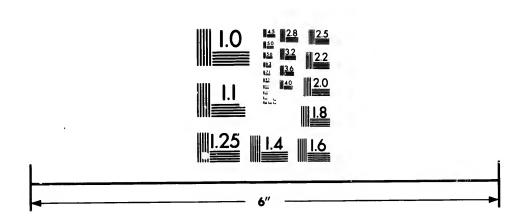


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# The Historical and Scientific Society of Manitoba



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## THE GAME BIRDS

OF MANITOBA

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## GEORGE E. ATKINSON

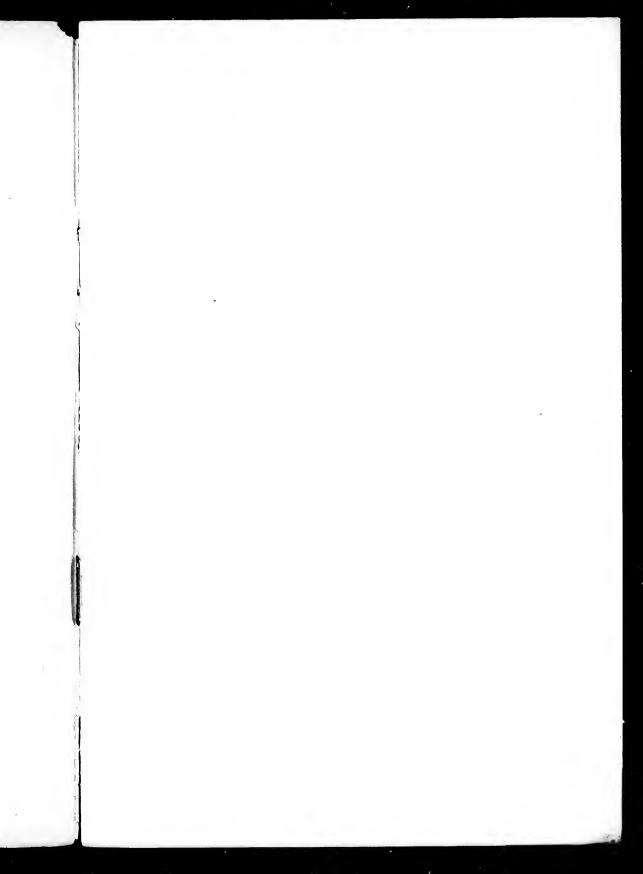
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PEDIOCÆTES PHASIANELLUS (Sharp-tailed Grouse, or Old Manitoba Prairie Chicken)

## THE GAME BIRDS OF MANITOBA.

The Historical and Scientific Society of Manitoba met in the City Hall, Winnipeg, on the evening of April 14th, 1898. The audience present was large and manifested much interest in the proceedings. Chief Factor William Clark, of the Hudson's Bay Company, President of the Society, took the chair. After a number of items of preliminary business had been disposed of, Mr. George E. Atkinson, of Portage la Prairie, read his paper on "The Game Birds of Manitoba," which was illustrated by specimens of a number of the birds referred to. Mr. Atkinson said:

The science of Ornithology is one which shows striking results of great interest and practical value, if it be studied aright. Herein we look upon those forms of life which constitute a connecting link between reptiles and mammals, in that highest branch of the animal kingdom, the Vertebrata. To Aves nature permits a wider range than to any other member of the sub-kingdom. The birds are equally at home on land or water, have "dominion of the air," and possess a power of locomotion through space in a manner impossible to other forms.

## OUR GAME BIRDS.

By our game birds we mean those birds which are sought after for the double purpose of affording sport to the hunter and meat to the larder. The serving of these purposes having been regarded by the majority of sportsmen as the only interest or value of our game birds, it must not be wondered at that little time has ever been given to look for other interesting or valuable qualities beyond a sufficient knowledge of the surest methods of capture and the choicest varieties for the table.

It is the lack of authentic knowledge, consequent on the lack of interest manifest, which has allowed so many ridiculous stories about our most familiar species to remain un-

challenged by men who should know the truth on account of experience, but who do not know because of defective observations and interests.

I trust that I may be able to show that the subject is exceedingly interesting from different standpoints, and yet little can be explained in one paper in proportion to what is to be known and which should be known by every man who has interest enough in sport to take a gun in hand and go in pursuit of game. It is the intention of this paper to deal almost entirely with the orders, as time and space do not permit of an investigation of individual species.

#### I. SYSTEMATIC TREATMENT.

The systematic or Alphabetical standpoint is that which names our subjects, classifies them into Orders, Families, Genera, and species, according to their diversity of form, coloration or habitat; traces the general relations of all forms to each other, and is the centre of the investigations of the evolutionists.

In dealing with our game birds from this standpoint of view, therefore, we first perceive that they are grouped into three orders, with a total local representation of 78 species, viz.:

Anseres, including ducks, geese, and swans, with 37 representative species.

Limicolae, including snipe, sandpipers, and plovers, with 36 representative species.

Gallinae, including grouse, quail and turkeys, with 7 local species.

A comparison of the three orders shows that the order Anseres are all birds adapted to aquatic life, the Gallinae for life on dry land, while Limicolae form the connecting link, being adapted for a sub-aquatic life.

Let us make a systematic comparison of the structures of the three orders to show adaptation to conditions.

1. Anseres.—Feet webbed; adapted for swimming; tarsus short and thick; bill stout, flat or round with teeth or toothed ridges to assist in securing submerged food, the ridges acting as strainers or gutters to allow the water to escape; sternum flat,

broad, long and almost solid at the base; keel low, forward, slightly sloping to the base; frontal bone comparatively stout and round, only connected with the keel by weak muscles; wing almost twice as long as wide with very strong pectoral muscles for swift, systematic and sustained flight; no crop.

- 2. Limicolae.—Toes bare, lobed, or semi-palmated; legs long and slender for wading; bill long and slender (except in plover) for surface feeding or probing the mud and bog weed; sternum slight, narrow and short; frontal bone quite delicate, keel proportionately quite high covering down to a nearly solid base; wings long and narrow, well adapted for an erratic dodging flight. No crop.
- 3. Gallinae.—Toes unwebbed and unlobed; tarsus short and stout, often covered with hair or fine feathers; hind toe much longer than either Anseres or Limicolae; foot suitable for scratching, running on dry land or perching in trees; bill short and stout; sternum very narrow and long proportionately; keel very high, curving down to a solid base detached from a strip of bone on each side, seeming like the lower rib, only it is not jointed to the sternum but is part of itself; frontal bone long, narrow and pointed, attached to keel by quite a strong muscle; wings short, broad and rounded for a bullet like flight to escape enemies; quite a large crop where considerable food can be stored from time to time.

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## ANSERES (DUCKS AND GEESE).

Dealing with each order separately, we find them divided again into families, each showing characteristics peculiar to themselves.

In Anseres there are four such families, viz.:

- (a) Merginae.—Mergansers or fish ducks: Bill long, narrow and rounded, sharply toothed for holding fish; tarsus shorter than middle toe, without nail, having a representation of three species in Manitoba.
- (b) Anatinae.—River Ducks: Tarsus as in Merginae, bill broad, flattened teeth, more ridgelike; no lobe on the hind toe.

Includes mallard, teal, pintail, wood duck, shoveller and widgeon, etc., with ten Manitoba species.

(c) Fuligulinae.—Sea and Bay Ducks: Bill and tarsus as in Anatinae; hind toes lobed; altogether a rounder duck than the the Anatinae. Includes bluebills, whistler, redbead, canvasback, scoters, cowheen and eiders, with fifteen local representatives.



I,AGOPUS I,AGOPUS (Willow Ptarmigan)

(d) Anserinae: Tarsus longer than middle toe; without nail; lores feathered; usually larger than foregoing families. Includes geese, with seven local species.

(e) Cygninae: Tarsus as in Anserinae; lores bare; size much larger than other families. There are two representative species.

#### LIMICOLAE (SHORE BIRDS.)

The Manitoban Limicolae are divided into five families, viz.:

(a) Recurvirostridue: Toes four, unlobed; bill long and slender; tarsus over 3½ inches. Includes stilts and avocets, having only one species in Manitoba.

(b) Phalaropodidae: Toes four, lobed, and semi-palmated; tarsus under 3½ inches; bill long and slender. Includes the phalaropes, having only two species local.

(c) Scolopacidue: Toes four, unleied, sometimes semi-palmate; tarsus 3½ inches; bill long and slender. Includes snipe, and sandpipers, with 24 species locally represented.

(d) Churadriidae (Plovers): Toes three, not lobed, sometimes semi-palmated; no hind toe; bill short and thick for surface feeding; tarsus under 3½ inches. There are five local species of this family.

(e) Aphrizidae: Toes 4, unlobed and unwebbed; bill as in Charadriidae; tarsus under 3½ inches. Turnstones, with only one species, being more common on the coast.

## GALLINAE (GROUSE, Etc.)

The divisions of Gallinae (local species) are fewer, on account of fewer varieties being found on the prairies. The majority of the Gallinae are inhabitants of more southern and wooded districts. The whole number of resident species are included under one family: Tetruonidue, the more northern and feather legged sub-family of the groose, quail and partridge. All our local species are feather-legged.

#### II. THE PHILOSOPHIC SIDE.

The philosophic standpoint from which Ornithology may be treated, is that which deals with the whys and wherefores of the Systematic. Herein we deal with the living specimen, and reason out the cause of the diversity of form, coloration, etc., shown by the systematic, by a careful observation of habit and habitat or conditions and environment of the species.

From this point of view, therefore, we will deal with: "The origin of birds and their place in nature," "The migration of

game birds, its cause and effect," and "The effects of civilization upon our game birds," pointing again to the systematic description to show the effect of a cause, or the construction of forms to suit chosen conditions.

As to the origin of birds and their place in nature, much



DENDRAGAPUS CANADENSIS (Canada Grouse or Spruce Partridge). Female.

may be said, but I shall simply refer you to former mention of birds as the connecting link between reptiles and mammals; on the lower side the *Archæopteryx mucrura*, the earliest known bird fossil, found in the Jurassic States of Bavaria, connecting with reptiles; and on the other hand to the *Ornithorhynchus* 

paradoxus, duck billed platypus, that peculiar egg-laying mammal of Australia, as the connecting link between aves and mammalia.

Regarding the migration of birds, its cause and effect, much controversy annually takes place without very definite solutions



DENDRAGAPUS CANADENSIS. (Canada Grouse or Spruce Partridge). Male.

being given to that problem; consequently, I shall only explain the peculiar migration habits of the three orders, and show a few simple reasons for such, also showing that food and temperature, while to some extent responsible, cannot be held accountable for all migration.

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The Anseres (ducks, geese and swans) are regularly migratory in Manitoba, leaving only on the freezing up of the ponds, rivers and lakes, which are the feeding ground and resting places of these birds. They winter usually as far north as they can procure food, open water and protection from enemies. For this reason we may argue that food and protection are sought by this order in migrating, as they are so constructed as to be comparatively helpless out of reach of water, notwithstanding the fact that they regularly leave the water to feed in the stubble fields. They rise and strike out in a regular swift and systematic flight to winter quarters when compelled to leave their summer homes.

2. The Limicolæ—shore-birds—snipe, sandpipers and plover—show different characteristics, and no family of land birds has a greater migration range. Many species which do not reach us until late in May pass long distances north of us to breed, and return early in August with their families. Leaving us early in September, they continue their journey by degrees till they are regularly recorded as wintering in Southern Patagonia. It is evident that neither food nor protection is the cause of such an extensive migration, as the birds are regular in their return in the spring, even though their breeding grounds are still snow and ice bound, and they are gone from us again in the fall often before the first frosts.

Observations of the birds of this order in life, and a comparison with human beings, have likened them to a very nervous and hysterical person, who never can remain quiet and is always fidgeting and twitching the hands and feet, as the majority of species seem affected with St. Vitas' dance. Even when standing in one place they are constantly bobbing their heads and bodies in an involuntary and nervous manner, and look as though they grudged the time they were spending with us and were anxious to be away again. Their calls express the same wild hysterical and fretful feeling.

As they are usually gregarious, they are easily decoyed by an imitation of their own whistle or that of a kindred species. The long narrow wings are well adapted for their nervous and erratic flights. 3. The Galline are less migratory than any of the others, and the local family Tetraonide are practically resident where-ever found, migrating only when compelled to on account of the home supply of food being frozen or snow covered, depending on their swift, bullet-like flight and their coloration and skill to clude enemies. Even the Pturmigan, the most northern genus, are only slightly migratory, turning white in winter and brown in summer as a protection from enemies.

#### OUR GROUSE.

The effects of civilization upon our game birds have been quite striking, differing with each order. Formerly all the water fowl were much more regularly and abundantly distributed over the country, but with the advance of civilization, the introduction of harvest machinery, the puffing of the locomotive, the reclaiming of the bogs and sloughs—their original nesting sites—they are rarer. The ducks and such members of the *Limicolæ* as frequented these places have been compelled to retire with the Indian to the wilder and less accessible places, while such as are only migratory have shortened their stopover periods with us, while local breeding species now congregate on the larger lakes to await their friends from the north on their southern journey.

The effects on the *Gallina* have been very different, revealing in one case a change of habit to suit changed conditions, a change of habitat in a second, and the advance of a better adapted species in a third.

- (a) When this country was first settled the ruffled grouse or partridge (Bonasa umbellus) was a numerous and unsuspicious bird in all our small bluffs, being easily flushed, and allowing an approach sufficiently close to knock it from the tree with a stick or snare it with a noose on a pole. At the present time the bird thrives in the vicinity of civilization, but is quite cunning, being difficult to flush, seldom alighting in trees, and placing itself in hiding with the greatest alacrity and remaining hidden most successfully.
  - (b) The sharp-tailed grouse (Pediocetes phasianellus var.,

campestris), being uninclined to adopt civilized habits, has retired to the wilder and more unsettled parts of the province, and in one case extending its range eastward into the wooded country of the Rainy River and Algoma Districts of Northwestern Ontario, is regularly recorded now at Lake Tamiscamingue, the head waters of the Ottawa River.



TYMPANUCHUS AMERICANUS. (Pinnated Grouse or New Manitoba Prairie Hen)

(c) The pinnated grouse (*Tympanuchus Americanus*), a comparatively new species, entered the province some fourteen years ago (1881) from Northern Minnesota and Dakota, and following up the grain fields, increases under the very feet of its greatest

enemy—man. It is a larger and heavier bird than Pediocætes campestris, whose place it has taken, and seems well acquainted with the game laws and the tricks of humanity. In season they are wild and shy, running long distances through the grass after alighting from a long flight. They hide themselves in the scrub and grass and are difficult to dislodge, having considerable power to withhold their scent. They do not frequent the trees as much as Pediocætes campestris, but in severe winter they go deeper into the bush than do the sharp-tailed variety. The sharptailed grouse come from the milder parts in the winter and keep company with the pinnated grouse about the stacks, but being in their own habitat a stupid, silly bird, the pinnated grouse do not seem to be able to tolerate their ignorance and repeatedly drive them off, while such as remain learn lessons of wisdom from this new and up-to-date game bird, which, while much more difficult to hunt, is a much handsomer bird, and affords more sport and satisfaction in its pursuit and capture, and is enthusiastically welcomed to Manitoba and Western Canada.

## III. THE ECONOMIC QUESTION

The economic standpoint is that which deals with the relations of the subject at issue to man from a financial standpoint. This is considered by economists and the general public to be the most important branch of any investigation.

Dealing with the game birds from this point of view we will consider them, irrespective of their value as game, according to their relations, beneficial, injurious or neutral, to agriculture, that most necessary art of civilization. By a beneficial species is meant one which feeds on or destroys the enemies of agriculture. By an injurious species is meant one which feeds on or destroys forms beneficial to agriculture or injures or destroys the results of agricultural labor or hinders in any way the destruction of enemies of agriculture or injures or destroys that which is beneficial to man.

By a neutral species is meant one whose injurious qualities balance the beneficial or whose feeding habits in no way interfere with human interests and independent of that law of nature that nothing has been made in vain as all necessary to maintain the balance of nature.

Therefore if we take the most beneficial or least injurious first we shall turn to the *Gallinæ*. The food of these birds during the breeding season, which is also the most important season for the agriculturalist, consists almost entirely of insect food, chiefly grasshoppers, caterpillars and injurious Coleoptera and Hemiptera. The winter food consists of rose-hips, wild berries and buds, the former a nuisance to the farmer, the latter of no material value. For this reason we may consider *Gallinæ* a beneficial order.

While the *Limicolæ* are almost entirely insectivorous their indiscretion in destroying many beneficial aquatic forms as well as injurious species classes them more as a neutral order tending to be beneficial.

With Anseres the case differs. A duck will eat anything it can get get into its mouth, and a wild duck is no exception to this rule. While they destroy large numbers of injurious forms, they do not discriminate, but devour large numbers of beneficial forms, such as frogs, lizards, crayfish, snails, and the larger aquatic beetles and the Belostoma, which are all beneficial in keeping in check the innumerable small injurious insects too small to be of use to the ducks. However, were this the only charge, we should acquit them as neutral, which they probably are to the agriculturist. But much graver charges are laid against them which sooner or later will require investigation.

Our governments annually spend large sums of money in replenishing the supply of food fishes in our lakes and rivers, and many species of this order of birds have a decided piscatorial appetite, more especially the open water ducks and merganser, which congregate in large numbers at the spawning beds of our food fishes, and gorge themselves upon the fry and spawn, while game commissioners blame the agency of man for the decrease of food fishes.

I once took from the throat of a shell drake (American merganser) sixty-four small fish, the fry of the whitefish, salmon trout, bass, chub and kindred forms, ranging from one-half to

three inches in length, while I have frequently taken thirty or forty small fish from the throat of a common mallard (Anas boschas), which had been shot while feeding in a millpond or a small stream. The retiring of these birds consequent on the advance of civilization, causing them to seek food in open water, will induce many at present non-fish-eating to accept the same diet, and much more damage will be done our food fishes in this manner than can ever be done with nets, which do not take the spawn or fry. From these facts we may see that the ducks are not beneficial to agriculture, and they are certainly injurious to our fisheries to an extent which will not decrease with the advance of civilization. If evidence of damage done be carefully estimated, then we shall see whether the valuable food fish destroyed is less than the value of game to the fastidious epicure. and whether the birds should be still protected in their depredations.

Geese and swans are strictly migratory with us. Although much damage was once done to growing crops by the immense flocks of snow geese (wavies), and this is the cause of their having no protection as game at present, the settlement of the country has greatly reduced the numbers of these birds, and in the greater part of Manitoba they may be considered as a neutral order or injurious in comparison to their numbers.

#### IV. THE SENTIMENTAL ASPECT.

We now arrive at the concluding standpoint, namely, the sentimental, or that through which the the beauty and perfection of nature and the majesty of the Creator appeal to and direct our lives through our intercourse with nature. This can scarcely be considered a scientific point of view, since many eminent though matter-of-fact scientists argue that true science will not permit of sentiment. But herein we distinguish between a naturalist and a matter-of-fact scientist, as sentiment is born in man.

This is the sunny pathway of the student of nature; he fairly revels in it, and for this reason a few sentimental observations from a sentimental naturalist will not be considered out

of place here. It seems very unfortunate that so many are too much engrossed with matter-of-fact views that little or no room or time remains for sentiment. Yet what harm does it do us? What time does it take to fill it and enjoy it? What a comforting and cheering influence it has upon our flagging spirits, and what an influence it might have upon our lives were we to thoughtfully study the simplicity and ready obedience of living forms to an unseen director called instinct.

How strikingly human are the characteristics displayed, and how difficult it is for us to determine where reason begins and instinct ends. Where do we see a more striking exemplification of human characteristics than may be seen in the mother grouse as she leads her newly hatched chicks about? Her pride as she leads them along before the scrutinizing gaze of her neighbors who show striking resemblances to admiration, disdain or even jealousy. See the pleasure and curiosity the little creatures show as they run peeping about exploring every cranny, the affectionate manner in which she seems to talk to them and her anxiety and alertness for danger as you put in an appearance and she fully realizes the helplessness of her family. See her courage and devotion in risking her own life as she says to them "hide quick while I lead the brute away," when suddenly she feigns injury flapping along in a semi-helpless manner and leads you on a chase after her. She is just in your grasp, you think, when suddenly the ruse is complete. You have been deceived and decoyed away, the wing is suddenly repaired and with a bound she is off while you stand and gaze with open eyes and mouth after her, or feel disgusted with yourself for being fooled by a bird.

Again we see the instant obedience of the chicks to the mother's voice as she directs them to hide or calls them to her side again after you are out of sight (and breath).

Again we see the vanity of the male as he struts about drumming to his mate, the modesty with which she accepts his attentions and vows of love, the constancy with which she attends her domestic duties while her fickle lord frequently goes off with his comrades leaving his faithful wife to look after the family.

These and many other characteristics make our birds exceedingly interesting subjects of study. Yet how many opportunities we miss of watching the life of the birds. How many secrets we lose by carelessness. How often we feel tired with



BONASA UMBELLUS (Ruffed Grouse, or wrongly called Canadian "pheasant."

nothing to do when we could restore our minds to vigorous action by watching the birds.

How often from his hiding could a sportsman bring valuable information if he used his observing powers and studied the forms about him as he watches for game? Yet I am forced to admit that the poorest and most absurd reports have been

received from this same source where such great opportunities are offered from time to time on the periodical trips of the sportsman to the lake, river or woods in search of game. A great majority of reports received from this source are upset by the slightest scientific investigation. Yet it is surely plain that a slight scientific knowledge of the species we are pursuing would prove valuable to every sportsman in assisting him in securing his game, and the knowledge once acquired costs nothing to carry about and it becomes lighter as the material increases. I can only say with John Burroughes, that eminent field naturalist and sportsman, about the observation of nature

"There is a fascination about it quite overpowering. It fits: so well with other things, fishing, hunting, farming, camping out, with all that takes us to the field and woods. One may go berry picking and make a rare discovery or driving a cow to pasture may hear a new song or make a new observation. Secrets lurk everywhere. There is news in every bush. What no man ever saw before you may see. What a new interest the woods have; how you long to explore every corner."

To these remarks I can only add: make records of your observations on paper. Don't trust to memory, it may deceive you. Tell your friends your observations that you may learn from discussion what is regular and what is irregular. We need never be afraid of seeing too much or of learning everything. To see the beauty and the life will often humble our proud spirits or prove refreshing and helpful when wordly cares press heavily upon us.

#### LIST OF LOCAL SPECIES.

The following is the list of the local species of the three orders, as complete as can be secured at the present time:

#### ORDER ANSERES.

Family Anatida.

Sub-family Mergina:

American Merganser—Merganser Americana. Red Breasted Merganser—Merganser serrator. Hooded Merganser—Hophodytes cucullatus. Sub-family Anatina:

Mallard-Anas boschas.

Black Duck - Anas obscura.

Gadwall—Anas strepera.

Widgeon or Baldpate—Anas Americana,

Green Winged Teal—Anas Carolinensis.

Blue Winged Teal—Anas discors.

Cinnamon Teal—Anas cyanoptera.

Shoveller—Spatula clypeata.

Pintail—Dafila Acuta.

Wood Duck -Aix sponsa.

#### Sub-family Fuligulina:

Red Head—Aythia Americana.

Canvas-back—Aythia vallisneria.

American Scaup Duck or Big Blue Bill-

Aythia marila nearctica.

Lesser Scaup Duck or Little Blue Bill-Aythia affinis.

Ring-necked Duck-Aythia collaris.

American Golden Eye or Whistler-

Glaucionetta clangula Americana.

Barrows Golden Eye—Glaucionetta Islandica.

Bufflehead—Charitonetta albeola.

Cowheen or Old Squaw-Clangula hyemulis.

Harlequin Duck—Histrionicus histrionicus.

American Eider-Somateria dresseri.

American Scoter—Oidemia Americana.

White Winged Scoter—Oidemia deglandi.

Surf Scoter—Oidemia perspicillata.

Ruddy Duck—Erismatura rubida.

## Sub-family Anserina:

Lesser Snow Goose Wavy--Chen hyperbora.

Blue Goose—Chen caernlescens.

White Fronted Goose—Anser albifrons gambeli.

Canada Goose—Branta Canadensis.

Hutchin's Goose-Branta C. Hutchinsii.

Brant Goose—Branta Bernicla.

Sub-family Cygnina.

Whistling Swan-Olor columbianus.

Trumpeter Swan—Olor buccinator.

#### ORDER LIMICOLA.

Family Phaloropodida.

Northern Phalorope—Paloropus lobatus.

Wilson's Phalorope—Phaloropus tricolor.

Family Recurvirostridae.

American Avocet-Recurvirostra Americana.

Family Scolopacidae.

American Woodcock—Philohela minor.

Wilson's Snipe-- Gallinago delicata.

Dowitcher-Macrorhamphus griseus.

Long-billed Dowitcher-Macrorhamphus scolopaceus.

Stilt Sandpiper-Micropalama himantopus.

Knot or Robin Snipe—Tringa canutus.

Pectoral Sandpiper—Tringa maculata.

White-rumped Sandpiper—I'ringa fuscicollis.

Baird's Sandpiper—Tringa Bairdii.

Beast Sandpiper—Tringa minutilla.

Red Backed Sandpiper or Blackheart-

Tringa Alpina Pacifica.

Semipalmated Sandpiper—Ereunetes occidentalis.

Sanderling—Calidris arenaria.

Marbled Godwit-Limosa fedoa.

Hudsonian Godwit—Limosa hamastica.

Greater Yellow Legs—Totanus Melanoleucus.

Lesser Yellow Legs—Totanus flavipes.

Solitary Sandpiper—Totanus solitarius.

Willet—Symphemia semipalmata.

Bartramian Sandpiper or Quail—Bartramia longicauda.

 ${\bf Buff\text{-}breasted \ Sandpiper--} Tryngites \ subruficollis.$ 

Spotted Sandpiper—Actitis macularia.

Long-billed Curlew—Numenius longirostris.

Eskimo Curlew—Numenius borealis.

Family Charadriide--

Black-bellied Plover—Charadrius squatarola.

American Golden Plover—Charadrius dominicus.

Killdeer—Ægialitis voeifera.

Ring-neck Plover—Ægialitis semipalmata.

Piping Plover—Ægialitis meloda.

Family Aphrigidae—

Turnstone—Arenaria interpres.

#### ORDER GALLINÆ.

Family Tetraonida ---

Canada Grouse or Spruce Partridge-

Dendragapus Canadensis.
Ruffed Grouse—Bonasa umbellus togata.
Gray Ruffed Grouse—Bonasa umbellus umbelloides.
Willow Ptarmigan—Lagopus lagopus.
Rock Ptarmigan—Lagopus rupestris.
Pinnated Grouse—Tympanuchus Americanus.
Sharp-tailed Grouse—Pediocates campestris.



