



A COLOURED  
**KEY TO THE WILDFOWL**

OF THE WORLD

By PETER SCOTT

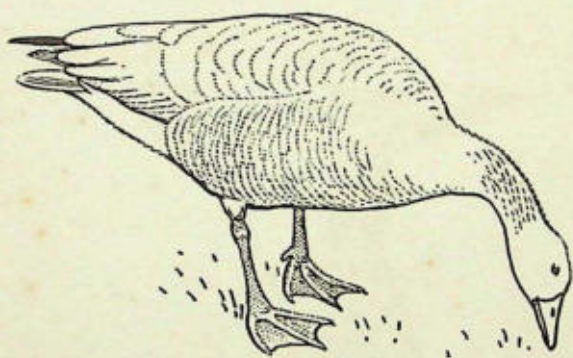


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PETER SCOTT



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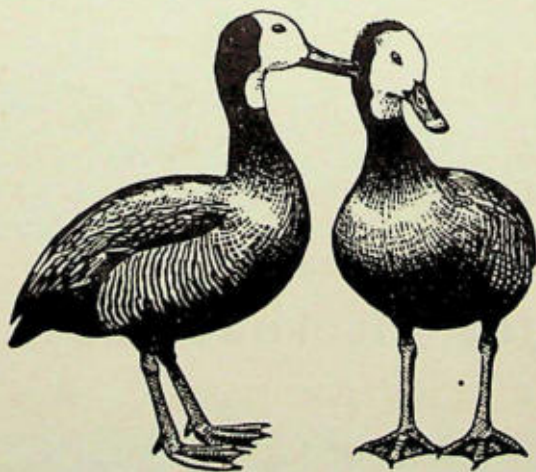
*A Key to the Wildfowl of the World, containing black and white drawings only, was first published in the 2nd Annual Report of the Severn Wildfowl Trust, 1948-49. It was reprinted as a separate book in 1950, revised and reprinted again in 1951.*

*This coloured version first published in 1957 amounts to an entirely new publication. Substantial additions have been made to the text and there has been further extensive revision in the light of the most recent taxonomic opinion.*

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## ACKNOWLEDGEMENTS

The classification used in this Key is basically that of Delacour and Mayr (*The Family Anatidæ*, Wilson Bulletin Vol. 57, pp. 3-55, 1945) with some modifications, mostly those of Delacour himself, published in the first two volumes of his *The Waterfowl of the World* (1954, 1956) and incorporated in the MS of the third volume. The notes on geographical distribution have largely been compiled from the book by Delacour, from Peters (*Check-List of Birds of the World*, vol. I, 1931) and from Hellmayr and Conover (*Catalogue of Birds of the Americas*, part 1, no. 2, 1948). Acknowledgements are made to the authors of these works.

I am grateful to Hugh Boyd for help in the revision of the notes on distribution and in compiling the introductory Key and the index.



## INTRODUCTION

In this Key there is a coloured picture of every kind of duck, goose or swan so far known to exist in the world—247 kinds. The object of the book is to enable anyone, even without previous experience, to identify any bird within this group (called the family *Anatidæ*) which they may see, and to discover its geographical range. It assumes that the bird has been seen at reasonably close quarters on the ground or on the water. The illustrations mainly show the birds in full breeding plumage. From June until October the drakes of many of the species of ducks from the Northern Hemisphere go into a dull “eclipse plumage”, which includes the period when the flight feathers are moulted and the birds are flightless. In this eclipse plumage the male in most cases looks very much like the female. The appearance of the females shows no striking change during the year, although it is sometimes affected by wear and tear of the feathers.

Where only one bird is shown as representative of each kind, as in the swans, geese, whistling ducks, etc., the sexes are virtually the same in plumage or, as in certain species of ducks, very similar but with the female slightly duller. In a few cases the female is so similar to that of a closely allied race that she is omitted in order to save space.

In the Key that follows and against the birds in the plates the conventional signs have been used to indicate sex, thus:

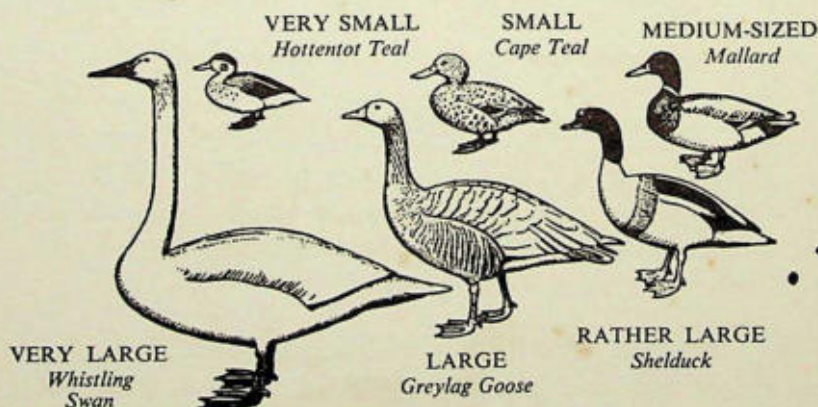
$\sigma$ = male	$\text{♀}$ = female
$\sigma\sigma$ = males	$\text{♀♀}$ = females

## HOW TO USE THIS KEY

Each plate shows a group of species which are regarded as being particularly closely related so that in general the birds most likely to be confused with one another are shown on the same page. As a quick guide a certain number of basic characters such as size, shape, colour, behaviour and voice may give a clue to the page you want.

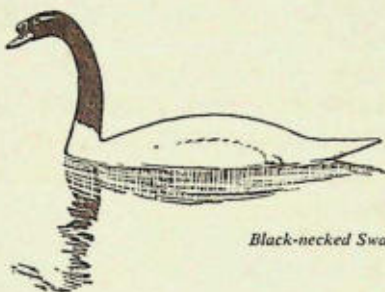
See, first of all, whether you can allocate the bird you are trying to identify to one or more of the headings on the following pages, and then see if you can trace it to a particular plate. Once you have the right plate there *should* be no great difficulty in making a final identification.

### RELATIVE SIZES



# 1. SIZE

	<i>Plate No.</i>
<b>Very Large.</b> <i>Swans</i> (white, or white with black head and neck, or black; young grey or light brown)	2
Large races of <i>Canada Goose</i> (brown with black head and neck and white cheeks) ..	5
<i>Spur-winged Goose</i> ♂♂ (black and white; rather ugly) .. .. .	19



*Black-necked Swan*

<b>Large.</b> <i>True Geese</i> ("Black Geese", "Grey Geese", <i>Snow Geese</i> , <i>Emperor</i> and <i>Barhead</i> ) .. .. .	3, 4, 5
<i>Sheldgeese</i> (long legs; upright stance) and <i>Steamer Ducks</i> (heavy bills) .. .. .	6, 7, 8
<i>Magpie Goose</i> (black and white; untidy-looking) .. .. .	1
<i>White-winged Wood Duck</i> , <i>Muscovy Duck</i> (long body, short legs) .. .. .	19
<i>Comb Duck</i> ♂♂ (black with white head and breast, head spotted with black; comb on bill)	19
<i>Spur-winged Goose</i> ♀♀ (black and white) ..	19



*Muscovy Duck*

<b>Rather Large.</b> <i>Cuban Whistling Duck</i> (long legs, spotted flanks; rather dark) .. .. .	1
<i>Shelducks</i> and <i>Sheldgeese</i> (long legs, upright stance) .. . . .	6, 7
<i>Andean Crested Duck</i> (short legs, long body and tail; brown, with small crest at back of neck) .. . . .	8
<i>Eiders</i> (thick-set, with massive bills; females brown, males black and white with light green on heads) .. . . .	15
<i>Goosander</i> ♂♂ (long, thin red bill hooked at tip; largely white body, head black; dive often)	22
<i>Goosander</i> ♀♀ (long, thin, reddish bill, grey body, brown head with crest at back; dive often) .. . . .	22
<i>Musk Duck</i> (sooty-black, very broad; male with lobe hanging from bill) .. . . .	23



Eider

<b>Very Small.</b> <i>Hottentot Teal</i> (black crown, cream cheeks with dark patch; bluish bill) .. .. .	9
<i>Ringed Teal</i> (♂ breast pink, flanks blue-grey, chestnut on sides of back) .. . . .	13
<i>Brazilian Teal</i> (brown with coral red legs and feet; glossy green wings marked with black and white) .. . . .	18
<i>Pygmy 'Geese'</i> (tiny goose-like bills, very short legs; backs black glossed with green) .. . . .	18
<i>Bufflehead</i> (high crowned; largely white beneath, white patch on head; male cheeks glossed green and purple; dives often) .. . . .	21



Cotton Teal or Indian Pygmy Goose

<b>Small.</b> <i>Lesser Whistling Duck</i> (long legs; brown with blue-grey sheen on back) .. . . .	1
<i>Teals</i> (some males brightly-coloured, especially on head; females brown) .. . . .	9, 10, 12, 18
<i>Pink-eared Duck</i> (soft buff and brown; huge bill with flaps at tip) .. . . .	13
Small <i>Mallards</i> , i.e., <i>Hawaiian Duck</i> , <i>Laysan Teal</i> (undistinguished) .. . . .	11
<i>Smew</i> (thin pointed bills; male almost white, female grey with brown head, dives often) ..	22
<i>Hooded Merganser</i> (thin pointed bill, male black and white, female brownish; conspicuous flattened crest; dives often) .. . .	22
<i>Stifftails</i> (very short and very wide; tail held flat in water or cocked right up; dive often)	23



*Ruddy Duck*

**Medium.** All the rest.



*Pintail*

## 2. SHAPE

	Plate No.
<b>Long Neck.</b> <i>Swans</i> (white, or white with black head and neck, or black; young grey or light brown)	2
<i>Magpie Goose</i> (black and white; legs orange-yellow, bill dirty yellowish; feet scarcely webbed) . . . . .	1
<i>Spur-winged Goose</i> (black and white; legs flesh, bill dark red) . . . . .	19
<i>Pink-headed Duck</i> (probably extinct) . . . . .	13
<b>Long Legs.</b> <i>Whistling Ducks</i> (noisy, sociable, addicted to perching on trees and posts) . . . . .	1
<i>Hawaiian Goose</i> (brownish-grey with buff neck and black head; feet only partially webbed) . . . . .	5
<i>Orinoco Goose</i> (fawn and brown, dark wings, cherry-red legs; 'wind-swept' neck; very upright stance) . . . . .	6
<i>Sheldgeese</i> (rather large; upright stance, small bills; most forms finely barred black on sides and breast) . . . . .	7
<i>Cape Barren Goose</i> (large, grey, with green bill, pink legs and black feet; grunts like a pig)	8
<i>Spur-winged Goose</i> (very large; black and white; dark red bill and legs) . . . . .	19
<b>Elongated Body.</b> <i>Black-necked Swan</i> (very large; white with black head and neck; bright red knob on bill) . . . . .	2
<i>Crested Ducks</i> (rather large; spotty brown; long black tail, inconspicuous crest at back of head) . . . . .	8
<i>African Black Ducks</i> (medium-sized; dark brown; black backs with white spots) . . . . .	11
<i>Hartlaub's, Muscovy and White-winged Wood Ducks</i> (large or rather large; short legs) . . . . .	19
<i>Sawbills</i> (long, thin bills; mostly black and white or brown and grey) . . . . .	22
<i>Torrent Ducks</i> (pointed bills; upright stance; long tails) . . . . .	14

**Short Rounded Body.** *Eiders* (rather large; females brown; males black and white with brightly-coloured heads and necks) .. .. . 15  
*Goldeneyes and Bufflehead* (medium-sized and very small; black and white males, females dark brown heads, dive often) .. .. . 21  
*Stiff-tails* (mostly rather small, with broad bills; spiky tails carried flat on water or cocked well up; dive often) .. .. . 23

**Long Tail.** *Crested Ducks* (rather large; mottled brown) .. .. . 8  
*Pintails and Salvadori's Duck* (medium-sized or rather small) .. .. . 9  
*Torrent Ducks* (medium-sized; tail broad as well as long; upright stance) .. .. . 14  
*Long-tailed Duck* ♂ (medium-sized; black and white) .. .. . 21  
*Stiff-tails* (mostly rather small; dive often) .. 23

**Crest at back of head.** *Tufted Duck* ♂ (black and white; dives freely) .. .. . 17



*Tufted Duck*



*Falcated Duck*



*Mandarin*

*Falcated Duck* ♂ (iridescent bronze head) .. 10

*Mandarin and Carolina Ducks* (males with larger crests, and very brightly coloured) .. 18



*Carolina or Wood Duck*



*Crested Shelduck*

*Crested Shelduck* (rather large; long legs; probably extinct) .. .. . 6



*Crested Duck*

*Crested Ducks* (rather large; long tail; mottled brown) .. .. . 8



Marbled Teal

*Marbled Teal* (small; beige-coloured with soft black spots; crest inconspicuous) .. .. 9



Red-breasted Merganser

*Mergansers* (long thin bills) .. .. 22



Hooded Merganser

*Goosander* ♀♀ (long thin bills; chestnut heads) 22



Smew

*Smew* ♂ (nearly white) .. .. 22

**Tuft on crown.** *Red-crested Pochard* ♂ (crown orange, like shaving-brush) .. .. 16



Red-crested Pochard

*Cuban and Spotted Whistling Ducks* (long legs; flanks spotted with white; tuft inconspicuous) .. .. 1

### 3. BILL SHAPE

**Long thin bill, hooked at tip.** *Goosander, Merganser and Smew* (Sawbills) .. .. 22



Goosander ♀

*Torrent Ducks* (bills bright red) .. .. 14



Torrent Duck

**Long, broad, spoonshaped.** *Shovelers* (medium-sized) .. .. 12



Shoveler

**Long with flaps at tip.** *Pink-eared Duck* (small; light brownish-grey with fine black bars) .. 13



Pink-eared Duck

**Making straight line with forehead.** *Swans* (very large) .. .. . 2



Swan Goose

*Swan Goose* (large, with black bill and dark brown stripe down back of neck) . . . . . 3



Eider

*Eiders* (rather large; males black and white with coloured heads, females brown).. . . . 15

*Canvasback* (medium-sized — larger than *Pochard* or *Redhead*; dives often) .. . . 16

**Comb or Knob above bill.** *Mute Swan* (very large; white; orange-pink bill; knob black) .. . . 2

*Black-necked Swan* (white with black head and neck; knob red) .. . . . 2

*Domestic Chinese Goose* (large; upright stance, imperious look; belly nearly touches ground) .. . . . 3



Comb Duck

*Comb Duck* or *Knob-nosed Goose* ♂ (rather large; white head with black spots; knob black) 19

*Muscovy Duck* ♂ (large; black glossed with green. Domestic forms white, grey or black, or mixtures; knob black or red) .. . . . 19

*Rosybill* ♂ (medium-sized; black and grey with cherry-red bill) .. . . . 16

Some *Scoter* ♂♂ (medium-sized; glossy black) 20

*White-headed Stiff-tail* ♂ (bill blue; dives often) 23

*King Eider* ♂ (medium-sized; black with pink breast, blue-grey head; knob orange) .. . . 15



King Eider

**Lobe hanging under bill.** *Musk Duck* ♂ (rather large; sooty dark grey; dives often) .. . . 23



Musk Duck

**Down-curved bill.** *Blue Duck* (medium-sized; grey, with flesh-coloured bill) .. . . . 13





Blue Duck



Cape Barren Goose

*Cape Barren Goose* (large; grey, with greenish bill) .. . . . 8

	<b>Very large, heavy bill. Steamer Ducks</b> (large; grey marked with brown) .. .. .	8
		
<i>Steamer Duck</i>	<b>Thick-billed Bean Goose</b> (large; brownish-grey, orange band on bill and orange legs) ..	3
		
<i>Thick-billed Bean Goose</i>	<b>Eastern Greylag Goose</b> (large; pale brownish-grey, bill and legs pink) .. .. .	3

#### 4. COLOUR

**Very Bright** with complex pattern.

	<i>Red-breasted Goose</i> (medium-sized; black, sharply marked with chestnut and white) ..	5
	<i>Baikal Teal</i> ♂ (small, with black, green, buff and white on head) .. .. .	10
	<i>Mandarin Duck</i> ♂ (medium-sized, with orange hackles and 'sails', white stripe on head) ..	18
	<i>Carolina or Wood Duck</i> ♂ (medium-sized, with glossy green and white head, purple breast, scarlet eye, orange bill) .. ..	18
	<i>African Pygmy Goose</i> ♂ (small; chestnut breast and flanks, green patch on side of head; bright orange bill) .. .. .	18
	<i>King Eider</i> ♂ (medium-sized; black and white, with pink breast, blue-grey and pale green patches on head, orange-red bill) .. ..	15
	<i>Steller's Eider</i> ♂ (small; black and white, chestnut below shading to orange-pink, green patches on head) .. .. .	15
	<i>Harlequin Duck</i> ♂ (medium-sized; blue-grey and white with chestnut flanks and sandy-orange stripe over eye) .. .. .	21
<b>White.</b>	<i>Swans</i> (very large; long-necked) .. ..	2
	<i>Snow Geese</i> (large; pink bill and legs; black wing-tips) .. .. .	4
	<i>Kelp Goose</i> ♂ (large; black bill and yellow legs; all plumage pure white) .. .. .	7

<b>Nearly White.</b> <i>Magellan or Upland Geese</i> ♂♂ (large; upright stance; barred flanks, grey backs) .. .. .	7
<i>Smew</i> (small; white, with some black markings on head and back; thin, rather pointed bill)..	22
Immatures of <i>Swans, Snow Geese and Kelp Geese</i> .. .. .	2, 4, 7
<b>Black.</b> <i>Black Swan</i> (very large; long-necked, with white wing-tips) .. .. .	2
<i>Muscovy Duck</i> (large; short-legged; black with green or purple gloss, white patch on wing)	19
<i>Scoter</i> ♂♂ (medium-sized ducks, black with coloured bill) .. .. .	20
<i>N.Z. Shelduck</i> ♂ (rather large; long-legged, with green and white in wing).. .. .	6
<b>Sharply Black-and-White.</b> <i>Black-necked Swan</i> (very large; white, with black neck) .. .. .	2
<i>Maggie Goose</i> (large; white with black head, neck and wings) .. .. .	1
<i>Common Shelduck</i> (rather large; white with black head, neck and wings, chestnut band on breast; red bill) .. .. .	6
<i>Goosander</i> ♂♂ (rather large; white, with black head and back; long hook-tipped bill) .. .. .	22
<i>Eider</i> ♂♂ (rather large; with white shoulders, white or pink breast, black body, green patches on head).. .. .	15
<i>Tufted and Ring-necked Duck</i> ♂♂ (medium- sized diving ducks with black heads, necks and bodies, white or pale grey sides) .. .. .	17
<i>Common and Barrow's Goldeneye</i> ♂♂ (medium- sized diving ducks with black heads, white breasts, flanks and some white on the back; white spot in front of eye) .. .. .	21
<b>Chestnut.</b> <i>Ruddy Shelduck</i> (rather large; nearly uni- formly coloured, with paler head, black tail and wing tips) .. .. .	6

<i>Cape Shelduck</i> (rather large; chestnut bodies, grey or grey and white head, black tail and wing tips) .. .. .	6
<i>Hartlaub's Duck</i> (medium-sized; dark chestnut with black or black and white head; blue in wing) .. .. .	19
<i>Cinnamon Teal</i> ♂♂ (small; blue in wing usually hidden when at rest) .. .. .	12
<i>Stiff-tail</i> ♂♂ (small; round; head black or black and white; blue bill) .. .. .	23
<b>Pink Head.</b> <i>Pink-headed Duck</i> (medium-sized; long pink neck and head, dark brown body. May now be extinct) .. .. .	13
<b>Orange Head.</b> <i>Red-crested Pochard</i> ♂ (medium-sized; orange head and crest, red bill) .. .. .	16
 <b>5. BRIGHTLY-COLOURED BILLS</b>	
<b>Red Bill.</b> <i>Coscoroba</i> (very large white bird) .. .. .	2
<i>Black Swan</i> (very large black bird) .. .. .	2
<i>Spur-winged Goose</i> (very large black and white bird with long legs) .. .. .	19
<i>Common Shelduck</i> (rather large duck; bill broad) .. .. .	6
<i>Goosander</i> (rather large duck; bill long and pointed, or with hooked tip) .. .. .	22
<i>Red-crested Pochard</i> ♂ (medium-sized duck with orange head, brown in eclipse) .. .. .	16
<i>Rosy-bill</i> ♂ (medium-sized duck with black head and neck) .. .. .	16
<i>Red-billed Pintail</i> (medium-sized duck with brown body, pale cheeks) .. .. .	9
<i>Red-billed Whistling Duck</i> (medium-sized duck with brown body, black belly, long legs) .. .. .	1
<i>Torrent Ducks</i> (medium-sized; males with black and white patterned heads, long tails, females grey above, chestnut below) .. .. .	14
<i>Brazilian and Schuyll's Teal</i> (small and medium-sized brownish-grey duck, with dazzling red legs) .. .. .	18

<i>Mandarin Duck</i> ♂ (medium-sized duck with orange hackles and 'sails', white stripe on head) .. .. .	18
<b>Red spot on bill.</b> <i>Bahama Pintail</i> (warm brown with dark crown and white cheeks; bill blue with red spot at base) .. .. .	9
<i>Indian and Burma Spotbills</i> (pale mallards with white in wing; yellow tip to bill and red spot at base) .. .. .	11
<b>Orange Bill.</b> <i>Pacific, Northern or King Eider</i> ♂♂ (rather large black and white duck) .. .. .	15
<i>White-winged Wood Duck</i> (rather large; blackish-brown with spotty white head and spotty bill) .. .. .	19
<i>African Pygmy Goose</i> (small duck, dark green above and chestnut on breast and flanks) .. .. .	18
<i>Western Greylag Goose</i> (large brownish grey bird with pinkish legs) .. .. .	3
<i>Bean Geese</i> (large brownish-grey birds with orange legs and some black on bill) .. .. .	3
<i>Carolina or Wood Duck</i> ♂ (medium-sized duck with glossy green and white head, purple breast, scarlet eye) .. .. .	18
<b>Yellow Bill.</b> <i>Magpie Goose</i> (large black and white; bill variously covered with dark scaly spots) .. .. .	1
<i>Bar-headed Goose</i> (large pale grey goose with black bars over head) .. .. .	4
<i>Spectacled Eider</i> ♂ (rather large black and white duck with pale green on head) .. .. .	15
<i>Greenland Whitefront</i> (rather large dark brown goose with white forehead and orange legs) .. .. .	3
<i>Abyssinian and African Yellowbills</i> (medium-sized dark brown mottled ducks with black stripe down centre of bright yellow bill) .. .. .	11
<b>Green Bill.</b> <i>Cape Barren Goose</i> (large grey goose with green top to bill) .. .. .	8

<i>European, American or Faeroe Eider</i> (rather large ducks, with long, high bills) .. .. .	15
<i>Mallard</i> ♂♂ (glossy green heads, maroon breasts, or plain brown with spots in some races) .. . . .	11
<b>Blue Bill.</b> <i>Stifftail or Ruddy Duck</i> ♂♂ (small diving ducks, round in shape with chestnut bodies, black heads with or without white cheeks) ..	23
<i>Puna Teal</i> (medium-sized grey duck with black crown and white cheeks; black line along centre of bill) .. .. .	9
<i>Silver Teal</i> (small grey teal with black crown, cream cheeks; black line along centre of bill and yellow spot at base in ♂, sometimes in ♀)	9
<i>Hottentot Teal</i> (very small brownish duck with black crown, cream cheeks with a dark patch) .. .. .	9
<i>Ringed Teal</i> ♂ (very small duck with creamy grey cheeks, pink breast, chestnut on sides of back) .. .. .	13
<i>Philippine Duck</i> (medium-sized grey duck with light chestnut face and sharp eye-stripe)	11
<i>Bahama and Galapagos Pintails</i> (medium or small; brown; white cheeks, red spot at base of bill) .. .. .	9
<i>Black-necked Swan</i> (very large white bird with black head and neck and red knob above blue bill) .. .. .	2



*Red-breasted Goose*

## 6. VOICE

<b>Trumpeting or bugling.</b> <i>Trumpeter, Whooper, Whistling and Bewick's Swans</i> (very large white birds) .. .. .	2
--	---

<b>Honking.</b> <i>True Geese</i> (very large or large birds; brown-, or grey-, or black-and-white, or white) .. .. .	3, 4, 5
<i>White-winged Wood Duck</i> ♀ (large, blackish duck, dark brown breast, spotted white head and white in wing) .. .. .	19
<i>Maggie Goose</i> (large, black-and-white, with long orange-yellow legs) .. .. .	1
<i>Shelducks</i> (rather large, brightly-coloured, with varying amounts of chestnut or orange-brown on body) .. .. .	6
<b>Whistling.</b> <i>Whistling Ducks</i> (long-legged birds with an upright stance) .. .. .	1
<i>Common Shelduck</i> ♂ (rather large, black-and-white, with red knobbed bill and red-brown band on breast).. .. .	6
<i>Radjah Shelduck</i> ♂ (medium-sized, white with pale pink bill and brown back) .. .. .	6
<i>Sheldgeese</i> ♂♂ (large; white, black-and-white, or brown with black-barred flanks) .. .. .	7
<i>Northern Pintail</i> ♂ (medium-sized, with very pointed tail and slender neck).. .. .	9
<i>Green-winged, Chilean and Sharp-winged Teal</i> ♂♂ (small ducks) .. .. .	9
<i>Wigeon</i> ♂♂ (medium-sized ducks with white or buff crowns) .. .. .	12
<i>Ringed Teal</i> ♂ (very small, with creamy-grey face, blue bill, pink breast, blue-grey sides) .. .. .	13
<i>Blue Duck</i> ♂ (medium-sized blue-grey duck with odd bill 'flanged' near the tip) .. .. .	13
<i>Pink-eared Duck</i> ♂ (small duck; huge bill with flaps at tip) .. .. .	13
<i>White-backed Duck</i> (small brownish duck with barred sides and short tail) .. .. .	23
<b>Barking.</b> <i>Sheldgeese</i> ♀♀ (large; white with red legs or mainly brown with yellow legs) .. .. .	7
<i>Cape Barren Goose</i> ♂ (large, grey, with green bill, pink legs and black feet) .. .. .	8
<i>Bronze-winged Duck</i> ♀ (medium-sized brown duck with white crescent on face and white throat pattern) .. .. .	9

- Goosander* ♀ (medium-sized, grey and white, with long pointed red bill, hooked at tip, and red-brown crested head) .. .. . 22
- Quacking.** *Dabbling Duck* ♀♀ (medium-sized or small, mainly brown) .. .. . 9, 10, 11, 12
- Clucking.** *Baikal Teal* ♂ (small, with bronze-green and buff patterning on head) .. .. . 10  
*Shoveler* ♂♂ (small, with very large bill) .. .. . 12
- Rattling or nattering.** *Radjah Shelduck* ♀ (medium-sized, white, with pale pink bill and legs, reddish brown or dark brown on back) .. .. . 6  
*Crested Duck* ♀ (rather large mottled brown with long tail and a small crest) .. .. . 8  
*Bronze-winged Duck* ♀ (medium-sized, brown, with white crescent on face and white patch under chin) .. .. . 9  
*Garganey* ♂ (small, white stripe above eye, brown head, pale grey flanks, greyish back; sounds like fishing reel) .. .. . 12  
*Blue-winged Teal* ♂ (small; mottled red-brown, grey head with white crescent on side of face) .. .. . 12  
*Cinnamon Teal* ♂ (small, deep chestnut, with sky-blue shoulders [usually hidden]) .. .. . 12  
*Smew* ♂ (small white bird with black markings on head and back, thin, sharp bill) .. .. . 22
- Groning.** *Cape Barren Goose* ♀ (large, grey, with green bill, pink legs and black feet) .. .. . 8  
*Gadwall* ♂ (medium-sized grey and brown duck with black under tail) .. .. . 12
- Laughing.** *Common Shelduck* ♀ (rather large, black and white, red bill, red-brown band across breast) .. .. . 6

<b>Hissing.</b> <i>Mute Swan</i> (very large, white, orange and black bill)	2
<i>Egyptian Goose</i> ♂ (large grey bird with chestnut brown markings, including patch round yellow eye)	6
<i>Muscovy Duck</i> ♂ (large black duck with black or red lumpy bill; sounds like small steam engine)	19
<i>True Geese</i> (in defence)	3, 4, 5

## 7. BEHAVIOUR

<b>Frequent Diving.</b> <i>Torrent Ducks</i> (medium-sized, slim build, with long stiff tails, red bills and feet)	14
<i>Pochards</i> (medium-sized, ♂♂ smartly marked, females brown)	16, 17
<i>Eiders</i> (rather large, or medium-sized; ♂♂ black and white with coloured heads, ♀♀ brown; both sexes with large bills)	15
<i>Scoters</i> (medium-sized; ♂♂ black, ♀♀ brown)	20
<i>Harlequins, Longtail and Goldeneyes</i> (medium-sized or smaller, mostly black- or brown-and-white)	21
<i>Sawbills</i> (black-and-white or grey-and-white, with long thin, pointed or hooked bills)	22
<i>Stifftails</i> (small or very small, 'tubby'; ♂♂ chestnut, black and white, with blue bills, ♀♀ brown)	23
<i>Whistling Ducks</i> (sometimes) (medium-sized or small, with long legs and necks)	1



Male Goldeneye

<b>Grazing.</b> <i>Swans</i> (very large white or black and white birds)	2
<i>True Geese</i> (very large or large; brown-, or grey-, or black-and-white, or white)	3, 4, 5
<i>Sheldgeese</i> (large, long-legged, with small bills; white or brown, with black barring on flanks, and sometimes on breast)	7
<i>Wigeon</i> (medium-sized ducks; ♂♂ brightly-coloured with white or buff crowns, ♀♀ duller)	12

Red-breasted  
Goose

*Australian Wood Duck* (♂ grey with chocolate head, ♀ mottled grey and brown) . . . . 18

**Perching on branches, posts, etc.** *Magpie Goose*



*Red-billed Whistling Duck*

(large; black and white, orange yellow legs and bill) . . . . . 1

*Whistling Ducks* (medium-sized or small, long legs, upright stance) . . . . . 1

*Radjah Shelduck* (medium-sized; white with pink bill and feet, dark brown back and breast band) . . . . . 6

*Orinoco Goose* (very upright; neck 'wind-swept'; fawn, with chestnut flanks, greenish-black wings, cherry-red legs) . . . . . 6

*Green-winged Teal* (small; ♂♂ with brown and green head and grey-brown body; ♀♀ brown) . . . . . 9

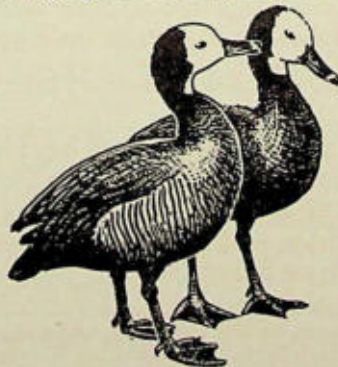
*White-winged Wood and Muscovy Duck* (large; rather ugly; black with white patches) . . . . . 19

*Spur-winged Goose* (very large; very ugly; black and white, with dark red bill and legs) . . . . . 19

**Mutual Preening.** *White-faced Tree Duck* (rather small; long-legged, upright stance) . . . . . 1

*Orinoco Goose* (rather large, upright stance; fawn with chestnut flanks, greenish-black wings and cherry red legs) . . . . . 6

*Mandarin and Carolina Ducks* (small; ♂♂ improbably and brilliantly coloured with crests, ♀♀ greyish-brown, mottled underneath) . . . . . 18



*White-faced Whistling Ducks*

## IF YOU ARE STUCK

If you are unable to identify your bird from the Key or from the Plates the following possibilities should then be carefully considered.

The bird may be:

1. An immature specimen, the plumage of which is likely to be similar to the female, or intermediate between that of the male and female.
2. A male in eclipse plumage of one of the species in which the drake spends several months in a dull plumage usually resembling the female. Intermediate plumages occur during the transition.
3. A hybrid. These are comparatively frequent in wildfowl and the parentage is not always apparent even to an expert eye.
4. A variety or freak, showing white in patches (schizochromism) or a uniform paleness of plumage (leucism) or blackness (melanism). Pure albinism—pure white with pink eyes—not recorded in wildfowl.
5. Descended from domestic stock. Such birds, capable of flight, include some tame grey or white or 'skewbald' geese (from Greylag stock) and Chinese Geese (Plate 3). Much more frequently mistaken for wild birds, however, are various forms of the Mallard (Plate 11) which show domestic blood and the domestic form of the Muscovy Duck (Plate 18), all of which may be quite good fliers.

Mallards showing domestic blood may take the following forms:—

- (i) White Call Ducks (small; white with yellow or orange bill)
- (ii) Cayuga Ducks (medium-sized; black or dark reddish-brown, with black head and variable-sized white patch on breast.)<sup>1</sup>

<sup>1</sup> It has not yet been established whether these birds, which are not uncommon, are descended from domestic 'Cayuga' type stock or whether they represent a fairly frequent mutation capable of arising from perfectly wild stock.

(iii) Mallards with white wing-tips, broad white neck-rings, etc.

Muscovy Ducks with domestic blood can be:—

(iv) Black glossed with green; white in wings; variable additional white, most often on head; bill swollen and bright red or black and red.

(v) Pure white with red bill.

(vi) Pale grey, usually with white head and red bill.

(vii) Mixtures of all three colours.

If you have seen a striking duck or goose which you cannot trace from this Key or from the Plates, it is very likely to be a Muscovy Duck, or a Mallard showing domestic blood or a hybrid—in that order of probability.



*Domestic Muscovy Duck*



*Mallard of 'Cayuga' type*



*Hybrid Mallard x Pintail Male*

## NAMES AND CLASSIFICATION

All the birds in this book are given at least two names. Those printed in bold type are the English, or vernacular, names. The choice of these names is not governed by strict rules of procedure and people differ more or less strongly in their preferences. The ones used here are for the most part those in general use in ornithological handbooks. For species found in Britain these are the same as the 'common' names, used by wildfowlers and birdwatchers and those with just a general interest in the birds around them. But the textbook names given to species occurring elsewhere, in Australia for example, do not necessarily coincide with the names used locally. This Key tries to include the most widely-used of such local names, though confining itself to English ones.

The names printed in italic type are those applied to the different kinds of birds according to the formal procedure of taxonomy. It may be helpful to explain briefly the significance and use of such names. Taxonomy (or systematics; the terms are synonymous) is the study of the laws and principles of classification of animals (and plants). Taxonomy has two distinct components, classification and nomenclature. *Classification* deals with the ranking of various categories (such as family, genus, species) to which organisms are assigned in accordance with their evolutionary relationships, and *nomenclature* deals with the legalistic aspect of names (which name should properly be used for a given animal, according to the International Code of Zoological Nomenclature).

Classification has a double purpose. From a practical point of view, a system of grouping makes it easier to identify animals. From a theoretical point of view a "natural" classification shows, to some extent, the relationships or supposed relationships of the groups concerned and helps to indicate the course which evolution has taken.

The system of classification applied to animals may best be demonstrated by means of examples taken from the text opposite Plate 1. The groups used are in a hierarchy, in which any category includes all the subsequent (lower) categories. The six universally recognised categories, in descending order

of rank, are: Phylum, Class, Order, Family, Genus and Species. This system is expanded according to the needs of specialists in any group by using the prefixes "super-" and "sub-". Birds belong to the Phylum *Chordata* (which includes all vertebrate animals and those animals without vertebrae which possess a notochord) and form the Class *Aves*. The swans, geese and ducks are included in the Order *Anseriformes*, one of twenty-three orders into which the Class *Aves* is divided. The Order *Anseriformes* includes the Family *Anhimidae* (the Screamers) and the family *Anatidae*. (Swans, geese and ducks.)<sup>1</sup>

The Family *Anatidae* is divided into three Sub-Families. The Magpie Goose (Plate 1) is considered so different from all other wildfowl in the details of its anatomy that it is assigned to the Sub-Family *Anseranatinae* while the remainder are assigned to the Sub-Families *Anserinae* (Swans, Geese and Whistling Ducks) or *Anatinae* (the remaining ducks). Delacour and Mayr, whose paper *The Family Anatidae* (Wilson Bulletin Vol. 57, No. 1, pp. 3-55, 1945) provides the basis of the classification adopted in this Key, insert a further category, the Tribe, between the Sub-Family and the Genus. They use the term tribe (with the ending *-ini*) for a recognisable group of genera within each sub-family. The Magpie Goose forms a Tribe, a genus and a species by itself.

The Sub-Family *Anserinae* is divided by Delacour and Mayr into two tribes, *Anserini*—the Swans and Geese, and *Dendrocygnini*—the Whistling Ducks (Plate 1). All the members of the Tribe *Dendrocygnini* are assigned to a single Genus, *Dendrocygna*. But the Tribe *Anserini* includes four genera, *Coscoroba*, *Cygnus*, *Anser* and *Branta*, while the Sub-Family *Anatinae* is divided into seven tribes and includes 34 genera.

This lack of numerical equivalence between the groups shows the complexity of the relationships within the Family. But though it is difficult to give any precise meaning to the concepts, there is a general belief that genera and above all species form comparable natural units, whether in birds or mammals, or invertebrates or plants. The scientific name of

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<sup>1</sup>Some consider that the Family *Phaenicopteridae* (the Flamingos) should also be included in the order *Anseriformes*.

the Magpie Goose is made up of the generic name *Anseranas* (Goose-duck) and the specific name *semipalmata* (half-webbed). This use of the combination of generic and specific names to describe the most important recognisable natural group—the species—is the principle of binomial nomenclature, first consistently applied by the great Swedish taxonomist Linnaeus in the middle of the eighteenth century.

All these long Latin names are subject to a strict set of rules of nomenclature. Only the method of choosing the generic and specific names will be illustrated here, although rules are also laid down for applying the correct names to higher groups. The first principle of naming a species is that a type specimen of the organism shall be described under that name. The description must be detailed enough to make clear what differences are supposed to exist between the named specimens and other rather similar animals, and the species must be provided with a type locality, wherever possible the place at which the type specimen was collected. It has frequently happened that someone has described an animal as of a new species only for it to be shown later that a similar animal had been described earlier by someone else, so that two (or more) names are available for the same species. To get over this difficulty there is a rule of priority. The first specific name applied to a species must stand, except in very special circumstances, which have to be argued for any particular case.

The generic name consists of a single word, printed with an initial capital. The specific name is also a single word, written with a small initial letter. These, and all scientific names, must be words which are either Latin or latinized or are treated as such in case they are not of classic origin. The original describer can choose what specific name he likes, providing it agrees grammatically with the generic name. Usually the names chosen refer to a feature of the bird's appearance, or where it lives, though sometimes the describer names an animal in honour of a friend or another specialist in the same group, or the collector who obtained the type specimen.

*Three* words in a scientific name indicate that the species

seems to be made up of several more or less distinct groups, separated geographically, which though sufficiently alike to justify them being regarded as a single species, show sufficient variation from group to group to enable most individuals to be identifiable as members of one subspecies rather than another. (Subspecies are sometimes referred to as 'races' and as 'forms', and in this context the three terms are almost synonymous, though 'form' would also include species which are not subdivided into subspecies or races.) One of the subspecies repeats the specific name, while the remainder are given additional names. Some examples may make this clearer.

The Whistling Ducks of Plate 1 illustrate all these points. The Spotted Whistling Duck is called *Dendrocygna guttata*. *Dendrocygna* means "tree-swan"—a reference to the long-necked appearance of all members of the genus, and to their habit of perching on trees—and *guttata* means spotted. *Dendrocygna eytoni* is named for the man who discovered and described the species. (It is not now usual for a taxonomist to name a species after himself.) Both these species show no signs of geographical variation. But the Wandering Whistling Duck *Dendrocygna arcuata* (the specific name *arcuata*, arched or bowed, refers to the flank feathers) forms three geographical races or subspecies. The Wandering Whistling Ducks of the East Indies form one subspecies. Since the type specimen of the species came from this area this subspecies must be called *Dendrocygna arcuata arcuata*. Australian specimens are larger and can be recognised as *Dendrocygna arcuata australis*, while specimens from New Britain, which are a good deal smaller, are distinguishable as *D.a. pygmaea*. (When generic and specific names need to be referred to repeatedly they can be contracted to their initial letters for brevity.) You will notice in the text that it is uncertain to which race birds from New Caledonia should be allotted. This kind of overlap is frequently found. Sometimes fuller investigation enables a clear-cut decision to be made, but often it must be accepted that such birds are truly intermediate, in which case, though the forms at each end of the varying population are given distinct names, the intermediate birds cannot be given a tri-

nomial name and may be treated as *D.a. australis* > *pygmæa* or in some other inevitably clumsy way.

It will be noted that another name in Roman type follows the specific or subspecific name, e.g., *Dendrocygna guttata* Schlagel. This is the author's name. The author of a scientific name is the person who first publishes the name in connection with a description. The author's name is not always given as part of the scientific name, but is useful in making clear which type description is being used in cases where the history of the name is complicated. (There are uncomfortably many complications, because most names originate from 150 to 200 years ago, a period when first publications were often in obscure journals not widely circulated, so that species were often described as "new" several times by different authors in the course of a few years.) Changing ideas about relationships have also caused the accepted limits of many species to vary. Changing ideas about relationships are responsible too for the presence or absence of parentheses enclosing the author's name. The rule is that the author's name appears without brackets if he originally described the species as a member of the genus in which it is now placed. But if the author placed it in another genus, then his name appears in brackets. For example, Eyton first described the Plumed Whistling Duck (in 1838) under the name *Leptotarsis eytoni*. Since it is now considered to belong to the genus *Dendrocygna*, *Leptotarsis eytoni* Eyton has been replaced by *Dendrocygna eytoni* (Eyton).

The contractions L. or (L.) which appear frequently instead of an author's name stand for Linnaeus, the inaugurator of binomial nomenclature.

The 247 forms of swans, geese and ducks—all that are so far known to science—are comprised within 147 full species. Of these 47 forms (of 43 species) have been found in a wild state in Britain and three more, originally introduced as captives, have now formed feral free-living populations (the Canada Goose, Egyptian Goose and Mandarin Duck). These 50 forms are marked in the text thus \*. Seven forms of 4 species believed to have become altogether extinct throughout the world within recent years are marked thus †.

## SCALE OF THE PLATES

It should be noticed that five different scales have been used in the drawings—one for the swans (Plate 2), one for the True Geese and Sheldgeese (Plates 3, 4, 5, 7), one for the Shelducks and Perching Geese (Plates 6, 18), one for the Whistling Ducks, Crested and Steamer Ducks and Cape Barren Goose, and Scoters (Plates 1, 8, 20) and one for the rest of the ducks (Plates 9-17, 19, 21-23). This complication has arisen because, within the framework of the natural groupings, the birds have been drawn as large as possible in order to show the detail; teal would be too small to show the markings if drawn on the same scale as swans, all of which must be shown on one page.



*Salvadori's Duck*

PLATE 1

Sub-order ANSERES  
Family ANATIDÆ  
Sub-Family ANSERANATINÆ  
Tribe ANSERANATINI

**Magpie Goose.** *Anseranas semipalmata* (Latham).  
Southern New Guinea and northern Australia, especially Arnhem Land.

Sub-Family ANSERINÆ

Tribe DENDROCYGNINI (Whistling Ducks or Tree Ducks)

**Spotted Whistling Duck.** *Dendrocygna guttata* Schlegel.  
East Indies (Mindanao, Celebes, Moluccas, Tenimber, Aru, New Guinea, Bismarck Archipelago).

**Plumed or Eyton's Whistling Duck.** *Dendrocygna eytoni* (Eyton).  
Australia and Tasmania.

**East Indian Wandering Whistling Duck.** *Dendrocygna arcuata arcuata* (Horsfield).  
East Indies (Borneo, Sumatra, Java, Bali, Sumba, Timor, Celebes, Moluccas and Philippines).

**Australian Wandering Whistling Duck.** *Dendrocygna arcuata australis* Reichenbach.

Australia and southern New Guinea. Birds in northern New Guinea and New Caledonia probably belong to this form, or are intermediate between it and *pygmæa*.

**Lesser Wandering Whistling Duck.** *Dendrocygna arcuata pygmæa* Mayr.  
New Britain (and formerly Fiji Islands, where it has probably been exterminated by the introduction of the mongoose).

**Fulvous Whistling Duck.** *Dendrocygna bicolor* (Vieillot).  
Southern California to south-eastern Texas and south to central Mexico; northern tropical South America from Colombia to the Guianas; Brazil, Peru, south to Paraguay and northern Argentina; East Africa from Lake Chad to Natal; Madagascar; India, Ceylon and Burma, south to Pegu. (This a most extraordinary distribution for any species of bird. There is no geographical variation throughout this huge and broken range.)

**Black-billed or Cuban Whistling Duck.** *Dendrocygna arborea* (L.).  
West Indies (Bahama Islands, Greater Antilles—Cuba, Haiti, Jamaica, Puerto Rico—Virgin Islands, Leeward Islands, Martinique).

**Lesser or Indian Whistling Duck.** *Dendrocygna javanica* (Horsfield).  
India from Sind eastwards to coast of southern China, south to Ceylon, Nicobar Islands, Malay Peninsula, Siam, Cochin China; Riu Kiu Islands, south-western Borneo, Sumatra and Java.

**White-faced Whistling Duck.** *Dendrocygna viduata* (L.).  
Tropical South America, south to the Argentine Chaco, Paraguay and Uruguay. Africa, south of the Sahara to southern Angola and the Transvaal; Madagascar; Comoro Islands.

**Northern Red-billed Whistling Duck.** *Dendrocygna autumnalis autumnalis* (L.).  
Extreme southern Texas and Mexico, south through Central America to Panama, where it intergrades with *D.a. discolor*.

**Southern Red-billed Whistling Duck.** *Dendrocygna autumnalis discolor* Sclater & Salvin.

South America from eastern Panama to northern Argentina, but not south of Ecuador on the west side of the Andes.

MAGPIE GOOSE AND WHISTLING OR TREE DUCKS

Northern Red-billed or Black-bellied Whistling Duck or Tree Duck

The two races intergrade



Southern Red-billed Whistling Duck or Tree Duck



♂ and ♀ have the same plumage in all the forms on this page

Black-billed or Cuban Tree Duck



Magpie, Semi-palmated, or Pied Goose



Male has higher crown than female

Wandering Tree Ducks East Indian (top of three) Lesser (middle) and Australian (bottom)



Medium

Small

Large

Fulvous Tree Duck or Whistling "Teal"



Javan Tree Duck or Lesser Whistling "Teal"



Plumed or Eyton's Tree Duck

Spotted Tree Duck

White-faced Tree Duck



PLATE 2

Tribe ANSERINI (Swans and Geese)

**Coscoroba Swan.** *Coscoroba coscoroba* (Molina).

Breeds in extreme southern Brazil, Uruguay, Paraguay, Argentina, Chile (including Tierra del Fuego), and Falkland Islands. Winters further north, to about 25°S. This species may more properly belong to the Tribe *Dendrocygnini*.

**Black Swan.** *Cygnus atratus* (Latham).

Australia (except extreme north central) and Tasmania. Introduced into New Zealand, where now widespread, and Sweden.

\***Mute Swan.** *Cygnus olor* (Gmelin).

Now breeds wild in southern Scandinavia, Denmark, Russia, Asia Minor and Persia, east through Turkestan to Mongolia. Also in semi-wild state in British Isles. In winter to north Africa, Black Sea, north-western India and Korea. Elsewhere widely introduced.

**Black-necked Swan.** *Cygnus melanocoryphus* (Molina).

Breeds in South America, from 35°S. in Brazil, Paraguay, Uruguay, Falkland Islands, Argentina and Chile, south to Tierra del Fuego. In winter north to Tropic of Capricorn.

**Whistling Swan.** *Cygnus columbianus columbianus* (Ord).

North America, breeding chiefly north of Arctic Circle from Alaska to Hudson Bay, and wintering on the Atlantic coast from Chesapeake Bay to Currituck Sound and the Pacific coast from southern Alaska to California.

\***Bewick's Swan.** *Cygnus columbianus bewickii* Yarrell.

Breeds in northern Russia from the Kanin peninsula and northern Siberia, east to the Lena Delta; south in winter to the British Isles, northern Europe, Caspian Sea and Central Asia.

**Eastern Bewick's or Jankowski's Swan.** *Cygnus columbianus jankowskii* Alpheraky.

Breeds from the delta of the Lena to the delta of the Kolyma; south to China and Japan in winter. There is some doubt whether this race, which is said to have a larger and more yellow bill, can be shown to be really distinct from *C. c. bewickii*.

\***Whooper Swan.** *Cygnus cygnus cygnus* (L.).

Breeds from Iceland and northern Scandinavia eastwards to Kamchatka, Commander Islands and Japan. Winters British Isles, western Europe, north Africa, Asia Minor, northern India, central Asia, China and Japan. Seems formerly to have bred in Greenland, where frequently seen.

**Trumpeter Swan.** *Cygnus cygnus buccinator* Richardson.

Formerly bred throughout North America. Now known to breed only in Alberta, British Columbia, Montana, Wyoming and interior of Alaska. The species is virtually non-migratory and there are probably not more than 1,500 individuals in existence.

SWANS

*Bewick's* *Jankowski's*

*Trumpeter*

*Whistling*

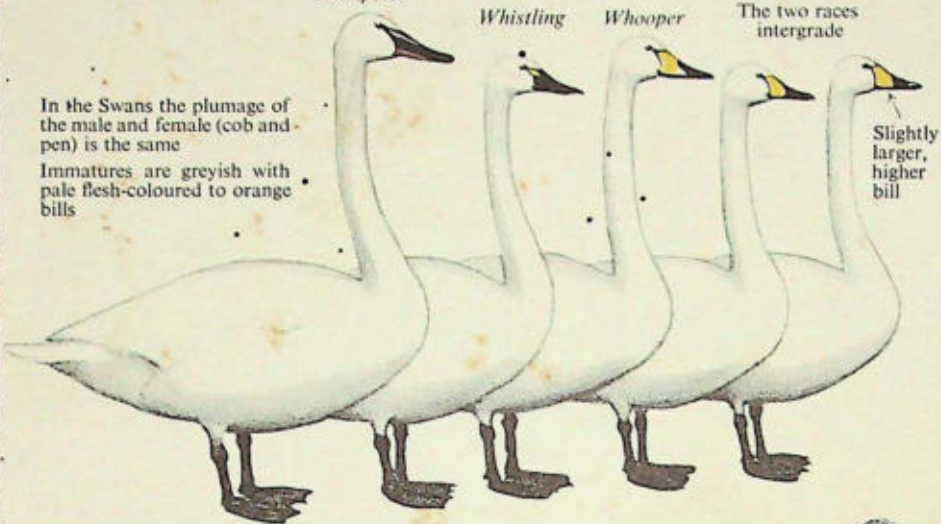
*Whooper*

The two races intergrade

Slightly larger, higher bill

In the Swans the plumage of the male and female (cob and pen) is the same

Immatures are greyish with pale flesh-coloured to orange bills



*Trumpeter*



*Whooper*



*Whistling*

Yellow spot not always present



*Bewick's*

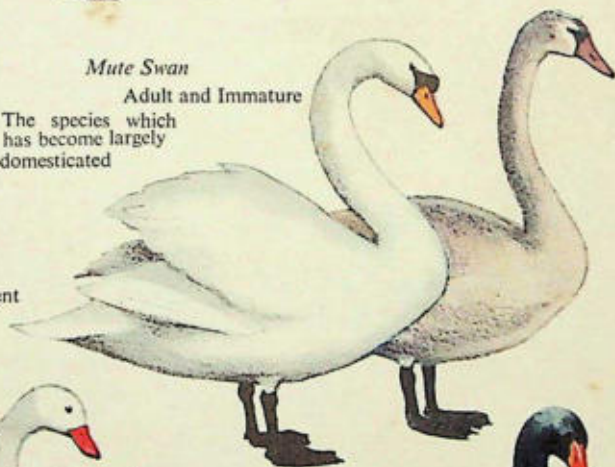


*Mute*

*Mute Swan*

Adult and Immature

The species which has become largely domesticated



*Coscoroba Swan*

*Black-necked Swan*

*Black Swan*

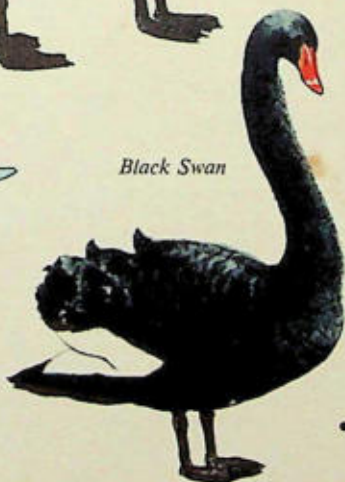
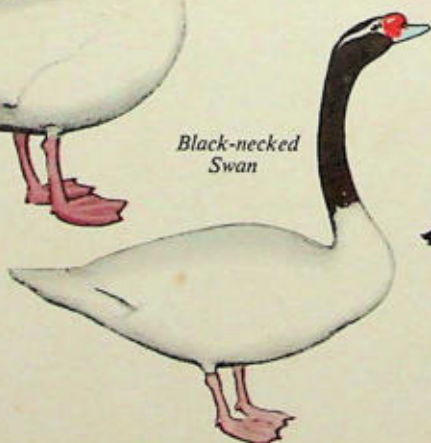
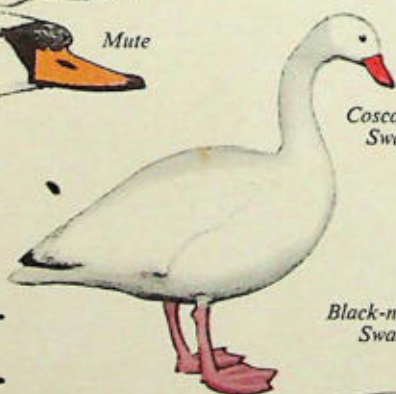
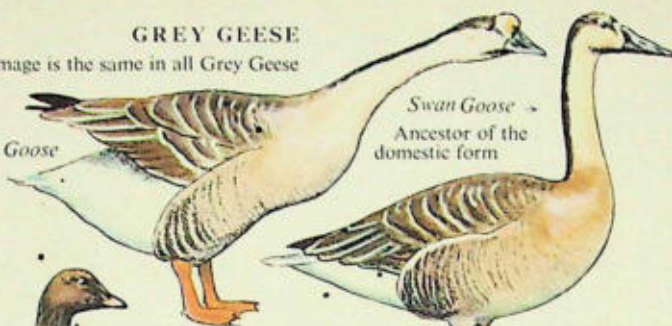


PLATE 3

- Swan Goose.** *Anser cygnoides* (L.).  
Breeds in Siberia from the Tobol and the Ob to Kamchatka, the Commander and Kurile Islands, south to the Altai, Lake Baikal and Ussuri. Winters in China. Domestic varieties of "Chinee Geese" are derived from this species.
- \*Western or Yellow-billed Bean Goose.**  
*Anser fabalis fabalis* (Latham).  
Breeds in wooded country of the Arctic from Lapland eastwards to the Ural Mountains. Winters south to Britain (now very local and rather rare), Holland, Mediterranean and Black Seas. Limits of ranges of this and next four races not yet fully determined.
- Johansen's Bean Goose.** *Anser fabalis johanseni* Delacour.  
Breeds in forested western Siberia east to Khatanga and south to about 61°N. Mingles and interbreeds with *rossicus* in the north and intergrades with *fabalis* and *middendorfi* where their ranges are in contact.
- Middendorff's Bean Goose.** *Anser fabalis middendorfi* Severtzow.  
Breeds in forests of eastern Siberia from the Khatanga to the Kolyma, south to the Altai. Winters in eastern China, northern Mongolia and Japan.
- \*Russian Bean Goose.** *Anser fabalis rossicus* Buterlin.  
Breeds in Novaya Zemlya and on tundra shores of Arctic Russia and Siberia west of the Taimyr Peninsula. Winters in Europe west to Belgium and Holland, south to Italy; in southern Russia, Siberia, Turkestan and China. Individuals have strayed to Britain. "Sushkin's Goose" appears to be a colour phase of this race, with pink bill and legs.
- Thick-billed or Eastern Bean Goose.** *Anser fabalis serroriostris* Swinhoe.  
Breeds on the tundra shores of Siberia, east of the Yenesei. Winters in China and Japan.
- \*Pink-footed Goose.** *Anser brachyrhynchus* Baillon.  
Breeds in east Greenland, Iceland and Spitzbergen. Birds from Greenland and Iceland winter in Scotland and England, those from Spitzbergen in Denmark, Germany, Holland, Belgium, occasionally France.
- \*European White-fronted Goose.** *Anser albifrons albifrons* (Scopoli).  
Breeds on the Arctic coasts of Europe and Asia, east from the Kanin Peninsula, Kolguev and southern Novaya Zemlya to the Kolyma River and perhaps beyond. Winters in England and Wales, western Europe, on shores of Mediterranean, Black and Caspian Seas, in northern India, China and Japan.
- Pacific White-fronted Goose.** *Anser albifrons frontalis* Baird.  
Breeds in Arctic America, from Mackenzie River west to Bering Sea, and in eastern Siberia, but western limits unknown. Winters in western United States, south to Mexico and east to Louisiana; and in China and Japan.
- \*Greenland White-fronted Goose.** *Anser albifrons flaviostris* Dalgety and Scott.  
Breeds in north-west Greenland. Winters in Ireland, west Scotland, Wales (in small numbers); occasional in England and eastern North America.
- Tule Goose.** *Anser albifrons gambelli* Hartlaub.  
Breeding area unknown, perhaps Victoria Island, off central arctic coast of Canada. Winters very locally in Sacramento Valley, California, in small numbers. White-fronted Geese breeding on the Perry River, on the Canadian mainland south-east of Victoria Island, are intermediate between *gambelli* and *frontalis*.
- \*Lesser White-fronted Goose.** *Anser erythropus* (L.).  
Breeds, largely on mountain tarns, from Norwegian Lapland to the Kolyma in Siberia and perhaps further eastwards. Winters in south-eastern Europe, Black and Caspian Seas, Turkestan, north-west India, China and Japan. Rare straggler to Britain, odd individuals occurring almost annually in flocks of White-fronted or Bean Geese.
- \*Western Greylag Goose.** *Anser anser anser* (L.).  
Breeds in Scotland, though now only in small numbers. The only indigenous species of goose breeding in Britain. Breeding range includes Iceland, Scandinavia, south to Austria, Yugoslavia, Macedonia and the Caucasus. Winters in Britain, Holland, France, Spain, North Africa. Populations of western Russia and the Balkans are intermediate between this and the Eastern form and further study may reveal more distinguishable populations. The Greylag is the ancestor of domestic geese, other than Chinese.
- Eastern Greylag Goose.** *Anser anser rubrirostris* Swinhoe.  
Breeds eastwards from about 40°E. and south of 60°N. through Asia Minor and central Asia to Kamchatka. In winter to the eastern Mediterranean, Black and Caspian Seas and in Seistan, north-west India and China.

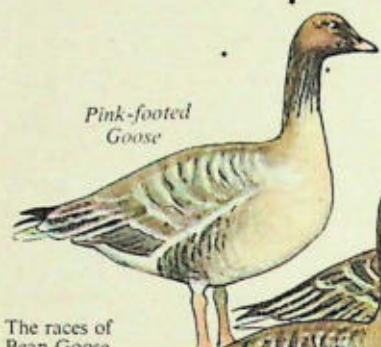
### GREY GEESE

Male and female plumage is the same in all Grey Geese



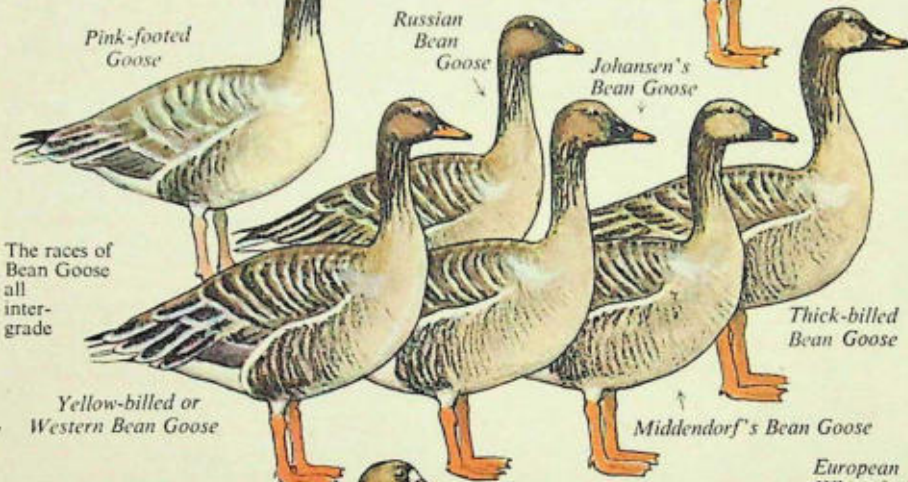
Swan Goose  
Ancestor of the domestic form

Domestic Chinese Goose



Pink-footed Goose

The races of Bean Goose all inter-grade



Russian Bean Goose

Johansen's Bean Goose

Thick-billed Bean Goose

Middendorf's Bean Goose

Yellow-billed or Western Bean Goose



European White-fronted Immature Goose

Pacific White-fronted Goose

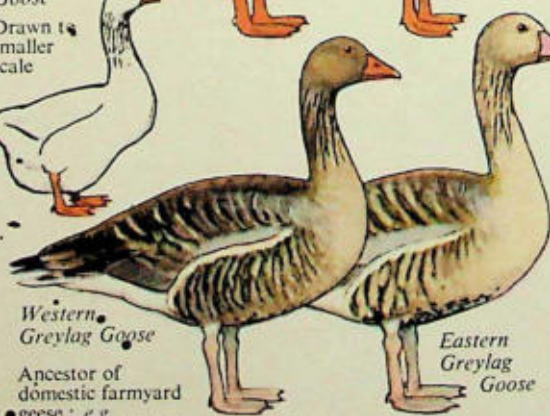
Tule Goose  
Greenland Whitefront

European Whitefront Adult

Black belly markings of adult Whitefronts vary individually within wide limits



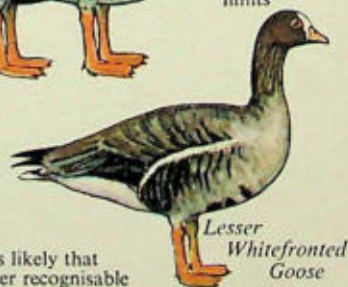
Domestic Embden Goose  
Drawn to smaller scale



Western Greylag Goose

Eastern Greylag Goose

Ancestor of domestic farmyard geese; e.g. Toulouse, Embden, Roman, Sebastopol, etc.



Lesser Whitefronted Goose

It is likely that other recognisable sub-species of the Greylag Goose exist and will in due course be described

PLATE 4

**Bar-headed Goose.** *Anser indicus* Latham.

Breeds on lakes of high central Asia from the Tian-Shans to Ladakh and Kokonor. Winters northern India, Assam and northern Burma.

**Emperor Goose.** *Anser canagicus* Sewastianow.

Breeds on the north-west coast of Alaska from Kotzebue Sound to the Yukon and Kuskokwim Rivers, on St. Lawrence Island and in Siberia from the Anadyr along the Chuckchi Peninsula. Winters in the Aleutian Islands and the Alaska Peninsula, east to Bristol Bay; in Asia, south to the Commander Islands and Kamchatka.

\***Lesser Snow Goose and Blue Goose.** *Anser caerulescens caerulescens* (L.).

Breeds on Baffin and Southampton Islands and Arctic coast of North America from Hudson's Bay westward and in north-eastern Siberia, probably as far west as the Lena. The Blue Goose, formerly regarded as a distinct species, now appears to be a colour phase most numerous at the eastern end of the range, but spreading westwards and becoming more numerous. Nearly all Blue Geese winter on the coast of the Gulf of Mexico, chiefly in Louisiana. Birds of the white phase predominate in California, though some are found on the Gulf coast. In Asia the race winters south to Japan. Individuals of both types have occurred as stragglers in Britain, but some of those recorded may have been escapes and most wild British Snow Geese have probably been of the form *atlanticus* (see below).

\***Greater Snow Goose.** *Anser caerulescens atlanticus* Kennard.

Breeds on the coast of north-west Greenland, Ellesmere Land and the adjacent islands. Migrates by way of Cap Tourmente at mouth of St. Lawrence to winter off Atlantic coast of U.S.A. from Chesapeake Bay to North Carolina. A fairly frequent straggler to Britain, though it is difficult to establish whether records refer to wild birds or to escapes from captivity in this country or elsewhere in Europe.

**Ross's Goose.** *Anser rossii* Cassin.

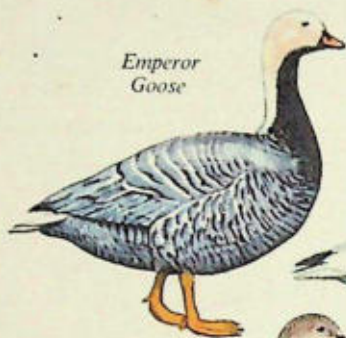
Breeds in the Perry River region in the centre of the Arctic coast of Canada. The nest was first found in 1942. Winters in Sacramento and San Joaquin valleys in California. Total population small; probably only about 8,000 individuals at present (1957).



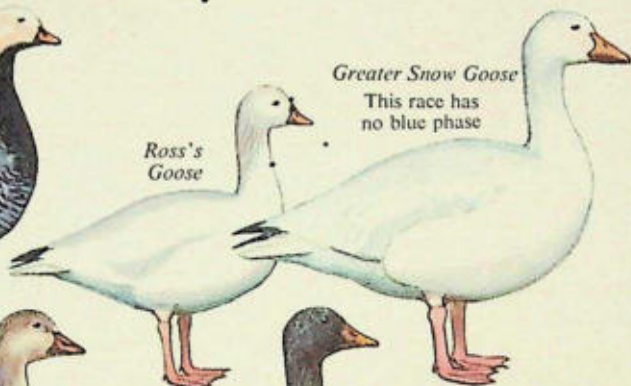
SNOW GEESSE, etc. (ABERRANT GREY GEESSE)

The plumage of males and females on this page is the same

Emperor  
Goose



Greater Snow Goose  
This race has  
no blue phase



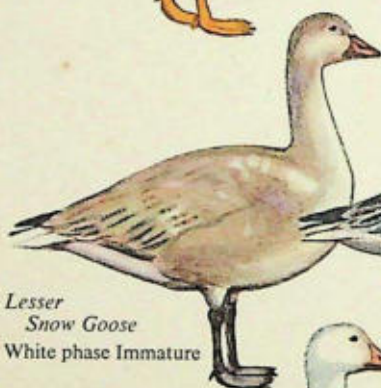
Ross's  
Goose



Lesser Snow Goose  
Blue phase  
Immature



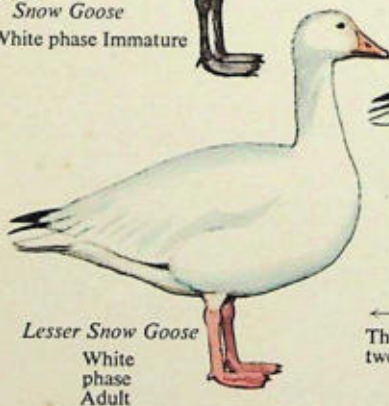
Lesser  
Snow Goose  
White phase  
Immature



Lesser Snow Goose  
Blue phase Adult  
White-breasted form



Lesser Snow Goose  
Blue phase  
Typical adult



Lesser Snow Goose  
White  
phase  
Adult

↔  
These are believed to be  
two phases of the same  
sub-species

Greater  
Snow Goose



Lesser  
Snow Goose



Ross's  
Goose



Bar-headed  
Goose

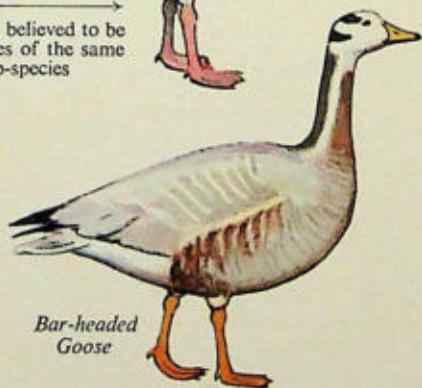


PLATE 5

- \*Atlantic Canada Goose. *Branta canadensis canadensis* (L.). Breeds in south-east Baffin Island, Newfoundland, Labrador east of the Height of Land, and on Magdalen Islands. Winters on Atlantic coast from Nova Scotia south to Florida. Introduced into England first in seventeenth century and now generally regarded as British bird. Also introduced elsewhere in Europe and in New Zealand.
- Central or Todd's Canada Goose. *Branta canadensis interior* Todd. Breeds in northern Quebec, Ontario, Manitoba, around southern Hudson Bay and James Bay. Winters from southern Ontario, Wisconsin, Illinois and Chesapeake Bay, along Atlantic coast south to Florida and Louisiana.
- Great Basin or Moffitt's Canada Goose. *Branta canadensis moffitti* Aldrich. Breeds from central British Columbia, Alberta and Saskatchewan to north-eastern California, northern Utah, northern Colorado and South Dakota. This race does not move far on migration but has been recorded in winter from southern British Columbia, north-western Wyoming and Arkansas, south to California and the Gulf of Mexico.
- †Giant Canada Goose. *Branta canadensis maxima* Delacour. Extinct. Formerly bred in great plains of central United States.
- Lesser Canada Goose. *Branta canadensis parvipes* (Cassin). Breeds throughout the interior of northern North America from central Alaska east to Hudson Bay and south to northern British Columbia and Manitoba, where it intergrades with *moffitti* and *interior*. Breeds also on Baffin and Southampton Islands. Migrates mainly west of the Mississippi and winters in southern U.S. from California to Louisiana and south to Mexico.
- Taverner's Canada Goose. *Branta canadensis taverneri* Delacour. Breeds probably in north-west interior from Alaska peninsula to the Perry River, where it intergrades with *parvipes*. Winters from Washington to Texas and Mexico, mainly in California. Also intergrades with *occidentalis*.
- Dusky Canada Goose. *Branta canadensis occidentalis* (Baird). Breeds around Prince William Sound and perhaps further south along Gulf of Alaska. Usually sedentary, but has been found in Oregon.
- Vancouver Canada Goose. *Branta canadensis fulva* Delacour. Breeds along coast and on islands of British Columbia and southern Alaska. Largely non-migratory but wanderers have been found in northern California in winter.
- Aleutian Canada Goose. *Branta canadensis leucopareia* (Brandt). Breeds in Aleutian Islands. Winters in Japan and from British Columbia to California. Now very rare.
- Richardson's Canada Goose. *Branta canadensis hutchinsii* (Richardson). Breeds on Melville Peninsula, Southampton, Baffin and Ellesmere Islands. Migrates between Mississippi and Rocky Mountains to winter in Texas and Mexico.
- Cackling Canada Goose. *Branta canadensis minima* Ridgway. Breeds along western shores of Alaska. Winters from southern British Columbia to southern California, in large interior valleys.
- †Bering Canada Goose. *Branta canadensis asiatica* Aldrich. Extinct. Bred Bering Island (Commander Islands) and Kurile Islands, until about 1900.
- Hawaiian Goose or Ne-Ne. *Branta sandvicensis* (Vigors). The rarest goose. Now only on Hawaii; formerly on Maui and perhaps on other islands of the group. Probably less than 50 left in 1947. Little more than a hundred individuals alive at present (1957), mostly in captivity (about a third in Britain).
- \*Barnacle Goose. *Branta leucopsis* (Bechstein). Breeds in north-east Greenland, Spitzbergen and southern Novaya Zemlya. Winters mainly in Scotland and Ireland, and on the coasts of Germany, Denmark and Holland.
- \*Russian or Dark-bellied Brent Goose. *Branta bernicla bernicla* (L.). Breeds in Arctic Europe and Asia from southern Novaya Zemlya and Kolguev east to the Taimyr Peninsula. Winters on coasts of Germany, Denmark, Holland, England, Scotland, France and western Morocco. Appears to have decreased greatly during last 25 years. Probably now increasing (1957).
- \*Atlantic or Light-bellied Brent Goose. *Branta bernicla hrota* (O. F. Müller). Breeds on coasts and islands of eastern Arctic Canada, northern Greenland, Spitzbergen, Franz Joseph Land and probably northern Novaya Zemlya. Winters in Ireland, and erratically elsewhere on coasts of north-west Europe, and on Atlantic coast of U.S.A. from New Jersey to North Carolina. Decreased to low ebb about 1940, now increasing (1957).
- Lawrence's Brent Goose. *Branta bernicla nigricans* (Lawrence). Breeding area unknown, probably north-east of Hudson's Bay. Winters on coast of New Jersey. Very rare, possibly now extinct.
- Pacific Brent Goose or Black Brant. *Branta bernicla orientalis* Tougarev. Breeds on coasts and islands of western Arctic Canada, northern Alaska and Siberia, west to Taimyr Peninsula. Winters on shores of the Pacific south to Japan and northern China and from Vancouver Island to Lower California.
- \*Red-breasted Goose. *Branta ruficollis* (Pallas). Breeds on the Siberian tundra from the Ob to the Khatanga. Winters in southern part of the Caspian Sea and in the Aral Sea. Rare in Europe, 13 records in Britain.

Plate 5

Bering  
Canada Goose  
Extinct

BLACK GEESE

Aleutian Canada  
Goose

Apparent tendency to white ring

Cackling  
Goose

Small  
and dark

Richardson's  
Goose  
Small and  
pale

Taverner's Canada  
Goose

Lesser Canada  
Goose

Giant  
Canada  
Goose  
Extinct

Dusky Canada  
Goose

Great Basin  
Canada  
Goose

Todds or  
Central Canada  
Goose

Eastern  
Canada  
Goose

Vancouver  
Canada  
Goose

Lawrence's  
Brent  
Goose

Pacific Brent  
Goose or Black Brant  
Ring complete  
in front

Russian or  
Dark-bellied  
Brent  
Goose

Atlantic or  
Light-bellied  
Brent

Nene or  
Hawaiian  
Goose

Barnacle  
Goose

Red-breasted  
Goose

In all these forms the plumage of both  
sexes is the same

PLATE 6

Sub-Family ANATINÆ

Tribe TADORNINI (Shelducks and Sheldgeese)

†Crested Shelduck. *Tadorna cristata* (Kuroda).

Known only from three specimens, two from Korea and one from near Vladivostok. Thought at first to be a hybrid, but figures fairly frequently in ancient Japanese prints, indicating that it is probably a recently extinct species.

\*Ruddy Shelduck. *Tadorna ferruginea* (Pallas).

Breeds in south Spain and from south-east Europe, the Near East, the Caspian Sea, across Asia to Transbaikalia, south to Himalayas and south-western China. Winters in southern half of its breeding range to the Nile Valley; India and southern China. Occasional in Britain.

South African or Cape Shelduck. *Tadorna cana* (Gmelin).

Cape Province, Orange Free State and Transvaal.

Australian Shelduck. *Tadorna tadornoides* (Jardine and Selby).

West and South Australia, Victoria and Tasmania.

Paradise or New Zealand Shelduck. *Tadorna variegata* (Gmelin).

New Zealand.

Moluccan or Black-backed Radjah Shelduck. *Tadorna radjah radjah* (Lesson).

Moluccas, Ceram, Buru, Waigiu, Salawatti, New Guinea and the Aru Islands.

Australian or Red-backed Radjah Shelduck or Birdikin Duck. *Tadorna radjah rufitergum* Hartert.

Northern and eastern tropical Australia.

\*Common Shelduck. *Tadorna tadorna* (L.).

Breeds on coasts of western Europe, including the British Isles; locally about the shores of the Mediterranean, Black and Caspian Seas, east on the saline lakes of central Asia to east Siberia, Mongolia and Tibet. Winters from southern part of its breeding range to northern Africa, Arabia, India, south China and Japan.

\*Egyptian Goose. *Alopochen ægyptiacus* (L.).

Africa, south of the Sahara, also the entire Nile Valley; southern Palestine. Occasional records in Europe. Introduced into some parts of England.

Orinoco Goose. *Neochen jubatus* (Spix).

Basins of the Orinoco and the Amazon.

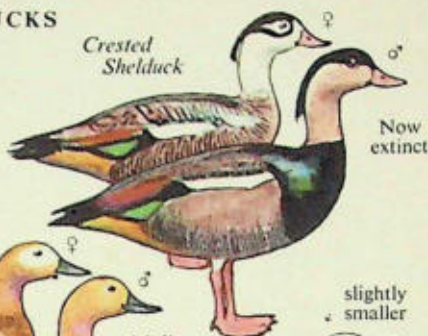


SHELDUCKS

Common Shelduck

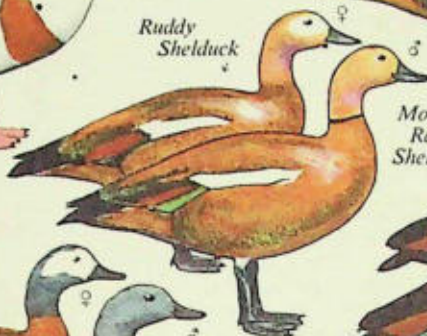


Crested Shelduck



Now extinct

Ruddy Shelduck



slightly smaller

Mollucan Radjah Shelduck



♂ & ♀ the same in both races

Cape or South African Shelduck



Australian Shelduck or Mountain Duck



New Zealand Shelduck or Paradise Duck



Orinoco Goose

♂ & ♀ plumage the same



Egyptian Goose

♂ & ♀ the same



There are two colour phases, the second being greyer on the back than this one

PLATE 7

**Abyssinian Blue-winged Goose.** *Cyanochen cyanopterus* (Rüppell).  
Highlands of Abyssinia and Shoa.

**Andean Goose.** *Chloëphaga melanoptera* (Eyton).

Western South America from the highlands of Peru and Bolivia to the Straits of Magellan. In winter it descends to the plains at the foot of the Andes in Chile and Argentina.

**Ashy-headed Goose.** *Chloëphaga poliocephala* Sclater.

Southern Chile and Argentina, Tierra del Fuego; Falkland Islands (rare). Migrates north in winter, but limits of breeding and winter ranges not clearly established.

**Ruddy-headed Goose.** *Chloëphaga rubidiceps* Sclater.

Falkland Islands and Tierra del Fuego; occasional in Patagonia and central Argentina. Northward movements in winter not yet worked out.

**Upland or Lesser Magellan Goose.** *Chloëphaga picta picta* (Gmelin).

Chile and southern Argentina from the Rio Negro south to Tierra del Fuego. In this form the males may be barred or white-breasted; the barred form predominates near the coast and to the south, the white form inland and to the north.

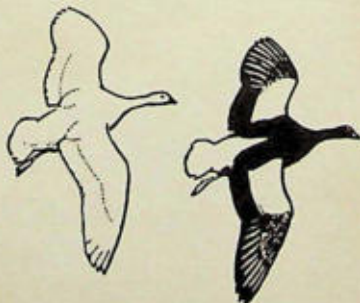
**Falkland Upland or Greater Magellan Goose.** *Chloëphaga picta leucoptera* (Gmelin).

Falkland Islands. Introduced into South Georgia. Larger than the typical form and males are always white-breasted.

**Patagonian or Lesser Kelp Goose.** *Chloëphaga hybrida hybrida* (Molina).

Coast of Chile from Chiloë, southward to Tierra del Fuego.

**Falkland or Greater Kelp Goose.** *Chloëphaga hybrida malvinarum* Phillips.  
Falkland Islands.



SHELDGEESE

All on this page except the Abyssinian are South American

*Abyssinian Blue-winged Goose*

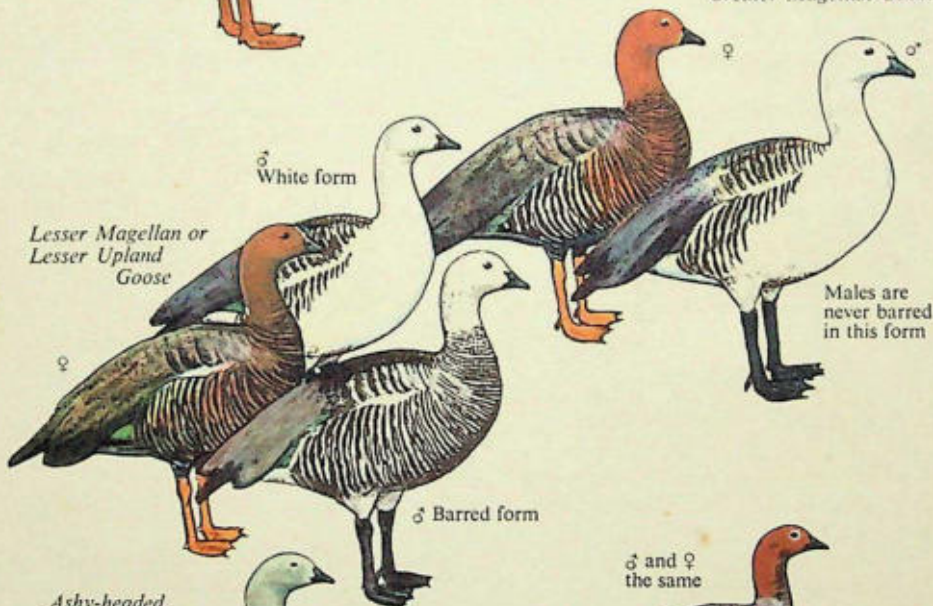
Male and female plumage the same



*Andean Goose*  
Male and female plumage the same



*Falkland Upland or Greater Magellan Goose*



*Lesser Magellan or Lesser Upland Goose*

♂ White form

♀

♂

Males are never barred in this form

♂ Barred form

♂ and ♀ the same

*Ashy-headed Goose*

♂ and ♀ the same

*Ruddy-headed Goose*

*Falkland Kelp Goose*

*Patagonian Kelp Goose*

Local race with longer bill and legs

PLATE 8

Aberrant species of tribe TADORNINI

**Cereopsis or Cape Barren Goose.** *Cereopsis novæ-hollandiæ* Latham.

Islands off Western Australia, South Australia and in Bass Strait. Probably not more than 6,000 individuals at present (1957).

**Flying Steamer Duck.** *Tachyeres patachonicus* (King).

Coasts, rivers, and interior lakes of southern South America from Valdivia, Chile on the west and Puerto Deseado, Argentina, on the east, south to Tierra del Fuego; Falkland Islands.

**Magellanic Flightless Steamer Duck.** *Tachyeres pteneres* (Forster).

The coast of southern South America from Concepcion, Chile, south to Tierra del Fuego, including the Straits of Magellan to the eastern entrance, but not the Atlantic coast north of Cape San Diego.

**Falkland Flightless Steamer Duck.** *Tachyeres brachypterus* (Latham).

Falkland Islands. The steamer ducks have been placed in a separate tribe by some authors.

**Patagonian Crested Duck.** *Lophonetta specularioides specularioides* (King).

From central Chile and west central Argentina south to Tierra del Fuego; Falkland Islands.

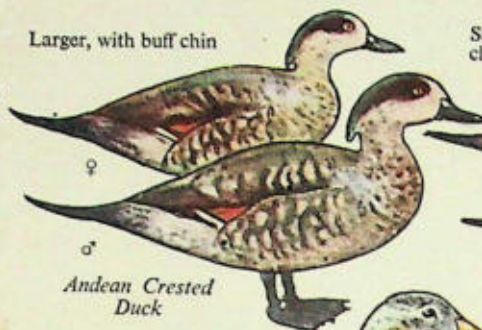
**Andean Crested Duck.** *Lophonetta specularioides alticola* Ménégaux.

Highland lakes in the Andes from central Peru, south through Bolivia to the latitude of Santiago, Chile. Occasionally in winter to the central valley of Chile.

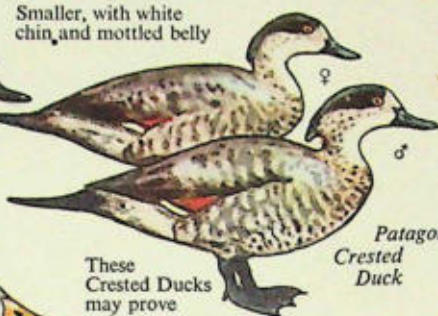


Larger, with buff chin

Smaller, with white chin and mottled belly



*Andean Crested Duck*

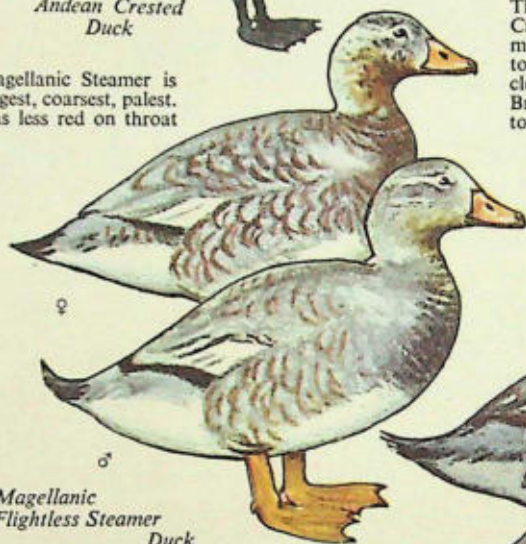


*Patagonian Crested Duck*

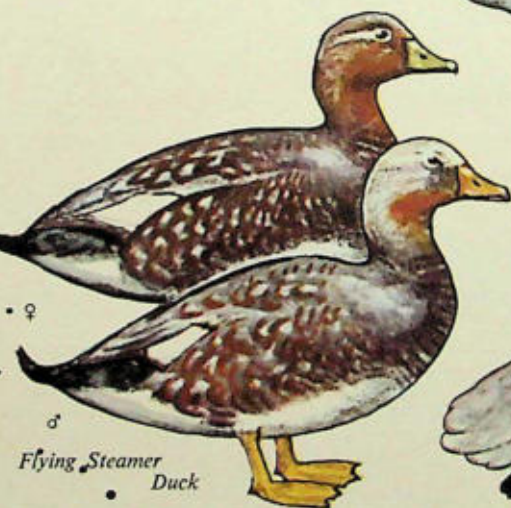
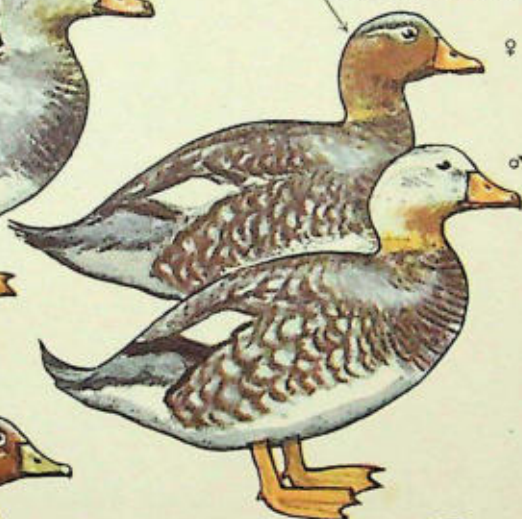
Magellanic Steamer is largest, coarsest, palest. Has less red on throat

These Crested Ducks may prove to be more closely related to the Bronze-winged Ducks than to the Shelducks

*Falkland Is. Flightless Steamer Duck or Loggerheaded Duck*

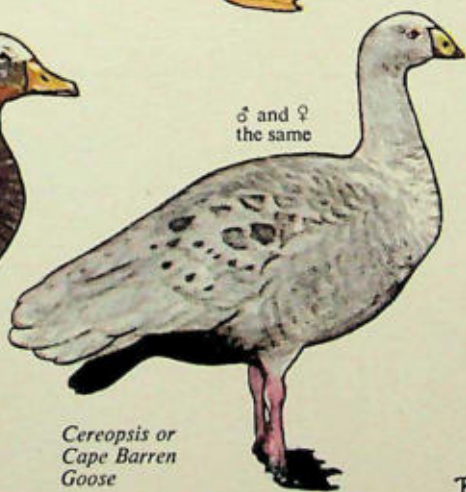


*Magellanic Flightless Steamer Duck*



*Flying Steamer Duck*

♂ and ♀ the same



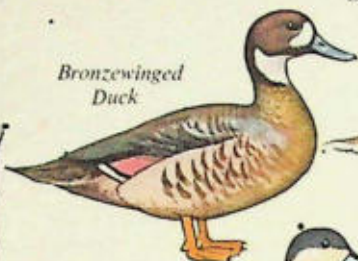
*Cereopsis or Cape Barren Goose*

Flying Steamer is darker and smaller than the other two

Tribe ANATINI (Dabbling Ducks)

- Bronze-winged Duck.** *Anas specularis* King. Slopes of the Andes in Chile and Argentina from the latitude of Concepcion to Tierra del Fuego. North in winter to the vicinity of Valparaiso, Chile.
- Salvadori's Duck.** *Anas waigiuensis* (Rothschild and Hartert). Mountains of New Guinea, and possibly the Island of Waigiu.
- Marbled Teal.** *Anas angustirostris* Ménétrières. Resident in Mediterranean Basin from southern Spain to Near East, Persia, Baluchistan and north-western India.
- Cape Teal.** *Anas capensis* Gmelin. Africa from Bechuanaland, African lakes, Uganda and southern Abyssinia southward. Apparently not in eastern coastal areas. Recorded from Lake Chad and Senegambia.
- Hottentot Teal.** *Anas punctata* Burchell. Africa from southern Angola, Uganda and Shoa to Cape Province; Madagascar.
- Northern Silver or Versicolor Teal.** *Anas versicolor versicolor* Vieillot. South America from central Chile, the Bolivian Chaco, Paraguay and southern Brazil, south to central Argentina.
- Southern Silver or Versicolor Teal.** *Anas versicolor fretensis* King. South America from the latitude of Valdivia, Chile, through southern Chile and Argentina to Tierra del Fuego; Falkland Islands.
- Puna Teal.** *Anas versicolor puna* Tschudi. The Puna zone (highland plateau) of the Andes from central Peru, south through Bolivia (Lake Titicaca and Cochabamba) to northern Chile.
- Red-billed Pintail.** *Anas erythrorhynchos* Gmelin. South and East Africa from southern Angola, Lakes Tanganyika and Victoria and southern Abyssinia, south to the Cape; Madagascar.
- Lesser or Northern Bahama Pintail.** *Anas bahamensis bahamensis* L. Bahama Islands, Greater Antilles (Cuba, Haiti, Jamaica, Puerto Rico) northern Lesser Antilles, northern Colombia, the Guianas and northern Brazil, as far as Amazon.
- Greater or Southern Bahama Pintail.** *Anas bahamensis rubrirostris* Vieillot. Southern Brazil, Paraguay, Uruguay, south to northern and eastern Argentina, and west to eastern Bolivia; central provinces of Chile; recorded on west coast of Peru.
- Galapagos Pintail.** *Anas bahamensis galapagensis* Ridgway. Galapagos Islands (Pacific Ocean west of Ecuador).
- South Georgian Teal.** *Anas georgica georgica* Gmelin. Island of South Georgia (South Atlantic).
- Chilean or Brown Pintail.** *Anas georgica spinicauda* Vieillot. South America from southern Colombia and Ecuador, through Bolivia, southern Brazil, Paraguay, Uruguay, Argentina and Chile to Tierra del Fuego; Falkland Islands. Probably does not winter in extreme south of its range.
- Niceforo's Pintail.** *Anas georgica niceforoi* Wetmore and Borrero. Eastern Andes of Colombia; also Cali, Valle de Cauca, Colombia. Very rare.
- \*Northern Pintail.** *Anas acuta acuta* L. Breeds in the northern parts of Europe, Asia and North America, including British Isles. Winters south to North Africa, the Nile Valley, Abyssinia, Persian Gulf, India, Ceylon, Burma, Siam, southern China; from southern British Columbia, Mississippi Valley and Chesapeake Bay to Panama and West Indies; Hawaiian Islands.
- Kerguelen or Eaton's Pintail.** *Anas acuta eatoni* (Sharpe). Kerguelen Island. Recently introduced into St. Paul and Amsterdam Islands (all in South Indian Ocean).
- Crozet Pintail.** *Anas acuta drygalskii* Reichenow. Crozet Islands. (South Indian Ocean, 800 miles west of Kerguelen Island.)
- Chilean Teal.** *Anas flavirostris flavirostris* Vieillot. South America from central Chile, north-western Argentina and extreme southern Brazil, south to Tierra del Fuego; Falkland Islands.
- Sharp-winged Teal.** *Anas flavirostris oxyptera* Meyer. The Puna zone (highland plateau) of the Andes from northern Peru, south through western Bolivia to northern Chile and northern Argentina.
- Andean Teal.** *Anas flavirostris andium* (Slater and Salvin). High Andes of central and southern Colombia and of Ecuador.
- Merida Teal.** *Anas flavirostris altipetens* (Conover). High Andes of western Venezuela and the eastern Andes of Colombia, south to Bogota.
- \*European Green-winged Teal.** *Anas crecca crecca* L. Breeds in Europe and Asia from Iceland to China, Manchuria and Kurile Islands and Japan. Winters as far south as North Africa, Nile Valley, Somaliland, Persia, India and Ceylon, Assam, southern China and the Philippines.
- Aleutian Teal.** *Anas crecca nimia* Friedmann. Aleutian Islands.
- \*American Green-winged Teal.** *Anas crecca carolinensis* Gmelin. Breeds in northern North America from Alaska to Hudson Bay south to about 40°N. Winters in southern U.S., Mexico, northern Central America and the West Indies. Reliably recorded in Britain eight times.

Bronzewinged Duck



Marbled Teal

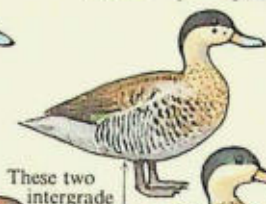
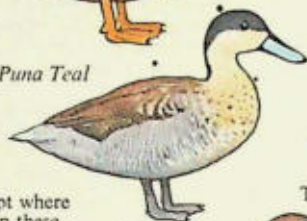


Salvadori's Duck



Northern Versicolor Teal

Puna Teal



Cape Teal



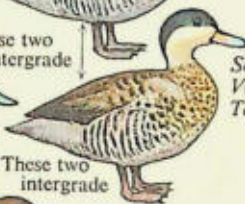
Except where shown these are all drakes. The females are duller

Lesser Bahama Pintail



These two intergrade

Southern Versicolor Teal



Hottentot Teal



These two intergrade

Galapagos Pintail



Greater Bahama Pintail

Red-billed Pintail or Red-billed Teal



Chilean or Brown Pintail



South Georgian Teal



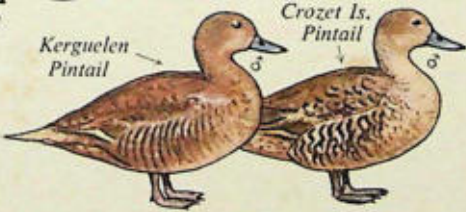
Niceforo's Pintail



Pintail



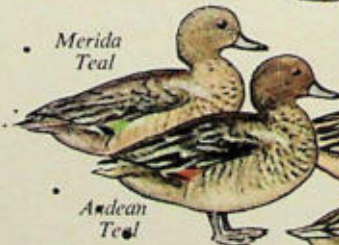
Kerguelen Pintail



Crozet Is. Pintail



Merida Teal



Sharp-winged Teal



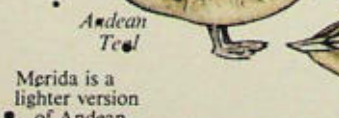
American Green-winged Teal



Aleutian Teal



Andean Teal



European Green-winged Teal



Chilean or Yellow-billed Teal



Merida is a lighter version of Andean ♀'s of these 4 are almost the same as ♂'s

PLATE 10

**Baikal or Formosa Teal.** *Anas formosa* Georgi.

Breeds in Siberia east from the Yenisei River to the Kolyma delta and Anadyr, south to Lake Baikal, northern Sakhalin and northern Kamchatka. Winters in China and Japan. Recorded from Formosa but derives its name not from the island but from the fact that "Formosa" is the Latin for "beautiful".

**Falcated Teal.** *Anas falcata* Georgi.

Breeds in northern Asia, south of the Arctic Circle from the Upper Yenesei to Kamchatka, south to Lake Baikal, northern Mongolia, the Amur and Ussuriland. Winters in Japan, Korea, eastern and southern China to Upper Burma.

**Madagascar Teal.** *Anas bernieri* (Hartlaub).

Western part of Madagascar. Believed to be very rare.

**East Indian Grey Teal.** *Anas gibberifrons gibberifrons* S. Müller.

East Indies (Java, Celebes, Lesser Sunda Islands, Sabeyer, Sumba, Flores, Timor and Weter).

**Rennell Island Grey Teal.** *Anas gibberifrons remissa* Ripley.

Rennell Island.

**Australian Grey Teal.** *Anas gibberifrons gracilis* Buller.

Australia, New Zealand, New Guinea, Aru and Kei Islands. Recorded from New Caledonia, but not recently.

**Andaman Teal.** *Anas gibberifrons albogularis* (Hume).

Andaman Islands, Landfall and Great Coco Islands (Indian Ocean). Two races have been described from the islands, but since there is striking individual variation in this species the claim of *A.a. leucopareus* is not substantiated.

**Chestnut-breasted Teal.** *Anas castanea* (Eyton).

Australia (except north coast); Tasmania. At present mainly restricted to southern New South Wales and Victoria.

**Auckland Island Flightless Teal.** *Anas aucklandica aucklandica* (G. R. Gray).

Auckland Islands (400 miles south of New Zealand). Lately reported to be holding its own satisfactorily.

**Campbell Island Flightless Teal.** *Anas aucklandica nesiotis* (Fleming).

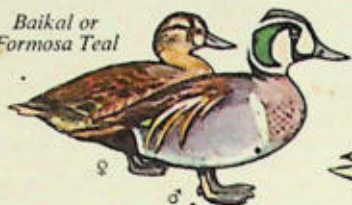
Campbell Island (500 miles south of New Zealand and east of Auckland Islands). Probably only a few dozen remain, but never was numerous.

**New Zealand Brown Teal.** *Anas aucklandica chlorotis* G. R. Gray.

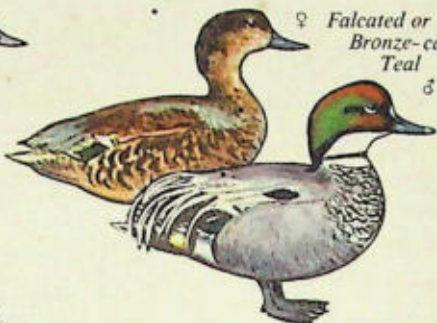
New Zealand; formerly Chatham Islands. Dangerously rare, though now probably increasing. Perhaps 1,000-1,500 individuals at present (1957).

DABBLING DUCKS

Baikal or Formosa Teal



Falcated or Bronze-capped Teal



Madagascar or Bernier's Teal

Erythristic form of Grey Teal



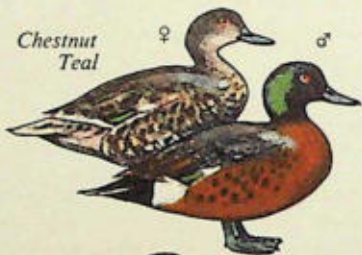
East Indian Grey Teal High forehead



Rennell Island Grey Teal Smallest of the three



Chestnut Teal



Australian Grey Teal



Andaman Teal



New Zealand Brown Duck or Brown Teal



Dull plumage  
Many males are intermediate between these two

Bright plumage

Island form of Grey Teal with variable amount of white on face

Auckland Is. Flightless Teal



Campbell Is. Flightless Teal



Narrower bill

PLATE 11

\***Mallard.** *Anas platyrhynchos platyrhynchos* L.

Breeds in Europe and Asia from Arctic Circle, south to Mediterranean, Persia, Tibet, central China, Korea and northern Japan; Iceland; the Azores; northern and central North America, west of Hudson's Bay and the Mississippi. The commonest breeding duck in Britain. Winters from southern half of breeding range to North Africa, Nile Valley, India, Burma, southern China, Japan; southern Mexico and Florida.

**Greenland Mallard.** *Anas platyrhynchos conboschas* C. L. Brehm.

Breeds on coasts of Greenland, on the west, north to Upernavik and on the east, north to Angmagsalik.

**Hawaiian Duck.** *Anas platyrhynchos wyvilliana* Sclater.

Hawaiian Islands. Probably 500 individuals at present (1957).

**Laysan Teal.** *Anas platyrhynchos laysanensis* Rothschild.

Laysan Island (900 miles west of Honolulu). For many years the maximum number seen on the single lake on the island has been about 30, but recently (1956) over 100 have been reported.

**Florida Duck.** *Anas platyrhynchos fulvigula* Ridgway.

Florida, Texas and Louisiana, possibly Alabama. The Mottled Duck *A. fulvigula maculosa* is not now regarded as a separable race.

**Mexican Duck.** *Anas platyrhynchos diazi* (Ridgway).

Highlands of central Mexico and the upper Rio Grande Valley from El Paso, Texas to Albuquerque, New Mexico. Birds from the latter area were formerly supposed to be a distinct race, but they do not seem to merit separation.

(Oustalets Duck from the islands of Guam, Saipan and Tinian, 1,200 miles north of New Guinea, was described as a distinct species, or at least race, *A. platyrhynchos oustaleti*, but recent research by Kuroda has shown this population to result from hybridisation of *A. platyrhynchos* and *A. superciliosa*.)

\***North American Black Duck.** *Anas rubripes* Brewster.

Breeds in north-eastern North America from the west side of Hudson Bay to Labrador, and south to North Carolina. Winters south to the Gulf coast. Recorded once in Ireland (1954).

**Indian Spotbill.** *Anas pectorhyncha pectorhyncha* Forster.

India to western Assam; Ceylon.

**Burma Spotbill.** *Anas pectorhyncha haringtoni* (Oates).

Burma, Shan States, Yunnan.

**Chinese Spotbill.** *Anas pectorhyncha zonorhyncha* Swinhoe.

Breeds in eastern Siberia, Manchuria, Mongolia, northern China, Korea, southern Sakhalin, the Kurile Islands and Japan. Winters south to southern China and Formosa.

**New Zealand Grey Duck.** *Anas superciliosa superciliosa* Gmelin.

New Zealand and neighbouring islands.

**Pelew Island Grey Duck.** *Anas superciliosa pelewensis* Hartlaub and Finsch.

Pelew Islands (east of Philippine Islands), northern New Guinea, Solomon Islands, Fiji, Samoa, Tonga, Tahiti, New Caledonia, New Hebrides, Bismarck Archipelago.

**Australian Black Duck.** *Anas superciliosa rogersi* Mathews.

Australia and Tasmania, East Indies, Celebes, Moluccas and New Guinea.

**Philippine Duck.** *Anas luzonica* Fraser.

Philippine Islands.

**Meller's Duck.** *Anas melleri* Sclater.

Eastern half of Madagascar; introduced into Mauritius.

**African Yellowbill.** *Anas undulata undulata* Du Bois.

Africa from Angola, Uganda and Kenya southward.

**Abyssinian Yellowbill.** *Anas undulata ruppelli* Blyth.

Upper Blue Nile and Abyssinian Lake Region. Probably also Cameroons (one collected).

**African Black Duck.** *Anas sparsa sparsa* Eyton.

South Africa; northern limits of range not yet known reliably, but as far as Portuguese East Africa and Nyasaland.

**Abyssinian Black Duck.** *Anas sparsa leucostigma* Rüppell.

Abyssinia, Sudan, East Africa across to the Upper Congo, and Tanganyika. Rare in the western part of its range.

**Gabon Black Duck.** *Anas sparsa maclatchyi* Berlioz.

Western French Equatorial Africa and probably Cameroons.

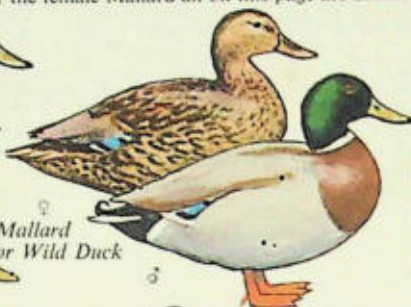
DABBLING DUCKS (MALLARDS)

Except for the female Mallard all on this page are drakes

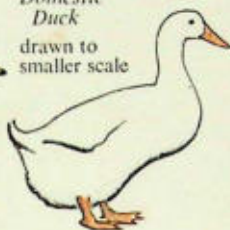
Greenland Mallard



Mallard or Wild Duck



Domestic Duck drawn to smaller scale



North American Black Duck



Mexican Duck



Florida Duck



Black spot

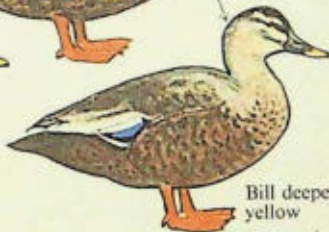
Indian Spotbill



Burma Spotbill



Chinese Spotbill



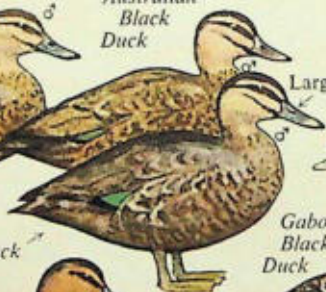
Females mostly just duller edition of male

Bill deeper yellow

Pelew Island Grey Duck



Australian Black Duck



Abyssinian Yellowbill



African Yellowbill

Darker

Smallest

Largest

New Zealand Grey Duck Greyer



Gabon Black Duck



Abyssinian Black Duck

These Black Ducks intergrade

African Black Duck

Philippine Duck

Female similar to male



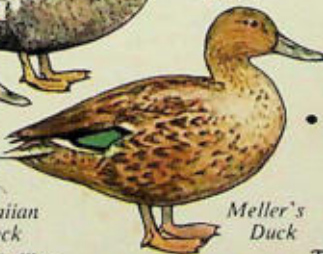
Laysan Teal

Females also show white round eye



Hawaiian Duck

Female like small female Mallard



Meller's Duck

- \***Gadwall.** *Anas strepera strepera* L.  
Europe, Asia and western North America, breeding from Iceland to Kamchatka. British Columbia and Prairie Provinces of Canada, south to England, Holland, Germany, central Russia, Caspian, Sæstnan, Transbaikalia, California and Colorado. Winters south to northern Africa, Abyssinia, India, Assam, southern China, Lower California, southern Mexico and Florida.
- †**Coues's Gadwall.** *Anas strepera couesi* (Streets).  
Washington Is., New York Is. (Fanning Group, 1,000 miles S. of Hawaii). Extinct.
- \***European Wigeon.** *Anas penelope* L.  
Europe and Asia, breeding in temperate regions north to the Arctic Circle and beyond, from Iceland and Scotland to Kamchatka. Winters in Britain and south to Nile Valley, Abyssinia, India, southern China and Japan. Regularly in small numbers on the Atlantic coasts of North America, also in British Columbia.
- \***American Wigeon.** *Anas americana* Gmelin.  
North America, breeding in the north-west from Alaska to the Prairie Provinces, mainly east of the Rockies and wintering from British Columbia to California and the Gulf Coast, and from Long Island, south to Costa Rica and West Indies. About twelve records in Britain.
- Chiloe Wigeon.** *Anas sibilatrix* Poepfig.  
Southern South America from Chile and southern Brazil, south to Tierra del Fuego; Falkland Islands. Breeds in the southern half of its range.
- \***Prairie Blue-winged Teal.** *Anas discors discors* L.  
Breeds in central plains of United States north to Great Lakes and Prairie Provinces of Canada. Winters on Gulf coast from Florida to Mexico, in the West Indies, Central America and northern South America to Peru in the west and Cayenne in the north-east. About ten recorded occurrences of this species in Britain, also record of probable breeding in Lincolnshire, but may have originated from escaped birds.
- \***Atlantic Blue-winged Teal.** *Anas discors orphna* Stewart and Aldrich.  
Breeds in tidal marshes of Atlantic seaboard from New Brunswick, Nova Scotia and Prince Edward Island south to North Carolina. Intergrades with *discors* in Great Lakes region and in central Canada. Part of the middle population seems to be permanently resident, but many birds migrate to the West Indies and South America. This is probably the race recorded about 10 times in Britain. One in 1956 was certainly *orphna*.
- Argentine Cinnamon Teal.** *Anas cyanoptera cyanoptera* Vieillot.  
Breeds in South America from Southern Peru, Brazil and Uruguay south, and in Falkland Islands.
- Andean Cinnamon Teal.** *Anas cyanoptera orinonius* (Oberholser).  
Puna region (highland plateau) of the Andes in Peru, Bolivia and Chile.
- Borrero's Cinnamon Teal.** *Anas cyanoptera borreroi* Snyder and Lumsden.  
Breeds in highlands of Colombia. Exact limits of range not yet known.
- Tropical Cinnamon Teal.** *Anas cyanoptera tropica* Snyder and Lumsden.  
Lowlands of Colombia.
- Northern Cinnamon Teal.** *Anas cyanoptera septentrionalium* Snyder and Lumsden.  
Breeds in western North America from southern British Columbia to Mexico, east to Kansas and Texas. Winters south to Colombia and Venezuela.
- \***Garganey.** *Anas querquedula* L.  
Breeds in south-eastern England, south Sweden, Finland, Russia, east across Asia, south of lat. 60°N. to Kamchatka; southern limits, France, Italy, Black Sea, Turkestan, Manchuria and northern Japan. Winters Mediterranean south to Nigeria, Kenya, Nyasaland, India, Indo-China, Philippines, Celebes, Moluccas and New Guinea.
- Argentine Red Shoveler.** *Anas platalea* Vieillot.  
Southern South America from Peru and Bolivia to southern Brazil and south to Tierra del Fuego and Falkland Islands; migratory in northern and southern parts of its range.
- Cape or South African Shoveler.** *Anas smithi* (Hartert).  
South Africa, north to Angola, Bechuanaland and the Transvaal.
- Australian Shoveler.** *Anas rhynchotis rhynchotis* Latham.  
Australia (except in the north) and Tasmania.
- New Zealand Shoveler.** *Anas rhynchotis variegata* (Gould).  
New Zealand. Formerly Chatham Islands.
- \***Common Shoveler.** *Anas clypeata* L.  
Breeds in Europe, Asia and North America, not north of Arctic Circle nor in eastern Canada. Breeds commonly in Britain. Winters as far south as East Africa, Persian Gulf, Ceylon, Burma, southern China, Japan, Hawaii, Lower California, Mexico, Honduras, Florida.

DABBLING DUCKS

Coues's  
Gadwall  
Extinct

Gadwall

American  
Wigeon

European  
Wigeon

Chiloe  
Wigeon

Prairie  
Blue-winged  
Teal

Garganey

Northern  
Cinnamon  
Teal

These probably  
intergrade

Atlantic  
Blue-winged  
Teal

Argentine  
Cinnamon  
Teal

Tropical  
Cinnamon  
Teal

Smallest and  
spotted

Andean  
Cinnamon  
Teal

Borrero's  
Cinnamon Teal

Common  
Shoveler

Largest

Cape Shoveler  
Australian Shoveler

Argentine  
Red Shoveler

New Zealand  
Shoveler

PLATE 13

**Ringed Teal.** *Anas leucophrys* Vieillot.

South America from southern Bolivia, Paraguay, south-western and southern Brazil, to north-eastern Argentina and Uruguay.

Aberrant species of tribe ANATINI

**Blue or Mountain Duck.** *Hymenolaimus malacorhynchos* (Gmelin).

Mountain streams of New Zealand.

**Pink-eared Duck.** *Malacorhynchus membranaceus* (Latham).

Australia and Tasmania.

†**Pink-headed Duck.** *Rhodonessa caryophyllacea* (Latham).

North-eastern and eastern India, Nepal and Assam, south to Madras. Was always local and rare, now probably extinct. No reliable reports of wild birds since 1935. Last in captivity died about 1939. The Pink-headed Duck may be more closely related to the pochards than to the dabbling ducks.

**Freckled Duck.** *Stictonetta nevosa* (Gould).

Australia (except in the north) and Tasmania. The rarest of Australian Ducks, perhaps dangerously so.



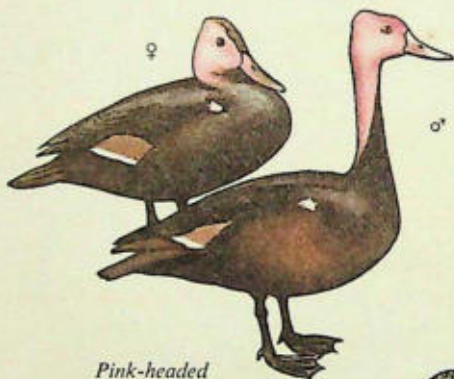
DABBLING DUCKS

*Ringed Teal*



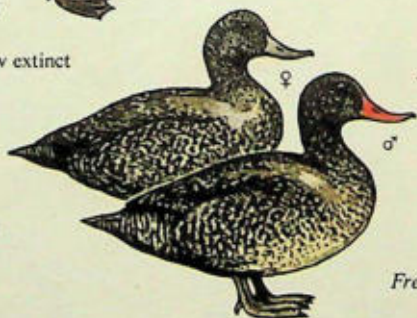
This species *may* be more closely related to the Brazilian Teal and therefore to the Perching Ducks

ABERRANT SPECIES OF DABBLING DUCKS



*Pink-headed Duck*

Probably now extinct



Male's bill is only red in breeding season

*Freckled Duck*



Soft flap at tip of bill



*Pink-eared Duck*

In both these species ♂ and ♀ are similar



*Blue or Mountain Duck*

PLATE 14

**Chilean Torrent Duck.** *Merganetta armata armata* Gould.

Andes of Chile and adjoining parts of western Argentina, north to Province of Mendoza, south to Tierra del Fuego.

**Colombian Torrent Duck.** *Merganetta armata colombiana* Des Murs.

Andes of Venezuela, Colombia and northern Ecuador.

**Peruvian Torrent Duck.** *Merganetta armata leucogenis* (Tschudi).

Andes of central and southern Ecuador and of Peru (except for Tinta, the Cuzcan Andes and Rio Victor—occupied by *M.a. turneri*).

**Turner's Torrent Duck.** *Merganetta armata turneri* Sclater and Salvin.

Known only from Tinta, the Cuzcan Andes and Rio Victor (Dept. of Arequipa) Peru.

**Garlepp's or Bolivian Torrent Duck.** *Merganetta armata garleppi* Berlepsch.

Mountains of Bolivia. Intergrades with *turneri* in the north and *berlepschi* in the south.

**Berlepsch's or Argentine Torrent Duck.** *Merganetta armata berlepschi* Hartert.

Mountains of north-western Argentina (Provinces of Salta and Tucumán).



TORRENT DUCKS

Colombian Torrent Duck



Slightly smaller

Peruvian Torrent Duck



Turner's Torrent Duck ♂



Garlepp's or Bolivian Torrent Duck



Berlepsch's or Argentine Torrent Duck



The belly in this race is not always quite so black

Chilean Torrent Duck ♀



All have a carpal spur on the wing which is larger in the ♂ than the ♀

PLATE 15

Tribe, SOMATERIINI (Eiders)

\***European Eider.** *Somateria mollissima mollissima* (L.).

Breeds in Iceland, Scotland, Scandinavia, east to Novaya Zemlya. Mainly resident, but some winter in North Sea and on west coast of France.

**Pacific Eider.** *Somateria mollissima v-nigra* G. R. Gray.

Breeds on Arctic coasts and islands of north-eastern Asia, Commander and Aleutian Islands and coasts of Alaska and North-West Territories of Canada. Winters chiefly in the Aleutian Islands.

**Northern Eider.** *Somateria mollissima borealis* (C. L. Brehm).

Breeds on north-eastern coasts of Canada and west Greenland. Winters from the open waters of Greenland, south to Maine.

**American Eider.** *Somateria mollissima dresseri* Sharpe.

Breeds on both coasts of Hudson's and James Bays and on east coast of Labrador. Winters from Newfoundland to Nantucket.

**Faeroe Eider.** *Somateria mollissima faeroensis* C. L. Brehm.

Faeroes; resident.

\***King Eider.** *Somateria spectabilis* (L.).

Breeds on fresh water near the Arctic coasts and on islands of Europe, Asia, and North America. Rare straggler to the British Isles in winter.

**Spectacled or Fischer's Eider.** *Somateria fischeri* (Brandt).

Breeds on the New Siberian Islands and Arctic coast of Siberia from the Yana River to Bering Strait and on the coast of Alaska. Winters in the Aleutian Islands.

\***Steller's Eider.** *Polysticta stelleri* Pallas.

Breeds on the Arctic coast of Siberia from the Taimyr Peninsula to Bering Strait and the coast of Alaska. Very small numbers resident in northern Lapland. Winters on open waters of Kamchatka, Commander and Kurile Islands, Aleutian Islands and Kenai Peninsula (Alaska). Recorded five times in Britain.

\*The eiders are included in the Tribe Mergini by some authorities.



EIDERS

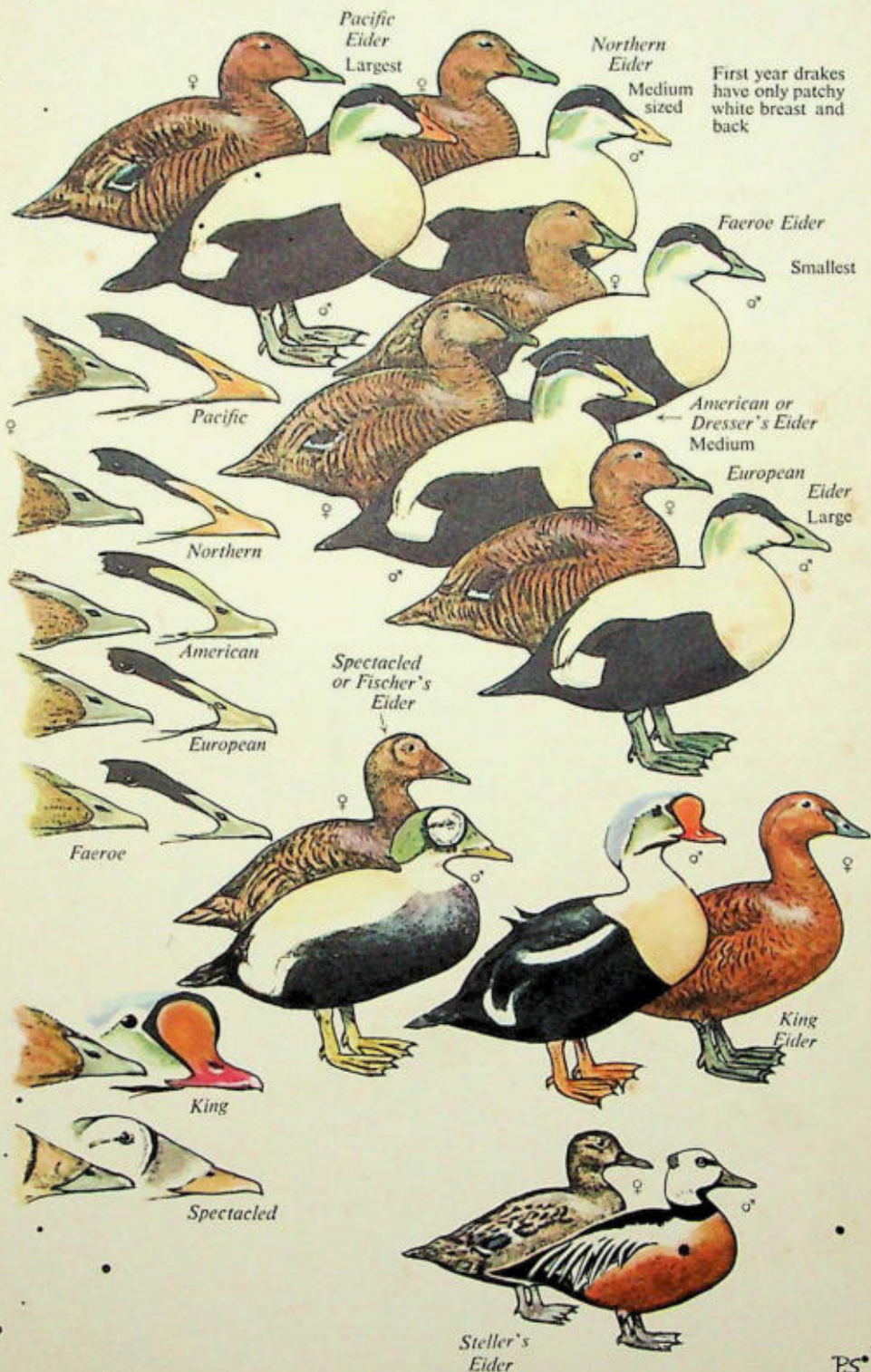


PLATE 16

Tribe AYTHYINI (Pochards)

\*Red-crested Pochard. *Netta rufina* (Pallas).

Eastern Europe and Asia, breeding from southern France, Holland (few, but increasing), through lower Danube, southern Russia east across Kirghiz Steppes to west Siberia. Winters Mediterranean, India, Burma, Shan States to China. Rare vagrant in Britain, but becoming commoner, as in other parts of north-west Europe.

Rosy-bill. *Netta peposaca* (Vieillot).

Central Chile, south to Chiloe Island, east across Argentina to Paraguay, Uruguay and south to northern Patagonia.

South American Pochard. *Netta erythrophthalma erythrophthalma* (Wied).

Western South America from north-western Venezuela to southern Peru.

African Pochard. *Netta erythrophthalma brunnea* (Eyton).

Africa from Angola in the west to Abyssinia and south to Cape Province.

Canvasback. *Aythya vallisneria* (Wilson).

North America, breeding in western Prairie Provinces of Canada and west central United States. Wintering from British Columbia, Colorado, southern Illinois and Chesapeake Bay, south to California, central Mexico, the Gulf and Florida.

\*European Pochard. *Aythya ferina* (L.).

Breeds in British Isles, southern Scandinavia and from eastern Russia through west Siberia to Lake Baikal, south to Holland, Germany, Balkans, Black Sea, Kirghiz Steppes and Yarkand. Winters in breeding range and south to Nile Valley, India, Burma and south China.

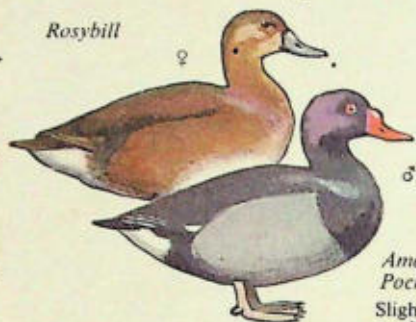
Redhead. *Aythya americana* (Eyton).

Breeds in western North America. Winters in U.S. and south to Lower California and the Valley of Mexico.

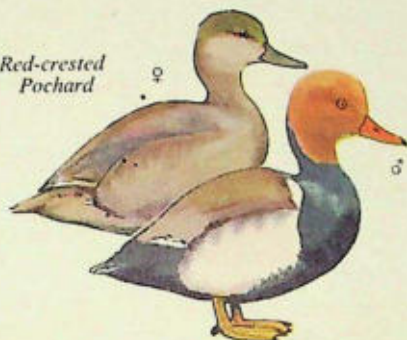


POCHARDS

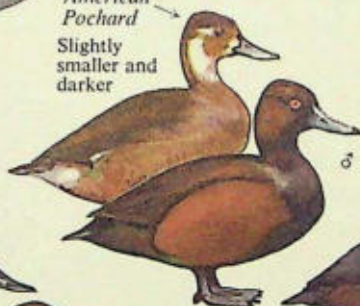
Rosybill



Red-crested Pochard

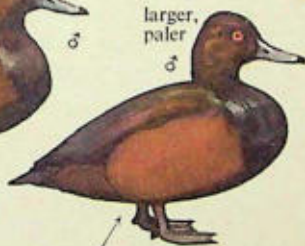


South American Pochard  
Slightly smaller and darker



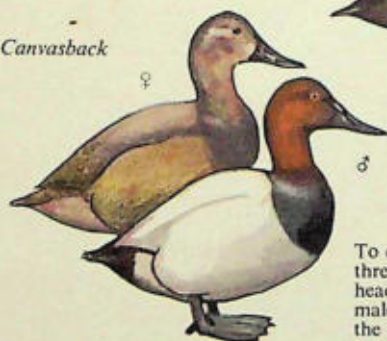
African Pochard

larger, paler



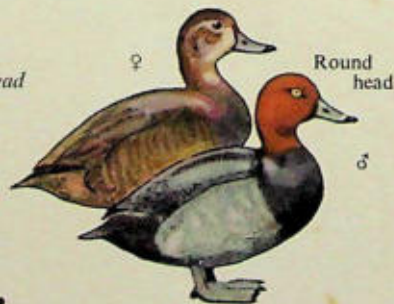
Female similar to female South American Pochard

Canvasback

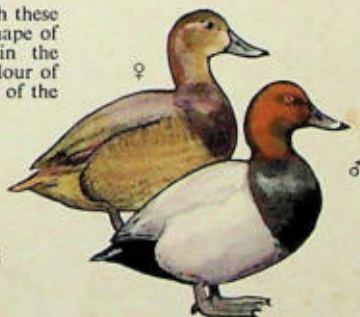


To distinguish these three, note shape of head, and, in the males, the colour of the back and of the eye

Redhead



Round head



European Pochard

♂ & ♀

PLATE 17

Madagascar White-eye. *Aythya innotata* (Salvadori).

Northern and eastern Madagascar.

\*Common White-eye or Ferruginous Duck. *Aythya nyroca* (Güldenstädt).

Breeds in southern Europe, Balkans, Poland and west Siberia to the Ob Valley, south to northern Africa, Persia, Turkestan, Kashmir, the Pamirs and southern Tibet. Winters in the Mediterranean, Nile Valley, Persian Gulf, India and Burma. Rare vagrant in Britain.

Baer's Pochard. *Aythya baeri* (Radde).

Breeds from Transbaikalia to the lower Ussuri and the Amur; Kamchatka (?). Winters in China, Korea, Japan, upper Assam and Burma.

Australian White-eye. *Aythya australis australis* (Eyton).

Australia, Tasmania; casual in some East Indies. Extinct in New Zealand.

Banks Island White-eye. *Aythya australis extima* Mayr.

Banks and Gaua Islands (north of New Hebrides).

New Zealand Scaup or Black Teal. *Aythya novae-seelandiae* (Gmelin).

New Zealand, Auckland Islands, Chatham Islands.

\*Ring-necked Duck. *Aythya collaris* (Donovan).

Breeds in central and north-western North America. Winters in southern U.S., south to Guatemala and West Indies. Accidental in Britain (two records, 1801 and 1955).

\*Tufted Duck. *Aythya fuligula* (L.).

Breeds in Europe and Asia from Iceland and British Isles to the Commander Islands (Pacific), south to central Europe, Balkans, Kirghiz Steppes, Lake Baikal, the Amur and Sakhalin. Winters in southern half of breeding range and south to Nile Valley, Persian Gulf, India, south China and Philippines.

Lesser Scaup. *Aythya affinis* (Eyton).

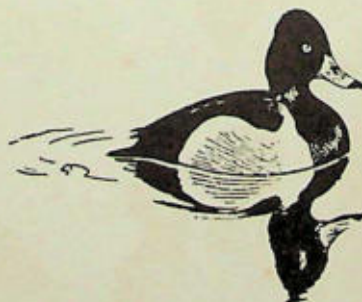
Breeds in north-central and north-western Canada and U.S. Winters in southern U.S., south to Panama and West Indies.

\*European Greater Scaup. *Aythya marila marila* (L.).

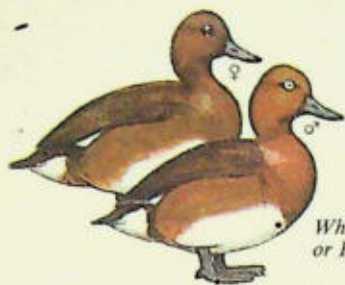
Breeds in northern Europe and Asia (eastern limits not yet determined). Has bred Scotland. Winters on coasts of western Europe (including Britain), eastern Mediterranean, Black Sea, Persian Gulf, north-western India.

Pacific Greater Scaup. *Aythya marila mariloides* (Vigors).

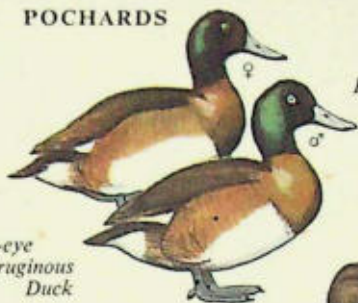
Breeds in North America from Hudson's Bay to the Aleutians, Bering Island, Kamchatka and probably elsewhere on the eastern Asiatic mainland. Winters on Pacific and Atlantic coasts of North America, south to Lower California and the West Indies, also China, Korea and Japan.



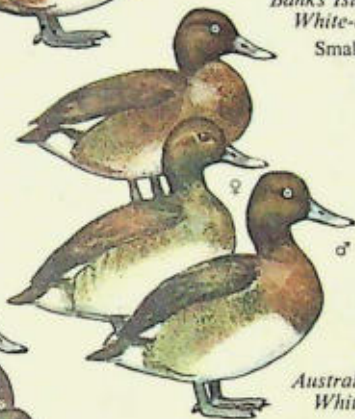
POCHARDS



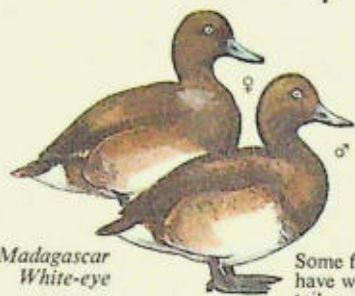
White-eye or Ferruginous Duck



Baer's Pochard



Banks Island White-eye Smaller

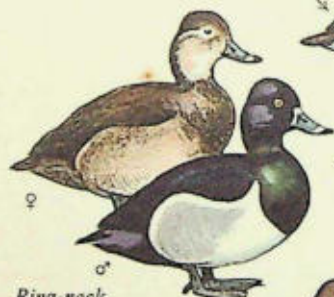


Madagascar White-eye

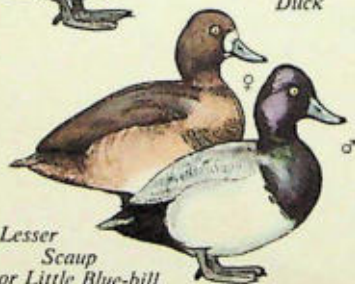


Some females have white under tail, especially in autumn

Tufted Duck



Ring-neck or Ring-bill

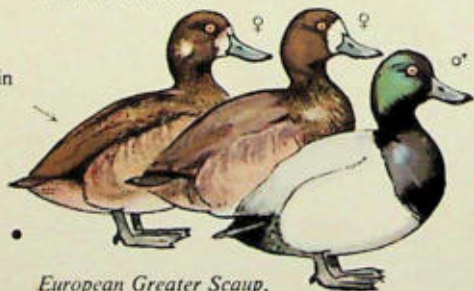


Lesser Scaup or Little Blue-bill

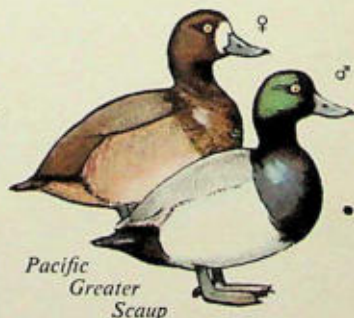


New Zealand Scaup or "Black Teal"

Female in summer



European Greater Scaup, Blue-bill or Broad-bill



Pacific Greater Scaup

Slightly smaller and darker on back P.S.

PLATE 18

Tribe CAIRININJ (Wood Ducks or Perching Ducks and Geese)

**Lesser Brazilian Teal.** *Amazonetta brasiliensis brasiliensis* (Gmelin).

Eastern South America from the Orinoco, western Brazil, eastern Bolivia, Paraguay, Uruguay and northern Argentina. There is a light and a dark colour phase of this race.

**Greater Brazilian or Schuyf's Teal.** *Amazonetta brasiliensis ipecutiri* Vieillot.

Argentina, south of Buenos Aires. The ranges of the races of *A. brasiliensis* are probably complicated by some migration. It is possible that more than two races exist.

**Australian Wood Duck or Maned Goose.** *Chenonetta jubata* (Latham).

Australia and Tasmania.

\***Mandarin Duck.** *Aix galericulata* (L.).

Eastern Asia from the Amur and Ussuri, south through Korea, eastern China, Japan to Formosa. Females from Korea are darker than those from elsewhere and have pink bills, and this population may constitute a distinct race. Introduced and now well established in England.

**North American Wood Duck.** *Aix sponsa* (L.).

Eastern half of the United States and southern Canada. Wintering in southern and south-eastern States. Also in the west from British Columbia to California (an entirely separate population).

**African Pygmy Goose.** *Nettapus auritus* (Boddaert).

Africa from a line between Gambia and Kenya, south to the Cape and Madagascar.

**Green Pygmy Goose.** *Nettapus pulchellus* Gould.

Ceram, Buru, southern New Guinea, northern Australia.

**Indian Pygmy Goose or Cotton Teal.** *Nettapus coromandelianus coromandelianus* (Gmelin).

India, Ceylon, Burma, east to southern China, south to Malaya and north-western East Indies.

**Australian Pygmy Goose.** *Nettapus coromandelianus albipennis* Gould.

North-eastern Australia.



PERCHING DUCKS



These two races intergrade. Other distinguishable races may exist

Although apparently closely related no hybrid between Mandarin and Carolina has been recorded, probably due to chromosome differences

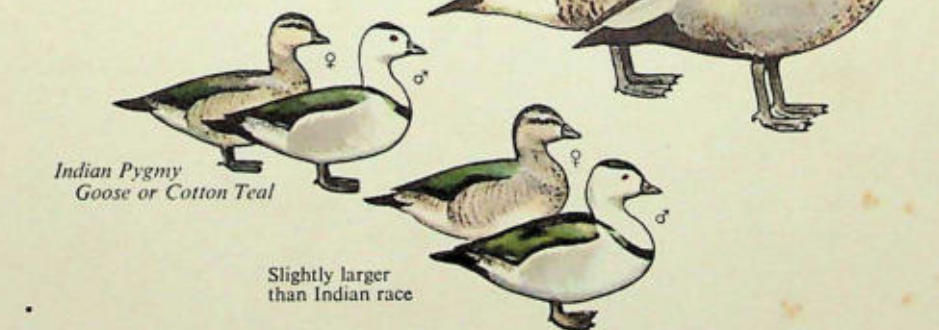


PLATE 19

**Comb Duck.** *Sarkidiornis melanotos melanotos* (Pennant).

Africa from Gambia and the Sudan, south to the Cape and Madagascar; India, Ceylon, Burma and south-eastern China.

**South American Comb Duck.** *Sarkidiornis melanotos carunculatus* (Lichtenstein).

Eastern tropical South America from Venezuela, south to southern Brazil, Paraguay and northern Argentina.

**Western Hartlaub's Duck.** *Cairina hartlaubi hartlaubi* (Cassin).

West and central Africa (Liberia eastwards; limits of range not known). Probably intergrades with *albifrons*.

**Eastern Hartlaub's Duck.** *Cairina hartlaubi albifrons* (Neumann).

African Lake Region and Congo westwards at least to Ituri River. Probably intergrades westward with *hartlaubi*.

**White-winged Wood Duck.** *Cairina scutulata* (S. Müller).

Assam, south through Malaya to Sumatra and Java. Sumatran and perhaps Javan birds may belong to a separable race.

**Muscovy Duck.** *Cairina moschata* (L.).

Mexico, south through central America and South America to Peru on the west and to Uruguay in the east. The ancestor of the farmyard Muscovy Duck.

**Spur-winged Goose.** *Plectropterus gambensis gambensis* (L.).

Africa from Gambia to upper Nile, south to the Zambesi.

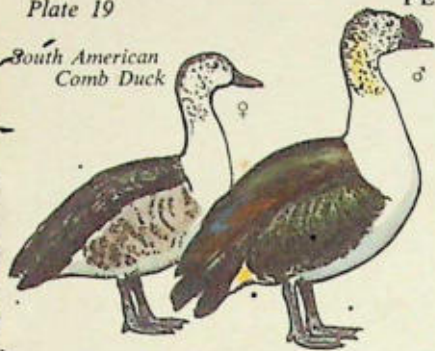
**Black Spur-winged Goose.** *Plectropterus gambensis niger* P. L. Sclater.

Africa, south of the Zambesi.

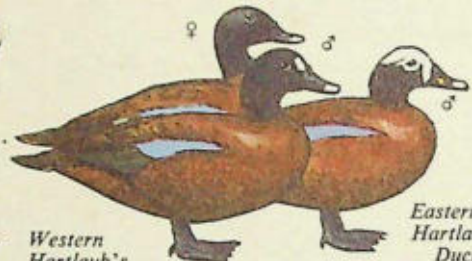
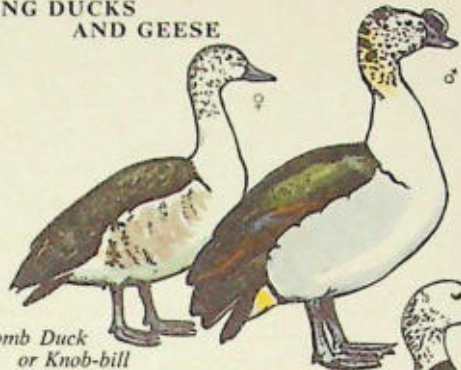


PERCHING DUCKS  
AND GEESE

South American  
Comb Duck

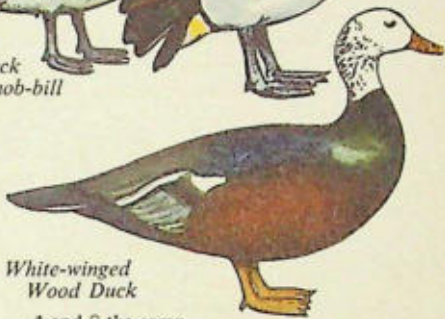


Comb Duck  
or Knob-bill



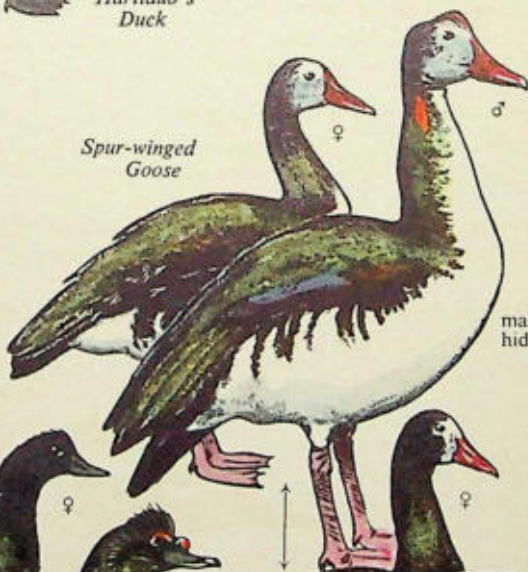
Western  
Hartlaub's  
Duck

Eastern  
Hartlaub's  
Duck



White-winged  
Wood Duck  
♂ and ♀ the same

Spur-winged  
Goose

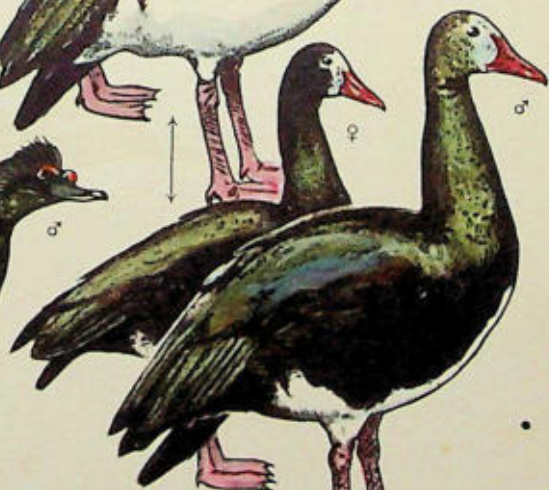


In both  
races there is  
a carpal spur,  
larger in the  
male. It is normally  
hidden.

Domestic Muscovy, which  
may be glossy green, grey  
or white, or a mixture



Wild Muscovy  
Duck



Black Spur-winged  
Goose

The two races of Spurwings  
intergrade

The species from which the  
farmyard Muscovy was  
originally domesticated

Tribe MERGINI (Scoters, Goldeneyes, Mergansers)

†Labrador Duck. *Camptorhynchus labradorius* (Gmelin).

Now extinct. Formerly bred in Labrador. Wintered south, probably to Chesapeake Bay, but chiefly off Long Island. Last one shot in 1875.

\*Common or Black Scoter. *Melanitta nigra nigra* (L.).

Breeds in Iceland, Ireland, Scotland, northern Europe and Asia from Norway, east to the Taimyr Peninsula. Winters chiefly on coasts of western Europe (including Britain), Mediterranean, Black and Caspian Seas.

American Black Scoter. *Melanitta nigra americana* (Swainson).

Breeds in north-eastern Asia, Aleutian Islands, western Alaska, sporadically across northern North America to Newfoundland. Winters south to China and Japan, California, North Carolina, and on Great Lakes.

\*Surf Scoter. *Melanitta perspicillata* (L.).

Breeds in northern North America, west of Hudson's Bay in Labrador and possibly in north-eastern Siberia. Winters from Alaska to California, on the Great Lakes, and from Nova Scotia to South Carolina. Occasional in Britain.

\*Velvet or European White-winged Scoter. *Melanitta fusca fusca* (L.).

Breeds from Scandinavia and the Baltic, east to Yenisei. Winters on the coasts of western Europe (including Britain), the Mediterranean, Black and Caspian Seas.

Asiatic White-winged Scoter. *Melanitta fusca stejnegeri* (Ridgway).

Breeds in eastern Asia from the Altai to Anadyr, Kamchatka and the Commander Islands. Winters on Pacific coast south to China and Japan.

Pacific White-winged Scoter. *Melanitta fusca dixonii* (Brooks).

Breeds in western Alaska. Winters on Pacific coast of North America, south to California. There is some considerable doubt whether this race can justifiably be separated from *deglandi*.

American White-winged Scoter. *Melanitta fusca deglandi* (Bonaparte).

Breeds in north-western Canada from the Mackenzie to James Bay and south to North Dakota. Winters on the Great Lakes and Atlantic coast, south to North Carolina.



SCOTERS

Bills of drake  
Scoters

Nail of bill more  
curved in  
both sexes



American Black  
Scoter

Common or Black  
Scoter

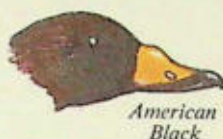
Labrador  
Duck  
Extinct



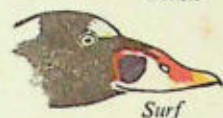
Surf Scoter



Black



American  
Black



Surf



Asiatic  
White-winged



Velvet

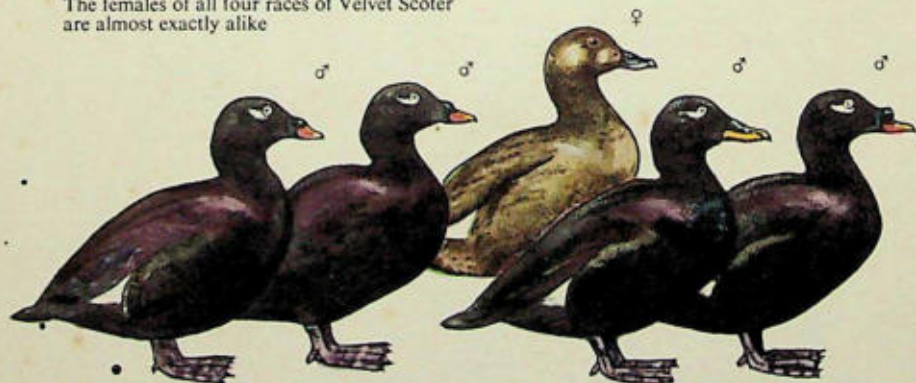


American  
White-winged



As above  
but shorter  
Pacific  
White-winged

The females of all four races of Velvet Scoter  
are almost exactly alike



Pacific  
White-winged  
Scoter

American  
White-winged  
Scoter

Velvet  
Scoter

Asiatic  
White-winged  
Scoter

♂ and ♀

\***Atlantic Harlequin Duck.** *Histrionicus histrionicus histrionicus* (L.).

Iceland, Greenland, northern Labrador. Mainly resident, breeding on rivers and wintering on sea coasts; some south to Long Island in winter. About twelve records in Britain.

**Pacific or Western Harlequin Duck.** *Histrionicus, histrionicus pacificus* W. S. Brooks.

Breeds in eastern Siberia from the Lena and Lake Baikal to Anadyr, Kamchatka, Sakhalin and the Kurile Islands. In North America from southern Alaska, south in the mountains to central California and Colorado. Winters on coasts south to Japan and California. This race is probably invalid.

\***Long-tailed Duck or Old Squaw.** *Clangula hyemalis* (L.).

Breeds on Arctic coasts of Europe, Asia and North America. Winters south to Britain, France, Holland, Black Sea, Caspian Sea, Japan, California, the Great Lakes, North Carolina; southern Greenland.

**Barrow's Goldeneye.** *Bucephala islandica* (Gmelin).

Breeds in Iceland, south-western Greenland, Labrador and in the mountains of north-western North America from south-central Alaska to south-western Colorado. The birds of Iceland and Greenland are resident, repairing to the coast in winter. Those in America winter south to Long Island on the Atlantic coast and San Francisco on the Pacific. Females with largely yellow bills occur often in the Rocky Mountain population but apparently not in the other parts of the breeding range and the two groups may form valid races.

\***European Goldeneye.** *Bucephala clangula clangula* (L.).

Breeds from northern Scandinavia east across Europe and Asia, north to the limit of trees, south to Germany, Balkans, central Russia and Siberia to Kamchatka and Sakhalin. Winters from British Isles, Mediterranean, northern India, southern China and Japan.

**American Goldeneye.** *Bucephala clangula americana* (Bonaparte).

Breeds in North America in heavy timber from Alaska and British Columbia to Newfoundland. Winters on Pacific coast south to California and on Atlantic to South Carolina. Also on open lakes and rivers in central United States.

\***Bufflehead.** *Bucephala albeola* (L.).

Breeds from central Alaska to Hudson's Bay, south to British Columbia, Alberta and Manitoba. Winters mainly in the United States; also Aleutian and Commander Islands. Four authentic records in Britain.





\*Smew. *Mergus albellus* L.

Breeds in Europe and Asia from Scandinavia to Siberia and south to the Volga, Turkestan and the Amur. Winters on coasts and lakes from Britain (regular on reservoirs near London), the Mediterranean, Persia, northern India to China and Japan.

\*Hooded Merganser. *Mergus cucullatus* L.

North America, breeding from south central Canada to southern U.S. and wintering chiefly in the Pacific States, Great Lakes, the Gulf States and Atlantic States south of New York. Four fully authenticated in Britain; nine others less certainly established.

Brazilian Merganser. *Mergus octosetaceus* Vieillot.

Southern Brazil, eastern Paraguay and north-eastern Argentina.

†Auckland Island Merganser. *Mergus australis* Hombron & Jacquinot.

Auckland Islands (400 miles south of New Zealand). Almost certainly extinct.

\*Red-breasted Merganser. *Mergus serrator serrator* L.

Breeds in suitable places throughout northern Europe, Asia, and North America (including British Isles), south in winter to the Mediterranean, Persian Gulf, China, Formosa, Gulf of Mexico and Florida.

Greenland Merganser. *Mergus serrator schioleri* Salomonsen.

Resident in Greenland.

Chinese or Scaly-sided Merganser. *Mergus squamatus* Gould.

Recorded in summer from Copper Island on the lower Amur River. Winters in China from western Szechuan to central Fukien and south to western Yunnan.

\*Goosander. *Mergus merganser merganser* L.

Breeds in Europe and Asia from Iceland, British Isles, Switzerland, the Balkans, to Kamchatka, the Kurile and Commander Islands. South in winter to Mediterranean and China.

Asiatic Goosander. *Mergus merganser orientalis* Gould.

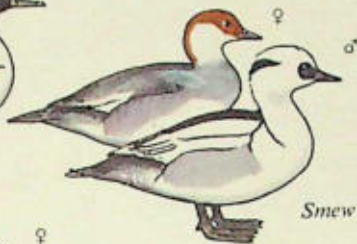
Afghanistan, Turkestan, Altai, Tibet. Winters northern India, northern Burma and China (Szechuan) and farther east, where it occurs with the typical race.

American Merganser. *Mergus merganser americanus* Cassin.

North America, breeding south of a line from south-eastern Alaska to James Bay; and wintering south to the Gulf of Mexico.



Hooded Merganser



Smew

Greenland Merganser  
Thicker Bill

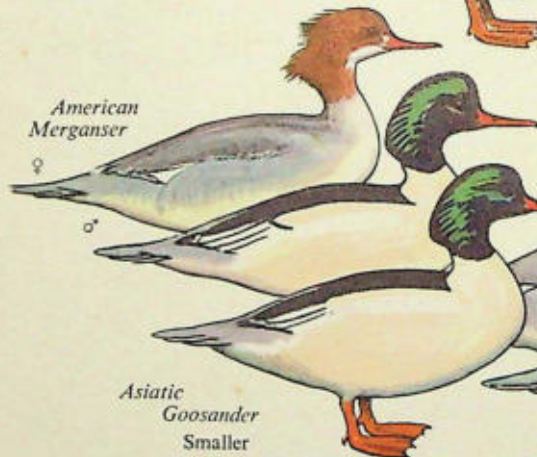


Red-breasted Merganser

Goosander

Red-breasted Merganser

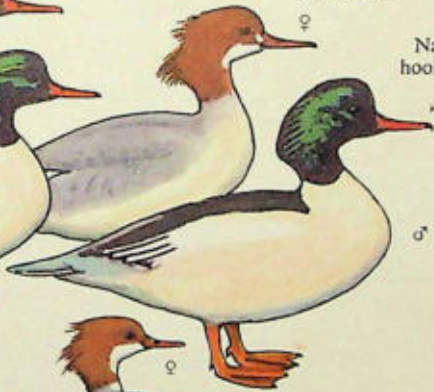
American Merganser



Goosander

Nail hooked

Asiatic Goosander  
Smaller



Chinese Merganser



Brazilian Merganser  
♂ and ♀ similar



♂ and ♀ similar

Auckland Island Merganser  
Probably now extinct

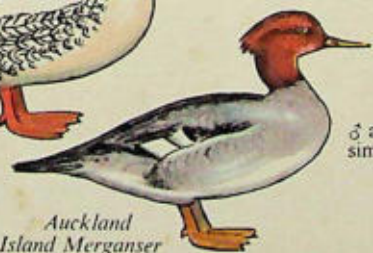


PLATE 23

Tribe OXYURINI (Stiff-tails)

**Masked Duck.** *Oxyura dominica* (L.).

Greater Antilles (Cuba, Haiti, Jamaica, Puerto Rico) and South America to central Chile and north-eastern Argentina.

**White-headed Stiff-tail.** *Oxyura leucocephala* (Scopoli).

Mediterranean, Black and Caspian Seas, Turkestan, south in winter to Egypt, Palestine, Mesopotamia and northern India.

**North American Ruddy Duck.** *Oxyura jamaicensis jamaicensis* (Gmelin).

Breeds in north-west central North America and winters south to California, Mexico, Florida and the Carolinas; also resident in West Indies. West Indian birds have been separated from N. American, the latter being named *O.j. rubida*, but the distinction is doubtful.

**Colombian Ruddy Duck.** *Oxyura jamaicensis andina* Lehmann.

Andean lakes of central and eastern Colombia. This race forms the link between *O.j. jamaicensis* and *O.j. ferruginea* and may intergrade in both directions.

**Peruvian Ruddy Duck.** *Oxyura jamaicensis ferruginea* (Eyton).

Andean lakes of Peru and Bolivia. Birds from Ecuador have been separated as *O.f. aequatorialis* but in view of the apparently exceptional individual variation it is doubtful if this race can be accepted.

**Argentine Ruddy Duck.** *Oxyura vittata* (R. A. Philippi).

Southern South America from northern Chile and southern Brazil to Sierra del Fuego. This species and *O.j. ferruginea* have been found breeding on the Lago Peñuelas, near Valparaiso, which indicates that they must be regarded as specifically distinct.

**Australian Blue-billed Duck.** *Oxyura australis* (Gould).

Australia (except in the north) and Tasmania.

**African Maccoa Duck.** *Oxyura maccoa* (Eyton).

Eastern Africa from southern Abyssinia to the Cape.

**Musk Duck.** *Biziura lobata* (Shaw).

Southern Australia and Tasmania.

Aberrant species of tribe OXYURINI

**African White-backed Duck.** *Thalassornis leuconotus leuconotus* Eyton.

Africa from eastern Cameroon and southern Abyssinia, south to the Cape.

**Madagascar White-backed Duck.** *Thalassornis leuconotus insularis* Richmond.

Madagascar.

**Black-headed Duck.** *Heteronetta atricapilla* (Merrem).

Central Chile, east to Paraguay and southern Brazil, south in Argentina at least to the latitude of Buenos Aires.



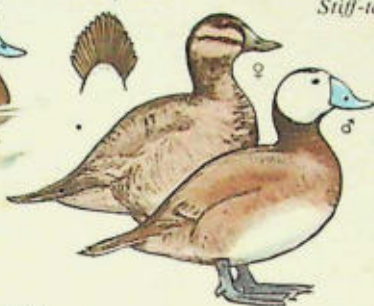
STIFF-TAILS

Two normal swimming positions

♂ displaying

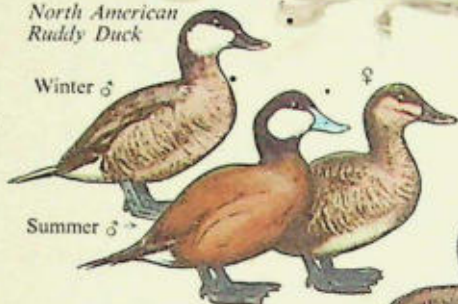
Tail spread

White-headed Stiff-tail



North American Ruddy Duck

Winter ♂

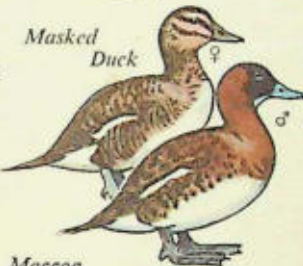


Summer ♂



Peruvian Ruddy Duck

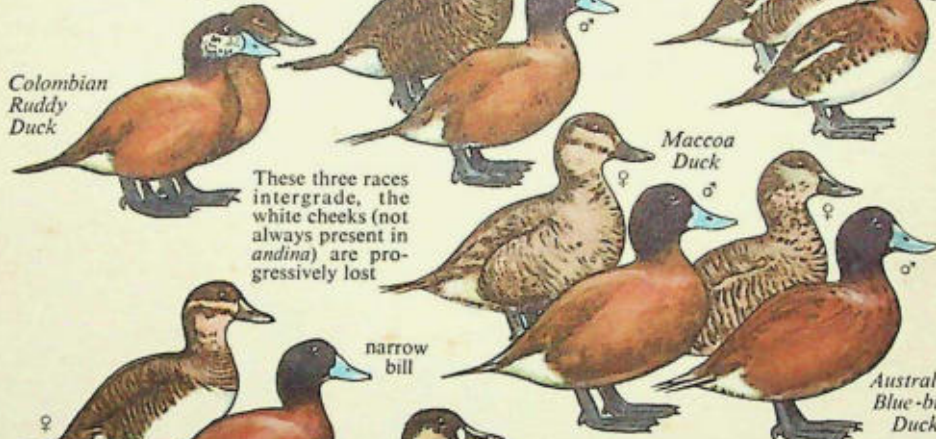
Masked Duck



Colombian Ruddy Duck

These three races intergrade, the white cheeks (not always present in *andina*) are progressively lost

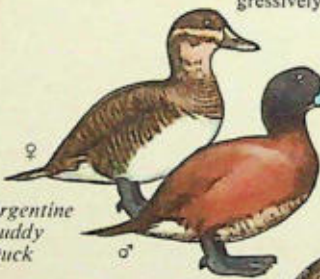
Maccoa Duck



narrow bill

Australian Blue-billed Duck

Argentine Ruddy Duck



Madagascar White-backed Duck

African White-backed Duck



♂ and ♀ the same

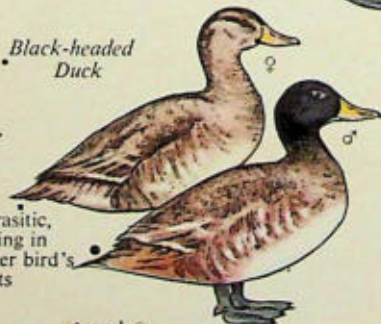


Normal swimming position

Smaller and brighter ♂ and ♀ the same

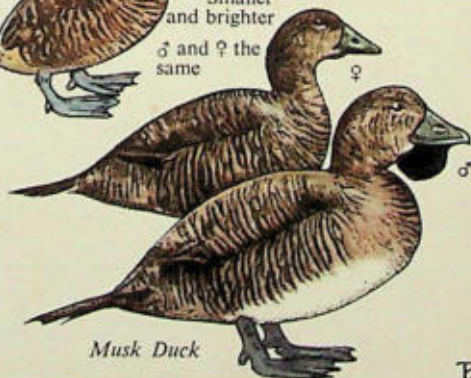


Black-headed Duck



Parasitic, laying in other bird's nests

♂ and ♀



Musk Duck

## INDEX OF SCIENTIFIC NAMES

Figures opposite names refer to plate numbers. Names of genera are shown in capitals, of species and subspecies in roman type. Where a species includes several subspecies the subspecific name only is cited with that of the genus: e.g., *Dendrocygna arcuata arcuata* is listed as 'arcuata, Dendrocygna' while *Dendrocygna arcuata australis* appears as 'australis, Dendrocygna'. The names of genera and species shown in parenthesis are synonyms no longer in use. Only names which have been widely used, but are now discarded, are included in the synonymy.

	Plate		Plate
acuta, Anas .. ..	9	(ARCTONETTA) Somateria	
aegyptiacus, Alopochen ..	6	fischeri .. ..	15
(aequatorialis) Oxyura		arcuata, Dendrocygna ..	1
ferruginea .. ..	23	armata, Merganetta ..	14
affinis, Aythya .. ..	17	(arvensis) Anser fabalis ..	3
AIX .. ..	18	(ASARCORNIS) Cairina	
albellus, Mergus .. ..	22	scutulata .. ..	19
albeola, Bucephala .. ..	21	asiatica, Branta .. ..	5
albifrons, Anser .. ..	3	atlanticus, Anser .. ..	4
albifrons, Cairina .. ..	19	atratus, Cygnus .. ..	2
albipennis, Nettapus ..	18	atricapilla, Heteronetta ..	23
albugularis, Anas .. ..	10	aucklandica, Anas .. ..	10
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alticola, Lophonetta ..	8	australis, Aythya .. ..	17
altipetens, Anas .. ..	9	australis, Dendrocygna ..	1
AMAZONETTA .. ..	18	australis, Mergus .. ..	22
americana, Anas .. ..	12	australis, Oxyura .. ..	23
americana, Aythya .. ..	16	autumnalis, Dendrocygna	1
americana, Bucephala ..	21	AYTHYA .. ..	16, 17
americana, Melanitta ..	20		
americanus, Mergus ..	22		
ANAS .. ..	9 to 13	baeri, Aythya .. ..	17
andina, Oxyura .. ..	23	bahamensis, Anas .. ..	9
andium, Anas .. ..	9	berlepschi, Merganetta ..	14
angustirostris, Marmaronetta	9	bernicla, Branta .. ..	5
ANSER .. ..	3, 4	bernieri, Anas .. ..	10
anser, Anser .. ..	3	bewickii, Cygnus .. ..	2
ANSERANAS .. ..	1	bicolor, Dendrocygna ..	1
arborea, Dendrocygna ..	1	BIZIURA .. ..	23

	<i>Plate</i>		<i>Plate</i>
borealis, Somateria .. ..	15	couesi, Anas .. ..	12
borreroi, Anas .. ..	12	crecca, Anas .. ..	9
brachypterus, Tachyeres ..	8	cristata, Tadorna ..	6
brachyrhynchus, Anser ..	3	cucullatus, Mergus ..	22
BRANTA .. ..	5	CYANOCHEN. .. ..	7
brasiliensis, Amazonetta ..	18	cyanoptera, Anas .. ..	12
brunnea, Netta .. ..	16	cyanopterus, Cyanochen ..	7
buccinator, Cygnus .. ..	2	cygnoides, Anser .. ..	3
BUCEPHALA .. ..	21	(CYGNOPSIS) Anser	
		cygnoides .. ..	3
		CYGNUS .. ..	2
		cygnus, Cygnus .. ..	2
CAIRINA .. ..	19		
CAMPTORHYNCHUS .. ..	20	(DAFILA) part of ANAS ..	9
cana, Tadorna .. ..	6	deglandi, Melanitta ..	20
canadensis, Branta .. ..	5	DENDROCYGNA .. ..	1
canagicus, Anser .. ..	4	(DENDRONESSA) Aix	
capensis, Anas .. ..	9	galericulata .. ..	18
carolinensis, Anas .. ..	9	diazii, Anas .. ..	12
carunculatus, Sarkidiornis	19	discolor, Dendrocygna ..	1
caryophyllacea,		discors, Anas .. ..	12
Rhodonessa .. ..	13	(dispar) Chloephaga	
(CASARCA) part of TADORNA	6	p. picta .. ..	7
castanea, Anas .. ..	10	dixoni, Melanitta .. ..	20
CEREOPSIS .. ..	8	dominica, Oxyura .. ..	23
(CHAULELASMUS) Anas		dresseri, Somateria ..	15
strepera .. ..	12	drygalskii, Anas .. ..	9
(CHEN) part of ANSER .. ..	4		
(CHENISCUS) part of		eatoni, Anas .. ..	9
NETTAPUS .. ..	18	(ERISMATURA) OXYURA ..	23
CHENONETTA .. ..	18	erythrophthalma, Netta ..	16
(CHENOPIS) Cygnus atratus	2	erythropus, Anser .. ..	3
chlorotis, Anas .. ..	10	erythrorhyncha, Anas ..	9
CHLOEPHAGA .. ..	7	(EULABEIA) Anser indicus	4
CLANGULA .. ..	21	(EUNETTA) Anas falcata ..	10
clangula, Bucephala .. ..	21	extima, Aythya .. ..	17
clypeata, Anas .. ..	12	eytoni, Dendrocygna ..	1
cærulescens, Anser .. ..	4		
collaris, Aythya .. ..	17	fabalis, Anser .. ..	3
colombiana, Merganetta ..	14	faerœensis, Somateria ..	15
colombianus, Cygnus .. ..	2	falcata, Anas .. ..	10
conboschas, Anas .. ..	11		
coromandelianus, Nettapus	18		
COSCOROBA .. ..	2		

	<i>Plate</i>		<i>Plate</i>
ferina, Aythya .. ..	16	(hyperborea) Anser	
ferruginea, Oxyura .. ..	23	cœrulescens .. ..	4
ferruginea, Tadorna .. ..	6		
fischeri, Somateria .. ..	15	indicus, Anser .. ..	4
flavirostris, Anas .. ..	9	innotata, Aythya .. ..	17
flavirostris, Anser .. ..	3	insularis, Thalassornis .. ..	23
formosa, Anas .. ..	10	interior, Branta .. ..	5
(frænata) Merganetta		ipecutiri, Amazonetta .. ..	18
armata armata .. ..	14	islandica, Bucephala .. ..	21
fretensis, Anas .. ..	9	(islandicus) Cygnus cygnus .. ..	2
frontalis, Anser .. ..	3		
(FULIGULA) part of AYTHYA	17	jamaicensis, Oxyura .. ..	23
fuligula, Aythya .. ..	17	jankowskii, Cygnus .. ..	2
fulva, Branta .. ..	5	javanica, Dendrocygna .. ..	1
(fulva) Dendrocygna		johanseni, Anser .. ..	3
bicolor .. ..	1	jubata, Chenonetta .. ..	18
fulvigula, Anas .. ..	11	jubatus, Neochen .. ..	6
fusca, Melanitta .. ..	20		
		labradorius,	
galapagensis, Anas .. ..	9	Camptorhynchus .. ..	20
galericulata, Aix .. ..	18	laysanensis, Anas .. ..	11
gambelli, Anser .. ..	3	leucocephala, Oxyura .. ..	23
gambensis, Plectropterus	19	leucogenis, Merganetta .. ..	14
garleppi, Merganetta .. ..	14	leuconotus, Thalassornis .. ..	23
georgica, Anas .. ..	9	leucopareia, Branta .. ..	5
gibberifrons, Anas .. ..	10	leucophrys, Anas .. ..	13
(GLAUCIONETTA)		leucopsis, Branta .. ..	5
BUCEPHALA .. ..	21	leucoptera, Chloephaga .. ..	7
gracilis, Anas .. ..	10	leucostigma, Anas .. ..	11
guttata, Dendrocygna .. ..	1	lobata, Biziura .. ..	23
		(LOPHODYTES) Mergus	
haringtoni, Anas .. ..	11	cucullatus .. ..	22
hartlaubi, Cairina .. ..	19	LOPHONETTA .. ..	7
HETERONETTA .. ..	23	luzonica, Anas .. ..	11
HISTRIONICUS .. ..	21		
histrionicus, Histrionicus	21	maccoa, Oxyura .. ..	23
hrota, Branta .. ..	5	maclatchyi, Anas .. ..	11
hutchinsii, Branta .. ..	5	(maculosa) Anas .. ..	
hybrida, Chloephaga .. ..	7	platyrhynchus fulvigula .. ..	11
hyemalis, Clangula .. ..	21	(major) Mergus serrator	
HYMENOLAIMUS .. ..	13	schioleri .. ..	22

	Plate		Plate
malacorhynchus,		(NETTION) part of ANAS	9, 10, 13
Hymenolaimus . . . . .	13	and Amazonetta	
MALACORHYNCHUS . . . . .	13	brasiliensis . . . . .	18
malvarum, Chloephaga	7	niceforoi, Anas . . . . .	9
(MARECA) part of ANAS . . . . .	12	niger, Plectropterus . . . . .	19
marila, Aythya . . . . .	17	nigra, Melanitta . . . . .	20
mariloides, Aythya . . . . .	17	nigricans, Branta* . . . . .	5
MARMARONETTA . . . . .	9	nimia, Anas . . . . .	9
(mathewsi) Anas gibberifrons gracilis . . . . .	10	(nivalis) Anser cœrulescens	4
maxima, Branta . . . . .	5	(NOMONYX) Oxyura	
MELANITTA . . . . .	20	dominica . . . . .	23
melanocoryphus, Cygnus	2	novæ-hollandiæ, Cereopsis	8
melanoptera, Chloephaga	7	novæ-seelandiæ, Aythya . . . . .	17
melanotos, Sarkidiornis	19	(novimexicana) Anas	
melleri, Anas . . . . .	11	platyrhynchus diazi . . . . .	11
membranaceus, Malacorhynchus . . . . .	13	(NYROCA) AYTHYA	16, 17
MERGANETTA . . . . .	14	nyroca, Aythya . . . . .	17
merganser, Mergus . . . . .	22	occidentalis, Branta . . . . .	5
(MERGELLUS) Mergus		octosetaceus, Mergus . . . . .	22
albellus . . . . .	22	(OIDEMIA) Melanitta nigra	20
MERGUS . . . . .	22	olor, Cygnus . . . . .	2
(METOPIANA) Netta		orientalis, Branta . . . . .	5
peposaca . . . . .	16	orientalis, Mergus . . . . .	22
middendorfi, Anser . . . . .	3	orinomus, Anas . . . . .	12
minima, Branta . . . . .	5	orphna, Anas . . . . .	12
moffitti, Branta . . . . .	5	(oustaleti) Anas platyrhynchus x A. superciliosa	11
mollissima, Somateria . . . . .	15	oxyptera, Anas . . . . .	9
moschata, Cairina . . . . .	19	OXYURA . . . . .	23
nævosa, Stictonetta . . . . .	13	pacificus, Histrionicus . . . . .	21
(nearctica) Aythya marila		parvipes, Branta . . . . .	5
mariloides . . . . .	17	patachonicus, Tachyeres . . . . .	8
(neglectus) Anser f. fabalis	3	pelewensis, Anas . . . . .	11
NEOCHEN . . . . .	6	penelope, Anas . . . . .	12
nesiotis, Anas . . . . .	10	peposaca, Netta . . . . .	16
(NESOCHEN) Branta		(percna) Anas superciliosa	
sandvicensis . . . . .	5	rogersi . . . . .	11
(NESONETTA) Anas		perspicillata, Melanitta . . . . .	20
aucklandica . . . . .	10	(PHILACTE) Anser canagicus	4
NETTA . . . . .	16	picta, Chloephaga . . . . .	7
NETTAPUS . . . . .	18		

	<i>Plate</i>		<i>Plate</i>
platalea, Anas .. ..	12	SARKIDIORNIS .. ..	19
platyrhynchos, Anas .. ..	11	schioleri, Mergus .. ..	22
PLECTROPTERUS .. ..	19	scutulata, Cairina .. ..	19
poecilorhyncha, Anas .. ..	11	(sedentaria)-Somateria	
poliocephala, Chloephaga	7	mollissima dresseri .. ..	15
POLYSTICTA .. ..	15	semipalmata, Anseranas .. ..	1
(PSEUDOTADORNA) Tadorna		septentrionalium, Anas .. ..	12
cristata .. ..	6	serrator, Mergus .. ..	22
pteneres, Tachyeres .. ..	8	serrirostris, Anser .. ..	3
(PTERONETTA) Cairina		sibilatrix, Anas .. ..	12
hartlaubi .. ..	19	(sibiricus) Anser fabalis	
pulchellus, Nettapus .. ..	18	middendorfi .. ..	3
puna, Anas .. ..	9	smithi, Anas .. ..	12
(PUNANETTA) Anas		SOMATERIA .. ..	15
versicolor .. ..	9	sparsa, Anas .. ..	11
punctata, Anas .. ..	9	(SPATULA) part of ANAS .. ..	12
pygmæa, Dendrocygna .. ..	1	spectabilis, Somateria .. ..	15
		specularioides, Lophonetta	8
(QUERQUEDULA) part of ANAS	12	specularis, Anas .. ..	9
querquedula, Anas .. ..	12	spinicauda, Anas .. ..	9
		sponsa, Aix .. ..	18
radjah, Tadorna .. ..	6	squamatus, Mergus .. ..	22
remissa, Anas .. ..	10	stejnegeri, Melanitta .. ..	20
RHODONESSA .. ..	13	stelleri, Polysticta .. ..	15
rhynchotis, Anas .. ..	12	STICTONETTA .. ..	13
rogersi, Anas .. ..	11	strepera, Anas .. ..	12
rossicus, Anser .. ..	3	superciliosa, Anas .. ..	11
rossii, Anser .. ..	4	(sylvestris) Anser a. anser	3
rubidiceps, Chloephaga .. ..	7	(sylvicola), Sarkidiornis	
rubripes, Anas .. ..	11	melanotus carunculatus	19
rubrirostris, Anas .. ..	9	TACHYERES .. ..	8
rubrirostris, Anser .. ..	3	TADORNA .. ..	6
ruficollis, Branta .. ..	5	tadorna, Tadorna .. ..	6
rufina, Netta .. ..	16	tadornoides, Tadorna .. ..	6
rufitergum, Tadorna .. ..	6	taverneri, Branta .. ..	5
ruppelli, Anas .. ..	11	THALASSORNIS .. ..	23
		(torquatum) Anas	
(SALVADORINA) Anas		leucophrys .. ..	13
waigiensis .. ..	9	(tristis) Anas rubripes .. ..	11
sandvicensis, Branta .. ..	5	tropica, Anas .. ..	12
		turneri, Merganetta .. ..	14

	<i>Plate</i>		<i>Plate</i>
(titzihoa) <i>Anas a. acuta</i>	9	(vittata) <i>Amazonetta</i>	
		<i>brasiliensis ipecutiri</i>	.. 18
		<i>vittata, Oxyura</i>	.. 23
<i>undulata, Anas</i>	.. 11	<i>v-nigra, Somateria</i>	.. 15
<i>vallisneria, Aythya</i>	.. 16	<i>waigiensis, Anas</i>	.. 9
<i>variegata, Anas</i>	.. 12	<i>wyvilliana, Anas</i>	.. 11
<i>variegata, Tadorna</i>	.. 6		
<i>versicolor, Anas</i>	.. 9		
<i>viduata, Dendrocygna</i>	.. 1	<i>zonorhyncha, Anas</i>	.. 11

## INDEX OF ENGLISH NAMES

The application of English names to birds is not governed by formal procedure such as governs the scientific terminology. This index is correspondingly unsystematic. It aims at enabling the reader to find the illustrations of every species, and so it includes a number of names in local or general use even though alternative names have been employed in the text. Such additional names are shown in italic type, followed immediately by the preferred name, in roman type.

Although it seemed desirable to provide in the text a distinctive English name for every subspecies, these lengthy names are rarely used, the specific name being the obvious choice. Accordingly in this index only the specific vernacular names are given except in those cases where one subspecies has acquired a distinctive English name of its own. For example, twelve races of Canada Goose are illustrated on plate 3: in this index all are covered by the entry 'Canada Goose', but 'Cackling Goose' is also included, because this bird is not generally known as the 'Cackling Canada Goose'.

A few names not originally English have also been included, e.g., 'Ne-Ne' for the Hawaiian Goose, familiarity being the criterion.

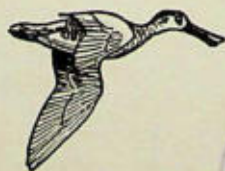
	<i>Plate</i>		<i>Plate</i>
Abyssinian Blue-winged Goose .. .. .	7	Auckland Island Flightless Teal .. .. .	10
African Black Duck ..	11	Auckland Island Merganser ..	22
African Maccoa Duck ..	23	Australian Blue-billed Duck ..	23
African Pochard .. ..	16	Australian Musk Duck ..	23
African Red-billed Pintail ..	9	Australian Pygmy Goose ..	18
African White-backed Duck ..	23	Australian Shelduck ..	6
Aleutian Teal .. .. .	9	Australian Shoveler ..	12
American Black Duck ..	11	Australian White-eye ..	16
American Merganser ..	22		
American Wigeon ..	12		
Andaman Teal .. .. .	10	Baer's Pochard .. .. .	17
Andean Goose .. .. .	7	Bahama Pintail (or <i>Duck</i> ) ..	9
Andean Teal .. .. .	9	Baikal Teal .. .. .	10
Argentine Red Shoveler ..	12	<i>Baldpate</i> American Wigeon ..	12
Ashy-headed Goose ..	7	Banks' Island White-eye ..	17

	<i>Plate</i>		<i>Plate</i>
Bar-headed Goose ..	4	Bronze-winged Duck ..	9
Barnacle Goose ..	5	Bufflehead ..	21
Barrow's Goldeneye ..	21	<i>Burdekin Duck</i> Radjah	
Bean Goose ..	3	Shelduck ..	6
Bewick's Swan ..	2	<i>Butterball Bufflehead</i> ..	21
<i>Birdikin Duck</i> Radjah		<i>Butterball Ruddy Duck</i> ..	23
Shelduck ..	6		
Black Brant ..	5	Cackling Goose ..	5
Black Duck ..	11	Campbell Island Flightless	
'Black Geese' ..	5	Teal ..	10
<i>Black Sheldrake</i> New		Canada Goose ..	5
Zealand Shelduck ..	6	Canvasback ..	16
<i>Black Scoter</i> Common		Cape Barren Goose ..	8
Scoter ..	20	Cape Shelduck ..	6
Black Swan ..	2	Cape Shoveler ..	12
<i>Black Teal</i> New Zealand		Cape Teal ..	9
Scaup ..	17	Carolina ..	18
<i>Black-bellied Whistling Tree</i>		Cereopsis Goose ..	8
<i>Duck</i> Red-billed Whist-		Chestnut Teal ..	10
ling Duck ..	1	<i>Chestnut-breasted Teal</i>	
Black-billed Whistling		Chestnut Teal ..	10
Duck ..	1	<i>Chile Teal</i> Chilian Teal ..	9
Black-headed Duck ..	23	Chilian Pintail ..	9
Black-necked Swan ..	2	Chilian Teal ..	9
Blue Duck ..	13	<i>Chilian Widgeon</i> , Chiloe	
Blue Goose ..	4	Widgeon ..	12
<i>Bluebill</i> Scaup ..	17	Chiloe Widgeon ..	12
Blue-billed Duck ..	23	Chinese Merganser ..	22
Blue-winged Goose ..	7	Cinnamon Teal ..	12
Blue-winged Teal ..	12	<i>Clucking Teal</i> Formosa Teal	10
<i>Brahminy Duck</i> Ruddy		Comb Duck ..	19
Shelduck ..	6	<i>Copper Teal</i> Cinnamon Teal	12
Brazilian Teal ..	18	Coscoroba Swan ..	2
Brazilian Merganser ..	22	<i>Cotton Teal</i> Indian Pygmy	
Brent Goose ..	5	Goose ..	18
<i>Broadbill</i> Scaup ..	17	Coues's Gadwall ..	12
<i>Brown Pintail</i> Chilean		Crested Duck ..	8
Pintail ..	9	Crested Shelduck ..	6
<i>Brown Pochard</i> South		<i>Crested Teal</i> Falcated Duck	10
African or South		Crozet Pintail ..	9
American Pochard ..	16	<i>Cuban Whistling Duck</i>	
<i>Bronze-capped Duck</i>		Black-billed Whistling	
Falcated Duck ..	10	Duck ..	1

	<i>Plate</i>		<i>Plate</i>
Eaton's Pintail .. ..	9	Hawaiian Duck .. ..	11
Egyptian Goose .. ..	6	Hawaiian Goose .. ..	5
Eider .. ..	15	<i>Honker</i> Canada Goose ..	5
Emperor Goose .. ..	4	Hooded Merganser ..	22
European Wigeon ..	12	Hottentot Teal .. ..	9
<i>Eyton's Tree Duck</i> Plumed		<i>Hutchins's Goose</i> Richard-	
Whistling Duck .. ..	1	son's Goose .. ..	5
Falcated Duck <i>or Teal</i> ..	10	Indian Pygmy Goose ..	18
Ferruginous Duck ..	17	Indian Whistling Duck ..	1
Fischer's Eider .. ..	15	 	
Flightless Steamer Duck ..	8	Jankowskii's Swan ..	2
Florida Duck .. ..	11	<i>Javan Tree or Whistling</i>	
Flying Steamer Duck ..	8	<i>Duck</i> Lesser Whistling	
Formosa Teal .. ..	10	Duck .. ..	1
Freckled Duck .. ..	13	 	
Fulvous Whistling Duck ..	1	Kelp Goose .. ..	7
 		Kerguelen Pintail .. ..	9
Gadwall .. ..	12	King Eider .. ..	15
Galapagos Pintail .. ..	9	<i>Knob-billed Duck</i> Comb	
Garganey .. ..	12	Duck .. ..	19
Goldeneye .. ..	21	<i>Knob-nosed Goose</i> Comb	
Goosander .. ..	22	Duck .. ..	19
Greater Snow Goose ..	4	<i>Koloa, Hawaiian Duck</i> ..	11
<i>Greater Whistling Teal</i>		 	
Fulvous Whistling Duck	1	Labrador Duck .. ..	20
Green Pygmy Goose ..	18	Laysan Teal .. ..	11
<i>Greenhead Mallard</i> ..	11	Lesser Scaup .. ..	17
Green-winged Teal ..	9	Lesser Snow Goose ..	4
Grey Duck ( <i>Anas super-</i>		Lesser Whistling Duck ..	1
<i>ciliosa</i> ) .. ..	11	Lesser White-fronted Goose	3
<i>Grey Duck</i> Crested Duck	8	<i>Logger-headed Duck</i>	
'Grey Geese' .. ..	3	Steamer Duck .. ..	8
Grey Teal ( <i>Anas gibber-</i>		Long-tailed Duck ..	21
<i>frons</i> ) .. ..	10	 	
Grey Teal ( <i>Anas versicolor</i> )	9	Maccoa Duck .. ..	23
Greylag Goose .. ..	3	Madagascar Teal ..	10
 		Madagascar White-backed	
Harlequin Duck .. ..	21	Duck .. ..	23
Hartlaub's Duck <i>or Teal</i>	19	Madagascar White-eye ..	17

	<i>Plate</i>		<i>Plate</i>
Magellan Goose .. ..	7	Pink-headed Duck .. ..	13
Magpie Goose .. ..	1	Pintail .. ..	9
Mallard .. ..	11	Plumed Whistling Duck ..	1
Mandarin Duck .. ..	18	Pochard .. ..	16
<i>Maned Goose</i> Australian		<i>Polish Swan</i> . (Colour phase	
Wood Duck .. ..	18	of Mute Swan) .. ..	2
Marbled Duck or Teal ..	9	Puna Teal .. ..	9
Masked Duck .. ..	23	Pygmy Goose .. ..	18
Meller's Duck .. ..	11		
<i>Merganet</i> Torrent Duck	14	Radjah Shelduck .. ..	6
Merganser .. ..	22	Red Shoveler .. ..	12
Merida Teal .. ..	9	Red-billed Pintail or Teal	9
Mexican Duck .. ..	11	Red-billed Whistling Duck	1
<i>Monkey Duck</i> Freckled		Red-breasted Goose .. ..	5
Duck .. ..	13	Red-breasted Merganser ..	22
Mountain Duck .. ..	13	Red-crested Pochard .. ..	16
<i>Mountain Duck</i> Australian		Redhead .. ..	16
Shelduck .. ..	6	<i>Red-legged Black Duck</i>	
Muscovy Duck .. ..	19	North American Black	
Musk Duck .. ..	23	Duck .. ..	11
Mute Swan .. ..	2	<i>Rice Teal</i> Indian Pygmy	
		Goose .. ..	18
Ne-ne .. ..	5	Richardson's Goose .. ..	5
New Zealand Brown Duck	10	Ringbill .. ..	17
New Zealand Scaup .. ..	17	Ringed Teal ( <i>Ring-necked</i>	
New Zealand Shelduck ..	6	Teal) .. ..	13
New Zealand Shoveler ..	12	Ring-necked Duck .. ..	17
<i>Nile Goose</i> Egyptian Goose	6	Ross's Goose .. ..	4
Niceforo's Pintail .. ..	9	Rosybill .. ..	16
North American Black		Ruddy Duck .. ..	23
Duck .. ..	11	Ruddy Shelduck .. ..	6
Old Squaw .. ..	21	Salvadori's Duck .. ..	9
Orinoco Goose .. ..	6	<i>Scaly-sided Merganser</i>	
		Chinese Merganser .. ..	22
Paradise Shelduck .. ..	6	Scaup .. ..	17
<i>Pepper Teal</i> Silver Teal ..	9	Schuyl's Teal .. ..	18
Philippine Duck .. ..	11	Scoter .. ..	20
Pink-eared Duck .. ..	13	Sharp-winged Teal .. ..	9
Pink-footed Goose .. ..	3	<i>Sheldrake</i> Shelduck .. ..	6
		<i>Sheldrake</i> American	
		Merganser .. ..	22

	<i>Plate</i>		<i>Plate</i>
Shoveler .. .. .	12	Upland Goose .. .. .	7
Silver Teal .. .. .	9		
Smew .. .. .	22		
Snow Goose .. .. .	4	Velvet Scoter .. .. .	20
South African Pochard ..	16	<i>Versicolor Teal</i> Silver Teal	9
South African Shelduck ..	6	..	
South African Shoveler ..	12		
South American Pochard	16		
South Georgian Teal ..	9	Wandering Whistling Duck	1
<i>Speckle-belly</i> White-		<i>Wavy</i> Snow Goose ..	4
fronted Goose .. .. .	3	Whistling Duck .. .. .	1
Spectacled Eider .. .. .	15	Whistling Swan .. .. .	2
Spotbill .. .. .	11	White-backed Duck .. .. .	23
Spotted Whistling Duck ..	1	White-eye .. .. .	17
<i>Sprig</i> Pintail .. .. .	9	White-faced Whistling	
Spur-winged Goose .. .. .	19	Duck .. .. .	1
Steamer Duck .. .. .	8	White-fronted Goose ..	3
Steller's Eider .. .. .	15	White-headed Stiff-tail ..	23
<i>Summer Teal</i> Garganey ..	12	White-winged Scoter ..	20
Surf Scoter .. .. .	20	White-winged Wood Duck	19
Sushkin's Goose. (Colour		Whooper Swan .. .. .	2
phase of Bean Goose) ..	3	Wigeon .. .. .	12
Swan .. .. .	2	<i>Wild Duck</i> , Mallard ..	11
Swan Goose .. .. .	3	Wood Duck, North Ameri-	
		can and Australian ..	18
		Wood Duck, White-winged	19
Teal .. .. .	9, 10, 12, 13, 18		
Torrent Duck .. .. .	14	Yellowbill .. .. .	11
Tree Duck .. .. .	1	<i>Yellow-billed Teal</i> Chilian	
Trumpeter Swan .. .. .	2	Teal .. .. .	9
Tufted Duck .. .. .	17		
Tule Goose .. .. .	3		







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