

COMMON EIDER *Somateria mollissima*Eider (EIDER)
Incubation: FRing: 12.5 Incoloy (13.0 SS)
Parental care: FWP = (2) 3; 11 P (P1 reduced); (12) 16 - 18 S; 14 TF
Return to breeding grounds: 2Y

1st breeding: (3Y) 4Y/5Y

IDENTIFICATION

(1) Common Eider <i>S. mollissima</i>		(2) King Eider <i>S. spectabilis</i>	
excluding unmistakable breeding ad M			
- wing ≥ 255.5	$\neq 3$	- coasts of Arctic except Iceland and Scandinavia	$\neq 3$
- bill to feathers ≥ 40.3	\neq all	- wing ≥ 230	$\neq 3$
- appearance of head and bill (Fig 1)	\neq all	- bill to feathers ≤ 39	$\neq 1$
- F ad Appearance of feathers of flanks (Fig 2) $\neq 2$		- appearance of head and bill (Fig 3)	\neq all
- Juv Flanks finely barred		- F ad Appearance of feathers of flanks (Fig 4)	$\neq 1$
- Juv Feathers of flanks all with dark centre and a pale fringe		- Juv Feathers of flanks all with dark centre and a pale fringe	
Fig 1 forehead in even line from bill; triangular head shape featherings extend up to the proximal edge of nostrils pale bill straight gape, barely visible	Fig 2 – Feather of flanks \pm straight black line	Fig 3 forehead a little steep; crown a little flat featherings extend little on the sides of bill, especially compared to nostrils and the feathers of forehead bill darker than head dark gape clearly curved towards the eye	Fig 4 – Feather of flanks black line in V shape
(3) Steller's Eider <i>Polysticta stelleri</i>		(4) Spectacled Eider <i>S. fischeri</i>	
- coasts of Arctic from Alaska to Taimyr, sometimes Norway		- coasts from NE Siberia to Alaska, vagrant in Europe	
- small and light; wing ≤ 238 , weight ≤ 1000		- wing ≥ 225	
- bill to feathers = 35.2 - 43.7		- bill to feathers ≤ 29.8	
- appearance of head and bill (Fig 5)		- appearance of head and bill (Fig 6)	
- speculum purple-blue bordered with white on both sides (sometimes indistinct in juv)		- axillaries more greyish than whitish	
Fig 5 steep forehead and flat crown no feathered area on the base of bill short bill almost vertical bill/feathers limit		Fig 6 pale brown 'goggles' contrasting, formed of velvety feathers featherings covering the bill almost to nostrils	

Hybridisation possible with King Eider, and perhaps Common Shelduck *Tadorna tadorna*, Mallard *Anas platyrhynchos* (apparently does not dive), Northern Pintail *A. acuta*, Steller's Eider, Velvet Scoter *Melanitta fusca*, and Red-breasted Merganser *Mergus serrator* and/or Common Merganser *M. merganser* (size and bill shape in-between, large white marking on the upper-wing).

MEASUREMENTS

<i>S. mollissima</i>					<i>borealis</i>		<i>faeroeensis</i>		<i>dresseri</i>	
	Ad M	Ad F	Juv M	Juv F	M	F	M	F	M	F
Wing	289 - 315	280 - 315	263 - 297	255.5 - 292	270 - 308	262 - 295	260 - 284	257 - 271	275 - 300	265 - 298
Tail	90 - 104	90 - 98	74 - 88	70 - 84	-	-	-	-	-	-
Bill ¹	53 - 64	46.2 - 60.6	50 - 61	48 - 58	45.5 - 59.0	40.3 - 56.6	48 - 56	(45 - 50)	49.1 - 60	42.2 - 56
Tarsus	51 - 58	50 - 58	-	-	41.9 - 58.3	43.7 - 55.9	49.0 - 55.5	(48.0 - 51.0)	49 - 55	44.6 - 53
Weight	1400 - 2875	1192 - 2895	1562 - 2567	1552 - 2009	1560 - 2710	1300 - 2165	-	1703 - 2223	-	-

¹ to feathers in the middle of culmen.

<i>S. spectabilis</i>					<i>P. stelleri</i>				<i>S. fischeri</i>	
	Ad M	Ad F	Juv M	Juv F	Ad M	Ad F	Juv M	Juv F		
Wing	(257) 261 - 302	248 - 296	242 - 275	230 - 275	204 - 238	202 - 235	199 - 213	(203 - 210)	225 - 280	
Tail	79 - 89	73 - 87	-	-	83 - 114	80 - 116	(72 - 79)	(72 - 75)	-	
Bill ²	26 - 34	27 - 39	(28.4 - 33.0)	(27.2 - 33.8)	35.2 - 41.7	37.3 - 43.7	-	-	18.2 - 29.8	
Head and bill	-	(103 - 105)	-	-	88.0 - 103.9	89.2 - 96.0	-	-	-	
Tarsus	44 - 52.1	43.4 - 48	-	-	36 - 42.7	36 - 43.2	-	-	45 - 50	
Tarsus and toe	-	(116 - 120)	-	-	-	-	-	-	-	
Weight	1310 - 2013	1150 - 1923 ³	1110 - 1520	780 - 1420	500 - 1000	625 - 1000	-	-	1176 - 1956	

² to feathers. ³ max = 800 - 2140.**VARIATION**

Strong variation; in M according to size, extent of frontal shield on the bill, extent of feathers on the sides of bill (Fig 7) and the colour; in F, according to breeding plumage. Two other ssp from NE Siberia to N Canada. Areas of intergradation.

- *mollissima* (NW coasts of Europe). The largest in Europe.
- *borealis* (Arctic Atlantic, Iceland, Spitsbergen, Greenland, Baffin Island). Smaller than *mollissima* (except in Spitsbergen). Lower scapulars often more curled up and more pointed.
- *faeroeensis* (Faroes and perhaps Shetlands and S Iceland). As *mollissima* but smaller, bill shorter and thicker with frontal shield short and dark olive-grey. Extension of feathers under the nostrils rather like *borealis*. **F** Brown much darker. Bars less distinct. Appearance of dark hood.
- *dresseri* (E of N America). Lower scapulars curled up, often very prominent.

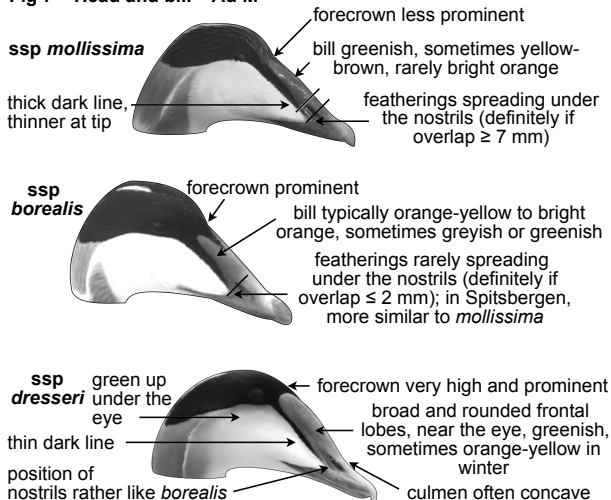
Fig 7 – Head and bill – Ad M

Fig 8 – Progression of moult

Progression of moult		complete moult								partial moult								Thick line: common case				Thin line: rare case			
		03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07							
Juv – 2Y spring							Postjuv																		
	P and S														?	Prebreeding									
Ad	Body			Postbreeding																					
																Prebreeding									

MOULT (Fig 8)

Juv – 3Y spring [3/5/7 spring] *Partial postjuv* very variable, including usually head, upperparts and flanks from 09, followed in 10 by the *partial prebreeding* moult including \pm the same areas. Wing, back, rump and usually underparts and tail retained until 2Y summer (but tail sometimes moulted from 09 of 1Y). Then *complete postbreeding* as ad but less complete and more prolonged, with some imm feathers retained. Then 2nd *prebreeding* moult as ad but usually finishing later, sometimes with some non-breeding feathers still retained.

Ad [6/8 spring] *Complete postbreeding* from 06 to 08, starting with head, neck and part of body from mid-06 to mid-07, followed by the rest of plumage and simultaneous moult of flight feathers from mid-07 to 08; F moulting \approx 1 month later. *Partial prebreeding* limited to head and part of body from 08 to 11 in M, from 10 to 03 in F. In *borealis*, M often moulting to eclipse plumage from mid-07 or later, and sometimes still in eclipse plumage late 10.

SEX – AGE

At any age and in any season, sexing is possible by cloacal pattern (Fig 1 page 19). The late acquisition of ad plumage, the \pm continuous moult of imm and the great ind variations make ageing difficult.

Juv [3] *Shape of TF* (Fig 2 page 19), retained until 09 – 11. Resembles ad F but without distinct bars on the *upperparts*, the feathers being plain cold grey-brown with only a narrow buff fringe and a dull black subterminal bar. LC and MC blackish-brown slightly edged with pale buff. *Usually no white tip on S and GC* (but feature perhaps variable). T slightly pointed, dark brown to almost black usually without pale fringe but sometimes with a pale tip (Fig 9). Outer P narrow, without gloss. M often with some small white markings on the feathers of the breast (lacking in F).

1Y – 2Y spring [3/5 spring] As juv but \pm adult type moulted feathers (especially in flanks). Most of juv wing, back, rump, and usually underparts and TF retained until spring. Inner GC rather rounded (Fig 10).

1Y – 2Y spring M [3/5 spring M] Search for body feathers with \pm blackish, whitish and greenish for sexing from 11 – 12 (but sometimes only in 03 – 04). Usually, body blackish; breast and upper mantle paler and mottled; head dark; back and shoulders mottled with white. *Wing uniformly dark* (rarely a few white LC or MC); inner GC brown with a whitish ill-defined or lacking fringe (Fig 10). T brownish sometimes tipped whitish and less pointed (Fig 9). *Many ind variations*: in spring, sometimes breast white, head of ad M type, but mantle and wing dark.



1Y – 2Y spring F [3/5 spring F] Inner GC brown with a whitish ill-defined or lacking fringe (Fig 10).

2Y autumn – 3Y spring M [5 autumn/7 spring M] Resembles ad M. LC and MC white and mottled with black on the side. T incurved and pointed, the basal half varying from white to dark grey, becoming progressively black towards the tip (Fig 9). Feathers of underparts well washed with blackish. Tips blackish mainly on the centre of back and rump.

2Y autumn – 3Y spring F [5 autumn/7 spring F] No features of plumage verified for the distinction from ad F, although GC and S probably have the white tip narrower than in ad; double wing bar not complete.

3Y autumn – 4Y spring M [7 autumn/9 spring M] Some MC and LC blackish mixed with the white ones of ad type, usually near the leading edge of wing and the carpal joint. Small PC near alula, black as the 2 longest feathers of alula. T and the innermost S usually white, mottled with dull black at the tip.

Ad [4/6 spring] Inner GC rather square-shaped (Fig 10). Outer P broad, slightly glossy.

Ad M (+2Y autumn – +3Y spring) [6 autumn/8 spring M] In breeding plumage, easily distinguished from F and juv M. In eclipse, resembles imm M but T, the innermost GC, LC and MC all white (Fig 9 and 10); usually white tip on black S, GC and PC; alula black.

Ad F (+1Y autumn – +2Y spring) [4 autumn/6 spring F] Whole plumage dark brown. Body uniformly barred with black. S and GC with a broad white tip (Fig 10), forming a complete double wing bar (white tip occasionally missing on the GC). Tip and sides pale on the dark brown T slightly incurved. Feathers of upperparts black with edges broad brown to cinnamon-buff.

Occasionally, old F with an appearance of 2nd winter M: upperparts dark mottled with white; cheeks, throat and neck white with dark mottling; breast largely washed with pink; underparts and flanks largely black with a white patch on each side of rump; wing feathers \pm uniformly blackish-brown with MC and LC white and inner web of T white; but crown brown with \pm white, white of cheeks including the eye, but no green on the nape.

REFERENCES [Blomdahl et al. 2002; Dawson 1994; Ellis 1994; Forsman 1995a; Fredrickson 2001; Furness et al. 2010; Garner 2015b; Goudie et al. 2000; Hario and Rintala 2009; Henriksen and Lund 1994; Lovvorn et al. 2003; Oppel and Powell 2009; Petersen et al. 2000; Powell and Suydam 2012; Pyle 2008; Suddaby et al. 1994; Swennen et al. 1979; Swennen et al. 1989; Tenovuo and Tenovuo 1983]

