing and following them with longing eyes until the last faint “honk” has died away and the flock has become but a speck against the dark mass of the northern cloud-bank. For the rest of the day that man's mind is scarcely to be kept on the ledger or the farm's business, and ten to

one, when he goes home the tried companion of a hundred pleasant shooting trips comes out from its dusty case, is tenderly balanced in his hands, thrown to his shoulder and aimed at an imaginary goose, then carefully inspected and thoroughly cleaned, though there is no need of it, and at last reluctantly put away again. Perhaps the poor fellow cannot break away from his toil, but he will think and plan for the future and in his dreams live over again his merry days by field and marsh or on blue waters. Mayhap he hears the ripples chuckling under the bows of his float with a merry spring-time melody as he forces his small craft over the gentle swells in pursuit of some unsuspecting flock. Will he score one of them? Of course! For there are no "blank days" in the "happy hunting grounds" of our dreams, and so he is happier for the mere sight of that flying phalanx of "honkers," and the memories which they recall of deeds performed at crack o' day with sculling oar and goose gun.

Far away in the lagoons of the south the winter months have been spent, and now a few days, genial and bright with the promise of spring, have filled the old gander's whole being

with a vague unrest. He mopes and is silent; anon he stirs the whole flock with his noisy clatter, and soon with a cry like a trumpet call he spreads his brown wings for the north and the safety of its frozen marshes. Every goose within hearing joins him and away they go; by day and by night in a well nigh unending flight he leads his followers to those Arctic shores.

When the wearied column comes down to rest on the water, tired enough and loth to fly, the gunner may "scull" them if he has skill in the handling of a "gunning float" and is blessed with a strong wrist. It is less tiresome to do your "sculling" by proxy, however; therefore, if you have some good-natured gunner friend, the possessor of a double "float," it is good judgment to cultivate his acquaintance at this season of the year. The deep ones among our duck and goose shooters are very polite to all the steamboat skippers during the migratory flights of the geese, and a mysterious wink from one of these brass-buttoned people will catch the bay gunners' attention quicker than a kick from another man. "We passed a big flock of geese down off the no'theast p'int of Clabbo'rd Island on the way up. Tom says to come down

just as soon as you can get there," says one of these in a confidential tone, and off you go to get gun and shells ready for a trip down the bay. As fast as your horse can take you you go to your friend's home by the sea. It is a long six miles through the deep and clinging mud—a longer six miles to-day than ever, you think—but you arrive at last, your poor nag steaming from his jog. Your friend is impatiently waiting, pacing his porch, spyglass in hand, his attention divided between yourself and that long black line a mile-and-a-half away upon the water. He evidently expected you. "Huh! Here, are you? How long does it take that plug of yours to travel six miles of good roads? I thought you were never coming!" Even as he speaks and, grinning welcome, grasps your hand, with his other paw, glass and all, he points away to where the unsuspecting birds are riding at ease. You seize the 'scope the while he complains at such delay, to feast your eyes upon that ravishing sight. A dozen at least! Yes, twenty big "honkers" resting and pruning their feathers in a security which you intend shall be brief. Your horse is soon cared for, then,—“Come, now, how long are you

going to stare? Everything is ready. Let's move!" A hurried gathering of war material and you make for the shore where waits the float. With a piece of ice on her long, low bow and a rim of snow along her gunwales your craft, showing not more than six or eight inches above water, is hardly to be told from an ice-cake at fifty yards distance. You take the oars and drive the boat over the waves, perhaps with a touch of selfish joy that there is no other craft in sight. A mile away from the geese your friend says, "Now, pull in your oars and let me scull. I don't dare risk rowing any further." So you settle yourself down contentedly to let this willing worker toil for you. Down you go, laying your lazy length in the bottom of the float, with not even the tip of your nose to show above the gunwale, your head upon your comrade's knees, and as the spring sunshine plays upon your face you think goose-shooting is not such hard work after all. Your spirit is lulled into a deep content and restfulness by the monotonous, muffled "*bump-bump—bump-bump*" of the sculling oar, and even the muttered curse of your companion, whose wrist begins to tire, is not altogether able to dispel your happiness.

Steadily and cautiously the dangerous little craft has pushed its careful way among the drifting ice cakes and has nearly gained a distance whence the shot may be sent into the flock as yet unnoting our approach, when suddenly the old gander stretches up his neck and nervously calling to his command sets them all in motion and they paddle swiftly away. If they are not pursued too closely as a rule they think they can outrun their enemy, if enemy it is, and becoming less cautious, do not so easily take alarm next time. Therefore the man at the scull oar slows up—only giving a few turns of his wrist to keep the float's steerage way. Bye and bye, after a half hour of laborious manœuvring you are almost near enough to shoot. Stealthily the double float slips along—just the top of the sculler's white cap and one eye showing above the low gunwale, the only signs of the pirate crew within. Look out, old gander! Here's trouble for you!

Perhaps our amateur goose-hunter is not beginning to be a little nervous. The only sounds you hear are the low murmur of the ripples beneath the bows, the gride of small ice cakes alongside, and the muffled monotone of the scull-

ing oar, fainter than ever from our pilot's greater care as he moves it to and fro. Flat on your back you lie with your face turned skyward and wonder if the geese can't hear your heart, throbbing, as it seems to you, like an engine. You can bear it no longer. "How far?" you ask. "Keep still! About a hundred yards," the answer comes back in a subdued whisper, and again your pulses renew their dance. "They're swimming again. Confound that gander!" (Let us change a word here for good reasons; the remark need not be rendered literally, but the toiler is scarcely to blame for a trifle of impatience.) "He's been over the route before." A moment later—"We're gaining a bit again. If my wrist holds out and we can get twenty yards nearer we can chance it. When I touch you sit up and take the three together on the left—the *left*, mind you. I will take care of those on the right." Again only the gentle motion of the boat and you could never tell that you were moving, for every landmark is hidden,—only a white gull far-wheeling in the blue and changeless expanse above to look at. The warm sun shines down into your face; you close your eyes

as if for a quiet nap, but come out of your trance very suddenly—the result of a vigorous kick. “Quick, now! Wake up here!” exclaims the man at the scull-oar. “The left!” and up you get and bring your gun to bear on a big gray bird rising out of the water seventy yards away, the first one that catches your eye, then see another about forty yards distant and change to him. Meanwhile your companion, who has been watching them and has had his birds all selected, gets in his two barrels—so near your head that the concussion of his eight-bore well nigh splits your ear drum—before you are fairly ready to shoot. But you add your contribution to the general uproar and see your second barrel double up a big goose, which falls into the water like a ton of coal. “Dead, for a ducat!” (If it was not the one you meant there is no one to know it except yourself and you think that you can keep a secret.) Your first charge was not properly placed, a lurch of the float as your companion swung having thrown you off, but Tom’s former experience and longer training have shown their fruits in his gathering two with his first, where three necks stood in line, and one with the second bar-



CANADA GOOSE.

rel. Away goes the flock with noisy honkings, long necks outstretched and every nerve straining to get out of range. Away, weary as they are, spurred to yet greater endeavors by two more hasty shots from your comrade, and hurrying on until only the sharpest of eyes can mark them down in the shadow of a distant island. Your companion resumes his sculling oar and pushes the float up to a crippled goose which is getting into shape for another trial at escape. Another shot collapses him. You drag your trophies into the boat—only a feeble shiver of wings by way of remonstrance. Are you proud of your prize? You are no true man if not. How large does he look to your delighted eyes as he lies in the bottom of the float? Though your companion's birds are all larger than your own you will never admit it and have no eyes for any but the goose you have killed "all by yourself."

The birds are weary and will not go out of the bay, but there goes another float after them and as it is nearer to the flock than is your own craft you decide to wait here a while. They may come this way next time they fly, when you can try it again. If they don't come back you

have reason to be satisfied still and have had your share. Though you have not killed your forty or fifty geese, as they tell it in the West, you are satisfied. I have noticed that the New England gunner generally has to be satisfied with smaller game returns than his western brother receives for his efforts.

I remember once coming upon a small flock in their northward flight. They had just arrived from the south and were sorely tired. In the marsh where they had settled, the winter's ice had swept away every vestige of cover and not a stalk of the last season's rank-growing grass remained, save in a few spots well above high water mark, where some scanty brush and a thin fringe of salt hay was left standing after winter's work. At my approach thus unprotected the flock at once took wing and scaled away long before I could get within gun-shot. An hour passed, and chancing to look in the direction in which they had gone I saw the whole flock returning and about a mile away. Nearer and nearer they came and I at once hunted cover where there was none in the flat stretch of mud and water. Five hundred yards—four hundred—three hundred—and in

the mire I crouched in a motionless heap with my hat full of shells loaded with BB and buck-shot lying beside me, and in my mind already I owned the whole flock. One hundred and fifty yards away, and at a single warning note from the leader they turned aside and swung slowly past just out of reach. With necks outstretched and wings set, they drifted down to the water and alighted just at a safe distance. Here and there tussocks of black mud rose from the slimy shallows, and taking his station on one of these the old file leader stood sentinel while the others, scattered over the surrounding surface, were soon contentedly feeding. Presently the gander's appetite began to urge its claims upon him, and giving an impatient call he was speedily relieved, the nearest goose clambering upon his point of observation even while he was leaving. No quarreling, but with ready obedience the guard duty was done, each knowing that his neighbor would cheerfully perform his part. While the gander was getting his bite, and during the hour's time which I spent hoping they might feed in shore and so give me my chance, fully half a dozen birds took their turn at watching while all the rest were

filling up as though they thought that the next station was to be Labrador, and no "five minutes for refreshments" by the way. The ease and grace of their movements were a matter of great surprise to me, and it can never be truthfully said that the Goose is either clumsy or stupid. But luck was against me; the tide was falling, food was abundant where they had settled and they came no nearer. At last an alarming cry from the watchful bird on duty and again the flock took wing and flew away. I looked about for the cause of their departure and saw coming down the marsh half-a-mile off two gunners, whose movements had caused my feathered friends to leave thus unceremoniously. So I had wasted a full hour in trying to get within distance—and yet perhaps not wasted, for to my mind no time should be considered wasted when spent in the good company of the brave gray Goose.

The general impression outside the circle of the shooting fraternity seems to be that the Goose is a big, clumsy bungler—a most thick-skulled, slow-witted bird, but no sportsman who is at all acquainted with him will ever pass such a judgment. Seen moving on the water in their

times of peace they are nearly as graceful as the swan. As to their intellect—let their detractors try to get within killing distance and see for themselves who is the smarter.

Many are shot from blinds in the fresh water ponds with live decoys anchored along the shores,—some old wing-tipped veterans whose wounds have been cured and the birds more than half domesticated for this purpose. They take very kindly to civilised ways and tame in a wonderfully short time. After a week of captivity the wildest goose will become so tame that it will almost have to be kicked from under foot in the yards. When left to their own devices and not too much assisted in their house-keeping affairs they breed readily in their new surroundings. Most of the decoys for the shooting are thus obtained. Very rarely a bird tamed to the semi-domestic state is influenced by the migratory instinct to depart with its wild kindred. But perhaps more would be lost from this cause if they were not in most cases “pinioned.”

Not a goose can fly over the horizon that these decoys do not see, and the gander will try his most alluring arts and most enticing music

for their undoing. Few are the hungry travelers that do not come in for rest and food at his invitation. Many shooting clubs have large flocks of decoys and elaborate methods of handling them, letting bird after bird free from their hidden pens to rush to the water when a flock of visitors are wavering in their minds as to coming in. The decoys rarely fail to bring their wild brethren into trouble at last, and, like humanity, the geese thus trained seem to enjoy their mean trade.

The full grown Canada Goose is a most worthy bird: the largest return for his powder and shot that comes to the average sportsman. A Goose of ordinary size will weigh eight pounds, and occasionally old "honkers" are brought to bag which will tip the scales at twelve or fourteen pounds. Nor is the bold fellow to be despised at the table, for his flesh is of good flavor, and unless the subject is too long experienced in the ways of the world, the meat is nice and tender. Surely they are as good for all ordinary purposes as any of the breeds now found in the farmer's barnyard, and the wonder is that more have not been domesticated.

The whole continent of North America is the home of the Canada Goose. It breeds in any suitable place from the Middle States northward to the islands of the Arctic seas, but the greater number build their nests in the Saskatchewan country and thence north to the limit of the Canadian forests. The interior of Labrador, too, has its breeding myriads, where one friend tells me, "I have seen all the Geese in the world in one flock!" Among New England's more remote and unfrequented lakes, particularly those among the Maine woods, this Goose occasionally raises its family. Nests are usually upon the ground, though there have been instances where they have built in trees, taking possession of deserted nests of hawks or other large birds, and presumably have transported their clumsy babies to the water in their beaks, after the manner of the wood duck. The complement of eggs varies from five to eight, usually the smaller number, grayish green in color, and about three and one-half inches long.

This species is the most common and widely dispersed of our geese, and a fine looking fellow is the gander in his spring suit, despite the

fact that there is no gaudy color in his raiment. His head and neck are jet black, with a broad half-encircling band of white from beneath the throat and chin running up on each cheek just behind the eye, and usually a touch of white on his eyelids. The upper parts are grayish brown shading off from the black of the lower neck with each feather a trifle lighter on its edges. The rump black; the upper tail coverts snowy white, standing out in beautiful contrast between the rump and the tail feathers, which are also jet black. Below, the same color as above, but of lighter shade, the gray breast growing lighter still toward the lower parts, the crissum being pure white. The iris is brown; bill and feet black. His length is from thirty-six to thirty-nine inches, and the spread of his wings may exceed five feet. The female is marked like the male, and save for a somewhat brownish tone in the blacks she is exactly similar to her mate.

HUTCHINS' GOOSE.

(*Branta canadensis hutchinsii*.)

This is a smaller variety of the common species, more numerous to the westward than in our section, though I believe by no means uncommon in our own territory. The habits and mode of life of this bird are in every respect identical with the typical bird and all that may be said of one will apply with equal correctness to the other. The main distinction between the two lies in the smaller size and usually darker color of this variety, and in the fact that it has but from fourteen to sixteen feathers in the tail, while the common goose is supplied with eighteen or twenty. Length, wingspread and all measurements average considerably smaller than in the common Canada Goose.

The scientific standing of this variety was for some time considered doubtful, though it is now conceded to rank as a subspecies.

The bay gunners of eastern New England waters distinguish between two races of Canadas, the "long-necked geese" and the "short-necked geese," the latter coming north, as a

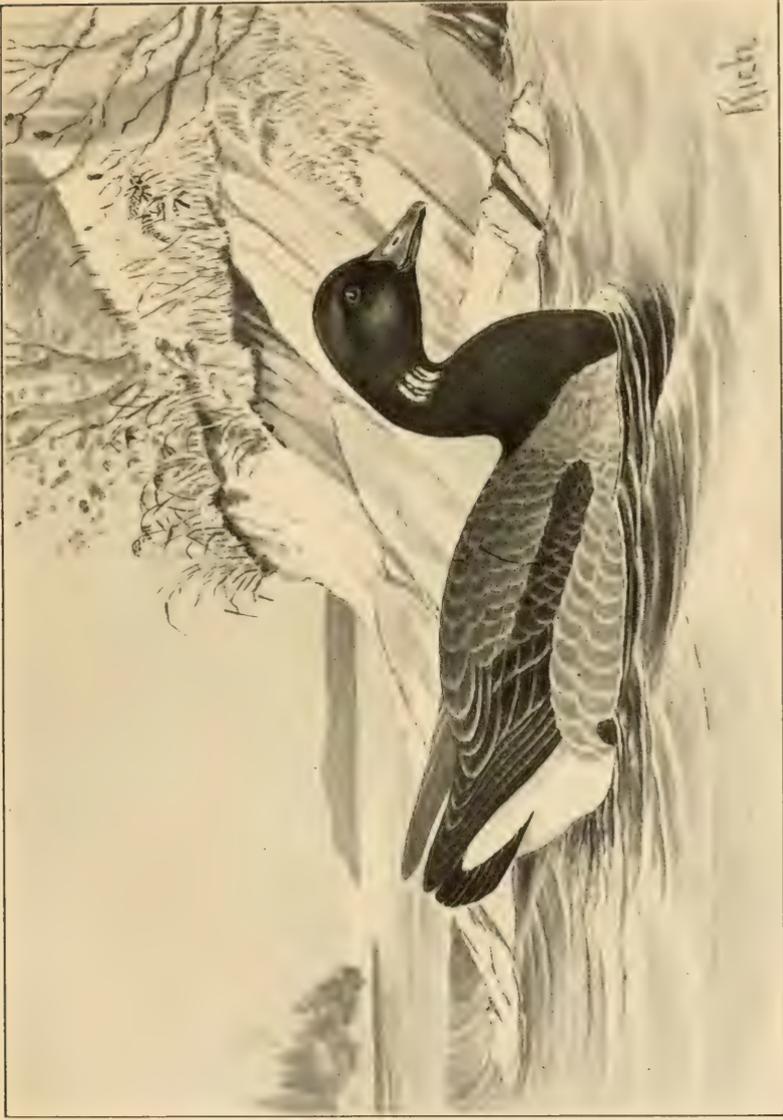
rule, somewhat later and returning ahead of the first named. Not that the two do not travel together, but the later arrivals in the spring and the first comers in the fall are said to average a larger percentage of "short-necked geese." This spring I have had four of these so-called "short-necked geese," of which one was doubtful and three undoubtedly of the present sub-species. If this average will hold it will show Hutchins' Goose to be far from uncommon here.

THE COMMON BRANT.

(*Branta bernicla glaucogastra.*)

These birds breed all through the northern part of the continent and the islands north of it, as well as all along the west coast of Greenland, and are reasonably abundant on our coasts during the migrations. Perhaps we should say unreasonably abundant considering the numbers annually slaughtered from sink boxes and over decoys a little farther south of us, and mostly in the spring flights at that.

The Brant is mainly maritime, though occasionally found in the larger inland waters, and



BRANT.

while a common bird in the Old World is found in North America only on the eastern half. The bird is well known and highly esteemed by the gunner. It comes well to decoys and furnishes good sport. Its flesh, too, is of good flavor despite its somewhat rank food of mollusks and the like. When possible to do so the Brant chooses a vegetable diet.

It is marked as follows: head and neck jet black, as is also the forebreast. A small patch of white on each side of the neck. Breast ashy gray, this color sharply contrasted with the black above, and fading below into the white of the belly and crissum. Above, a dusky brown, with paler margins to the feathers, the rump growing darker and the upper tail coverts showing snowy white between this dark area and the black tail feathers. Wing quills also blackish. Iris brown; bill, feet and claws black. Length about twenty-four, extent of wings some forty-eight inches. Weight about four pounds.

In northern New England the Brant is rarely shot over decoys, our method being that toilsome fashion of pushing a gunning float around the bay in steady pursuit until the birds get

sick of running away and so allow the gunner to get within range and end it all. They are not very difficult of approach as compared with the average of our ducks and their big cousins, the Canadas. The smaller flocks are ordinarily more readily approached than the large ones—a general rule in all such bay gunning.

We in the north of the Gulf of Maine see few of these migrants at either season, but the brant slayer of Cape Cod is more favored of the gods. Not only has he a hundred birds where we have one, but no weary toil at the "scull oar" is his, for the Cape is about the last stopping place of their migration and here they plan to rest and "take in ballast," as the gunners name their habit of filling their crops with sand.

When the flights strike there, usually the latter part of April or the first of May, the wise gunner has his small "shanty" erected near the beach, a sink box set in the sands on a convenient point near high water mark, and if no natural bar is there he proceeds to build one a fair gunshot away from the sink and just high enough to be above the lift of the tide. Here his live decoys may disport and enjoy them-

selves as much as their anchors and road lines will permit. When, as the rising tide drifts them in, the flocks of Brants see these captives upon their little islands, they paddle in to clamber up and take part in their joys. The gunners, for there are usually several in a box, may make a heavy killing, each taking a separate portion of the flock and raking it with deadly effect at a given signal. After a few such experiences the birds usually "tower" into the air to a great height and bear away for the north. A wounded Brant is commonly captured, for it seldom dives nor is it a fast swimmer.

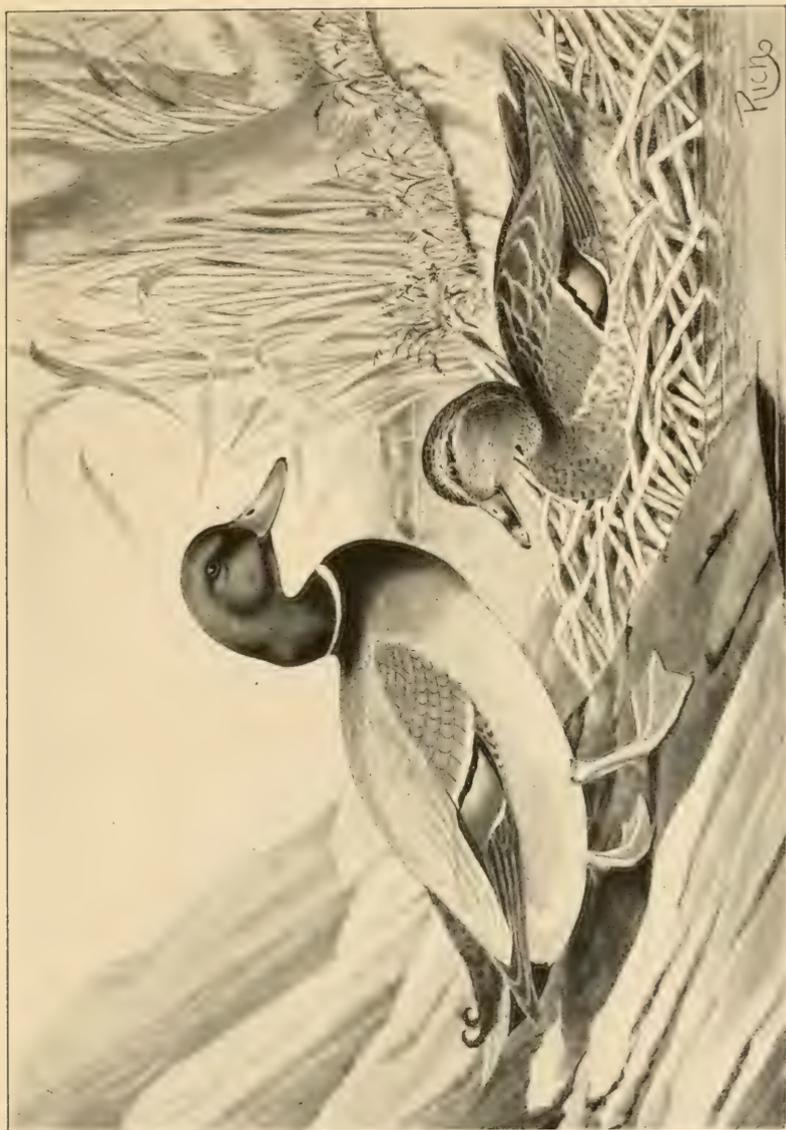
The name, Brant Goose, is a corruption of Brent, or Burnt, Goose, referring to its charcoal coloring.

The Pacific coast and western country has a representative of the race which is closely related to this species—the Black Brant. This also winters on the Asiatic coast as well as on our own.

THE MALLARD.

(Anas boschas.)

From the records of our older gunners the number of Mallards now visiting our section shows a material decrease in the last few years. Even up to fifteen years ago they were not uncommon, but now this world-wide favorite with the wildfowler is seldom seen here (Maine) except in the favored waters of Merrymeeting Bay, which place, as regards the number and variety of wildfowl found, is probably the best duck-shooting point anywhere along the northeast coast of the United States. In Casco Bay we may take fifty Mallards in a season, though I think this is a very liberal estimate. Throughout the central portion of the continent this is the most numerous species of wildfowl. But with all this scarcity of Mallards in our waters there is still a crumb of comfort for us in the thought that we have the black duck, a near relation, and as a game bird fully the equal of, and in some respects superior to, Mr. Mallard himself. Were it not for the black duck the New England wildfowler who is not con-



MALLARD.

tent with shooting "trash ducks" might as well sell his ten-bore for old metal for all the pleasure he would get from it; but the crop of duskies seems to be pretty much the same each year, for which blessing we should be truly thankful.

After their arrival on the breeding grounds the Mallards choose their mates, the drakes often fighting fierce battles for the possession of the belles of the flock. As each pair agrees to join forces for the season they leave the main body to seek out a suitable nesting place. They usually make their nest upon the ground, but will not refuse to occupy the deserted nest of hawk or crow if in a spot where they have reason to think that the ground floor is unsafe. Their nests are lined with dry grass and down from their own bodies. The complement of eggs varies from eight to ten, dingy yellowish gray in color, and not to be distinguished from those of the domestic bird. The period of incubation is about four weeks.

In the Old World the Mallard is one of the commonest ducks, nesting in the northern portions of Europe and Asia, and wintering in southern Asia and northern Africa. With us

it occasionally breeds in the United States, but mostly to the northward, though the rice-grown lakes and swamps of some of our north-western States are fairly well populated with them in the nesting season. The principal breeding ground lies in Canada in the Saskatchewan country. The absence of breeding Mallards on our continent eastward of Hudson Bay and their common occurrence in Greenland opens up a field for investigation. The bird life of Greenland includes many Old World species. Aside from the stray representatives of the European form there is in Greenland a distinct resident race of Mallards. It is hardly credible that the American race would cross hundreds of miles of equally good breeding territory on the mainland to nest in Greenland. Again, is it not possible that the comparatively few Mallards which find their way to northern New England, especially in the winter months, may be from the shores of Greenland, and so, perhaps, of the Greenland race rather than our own western form? The cold weather as a rule finds them comfortably settled in the lagoons and bayous of the South Atlantic and Gulf States, where they may laugh at winter's

storms and revel in food in abundance; but the writer has known of several fine specimens in full breeding plumage being taken on our coast (in Casco Bay) during the very severest of the winter's weather, all male birds and nearly always alone. On the Pacific coast they winter from the Aleutian Islands to southern California.

The farmer is indebted to this species for the common domestic duck, which is a lineal descendant of this gallant gentleman, yet few would guess from the clumsy waddle of the bird of the barnyard that he had any blood in common with this free courser of lake and marsh. What a degenerate scion of a noble race! In his habits the domestic bird has kept as closely as may be to the ways of his ancestors, but his lazy life and uneventful existence have taken away well nigh all the wild bird's fire and graceful action, so that he falls far short of his model.

Our hero is brilliantly appareled in showy garb, and is a handsome bird, especially in his spring plumage. The female, as is usually the case with the duck family, is attired in much more sober dress. The drake, then,

is colored on the head and upper neck a rich, metallic green, lustrous and glossy. A sharply defined ring of white runs around the neck at the base of this area, and beginning under this the lower neck and upper breast are a rich, deep chestnut with a purplish sheen, fading into the silver gray of the lower breast and under parts of the body, this gray color finely waved with faint darker lines. Lower part of the back, rump, tail coverts and crissum black. Tail feathers whitish, central ones growing more dusky, and with two black, up-curling feathers at the base of the tail. Speculum (the bright patch in the wing formed by the ends of some of the secondaries) purplish, changing color with each different view point, now purplish, now violet, now green, and bordered about by a margin of black feathers, these in turn being defined by a bar of white showing at the ends of the coverts and at the outer edge of the speculum. Iris brown; bill greenish yellow; feet and legs orange red with webs a trifle darker and duller in tone. The female is clad in a mixed and mottled dress of black, dusky brown and tawny yellow, this last the body color, lighter in shade on the head,



BLACK DUCK.

neck and under parts and the dark markings finer and fainter here. Wings and feet as in the male bird, save that the scapulars are of the same tawny hue as the rest of the body. Bill orange with a dusky patch on each side.

In length the Mallard is from twenty-two to twenty-four inches; in extent from thirty-two to thirty-six inches, and of weight varying from two and one-half to three and one-quarter pounds.

THE BLACK DUCK. DUSKY DUCK.

(*Anas obscura.*)

This is *the* duck of New England. To the wildfowler of this section the Black Duck is all that the mallard is to his western brother; aye, more than all, because he must be mallard, red-head, canvasback, pintail and many another western favorite rolled into one acute and resourceful waterfowl. Mallard and Black Duck are closely related, but inhabit an area of our land apart from each other. They have apparently divided the continent between them, the Black Duck taking the northern and eastern range, leaving to the other the southern

and western country. Rarely do they encroach upon each other's territory except in the south during the winter months. This species ranges to northern Labrador in summer, both coast and interior, in winter going south to Florida and rarely beyond.

Because of its abundance and the excellence of its flesh the Black Duck has long been the commonest of the wildfowl in our markets, but happily the laws now prevent the sale of this fine bird in much of the northern range of its family in the United States. He stays with us the year around. When in winter the inland lakes and streams are closed to him and he is left to the cold mercy of snow and ice, nothing daunted, he betakes himself to the coast, and in the never-frozen waters of the sea finds food in abundance and, for the most part, safety. At such times the Black Duck lives in the larger bays and the open ocean, during the day time sleeping contentedly on the water if the weather is fair, and seeking shelter from the storms on the lonely isles and in cozy nooks on the deep-sea ledges, flying into the tide-waters and visiting the "mussel-beds" each night to feed, perhaps coming ashore for fresh water so needful

to him. When untroubled he will stay for days in a quarter where food is plenty.

Many are killed during the winter nights by gunners who approach them in their deadly "floats" and shoot them as they huddle on the edges of the ice or feed along the muddy banks of the channels. Some gunners go to the air-holes in the ice with a number of half-tamed birds, the wounded and crippled survivors of former gunning trips cured and half domesticated to serve as decoys. Securely fastening these to a long line and anchoring them at a proper distance, the gunner sits silent and motionless in his float until the whizzing and rushing of wings and the splashing of the water tell of the arrival of expected visitors, and he points his barrels by the light of the moon if there happens to be a moon on duty that night. It is a cold kind of business—this sitting still in your boat on a winter's night with not even the privilege of walking about to keep alive.

The Black Duck is wary and cautious in the extreme, few of his tribe being so difficult of approach, scenting danger while it is yet afar off and waiting not a second warning, but rising into the air with a mighty leap as though

thrown up by a powerful steel spring, then off like a streak. It is next to impossible to get within shot reach of him in a gunning float in the open water, and it is not the easiest matter to get at him in the marshes where there is plenty of cover, for his hearing is of the quickest, his sight of the keenest, and every sense is constantly on the alert. It seems as though his sense of smell would detect an enemy more surely than would another duck's eyesight. In a mixed gathering of waterfowl society, to the Black Duck seems given the full responsibility of sentry duty—no mean compliment to his ability.

Probably the most of these birds which fall a prey to the gunner's wiles are shot from "sink-boxes" and "blinds" in the reed-grown corners of fresh water ponds, using live decoys to lure the birds on to their destruction. The successful duck-shooter must be up betimes and be ready to endure much discomfort, for he must be at his position before daylight in order to get the cream of the shooting, and, where gunners are as numerous as in my section, a late comer is apt to find every stand occupied.

The decoys are placed before the blind, an-

chored, as a rule, so that one old drake is somewhat separated from the rest, and being dissatisfied and lonesome, he keeps up a continual remonstrant conversation with the rest of his flock. If a bunch of birds is passing never fear but he will see them and find means to let the strangers know of his presence and whereabouts, and they, with a sudden turn from their course, with necks outstretched and wings stiffly set, come in at full speed. Now they turn away, careering around the pond two or three times because the foxy old fellow who leads them is not just suited with the appearance of things,—some small matter of suspicion in his mind,—but next time around a bird or two in the tail of the flock, more hungry than wise, drop out with slanting flight,—then another, and yet more,—until finally the main body comes in like a flight of arrows. Splash! Splash! They have settled just outside the line of decoys and begin to swim in toward them. Now the gunner waits until they are bunched at a little distance from his “tolers,” which if old hands at the business at once swim away from their visitors, and when his feathered assistants are surely safe the gunner pulls trig-

ger where there is the greatest number of heads. The encore when the survivors rise like the scattered fragments of a bursting shell will hardly account for more than a pair, but usually the "pot-shot" with the first barrel has done grand service toward thinning the game supply, and it is no uncommon occurrence for one gun in experienced hands to gather in nearly all of the flock. I have known a man to wait twenty minutes with his destroyer resting on the edge of the "sink" in order to clean up the whole bunch with one cartridge. Commendable economy! These methods are mainly employed by market gunners whose favorite weapon is, in most cases, an eight- or four-bore "shoulder cannon." To the majority of shooters I believe that one duck killed cleanly on the wing will bring more real satisfaction than half a dozen thus murdered.

Very rarely is the Black Duck fooled by any wooden imitation of his kind. His keen eyes mark the difference long before he is within the reach of the gun, and swerving on rapid wings he climbs skyward and makes off at great speed—going clean out of sight, returning not at all to such a dangerous neighborhood.

As soon as the ice of the inland lakes breaks up in the spring the Black Duck finds it out in some mysterious way, and no devotee of rod and reel—trout fisher or salmon killer—is earlier upon the scene than is he. Forsaking the sea, unmindful of its kindly shelter and generous living when all the fresh water ponds and lakes refused him sustenance, he hurries away, like the fickle fellow he is, to the swamps and bog-holes of the interior as soon as ever he can. Here, during the merry days of spring and summer, he lives like a lord in the fullness and plenty of the good things of life, and the sea knows him no more until the fall migration commences.

This species nests in May or June, according to locality and seasons, raising a brood varying in number from six to ten. The nests are commonly made upon the ground, though occasionally upon the top of some decayed stump. The youngsters appear during June, or July at latest, and are as lively a family of infants as any proud parent could wish. Any person who doubts their abilities should try to catch some unfledged duckling. If there is cover enough anywhere near in which to hide, rest assured

that the little "flapper" will find it, for the Black Duck at any age is a most skillful skulker.

Though by far the greater number have gone on for summer quarters to Labrador and the Hudson Bay country, the more remote lakes and ponds of Maine are alive with these fine birds during the breeding season. Scarcely a secluded cove or hidden nook in their margins but has its brood of "waddling" youngsters, happy in the plenty that leaves no want unfilled. When the summer wanes and the young birds have become strong enough to journey, straggling ducks begin to make their appearance in the salt marshes, then in small bunches, a few at a time, as cold weather approaches they gather at the sea into flocks ranging from twenty to two hundred birds. Near my home they gather winter after winter at the mouth of a fresh water river in a body of, at times, as many as five thousand birds, coming in at night and spending their days on the salt water, except in bad weather, when they huddle on the ice at a safe distance from shore. From the first of September such of their number as are not inclined to brave the rigors of a New Eng-

land winter begin their longer journey to southern waters, and up to the middle of December the migrant birds continue to pass.

There is a vast difference between the flavor of the winter bird, fed on the mussels and animal food of the salt water, and that of the lazy dweller in the summer lakes; at the table one would scarcely know them for members of the same family. If their plumage and habits differed as much as the taste of their flesh there would be *strong* ground for the opinion which has been advanced that the birds of our winter months are of a race distinct from the birds which we gather during the fall flights. This belief is based upon the larger size, darker color, much heavier streaking on head and neck, brighter yellow of the bill, and redder tinge of the feet and legs of the cold weather visitor—naming it the “Hudson Bay Duck,” and claiming that it is a more northern race than the other. This is the one occasion which has come to my notice where the sportsman has gotten in ahead of the scientist in the separation of a sub-species: by our duck shooters these differences have long been noted and this theory of a separate race been held. One experienced

wildfowler of my acquaintance claims that this duck never goes near the inland waters, but is entirely a maritime race. This seems hardly probable, but there is certainly more reason for this bit of "feather-splitting" than for many other cases already admitted to good standing in the ornithologist's list. Mr. William Brewster, of Cambridge, Mass., has given this northern form official sanction and the scientific name of *Anas obscura rubripes*.

It may be well to state that in the southern part of its range there are two varieties of this duck known to the scientist, although the average gunner would not be likely to note a difference; these are the Texan and the Floridan Black Duck. The Floridan race is of lighter color than the typical bird; cheeks and throat very pale buff, almost, if not quite, without streaking; bill yellowish olive with a black nail and a patch of black at the base of upper mandible, resembling somewhat more the female mallard than the type of the Black Duck. Speculum sometimes greenish, sometimes purplish, and often the feathers making it are white-tipped.

The Texan race has a dirty gray color on

the throat, cheeks and neck, these last slightly streaked with brown lines. Speculum purple, feathers tipped with white. Under parts lighter than in northern races, each feather spotted near the tip with dusky brown. Both these races show markings which might indicate a mallard cross. Hybrids between mallard and black duck are not uncommon. Probably "Brewer's Duck," described and figured by Audubon, was such a bird.

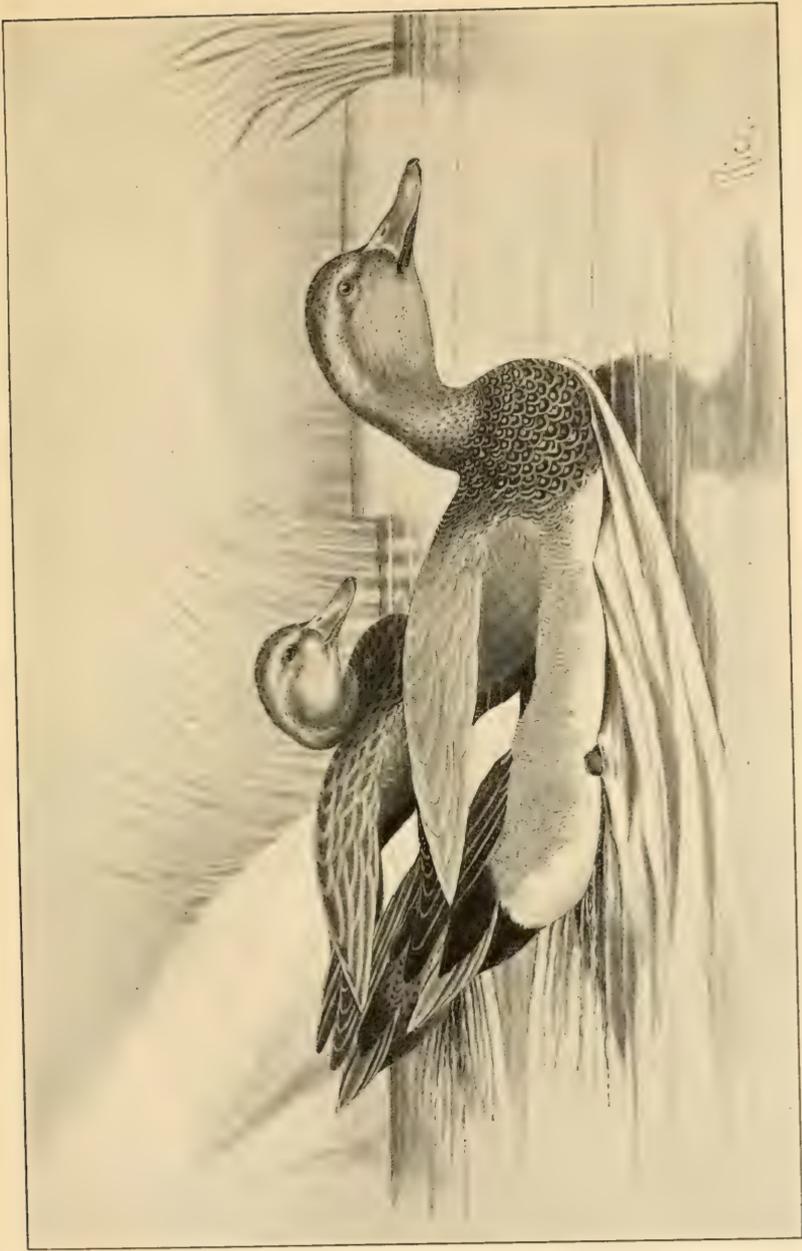
There is yet another species (Diaz' Black Duck) resident in Central America and Mexico, closely resembling the two southern forms.

The Black Duck is a strong flyer, swift of wing and capable of putting in many miles without a halt, in its migratory flights passing over at a height which makes it secure from all harm. The spring and fall months, of course, see more Black Ducks in our waters than do any other seasons, these excursions to and from the breeding grounds bringing many travelers of this sort to our shores and lakes.

In the West our Black Duck is sometimes called the Black Mallard. He resembles somewhat the female of that species but is considerably darker in his coloration. In size the two

are about equal though in the few comparisons which the writer has had the opportunity of making the Black Duck has had a shade the better of the weights. The male and female of this species are marked alike, and the male bird may usually be distinguished by the fine line of white on the outer edge of the speculum, but this rule is not invariable. The general color of these birds is a dull, dusky brown, with a lighter yellowish brown on the edges of the feathers. Head and neck are lighter in tone and of a yellowish buff shade, darker on the top of the head and back of the neck, lighter on the throat and streaked with dark brown lines which are more numerous on the hind neck and crown than on cheeks, chin and throat. The speculum is of deep violet hue, set in a black frame; usually in the male with a fine edging of white showing on the tips of the feathers which make it. Iris brown; bill yellowish green with a black nail; feet are dull orange with dusky webs and black nails.

The weight of this species ranges from two and one-half to three and one-half pounds. The length averages from twenty-two to twenty-four inches; in extent the measurements vary



GADWALL.

from thirty-two to thirty-four inches. I think the "Hudson Bay Duck" may average from one-half to three-quarters of a pound heavier than our summer and fall resident, with a corresponding increase in its sail-plan. Have been informed by reliable parties of a Northern Black Duck weighing four and one-half pounds.

The Black Duck is one of the largest of the "river ducks," and in proper condition is unsurpassed for the table. Its food is clean and its flesh is usually tender and of good flavor. This duck is easily domesticated. It might be a profitable investment for someone to raise them for the market. They are hardy, would need little care, and would probably thrive with a fair chance. It is likely that they would sell well in the markets, judging from the way the wild birds have always been snapped up in this neighborhood in the days when sale was permitted.

THE GADWALL. GRAY DUCK.

(*Chaulelasmus streperus*.)

Though found more or less abundantly in all parts of North America, and in fact all

over the Northern Hemisphere, and breeding throughout its range, this duck is an uncommon visitant in the eastern and coast waters of our continent north of South Carolina. Here is another case of discrimination against the New England gunner, for in our section it is even more rarely found. In a twenty years' acquaintance with one of the best duck-shooting ponds of the New England States I have heard of only three Gadwalls being taken there, have seen but five birds which had been killed in this locality, and have never seen the bird in life in these waters. Its home is through the central and western portions of our country, from our prairies north to the Saskatchewan.

It is a fine table bird, ranking well up at the head of the list. Not far removed from the mallard in kin, and of about the same size, the female somewhat resembles the female of that species in markings and dress. They come well to mallard decoys and often mix with mallards in flight and on the feeding grounds. The notes of the two are nearly identical. Both are shoal water feeders, seldom diving but getting their living along the banks and edges of the lakes or by "tipping" in the shallows.

The Gadwall builds its nest upon the ground or in low, dead stubs. The complement of eggs varies from six to ten in number, usually nearer the smaller figure. The color of these is a delicate creamy white. The male is a very prettily marked bird with some brilliant touches of color in his plumage. His head and neck are a pale yellowish white, streaked with dusky or black; darker and brownish in tone, as well as more heavily streaked on the crown. Lower neck all around, breast and upper parts of the back bluish black, the feathers with fine edgings of white, many of them having spots of the same color on their centres, thus giving the effect of a delicate collar of lace. These colors are more sharply defined on the breast, and on the back gradually blend with the body colors. Lower back dusky, growing black on the rump and tail coverts. The scapulars are a dull reddish brown; lesser upper coverts gray, changing and shading into a bright chestnut on the middle coverts and again to black on the greater coverts. Speculum white. Linings of the wings white; axillars white, with white shafts. Under parts grayish or white, with faint dusky pencillings, the vermiculations heavier and

wider upon the sides and flanks; under tail coverts black. Bill dull bluish; feet dull orange with dusky webs and nails. Iris reddish brown.

The female is a little smaller than the male; bill orange yellow with splashes of dusky color upon it. Feet as in the male, perhaps a little more dingy in shade. Above, the bird is colored with a mixture of tawny yellow, brown and black. Little or no chestnut on wing coverts; speculum white. The young male during the first year resembles the female, as is the rule with most ducks of the year.

In length this species is from twenty-one to twenty-three inches; in extent it averages from thirty-three to thirty-five inches. Weight about two and one-half pounds.

The title, "blarting duck," is given it in some localities from its noisy habits. The scientist has used a more euphonious word, but freely translated, *streperus* conveys the same idea.

This species is almost entirely a citizen of the fresh water. In some portions of the country it is known as the "Creek Duck" because of its marked fondness for small streams. In common with the other "river ducks" the Gad-



WIDGEON.

wall is a vegetable feeder, but it can put up with a fish diet if the other sort of provender is hard to come by.

THE WIDGEON.

(*Mareca americana.*)

While not so numerous in our corner of the continent as is the black duck, the Widgeon is fairly abundant; perhaps more so than is generally supposed. Shy, wary and difficult of approach it is not always recognized at the safe distance at which it usually takes flight. It is by no means an unusual bird in our ponds and lakes during the spring and fall flights, and more common in the fresh waters than on the coast. But it is in the sloughs and lakes of the western States and the interior of Canada westward and northwestward from Hudson Bay, where they breed in great numbers, or in the winter months among the rice swamps of the south, that the Widgeon is in his glory.

With us in New England most of them are killed during the fall flights, for very little spring shooting is done in this section. The birds themselves move along more leisurely and make longer stops on their fall travels than

when on their spring migrations, perhaps in consideration of the weaker powers of the young birds, or, having reared up their families, they feel that they have earned a vacation and so loiter by the way.

Rarely this bird is taken in our coast waters during the winter months. It is mostly as a migrant that we see it, as but few birds of this species are believed to breed within our borders. Still a careful search in the marshes and swamps of our Maine lakes might perhaps prove it a prominent citizen of those parts. Its nest is made upon the ground and contains from eight to ten dingy buff-colored eggs.

It is said that in the Delaware and Chesapeake waters the Widgeon is something of a pirate—an unfailing and steady attendant on the canvasback, preying upon its hard-working neighbor and depending upon it for the luxuries and delicacies of the feeding ground, for the Widgeon not being an expert diver, and the canvasback feeding mostly on the roots and plants growing on the bottom,—especially the wild celery, of which all the duck family are very fond,—the Widgeon uses his neighbor's

superior ability for his own benefit, snatching the plunder the instant his victim's head appears above the water. Of course there is much wrangling between the two upon the feeding grounds, for no self-respecting duck can tamely endure such high-handed treatment.

The Widgeon ranks close to the canvasback in table qualities. Perhaps this, with some others of the "river ducks," would rank equally high but for the judicious advertising of the canvasback's good qualities by shrewd dealers. In fact, many redheads are palmed off upon the unsuspecting epicure as the "aristocratic canvasback."

The Widgeon likes to doze in the sun on the sandbars and in the quiet corners of the marsh during the day, going to the feeding grounds at night, usually traveling in small flocks with rapid and well sustained flight, often moving in "company front," the central birds leading slightly.

Very few are killed in the open water, most meeting their fate in the early hours of the morning at the blinds in the marshes, lured on to their undoing by the seductive quack of

the lonesome and talkative decoy duck anchored in an attractive "pondhole." It is not the readiest of the ducks to decoy, however.

The Widgeon is a beautiful and graceful duck, and by his peculiar markings will command the admiring attention of any gunner who may capture him. In his full plumage the male bird is marked on the top of his head with a large area of snowy white; on the sides of the head and neck a yellowish white, spotted and streaked with dusky; a black patch,—in some lights metallic green,—runs from the eye back to the nape; the lower neck and upper breast are light reddish brown with a purplish gloss and sheen to the feathers, their edges a trifle lighter than the centers; on the sides and flanks the same shade finely waved with indistinct dusky crossbars.

The lower breast and under parts are pure white; the crissum jet black against this color. The purplish brown of the lower neck and breast spreads over the hind neck and down the back, waved with fine dusky lines set closely together. The lesser wing coverts are gray, growing lighter toward the middle and greater

coverts, the last becoming pure white. The speculum is bright metallic green set in a frame of black. Bill narrow, pale slatey blue, with a dusky tip and black nail; feet and legs of the same dull blue color but somewhat darker than bill, the webs and claws blackish. Iris brown.

The female is not so brilliantly dressed, for, as usual among the feathered tribes, the male bird wears the good clothes and "puts on the style" for the family. Still, the female Widgeon is rather better dressed than the average of her lady acquaintances. She lacks the white area on the crown, the dusky streaks being carried all over her head, and the reddish brown of her neck and breast is broken up with heavier black bars. The back is mottled with reddish and dark brown, the red mainly on the tips and edges of the feathers. The wing is much as in the male though the coverts are darker and grayer in tone. The speculum as in the male bird. At different seasons and ages this bird varies in its plumage but will probably be known at once in any stage of its development by its wing characters or the slightly lengthened tail feathers.

The Widgeon is from eighteen to twenty-two inches long and in extent varies from thirty to thirty-two inches.

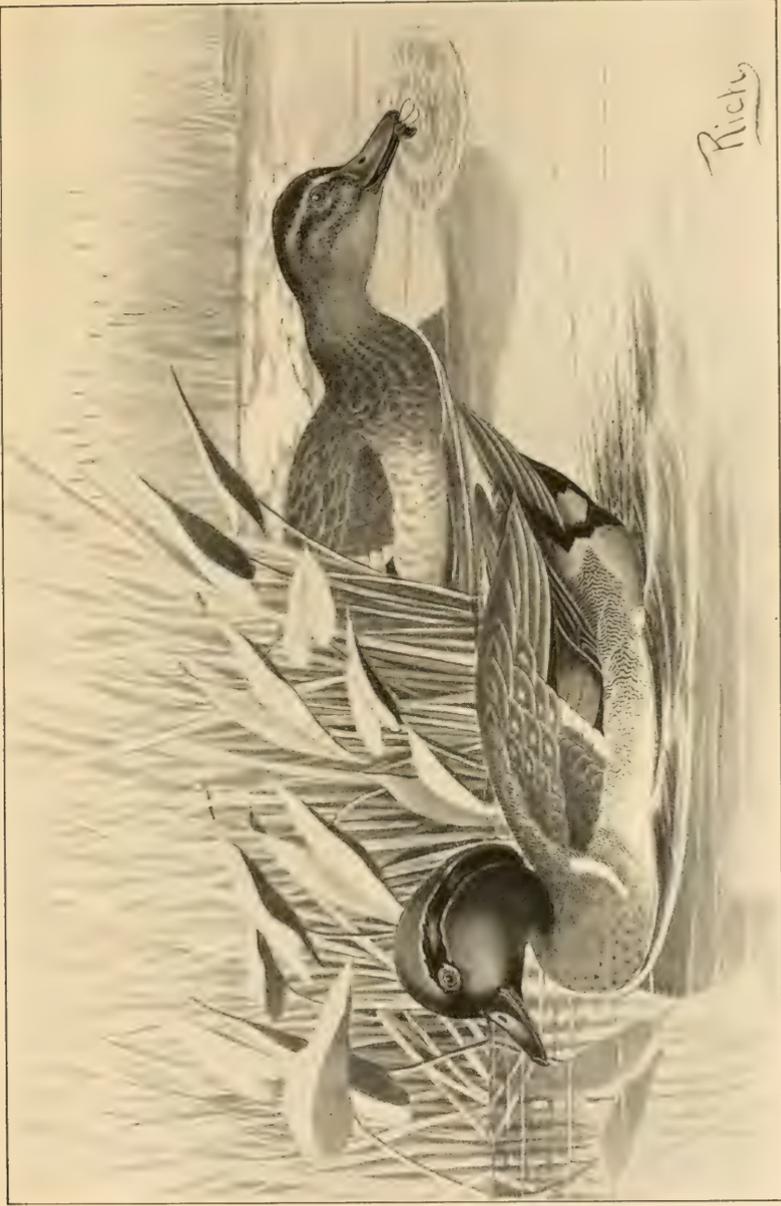
On rare occasions the European widgeon visits us. The male of this species varies considerably from the male of the American bird. The principal differences in coloring of the two species are found in the markings of the head and neck; the Old World's representative has the forehead and crown creamy or buffy white and on the sides of the head and neck is marked with rufous. There is no decided stripe of green behind the eye, though a few spottings of metallic color show here.

The females of the two are hardly distinguished from each other.

THE GREEN-WINGED TEAL.

(*Nettion carolinensis*.)

The Teals are among the smallest of their tribe, and among the finest in point of food qualities and in beauty of plumage. Of the three species native to the North American continent, two, the Green-winged and the Blue-winged, are well known and highly esteemed by the New



GREEN-WINGED TEAL.

England gunner, and in addition to these the family is worthily represented westward of the backbone of our continent by the Cinnamon, or Red-breasted Teal, formerly considered a straggler from South America, but now well established among our own birds. Rarely the European Teal is taken in our eastern waters. All have the same traits in common, decoying well, flying at great speed in compact flocks, close to the water. Surface feeders, fastidious in their choice of food, living on the wild grains and seeds of the marshes and the menu of the fresh water ponds, their flesh is second to none of the family in tenderness and good flavor.

The Teals are said to breed readily and thrive well in captivity. If this is so, surely their beauty should at once find them a place with the breeders of fancy fowl. The Green-winged Teal is the hardier of the two eastern species, staying in this latitude considerably later than does the Blue-winged, being found here as late as November, while the other rarely stays with us later than the first of October unless the season is unusually warm. As a rule the cream of the shooting on Blue-winged Teal is over by the middle of September.

The rice swamps and lagoons of the southern States are most populous with this species during the winter months, though many go on to the West Indies and even farther.

The breeding dress of the Green-winged drake is a beautiful piece of coloring. The head and upper neck a rich, bright chestnut, darkening on the chin; a glossy patch of dark metallic green running back from each eye and growing deeper on the nape where the two stripes come together among the drooping feathers of the crest. This crest, quite pronounced at this time, is hardly noticeable in the fall plumage. Above, silvery gray, finely and regularly waved with countless jet black lines. A small "half-moon," or crescent of white, in front of each wing—almost the only difference of plumage between this and the European variety, which lacks this marking. Have seen the American Green-wing lacking the white bar mentioned, but this is rarely so in the full plumage. If this mark is missing and the inner tertials are creamy white it is probable that the specimen is a stray from the Old World. Primaries and wing coverts brownish gray. Speculum a rich dark green, changeable and lustrous. Neck and

upper breast a beautiful buff tint with numerous black "polka dots" scattered through it, these growing fewer and fainter below, and the buff fading gradually into a grayish white, on the flanks finely pencilled with regular lines of black. Crissum black with buff both before and behind it. Bill black; iris brown; feet dull bluish.

The females of our own species and of the European race are not to be distinguished apart. Our bird may average a trifle larger. The female is not crested and is much less showily dressed. Head and neck light yellowish brown, finely streaked with black. Above, mottled with yellow, brown and black. Below grayish, with buff shadings and dusky specklings on the breast. In her other coloring she is nearly like the male.

With these, as is generally the case with the duck tribe, the greater number breed beyond the boundaries of the United States, through the lake country of Canada, anywhere east of the Rockies, though where conditions are suitable they are fairly numerous during the nesting season in the northernmost States. The nest is made upon the ground; a slight affair

of weeds and dry grass lined with feathers. This generally contains in the neighborhood of eight eggs, of a dull, grayish green color.

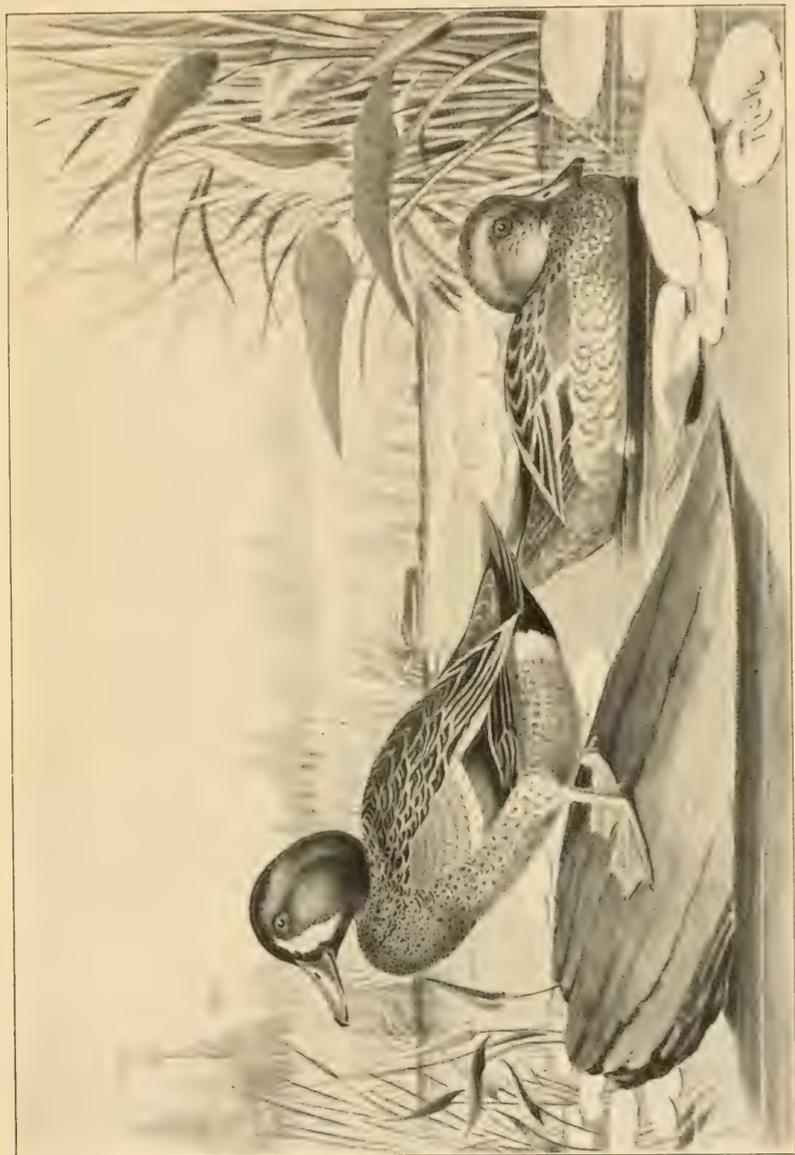
The Green-winged Teal is common all over eastern North America, perhaps less numerous beyond the Rockies and on the Pacific Coast, and is of casual occurrence in Europe.

THE BLUE-WINGED TEAL.

(*Querquedula discors.*)

In habits and mode of life this species is almost identical with the green-winged teal. It is a trifle larger and a little more southerly in its range. The "Blue-wing" is seldom seen west of the Rockies except as it straggles to the extreme northern part of its habitat.

The drake is a showy bird. His wedding clothes are a credit to himself and to his tailor. His head is dark slatey brown with a sheen of purple to the feathers; the crown darkening with fine dusky markings. A large crescent of white with its points extending backward in front of each eye. (This is lacking in the fall plumage.) Lower hind neck and upper part of the back blackish, the back mottled with black,



BLUE-WINGED TEAL.

brownish and dull yellow, this last color on the edges of the feathers. Lower part of the back and rump dusky, as are also the tail feathers. Wing coverts a very light and beautiful shade of blue, some of the scapulars also showing the same shade as well as jet black and golden yellow in stripes lengthwise upon the feathers. Speculum a dark, glossy green, set off by the white of the greater coverts. Wing quills dark brownish. Under parts brownish yellow with countless jet black spots on the throat and breast, these growing less numerous, larger in size and of less decided color below. Crissum black; patch of white on each side of the rump. Bill leaden black. Feet a dull, pale yellow with dusky webs and nails. Iris brown. The seasonal changes in its plumage are not very marked, the lack of the white crescent in the drake's face in the fall being the most radical.

For the female, above she is marked much like her mate, having the same bright blue on the wing coverts, the striping of the scapulars and the green speculum. She is perhaps less decidedly colored and spotted below, though the main differences lie in the markings of the head and neck,—these being dull brownish yellow

with blackish and brownish streaks. She is readily distinguished from any other duck which is likely to fall into the hands of the eastern gunner, though where the cinnamon teal is found it might pass for the female of that species if not closely examined, since they are much alike except for the ruddier color of Mrs. Cinnamon on the breast and below, and the dusky patch on her chin.

The length of this bird averages between fifteen and sixteen inches, and the extent from twenty-five to twenty-seven; as may be seen, a trifle larger than the "green-wing."

These are mostly dwellers in the fresh water, rarely venturing upon the sea except during the migrations. Their flesh ranks high among the waterfowl, being one of the best ducks which find their way to the table. Their breeding habits are as the "green-wing's," nesting nearly throughout the range of that species, and in addition to that they breed among the West Indies and in Central America and Mexico. They winter from the central United States to central South America.

Their flight is surprisingly swift and powerful considering their small size. Not all their

larger brethren can equal them in speed, and if they chance to join a flock of larger ducks the big fellows must keep moving or the Teal will show them the road. Estimates of the speed of ducks set the record for the teals at one hundred miles an hour,—probably as liberal as most estimates.

About the time of the first frost or about the full of the moon in September, the Blue-winged Teal begins to migrate to the southland for the winter. At this time the movement is general and by October first scarcely a Blue-wing is cleaving New England's skies. For a week or ten days at most the flight is on and during the early morning hours or just about sundown those spots which present attractions to the black duck are apt to receive a call from his small cousins, the teals. They will mix with any duck company they chance to meet, are less suspicious than almost any others of the family, come readily to wooden decoys, and a "talking" black duck toler is a sure enough winner with them. They thus afford great sport to the wild-fowler and are very popular with all that brotherhood whose favorite regalia are hip-boots and old clothes, and whose chief joys in

life are “sink-boxes,” “gun-punts,” “ten-bores,” and duck-calls.

These kill much easier than do most ducks,—No. 8 shot is plenty large enough for them—and they are worthy of a place on any man’s table when well cooked, or in his cabinet when properly stuffed—the two principal reasons for their rapid decrease in our streams and marshes.

These, too, are said to thrive well under domestication, though rather less hardy than the “green-wings.”

THE SHOVELER, OR SPOONBILL DUCK.

(*Spatula clypeata.*)

The Spoonbill Duck is less hardy than the average of our waterfowl, preferring more southern latitudes. It is a species of wide dispersion, having its representatives in nearly every quarter of the world.

This duck is mainly a dweller in the fresh water, only rare stragglers visiting the ocean and then mostly in the migrations. One of the most graceful among the waterfowl and a very beautiful bird is the Shoveler. Its flight is



SHOVELER.

powerful, swift and well sustained. As to its qualities as a table bird it is among the best.

With us it is a very uncommon visitor, particularly in the northern New England States, like many another of the duck tribe, thinking but little of our territory. The most of them choose the western and southern parts of our country for their homes. Have known of a small flock being killed in the limits of the city of Portland, Me., in the salt water, another on one of the outer chain of islands on our coast, and to these must be added the specimens from which our drawing was made, shot on the Falmouth shore near Portland, in the waters of Casco Bay, and which are now in my collection; apparently this is the total for a period of ten years. In the beauty of their plumage, brilliancy and perfection of their coloring these last two are the equals of any specimens which I have seen in any collection. I do not think it will average one Shoveler a year that is taken in this locality, otherwise a good duck country.

The Shovelers breed throughout their range,—in the New World from the central United States over the prairies to the Saskatchewan,

making their nests on the ground, of grass and dry moss, and ordinarily lay from six to eight eggs; these usually are of a pale grayish green color. They winter along the southeast and Gulf coasts of the United States, the West Indies and northern South America.

The drake in his spring suit is a brilliant and showy bird, his shapely form set off by bright and sharply contrasted colors. His head and neck are dark green, glossy and beautiful with the sheen of purple and violet. Lower neck, upper part of the back and breast pure white, in front just rusted with the faintest tinge of cinnamon from below. The wing coverts sky blue, darkening toward the greater, those margining the speculum pure white. Scapulars blue on the outer webs, striped with black and white on the inner half. Some of the shorter scapulars are white. Speculum green. Rump and tail coverts both above and below are black, or a rich dark green as the light happens to strike them. There is a white spot on each side at the root of the tail. Below, lower breast and abdomen deep chestnut with a purplish bloom to the feathers. On the flanks a few fine dusky lines across the tips of the feathers. Wing

quills and central feathers of the tail dusky; outer tail feathers silvery gray or white. Bill blackish, about two and three-quarters inches long and one and one-quarter inches wide at the broadest part which is near the tip. Feet light orange and small in proportion to the size of the bird, as becomes an aristocrat among water-fowl. Iris bright orange, almost red, in the male; in the female yellow.

The female is not widely different from the female mallard in her coloring except for the bluish cast of the wing coverts, but, of course, may be at once distinguished by the remarkable bill. Her wing markings are much like the drake's though not quite so brilliant. Head and neck brownish yellow with dusky specklings. Throat pale buff. Faint traces of the chestnut below. Feet and legs paler than male's.

These birds in their breeding dress are not common here; as they are usually taken in the fall, the only legitimate shooting season, they are not nearly so brilliant as when in the spring plumage, the fall dress being a much soberer suit than the wedding garments. Perhaps the bird's own mood has taken on a different hue.

The length of this species is from seventeen to twenty inches; the extent from thirty-two to thirty-five inches.

THE PINTAIL. THE SPRIGTAIL.

(*Dafila acuta.*)

It is a great pity that we so seldom capture the Pintail, for he is one of the most beautiful of the ducks as well as a fine bird at the table. He is a great favorite with the sportsman wherever he is found, for the high order of shooting skill necessary to stop him in his flight is justly appreciated.

There is no member of the duck tribe so gracefully made or built upon such clipper lines as is this bird and he is one of the fleetest of wing of all his family. When under way he is indeed a flyer, going at a remarkable rate of speed. The Pintail's flight will at once remind the bay gunner of that of the "old squaw," so well known along the Atlantic coast. The same chain lightning speed and darting and wheeling evolutions are common to both species. The speed of either of these is far greater than the

average duck can hope to attain, for estimates give both birds credit for ability to make ninety miles an hour!

Shy and cautious in the extreme, the Pintails are seldom caught napping, and seem to have but one failing in their tactics: They are apt to become confused if suddenly alarmed, when the flock bunches closely as they jump straight up into the air, leaping from earth or water as though thrown up by a powder blast, just as the black duck does when it starts up from the marsh in a hurry. This is the one time when the Pintail is ungraceful, with his long neck cork-screwing and almost tying itself into knots in his excitement. If wounded it is a very skillful skulker, and while not a great submarine navigator, can, by partially immersing its body and laying its long neck down on the water, the tactics of a wounded goose, disclaim any intention of attracting unnecessary notice to its movements. It is wary about coming to decoys and usually makes several circuits of the neighborhood in search of the reason for the toilers' presence before trusting them implicitly. In fact, since good company always benefits, the

Pintail learns caution and is otherwise mentally improved by his intimate acquaintance with the black duck.

The bird is a delicate and cleanly feeder. It gets its food in the shallows, in its endeavors to bring hidden good things to the surface, putting its long neck down to the bottom and wriggling its sternpost in the air as the rules of "river duck" table etiquette compel. Its own choice of food is small frogs, vegetable matter and the delicacies of the marsh dweller's bill of fare.

The Pintail is much more common on the fresh water of the interior and throughout the western country generally than on the coast line of New England. Save during the migrations it is rarely seen on the salt water, yet the specimens from which the accompanying drawing was made were killed in some of the severest winter weather in the swell of the broad Atlantic. They were shot at night from a flock of seven as they flew past a rocky islet where two gunners were creeping upon some black ducks which were feeding by moonlight. During the same week a few mallard drakes were killed in the same neighborhood, these, too, in full breed-



PINTAIL.

ing plumage. The Pintails were great mysteries to the fishermen-gunners who shot them. They were the first of that species that they had seen in nearly forty years of gunning on the coast, where deep water ducks had been their principal game.

The Pintail breeds from the northern States of the Union as far to the north, probably, as does any duck of the fresh water. It is a citizen of almost any part of the northern hemisphere and wherever found is much prized by duck shooters. Though not considered numerous anywhere in the east, certainly their most natural dwelling place would be in the lakes and ponds of the Maine woods where they may be more abundant in the breeding season than generally supposed. It winters on the coast line of the South Atlantic States, and on the Gulf coast to Central America.

In the acquaintance of most gunners, aside from the seafoal, which from their greater numbers are better known, there are very few kinds of ducks; and in this somewhat uncertain knowledge any webfoot of doubtful pedigree, which is not plainly wood duck, black duck, mallard or teal, is lumped into the general family of

“gray duck.” This may mean the gadwall, (when they get him, which is all too seldom here) pintail, widgeon, even the “ruddy,” and, were it not that nature has named him so plainly in giving him his chestnut braincase, the red-head, too, would have been placed in the same category. It is not uncommon to have a gunner mention “so many (or perhaps it should be ‘so few’) gray ducks” in enumerating the results of his day’s shooting, and in most cases when the bird is produced it proves to be a female or a young male Pintail.

In the favored regions of the West where the spring and fall flights of ducks are made in flocks of thousands, and where the shallow pools and prairie lakes are often nearly hidden by the companies of winged tourists, the Pintail is one of the most common birds. It is distributed all over the North American continent and is also found in corresponding latitudes of Europe and Asia,—a universal favorite.

To the average man, whose acquaintance with the duck family is confined to the noisy waddlers seen in the horse-ponds and barnyards through the rural districts, the agile grace and lithe movements of their wild relatives would

be a revelation. The beautiful plumage and trim lines of the wildfowl would surprise him greatly. Among these the Pintail drake is in the front rank. He is a beautiful fellow with a brilliant though not gaudy dress. His head and upper neck are a deep brown, showing in different lights a bronze-like sheen with glossy green and purple tints. A line of snowy white running up on the back of the neck on each side of the central strip of black which extends downward into the gray of the back and wing coverts. Lower neck in front, breast and under parts of snowy whiteness, save on the flanks where there are fine dusky pencillings as on the back, and the crissum which is jet black, sharply and cleanly defined against the surrounding white. Back silvery gray or whitish, finely and evenly barred with irregular wavy black lines. The scapulars and tertiaries striped lengthwise with black, whitish and silver gray. Speculum a greenish- or coppery-violet, framed about in black, tawny and white borders. Tail feathers yellowish gray, long central feathers black. In length the bird varies from twenty-five to thirty inches, according to the development of the tail feathers. In extent he is from thirty-four to

thirty-six inches. Iris brown. Feet bluish gray with dusky webs. Bill blackish. During the moulting season he puts on a dress like the female's but darker and still showing the coppery speculum.

The female is smaller and less showily dressed; principally dull yellowish brown for a body color, this mottled with dark brown and dusky, the dark colors on the centres of the feathers. Speculum of duller tones, and but little different from other feathering of the wing, perhaps from its less attractive setting. She lacks the lengthened feathers of the tail but may be known at once by her slender neck and race-horse lines. In his first season the young drake, as the country people say, "takes after his mother," and aside from his lustrous speculum is hard to distinguish from her.

THE WOOD DUCK. BRIDAL DUCK. SUMMER DUCK.

(*Aix sponsa*.)

Among the waterfowl of all America the little Wood Duck may claim the precedence of grace and beauty. Few birds indeed may equal

him in elegance of form and motion, and none of our other ducks can compare with him in beautiful coloring and plumage. Except the mandarin duck of the far east no member of the family approaches him in the rainbow brightness of his hues. They nest anywhere throughout the United States and a little beyond to the north.

They bred in abundance in the lake region of Maine, and were surely second in point of numbers in these waters as elsewhere on the fresh water in New England, only the black duck being more numerous. I say *were*, for they have become greatly reduced in numbers within the last few years. This is, no doubt, in great measure due to their "fatal gift of beauty," though their flesh, also, has a flavor that is delicate beyond that of most wild fowl. They have become so scarce that it seems that shooting them should be prohibited for a term of years if we would prevent their total extinction. Let us act before it is too late, and so prevent this irreparable loss.

These little creatures still brighten with their presence some of our inland streams, flitting with graceful ease among the interlacing

branches of spruce and alder where you scarce would think a bird could pass, or walking among the boughs as lightly and as blithely as any of the small warblers. Beneath flows the sluggish current along whose shady edges, in waving cat-tails or rankly growing grass is an abundance of the food they love best.

The traveler on our summer lakes, paddling his noiseless way over still waters and along forest-margined shores, when he comes suddenly into their bends and coves may chance upon the family comfortably snuggling down on a fallen tree reaching out into the water. The congregation is apt to disperse without ceremony—those ashore running into the woods, those on the log or water rising into the air with clatter and startled cries, shooting over the tree-tops like stray fragments of a rainbow,—and in two seconds he is alone with only a few idly drifting feathers in the ripples on the water to tell of his departed friends. Soon they will drop back over the encircling woods in twos and threes to revisit their favorite resting place.

Perhaps if you have lived in “the back country” of New England, in the months of April and May you have had the good fortune to see

the Wood Ducks come and search the forest for suitable places for their homes. It may be that, closely hidden, silent, motionless, and scarcely breathing lest you disturb the beautiful visitors, you have watched the birds flit from tree to tree along the watercourse; have seen them peep into the hollows of the dead stubs to see if the interiors were dry, cosy and suitable to hold the treasures which their fond hopes promise them. Anxious and eager, they squeeze their lithe bodies through each narrow opening and inspect the inner chambers with all the care of a newly-made bride on her first "house-hunting" expedition, and when at last one finds a spot which seems fitting how quickly it is communicated to the other! At once the two set to work to furnish the snug little home, enlarging the entrance and smoothing down interior angles and corners. Soon all is prepared to receive the eggs, and anon the full number is ready for the hatching. This plucky little knight, ordinarily the gentlest of creatures, is now brimful of fight if he is disturbed in his home by any other of his kind, and there is a good prospect for trouble if the intruder does not leave at once.

When the ducklings have arrived and gained a little strength the parent bird takes them in her beak and carries them to the nearest pond, unless, as is often the case, the nest overhangs the water, when she saves herself this trouble by simply pushing them overboard. Then she shows them how to get a living. There are often a dozen in a family, so that it is fortunate that they have only to reach out and take what they want to eat, otherwise the mother might have a hard time of it in providing for her numerous progeny, for the male bird usually deserts his mate at this time, leaving to her all the family cares. The drake spends the summer moulting season away from home with other recreant husbands, and is hardly to be recognized as the same gaudy bird of the spring.

About the first of September, the young birds having by this time become well grown and strong and the males again joining the flocks, the Wood Ducks begin to scatter about from their breeding grounds, a few at a time, the main body waiting until colder weather forces them from their summer homes, when they start for their winter quarters in the southern tiers of States, occasionally going beyond. They

seldom unite in any large flocks, the number generally ranging from ten to twelve in a bunch, the little party commonly consisting of one family. Our little bird is rather exclusive; knowing his high position in waterfowl society he will seldom travel with any other species and rarely notices decoys.

They are not so hardy and "hard-lived" as most of the ducks, but when "wing-tipped" are most difficult to capture, especially in the brushy streams, diving and making their way under water to the shore, then running stealthily away,—like the black duck, often hiding in holes in the ground or crawling into brush-heaps,—so that unless a dog is on their track they will commonly escape.

The flesh of this bird is the tenderest and sweetest of any of the duck family, and they are usually extremely fat in the fall after their summer's diet of frogs, snails, grains and the tender shoots of the water plants.

It is rarely that a Wood Duck is taken on the salt water, though often visiting the fresh ponds on the seashore. In one place which has more Wood Ducks to its credit than any other in our neighborhood the pond in which they are shot is

not more than four hundred yards from the open ocean, placed at the end of a rocky cape that projects far out into the sea, and because of this situation it is a noted stopping place for wildfowl of all kinds.

The drake in his breeding dress is attired thus: head and crest dark green, iridescent with changeable purple hues; a fine line of white from bill above the eye to the back of the head; another from the eye to the nape; an area of white on the chin and throat, spreading on each side of the head and dividing, one branch going upward behind the eye, the other almost meeting its fellow on the other side, thus nearly encircling the neck. The dark colors of the head and crest running down the back of the neck into the dark brownish green and purplish tinges of the back. Speculum green. Scapulars glossy black, purplish and green with the change of view point; primaries purplish, whitening on the outer webs near the tips. Rump and tail coverts glossy black. Some long plumes of deep crimson shade at the sides of the base of the tail. The lower throat and breast deep purplish chestnut, growing paler as it merges into the white of the under parts, and

dotted with innumerable broad arrowheads of white, arranged in regular order, growing larger and more numerous as the chestnut shade grows paler until thus the entire area has become white. A large crescent of white in front of the wing, this edged with jet black. Below pure white, the sides growing pale yellow, finely waved with black, these lines becoming broader and darker toward the flanks, where the ends of the flank feathers are finished with broad zones of black and white. Bill pale pinkish, bright red at the base, black at the nail and along the ridge. Feet orange; iris red. Many specimens taken in October are as brightly colored as in the spring months. Have seen many adult males in the fall as brilliant as when in their wedding dress.

The female is not so beautiful as her mate, having little or no crest, although the feathers on the nape are somewhat elongated. No such brilliancy of marking on the back or wings, the purple being much duller in hue. Head and neck grayish brown, darkening on the crown; chin, near base of bill and around the eyes, whitish. Below yellowish brown mottled with dusky; belly growing white. Bill dusky. Feet

a dull dusky yellow, webs even darker. Even though plainer in dress than her mate she is withal a beautiful duck.

The length of this species averages from eighteen to twenty inches; extent from twenty-six to twenty-eight inches.

The Wood Duck is said to breed readily in captivity and to be easily domesticated. It should surely become very popular among breeders of fancy fowl because of its beautiful plumage if for no other reason.

THE RED-HEAD.

(*Aythya americana*.)

Not often is the Red-head taken in northern New England waters; a little more common along the southern coast, and gradually increasing in numbers southward until in the Chesapeake and Delaware bays it is one of the commonest of the ducks. It is found during some season of the year more or less abundantly all over North America and is everywhere held in highest esteem.

The breeding birds are generally at home in the far north, mainly to the west and northwest



REDHEAD.

of Hudson Bay, the great duck nursery of the New World, though a comparatively small number breed in the northern States of the Union, and in the Rocky Mountain region much farther south. There is small doubt that many birds, especially of the duck tribe, which are credited with breeding only in the far-off north, occasionally nest in the cool heights of the mountains in much lower latitudes.

Closely resembling the canvasback in appearance and fully equal to this much-lauded bird in table qualities when the same opportunities are given, the Red-head is often sold in the markets as his highly esteemed relative. The likeness between the two birds might, indeed, deceive the casual observer, but no one at all familiar with them should ever mistake one for the other. The short bill, rounded and high-arched skull of *americana*, together with the somewhat puffy appearance of the feathers of its head, are widely different from the long, sloping profile of the canvasback, where the lines of the bill and head are nearly one. The Red-head is also considerably darker in his general coloration and has an orange-yellow iris. The canvasback's iris is red. Still the pur-

chaser has no cause for complaint at the Red-head's food qualities. In the waters where the Red-head and canvasback are most eagerly sought and where the latter has won its high reputation as a dainty bit for the table their diet of wild celery is in the main responsible for their excellence of flesh. Let us notice that the Red-head is equally as good as the canvasback in these places and on the same food, and that neither one is to be preferred before some of the "river ducks" in other localities where the wild celery has been omitted from Mother Nature's menu. Why should not the widgeon also rank as high? From his predatory habits he lives as well as either one of them in celery time.

The Red-head is eagerly hunted in all the waters where it is found. It comes readily to decoys and it is over these that most of them are shot. They kill hard and will carry off a heavy dose of lead. A wounded bird should be finished at once, for a cripple is nearly always lost to the gunner who permits it to get under water, as the Red-head is a good swimmer and expert as a diver, though falling far short of the submarine performances of various ducks

more strictly to be termed "sea ducks," and somewhat contemptuously called "trash ducks" or even "flying fishes," by the more aristocratic among wildfowlers.

This is one of the commonest of the ducks in the wild rice sloughs of the West, and it is often shot in the immense corn- and grain-fields of those sections, which they visit to feed upon the ripened seeds. They will fly long distances to get a corn dinner. Though, when it may choose, the Red-head is a vegetable feeder, if a breakfast of this sort is not to be had the bird will content itself with a meal of young frogs or tadpoles if it can find them. He is mainly a diving fowl and a bottom feeder, especially so in the waters of the northeast, where as a rule we know him as a salt water dweller, or at least a bird of the river mouths.

They arrive in these latitudes during late September or October, staying until the increasing cold has effectually closed all fresh water for the winter, when they come into the coast waters, working their way southward to remain until the spring sunshine opens again their feeding grounds in the north. This species is more numerous on the eastern half of our con-

continent, though fairly abundant on the Pacific coast during the winter months.

The Red-head breeds far north in the Fur Countries making its nest upon the ground and lining it with down and soft grass. The number of eggs is usually eight, in color pale buff.

In plumage the drake is the finer of the pair. His head and neck are a bright chestnut red with a sheen as of burnished copper. Lower neck, breast, upper back, rump, and tail coverts above and below are blackish. Back bluish gray, finely waved all over with blackish lines. Flanks and sides much like the back but more faintly marked. For the rest below, grayish white. Wing coverts bluish gray. Speculum ashy gray. Inside of the wings mostly white. Wing quills and tail feathers dull bluish gray or dusky. Bill rather short, broad and flattened at the end as compared with the canvas-back's, in color dull bluish with a black band across the tip. Iris of male orange; of the female yellow. Feet dull bluish with dusky webs and black nails.

The female is marked much like the male, but the head and neck are of dull brownish hue,



CANVASBACK.

grayer on the cheeks and behind the eyes. The back, also is more brownish in tone.

The length of this species is from nineteen to twenty-one inches; the extent from thirty to thirty-two inches.

THE CANVASBACK.

(*Aythya vallisneria*.)

The duck slayer of New England will have little acquaintance with this bird unless he is lucky enough to travel west or south for his shooting, for this fowl of savory reputation is a very unusual sight in our home waters. Widely dispersed, dwelling in nearly every part of North America, they avoid New England and the northeastern corner of our continent very carefully, as do so many other feathered migrants, so that we of these sections must content ourselves with other game, for there is small likelihood of our getting a chance at the "aristocratic Canvasback."

Of its life and habits, aside from its shot-dodging during the fall and winter, we know very little save that it occasionally nests in the northern States of the Union, in California, and

at various points among the Rocky mountains. The greater number nest far away in the north, perhaps even to the shores of the Arctic seas. It is a very fine bird from the sportsman's standpoint, usually decoying well, always flying fast and carrying lead off bravely.

About the month of October the Canvasbacks begin to arrive in the waters of the Atlantic seaboard and scatter all along the coast line from Long Island Sound to Texas. Some few even go to Central America. These birds keep together in large flocks both in the migrations and on the feeding grounds. They are said to be very wary and difficult of approach, placing sentinels during their resting and their feeding hours. They are expert swimmers and in their feeding they dive constantly, getting nearly all their food from the bottom. They can swim long distances beneath the surface, and, like the "surf-" and "sea-ducks," dive instantly when wounded, in an attempt to escape under water.

These are probably the most highly valued by the sportsman of any of the duck family. When after a season of feeding on the "wild celery" their flesh is in prime condition they

may deserve the praise accorded them, but many epicures will tell us that there are several of the "river ducks" of far greater merit when all are confined to the usual duck diet. In such case the Canvasback is said to be a very ordinary table bird.

This species is marked much like the redhead; the shape of the bill and head differing, and the general tone of the bird's plumage is lighter. The bill of the Canvasback is blackish, as long or longer than the head, high at the base and rather narrow throughout its entire length. The line of the profile of bill and head are almost one, in contrast to the bulging forehead and arching crest of the redhead. For his coloring, the male has a red head,—lacking the loose-feathered and puffy appearance of his cousin's topnot,—the color brownish in tone, with none of the coppery lustre shown by the redhead; the same color extends down over the upper neck; on the crown and about the base of the bill darkening to dusky brown. Above, a light silver gray or whitish, with fine black lines across the feathers, here closely resembling the redhead, as also on the lower neck, breast and upper back, the colors of wing and

body both above and below lighter than in the redhead. Iris red; feet grayish blue.

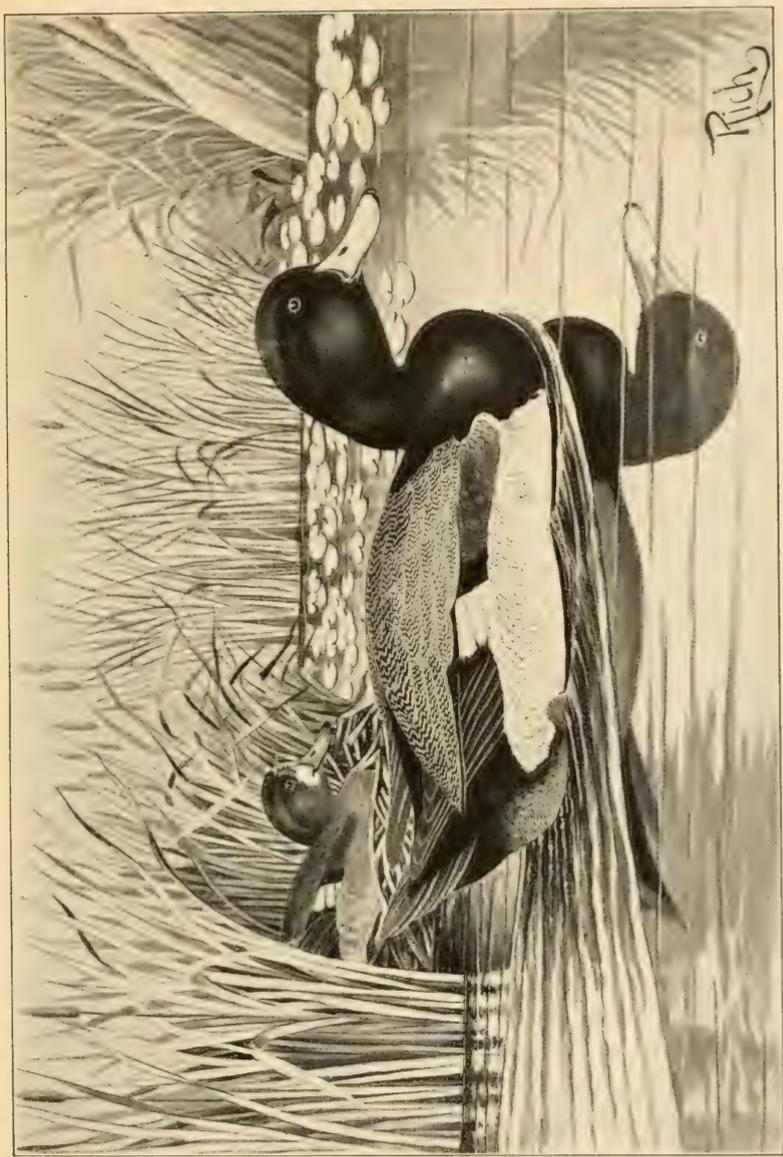
The female's head is colored a dingy brown. She is everywhere duller in tone and plainer in dress than is her lord. She resembles in a marked degree the female redhead, but may at once be distinguished, if there is any doubt as to identity, by the shape and color of her bill and her red-brown iris, which is not so decidedly red as in the male.

The length of this species is about twenty-one inches; the extent varies from thirty-one to thirty-three inches.

GREATER BLUEBILL. BROADBILL.

(*Aythya marila.*)

The dark, close-flying flocks of the Scaup Ducks are among the first arrivals on our coast with the approach of winter. Common enough in the months of cold weather and less suspicious of the gunner than the average waterfowl, this guilelessness often works to their disadvantage, so that our markets are usually well supplied with them. Their flesh is held in fair esteem. When they have fed on a vegetable diet



GREATER BLUEBILL.

they are equal to most ducks as a table delicacy, and even when forced to live upon the coarser food from the salt water their flesh does not become so rank as that of many other species under like conditions. A report showing the number of these birds which are served as canvassbacks would probably furnish some surprising statistics.

Inhabiting the whole northern hemisphere, and mostly breeding in the remote wastes of the Arctic regions, the Greater Scaup Ducks, or Greater Bluebills, pass the winter season in warmer latitudes, wandering alongshore as far as the Middle States and in the interior going even farther toward warm weather. In the Old World they winter in southern Europe and central Asia.

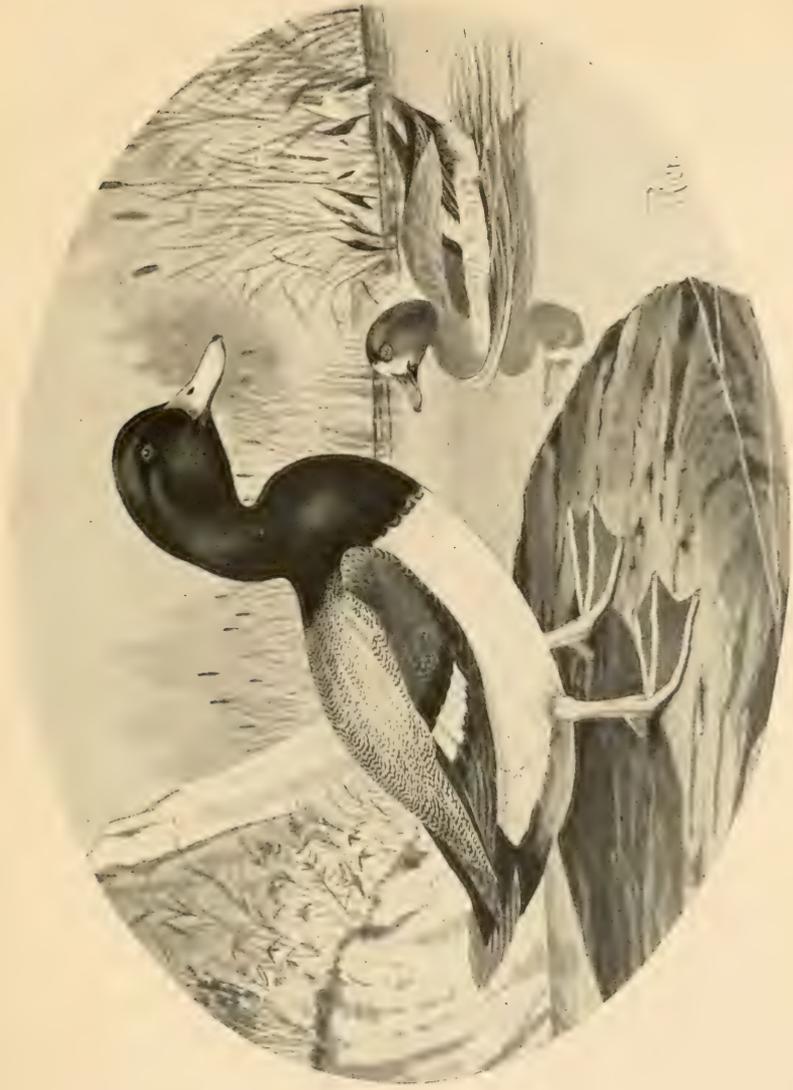
Their nests are made upon the ground in the fashion common to the ducks, of moss and soft grasses, and ordinarily contain eight grayish-green or drab-colored eggs. They seldom breed within the borders of the United States and are not often found here earlier than the latter half of October.

Their table during the winter season is sup-

plied with the mussels and animal food to be had in deep water, therefore of necessity they are expert swimmers and divers, and though apparently slow and heavy in getting under way, are strong and swift in flight.

During the migrations many are killed throughout the west, though the Greater Blue-bill is as a rule less numerous in the interior of the country than is the smaller species. When these inland haunts are frozen up they betake themselves to the coast waters where the work of destruction goes on until the spring opens up their only safe abode under the Arctic skies.

With us of the northeast most of the Blue-bills are killed from the "gunning float," the gunner clad in a white suit and the little craft itself "dressed down" to the water's edge with snow and ice to represent a floating ice cake. It is no wonder that the poor victims are "deluded," for it needs sharp eyes and close attention to make out anything dangerous in an object so harmless in appearance. There is commonly little trouble in approaching within easy range of a flock if the gunner is skilled in handling his craft, but to get within shot reach



LESSER BLUEBILL.

is not all, for any duck which can last out the New England winter will carry off a good load of shot, as the bird must have an abundance of vitality and an extra heavy suit of underwear to endure the climate. Both these our hero has. The Bluebill comes readily to decoys of almost any species of ducks, and fair shooting may often be had from a blind.

LESSER BLUEBILL.

(*Aythya affinis.*)

There are two species of this family, the Greater and the Lesser Scaup. The little fellow is a counterpart of his big brother, and for some time the naturalists of our country were in doubt as to the propriety of considering more than one species, but the final decision has been that the Small Bluebill is properly distinct.

The Lesser Scaup is southern in its range, breeding quite commonly in suitable localities in the west, and is known in many districts as the "Black Jack." It is possible that some nest in New England's remote corners. They are not uncommon here during the breeding season. In its winter travels this species goes a long way farther into the south than does

marila, for while many sojourn along the coasts of the Middle Atlantic States others spend this season among the West India islands or in Central America. It is my impression that the Lesser Scaup is more often a dweller in the interior than on the salt water; certainly there are ten Greater Scaups taken in Casco and Merrymeeting bays to one of the smaller species. In nesting habits, mode of life and plumage markings the two are almost identical. The Lesser Scaup is entirely American, while the Greater Bluebill is a dweller in the Old World as well.

For their markings one description will apply to both birds, the only difference in their coloring being in the shade of the head—in the Greater Bluebill the gloss is greenish; in the Lesser the iridescence gleaming through the black is purplish. The head, neck, breast and upper parts of the back are black. Back, scapulars, sides and flanks waved with zig-zag patterns in fine black lines on a silvery gray ground. Wing coverts of darker hue and less clearly marked, otherwise like the back. Speculum white in a black frame. Bill rather

broad, dull blue in color, and with a black nail. I think the bill of the Lesser Scaup averages proportionately wider than that of the larger species. Feet leaden blue with dusky or nearly black webs. Iris yellow.

The female not greatly different from her mate, the jet black areas of the head and fore parts of the body of the male bird fading to a dusky brown in her plumage. A whitish patch at the base of the bill. Black and white wavy lines of back less distinctly shown. Flanks brown, the feathers edged with whitish.

The length of the Greater Scaup ranges from eighteen to twenty inches; the extent from thirty-two to thirty-four inches. In the Lesser Scaup the length varies from fifteen to seventeen and the extent from twenty-seven to thirty inches.

In New England the Greater Bluebill is the more common bird; further south the small variety is about equally numerous.

These birds are also known as Black-Heads, Raft Ducks, and Shufflers. The name, "Scaup Duck," comes from their feeding on "scaup," broken shells and mussels.

THE RING-NECKED DUCK.

(*Aythya collaris*.)

Closely allied to the two last is the Ring-necked Duck. About a medium between them in size and inhabiting the same range of country; breeding from the northern part of the United States into the Arctic regions, and in their winter migrations often traveling to the West Indies.

They build their nests on the ground, lining a shallow hollow with moss and dry grass, and in this lay their complement of eggs, usually eight in number, in color a light greenish. This species is not at all common in New England and is less numerous throughout the whole of its range than are the Scaups. I doubt if an average of one Ring-necked Duck a year is killed in the State of Maine.

Its markings are as follows: Head and neck of brilliant bluish- or purplish-black, with a slight crest. Around the neck a collar of deep orange brown or chestnut; lower neck and upper breast blackish. Above blackish, scapulars faintly waved with gray. Wings dusky brown;



RING-NECKED DUCK.

speculum ashy bluish or grayish. Below mostly white; belly and flanks waved with black; crissum black. Bill black, edges, base and a belt across near the tip bluish gray. Feet bluish gray with black webs. Iris yellow.

The female has no collar. Where the male is black she is brownish. Wing and speculum the same as in the male. The bluish gray color of the speculum is the main point of difference between the female of this species and the females of the Scaups, whose speculum is white, although females of the present species may be slightly browner above and on the flanks.

Length of the Ring-necked Duck from sixteen to eighteen inches; extent from twenty-eight to thirty inches.

THE WHISTLER. GOLDEN-EYED DUCK.

(*Clangula americana.*)

This duck is from fifteen to eighteen inches in length and weighs from two to two and one-half pounds. The head and upper part of the neck are rich, dark green—in some lights almost black, in others glossy and metallic in its lustre. A spot of white on each side at the base

of the bill, nearly circular in form. The crest feathers are long and fluffy, erected at will. The whole feathering of the head is somewhat puffy. Back and much of the wings are black, though some of the secondaries and coverts are white and seem to make quite a band of this color in the wing. Under parts white. Long flank feathers white with a broad edging of black. Rump and tail black. Bill greenish black. Feet and legs orange with dusky webs and black nails. Iris bright golden yellow, whence the name, "Golden-eyed Duck."

The female is a trim little lady with neat and becoming attire. Her head dark chestnut or brown. A white ring about the neck, and below this a second circle of blue-gray coming up from the color of the back. Below white, growing dusky on the flanks. Wings and upper works generally, covered with grayish blue, the edges of the feathers whitish. Speculum white. Bill dusky brown, yellow-tipped. Iris as in the male. The female averages much smaller than the male.

They are abundant throughout North America, and while ranging in winter to the West Indies and Mexico are rather more common in the



WHISTLER.

higher latitudes, and in New England are most numerous during the cold weather when they are driven from the north country, and on our bays and inner coast line they are the most common ducks of the winter months. The species is widely distributed, ranging all through the northern hemisphere—a citizen of Europe, Asia and America. While the Old World variety may average a trifle smaller it is probably the same bird.

The Whistler nests all the way from New England's latitude into the Arctic Circle, or at least, as far north as the forests extend. Many rear their families in the wild country in the interior of Maine. Their nests are sometimes built upon the ground, though more frequently in the hollow "stubs" of dead trees, the cavity lined with down from the breasts of the expectant parents. They lay from six to ten eggs, of a bluish green color, and larger than is the rule with birds of their size.

The Whistlers seem to be holding their own in the struggle for existence—a thing which can be said of few of the duck family. There is good reason why they should, for there are few ducks so cautious and wary, placing sentinels

over the flocks while feeding, flying instantly at an alarm, and only alighting a long distance away. They seem to know at just what distance a modern shotgun is effective, so that, when the gunner is "sculling" them in winter they keep a watchful eye upon that seeming ice-cake which the coots and bluebills allow to approach so readily, and as the old drake Whistler looks over his shoulder at his pursuer he says to himself, says he, "Three hundred yards away,—all right!" and down he goes for another mouthful, bobs up, sit up on his tail, gives his feathers a shake and takes another critical survey of the diminishing distance,—"Two hundred yards?—Well it grieves me greatly thus to leave you, but I must be going," and off he streaks it with his swiftly-moving wings making a loud whistling, of course very cheering to the toiler in the float, who sits up and listens as it grows fainter and fainter until he marks his intended victim down a mile away, where he waits for the gunner to follow him to be teased some more. Their whistling may be heard a long distance—certainly half a mile on a still day. The bird is strong-winged and swift of flight. Audubon claims that a Whistler can

travel ninety miles an hour. For my part I have a very high regard for Mr. Whistler's abilities, both of wing and wit. I have seen him outrun many a charge of shot, and I know of no waterfowl so crafty except a black duck.

The New England gunner kills most of his Whistlers during the coldest weather of the year when not only the fresh waters are closed but the ice has formed solidly in the bays and arms of the sea, leaving only a breathing hole here and there where the swift currents will not be held in the grip of winter. The gunner, dressed in a white suit,—even his gun barrels chalked,—lies flat upon the snow-covered ice at the edge of some such an opening, behind a slight blind of ice cakes, or in his float dragged over the floe and launched upon the water within. He places decoys at the proper distances, arranging them in the water and along the edge of the ice, and takes what his fortune may send him in the way of sport.

The Whistler is said not to decoy well, but that has not been my experience. I do not know a more certain method of bringing a flock of these ducks to the decoys on a whistlerless morning than for the sportsman to lay down his

gun, and, stepping out of his blind, to run briskly away for a hundred yards just to shake loose the icicles in his blood. About the time he turns at the end of his breath he will see a nice bunch of Whistlers just leaving his decoys. This rule is invariable. Moral: Don't do it. You may freeze to death, but stick by the blind. I think that, given a good flock of decoys and a good position, the rest lies more in the ability of the sportsman to keep quiet and hidden than in any unwillingness of the birds to decoy. The Whistler is very quick to see a movement or perceive any little matter out of the common. When he does not like the appearance of things he can not be induced to come anywhere near. The gunner, too, must pay the strictest attention and shoot the instant his game is in the right place, for once he is seen or treachery suspected they go climbing into the sky like rockets.

A fair amount of sport may be had in this way if the gunner can endure the cold, for it is a pretty rugged kind of amusement. To get some shooting on a winter's morning it is only necessary to set a string of decoys off some ledge of rocks where an open space of water



A WINTER MORNING WITH THE WHISTLERS.

gives a chance for a duck to get his breakfast. Be sure you are completely hidden and keep quiet,—the golden rule of all duck shooting.

Just before sun-up the first of ocean's toilers begin to appear,—the gulls going lazily across the water to some inshore feeding ground for their morning meal. Seaward the sombre cloudbank reddens with the coming light and the islands become more than the shadowy masses which they have been ever since our arrival. A faint noise like a high-pitched whistle sounded rapidly and continuously, calls your attention skyward where a single duck is speeding his way past, bound up the bay. Suddenly he sights the decoys, black specks upon a mirror of polished steel, swings in a wide circle to leeward and with set wings drops out of the air with swift, slanting flight. Right in among the "tolers" he comes with a splash, then, discovering the cheat leaps into the air to escape. Even as he spreads his wings a gun roars forth its summons to surrender, and in the obedience he may not deny the poor bird topples into the sea. The float is launched and the prize brought ashore. The gunner crouches again in his ice- and sea-weed-covered blind just as a

bunch of a dozen birds come hurrying in from outside. They mean to pass by two hundred yards away, but one duck sees the decoys, darts from the main body, sets its wings and comes with a rush. Another sees the first one and follows suit; then another, and another, until the whole flock turns and comes in also. Just as they are about to settle in the water some old drake catches the glimmer of a gun-barrel, or sees the gunner's eyelids move, or hears his heart beat, or merely takes alarm on general principles and forthwith begins to back water with his engines and then to climb for a higher altitude. The rest hesitate, then as the gunner rises, away in every direction like the bursting of a bombshell, goes the flock of thoroughly startled ducks, no two together. Choose your birds quickly and aim well! Put plenty of shot into him or he will surely escape, for he is a rugged little rustler. The air is full of whizzing wings and merry whistlings, yet before one can think twice they are only a memory and half a mile away the stragglers are uniting again.

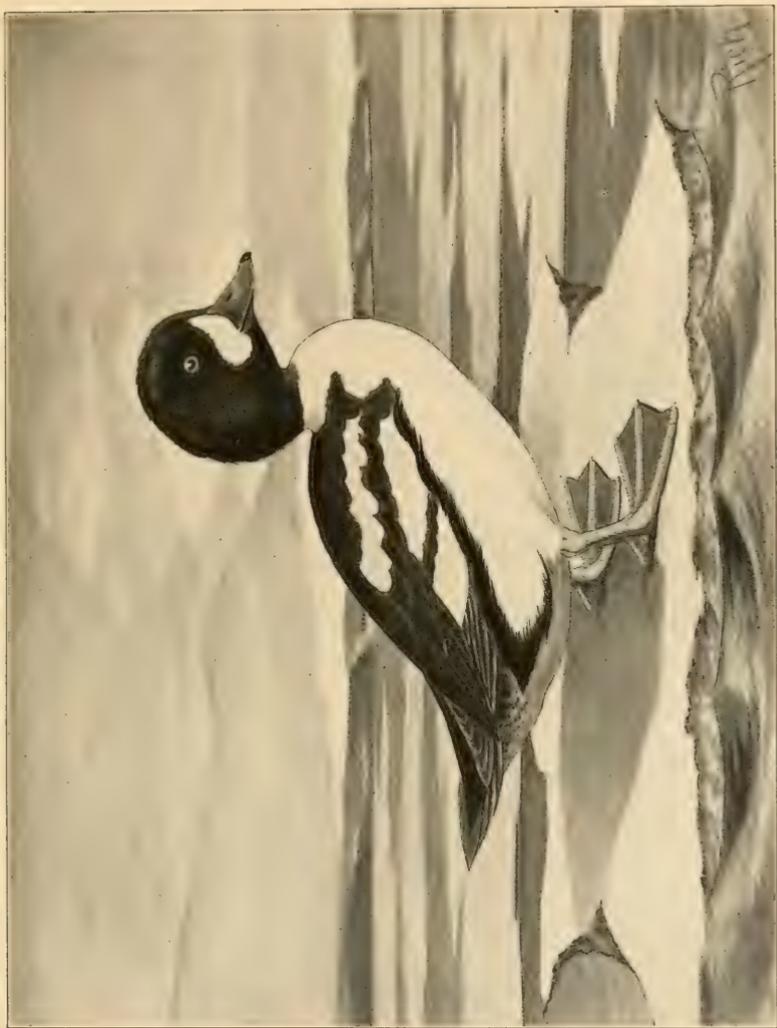
Another collection of black specks out toward the open sea begins to be heard making its music, coming ever nearer and the noise growing

louder and louder. Down! Down! Just one eye over the top of the rock blind and mind you don't wink that eye! There! They have seen the "tolers" and here they come! Now they set their wings and drop like—like—well, like Whistlers that mean business. Just as the leaders hover over the decoys with wings outspread let go at them, and as they rise the other barrel speaks. Well done! A few more chances like that and we shall make a bag of birds.

These ducks are most uncertain fellows and cannot be judged by any set rule or precedent. You may have the finest flock of decoys ever seen and yet the Whistlers may choose to pass them by to decoy to one lone bird sitting in a small opening in the ice a hundred yards away. Why? I don't know. Perhaps experience has taught them that a place where a gunner may hide is a pretty good place to look for him. Be sure that every duck that flies in will drop into that same spot until there is a raft of birds there large enough to satisfy all your wife's relations. What to do then? Well, have you a sail aboard? Then let us push through or over the ice into that opening and set our decoys in the

water close to the edge and on the ice nearby, ourselves in the boat twenty yards back into the ice-field and to leeward of the decoys. Throw the sail over us and over the boat. Grip a corner of our covering in your left hand and carry it across you, then your gun in the right hand, lean back in the stern of the boat with just your eye uncovered, keeping a sharp look-out always, and the "old iron" where it can be thrown quickly into action. Such an arrangement makes a blind hardly to be suspected by the wisest campaigner and the ducks will often come in quite near. A gunner so placed will at times get good shooting when a competitor on shore cannot get a shot. Try it some time when you see them passing every point and ledge out of gun-shot. Another point; make sure your decoys are good ones. Our friend is very discriminating in his tastes and prefers to be fooled artistically.

Got enough, have you? Well, after the sun is up the flight flags. The main body is on some inshore feeding ground, and unless some misguided mortal will try to "scull" them we may as well quit. I am nearly frozen! How are you? And we are both ready to pull the boat



BARROW'S GOLDEN-EYE.

home—one of the few times that men are willing to quarrel for the chance to toil for the common good.

The Whistler's flesh is held in slight esteem during the winter months when its diet is made up of mussels and shellfish from the unfailing larder of the sea, the last refuge of our ducks in cold weather, but on the inland waters where they are among the earliest visitors in the spring, and during the brighter times of summer and early fall when a vegetable diet is afforded, they are more than passable for the table. Indeed, at any time they are not so strong in their flavor as their sea-fowl neighbors.

How dull and monotonous these summer days must be after their winter-long struggle to keep their bodies from the soup-kettle and their skins from the taxidermists' shelves!

ROCKY MOUNTAIN GARROT. BAR-
ROW'S GOLDEN-EYE.

(*Clangula islandica*.)

A western relative of our typical bird, of somewhat rare occurrence in the east. It differs a little from the common variety in its

markings, but its habits are probably identical with the Whistler ways familiar to all eastern gunners.

Its range lies more to the west and south of the habitat of the common variety, more numerous throughout the interior than on the coast line.

Its size is if anything a bit larger than the common species. Its markings are as follows: the color on the head is of purplish shade—the white patch at the base of the bill longer and narrower and of somewhat crescentic shape—the crest feathers a trifle longer than in the type known to most of the shooting fraternity of the northeast, thus making the outline of the crown more rounded than in the common species. Three or four white feathers appearing among the scapulars will assist in showing the species if a male, as will also the broad edgings on the flank feathers, much heavier in this than in the typical bird of the east. Iris as in the common Whistler. Feet dull orange.

The females of the two species can scarcely be distinguished one from the other. The lady of this species may average a very little larger. A probable distinction may lie in the higher and

narrower bill which she wears, but I think it will need a more than commonly close observer to pick her out among a number of specimens of the ordinary species.

This is a bird of wide range, breeding anywhere along our northern border, thence any distance toward cold weather. It may be that the greater number nest in the Rockies. It seems to be very uncommon in New England, but is said to breed in the interior of Maine in the lake region. A few are taken each year in Penobscot Bay.

This duck has the same music box arrangement in its wings as has our own species, and decoys readily to "tolers" of the ordinary Whistler, though it is said that in localities and on streams where both birds frequent they are apt to keep apart, each to his own kind. It must be a hard matter in the mating time, with the madness of that happy season in his blood, for young Mr. Whistler to know when he has chosen wisely and well—whether he has chosen Miss *Clangula Americana*, or her cousin, Miss *Islandica*. But even wise men have sometimes shown little wisdom at such crises, and he has this for consolation—that if he has blundered

he will never find it out, since there are few prying scientists among his acquaintances to inform him of his mistake and so destroy his happiness.

THE BUFFLEHEAD. DIPPER. BUT-
TERBALL.

(*Charitonetta albeola.*)

At different seasons of the year this pretty little duck is found in all parts of North America, breeding from the northern States of the Union into the Arctic regions, and wintering in the West Indies, Mexico and Central America. It is also a chance visitor to Europe.

A fat and chunky little fellow he is, well meriting his name, the "Butter-ball," as also his other title, earned by his undoubted talent for disappearing beneath the water when danger threatens,—because of which he is called the "Spirit Duck" and "Dipper." In appearance he is a miniature "whistler," the black and white plumage being arranged much as in the dress of that bird, and the little fellow's head has the same puffy, hair-on-end innocence of



BUFFLEHEAD.

brush and comb, with the same changeable violet and green sheen to the feathers.

Formerly a most abundant species here and on account of its small size seldom molested by the gunners, of late it is very rarely seen, and would, in the present scarcity of game, hardly receive the consideration which it once enjoyed, although its flesh is not so good as it might be.

It is a wary little bird with much of its larger relative's good sense and caution, like the "whistler," setting a sentinel over the flock as it feeds, diving at once if alarmed, putting a safe distance between itself and pursuit before coming again to the surface, then instantly taking wing and off like a flash. On the seacoast they feed contentedly among the breakers and near the rocks, seeming to like such places better than the smooth waters, probably because the waves are tossing plenty of food about.

The breeding and nesting season finds the most of them in the north, where by quiet stream or sedgy pond they make their nest, indifferently on the ground or in a dead stub, with its hollow lined with feathers and grass, and all is ready for the eggs. The broods range

in number from six to twelve ducklings, generally nearer the smaller figure.

The Dipper is a hardy little bird, staying in its northern home late into the fall and coming into our latitude only during the coldest weather, to leave again early in the spring.

The male bird's plumage is made up of sharply contrasted blacks and whites, with a brilliant sheen to the long, fluffy feathers of the head. The upper parts are mainly black, growing lighter toward the tail. Lower neck all around and under parts throughout are white, with faint dusky shadings on the flanks and sides. Except for a large triangular patch of white behind the eye the entire head is dark green, almost black, with a purplish iridescence. Most of the wing coverts are white, but a broad black line runs through them from the lower back to the shoulder. Tail dusky, feathers lighter on the edges. The bill is dull bluish with a black nail. Feet pale flesh color, webs dusky, nails black. Iris brown.

The female is even smaller than the male and is of less decided tones; a dull grayish brown in color on the back with less of the contrasts shown in the plumage of the male bird. Whit-



OLDSQUAWS IN SPRING PLUMAGE.

ish below and white speculum. Head less puffy in the lay of its feathers, snuffy brown, with a small gray patch behind the eye. In her markings she resembles very closely the female of the American golden-eye made up a vest pocket edition.

The Bufflehead averages from twelve to fifteen inches in length and in extent from twenty-two to twenty-four inches. As may be seen, the smallest of our ducks.

THE OLD SQUAW.

(*Harelda hyemalis*.)

The wind sweeps along the gray water in heavy gusts, driving dead leaves seaward and piling foam and drift on the island shores. The long rollers break on the ledges in heavy monotone, thundering across seaweed-covered reefs in foam and feathery spray. The oak trees creak and gride against each other where they margin the shore and the smaller branches rattle and clash together. Withered leaves and dead grass stems rustle drearily in the breeze. Not a song-bird cheers the woods with melody. Not a shore-bird's whistle gladdens beach or

marsh. Landward the only indication of bird life is the scream of the jay or the distant cawing of the crows, southward bound. Winter is close at hand. There is a sting in the wind, a nip in the air, and the fingers are numb and blue as they hold the gun barrels. But out on the water, careless of wind or wave, rides a flock of "Squaws" making always a merry clatter. Ever and anon some of their number rise against the breeze to dart off at lightning speed, apparently in the mere enjoyment of flight, for, circling a half a mile about, they plump down again among their comrades, all the time noisily calling to each other. We might almost say they are the only song birds among the ducks, for really their notes are very pleasant to hear and quite musical in comparison with the usual vocal production of the family.

Undisturbed they have made holiday and raised their broods during the short Arctic summer, but now, driven by snow and ice from these pleasant quarters, they bring their youngsters southward along the coasts of New England and the Middle Atlantic States for the winter, dwelling offshore from the St. Lawrence to the Potomac.

They seem to favor the sandy shores, leaving to their neighbors, the "coots," almost undisturbed possession of those rocky, weed- and kelp-grown grounds which they love the best. The writer knows one stretch of shore divided into two parts by a high and narrow promontory; on the one hand shifting sandbars at the mouth of a swift-running river and mile after mile of shallows over a sandy bottom. Here are the Squaws, making a continual music most pleasant to the gunner's ear. They are a very restless lot, dashing about from place to place, the swiftest of the seafowl. On the other side of the headland are waters deep and bold, crashing and tumbling in on a rugged, rocky shore, with the full sweep of the open ocean. Here dwell the "coots," winging their heavy flight in sluggish contrast to the lightning rush of the "Squaw." Scarce a "Long-tail" puts his nose around the point which marks the frontier between the two communities, or if he does so, dashes back with the half-scared air of an intruder.

The Oldsquaw is mainly maritime, though occasional vagrants are seen on the Great Inland Seas. Their only visits to New England shores

are made during the winter months, the breeding and summer seasons being spent in the far north.

Their nests are made upon the ground and on the shore of some fresh water pond near the sea. These contain from four to seven grayish eggs. As soon as the youngsters are fairly well grown and able to take care of themselves they are taken out into the wide world of the ocean. For their food the sea furnishes an unfailing supply of marine animals and mollusks, which, however, makes their flesh very dark and to most palates very unpleasant. They are very fond of the "sand fleas" and marine creatures of the seaweed and beaches.

They leave our coasts for the breeding grounds, on the shores of the Arctic seas and among its islands, during the latter half of April or the first of May, to return again, southward bound, in October or November, according to the season, remaining in our waters all winter.

Because their flight is very swift and they decoy well great numbers of Squaws are killed each year by the gunners who shoot them mere-



OLDSQUAWS IN WINTER PLUMAGE.

ly for the practice and sport which they afford, oftentimes leaving dead and wounded birds to float at the mercy of wind and tide. It is at the hands of such butchers as these that the myriads of sea-fowl that once lined our coasts have been reduced to the hundredth part of their former numbers, for no species, however numerous, could stand the drain upon their forces resulting from such shooting, and to make the matter worse, most are killed in the spring flight to the north. I have seen twenty boats at a time, each containing from two to four shooters, all killing and wounding Squaws, and the half of them never troubling to pick up a bird.

Most of the Squaw killing is done over decoys; a string of "tolers" anchored to windward of a boat and the gunner only using the caution to keep below the gunwale until the flock is hovering over the decoys. Another way much in favor is to put a line of boats across a sound or channel through which the birds are accustomed to pass in going to and from their feeding grounds, and by anchoring a little more than a gunshot apart the birds have no choice

but to run the gauntlet if they would have their breakfast. Of course they are shot from "floats" also.

A number of names are given this bird by the gunners of the coast, among them, "Long-tailed Duck;" "Old Injun," (male); "Old Squaw," (female); "Sou-southerly," from some fancied resemblance of their cry to these words; "Hound," from the sound of the flock's "gabble," which is somewhat like the distant yelping of a pack of hounds; "Old Wife," from its talents as a conversationalist, perhaps.

The Old Squaw, by which name it is most generally known to us of the northeast, is also found on the Great Lakes in winter, dwells on the Pacific coast and in the waters of northern Europe along the coast.

What a streak of lightning it is when under way! When a gunner thinks he is "holding just right" on a passing "Squaw" it is a good plan for him to double his forelaying or the bird will continue to pass. Certainly, with the possible exception of the "whistler," no duck of the salt water can hope to stay in his company when he is crowded for time. A heavy charge of powder and about number 4 shot is

necessary as a convincing argument for stopping him. Where much hunted they learn caution quickly and offer only the longest of shots. At any time a wounded bird means a heap of trouble in the gathering thereof. They have all the talents of the most skillful sea-fowl at submarine navigation.

The seasonal changes of plumage in the male bird are quite radical. In the breeding dress the head and neck are a brownish black with a patch of gray about the eyes. Neck and breast a very dark brown, nearly black; the under parts white or silver gray, well defined and sharply contrasted against this dark ground. Upper parts everywhere, as are also the long feathers of the tail, nearly black; the scapulars varied with tawny yellow and reddish brown on the edges of the feathers. The short tail feathers silvery gray, darkening toward the central feathers. Bill black with an area of orange at the tip. Iris of the male carmine, his feet dull bluish with dusky webs and black claws. Iris of the female yellow, feet dusky greenish with blackish webs.

The fall and winter plumage is widely different from the spring suit; on the head, neck and

forepart of the back almost white, with a grayish patch on the cheeks and a dark brown spot under the ears. Upper breast dark brown between the white of the neck and the under parts. Bill mostly orange, with nail and central line of the mandible black. When a flock of winter Squaws goes past it looks like a snow squall driving over the waves. Occasional males are taken in a curiously pied and mixed dress, a stage between the regular plumages. Some birds are found carrying the winter dress through the summer or vice versa.

The female is a modestly attired duck. She has not the elongated central tail feathers. Her head, neck and upper parts in general are like the male's but paler and of less decided colors; grayish brown with a whitish patch on neck and about the eye. Under parts white except the upper part of the breast which is light brown.

The length of the male bird varies according to the development of his tail feathers from twenty to twenty-three inches; extent about thirty inches. The length of the female about eighteen inches; extent a trifle less than that of



HARLEQUIN.

the male bird. Weight of this species from one and three-quarters to two pounds. The Squaw is found on the coast of Alaska but is rarely seen on the western coast of the United States. It is common all along the coasts of northern Europe and Asia.

THE HARLEQUIN DUCK. "LORD AND
LADY."

(*Histrionicus histrionicus*.)

This bird inhabits nearly the whole of the northern hemisphere, Europe, Asia, Greenland, Iceland and North America. In our own country it breeds rarely in our northern States, more commonly in the Arctic regions. It also nests in the interior in the mountains, the Rockies and the Sierra Nevadas, which fact seems strange to our sportsmen of the northeast, for to them the Harlequin is a bird of the deep water, only found in any number far out to sea with the king eiders. It is reported to have bred along the eastern coast line of New England and in the Bay of Fundy, but probably is nowhere numerous in the nesting season south

of Newfoundland and Labrador. It is seldom found in this latitude except during the cold weather.

From the time of their visits and the distance of their haunts from the mainland few of their numbers fall a prey to the gunners, and the "Lords and Ladies," as they are named by seafowl shooters, are very rarely occupants of our game bags. But this is small cause for grief, since aside from their bright plumage and their beauty as "specimens" they are of little value.

If a shot is fired at a flock on the wing they will sometimes plunge from the air into the water and after swimming below the surface again take wing, coming up a hundred yards away—seeming the instant they reappear to dash from the depths into the air at full speed, leaving the gunner inexperienced in their ways and who perhaps had thought that by some miraculous chance he had killed the entire flock, to find that he doesn't care for that kind of duck after all. I passed through just such an experience once, and remember yet how disgusted and surprised I was when after steaming up to where the whole flock should have been dead

—no duck! and what may have been their ghosts rising from their watery graves sixty yards away.

They make their nests on the ground or in the hollow of a tree, lining the cavity with grass, leaves, moss or down. The number of eggs is from six to ten—usually eight—of a grayish green color.

This is a very curiously marked duck, beautifully plumaged in its full dress, which, it is probable, is not put on before the third spring. The general color of the species is a dull bluish, almost purplish, darker and nearly black on the top of the head, lower back, rump and tail. The body color is darker on the head and neck than on the breast and back, here growing more brownish in tone. The flanks bright chestnut. A white patch on each side at the root of the tail. Speculum purplish with a metallic lustre. A patch of white at the base of the bill; stripe of chestnut above each eye, and a small circular patch of white behind the eye, with a long, narrow stripe of the same color running down each side of the hind neck. A collar of white running around the lower neck, this black-edged, and another lower down on the

forebreast, the ends almost meeting on the back, this stripe also black-bordered. Some little white on the scapulars; iris red-brown; feet dull blue with dusky webs; bill greenish.

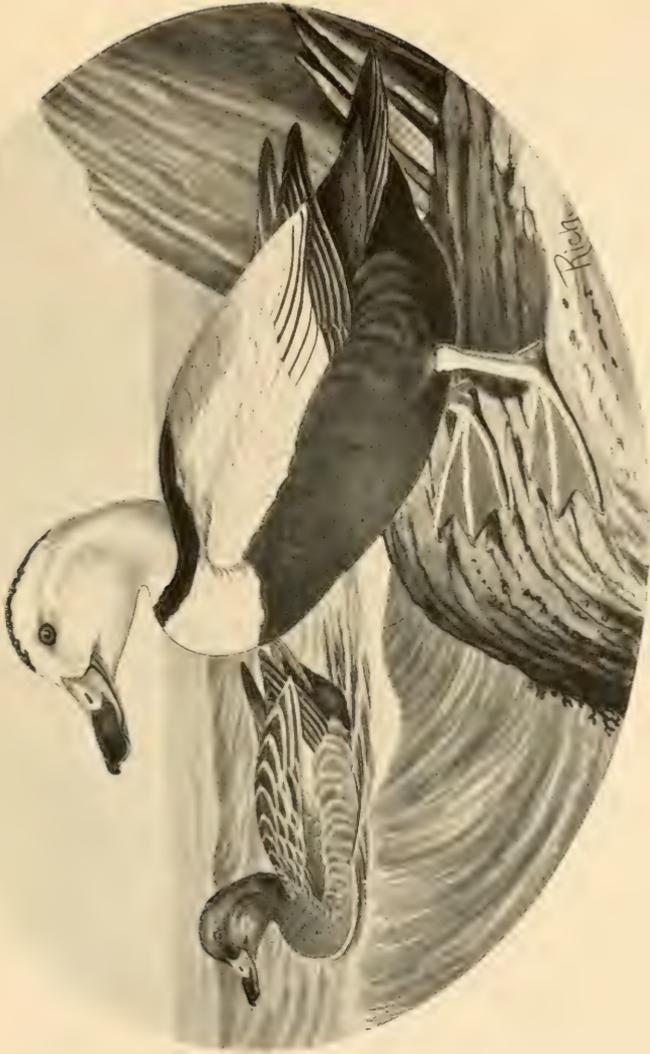
The female is considerably smaller than her mate and somewhat different in her markings; more brownish in her tones and lighter and grayer below. Bill, feet and iris as in the male bird. Length of male from fifteen to seventeen inches; extent from twenty-four to twenty-seven; female somewhat less than these measurements.

THE LABRADOR DUCK.

(*Camptolaimus labradorius*.)

There is small likelihood of the gunner's meeting this bird, either in New England's waters or elsewhere outside a few great museums, but on the slight chance that it still survives and may happen to be taken, and in order that our list of sea-fowl may be complete it is here described.

There is much reason to believe that the species is extinct, at least there is no record of its capture in many years. If a specimen should



LABRADOR DUCK.

be taken the lucky gunner would find it the most profitable bit of seafoal shooting of his career, for he might command his own price for the prize. I think the last recorded specimen, as published by the "Auk," the official journal of the American Ornithologist's Union, was one taken at Grand Menan Island in 1871. There are very few specimens in collections (some forty in this country and perhaps twenty across the water) and it is probable that these will always be highly prized, the value of each bird increasing every year. Very few can be had at any price. The figure paid at the last sale of which I knew was \$1,000 per duck.

Cast in the heavy ponderous mould of the seaduck, short of wing, slow and heavy in flight, and comparatively clumsy in model, the bird bears some resemblance to the eiders both in shape and markings. As it was fitted out with all the advantages possessed by the coots and eiders, it is hard to see why the race should have died out. Audubon tells of its breeding habits. It was a strictly maritime species and nested from the coast of Labrador into the north, in winter coming southward to the waters of the Chesapeake. This is about all we know

of its life and habits, and our chance of learning more about them is very slight. It was fully fifty years ago that they were found on our coasts, never in any abundance, for few have been taken at all.

Audubon's drawings were made from a pair shot by Daniel Webster and by him presented to the naturalist.

The male bird's head and neck are white, with a broad black line running down over the crown and nape. The lower neck with a black ring encircling it and that connected with the black of the back and upper parts. Below this black collar a broader band of white which nearly meets at the back. Above, entirely black except the wing coverts, secondaries and scapulars, these last pearl gray; below, wholly black, save the linings of the wings and the axillars, which are white. Primaries and their coverts and the tail feathers brownish black. Bill black, base and edges orange, the ridge blue-gray. Eyes reddish brown; feet gray with dusky webs and nails.

The female is a mottled gray and brown duck not much unlike the females of the king eiders, but may be distinguished by her white speculum.

Bill, eyes and feet as in the male. Length from eighteen to twenty inches; extent about thirty inches.

THE AMERICAN EIDER.

(*Somateria dresseri*.)

This dweller of the cold north visits our coasts only during the severest winter weather. Even then it keeps to its feeding grounds among the outer islands and in the open sea, hence it is called the "Sea Duck," and by this title is best known to our gunners.

Beneath the feathers the bird is covered with a thick coat of down, (the eider-down of commerce, or some of it), which in the regions where they breed is gathered from the nests as it is supplied by the birds themselves. They will even submit to being robbed twice, it is said, but decline to furnish more if the spoiler makes a third descent, then deserting the nest. The birds use this down as a lining for the nests and as a covering for the eggs, pulling the thick, blanket-like mass over their treasures when they leave them for a time to feed. In Iceland the people cut shallow holes in the turf edges near the sea, all around their homes, even

on the low, sod-covered roofs of their huts, in which the Eiders may make their nests, for peace and perfect protection have made them fearless and half domesticated. Here they are protected by law and the destruction of nests or eggs is punished by a heavy fine, for the down is a source of considerable profit to the people. Some few birds bred for years on the Maine coast in Penobscot Bay, and near Grand Menan Island, further east, but in both places the collector's persistency (always for the advancement of science, of course) has discouraged all attempts there of late years. Within a short time, however, the State has decided that they are worthy of some consideration and an island, where each year a few have succeeded in nesting in spite of all obstacles, has been set apart and efficiently guarded from intrusion in the hope of their colony's increasing in numbers, which it bids fair to do. Its main nesting, however, takes place in the northeastern corner of our continent, from the Gulf of St. Lawrence northward along the shores of Hudson Bay and the Labrador coast. Beyond these limits it is replaced by the Greenland Eider which differs very slightly from this species.

No kindness such as Iceland affords is offered to the flocks which turn their course southward along the American coast, for as soon as they reach the lines of civilization they run a continual gauntlet of shot from fishermen and gunners, and enjoy peace and quietness only during the severest weather when the sea is so rough or the day is so cold as to make a shooting trip "extra hazardous." Fortunately no weather is too cold or sea too fierce for this bird's comfort; such conditions mean safety, and he can be happy at a temperature low enough to freeze a polar bear. A pleasant day with a smooth sea in midwinter means death to many a seafowl.

I know one ledge, a favorite shooting stand, to which the gunners from the neighboring islands will pull out four or five miles in the afternoon to set their decoys, custom admitting these to hold the position against later comers, then they go home again to make another start at one or two o'clock the following morning to be on hand at the first light. Some even roll up in their blankets around a fire of driftwood in the lee of some great cliff in order to be first at a point of vantage—this with a chance of the

thermometer being down out of sight in the glass. Truly, "They have their reward." It may be game or it may take the form of pneumonia.

A common way in this neighborhood is for the gunner to go to the home of some dweller among the outer islands and start out with him. At midnight or a little later the warning hail is heard and out from the blankets you stumble to blink sleepily over a cup of strong coffee and the fuel to keep the inner man in order, then down to the shore to make ready. Cold and still the night, scarce a breath of air moving over the quiet water, but with regular rise and fall the gently seething swell breaks over the rocks at the mouth of the narrow cove. Inside the rocky barrier small fishing crafts ride at anchor, the water rippling alongside and their masts reflected in the waves show like long, undulating serpents. Overhead the moon shows pale and cold, and the stars in the sky are winking down at their reflections in the sea. Anon comes the gentle rustle of the breeze among the pines, so still the night you hear their needles shivering with the cold, and next the rumble and clatter of the decoys, oars and other



AMERICAN EIDER.

trappings jar discordantly on the silence as they are tumbled into the boat. At last we are off and are soon right willing to stand our trick at the oars, pulling away with a good will, for the air is pitilessly cold, and the black-looking mass where we hope for our morning's sport rises out of the sea a good four miles away. After a long pull with oar blades made heavy with their coating of ice, we find ourselves on the barren, wave-washed ledge. The decoys are quickly set and are soon floating in a life-like bunch before a natural blind in the rocks. You have come a long distance in the chill air of the night and though half frozen with the winter's breath are yet ready to brave rheumatism or risk pneumonia in the pursuit of your game. If so you are made of the stuff that succeeds and deserve success.

On every hand strange and fantastic shapes loom up like ghosts,—the work of dashing spray and the north wind. The rocks are clad in icy armor and every salt stream trickling down from the pools above marks its course with silver tracery. Long icicles hang pendant from the beetling cliffs which overtop the waves, and over all the moon throws a weird and fairy

light—here into a cavern of inky blackness, there upon a wall glittering as with pearls and diamonds set in Parian marble. The never-quiet swell of the Atlantic heaves and falls with regular pulse below, and for a time all conversation is hushed in the grandeur of the scene, the silence only broken by the booming of the surf on some neighboring reef. Ere long the path of the moon grows paler on the water, and as the first faint shaft of light goes shivering across the wakening world the rustling wings of the dwellers on the waves are heard out in the misty, uncertain stretch of water before you. With straining eyes you peer over the gray, tumbling seas. A splash! Something has settled among the decoys and swimming up in social mood begins a chat with one of them. Its wooden dignity and silence discourages any long conversation, and before you have made up your mind as to which white floating object is the most appropriate mark for your charge he takes wing and disappears in the gloom, perhaps followed by the haphazard discharge of every gun in the battery.

The east is brighter now. Rays of light are piercing the blackness overhead with arrowy

shafts. The few remaining stars are fast putting out their lamps. The clamor of passing flocks and the rush of hurrying wings begin to make sweet music. You cease drumming on your knees and thrashing your arms about in windmill fashion to keep your fingers warm—halt in your endless sentry march up and down the narrow rock-shelf where you have tramped and stamped about that the blood might not freeze in your very heart, and grasp the gun tightly (though you think you will be compelled to use it as a club, since your fingers are so numb and stiff that you can scarcely hope to pull trigger) for a flock of Sea Ducks, their broad front like a line of battle, are headed right for your decoys! Wait a bit! Don't fire yet! They are big birds and seem to be much nearer than they really are, especially when head on, but you may easily discover that your eyes are deceiving you if you shoot now. They are scarcely in gunshot yet. Now! As they swing! Bang!—Bang! Bang!—Bang! A mighty commotion and away goes the remnant of the flock in a hurry. See, there are three big fellows lying on their backs in the water with feebly kicking feet in the air, another turning

slowly 'round and 'round in a vain effort to get under, and a couple more with better success diving to the depths and swimming below the surface for dear life. There is small hope of their capture, yet if they come up within shot let them have it, for a stray pellet might stop them and we want to leave no poor cripples here to suffer and starve.

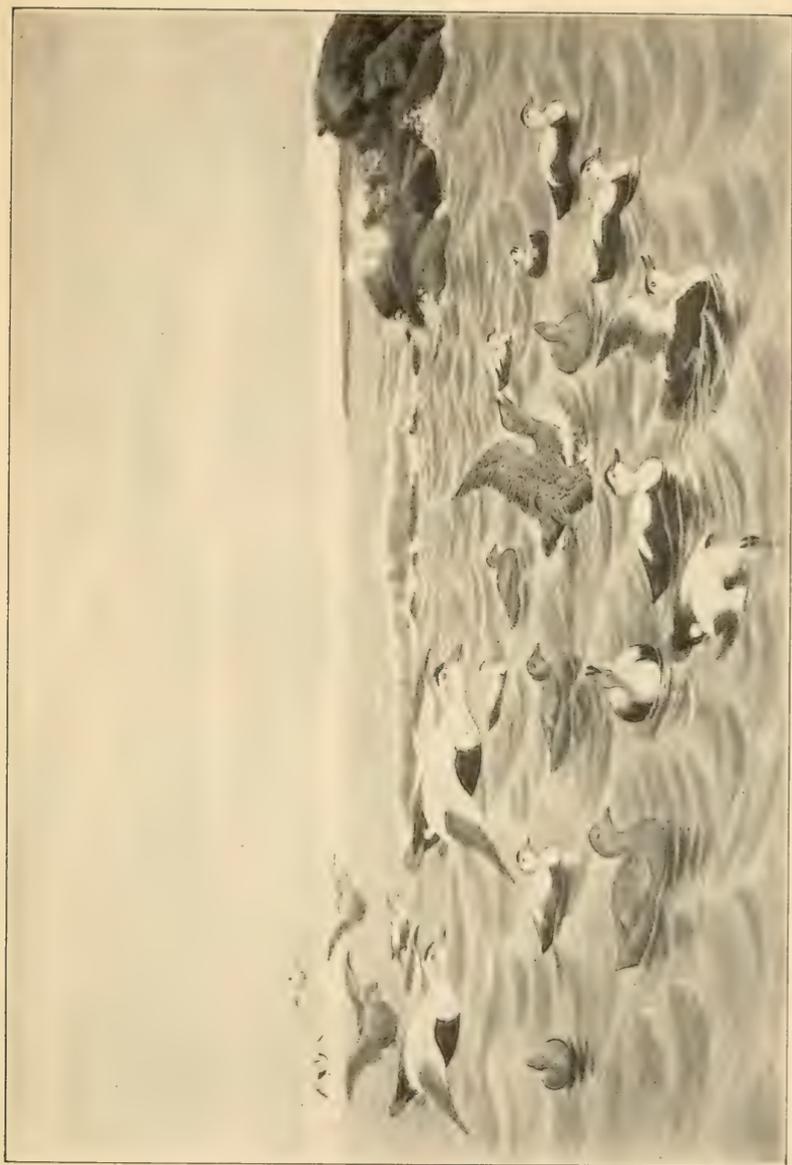
Perhaps when you have shot your wounded Sea Duck three or four times over you discover that he will stand a whole lot of killing, and that he will carry off ballast enough to sink most birds. He is one of those hard-headed, gritty fellows who never admit the fact even when they have been killed, and the thick coat of down and feathers, backed up by the sturdy muscles beneath, makes a very good suit of armor over his vitals. Head on, unless a shot enters the neck or brain, you may as well snap your fingers at him as waste ammunition,—that, too, when you are using number one or two for shot. Many use as heavy as BB.

Away in the distance, wherever you look there is some scurrying flock of seafowl: swift-flying "old-squaws" with a continual "gabbling,"—shelldrakes driving past in rush-

ing flight, but silent all, and looking like a flock of animated tenpins,—the heavy, lumbering flight of “coots,” or “surf ducks,” winging their way to some less troubled stretch of water. To-day this is a favorite feeding ground, but to-morrow there may not be a Sea Duck here, for they often change their range without apparent cause, leaving a place where for weeks they have been plenty and moving a few miles away to return as suddenly as they went. Sometimes this is the work of the wind which may carry them miles away as they rest upon the sea at night, but as often as not it is the bird's own caprice.

Right overhead, coming up behind you and unnoting your presence where you were hidden by the rocks, comes a big loon with out-stretched neck and flying bravely with rapid wingbeats. A shot only serves to hasten his flight, and without a sound he keeps on, swinging in a wide circuit to alight a mile away, perhaps sorely hurt. The sun is up, the birds come in thick and fast for an hour or so, then the flight suddenly ceases. If you have held well and truly, loaded the proper charges and placed them where you ought, by this time, being a

reasonable man, you have game enough. You had better go home now, for the flight is done and only an occasional straggler will reward your longer stay. So thinks our worthy pilot. The man in the "dory," too, who has lain down to leeward all this time, has had work enough in picking up the dead and wounded. Add to this that with the growing day a stiff breeze is coming out of the northeast. Black heavy clouds are gathering seaward and the veteran's eyes are beginning to watch their threatening masses closely. At last,—“Come, boys, we must be gittin' out o' this! There's nasty weather comin' yonder,” and with a lusty hail he tells Sam to take him aboard and they will take up the “tolers.” It is no child's play for the green hand to pick up and stow the decoys, but these two, one at the oars and the other at the lines, make short work of it though the “dory” jumps and pounds in the “chop” perilously near to the jagged points of half submerged rocks. And now with the game aboard and the passengers safely stowed we square away for home, the “landlubbers” of the party keeping anxious eyes to windward where sea and sky are fast becoming one in a dull



SEA DUCK SHOOTING OVER DECOYS.

gray curtain. A mile from home the first flakes of the storm begin to seethe in the water alongside and in another minute every landmark is hidden—nothing to look upon but nearby waves and level lines of driving snow. If our guardians are disturbed at the prospect they give no sign, but pull steadily, keeping their course by the heavy wind which they know will hold from this quarter for some time. But the passengers, covering up no little anxiety under an air of indifference, are mightily pleased when finally they hear the thunder of the sea upon the rocks ahead. A short pull along the coast brings into view the dead oak which marks the harbor's entrance, and soon the voyage is ended and we are at home with another shooting experience to remember, and that, too, one which only New England's winter season can give us.

The Eiders gather into large flocks and fly out into the open sea for the night, coming in about daybreak to feed among the sunken reefs on the mollusks and shellfish which make their chief diet and abound in such places. This food, the staff of life to the seafowl, makes their flesh dark and to most people unpleasant in

flavor. But opinions differ as to their food qualities, the islanders praising them highly, even preferring them to the more generally esteemed fowl of the fresh water. In its feeding the Eider dives deeper than most ducks; just how deep we can hardly know, but I think I put it moderately when I claim that they can, as the boys say, "bring up bottom" in sixty feet of water; and many say much deeper.

Many Eiders are killed by gunners who take position under cover on the deep water ledges where the birds feed, waiting while the flocks work in shore, as they dive and come up nearer each time until the whole party is well in. Then the first arrivals gather together in a compact bunch to await the rest of the flock. When all are accounted for they fly out again to repeat the process. Often a considerable number are killed at a discharge as they "bunch up" to go out.

From the nature of their haunts few Sea Ducks are killed from "floats" as the water is usually too rough to permit their use, for the ducks, climbing up one hill of green water, may easily look into the craft as it slides down another long swell. The game, too, is much more

wary than the average gunner would suppose to see them come to decoys, for this they do readily, a single bird or a small flock being almost sure to come in if they see the "tolers." The larger flocks are less likely to notice decoys—a general rule with all ducks.

These birds arrive in New England waters about December first, and have nearly always gone north again by the middle of March or the first of April at latest, varying their movements as the season is mild or severe.

The Sea Duck is a powerfully made fowl, about twenty-four inches long and in extent some forty inches. The males will average to weigh between five and six pounds; the females a pound less. The male in full plumage is a remarkably showy bird, the contrasting effects of his snowy white and jet black plumage in broad areas being very striking. His head is black on the crown and sides down through the eyes and back to the base of the skull, with a thin strip of white running over the centre of the hind head and narrowing to a point on the crown. The cheeks, throat, neck, back, upper coverts and drooping plumes of the wings, the upper breast, also a spot on each side of the

rump are white, shot on the sides and back of the head with pale green,—a beautiful, satiny shade,—and tinged on the breast with pale russet brown. These delicate colors fade very much in stuffed specimens. The entire under parts, rump, tail and wing quills are jet black. Iris brown. Feet and legs dark green. The feet are a very generously constructed pair of paddles, set well back on the body as an advantage in diving, of much larger proportions than seem the fashion with the ducks of the fresh water, and though perhaps less refined in appearance than the water motors of the aristocrats of the shallow ponds, will do more work in one stroke than will theirs in three. Frontal processes a rich yellowish green or orange.

The female is widely different in her markings from her mate, and would scarcely be thought one of the same species. She is a deep reddish brown hue all over, somewhat dusky on the lower parts, and everywhere mottled and barred with rich dark brown and black; the dark colors on the centres of the feathers above, and the cross-barrings mainly on the flanks and under parts.

During the first fall the young birds resemble the females though the markings are less clearly defined. In the next spring the young males put on a motley dress of brown, gray and black irregularly splashed over the whole body, but foreshadowing faintly the plumage of the adult bird. It is probable that they do not get their showy suit of black and white, clean cut and delicately shaded, until the third year of their life.

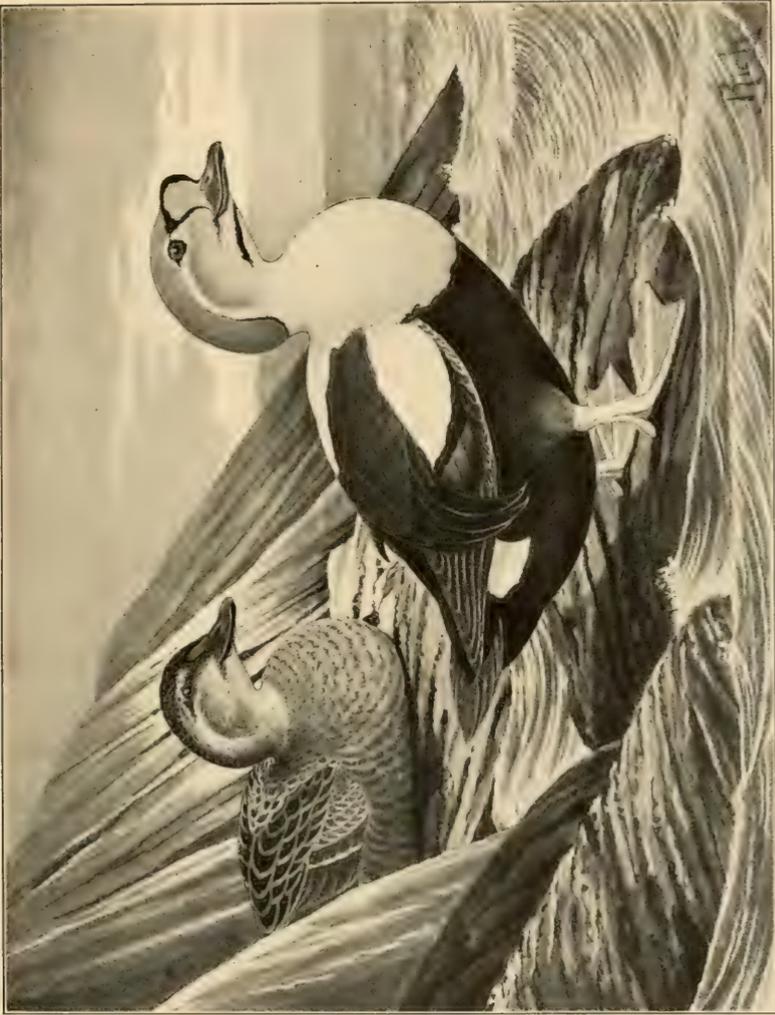
For a time after the breeding season the male Eider is said to put on a dress such as his wife wears. I have never seen one in this plumage, the latest killed male which I have seen in New England waters was in the perfection of his wedding clothes on May 30.

During the latter part of their stay with us there are comparatively few males in full plumage among the shotgun's victims, the most being what the islanders call "mongrels" from their curiously mixed plumage,—the young males just mentioned. It would seem that the elders of the flock go on to the north ahead of the main body, since the flocks found in our waters seem to be all young males or all females. Certainly during the last month of

their stay a full-plumaged male is a rarity. The male goes on ahead to prepare the summer residence for his lady? Not exactly! When the house-keeping cares show on the family horizon, a cloud no larger than a man's hand, Mr. Eider joins with other worthless good-for-naughts to spend his days and nights away from home, living almost entirely at sea until the nesting and moulting seasons are over and his offspring have become self-supporting.

These are the largest of our ducks, eminently fitted to take care of themselves, and one of the few species which seem to be holding their own in the struggle against the destroyer.

The difference between the American and the Old World type, represented by the Greenland Eider, which is occasionally taken on our coast, and is perhaps a more northern race than our own, lies principally in the shape of the frontal process and bill; these, in the American bird, are heavier and the tips of the nose ornaments are rounder and fuller than in the European species. One must be a close observer, however, to note the difference and distinguish the visitor among a number of our own birds.



KING EIDER.

THE KING EIDER.

(*Somateria spectabilis*.)

The Eiders of North America include five species. Of these the American, Greenland and King Eiders are visitors or residents on the northeastern coast. The present species is another "Sea Duck." It lives mostly in the open ocean and spends comparatively little time ashore even for one of his seafaring race. His is a life of perfect independence. He is at home wherever he alights on "blue water" and never a worryment is his—never a fear of pursuing gunner comes into his mind to ruffle his placid days. Often large flocks of the King Eiders are found in mid-ocean, hundreds of miles from any land, feeding upon the drifting seaweed which furnishes abundantly everything needful.

Their maritime existence and the rarity of their visits ashore, together with their heavy bodies and short legs combine to make their gait nearly as graceful as that of their human representative, the "old salt." In fact, it is a most clumsy "waddle" when compared with the easy

and nimble movements of the mallard, wood duck or pintail.

These are the children of the frozen seas, abundant only in Arctic waters and only coming into the warmer latitudes when the north is given over to the dreary reign of night and winter. Their migrations extend as far south as the Middle Atlantic States, but they are rare birds on all the coast line. An occasional straggler is seen in the Great Lakes, and there is one record of a male bird being taken on the Mississippi, probably having been blown out of his course, his reckoning lost, and he very willing to go back to sea, for his cargo was nothing but Mississippi mud. They are more common on the Pacific coast than on the eastern edge of our continent, but in the western waters do not come so far south; probably because the same latitudes are much warmer than with us.

In form and habits they are much like the common Eiders. In his markings the male differs from the male of the common variety in that he has a remarkable frontal process, most pronounced during the breeding months and nearly disappearing after this season,—a large and curious bulge upon the bridge of his nose,

of bright orange color, bounded by a jet black edge. There is also a black mark like an inverted V beneath the chin, the ends running down on each side of the throat. The plumes of the wings (the drooping tertials) are purplish black, wherein again he differs from the male of the common species, and also in the peculiar development of the outer two of these feathers, whose outer edges are deeply notched and the protruding point of the web stiffened to form a feathery horn standing out from each wing. In color he is mostly black; the neck, upper breast and linings of the wings with a spot on each side of the rump are white. The white of the breast is faintly tinged with cinnamon brown. The top of the head and nape are grayish blue or pearl gray, a very beautiful shade; the sides of the head tinged with pale sea green and the feathers bristly and hairlike, giving the effect of a piece of velvet. Iris brown. Bill and feet of reddish hue. Length about twenty-two inches; extent some twenty-eight inches. Weight from four to five pounds.

The female would scarcely be distinguished from that of the common species, except that her head and bill are proportionately shorter

and deeper, also the frontal process is not so prominent as in the common species. She is smaller and of less ruddy coloring than Mrs. Dresseri, otherwise an exact replica of her larger cousin.

The male in the first year resembles the female; in the second he puts on a motley guise like that of the common eider, and is supposed to reach his third year before donning his perfect plumage, beautiful and striking, even more so than that of the common eider.

The nesting habits and mode of life are nearly identical with those of the typical eider, and there is little to be said of one species which may not with equal truth be applied to the other. This bird, however, nests much further north; perhaps the most northern summer dweller among the wildfowl.

THE AMERICAN SCOTER. BUTTER- BILLED COOT.

(*Oidemia americana*.)

Few of the many species of seafoal which abound in New England's waters are so well known, and probably none are so numerous

among our sea-islands as are the "Coots," as they are named by the gunners alongshore. During the latter half of September straggling bunches of these birds begin to appear, and with increasing numbers they gather into larger flocks. The greater part has arrived by the middle of October and their advanced guards begin to spread out down the coast as far as the Middle Atlantic States. We are told that they are sometimes shot in Florida.

Probably the least wary of the duck family, they may be approached quite readily as compared with other members of the tribe. Gunners use many methods for capturing the Coots, but the greater number are killed over decoys. A string of "tolers" is set in a promising place just off some rocky point or ledge in the deep water, the gunner is well hidden, and if the birds are flying there is every prospect of good shooting, for the Coot is one of the best of birds to decoy. Often in the early part of the season, before the birds have become shy from constant peppering, the gunner may set his decoys on a line from his boat, only keeping below the gunwale when the flocks are coming in. And they *will* come in. I have often seen them fly

close enough to be struck with an oar,—I may say that they make it an invariable rule to do this when the gunner has taken the shells out of his gun or laid it aside to pick up his decoys after a morning's cootless waiting in the cold. One oddity in the gentle art of duck-shooting is the practice of "hollerin' coots," that is, of making a great noise when a flock is passing by out of shot, when they will often turn and come to the decoys. The report of a gun sometimes has the same effect, but we New Englanders are too thrifty to waste powder and lead where our vocal organs will serve as well.

Next to decoying the use of the "gunning float" is the most effective method of killing Coots. The "gunning float" is a long, low craft, drawing but little water and showing only a foot or so above the surface when properly trimmed down with ballast. In the fall, for use in the open water they are "trimmed" with "rockweed;" in the marshes with "thatch." In the spring and winter months the proper thing is snow and ice to represent a drifting ice-cake. It takes sharp eyes to detect the dangerous one among the many harmless pieces of ice when the gunner, clad in his



BUTTER-BILLED COOT.

white suit, is working his cautious way along toward the feeding flocks. The deception is so complete that I have known that crafty old pirate, the crow, to almost alight on the nose of a float when it was being pushed after a flock of seafowl. This float gunning is the method most used for all duck and goose shooting on the eastern New England coast line.

The Coots are often approached by sail-boats when there is a good sailing breeze, the craft getting to windward and then coming down upon them. As these birds always rise against the breeze and are heavy in flight and slow in getting under way there is often an opportunity to get in several shots before they are out of range.

I remember discovering on one of my shooting trips a new and well-wooded island in waters where I knew no island had stood before, and was surprised and alarmed to see my find move bravely along "with a bone in its teeth," against wind and tide. I sat up in my float and rubbed my eyes for another look. Suddenly a cloud of smoke poured out through the trees and the deep-throated roar of heavy ten bores rolled over the water. The mystery

is solved: a tugboat with a row of trees along each gunwale chasing a flock of Coots. This method of killing seafowl is wisely forbidden by the laws of most of our maritime States. "Sailing ducks," as the method mentioned before is termed, is also forbidden in many States, and properly, too, since it only serves to make the birds wild and finally to drive them "outside" entirely because they can get neither rest nor food. Slaughter enough can be made among them legitimately and a man should be satisfied with what can be done over decoys and by "sculling."

A few Coots remain on our coast during the warm weather, but there is not much evidence of their breeding in these latitudes. They are probably the crippled and unmated survivors of the spring flight, not able or not caring to journey farther north. Some may breed here; there seems to be no reason why they should not, but if they do so at all the number is probably very small. The most of them go far away toward the land of snow and ice, there to bring up in security their six or eight youngsters, hardening them by a liberal diet of shell-fish

and sea-food, until shot will flatten on their flesh if it strikes them.

They are unusually tough customers either in life or at the table. Most of our cooks believe it impossible to so prepare this bird as to make it decent food for any but a starving man. The best recipe that I have seen is something as follows: First, *skin* your fowl and let it par-boil in saleratus water at least one day, or until it can be dented with a fairly sharp axe. If your courage holds out the game is now ready to stuff and bake as you would any other duck, except that you must put enough onions into its inside to take away all Coot flavor. Arriving at this stage of proceedings there are two lines of retreat yet open to you: either throw your delicate morsel away or give it to someone against whom you hold an ancient grudge,—on no account should you try to eat it. Some of my island friends claim to be able to cook a Coot so that I could not tell it from a black duck. Well, perhaps,—but thus far I have always been careful to decline to referee any such match, for I much doubt if I could distinguish in a dark room between the flavor of a Coot and the pal-

ate-tickling relish of a well tried Gloucester fishing boot. The only way I can manage to eat Coot is to use the breast meat alone, parboil as before, score deeply and broil like a beefsteak and season well. A bit of lemon juice squeezed on it will help some, but it is doubtful if one would care to regale one's self with it more than twice a day for any length of time. If the reader must experiment let me recommend that he use a young bird in the early fall.

This duck is very hard to kill. He can carry off a full charge of shot with no apparent difficulty in his working parts, and unless the pellets are placed in a vital spot there are few chances of capturing him. If wounded severely or wing-broken he dives at once and continues diving and coming up to fill his air tank, often just putting his nose above water to get his breath and again going under to stay until he has reached a safe distance. Despite his Dutch model and somewhat clumsy appearance he swims fast and well either upon or below the surface, but his worst enemy cannot truthfully accuse him of being a graceful bird ashore, for he is heavy and chunky and at best his walk is an awkward "waddle." How do I know?

Well, just now there is under the window where I write a male "White-wing" whose broken bones I have repaired and whose wounds I have cured. Since his arrival he has been swaggering about the yard snapping and hissing at cats, dogs and fowls with all the independence of one whose title to board and lodging is assured. I have never seen a wild bird tame so easily.

There are three species of "Coots" in American waters, the "White-winged," the "Patch-head," and the "Butter-billed." To this list the fishermen will add two more, the "Gray Coot" and the "Brown Coot." These are the young of the other species. In the books these ducks are "Scoters," but thus designated the chances are that the birds will not be recognized among our deep water gunners. This name is seldom heard and when used is usually distorted into "Scooters,"—perhaps just as appropriate. Tell these people that these birds are not "Coots" and they will give you a look full of pity for your ignorance, and perhaps hint that there was a whole lot left out of your mental outfit; yet these birds are about as far removed from the true Coot as they well could be.

Poor Coots! They are of little value from any point of view, but it is sad to think of the rapidity with which they are each year decreasing in numbers. Ten years ago they might be shot almost anywhere alongshore, but now a fair day's shooting is quite hard to get. It is safe to say that in the last ten years they have diminished in numbers fully fifty per cent. At present they are unprotected by any law and are harassed and slaughtered from Labrador to Florida. Spring and fall, it is all alike, the seafowl of every kind know not a moment of peace from the time the flocks leave the north until their return thither next season.

Something should be done for them in the line of protection. At the very least it is not right to shoot them in the spring. Nothing more favorable to the increase of bird life of all kinds could be accomplished than the enactment of a law preventing all spring shooting, for by the destruction of a pair of birds in the spring we reduce the fall crop by at least four, not including the original pair.

About the only species of seafowl which are not decreasing with terrible rapidity are the eiders. These are hardly holding their own in

the struggle for existence, though they have a much better chance in that they make us their visits at a time when only the "crankiest" of gun cranks would think of braving the cold and hardships of a shooting trip among the outer islands. When a party goes out after "sea ducks" they never know when they will be permitted to return. The exposed position of the haunts of their game sometimes makes a return to the mainland impossible for days if a storm comes up; therefore winter shooting is not so much followed.

The Coots are found in both the New and the Old World.

The Butter-billed Coot, or American Scoter, will probably average the smallest of our Coots, though but little smaller than the "Patch-head." In most localities the present species is the least common of the three; a lover of "blue water," seldom coming into the narrow arms of the sea or tide-water, and only rarely taken on the Great Lakes where his cousins, the "Patch-head" and "White-winged" are not uncommon. In habits, breeding haunts and range of migration the three do not differ materially, on the eastern half of the continent the larger

number of this species nesting in northern Labrador. The Butter-billed Coot is entirely black save the nugget of gold which it so carefully balances upon its nose. The base of the bill is bright orange yellow, the rest plain black to conform to the sad hue of its raiment. Iris brown; feet blackish in male; olivaceous with black webs in young male and female.

The female is a trifle smaller than the male and of dusky brown color; bill lacking the gibbosity of the male and entirely black. Length of this species from seventeen to twenty inches; extent from thirty to thirty-four inches.

Young or female birds in any stage of development may be recognised (aside from color of iris) by the fact that the feathering stops short on the bill, not coming down nearly to the nostrils on top as in the other species.

THE WHITE-WINGED COOT. "WHITE-WING."

Oidemia deglandi.)

Best known and most numerous of the three is the "White-winged Coot," known also as the "White-winged Scoter," "Velvet Duck,"



WHITE-WINGED COOT.

“White-winged Surf Duck,” or more commonly and more simply as the “White-wing.” This species is more common in the bays and enclosed arms of the sea than are the others, which prefer the open water. The “White-wing” also is much larger in size. The habits of the three are almost identical.

In breeding dress and full plumage the male is glossy black all over except the white speculum, (wing-mark), and a tiny spot below and behind the eye. The bill with a large lump at the base and feathered to the nostrils, black at the base and on the edge to the nail, on the sides the black merging into a purplish tinge, then grading into deep red, whitening toward the tip, the nail orange. Iris white or pale yellow; feet and legs deep orange or bright red with black webs; these colors are duller in the females.

The coloring of the female is of a brownish cast, the edges of the feathers lighter. She has the white speculum as in the male, also the knob at the base of the bill, though this is not so prominent as in the male. The bill is plain black.

The White-winged Coot in any plumage may

be known by the white speculum. Young birds are of a dull grayish cast.

The White-wing inhabits both coasts of North America, the larger inland lakes, and is also represented in the Old World by a species very close to our own bird.

They breed through the interior from the northern States of the Union northward into the Arctic regions, and along both coasts of North America north from the Gulf of St. Lawrence in the east and from British Columbia in the west, by far the greater number going well beyond civilization. They make a large nest, usually placed at the edge of some body of fresh water, line it with down from their own bodies, and in it lay from six to eight eggs. They often breed far inland and a long way from salt water. Though every season a good sized flock summers among the outer islands of Casco Bay there is no evidence of their breeding there, and they are probably the crippled birds left behind by the spring flight, unable to continue their journey at the time and so unmated.

Apparently slow and heavy, when once on the wing their flight is powerful and often long protracted, usually traveling low over the water



PATCH-HEAD COOT.

save when migrating, at which time they often rise to a considerable height.

Their food consists of shell-fish, sea-weeds, and small fish. Their meat is dark, and except when it is from a young bird can scarcely be considered eatable.

This is perhaps the most common duck of the Atlantic coast.

THE PATCH-HEAD COOT.

(*Oidemia perspicillata*.)

Next of the Scoters in point of numbers is the "Patch-head Coot," also called "Horse-head," "Goggle-nose," "Skunk-head," and other equally romantic and euphonious titles. This species is fairly abundant on the eastern coast of North America, going farther south during the winter months than does either of the other two. They are not uncommon in Florida, are found in the Great Lakes, and are also abundant on the Pacific coast.

This bird breeds throughout the interior in high latitudes and all along the northern coast of the continent.

The male in breeding plumage is glossy black,

no white on wing or body, but a small patch on the forehead and another on the back of the head extending downward over the nape. It is not uncommon to find one or the other of these white spots missing in specimens. The bill is peculiarly marked; orange and white, at the base a squarish black patch edged with carmine. Iris pale yellow; feet and legs orange with dusky webs. Propellers of the female are duller in color, her bill black.

The female is a dull-colored, brownish-black bird with no white on forehead or nape, but some small splashes of grayish color on the sides of the head, on the cheeks and ears.

Young males much like the females.

Length from eighteen to twenty inches; extent from thirty to thirty-three inches. Weight from two to two and one-half pounds.

AMERICAN MERGANSER. POND SHELLDRAKE. GOOSANDER.

(*Merganser americanus*.)

The Shelldrake has its representatives all over the world, dwelling alike on the ocean or on inland pond and stream. Three species of

the family are regular residents of North America, and one Old World member of the race, the "Smew" or "Nun," is an exceptionally rare visitor on the northeastern coast line. All have long, narrow, cylindrical bills with notched and toothed edges—even the tongues are serrated to hold more firmly when they close upon their slippery prey, for this is a family of "fishing ducks," and are sometimes called "Saw-bills" from these saw-like teeth along the edges of the bill. These barb-like lamellæ are indispensable to the owner, making the bill perfection for its purpose and enabling the bird to hold fast to all on which it closes, as tightly as a politician with a "pull."

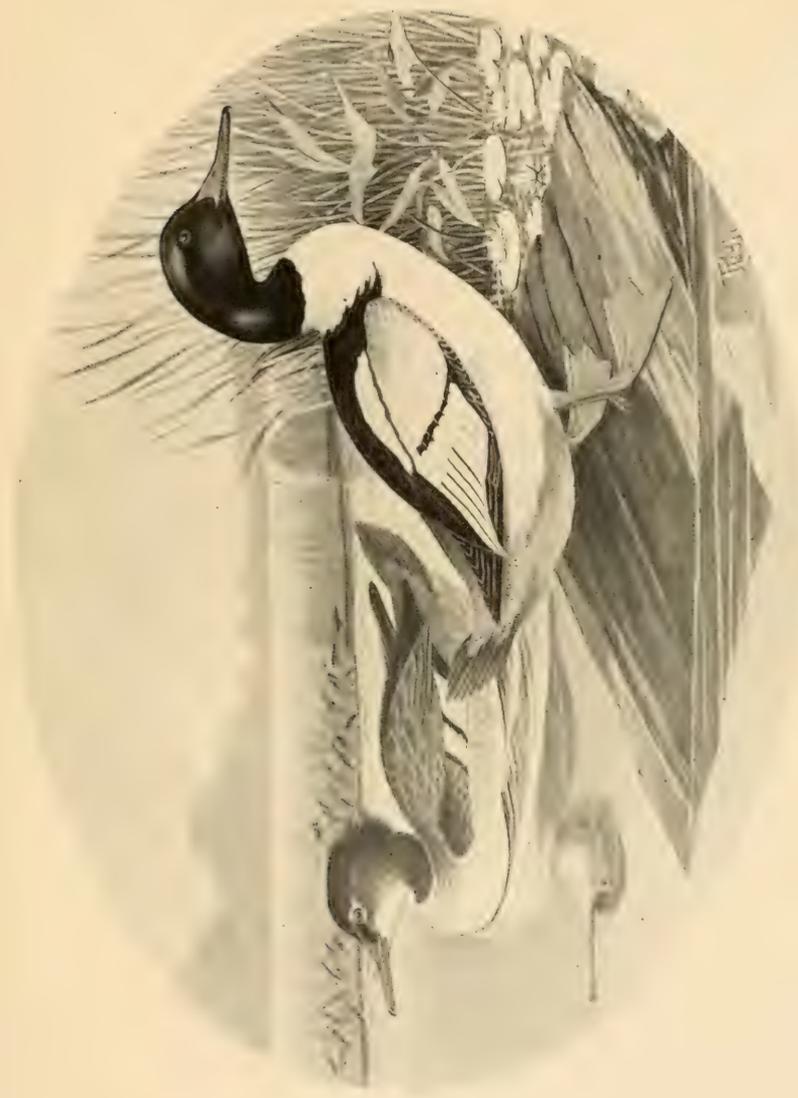
Any one of the Shelldrakes is more than half fish. Seen under the water in pursuit of a breakfast or dodging about to escape capture when wounded the resemblance to some finny dweller of the sea is very marked; head and neck outstretched, every feather hugged closely to the body, the half-opened wings like large fins aiding the feet in their work, he goes shooting through the water like a flash.

The Shelldrake's body is more compressed and somewhat longer in proportion to its size

than are the bodies of most ducks. This model must be necessary, for none of the family need such speed in the water as these which feed upon an active prey which must often be pursued some distance before it is captured. It is a form easily driven through the air, too, if we may argue anything from the forelaying necessary to stop a crossing bird in shooting.

Shelldrakes are generally found in flocks ranging from half-a-dozen to twenty, rarely more except in migration. Commonly, unless there is no danger, they place a watcher over the flock while feeding. Usually all but the bird on "sentry go" dive together while fishing so as to leave less opportunity for their prey to escape. Often they drive a school of small fry into shoal water and pursuing them into a narrow place may even force their victims high and dry ashore by their furious rushes. In such a case they will almost finish a school, for they are very voracious feeders.

The Goosander is the largest of the American Shelldrakes and somewhat rare in the sea except in the winter months when the few that do not go south are compelled to dwell upon the salt water or in the cabinet of some collec-



AMERICAN MERGANSER.

tor. The male bird is a handsome fellow, with a brilliant dark green head and neck. The under parts of the body are of a delicate salmon tint, growing fainter and changing to white on the flanks and hinder parts; there are also some fine dusky pencillings here. In stuffed specimens the salmon tint below fades very quickly, leaving scarcely a trace of itself. Back and upper parts glossy black, fading to ashy gray on the rump and tail. The wings are mostly white above, crossed by a black bar at the tips of the greater coverts and forming a part of the frame for the white speculum. The wing quills are dusky, nearly black. The bill and feet are bright vermilion; bill black on the ridge and having a black hook on the end. Iris carmine. The male is but slightly crested, this adornment being considerably more prominent in the female, though even here rather thin and loose-feathered.

The female's head and neck are reddish brown in color, with a whitish throat. On the back a dull, bluish gray. There is less of the salmon tint below than appears in the dress of the male. Speculum white. Bill and feet same color as the male's, but iris yellowish.

These birds average about four and one-quarter pounds weight for the males, the females running from one-half pound to one pound less. In length they vary from twenty-four to twenty-seven inches; in extent about thirty-five.

They nest upon the ground or in the hollow of a tree, laying from six to eight eggs. They usually choose the edge of some secluded fresh water pond for their home, but often make their nest a long distance from water if unable to find a suitable place near it. Safety is the prime requisite—convenience comes after. They breed anywhere from our northern States into the Arctic regions and are one of the commonest of the breeding waterfowl on our Maine lakes. They winter in moderate numbers in our coast waters, though the greater bulk of these birds have gone south at this season.

THE RED-BREASTED MERGANSER.

(*Merganser serrator.*)

Most common of all in New England coast waters is the Red-breasted Merganser, *the* Shelldrake alongshore, where many gunners know no other species than this bird. He winters

in our bays and rivers when he can, preferring tide-waters and the arms of the sea, but if this is not permitted he can do very well "off shore" and is one of the most numerous of the winter dwellers on our coast. Still, the greater number have gone on to warmer climates, and Shell-drakes are here in larger numbers during the flight seasons than at any other time.

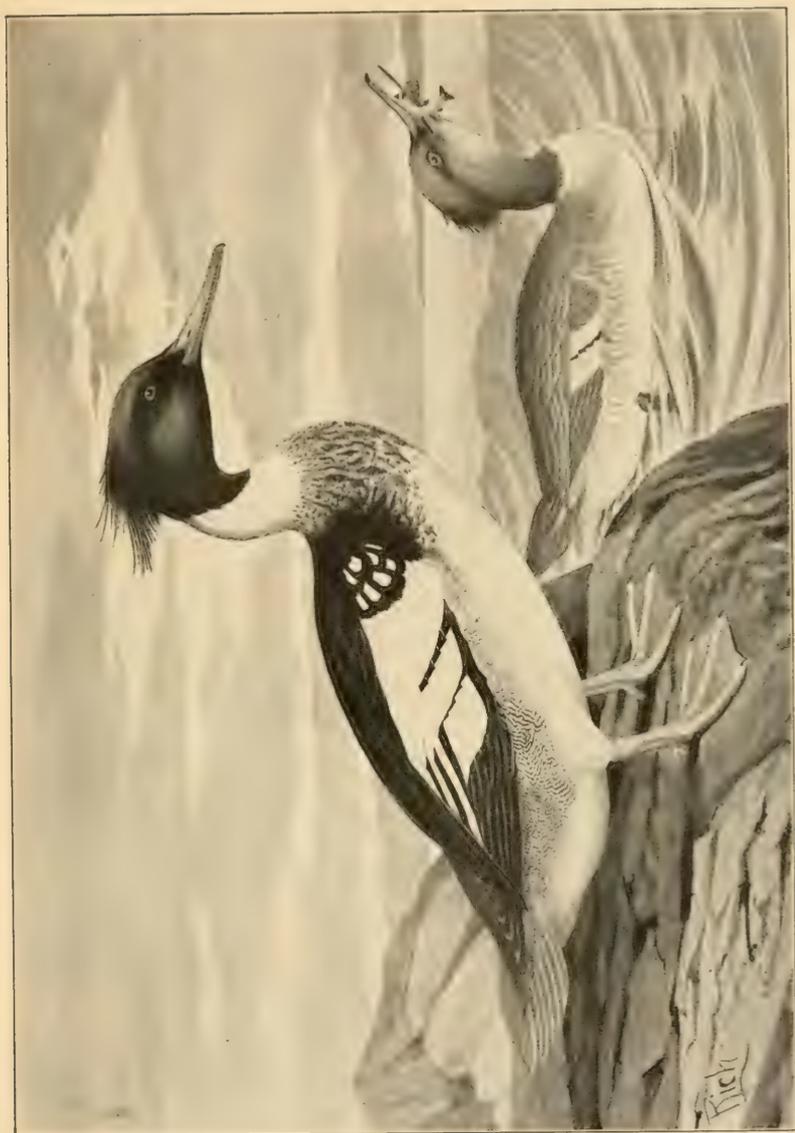
If in the latter half of April or the first of May the gunner turns out before daylight and takes his stand upon a lonely ledge or the point of some uninhabited island of the sea and puts out his wooden decoys in a life-like group within good shot reach of the grim-fronted rock behind which he lies hidden, he is likely to find good sport for two or three hours while the Shell-drakes are flying in from "outside" where they have been asleep on the breast of the Atlantic.

The moon is paling and the stars are losing their lustre. The day is coming and across the eastern sky a pink light is creeping. The sleepy world is rubbing its eyes and making ready for its round of toil. The water is yet gray and uncertain and the masses of the woods on the islands round about are solid and sombre. But

a tiny little songsparrow, perched near by and quivering with the joy of springtime, sends forth his brave little song in merry greeting; the awakened crow gives out an occasional cawing as he starts forth from the pines for his breakfast on the shore, and just out of range of the watcher's gun a bunch of big blue herons playing "follow my leader" passes by in slow and dignified flight, northward bound. The decoys anchored across the gentle breeze are riding motionless in a calm streak under the shelter of the ledge, but in plain sight and sure to be noticed by any passing flock coming in from sea, and all is ready.

While still too dark for him to shoot, the gunner has seen shadowy forms flitting past in the uncertain foreground, and now with the increasing light comes the hurry and rustle of wings carrying hungry birds to their feeding grounds inshore.

Here they are! Where they came from no one knows, for two seconds ago not a feather was in sight, but out of the water they appear as if by magic and are almost upon the gunner before he sees them. They have sighted the decoys and swing in toward their new-found



RED-BREADED MERGANSER.

friends with wings stiffly set and necks outstretched. In this strange light they look as large as geese. Now is the time! As they bunch and wheel, convinced of the cheat, let go at them with both barrels, and in answer to the sudden roar of your discharge down go the splashing forms of dead and wounded birds among the motionless decoys. While the boom of your gun goes echoing about from cape to promontory in circuit of the bay as if a battery was stationed on every headland, you are hurrying down to the boat to gather up the spoil. You pat yourself on the back—(mentally, of course,)—and think, “What a streak of shooting I have developed!” when, hello! Only one bird! Ah, there is one more swimming away and here another, and popping suddenly out of the depths still another, but most of them active and doing their best to put a safe distance between your dangerous company and themselves, swimming with their bodies half submerged and a watchful eye behind them. You have reloaded and are now tugging as for your life at the oars to gather in those that seem to be the most active, and so pass by the dead as they will keep until your return. But you don’t

seem to gain much on the cripple and you think you will try him with a charge of 4's. Bang! and when the smoke has drifted aside—no Shelldrake. He is under and won't come up again inside of two hundred yards. After staring in vain for this bird, which has come up very cautiously and just poking his head above water for a breath has as silently gone under again for another stretch seaward, you turn your attention to a second invalid which mayhap leads you a similar chase. Perhaps you capture him—perhaps not. Your chances are about even on either bet. Just here you see a large flock making off from your decoys, scared away by your antics in the boat, so you decide to pick up the dead and get back into the blind. As you pull up to the two or three birds left limp and lifeless in the water when you went out you find them right side up again and not more than half as dead as you had thought, and these, too, commence making frantic efforts to get under water, with what success their condition permits. One gets almost under and is now politely "shaking a day-day" with one red foot in the air, disappearing entirely just as you pull trigger. If

you have good luck you may get one bird, and then back into the blind to try for more.

For two or three hours in the morning fair sport may be had over decoys, but when the sun is fairly on his daily round the birds are mostly on their feeding grounds and not moving much, so that few come near the "tolers." Now is the time to "scull" them in the float. It is no easy matter to get within killing distance of a Shelldrake even in the innocent looking "gunning punt," for he is by no means careless or stupid. For my own part I think the labor is too severe and the reward too uncertain, and seldom take the trouble to pursue them in a float, no matter how sharp an attack of "gun fever" is upon me. "The game is hardly worth the candle."

The flesh of this or any other of the family save the Hooded Merganser is not noted for any especial excellence as food, most people preferring to eat fish in its ordinary form.

The Red-breasted Merganser is smaller than the Goosander and has a pronounced crest, which, though thin and flimsy in the female, is present in both sexes. The male bird's head is

rich, dark green, this color running down the neck, stopping abruptly on the lower neck and breast. In front the white becomes a very light reddish brown, streaked with black. Underneath a very light salmon color. Wing for the most part black, but with a few feathers in the front of it pure white with black edges. Upper back black, also interscapulars and inner scapulars. Lower back grey, waved with darker gray and dusky. Bill vermilion red, dusky on top and black hooked. Iris bright red; feet vermilion.

The female is clad in a modest suit of gray and white. The head and upper neck is a brownish red with a patch of white on the throat and chin, this shading gradually into the reddish color of the head. The upper parts ashy or bluish gray; below white. A white patch in the wing. Feet, iris and bill as in the male bird. The females of this and the preceding species are very similar in their dress but may usually be distinguished by their size, the female of this bird being much smaller and lacking much of the delicate salmon tinge on the under parts, but if there is any doubt the position of the nostril will show to which species a specimen



HOODED MERGANSER.

belongs, the Goosander's being placed near the middle of the bill and that of the present species being placed near the base.

The length of this species is from twenty-two to twenty-four inches; its extent from thirty-three to thirty-five inches. Weight from two to two and one-half pounds.

Most of the Shelldrakes nest well beyond our borders, but breeding birds of this species are not uncommon in Maine. It is found also in northern Europe and Asia.

HOODED MERGANSER.

(*Lophodytes cucullatus*.)

The smallest and most strikingly marked species of the family which we have in North America is our beautiful little Hooded Merganser. In New England this is the least common of our Shelldrakes, and this species is found only in North America.

In many localities of the south and west this bird is called the "Wood Duck." Indeed it deserves the title nearly as well as does the bird which we have so named in New England, having the same habit of nesting in the hollows

of dead stubs, and in traveling about among the branches it is equally expert with our Summer Duck.

This Merganser breeds all through the United States and northward, wintering from the Middle States south to the Gulf of Mexico. The nest ready for the hatching contains from six to eight buff-colored eggs. When the infants are old enough, if the nest is distant from pond or stream, the mother bird carries them in her beak and puts them down on the edges of the water one after another, until her brood is at the new home where she plans to put the finishing touches to their education.

Their life, like that of most ducklings, is a most uncertain affair, likely to be terminated at any minute by the sudden snap of hungry mink or predatory hawk—even the finny dweller of the pond showing an appreciative taste in the direction of tender young ducks. But the baby Shelldrake of either species is far and away more lively and better able to take care of himself than is any other young duck of his age, and when he gets his growth will avenge his family's wrongs upon the enemy, whether

bass or pickerel, by eating thousands of small fry.

The male bird has his crest evenly and cleanly cut; from forehead to nape a large white area of hair-like feathers, bordered and sharply defined with jet black, this color also on head, neck and upper parts; lower part of neck and under parts white; the sides and flanks brownish red, finely and evenly pencilled with black lines. White speculum in wing, with two black bars crossing it. Bill black; eyes yellow, feet light brown with black nails.

The head and neck of the female is a grayish brown, darker on the crown. Upper parts and sides a dull dark brown. Feet, eyes and bill as in the male.

The length of this species is about eighteen inches; the extent from twenty-four to twenty-six inches.

This species is much more of a vegetarian than any other of the family, and in consequence its flesh ranks higher as food. - As a table bird it is nearly as good as any of the shoal water ducks.

THE RUDDY DUCK.

(*Erismatura jamaicensis*.)

This is strictly an American species. Its range is the whole North American continent, except possibly the northwest coast, passing southward through the West Indies and Central America to the northern shores of South America. In any part of this vast extent of country it is likely to be found during the breeding season, making for so small a fowl a large nest, near either salt or fresh water, and as often as not, building on some floating mass of rubbish, making a sort of houseboat for the family during the hot weather. The clutch of eggs is larger than is common in a duck's nest—sometimes a dozen or more to a setting, generally of pale buff color and quite large in proportion to the size of the bird. As to its choice of breeding country and the range of its travels, any place where there is water enough to float a duck and food enough either of vegetable matter or of shellfish to keep its little body plump upon is apt to receive a call from this small rover.

I must confess to a certain fondness for this small citizen. He is a most interesting little chap and a mighty sweet morsel to put before your company at the table. His flesh is really very good and of delicate flavor. He is a vegetable feeder when he may have his choice in the matter.

The "Ruddy" is much less suspicious of his enemies than most waterfowl, and the destroyer, if he chooses, may sit up without any precaution and paddle close up to their flocks on the water, delivering his fire at what range he may prefer. If there are any survivors from the first discharge it will not commonly be a matter of difficulty to get another shot, for they will probably spatter along the water for a hundred yards or so, making a great fuss about getting under way, and as soon as they are fairly into the air dropping into the water again without checking their speed, sliding along the surface and scattering spray like a "whistler," but allowing the second approach to be made with hardly more trouble than before. The wings are small in proportion to their chunky little bodies and their flight at the outset is heavy and labored, but once fairly

going they fly fast, their wings making considerable noise from their rapid motion. With all these drawbacks the Ruddy is wonderfully quick either in the air or on the water. He is quite capable of taking care of himself once he gets it into his head that harm is intended. He can get under water with a celerity that falls little short of the marvelous. One of his tricks has always been a mystery to me: he will sink himself completely beneath the surface without diving—simply settles down like a sinking craft and beats a retreat under water where he is as much at home as any duck of them all. I have seen black ducks when they thought themselves undiscovered and their wit said it was dangerous to fly, sink themselves so that only the head showed above water, and have seen shelldrakes settle down in the same style until only their heads were visible and so go darting and zig-zagging away when they had flown in and settled among a bunch of decoys before discovering the cheat, but I have never seen any of these go completely below the surface without an attempt at diving as does the Ruddy.

On the water he rides so much deeper than



RUDDY DUCK.

his neighbors that he looks like a craft dangerously overloaded. In swimming he often erects his spiny tail straight over his back and jets it in fan fashion, presenting a curious appearance as if using it for a sail.

His feet are proportionately large, but Mr. Ruddy is amply able to manage them and swims easily and at good speed.

The Ruddy will decoy to anything in the shape of ducks and be glad of the chance. The bird is called by a dozen or more titles—any name from teal to coot will do—but most of them meanly twit him of the scrubbing brush which he wears in the place of a tail, such as, “Stiff Tail,” “Spine Tail,” “Broad-billed Coot,” “Bumblebee Coot,” “Salt Water Teal,” and “Gray Teal.” The last two are the names to give him when you wish to sell him. The average man will praise any duck’s flesh if he thinks it is a “teal.”

For a short time in the spring, about the season of the Easter bonnet and the relapse into the church-going habit by the young man of fashion, the Ruddy Duck blossoms out in a suit which is the equal in style of any donned by his broad-footed neighbors. Brightly colored

but neither flashy nor gaudy, it is a beautiful garb and the pity is that it does not last longer. The upper part of the head and nape glossy black. Sides of head, cheeks and chin white. Throat, neck all around, scapulars, flanks and upper back chestnut red. Wing coverts, rump and lower back grayish brown. Wing quills dusky brown, spotted on the edges with gray. Tail dusky brown, the feathers stiff and harsh and the coverts growing to no great length over the quills. Under parts silvery white, slightly rusted on the breast. Under tail coverts grayish or white. Bill, legs and feet grayish blue; webs darker, nearly black. Iris reddish brown. Length from fifteen to sixteen and one-half inches; extent from twenty to twenty-four inches.

The female is of duller hues than her mate—the rule in duck coloring. On the top of the head dark brown instead of the jet black of the male. Cheeks only a little lighter than the rest of the face, with a narrow stripe of white running from the base of the bill beneath the eye to the nape. Chin white. Neck and throat brownish; upper breast yellowish brown; lower parts silvery white; flanks barred with brown;

tail same color as the back; under tail coverts white. She is a bit smaller than the male.

This species can hardly be mistaken for any other duck of the northeast if notice is given to the peculiarities of the tail feathers and the shortness of their coverts.

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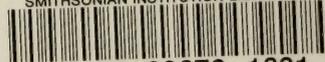
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