

Figure 76. Adult female ring-necked duck



Figure 77. Immature male ring-necked duck



Figure 78. Immature female ring-necked duck

# SEPARATION OF COMMON AND BARROW'S GOLDENEYES

#### Species Identification

The black bases of most greater secondary coverts on Barrow's goldeneyes extend over more than half of each feather and are visible on a normally spread wing. On common goldeneyes, these black bases cover less than half of each feather and are normally hidden (Figure 79). Usually the outer vanes of less than 7 secondaries are white on Barrow's goldeneyes, but on common goldeneyes outer vanes of 7 or more secondaries are white.

#### Age and Sex Identification

Adult males of each species are sufficiently distinctive to be easily identified. Adult females of both species have a broad black band across the tips of the greater secondary coverts. Immatures of both species have greater secondary coverts with white or variably spotted tips (not banded) that are often slightly frayed. The sexes of immatures appear similar, but 95% may be identified on the basis of wing length.

### COMMON GOLDENEYE

Wing Character	Male		Female	Female	
	Adult	Immature	Immature	Adult	
Middle and lesser coverts	Entirely white over all but the most proximal secondaries	A variable mixture of gray or gray-white and black over the secondaries		Many feathers entirely white; others only white tipped	
Greater secondary coverts	Entirely white	White, with or without traces of black at their tips which are often slightly frayed		White with a wide black band across their tips	
Notch-length	94% > 218 mm.	97% > 210 mm.	98% < 210 mm.	98% < 218 mm.	
Greater tertial coverts	Black, tips rounded and not frayed	Black, somewhat pointed, often both frayed and faded at tips		Black; tips rounded and often showing traces of gray	
Tertials	Shiny black; not frayed or faded	Dull black; tips usually faded to gray		Shiny black; not frayed or faded	

COMMON BARROW'S **ADULT MALE** IMMATURE MALE **IMMATURE FEMALE ADULT FEMALE** 

Figure 79. Greater secondary coverts of common and Barrow's goldeneyes



Figure 80. Adult male common goldeneye



Figure 81. Adult female common goldeneye



Figure 82. Immature male common goldeneye



Figure 83. Immature female common goldeneye

## BARROW'S GOLDENEYE

Wing Character	Male		Female	Female	
	Adult	Immature	Immature	Adult	
Middle and lesser coverts	White over white secondaries; more distal often with dark centers	Black with gray-white tips over secondaries		Black with white tips to mostly white over secondaries	
Greater secondary coverts	White on distal half; sometimes with black tipping; bases form a broad black band	White, sometimes with a trace of black at tips; black bases show as a narrow band		white with a wide black band across tips; black bases show as a narrow band	
Notch-length	97% > 222 mm.	96% > 217 mm. 94% < 217 mm.		96% < 222 mm.	
Greater tertial coverts	Black with rounded tips and not frayed	Black, somewhat pointed; often both frayed and faded at tips		tips Black; tips rounded and often showing traces of gray	
Tertials	Shiny black; not frayed or faded	Dull black, tips usually frayed and faded to gray		Shiny black; not frayed or faded	



Figure 84. Adult male Barrow's goldeneye



Figure 85. Adult female Barrow's goldeneye



Figure 86. Immature male Barrow's goldeneye



Figure 87. Immature female Barrow's goldeneye

# SEPARATION OF BUFFLEHEAD AND HOODED MERGANSER

Although whole birds are quite easy to tell apart, detached wings of some sex and age groups appear superficially similar. There are, however, two characteristics useful for separating the two species. Hooded mergansers have black tertials with central

white strips, and the white on their secondaries is restricted to the feather edges. In contrast, bufflehead tertials are solid black, and the white on their secondaries extends to the feather shafts.

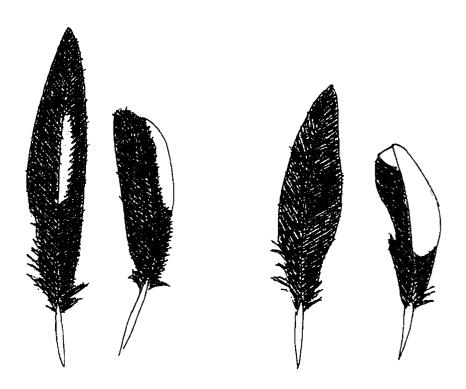


Figure 88. Variation in the tertials and secondaries between the hooded merganser (left) and the bufflehead (right)

### BUFFLEHEAD

Wings of adult males have greater, middle, and many lesser coverts that are entirely white. Wings of adult females and immature birds of both sexes have only a few white greater coverts and no white middle or lesser coverts. Wings in the second group that are 165 mm. or longer are all from immature males and include about two-thirds of them. Wings 164 mm. or shorter include the adult females, immature females, and the remaining immature males. The easiest sequence to follow is to identify the adult

females next. They have smoothly rounded greater coverts over both secondaries and tertials and their tertials often droop to rounded tips. The remaining wings are from immature birds and their greater coverts are usually frayed and somewhat pointed at their tips and their tertials appear straight with brownish fraying at their tips. Wings in this group that are 160 mm. or longer are from immature males and those that are 159 mm. or shorter are from immature females.

Wing Character Middle and lesser	Male		Female		
	Adult	Immature	Immature	Adult	
	Entirely white over secondaries; cover dark bases of greater coverts	Dark brown; tips pointed and often ragged	Very dark brown; tips pointed and often ragged	Entirely black; tips rounded; generally lie smoothly in	
secondary coverts		Tend to lie rather haphazardly, often showing gray basal portion of feathers		rows	
Greater secondary coverts	Entirely white; tips smooth	Vary among individual birds; usually many white spotted; tips usually frayed	Vary among individual birds from well spotted with white to entirely black; tips usually frayed	Vary among individual birds from black with or without few white spots to white with black band at tips; tips smooth	
Notch-length	93% > 165 mm	98% > 160 mm.	97% < 160 mm.	99% < 165 mm.	
Marginal coverts	Black with white fringe	Dark brown to black			
Greater tertial coverts	Black, rounded; usually smooth	Dark brown to black; pointed, often frayed at tips Black; rounded; usually smooth		Black; rounded; usually smooth	
Tertials	Solid black and pointed				



Figure 89. Adult male bufflehead



Figure 90. Adult female bufflehead



Figure 91. Immature male bufflehead



Figure 92. Immature female bufflehead

### HOODED MERGANSER

#### Sex Determination of Adults

Adult males have shiny black, unfrayed tertials with longitudinal white stripes and light gray middle and lesser coverts. Adult females have shiny black tertials with longitudinal white stripes, which, while tapering (as in males), are slightly shorter and blunter. The middle coverts of females are a blackish brown to grayish.

#### Age Determination

Immatures are similar in gross aspect to adult females, but immature tertials are straight and frayed at the tip and often appear brown. The middle and greater coverts usually are frayed and brown, particularly over the tertials. These feathers are smooth and unfrayed on adults.

A few immatures can be identified as males by the presence of one or more light gray middle or lesser coverts emerging among the darker feathers; however, the sex of most immatures cannot be determined.

Wing Character	Male		Female		
	Adult	Immature	Immature	Adult	
Tertials	Black; with broad longitudinal white stripes at	Dark brown; three distal with longitudinal white stripes at rachis; shafts straight; tips acutely pointed and very frayed		Black; three distal with longitudinal white stripe at	
	rachis; acutely pointed; curve distally	After molt: Similar to adult male	After molt: Similar to adult female	rachis; acutely pointed; curve distally	
Tertial coverts	Black and pointed	Dark brown and pointed; often frayed and faded		Black and pointed	
Greater Coverts	Broadly banded at tips with sharply defined white	Variably banded at tips with white which is often poorly defined and frequently with dark edging		Broadly banded at tips with sharply defined white	
Middle and lesser coverts	Do not cover black bases of greater coverts				
	Pale gray, broadly rounded over secondaries	Dark brown; tips often ragged and frayed		Broadly rounded; dark brown but slightly paler distally	



Figure 93. Adult male hooded merganser



Figure 94. Adult female hooded merganser



Figure 95. Immature hooded merganser

## SEPARATION OF RED-BREASTED AND COMMON MERGANSERS

The white greater secondary coverts on common mergansers hide the black bases of the secondaries and adult males normally show only one black bar, i.e., the bases of the greater secondary coverts. Females and immatures of both sexes normally show none. Adult females and a few immatures have a different type of bar due to black tips on the greater coverts rather than exposed bases of the secondaries. On red-breasted mergansers of all ages and sexes, the white greater secondary coverts do not cover the black bases of the secondaries. Thus, the wings of adult males show two black bars and the wings of adult females and immatures of both sexes show one black bar anterior to the speculum. On red-breasted mergansers, the most distal tertial is partially white on adult females and both sexes of immatures. On common mergansers of the same age and sex groups, this feather is dark gray.

Sex of approximately 97% of immature common mergansers can be determined from wing notchlength measurements provided primary growth is complete. In addition, most immature males have several more distal middle and lesser coverts that are a lighter shade of gray than the surrounding coverts. This light patch of feathers is subject to considerable variation in shade, but it does not occur on immature female wings.

Red-breasted mergansers do not show the same degree of difference in wing length between sexes as common mergansers. Among immatures, the degree of overlap is great enough to make measurements of little use for determining sex. Also, because immature males do not have pale coverts similar to those of common mergansers, their sex cannot be determined with accuracy.

### RED-BREASTED MERGANSER

Wing Character	Male		Female	Female	
	Adult	Immature	Immature	Adult	
Tertials	Three or four most distal mostly white with wide black margins on outer webs; two more proximal are black; all have bluntly pointed tips	Outer web of most distal is white with a wide black margin; others are dark gray with dark marginal stripes on one or more; tips are pointed and usually frayed		More distal are gray-white with wide dark marginal stripes	
Greater tertial coverts	Most are white with smoothly rounded tips	All are dark gray-black and taper to tips which are usually frayed		All are shiny black with smoothly rounded tips	
Greater	Do not completely cover dark bases of secondaries on normally spread wing				
secondary coverts	Proximal 2/3 is white to tips	Proximal 2/3 is white or	Proximal 2/3 is white with a black band (sometimes poorly defined) at tips		
Middle and lesser secondary coverts	Do not completely cover dark bases of greater coverts on normally spread wing				
	Entirely white	Dark gray with females :	Very dark gray to black		



Figure 96. Adult male red-breasted merganser



Figure 97. Adult female red-breasted merganser



Figure 98. Immature red-breasted merganser

## COMMON MERGANSER

Wing Character	Male		Female		
	Adult	Immature	Immature	Adult	
<b>Tertials</b>	Three or four most distal mostly white with narrow black margins on outer webs; others black; all are acutely pointed	All are dark gray with pointed tips that are usually frayed and faded		All are dark gray and bluntly pointed.	
Greater tertial coverts	Most are white with smoothly rounded tips	All are dark gray; taper toward tips that are usually somewhat frayed		All dark gray; tips smoothly rounded	
Greater	Cover the dark bases of the secondaries on normally spread wing				
secondary coverts	Proximal 2/3 is white to tips	Proximal 2/3 is white on outer gray at tips	Proximal 2/3 is white with black bands at tips		
Middle and lesser	Do not completely cover dark bases of greater coverts on normally spread wing				
secondary coverts	Entirely white over secondaries	Gray; but more distal coverts often form a pale area	nales; never have a pale area		
Notch-length	99% > 260 mm.	97% > 254 mm.	97% < 254 mm.	.99% < 260 mm.	



Figure 99. Adult male common merganser



Figure 100. Adult female common merganser



Figure 101. Immature male common merganser



Figure 102. Immature female common merganser

# SEPARATION OF OLDSQUAW, BLACK SCOTER, AND SURF SCOTER

#### Two Most Distal Primaries:

- (b) 9th primary is the longest, outerweb of this feather narrows near tip ......Oldsquaw
- (c) 10th primary longest, all primaries are uniformly tapering......Surf scoter

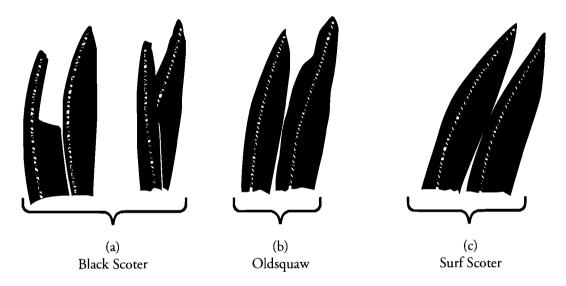


Figure 103. Variation in the outer two primaries among three species

## **O**LDSQUAW

The underwing of all oldsquaws is a uniform patterned dark brown to black. On adult males, the innermost tertials are solid black, and the outer tertials and adjacent secondaries show traces of rust. The remainder of the wing is an unpatterned black. On adult females, the tertials and adjacent secondaries are a dark rufus brown that has a tan edging.

Tertial coverts, middle coverts, and most lesser coverts are dark brown to black heavily washed with tan. The upper wing of both sexes of immatures is uniformly dark brown, often with a faint trace of rust on the secondaries and tertials. Immatures can be recognized by the frayed and faded tips of their tertials and tertial coverts.

Wing Character	Male		Female	
	Adult	Immature	Immature	Adult
Tertials	Acutely pointed, black, most show trace of rust	Dark gray-brown; usually show trace of rust		Dark brown with trace of rust; usually tan edging
Greater tertial coverts	Entirely black	Dark brown, usually frayed and faded at tips		Dark brown; tips washed with tan
Greater secondary coverts	Entirely black	Dark brown; frayed and faded at tips		Dark brown; tips washed with tan
Middle and lesser coverts	Entirely black	Entirely dark brown		Dark brown; heavily washed with tan
Secondaries	Dark rusty brown	Brown with traces of rust		Brown to rusty brown



Figure 104. Adult male oldsquaw



Figure 105. Adult female oldsquaw



Figure 106. Immature oldsquaw

### **BLACK SCOTER**

The underwing of all ages and sexes is completely dark and unpatterned. Adult male wings are easily identified by the extremely attenuated outermost primary and the completely black upperwing. Adult female wings are dark brown. Their tertials normally have bluntly rounded unfrayed tips. Greater coverts are broadly rounded and unfrayed,

often with poorly defined white areas near their tips. Wings of immatures of both sexes are a deep brown. Tertials are relatively short with frayed tips. Greater coverts are frayed and faded at their tips. Immature wings are about the same color as those of adult females. Although male wings are slightly larger than those of females, there is much overlap.

Wing	Male		Female	Female	
Character	Adult	Immature	Immature	Adult	
Outermost primary	Deeply attenuated for 55-60 mm, from the tip; shorter than adjacent primary	Not attenuated but no	nticeably narrower and shorter than	the next primary	
Tertials	Shiny black and acutely pointed; approximately 30 mm. longer than most secondaries	Dark brown and shar	ply pointed; often faded at their tips	Very dark brown and bluntly pointed; approximately 20 mm. longer than most secondaries	
Tertial coverts	Shiny black with rounded tips	Dark brown; narrow usually slightly frayer	slightly toward their tips which are d and faded	Dark brown; with rounded tips	
Greater, middle, and lesser coverts	Shiny black with rounded tips	Dark brown; greater appear rough	coverts often slightly faded near tip	s; Dark brown; may be faded at their tips	



Figure 107. Adult male black scoter



Figure 108. Adult female black scoter



Figure 109. Immature black scoter

### SURF SCOTER

All surf scoter wings are dark and unpatterned on both upper and under surfaces. Only adult males are black. Wings of all other sex-age categories are dark brown. Among these, adult females can be identified by their broadly rounded tertials and greater coverts over both secondaries and tertials. On immature birds, tertials are pointed and usually frayed and faded at their tips, and greater coverts over both secondaries and tertials are quite narrow and have frayed and faded tips.

Wing	Male		Female	Female	
Character	Adult	Immature	Immature	Adult	
Primaries	Outermost primary similar to	and as long as or longer	than the adjacent primary		
	Outer webs black Outer webs dark blackish brown				
Tertials	Shiny black and bluntly pointed; approximately 20 mm. longer than most secondaries	Dark brown and poin	ted; may be faded at their tips	Very dark blackish brown; tips bluntly pointed; usually less than 20 mm. longer than most secondaries	
Tertial coverts	Shiny black	Dark brown; noticeal faded at their tips	oly narrower than those of adults; o	ften Very dark blackish brown; smoothly rounded tips	
Greater, middle, and lesser coverts	Entirely black; appear smooth	Dark brown; most gr often appear rough	eater coverts are faded at their tips	they Very dark blackish brown; some are slightly faded at their tips; all appear smooth	



Figure 110. Adult male surf scoter



Figure 111. Adult female surf scoter



Figure 112. Immature surf scoter

#### WHITE-WINGED SCOTER

#### Age Determination

Immatures of both sexes are generally a lighter brown than adult females, but do intergrade somewhat. On immatures, the tertials and tertial coverts usually have some faded fraying at their tips. Similar light-colored fraying is often present among the scapulars. The greater coverts often have much less white at their tips than those of adults and sometimes they are entirely brown.

#### Sex Determination of Adults

Adult males can be readily identified by the black of all upperwing feathers except for the secondaries and the outer half of their greater coverts which are white. The sharply defined black bases of the secondary coverts create a saw-toothed appearance. There is no evidence of fading or fraying on either tertials or tertial coverts. Adult females are similar except that the upperwing is a very dark brown rather than black. It may be necessary to tilt the wings and view them closely to see that they are not black. Approximately 90% of adult females have a notch-length of less than 274 mm. and approximately 90% of adult males are longer.

Wing	Male		Female	Female	
Character	Adult	Immature	Immature	Adult	
Tertials	Shiny black, tips are blunt and rounded	Dark brown, tips are	oointed and usually frayed	Dark brown, tips are blunt and rounded	
Greater tertial coverts	Broadly rounded, black	Narrow slightly towar brown	d tips which are usually frayed; dark	Broadly rounded, dark brown	
Greater secondary coverts	About 1/2 of exposed portion white; remaining basal portion black on a diagonal, giving saw-tooth effect	Dark brown; some w amount of white varie	nite at tips, usually as round spots, bu s among individuals	About 1/2 of exposed portion white; remaining basal portion very dark brown approximately straight across	
Middle and lesser coverts	Broadly rounded and entirely black	Narrow toward tips g trapezoidal appearant	iving individual coverts a triangular to ce; tips usually frayed	Broadly rounded and entirely very dark brown	



Figure 113. Adult male white-winged scoter



Figure 114. Adult female white-winged scoter



Figure 115. Immature white-winged scoter

## COMMON EIDER

Wing	Male		Female	
Character	Adult	Immature	Immature	Adult
Tertials	Entirely white or, in sub-adults (yearlings), tips mottled with white; pronounced curvature; acutely pointed	Dark brown to near black; usi some light tips; tips are rathe notched; slightly curved	rally without edging, but with r sharp; usually frayed and often	Dark brown with light edges and tips; slightly curved; bluntly pointed
Greater tertial coverts	Broadly rounded, entirely white; black mottled on sub-adults	Narrow toward tips, which may be somewhat ragged, with a trace to a band of light edging		Broadly rounded, dark brown, broad arc of pale reddish brown edging
Greater secondary coverts	Black with white bases; tips of more distal often white	Dark brown, usually with only traces of light brown edging		Dark brown, many white- tipped; rest tipped with pale reddish brown
Middle and lesser coverts	Entirely white on adults; white with some black mottling along edges on	Narrow toward tips, dark brown with a variable amount of light brown edging; edging usually more obvious on females but sexes intergrade		Broadly rounded, dark brown, heavy pale reddish brown edging
	sub-adults	Rarely one or more white feathers		



Figure 116. Adult male common eider



Figure 117. Adult female common eider



Figure 118. Sub-adult male common eider



Figure 119. Immature common eider

### KING EIDER

This species occurs only casually in the more northern states of the Atlantic Flyway. Although common in Alaska, few are shot. Only a few wings from known-aged birds were available for study. Therefore, although the information presented here is probably reliable, it should be used with caution. At present, a serious problem with king eiders is the lack of a reliable method for separating females and immatures of this species from the same age and sex classes of common eiders.

Wing Character	Male		Female	Female	
	Adult	Immature	Immature	Adult	
Tertials	Entirely black, sharply curved, and acutely pointed	Very dark brown, usual tips are rather sharply p	ly edged with pale brown at tips only lointed, often frayed and/or notched	; Very dark brown, slightly curved, and acutely pointed	
Greater tertial coverts	Broadly rounded and black	Usually narrowly edged	with pale brown; often frayed at tips	Broadly rounded, very dark brown, broad pale brown edging	
Greater secondary coverts	Black, often with some white tipping	Very dark brown; many adult female	white-tipped; and similar to those o	Very dark brown, many white tipped; rest solid brown slightly faded at tips	
Middle and lesser coverts	Entirely white except for the leading edge of the wing	Similar to adult female narrower	but edging is darker and somewhat	Broadly rounded, very dark brown, broad pale brown edging	



Figure 120. Adult male king eider



Figure 121. Adult female king eider



Figure 122. Sub-adult male king eider



Figure 123. Immature king eider

# RUDDY DUCK

Wing Character	Adult	Immature
Tertial coverts	Broadly rounded at tips	Somewhat squared at tips, appearing trapezoidal
Tertials	Broad-tipped, curved and drooping	Straight, often somewhat frayed at their tips
Middle coverts	Rounded and smooth-edged	Slightly trapezoidal, often rough-ended



Figure 124. Adult ruddy duck



Figure 125. Immature ruddy duck

# FULVOUS WHISTLING DUCK

Wing Character	Adult	Immature
Greater coverts	Broadly rounded and with a trace of fading at their tips	Narrow to pointed tips that have a trace of fading
Tertials	Broadly rounded; often a faint trace of fading that their tips	Narrowly rounded to pointed, often slightly faded at their tips
Lesser coverts	Broadly rounded with very little fading at the tips	Narrow toward their tips which are often faded.



Figure 126. Adult fulvous whistling duck



Figure 127. Immature fulvous whistling duck

# BLACK-BELLIED WHISTLING DUCK

Wing Character	Adult	Immature
Greater coverts	Entirely white and broadly rounded at their tips	White but slightly mottled near their tips which are pointed
Tertials	Dark olive color; bluntly rounded at their tips	Dark olive color, but usually slightly pointed and frayed at their tips
Lesser coverts	Broadly rounded olive and usually with narrow white edging	Usually taper to a point and are without edging



Figure 128. Adult black-bellied whistling duck



Figure 129. Immature black-bellied whistling duck

## APPENDIX: KEY TO DUCK SPECIES

From each pair of contrasting statements choose the one that best describes the wing in hand. Each choice leads to an additional choice until the species is identified. For example, a wing described by statements 1(b), 6(a), 7(a), 8(a), and 9(a) is that of a mallard.

1(a).	Upper wing: primaries, secondaries, tertials, and their coverts: all an unpatterned black or dark brown to gray-brown
1(b).	Upper wing: primaries, secondaries, tertials, and their coverts not uniform in color or pattern
2(a).	Notch-length 155 mm. or shorter; primaries strongly curved ventrally; some underwing middle coverts white
2(b).	Notch-length 180 mm. or longer; primaries only slightly curved ventrally; underwing coverts uniformly dark
3(a).	Outermost primary black with inner web narrowing to about 5 mm. for approximately 70 mm. from its tip; or dark brown and about half the width of adjacent primaries
3(b).	Outermost primary black, brown or blue and approximately the same width as adjacent primaries
4(a).	Outerweb of next to outermost primary narrows abruptly 30 mm. to tip; tertials solid black or dark brown (usually with a reddish cast) and narrow light edgingOldsquaw(part)
4(b).	Outerweb of next to outermost primary tapers gradually over length; tertials blue, black, or brown
5(a).	Outermost primary as long or longer than the next primary; notch-length 212 mm. or longer
5(b).	Outermost primary varies from longer to shorter than next primary; often bluish; notch-length 203 mm. or shorter
6(a).	Some secondaries part blue, green, or purple
6(b).	Secondaries not blue, green, or purple16
7(a).	Some secondaries all or part blue or purple
7(b).	Some secondaries part green
8(a).	Blue bordered front and back by white on both the greater coverts and the trailing edge of the secondaries
8(b).	Blue bordered front or back (not both) with white10
9(a).	Tertials straight, brown with light edging, or reddish brown grading into silver-gray; underwing white
9(b).	Tertials curve outward, usually blue; middle and lesser coverts white or brown; underwing part dark

10(a).	Greater, middle, and lesser coverts brown; tertials longer than secondaries; underwing white
10(b).	Greater, middle, and lesser coverts blue or bluish; tertials approximate secondaries in length; underwing not white
11(a).	Trailing edge of secondaries white; underwing barred
	Trailing edge of secondaries dark; underwing dark
12(a).	Middle and lesser coverts blue
12(b).	Middle and lesser coverts not blue14
13(a).	Primary shafts white; notch-length 210 mm. or longer
13(b).	Primary shafts brown; notch-length 205 mm. or shorterBlue-winged & cinnamon teals
14(a).	Greater coverts banded with cinnamon; trailing edge of secondaries banded with white; outerweb of most distal tertial longitudinally striped with black or brown
14(b).	Greater coverts banded with black; trailing edge of secondaries banded or unbanded; outer web of most distal tertial white or whitish
15(a).	Notch-length 200 mm. or less
15(b).	Notch-length 240 mm. or more
16(a).	Three or more secondaries white or whitish
16(b).	Secondaries (exclusive of trailing edge or flecking) not white
17(a).	Some greater coverts black; none white
17(b).	Some greater coverts are white or partly so
18(a).	White confined to 3 or 4 secondaries next to tertials; others cinnamon or light edged with internal patterns; underwing white
18(b).	Most secondaries white, banded with black near their tips; upperwing covert black or dark brown often flecked with white; underwing partly dark19
19(a).	White of upperwing confined to secondariesLesser scaup
19(b).	White of upperwing extends to primariesGreater scaup
20(a).	All upperwing secondary coverts so heavily vermiculated with white as to appear white
20(b).	Some upperwing secondary coverts not white, none vermiculated
21(a).	White on secondaries does not reach the shafts; tertials black with central white stripes
21(b).	White extends to the shaft or beyond; tertials black, dark gray, or white with black margins
22.(a)	Tertials black; notch-length 180 mm. or less
22(b).	Tertials variable; notch-length 190 mm. or more
23(a).	Underwing coverts all solid black, gray, or brown

23(b).	Underwing coverts mostly white; upperwing middle and lesser coverts white, black, or gray
24(a).	Middle, lesser, and marginal coverts are a uniform black or brown; notch-length 245 mm. or longer
24(b).	Middle and lesser coverts white, or black washed with white or gray; notch-length 240 mm. or less
25(a).	Black bases extend over more than half of each greater secondary covertBarrow's goldeneye
25(b).	Black bases extend over less than half of each greater secondary covert
26(a).	Black bases of secondaries are exposed on a normally spread wingRed-breasted merganser
26(b).	Black bases of secondaries are covered on a normally spread wing
27(a).	Secondaries gray, usually with white tips and a dark sub-terminal band
27(b).	Secondaries brown or black, without white trailing edge
28(a).	All upperwing coverts dark brown to black; tertials dark brown to black with faint greenish sheen
28(b).	All upperwing coverts gray to gray-brown, may vary from plain to heavily flecked and/or vermiculated with white; tertials vary from gray-brown with or without flecking to white well vermiculated with dark gray
29(a).	Secondaries black or mostly so
29(b).	Secondaries brown or brownish
30(a).	Tertials white or mostly so
30(b).	Tertials black, olive, or mostly brown
31(a).	Tertials black
31(b).	Tertials olive or mostly brown
32(a).	Tertials sharply curved; middle and lesser coverts black, black and white, or white
32(b).	Tertials straight; upper wing black with most coverts washed with dark cinnamon; underwing entirely blackFulvous whistling duck
33(a).	Tertials olive; bases of primaries and secondaries white; underwing black
33(b).	Tertials mostly brown; outer web of most distal white; pale barring on underwing
34(a).	Primary shafts white; underwing white
34(b).	Primary shafts brown; underwing dark and/or heavily barred35
35(a).	Trailing edge of secondaries white; greater coverts light edged
	Trailing edge of secondaries washed with buff
36(a).	Tertials brown, longitudinally striped, and pale edged
36(b).	Tertials brown, edges washed with cinnamon

37(a).	Tertials sharply curved	King eider (part)
37(b).	Tertials slightly curved	Common eider (part)
38(a).	Middle and lesser coverts dark brown with some well-defined buff edging	Common eider (part)
38(b).	Middle and lesser coverts dark brown well washed with pale buff	Oldsquaw (part)

<sup>&</sup>lt;sup>1</sup> Mottled ducks occur only in southern Florida and the Gulf coast west to include Texas. American black ducks are rare in this area.

The specula of all redheads are recognizably lighter gray than those of adult female and both sexes of immature canvasbacks.

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