



(Page 7 )

**Comb-duck.**

H. Gr. ny. bl. del.



# THE WATER FOWL

OF

INDIA AND ASIA

BY

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Fancy Pheasants," &c., &c.*

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# Indiana Collection

## PREFACE TO THE SECOND

THE favourable reception which the public has been kind enough to accord to my work in its first form "How to know the birds of India" has been deemed a justification for the present revised edition, which has not only been enlarged to date as far as Indian waterfowl are concerned, but amplified by the addition of brief notices of all non-Indian Asiatic species. It is now a complete guide to all the wild fowl of Asia from the Mediterranean to the Pacific, and will, it is hoped, be serviceable to sportsmen East and West of our Indian Empire, as well as affording means of identification to Anglo-Indians of species at present not known as Indian, but likely in the future to come over our borders, as the Red-breasted Goose and Mandarin Duck have done since the publication of this work in its original form.

By way of keeping to the original plan of a work of reference for Anglo-Indians especially, however, the matter dealing with non-Indian Asiatic species has been kept in small print, and these species are not included in the keys, to simplify matters as much as possible. The majority of the ducks the sportsman is likely to meet with, it must be remembered, are found all across Asia in greater or less abundance, so that if he knows the Indian species he will be well advanced in his knowledge of those he may meet with in shooting elsewhere in Asia, or in Europe either, for that matter.

By way of making the work as useful as possible to beginners, the drawings of heads which have now been

added—the work of that most accurate artist, Mr H Gronvold,—have been selected so as to illustrate the commoner kinds of ducks, etc., and include a'l those most likely to fall to the gun in ordinary Indian shooting

F FINN

LONDON, 1909

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## PREFACE TO THE FIRST EDITION.

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### “ HOW TO KNOW THE INDIAN DUCKS.”

THE present little work is substantially a reprint of a series of articles, which appeared in the *Asian* from November 1898 to June 1899, with a few additions and alterations ; and I am much indebted to Mrs. Targett, the proprietress of that journal, for permission to reproduce the series in book-form.

My excuse for doing so is, that having for years taken an interest in the birds with which it deals, and having had, from my connection with the Indian Museum and my opportunities of keeping an eye on the Calcutta market, the privilege of recording during the past six years an usual number of rarities, I have felt impelled to put before the public a little handbook which may prove useful to those who are less fortunately situated. I can at least claim, I think, to have made my diagnoses simple and plain, and to have succeeded in “keeping almost entirely free from technical terms.

The General Synopsis of the Indian Ducks, which forms Appendix I, and the Index of the work, is more than has been attempted by any previous writer in this field ; and the succeeding Table of colours of Full-plumaged Males, if read with any attention, should serve the purpose of the identification of such nearly as well as a series of plates ; for young birds and females, even plates are hardly sufficient without diagnoses or descriptions.

I must, in conclusion, express my obligations to the writers of other works dealing with this subject, and in

PREFACE TO THE FIRST EDITION.

especial to Messrs. Hume and Marshall's invaluable *Game Birds of India, Burma, and Ceylon* ; Dr. W. T. Blanford's fourth volume on Birds in the *Fauna of British India* series, the nomenclature of which is followed in the present book ; and Mr. E. C. S. Baker's series of articles on *Indian Ducks and their allies*, in the Journal of the Bombay Natural History Society. In addition, I have been indebted for pieces of information to several friends, whose names mostly appear in the course of the work.

F. FINN,

April, 1901

Indian Museum, Calcutta.

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# THE WATER FOWL

OF

INDIA AND ASIA.

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## CHAPTER I.

### INTRODUCTION.

THERE is no more generally interesting group of birds than the family *Anatidæ*, which includes the Ducks and their allies the Swans, Geese and Mergansers ; and certainly there is none in India, or in most other countries either, better fitted to attract to the study of general ornithology those hitherto unacquainted with its charms. So many species occur in our area ; they differ so interestingly in their habits ; their plumage is often so striking or so delicately beautiful ; and last, but not by any means least, they are all fit, and some very good, to eat. I say nothing of the sport to be obtained from shooting them, for to most people that will be the leading motive for making their acquaintance at all ; though, from another aspect which has been too little studied, both by ornithologists and by the general public, Ducks are not unworthy of attention. Given only a little pond, no birds are so easy to keep as pets ; they can be allowed to run even in a garden, and are generally both hardy and peaceable, while requiring the minimum of attention. They seem to be invariably popular in public gardens, and I do not understand why they have not to

a greater extent engaged the attention of amateurs of birds. Out here, of course, the unsettled habitation of many of us forbids much keeping of pets, but to the retiring Anglo-Indian, or to him whose lines are cast in one place for his whole service, I can cordially recommend the "waterfowl fancy," if he cares for birds at all.

Returning to Ducks as game, the pleasure of making a bag is much enhanced, to any one who knows his birds, by the possibility of securing a rarity, which is particularly great in the case of Ducks. I do not think that the record of rare "occurrences" is by any means the highest form of ornithology; but out here the pursuit of it is at least not harmful, as it too often is at home, and is indeed important, seeing the vast area we have to deal with. And any extensive Duck-shooting, or even searching a market or native fowler's catch, is likely to result in some "find" of value to the naturalist.

## How to Distinguish a Duck.

Having said this much by way of introduction, we may proceed to the means of distinguishing a Duck when the bird has been obtained by means legitimate or otherwise. Most people know a Duck or Goose at sight, but there are exceptions, and for the sake of these weak brethren, I must ask those whose knowledge is greater to excuse what will seem to them unnecessary details. I have heard of one sportsman exhibiting a Cormorant, and another a Coot, as a Duck; and as Dabchicks have been offered to me in the Calcutta bazaar as Teal, I presume that particular "sell" has been worked successfully on others.

A Duck then (and the word "Duck" shall, as our legal friends would say, in this connection be taken to refer to and include all Teal, Geese, Swans and Mergansers) can be distinguished from all other Indian birds by the following characters:—The bill is *straight* and

armed at the edges of both chaps (*mandibles*) with a row of transverse ridges or teeth (*lamellæ*), and the feet have moderate or short shanks (*tarsi*) and three toes in front webbed together, and a small, nearly or quite useless toe behind, not connected with the front ones by a web.

It may be as well to point out how these characters exclude all pretenders to the dignity of Ducks. *Coots*, *Phalaropes* or *Swimming Snippets*, and *Dabchicks* and other *Grebes*, are at once excluded, not only by their beaks, which are not in the least like a Duck's, but especially by their feet, of which the toes are not webbed together, but provided each with a separate and individual web.

*Flamingoes* have ridged beaks like Ducks, but the beak is bent suddenly downwards in the middle, and the shanks are very long.

*Cormorants*, *Pelicans* and their allies, not only have not the ridged beak but the hind toe is well developed, and joined to the front ones by an extension of the web which unites these.

*Gulls*, *Terns* and *Petrels* have a plain-edged beak, though their feet are very like those of Ducks, except that in the last the hind toe is reduced to a nail only.

As for those birds which swim, though without any web to their feet, such as *Moorhens*, no one has any business to mistake them for Ducks at all.

## General Account of the Ducks.

Before proceeding to distinguish the various sections of the Duck family, a little more about its general characteristics may be noted. The most marked peculiarity about the Duck's bill is of course its ridged edges; this ridge arrangement presenting, as was pointed out by Darwin, a beautiful gradation in various species from simple teeth to processes so long that they fairly represent whalebone in miniature. This is well seen in the

bill of the Shoveller, along the edges of which there is a regular comb. The bill is covered with skin, not with horn as in most birds, except at the end, where there is a " nail " which takes up more or less of the tip, and is often coloured differently from the rest of the bill.

The body is heavy, the tail generally short, rounded or pointed, composed of many feathers, much hidden at the root by the thick soft coverts, and the wings are never excessively long, and often markedly short ; but all Indian species can fly, except in the moulting season, when, as with members of this family in general, all the wing-quills are shed at once. But as most of our waterfowl come to us as winter migrants, they have to get over their wing-moult before they start on their journey south.

Most of our Ducks also breed in Central and Northern Asia, making a nest on the ground which they line with their own down. Our resident Indian Ducks mostly build in trees as a rule, and the downy lining to the nest is imperfect or wanting.

The eggs of the Ducks are numerous, and white, pale buff or green in colour, without spots. The young, as every one knows, are active and feed themselves, and are clothed in hairy-looking down. They get well fledged on the body before the wing-quills are grown, and in this stage are known as " flappers." Their first plumage generally resembles that of the old female, but may differ from that of either parent.

Although Ducks are monogamous in the wild state, and often show considerable conjugal devotion, they readily take to polygamy in domestication, and hybridize freely. Even among wild birds hybrids are not uncommon, though, curiously enough, such seem seldom to occur in India. Mr Hume says nothing about them in his " Game Birds and Wildfowl," and I have personally seen very few Indian specimens. It is hardly

credible, however, that many hybrids do not really visit us, and the possibility of finding one of these curious crosses gives an additional interest to the study of the group.

As food, Ducks vary very much, the difference depending to a certain extent on what they have themselves previously eaten. The worst may, at a pinch, be improved for the table by skinning them, the unpleasant flavour largely residing in the skin, which is loaded with fat in these birds

### **Distribution of the Ducks.**

Ducks are found all over the world, most of the finest forms, however, living, or at any rate breeding, outside the tropics : few species reside constantly in India or other hot countries. The number of migratory Ducks that visit the Indian Empire in the cold weather, however, bring up our number of species to nearly a fourth of the whole family.

It will be noticed that the non-Indian species occurring in Asia are nearly all high northern birds, and often of marine habits, and the lines of migration followed by these are not likely to take them to India as a rule, though they are liable to occur there, as such maritime species as the sheldrake, golden-eye, and scaup do so.

As Asia, zoologically considered, extends down through the East Indies to Bali, it has been necessary to include the descriptions of a few East Indian species, most of which are properly Australian forms which extend westwards. Of the Asiatic Ducks, on the other hand, hardly any reach Australia.

### **Divisions of the Duck Family.**

So far I have spoken of " Ducks " in a general sense, as I warned my readers above, but there and at the beginning I mentioned that under *Anatidæ* came also

the birds known as Swans, Geese and Mergansers and these groups, together with the birds to which the name of Duck is usually restricted, form four obvious sub-divisions of the family, these sub-divisions are adopted by Dr. Blanford in the fourth Bird Volume of the *Fauna of British India* series as the "sub-families" into which the *Anatidæ* are divided by him—an arrangement which is very simple and easy to follow. But how about Teal? will probably be asked. In answer to this it can only be said that the word "Teal" simply means a small Duck, and has been generally so used, just as big Ducks have frequently attained to the dignity of "Geese" both with naturalists and with the general public. It will prove more convenient in the long run, however, to restrict these words to the birds to which they most properly belong, and with Indian birds this can generally be done.

As to the distinction of the four groups of the Ducks, this is not difficult with Indian species, if certain obvious characters be attended to.

SWANS (*Cygninæ*) are at once distinguished by their exceedingly long necks and by their great size, exceeding that of an ordinary tame Goose. The plumage is white or grey, according to age.

GESE (*Anserinæ*) differ from most other Indian members of the Duck tribe in having the front edge of the nostrils about the middle of the beak, instead of nearer the root than the tip, according to the usual rule among Ducks and birds in general. Their plumage is plain grey or brown with lighter edges, giving it a barred appearance. This will at once prevent the Golden-eye Duck, which is pied, from being mistaken for a Goose, though unlike other Ducks, it has nostrils set far forward, much as in a Goose. Geese are of large size as a rule, but no Indian wild Goose is so big as an ordinary tame one. This excludes the Whooper Swan, which is much bigger than a tame Goose, but has the nostrils about the middle of the beak.



MERGANSERS (*Merginæ*), being a small group, may be taken next in order. They are to be known from other Indian *Anatidæ* by their narrow tapering bills, more than twice as broad at the root as at the tip, which at first sight do not seem to belong to birds of this family at all, the broad flat round-tipped bill being such an obvious difference between Ducks and any other birds. Their plumage is pied.

THE TRUE DUCKS (*Anatinæ*), which are very much in the majority, form the rest of the family. They have none of the peculiarities which distinguish the others, and are hence chiefly distinguishable by negative characters. The biggest of them is nothing like as big as a tame Goose, and they are generally smaller than a wild one. Their necks are only moderately long, their nostrils (except in the Golden-eye) are always nearer the root of the beak than the tip, and the beak itself, though it varies in width and is sometimes narrowed towards the point, never approaches the *markedly* narrow and tapering form of that of the Mergansers.

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## CHAPTER II.

### Swans.

Only two Swans are known to occur within our limits, and of these one is rare, and the other has only been found twice, so that a Swan is not a very probable item in an ordinary bag.

In addition to their large size and very long necks, Swans possess the following noticeable characters — Their beak is very much like that of an ordinary Duck in form, long, parallel-sided and flat, with the ordinary ridges along the sides, and a moderate-sized " nail." The space between the eye and bill (*lores*) is bare in full-grown birds, and forms a noticeable peculiarity. The head is comparatively small, the body large and the wings broad ; the legs are set far back, with short shanks and large feet, the middle toe being longer than the shank, and the outer toe also long.

Swans are essentially surface-water-birds ; they do not frequent the land much, and when there walk ungracefully ; on the water they swim well and strongly, but do not dive (at any rate as far as I have seen) ; by means of their length of neck they can reach food some distance below the surface. The tame species, and no doubt the wild ones also, will turn " end up " like a Duck when feeding in deeper water than the length of the neck is sufficient to fathom. They rise with difficulty, running along the water for some distance, but when well on the wing fly faster than they appear to do. In their food, Swans are omnivorous, like Ducks, devouring small aquatic animals, fish, spawn, grain, and green land and water herbage, especially the latter.

Their nest is a large structure, built upon the ground, and it has been observed with the tame species that the bird is continually anxious to raise it, as it always haunted by dread of a flood.

The parents defend the nest vigorously, their wings being the chief weapons in fighting, for the Mute Swan at all events has very little power in the bill. I have let a vicious old male in the London Zoo, years ago, chew away at the back of my hand as much as he liked, and he could hardly graze the skin.

Both male and female are alike in their pure white plumage, the former being rather larger in size; the young differ from both in being of a dull brownish grey, with less brilliantly-coloured beaks than their parents. The feet are black or dark grey in old birds at all events. Both of our species are much of a size, and the distinctive characters are mainly to be sought in the form and colour of the bill.

The *Mute* or *Tame Swan* may be distinguished at all ages by having the front edge of the nostril nearer to the root of the bill than to the tip; while the *Whooper*, like a goose, has the front edge of the nostril about the middle of the beak.

### The Mute or Tame Swan.

*Cygnus olor*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 413.

VERNACULAR NAMES. (No special name exists, but Hume says that in the N.-W. Punjab Swans are known by the name *Penr*, this being usually applied to Pelicans.)

The Mute Swan has, when *adult*, a knob at the base of the bill, which is orange-red, the nail, nostrils, edges, knob and triangular bare space between bill and eye being black. The *female* has a smaller knob than the

male In the young bird there is at first hardly any knob to the bill, the ground-colour of which is dark grey, while the bird is in the sooty brownish grey plumage of the first autumn as the plumage becomes white, the bill turns to a lighter grey tinged with green, and before the close of the second year, at which time the bird has become white, the grey tint of the beak has given place to a pinkish flesh-colour, which, in the following spring, darkens into the full orange-red Face-skin always black Nostrils nearer root of bill than tip

In the variety known as the Polish Swan, which is either a case of albinism or of precocious maturity, the plumage being white or nearly so from the first, the bill is pale purplish pink in the young, not grey This looks as if precocity were the true explanation

The Mute Swan inhabits the greater part of Europe, Northern and Central Asia, migrating south to some extent in winter, when it visits Northern Africa regularly, and India occasionally Twice, however, these birds have been killed near Peshawar, a good locality for Swans, in June and July This Swan is one of the most familiar ornamental birds in Europe, and as it is only semi-domesticated, often looking after itself entirely, it frequently, when left unpinioned, takes wing, and hence the natural limits of the wild birds in Europe are rather difficult to settle with accuracy It is said to have been introduced into England by Richard Cœur-de-Lion, that country not being part of its natural range This swan lays—according to the age of the female—from five to eight eggs, which are greenish grey in colour

Swans are often imported into India and command a high price, possibly the summer-killed Indian bird above alluded to were only "escapes" after all.\*

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\* The Black Swan of Australia (*Chenopsis atratus*) has been, however, far more numerously brought over, and as it has bred in this country, and escaped, is not unlikely to occur wild. Its black plumage, with white quills and red bill, will of course at once distinguish it from all Indian wild fowl.

The late Mr. W. Rutledge, the well-known Calcutta dealer in animals, used to import two or three dozen yearly for many years, and some have got away to his knowledge. But Mr. Hume says it is mostly the birds of the year which occur in India. These would be mainly grey in plumage and in this stage will be found fit for food. The head, or even the skull, if preserved, will be sufficient for identification of the species. The breeding habits of this Swan in Europe are well known; the nest is large, the eggs, from about a dozen to half that number, are white or nearly so. The male jealously guards his home, and his majestic appearance when roused in its defence is well known; this graceful attitude with arched neck laid back, and secondary wing feathers raised, being, however, assumed at other times.

The Mute Swan, as its name implies, is a very silent bird, uttering ordinarily only a nasal croak, or when angry, a hiss.

The whole length of the bird is about 5 feet, and that of its closed wing (from knuckle to end of longest quills) about 2 feet.

### The Whooper or Wild Swan.

*Cygnus musicus*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 114.

VERNACULAR NAMES.—None known.

The Whooper has no knob on the bill at any age; when the bird is *adult*, this is black for about the tip half, the rest being bright yellow, which colour also extends to the bare skin of the face.

In the *young* the beak is dull flesh-colour at first, with black edges and tip; then, while the birds are still grey, the end becomes black, and the root and face greenish-white, with a reddish-orange band across the nostrils.

At the close of the second year, when the plumage, as in the other species, has become white, the bill has assumed its full colour of yellow and black.

In size it is about equal to the Mute Swan, but has a longer bill, about four inches in length.

Thus the light face will always distinguish the Whooper, in addition to the difference in the position of the nostrils, which in this species are in the middle of the bill. The tail also in the Whooper is shorter and rounded, while in the Mute Swan it is longer and pointed.

The Whooper is a more northern species than the Mute Swan, breeding in high latitudes in Europe and Asia, and wintering in the greater part of the former Continent, and in the temperate regions of the latter. It has only thrice been found in India. Hodgson obtained a specimen in the Nepal Valley in January 1829. This, or rather its skull and foot, had been referred by Mr. Hume to the smaller species *Cygnus bewicki*; but Blanford regarded the relics as undoubtedly pertaining to a Whooper. No other specimen as was recorded till 1900, when Lieutenant-General W. Osborn, I.S.C., shot one out of a flock of four on the River Beas on January 6th. Also, on January 31st, 1904, Mr. J. Crerar shot one on the Changra Dhand in Sind.

The Whooper is a much greater vocaliser than the other species; it has, indeed, a very fine trumpet-like call. It walks better on land, and a winged bird will make a good run for its life, and has even been known to charge when overtaken. On the water, however, this species does not equal the Mute Swan in beauty, as it carries its neck straight and does not raise its wings. The light yellow face also, and knobless beak, completely deprive the Wild Swan of the haughty and dignified air of its rival. It lays four to six yellowish white eggs.

The windpipe in this species is much elongated and coiled, the coils being lodged in the keel of the breast-bone.

**Bewick's Swan.**

*Cygnus bewicki*, SALVADORI, Brit Mus Cat, Birds, Vol. XXVII, p. 29

Is very like the Whooper, but decidedly smaller and has the yellow on the base of the bill less extensive, and terminating rather abruptly, it does not reach the basal end of the nostril whereas in the Whooper the yellow runs on below the nostril and ends in a point.

This species has much the same range as the Whooper, but does not breed so far west in Europe, though visiting Britain in winter. Like the Whooper it is found in China and Japan at that season and although not yet known to occur in India, will probably be found to do so sooner or later. The eggs are like the Whooper's, but smaller. The bill in this species is little over three-and-a-half inches long and the shank barely four, while the closed wing is about a foot-and-a-half. The total length is about four feet.

**Pere Davie's Swan.**

*Cygnus davidi*, SALVADORI Cat Birds, Brit Mus, Vol. XXVII

Is a very mysterious bird, only one specimen being on record which was seen by that excellent ornithologist, Swinhoe in the Museum of the Lazarist Mission at Peking in 1868; the specimen had been bought in the market at Tientsin.

It was smaller than Bewick's Swan and was all white with red bill tipped with a black nail, and orange-yellow feet.

No other specimen has since been obtained and it is just possible that the specimen seen by Swinhoe was one of an expiring species which has now disappeared altogether. It must not be forgotten that a conspicuously coloured diving-duck (*Campylolæmus labradoricus*) formerly well known in North America, has completely disappeared in our time, and there are not nearly so many specimens of it in Museums as there are of the Great Auk.

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## CHAPTER III

### Geese.

Our certainly ascertained Indian Geese are five in number, and form a group of birds very easily recognizable even to the beginner.

In addition to the central position of the nostrils in the bill, Geese present so many other notable peculiarities that they are really very easy to distinguish. The difference between a Goose and a Swan is proverbial, and it is rather curious that any true Ducks should have been able to claim rank as Geese as they have done.

All our Geese, then, have the following characteristics in common, a rather long neck, bearing a comparatively small head, provided with a beak shorter and narrower than is usual in the family, and very high at the root while sloping rapidly to the point, so that the bill, as a whole, has a conical form. The armature of its edges is in the form of teeth, and the nail is generally large, taking up the whole of the tip, the whole organ being thus admirably adapted for cropping grass and other herbage. The nostrils, as above stated, are nearly central, the body is less heavy than is usually the case among Ducks, the wings are long and broad, and the tail is rounded.

The legs are rather long, the shank being about as long as the middle toe, and are set well forward.

The plumage is very characteristic, grey or brown in colour, with the edges of most of the feathers, which are broad and blunt, lighter, so that the general effect is one of transverse barring, the quills are dark, at any rate at the end, and the stern and feathers at the root



of the tail (*tail-coverts*) white, the feathers of the neck are usually ridged or pleated.

The eyes are always dark, and the feet some shade of reddish or yellowish, never black or grey, as is often the case in our other *Anatidæ*. The colour of the beak and feet is more variable than is usual in birds.

Sauce for the goose is proverbially sauce for the gander, and they almost exactly resemble each other, though the former is usually rather smaller. Nor are the young very different from their parents in general appearance, though they often lack some of the characteristic marks of their species, and their feathers are narrower and more rounded than those of their parents.

In their habits and movements Geese are also very uniform. They are rather land than water-birds, though they swim well (being noticeably high in the stern on the water) and dive fairly; but most of their time is spent on shore, where they walk well, though with a peculiar swaying gait, and can run fast and traverse long distances on foot if necessary. They occur in flocks if numerous.

Their flight is strong, they rise readily, and can even perform various evolutions in the air, such as turning somersaults like a tumbler-pigeon. In feeding they are more strict vegetarians than most birds, living almost entirely on vegetable food, such as grass, roots and grain; and when numerous, they may become terribly destructive to crops, not only by what they eat, but by trampling them down. They are themselves good food, if not equal to the best Ducks. They all breed outside India, to the north and west, building on the ground, and laying from six to a dozen eggs, yellowish white in colour.

Their voice is a cackle or a hiss, the latter when enraged, at which time the ludicrous appearance of the gander with gaping mouth and lowered neck, is well

known. Both sexes have the same voice, and there is nothing peculiar about the structure of the windpipe in this sub-family.

The true Geese are all confined to the Northern Hemisphere, and even in winter do not go so far south as many of the Ducks.

Two species visit the Indian Empire commonly, the Gray and the Bar-headed, the other three being rare and occasional visitants.

The general appearance of these birds being, as above stated, uniform and unmistakeable, I shall endeavour in the descriptions to note only the salient points; and I will try also to make the preliminary diagnosis of the species depend on characters which do not vary with age, so as to allow for the slight difference between the young and adults. We find then, that, of our six species:—

The *Bar-headed* is at once distinguishable by its pale clear grey colour, almost a French grey. The rest are brownish grey or brown, except the Red-breasted.

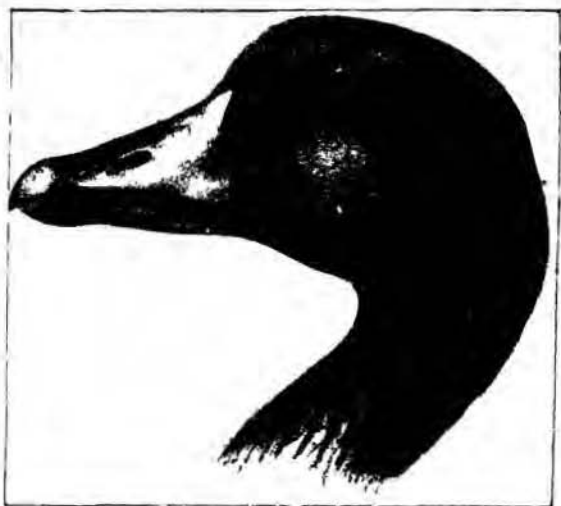
The *Red-breasted* is mostly black or very dark brown, with the breast chestnut or buff and the bill and feet black.

The *Dwarf*, as its name implies, is known from all the others, but the Red-breasted by its small size, which is only about that of a good big tame Duck, the bill being especially small, only about an inch and a half from corner of mouth (*gape*) to tip. All the other Geese but the Red-breasted have beaks of two inches or over.

The *Gray*, on the contrary, is the biggest bird of the lot, with a bill of two inches and a half or over, without any black on it.

The *White-fronted* has a two-inch bill, also without any black.

The *Pink-footed* is distinguished from all the rest by



(Page 17)

**Gray Goose.**

H. Gronvold, del.



(Page 23)

**Bar-headed Goose.**

H. Gronvold, del.

having the root of the bill black, the said bill being a two-inch one.

## The Gray Goose.

*Anser ferus*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 416.

VERNACULAR NAMES.—*Sona*, *Kurria-sona Hâns*, *Râjhâns*, Hindi ; *Kar-hâns*, Bhagulpur ; *Mogala*, *Mogala-battak*, Nepal Terai ; *Kangani*, Manipur.

The Gray Goose is the largest and most strongly built of the Indian species, with a big coarse bill well over two inches in length, with a strong nail and prominent teeth, shown plainly by the gaping edges. In colour it is generally of a brownish grey, some specimens being browner and others greyer. The "shoulder" of the wing is blue-grey, and so is the lower back ; the belly is more or less blotched with black in *old birds*. The bill and feet are fleshy pink, the colour varying in depth. The *young bird* has the lower back brownish-grey, and of course no black below. There is often a white patch on the forehead. The whole length is about two feet and a half, and the closed wing about one-and-a-half, bill two-and-a-half inches or over ; shank three inches.

In Europe the Gray Goose often has an orange bill, but apparently never in India ; there, however, according to Mr. Hume, the colour of the bill and feet varies much in intensity, from creamy white hardly tinged with pink to dingy livid purplish red. These differences, he thinks, are matters of individual complexion, as he did not find them dependent on season ; but, on the other hand, often coinciding with differences in the general tone of plumage so variable in this species. I may add that the bills and feet of waterfowl vary much in intensity of colour according to the state of health of the bird, being pale when it is not in good form. Moreover, I

have observed that in captive birds of this species kept in the Calcutta Zoo, the beak varied from rose-red in the spring to a sallow flesh-colour when the birds were moulting, so there is evidently some seasonal change depending on vigour. I have seen one or two specimens in which the "nail" at the tip of the bill, usually white, was horn-colour, but it never approached black.

The Gray Goose breeds in Europe north of about 50° latitude, and in Central Asia and Southern Siberia, wintering in South Europe, North Africa, South-Western Asia, and Northern India. It is especially common in the cold weather in the Punjab, Sind, and the North-West Provinces, and occurs also in Assam, Burma, and Manipur.

It is found as far south as the Nerbudda on the West, and the Chilka Lake in Orissa on the East, but seldom south of the Gangetic plain inland. It is often in very large flocks, from two hundred to a thousand birds or more, but the total number of birds that visit India is not, in Mr Hume's opinion, more than a fifth of that of the Bar-headed, to be mentioned below.

This species is the original stock of the Tame Goose of Europe, and was already domesticated, and sometimes at least white, in the time of Homer, as we know from certain passages in the Odyssey. It ought, however, to be mentioned that there is some possibility of the White-fronted Goose, to be dealt with hereafter, having had a share in the origin of our tame birds. The Goose has varied very little during these long ages of domestication in comparison with other birds more recently tamed, such as the fowl.

It should be mentioned, however, that the domestic Goose of India has sprung, at least in part, from a quite distinct species, the Chinese Goose (*Cygnopsis cygnoides*), to be noticed later.

It is usual to call the Gray Goose the Gray Lag, the latter word being supposed, with much reason, to mark

out this species as the Goose which "lagged" behind to breed in Britain (as it formerly did, though now only doing so in a few places in Scotland) when the rest of the wild Geese went north. As, however, the "lag" is continually getting mixed up with "leg" and the bird's legs are anything but grey, I have thought it as well to drop this suffix, this species having the greyest plumage of all our Geese except the Bar-headed, which is well distinguished by the marking from which it takes its name.

### The Pink-footed Goose.

*Anser brachyrhynchus*, BLANFORD. Faun Brit. Ind., Birds, Vol IV, p 418.

VERNACULAR NAMES — None known.

This Goose is smaller than the Gray, with a much shorter bill, but much resembles that species in colouring, though it is darker, but is easily distinguished from it and all our other Geese by its bill, which is black at the root and on the nail, the intermediate portion being pink, as are the feet. There is no black on the belly. The bird is about twenty-eight inches long, the closed wing about sixteen, and the bill two, shank three. Semi-domesticated birds have been known to produce young with orange band on the bill and orange feet, and specimens may also occur among wild birds, so that the black on the bill is the best character to go by. Such orange-billed and footed birds, did any turn up in India, might be mistaken for the Bean Goose (*Anser segetum*), which is strongly suspected of occurring here, and always has a black-and-orange bill and orange feet, but the former member is much larger than the bill of the Pink-footed Goose, being as big as in the Gray, about two-and-a-half inches, or even larger in some cases.

The Pink-footed Goose breeds in the extreme north of Europe, and chiefly visits the western part of that

continent in water. It is rare in India, indeed, until recently the only Indian-killed specimen that had been *preserved* is one in the possession of Mr. Stuart Baker, which was obtained by a native collector in the south of Cachar. The occurrence of the bird had, however, been several times before recorded, and Mr. Hume had even got specimens, but these were lost. His birds, a pair, were shot in 1864, from a large flock of Grays among which their darker, browner colour and bright pink feet rendered them conspicuous. Specimens have also been procured of late years in the Shan States.

Sportsmen should, therefore, be on the look-out for this bird, and when found, make a note of it. It is found in pairs and small flocks, and appears to be very wild and wary.

### The White-fronted Goose.

*Anser albifrons*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 417.

VERNACULAR NAMES.—None known.

This Goose when *adult* is of a general dark brown colour, with a white band across the forehead, extending to the corners of the mouth and sometimes the chin; the belly is more or less blotched with black, sometimes very heavily, the legs are orange, and the bill fleshy or yellow, with no black on it.

*Young birds* have no white on the head, or black on the belly. The bird is considerably smaller than the Gray Goose, being about twenty-seven inches long, with a wing of about fifteen; shank two and-a-half inches; bill two. This Goose has the widest range of all our Indian species, occurring in Europe, Asia and North America; for though the American form is sometimes distinguished as *Anser gambeli*, it appears to

be hardly sufficiently distinct from our bird to rank as a full species ; it is merely larger, with a bigger bill.

It breeds in high northern latitudes, migrating in winter to the coasts of the Mediterranean, Egypt, the Caspian Sea, Northern India, China and Japan. It is said to be found in Assam, and has been shot in Upper Burma. In America it reaches Mexico and Cuba in winter. With us it is a rare bird, visiting, in the cold weather, the Punjab, Sind, Cutch, Rohilkhand and Oudh, where it is usually found on rivers, singly or in very small parties of two or three birds. The note of this Goose resembles a laugh, whence it is sometimes called the Laughing Goose.

### The Dwarf Goose.

*Anser erythropus*, BLANFORD, Faun. Brit. Ind., Birds, Vol. I, p. 418.

VERNACULAR NAMES.—None known.

This little Goose, which, as I said above, is only about as big as a large tame Duck, is very like the White-fronted, it has, however, proportionately longer wings and a smaller bill, is darker in colour (thus being the darkest of all our Geese), and has the white patch on the forehead in the form of a longitudinal "blaze" or broad streak, running up from the bill to the level of a line drawn between the eyes. The bill is pink or flesh-coloured (with no black), and the legs orange. The bill may apparently be sometimes orange or yellow. The eyelids are edged with lemon-yellow, and hence very conspicuous. *Young birds*, like the young of the White-fronted Goose, have no white on the head or black on the belly.

The length is about twenty-one inches, wing about fourteen, shank about two and-a-half, bill one and-a-half. The wings are thus proportionally much



longer than in the White-fronted, or indeed than in any other of our Geese; when closed they reach well beyond the tail. The bird appears more compactly built than any other of our Geese.

The Dwarf Goose breeds in Lapland and eastwards also in Siberia; in winter it is found from Western Europe, where it is rare, to Northern India, China, where it is common, and Japan. It is a more Eastern bird than its larger ally the White-fronted; in India it is rare, less than a score of specimens having been taken.

This pretty little Goose, conspicuous among its kin by its small size and rich colouring, is probably more common than is supposed, for, during 1898, I got no less than four living birds from the Calcutta bazaar, a dealer there having imported them from up-country; three of these, fine old birds, I obtained on New Year's day, and one was exhibited alive before the Asiatic Society soon afterwards.

Two of them lived for some time in fine condition in the Alipore Zoo; the other with a younger bird subsequently obtained also among up-country birds in the bazaar, where I first noticed it in May of the same year, has died, and their skins are now in the Indian Museum, in poor condition unfortunately. Again, on January 7th, 1900, I saw, among a lot of up-country birds in the bazaar, yet another specimen of this species, rather younger than the rest; this was sold to go to England. This Goose has been observed to be very active in flight, as one might expect from its long wings.

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## The Bar-headed Goose.

*Anser indicus*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 419.

VERNACULAR NAMES.—*Háns*, *Kareyi Háns*, *Ráj Háns*, *Birwa*, H., *Paria*, Nepal Terai, *Nang-pa*, Ladak; *Nir-bathu*, Tam., *Badi-Háns*, Chittagong; *Káng-nai*, Manipur.

The Bar-headed Goose, the commonest of all our Geese, differs more from any of the rest than these do from each other. the bill has straighter edges and shows the teeth less, and has a smaller nail; the general build is lighter and more slender, so that, although the measurements are mostly about the same as those of the Gray, the bird is less bulky, and there is no pleating of the neck plumage, though this character may be absent in the Gray Goose. The colour of this species is equally characteristic, being a clear pale grey, passing into brown-grey on the neck and flanks, the head is white, with two black bars at the back, the first and longest reaching from eye to eye, and a white streak runs down each side of the neck. The bill is yellow or orange, with a black nail, and the legs are orange.

Young birds have the crown dark brown, and no black bars on the head or white stripes on the neck. The length is about thirty inches, the wing a foot and a half, the shank three inches, and the bill about two.

The Bar-headed Goose breeds in Tibet and Central Asia, visiting India in winter far more numerously than any other Goose, and being common in the north and rare in the south. It occurs in Manipur, and is common on the Irrawaddy and elsewhere in Upper Burma. But it is rare in the Bombay Presidency, and unknown on the Malabar Coast. It is found in small or large flocks. It is a far more graceful bird,

both on land and water, than the Gray, our only other common Goose, walking more easily and sitting higher in the water. It is according to Hume less tamable than that species, and does not stand the heat of the Indian summer so well, if kept in captivity, though this has not been my experience with this species at the Calcutta Zoological Gardens, where it certainly kept its condition perfectly.

### The Red-breasted Goose.

*Branta ruficollis*, SALVADORI, Brit. Mus. Cat., Birds, Vol. XXVII.

VERNACULAR NAMES.—*Shakvoy*, in Siberia.

This beautiful little Goose has never been actually obtained in India, but it has been seen by so good an observer as Mr. E. C. Stuart Baker, and it is a very unmistakable bird, so I follow him in admitting it to our list.

It is a small bird for a Goose, not bigger than a large Duck and has a remarkably small delicate-looking bill for its size; the neck-feathering is not ridged or pleated.

The plumage is mostly black, with the front of the neck, and the breast, bright chestnut. There is a chestnut spot on the sides of the head, bordered with white, which white runs down the side of the neck. There is also a white patch between eye and bill; the flanks are barred black and white, and the belly and feathers at base of tail all white. The young birds are brown instead of black, and have the red of the neck and breast much paler, and the red patch on the sides of the head replaced by brown. The legs, bill, and eyes are all dark. This bird is about twenty-two inches long with the bill only about an inch, shank about two inches, and closed wing about fourteen inches. Conspicuous in

its harlequin plumage of tortoise-shell and white, this handsome Goose has attracted attention from the remotest times, for a representation of it appears in what is the earliest bird-picture on record, from an Egyptian tomb of about 3000 B C. In that part of the world, however, it is rare, though occurring as a straggler all over Europe, but its breeding home is in Western Siberia and it migrates to Persia and Turkestan. Blyth believed that an old record of it in the long-defunct *Oriental Sporting Magazine* of 1836 referred to it and as lately as March 1907 Mr E C S Baker actually saw five on the Brahmaputra, on which river Mr Mundy had previously seen the species, and given a recognizable description of the birds to Mr Baker.

*Of the non-Indian Asiatic geese there are quite a number of species.*

### The Bean Goose.

(*Anser fabalis* SALVADORI Brit Mus Cat., Birds, Vol. XXVII p 99)

This is a large goose about equalling the GREY LAG in size and with the neck feathering similarly pleated but not quite so heavily made. In colour it is dark brownish grey much browner than the GREY LAG and it has no grey on the shoulder of the wing. The bill which is of a good size—very stout in some individuals—is black at the base and on the nail and orange for the rest of its length. The amount of orange varies very much as does the size and depth of the beak especially the lower jaw. The legs are always orange and the eyes dark.

The length is nearly a yard with the closed wing nearly seven inches, the bill about two and a half and the shank nearly three, but the size varies very much. This goose ranges across the Northern parts of the Old World migrating south in winter. It varies a great deal and some authors divide it into several species according to the size of the bill and the amount of orange on this. The most distinct of these races is MIDDENDORF'S GOOSE (*Anser fabalis Middendorfi*), which is a very large bird with the head and neck light buffy brown, occurring in Eastern

Siberia. Then there is SUSHKIN'S GOOSE (*Anser neglectus*) a form like the BEAN GOOSE, but with a weaker bill, and with a pink bar on this and pink feet, which might easily be confounded with the Pink-footed goose.

## The Chinese Goose.

*Cynopsis cygnoides*, SALVADORI, Brit. Mus. Cat., Birds.  
Vol. XXVII, p. 107.

Is a large species, bigger than the gray, with long neck, with smooth plumage devoid of pleating, and with a large bill, flatter than is usual in geese, and inclined to be swollen at the forehead. This bill is entirely black, and the feet orange, a combination not found in any other goose. The plumage is of a lightish brown rather than grey, with the usual pale edgings to the feathers and white stern, but the most distinctive point about it is the dark-brown colour which covers the crown and runs down the back of the neck, contrasting sharply with the pale creamy colour of the rest of the head and neck. The total length of this goose is about a yard; the bill is three-and-a-half inches long, shank three, and wing about a foot-and-a-half.

Everyone who knows the common domestic goose of India and China, which is descended from this species, will recognize this description, but the tame bird often has a very decided knob on the forehead, especially in the male, and is more coarse and paunchy in form than the wild type, besides being often white or pied. The wild home of the CHINESE GOOSE is Eastern Siberia, China, and Japan, and it may be expected to occur on our eastern frontiers in winter sometime or other.

## Hutchins' Goose.

*Branta hutchinsi*, SALVADORI, Brit. Mus. Cat., Birds.  
Vol. XXVII, p. 114.

Like the BRENTS, next to be dealt with, belongs to a group with smooth necks and dark bills and feet, like the RED-BREASTED GOOSE. It is a rather small race of the well-known CANADIAN GOOSE of ornamental waters in Europe, now often found quite wild in Britain. It is about the size of the GREY-LAG, with the body-colour of a dark-brown with the usual light edges, the tail black, and the head and neck conspicuously glossy black with a white crescent on the throat, reaching up on the cheeks.

Its bill is rather over two inches long, and the shank three and-a-quarter; the wing sixteen inches; the total length is between two and three feet.

It is a North American bird chiefly but also found in North-East Asia, and visits Japan in winter.

### The Brent Goose.

*Branta bernicla*, SALVADORI, Brit. Mus. Cat., Birds, Vol. XXVII, p. 119.

*Kokugan* of the Japanese.

Is a small species, about the size of a large duck, and very dark in colour, the head, neck, and breast quite black, with a white bar on each side close below the head. The stern is, however, white as in geese generally; and the belly and flanks are smoky-grey, the latter more or less strongly marked with whitish tips to the feathers.

The length of this goose is about twenty-one inches, the bill about one-and-a-half, shank two, and closed wing just over a foot. It is a Northern bird, ranging from Europe to Eastern North America, and breeding in high latitudes; the four eggs it lays are creamy-white, and it builds near the sea, being purely a sea-bird, which feeds chiefly on sea-grass and other marine vegetation. On its winter migration it is found on the Japanese coasts. This is the chief wild-goose pursued by the gunner on British waters.

### The Black Brent.

*Branta nigricans*, SALVADORI, Brit. Mus. Cat., Birds Vol. XXVII, p. 123.

Is hardly more than a sub-species of the above, with the belly nearly as dark as the breast and the general tone of the back darker. The white neck-patches, however, meet in front. This is the characteristic BRENT of Western North America, but like the other, it visits Japan in winter.

### The Snow Goose.

*Chen hyperboreus*, SALVADORI, Brit. Mus. Cat., Birds, Vol. XXVII, p. 84.

*Haku-gan* of the Japanese.

Belongs to a group with grooved or pleated featherings of

the neck, and the tertiary quills rather long and pointed. The teeth of the bill show very plainly.

The *adults* is pure white with black pinion-quills and rose-pink bill and feet. The *young* is grey with the bill and feet dark greyish. The bill is about two and a half inches long, shank three and wing seventeen, the total length rather over two feet. This is properly an Arctic American bird, but also occurs in North Eastern Asia and may be found in Japan in winter.

### The Emperor Goose

*Philacte canagua* SA VADORI. Brit Mus Cat. Birds.  
Vol XXVII p. 109

Is a very distinct species, stout and heavy in build, with very short bill and short shanks. Its plumage is clear grey, with each feather tipped first with black and then with white. The head and back of the neck are white, the throat down to the breast dark brown. The bill is dark at the sides, pale flesh colour down the centre, and the legs orange. *Young birds* are less clearly marked and have the head and neck speckled. The bill is barely two inches long, the shank less than three and the wing fifteen. The total length is rather over two feet. This little known goose inhabits the northern shores of the Pacific on both sides. It is a sea goose, feeding on shellfish, sea weeds, etc.

## CHAPTER IV.

### **Mergansers.**

The three species which compose this sub-family are at once to be distinguished, as above stated, by the form of the beak, which in all is markedly narrow, shallow, and tapering, being more than twice as broad at the root as at the tip. Its edges are armed with teeth, of which the upper row are plainly visible even when the bill is closed, and the large nail takes up the whole of the tip and forms a hook. The nostrils are nearer the root than the tip, as in ordinary Ducks.

It is practically only the peculiar bill which marks these birds off at all from the true Ducks (*Anatinae*), and perhaps they hardly deserve sub-family rank, since, except for the form of the beak, they present no noteworthy distinction from the Golden-eye, which everybody would call a Duck. Still they have nearly always been given a separate position, and may retain it in this series.

Mergansers are about the size of or smaller than a tame Duck, and in general form, present a fair-sized head, a rather short neck, and a somewhat flat body. The wings are pointed, and if anything rather short, the tail rather long and rounded, and the feet are set far astern, with short shanks; these being much exceeded in length by the middle toe, to which the outer toe is about equal, giving a large foot. The hind toe is furnished on its lower edge with a flap or lobe of skin.

The plumage of the Mergansers is pied, and very different in the two sexes, the males being black and white and the females grey, brown and white. The



young resemble the female, and so does the male when in the undress plumage which he puts on for a time after breeding.

At the lower end of the male's windpipe there is a curious hollow enlargement, partly of bone and partly of membrane, the *bullæ ossea* or drum, and in the case of the Red-breasted Merganser, it has been noticed that in the pairing season the male alone emits a singular low hollow note. The ordinary voice of Mergansers is rather a croak than a quack.

Mergansers are swift and powerful swimmers and excellent divers, most of their time being spent on the water. On shore they move about very little, but are more active than most diving Ducks, their flight is swift and powerful, though the Goosander rises with difficulty. They are the most carnivorous of the family, feeding on fish and other water animals, and regarded as food themselves are but indifferent, though probably edible enough if the skin be removed, I have only tried the Red-breasted. Their nests are placed under cover, either in holes of trees or on the ground, their eggs are numerous, and creamy or greenish white or buff in colour. One species, the Goosander, breeds within Indian limits in the higher Himalayas, migrating in winter to the base of the range; but the other species, the Red-breasted Merganser and Smew, are migrants only, breeding to the northward of our area.

The Goosander and Smew are fairly common, but the Red-breasted Merganser is one of the rarest of Indian waterfowl, though probably commoner than is supposed.

The Goosander and Red-breasted Merganser very closely resemble each other and differ much from the Smew, for which reason these two are placed together in one group (*genus*), while the Smew, having no very near relative, occupies a genus by itself. The three birds are very easily distinguished by their beaks as follows:—

In the *Smew*, the beak is only about an inch-and-a-half long, and grey, the beaks of the other measure between two and three inches, and are red, more or less dark along the ridge

The *Goosander's* beak is shorter and thicker than that of the *Red-breasted Merganser*, and has fewer teeth, these numbering, in the upper chap, about fifteen between the nostril and the nail, while in the *Red-breasted Merganser's* longer and thinner bill there are about eighteen teeth between nail and nostril

Besides the difference in length and colour of bill, the *Goosander* and *Red-breasted Merganser* agree with each other, and differ from the *Smew*, in the following points. The teeth of the bill point slantingly backwards, instead of being perpendicular as in the *Smew*, the beak is much narrower, and has the nostril nearer the root than in that bird, the shortness of whose bill brings the nostril nearly as far forward as in a *Goose*, the feet are red or orange, while in the *Smew* they are grey, the bulb in the windpipe is larger, and they are very much larger birds.

## The Goosander.

*Merganser castor*, BLANFORD, Faun Brit. Ind., Birds, Vol IV, p 469.

VERNACULAR NAMES —None in Ind, in Yarkand  
*Ala ghaz aurdak* (Pied Goose-duck).

The *male* and *female* differ very much in this species, in the former there is a short, bushy, silky, mane-like crest, while the *female's* crest is much longer and more straggling; the shoulder plumes (*scapulars*) and inner quills (*tertials*) in the *male* are long and pointed, shorter in the *female*.

In colour the *male* is mostly white, but the head and upper neck are deep green-black, the upper back,

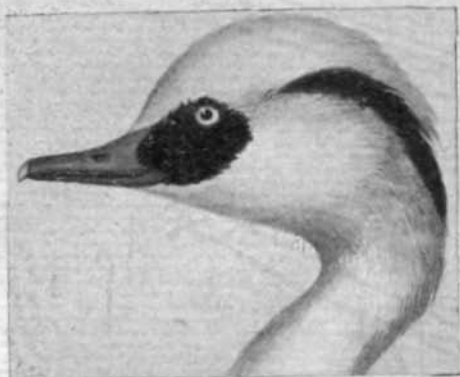
scapulars, and narrow edges of tertials are black, the front edge of the wing is black and white, the pinion quills (*primaries*) are greyish-black; the tail and the middle of the lower back are slaty grey, and the sides of the lower back are pencilled with that colour on the white ground. The white lower plumage is sometimes washed with a beautiful salmon-colour, but this is not always present, and disappears in preserved skins.

The *female* is clear slate-grey above, this colour gradually passing into the white of the breast and rest of the underparts; the primary quills are grey-black as in the male, and the quills of the forearm (*secondaries*) and their coverts white, with the exception of the inner ones or tertials, which are grey like the back. The head and neck are chestnut, with the crown greyish brown and the throat white.

The *male* in undress, and the *young*, closely resemble the *female*; but the *young* are duller, and the male has a dark ring round the neck, and in undress a darker back and whiter wings. The red of the bill and feet is less bright in the *female* than in the *male*, and the feet are orange in the *young*. The eyes are red in old males, brown in others.

The male is about two feet long, with the wing about eleven inches, the beak about two-and-a-half, and the shank about two; in the *female*, the wing is about an inch less.

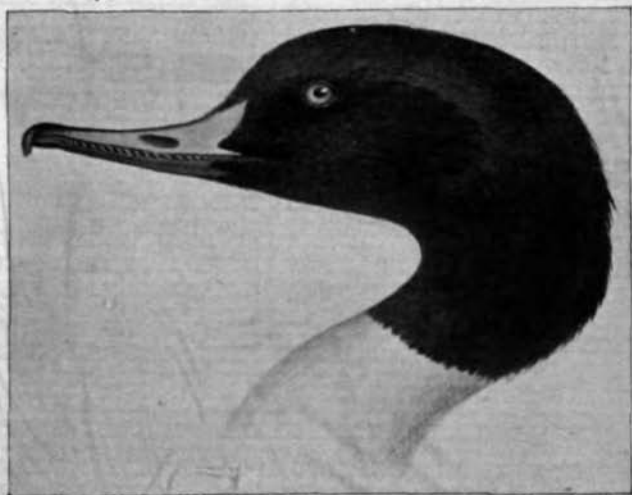
The Goosander inhabits the north temperate region in both hemispheres; in India it breeds, as above stated, in the higher Himalayas, migrating in winter to the base of the range, the hills south of Assam, and the country between the Ganges and Godavari; it has also occurred at Myitkyina in Northern Burma, and is said to have been shot on the east side of Bombay harbour. It is found in pairs in summer in the Himalayas, and in flocks in winter, frequenting rivers and lakes. Young have been taken in the hills in June



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**Smew.**

H. Grönvold, del.



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**Goosander.**

H. Grönvold, del.

and July, but never eggs. The bird breeds either on the ground in long grass or bushes or among stones, or in holes and stumps of trees, most frequently the latter. Mr. Hume thinks it probable they breed in rocks with us. The eggs are buffy-white, and from seven to twelve in number.

The Goosander is very voracious; a captive bird I had under observation devoured no less than forty fish, about two inches long, at a meal. No "castings" were found, but bones and all were digested as by a Cormorant, and the excreta were semi-fluid and very fetid. The stomach of this bird proved to be soft throughout, not hard and muscular like a Duck's gizzard. The teeth must be very useful in retaining fish, as the bird has no particular power of grip in the bill compared with other fish-eating birds, such as Cormorants.

The Goosander is said to be fair eating it stewed with rich sauce—a thing worth knowing, as it often occurs where no other Duck is found.

### **The Red-breasted Merganser.**

*Merganser serrator*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 470.

VERNACULAR NAMES.—None known.

This Merganser is a smaller bird than the Goosander, but has a longer and narrower bill, with more teeth, and less hooked at the tip. The sexes differ structurally in just the opposite way to those of the other species, the *male* Merganser having a long straggling double crest, consisting of an upper and lower portion, and the *female* a shorter one. The *male* of this species resembles in general the male Goosander in colour and markings, with the following noteworthy differences:—The back is more black, the breast is reddish brown with ill-defined black streaks; the whole front edge of the

wing is grey, and there are two black bars across the white part there is a patch of white black-edged feathers just in front of the armpit and the lower part of the back is finely pencilled with black and white, this marking being continued more coarsely on the upper flanks

The *female* is very like the female Goosander, but is of a dull mottled brownish grey instead of the clear pale bluish grey of that bird the head is not so reddish, and the white of the throat is duller and less clearly defined and the white patch on the wing formed by the secondaries and their coverts is crossed by a black bar this occupying the same position as the shorter of the two black wing-bars of the male

The *young* and the *male in undress* closely resemble the female

Young birds and females have less bright red feet than males, and there is more black along the ridge of the bill in these the male has bright red eyes The male of this species is about twenty-two inches long, with a wing of about nine and three-quarter inches, and shank nearly two bill about two and-a-half The female is smaller

This species of Merganser, like the Goosander inhabits the north temperate zone of both worlds breeding in the north and wintering to the southwards It is a ground breeder, laying eight or more dirty buff eggs It has only occurred in India twice so far as is known, but probably often gets confused with the Goosander There are, Dr Blanford informs us, in the British Museum the wings of one obtained at Karachi by Major Yerbury and in the Indian Museum there was a good skin of a female or young male specimen obtained in the Calcutta bazaar on December 17th, 1889

## The Smew.

*Mergus albellus*, BLANFORD, Faun Brit Ind,  
Birds, Vol IV, p 467

VERNACULAR NAMES—*Nihenne*, H, Etawah,  
N-W P

The *male* Smew is at once distinguished from all other Indian wildfowl by its striking plumage, which is nearly all white. The head, neck, and lower parts are white; but there is a black patch from the bill to behind the eye, and another at the back of the head. The upper back is black, and a black line runs from this at each shoulder down the breast, the scapulars are white with black oblique bars at the tips. The black of the back shades into the grey of the tail-coverts and tail and the white flanks are pencilled with black. The wings have a black front edge and white "shoulders." The primaries are brownish black, the secondaries and their coverts black, with white tips forming two bars, and the tertials grey and not very long.

The *female* is dark grey above, this colour extending, mixed with white across the breast. The head is chestnut with a black patch on the face, and the throat and front of the neck white. The wings are black and white as in the male. The crest is shorter than in that sex.

The *young birds* are like the female, but have no black patch on the face, and the white patch on the wing is clouded with brown. The *male in undress* is also very like the female, but shows the dark bands on the breast. The eyes are brown, but sometimes at all events white in males. The bill and feet are grey, not red as in the other Mergansers. The male is about sixteen inches long, with a wing about eight, bill about one and-a-half, shank one and-a-quarter.

The Smew is confined to the old world, breeding far north, and visiting in winter Central and Southern

Europe, Central Asia, China, and Northern India. With us it is fairly common in the Punjab, and occurs also in Sind, Northern Guzerat, the North-West Provinces, and Oudh. It has also been recorded from Cuttack, and Dr. Blanford has met with it near Raniganj in Bengal, but it has not been observed further east, nor in Southern India.

This is a particularly neat-looking and trimly-built little bird, the most active and vigorous of all our wildfowl. While, as one might expect from its build, a splendid diver, it, as would hardly be guessed from its small wings and large feet, rises readily and flies easily, and gets about nimbly enough on land, where, however, it seems to be very rarely seen in a wild state—I judge from captives in the London Zoo. It builds in holes in trees, laying about half-a-dozen very polished creamy white eggs. It is found in India in flocks, and most of the birds seen there are immature. The flesh is said to be very bad indeed, it being, according to Pallas, “*pisculentissima*”

### The Scaled Merganser.

*Merganser squamatus*, SALVADORI, Brit. Mus. Cat., Birds, Vol. XXVII p. 478.

This little-known Chinese species is to some extent intermediate between the GOOSANDER and RED-BREASTED MERGANSER, which it closely resembles in general appearance. The male, however, is readily distinguishable from either species by having the black of the head continued down to join that of the upper back, and by the lower black and the flanks being marked with black concentric lines on a white ground, giving a scaly effect. The breast and abdomen are white with a salmon flush in the living bird, as in the Goosander. The crest, however, is double, as in the RED-BREASTED species, and there are also two black bars across the white of the wing.

The female is very similar to the female Goosander, but can be recognized by the double crest.

In size this species is very like the Goosander, the male being two feet long, with the bill about two and-a-half



inches shank nearly two and wing just over ten, the female being smaller

For many years this MERGANSER which is found in China was only known by a young male procured in 1864 but in 1898 an adult pair were procured by Captain Wingate, and figured in the 'Ibis' for 1900. These came from South West HUNAN and since then the species has been found in Yunnan and Western Szechuen so that it may be expected sooner or later to turn up within Indian limits

## CHAPTER V

### True Ducks.

THERE IS no single character marking off this sub-family, which includes the vast majority of species, as there exists in it an infinite variety of form, adapting the birds to various conditions of life—some of the true Ducks being as much land-birds as the Geese, while others are as aquatic as the Mergansers or even more so. Moreover, the plumage and even size varies immensely according either to species or sex.

The members of this sub-family, however, may nevertheless be easily distinguished from those of the others by negative characters, as pointed out in my introductory chapter. They never have like Swans, *excessively* long necks nor equal a tame Goose in size, nor (except in the Golden-eye) are the nostrils ever set as far from the root of the bill as from the tip, as in the Geese nor do their bills ever show the very narrow form found in the Mergansers, with the tip less than half as broad as the root.

In most cases, however the bill of a true Duck will at once distinguish it from any member of the family except a Swan with which there is no danger of any confusion. A Duck's bill is normally broad and shallow, especially towards the tip of which the nail, as a rule forms the centre only and is turned down into a more or less marked hook. the nostrils are near the base, and the lower chap is so much smaller than the upper that it shuts quite into it, and cannot be seen from the side, while in most Geese and in Mergansers it is quite visible when the bill is shut. The sides of the bill are parallel, or it enlarges towards the end, tapering in a few

cases only, and then not much. The armature of its edges is a sifting apparatus in the form of rows of plates or ridges, the ends of those belonging to the upper chap being sometimes, but rarely, visible when the bill is closed

All true Ducks have a bill of this type, but of the other sub-families the Mute-Swan and the Bar-headed Goose have a very similar one, these, however, need no more to be mistaken for Ducks than the latter, when possessed of an eccentric beak, for Swans, Geese or Mergansers

The males, or drakes, in this sub-family generally possess the bulb or drum at the base of the windpipe alluded to in my account of the Mergansers, and this varies in form according to the genus and species, the voice of the drake differs accordingly from that of the duck. They are larger than the females, sometimes only a little, but occasionally very much so. They may either resemble them closely in plumage, or differ from them so much as hardly to be recognizable, and there are gradations between these two extremes. As a rule, where the difference exists, the male after breeding assumes a plumage resembling more or less completely that of the female. The young usually resemble her, but may have a special plumage of their own, differing from that of either parent.

In consequence of all these variations, although the drakes in full plumage are remarkably easy to distinguish, it is a matter of some difficulty to find characters which will discriminate every species irrespectively of age, sex, or season. This, however, can be done if attention be paid to details. The fact should be specially noted that in the true Ducks, as in the Mergansers, the secondary quills and their coverts are very commonly so coloured as to produce a wing-bar (*speculum*) or ribbon mark, especially conspicuous when the wing is closed. This is common as a rule to all individuals of

the species, though occasionally less developed in females and young.

In habits, as above observed, Ducks vary exceedingly in addition to their varying attachment to the water, and the corresponding difference in their powers of locomotion there and on land, there is much diversity in their nesting-habits, most breeding on the ground, while some select trees, and these usually perch freely, though from the formation of the feet they cannot move about among the boughs so easily as do most perching birds. Most breed out of India, to the north, but, except the Goosander, all the few resident Indian water fowl belong to this sub-family.

In diet Ducks are omnivorous, though some species are more vegetarian and others more carnivorous than others, grain and shell-fish find especial favour with them. The ridging of the bill enables this organ to be used very effectively for straining small items in their dietary from mud or water. Some feed below the surface, plunging for their food, while others only tilt up their tails and reach down, maintaining their position by padding with the feet.

As there are no less than twenty-nine species in this sub-family, their discrimination is a matter of more difficulty than that of the others. I shall, however, divide them for convenience into manageable groups separated by easily appreciable characters. And in the descriptions of the species I shall avoid as far as possible describing the often complicated colouring of the plumage in too much detail, while laying stress on the salient points of the species.

According to their build and (more or less) corresponding habits, we may divide the true Ducks into diving Ducks, Goose-like Ducks, and ordinary surface-feeding Ducks, groups easily recognizable.

The *diving* Ducks are at once marked off by their large feet, which have the outer toe as long as or even

longer than the middle, and the hind toe with a deep lobe or flap, so as to be leaf-like in outline, as in the Mergansers.

All the others have the outer toe markedly shorter than the middle, and the hind toe with a narrow lobe or none at all.

The *goose-like, or walking and perching Ducks* have either a short bill or long shanks, or both, the bill being about the length of the shank; other Ducks have it noticeably longer than the shank.

All of the rest, the *ordinary surface-feeding Ducks*, have rather short shanks and moderate-sized feet, with the outer toe shorter than the middle, and the bill longer than the shank. Most of the species belong to the sub-division of the sub-family.

To take the *diving Ducks* first: in addition to the peculiarity in the formation of their feet, which is manifestly designed to increase the effect of the outward and backward stroke in diving, they are noticeable for their squat form and short necks, wings, legs and tails, the shank is much shorter than the middle toe, and the wings are pointed, and bear a white bar or none at all. They are fine divers, and get their food largely by plunging for it; they do not come ashore much, and walk clumsily, the feet being set far astern. They usually show less difference between the sexes than most surface-feeders do; the bulb in the male's windpipe is partly of bone and partly of membrane. They are often poor eating. They number eight species, divided into four genera, which are very easily distinguished as follows:—

The *Golden-eye* is marked off at once by its forwardly placed nostrils, these being actually nearer to the tip of the bill than to the root.

The *Stiff-tail* by its peculiar wiry tail-feathers, scanty tail-coverts, and very short wings, the primaries not

showing when these are closed. The others have ordinary bills and tails, with wings, though small, of reasonable size.

The *Red-crested Pochard* is distinguished by its more or less red or orange feet, while the *ordinary Pochards* (five species) all have grey feet. I shall treat of their distinctions *inter se* when I come to them in their turn.

## The Golden-eye.

*Clangula glaucion*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 464

VERNACULAR NAMES — *Burgee* Panjab

In addition to the peculiarity of its forwardly-placed nostrils, the Golden-eye's bill is remarkable for its shortness and depth at the root — it lowers rapidly to the tip, and the sides also taper somewhat. The wings and tail are rather long for a diving-duck's but narrow, the shanks short, and the feet very large, the middle toe being about twice the length of the shank.

The *male's* plumage is mostly white, but the head is dark glossy green, with a white patch on each side at the base of the beak; the back, edge of the wing, primary and tertiary quills are black, the scapulars are white with black edges, and the tail dark grey or black.

The *female* is dark grey where the male is black, and has a dark brown head with no white on the face, and the white of the wing mixed with dark, the grey of the upper surface extends more or less across the breast.

The *young* and the *male in undress* resemble the female, but males are whiter on the wings according to age.

The bill is black in the male, blackish in the female and young, sometimes with a yellow patch at the tip in

these latter. The eyes are yellow, and the feet yellow with black webs.

The male is about seventeen inches long, with a bill of about two inches, wing nine and shank one and-a-half. Female considerably smaller.

The Golden-eye inhabits the north temperate and sub-arctic regions of both hemispheres, breeding far north and migrating south in winter; it is rare in India, but several specimens have been obtained in the Indus Valley, which it apparently visits regularly, and one in Oudh. The Indian Museum also contained a specimen from Sibsaugor, Assam; and according to a writer in the Rangoon Gazette, November 26th, 1908 it occurs regularly in small flocks on the Irrawaddy.

This species is an active bird, a fine diver and a swift flyer, the wings producing a strong whistling sound in flight. It seldom comes ashore, but can walk well enough. It feeds mostly on animal food, including small fish, and is itself very fishy eating. It breeds in holes of trees and lays about a dozen greyish green eggs. In the structure of its breastbone and windpipe, as well as in plumage and habits, it resembles the Mergansers, and is undoubtedly the nearest ally of that group.

## The Stiff-tail.

*Erismatura leucocephala*, BLANFORD. Faun. Brit. Ind., Birds, Vol. IV, p. 466.

VERNACULAR NAMES—None known.

This is a most remarkable-looking Duck, *very* short and squat in build, with a broad bill very high and angular at the base, and suddenly sinking towards the end, with the very small nail bent underneath at a sharp angle. The bill is much broader at the end than at the base.

The wing is pointed and absurdly short and small the primaries not showing when it is closed, the tail varies in length, but the feathers are noticeably very narrow and stiff, and the tail-coverts, usually so full in Ducks short and scanty, giving the tail the appearance of being stuck in. The short legs are set far back and the feet enormous, the middle toe being fully twice the length of the shank. The plumage is equally characteristic, being finely pencilled above with black on a reddish ground in both sexes, and silvery buff below, the dark bases of the feathers showing. Some specimens are much redder than others.

The *male* has a white head with a black crown, and a blackish neck, the upper tail-coverts are chestnut.

In the *female* the head is blackish with the throat and a stripe under the eye white. the tail-coverts are pencilled like the back. It is apparently about the size of the male.

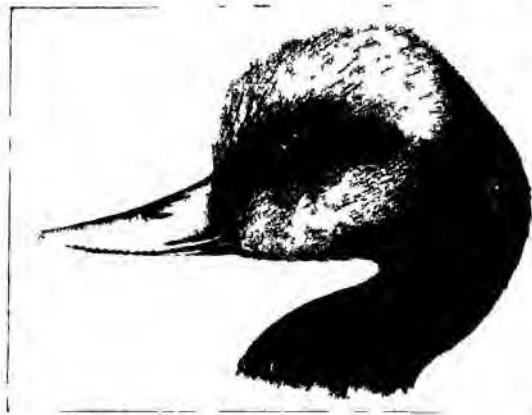
*Young birds* resemble the female.

The male's bill is sky-blue, that of the female and young greyish black, the eyes are dark and the feet grey with black webs.

The length is about fifteen inches, bill about two, shank about one, and wing only about six.

The Stiff-tail is found from the Mediterranean to Central Asia, and is generally resident. Stragglers have occurred from Western Europe to India. It has been found in Kashmir, at Peshawar, near Ludiana, Delhi and Roorkee, at Mardan, in Gilgit, in the Calcutta bazaar (twice to my knowledge) and near Hardoi. The bird shot in the last locality, by Captain E. D. White, was in full moult in January, and quite unable to fly, so that this species is doubtless resident in India as the Indian migratory waterfowl are through their moult long before the time. In habits the Stiff-tail resembles a Grebe rather than a Duck. It is more ready to dive





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**Red-crested Pochard.**

H. Gronvold, del.



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**Golden-eye.**

H. Gronvold, del.

than to fly; swims low, with its tail raised, and is said to be unable to walk, but this I doubt, though I have only had a cripple to study; at any rate, the Australian Musk-duck (*Biziura lobata*) which is one of the Stiff-tailed group, walks well enough, but with the gait and semi-erect attitude of a Cormorant. This bird resembled a Grebe in its remarkable tameness and in its constant pluming of its feathers. It builds among reeds or grass, and lays seven to nine eggs, of white colour and remarkably rough coarse surface. The male has no bulb in the windpipe, as was long ago recorded by Pallas.

### The Red-crested Pochard.

*Netta rufina*, BLANFORD, Faun. Brit. Ind., Birds,  
Vol. IV, p. 456.

VERNACULAR NAMES.—*Lal-chonch*, *Lal-sir*, H.;  
*Hero-hans* (male), *Chobra-hans* (female), Beng.;  
*Dumar* (male), *Sanwa* (female), Nepal;  
*Ratoha*, Sind.

This species differs more from any of the other Pochards than these do from each other, and on that account is placed in a separate genus, though it is far less distinct from them than are the Golden-eye and Stiff-tail, and had better, I think, have been left in the same group. It is the biggest of the Pochards, and further remarkable for its large powerful bill, with the sides tapering or at least parallel, and the ridges lining it few and large, the ends of those belonging to the upper chap showing when the bill is closed. It is more slightly built than Pochards in general, and has the head-feathering thick and full, especially in the male, which is altogether different in plumage from the female. The young resemble her. The red or orange colouring on the bill and feet is characteristic.

The *male* has a full soft bushy crest of a yellow-buff colour, the rest of the head being of a beautiful pinkish chestnut, the upper surface is plain light brown, with two white patches in front of the wings, there is a wing-bar, white in front and pale grey behind, and the pinion-quills are white on the inner edge. The lower surface from the neck is black, as are the rump and shoulders, the sides and wing-lining are white washed with salmon-pink in birds in fullest plumage.

The bill is pinky scarlet, the eyes red, and the feet orange-red with black webs.

The *female* has less of a crest, and is light brown above and dirty white below from chin to tail. The wings are coloured as in the male, but less purely. The legs are not so bright as in the male, the eyes brown and the bill black, reddish towards the tip. The *young* and the *male in undress* are like her, but the male retains his red bill. I once saw a female in the Calcutta bazaar with a white face like a female Scaup.

The male is about twenty inches long, with an eleven-inch wing, and shank nearly two inches, bill rather over two. The female is smaller.

The Red-crested Pochard breeds in Southern Europe and North Africa, near the Black and Caspian Seas, and in Persia and Eastern Turkestan. It lays about eight eggs of a greenish grey colour. Throughout Northern and Central India it is found in winter, but is rare in the Deccan and further South. It is found in Assam and Manipur, and is believed to occur in Ceylon and in Burma.

It is a good swimmer and diver, has a strong flight, lighter than that of Pochards in general, and it also comes ashore more than other Pochards, walking better on land than these. It is often found in very large flocks on arrival at the beginning of the cold weather, but these afterwards break up into smaller parties. As an article

of food it varies, being sometimes good, but often poor eating. Like most other Pochards, it breeds outside India, and its note is a deep grating *kurr*, rather a croak than a quack. The male has the bulb of the windpipe partly of bone and partly of membrane, he sometimes whistles, this sound being apparently not made by the female.

The other five Pochards (genus *Nyroca*) form a very recognizable and uniform group. They all have grey and black bills and feet, and are clumsily formed, with large close-feathered heads. Except the Common or Red-headed Pochard, all have a white wing bar formed by the secondary quills, and the inner primaries at least mostly white internally. The males, from their few and striking colours, are remarkably easy to distinguish, but the females are more alike, though less so than is usual in surface feeders. The young so resemble each other that their discrimination is the only real difficulty in the study of our Indian Ducks, they have generally a distinct plumage of their own in this stage. The male's *undress* does not differ so much from his ordinary garb as is usual in Ducks.

All of them have bills which broaden more or less towards the end, and the male's windpipe has a drum partly of bone and partly of membrane. The note is a harsh croak, like "*kurr*," and is seldom heard. They are all excellent divers, feeding under water, difficult to retrieve if only wounded, and more or less clumsy on land, where they seldom venture. Their flight is laboured, and they rise with difficulty as a rule.

Independently of age and sex, they may be distinguished as follows —

The *Red-headed Pochard* has no white bar on the wing as above stated.

The *Tufted Pochard* usually has a narrow crest, of varying length according to age and sex.

The *Scaup* has a bill very broad towards the tip, its width at the widest part being more than equal to the distance between the front edge of the nostril and the nail, while in the others (except the Tufted, whose crest and smaller size distinguish it) it is less.

The Common and *Eastern White-eyes* have no crest and an ordinary-shaped bill; they are distinguished by the colour of the crown, the Eastern White-eye having this dark green or blackish, while it is plain or red-brown in the other, which is also smaller.

### The Red-headed Pochard.

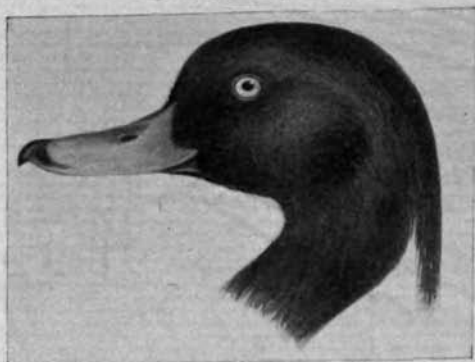
*Nyroca ferina*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 458.

VERNACULAR NAMES.—*Burar-nar*, *Lal-sir*, H.; *Lal muriya*, Beng., *Cheun*, Nepal; *Thording-nam*, Manipur.

This is a very ungainly looking Duck. The bill is long and rather narrow, the head and feet very large, and the tail and wings short.

The *male* is at once known from any Indian Duck by his conspicuous tri-coloured plumage, the head being rich chestnut red, the breast, rump, and stern black, and the body pale clear grey, this colour being produced by a fine pencilling of black (grey on the wings), the white prevailing below.

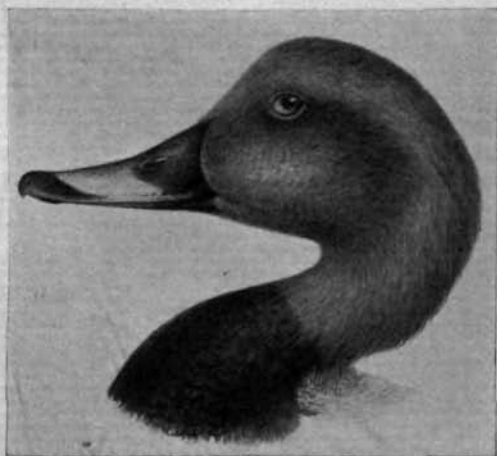
The *female* (sometimes called the Dunbird) has a nut-brown head and breast, shaded with white about the cheeks and throat, a dark dirty grey body, the pencilling less marked and on a darker ground, and replaced by dark and light mottling below, and tail-coverts not so black as in the male. Both have a plain inconspicuous grey wing-bar. The *young* appear to resemble the female, but are browner, at any rate below, and the *male in undress* retains much of his full colour, merely getting



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**Tufted Pochard.**

H. Grönvold, del.



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**Red-headed Pochard.**

H. Grönvold, del.

a browner head, a dark pencilled grey breast and duller tail-coverts.

The male has bright red or, rarely, yellow eyes, the female, usually, at all events, brown ones, the bill and feet are grey and black, *as in all Pochards of this genus*, lightest and brightest in old males

The male is about seventeen inches long, with a wing of about eight and-a-half inches, shank an inch and-a-half, and bill just over two The female is smaller

This Pochard inhabits the whole north temperate zone in the Old World, breeding to the north, and migrating southward in winter, when it visits Northern India in large numbers further south it is less common, but occurs as far as Bellary It has not yet been obtained in Mysore or farther south, nor in Ceylon, but is not uncommon in Assam and Manipur, and has been recorded from the neighbourhood of Mandalay

This Pochard swims particularly low in the water, and very much down by the stern, it looks ungainly in the extreme on land, but walks well enough when there, it seems to rise on the wing with considerable difficulty. Like all Pochards it is a ground breeder, its greenish-grey eggs may number as many as twelve A male's eyes have been observed to change colour from red to yellow when it was handled It usually occurs in India in large flocks, frequenting especially large tanks or jheels, but also the sea-coast Away from this, it is one of the best Ducks for the table, and might well be called the Indian Canvas-back, since the celebrated American Duck of that name so closely resembles it that an unfortunate poulterer in England who had received Canvas-backs from America in ice was actually prosecuted for selling Pochards in close time! The Canvas-back (*Nyroca vallisneria*) is, however, very much bigger than our Pochard, darker on the head and lighter below, and with an entirely

black bill. Another Pochard also occurs in America still more like our bird (*N. americana*) ; this has yellow eyes and less black on the bill.

## The Scaup.

*Nyroca marila*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 462.

VERNACULAR NAMES.—None known.

This species is very like the Red-headed Pochard in size and general pattern of colour, but has a shorter and very much broader bill, this being much wider at the tip than at the base.

The *male* has a deep black-green head, and a black breast, rump, and stern ; the body is coarsely pencilled black and white, and the quills black with a white bar on the secondaries and white shading on the inner primaries ; the belly is white.

The *female* has a brown head and breast, the latter gradually passing into the white of the belly ; there is a white band round the root of the bill ; the pattern of colour generally is the same as the male but with brown instead of black ; the *male in undress* has a similar plumage.

The *young* are of a general dirty brown colour with a white face as in females, and with brown and white wings like theirs ; the belly is also white. The eyes are always yellow in this species, apparently, certainly in males.

The Scaup inhabits the whole of the north temperate zone, breeding to the north and going south in winter. It lays eight or nine dirty buff eggs. It is chiefly, in Europe at all events, a salt-water bird, and it is probably for this reason that it has been very rarely recorded from India. But it has occurred in Kashmir,



Kulu, Nepal, the neighbourhood of Attock, Gurgaon near Delhi, Karachi, and Bombay.

### The Tufted Pochard.

*Nyroca fuligula*, BLANFORD, Faun. Brit. Ind., Birds, Vol. IV, p. 463.

VERNACULAR NAMES.—*Dubaru*, *Ablak*, *Rohwora*, H.; *Turando*, Sind; *Maluc*, Nepal Terai; *Nella Chilluwa*, Tel.; *Neer bathoo*, Tamil; *Neer-kolee*, Canarese.

This is, if not a graceful, a neat-looking little Duck, with a short bill, much broadened towards the tip as in the Scaup, and a very compact "tubby" form; the head has a narrow crest, small in females and very small in young, but long and tassel-like in full plumaged males, in which it hangs far down. The male is easily distinguished by his black and white colouration, nearly the whole plumage being black, but the belly and sides are pure white, there being also the usual white on the quills. The inner quills are glossed with green, and the head with purple. In *undress* the crest is shorter and the flanks clouded with a black pencilling.

The female has the same distribution of colour, but the white is not so extensive or so clearly defined, and the black is replaced by more or less deep brown, the lightest birds having least white on the flanks, which may be entirely dirty brown. The difference probably depends on age. Some females have white on the fore-part of face, much as in the female Scaup.

The young bird has a general dirty light brown colour with dark-brown wings marked with white as in the parents.

The eyes are yellow in this species; rich orange yellow in old males, paler in females and young, in which latter they may even be white or brown. Hence this bird is