

AGEING FEMALE EIDERS *SOMATERIA MOLLISSIMA* IN THE FIELD

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Uit de nalatenschap van Kees Swennen II — Na het overlijden van Kees Swennen in het voorjaar van 2020 (Spaans 2020¹) stonden de nabestaanden en vrienden voor de taak om de nalatenschap door te nemen. Hierin bevonden zich, naast zijn bibliotheek, veel aantekeningen en andere 'overblijfselen' van zijn veelomvattende wetenschappelijke werk. Tussen de stukken troffen wij twee vrijwel afgeronde manuscripten aan. De inhoud hiervan is voor lezers van *SULA* interessant. Hieronder volgt het tweede stuk, integraal afgedrukt (behoudens enkele kleine redactionele wijzigingen). Dat is vooral een waarschuwing tegen het al te voortvarend op leeftijd brengen van eidervrouwtjes. Tegenwoordig zijn de gangbare determinatiewerken misschien beter of minder expliciet dan ze vroeger waren, waardoor deze waarschuwing wellicht wat gedateerd te noemen is, maar de erbij gevonden foto en de kanttekeningen zijn nog steeds de moeite waard.

When Kees Swennen passed away in the spring of 2020 (Spaans 2020¹), his family and friends were facing the task to go through his scientific legacy. Two nearly completed but hitherto unpublished manuscripts were found, addressing topics of interest to readers of SULA. Below is the second part, reproduced as it was found, except for some minor editorial changes. Above all, it is a warning against the use of certain ageing characteristics of female Eider ducks. Today, the current identification works are perhaps better or less explicit than they used to be, which may make this warning a bit dated, but the photo found with it and the caveats discussed are still worthwhile.

Kees Camphuysen, Texel, september 2020

¹ Spaans A.L. 2020. Dr. C. Swennen (1929-2020) overleden. *Limosa* 93: 103-104.

How to distinguish yearling female Common Eiders *Somateria mollissima* from older ones? Boyd *et al.* (1975) start their key with: 'Any female with complete double white wing bars can be identified as being at least three years old'. Also the modern handbooks (Bauer & Glutz von Blotzheim 1969, Cramp & Simmons 1980) stress the presence of the wing bars in the adult female, while yearlings would usually have no white tips to secondaries and greater upper wingcoverts. In practice, ageing appears not so simple. While handling large numbers of females for ringing purposes (Swennen 1988), I often noted breeding females – which must be considered as adults – with no or very narrow white wing bars year after year. On the other hand, in yearlings ringed as ducklings white bars were indeed usually absent or very narrow on the juvenile wing, but sometimes broad and obvious. Figure 1 shows a female Eider (sex cloacally controlled) ringed as pullus and photographed in the autumn of the year of hatching. It shows broad white wing bars, mainly found only in adults, and a broad, mottled white streak over the eyes, mainly found in yearlings. Both features are not decisive for age determination.

Boyd *et al.* (1975) suggested that females with sandy-yellow margins along the scapulars and greater coverts were probably second year birds, while females with rufous margins along these feathers might be older ones. However, females with these characteristics that were retrapped in subsequent years, showed that these are individual differences having no relation with age.

A reliable characteristic that we used in ageing female Eiders is the pattern on the upper lesser primary coverts. In females older than one year these coverts are broadly fringed and the fringes are equally wide and of similar colour as on the lesser secondary coverts. In yearlings, the fringes of the upper primary

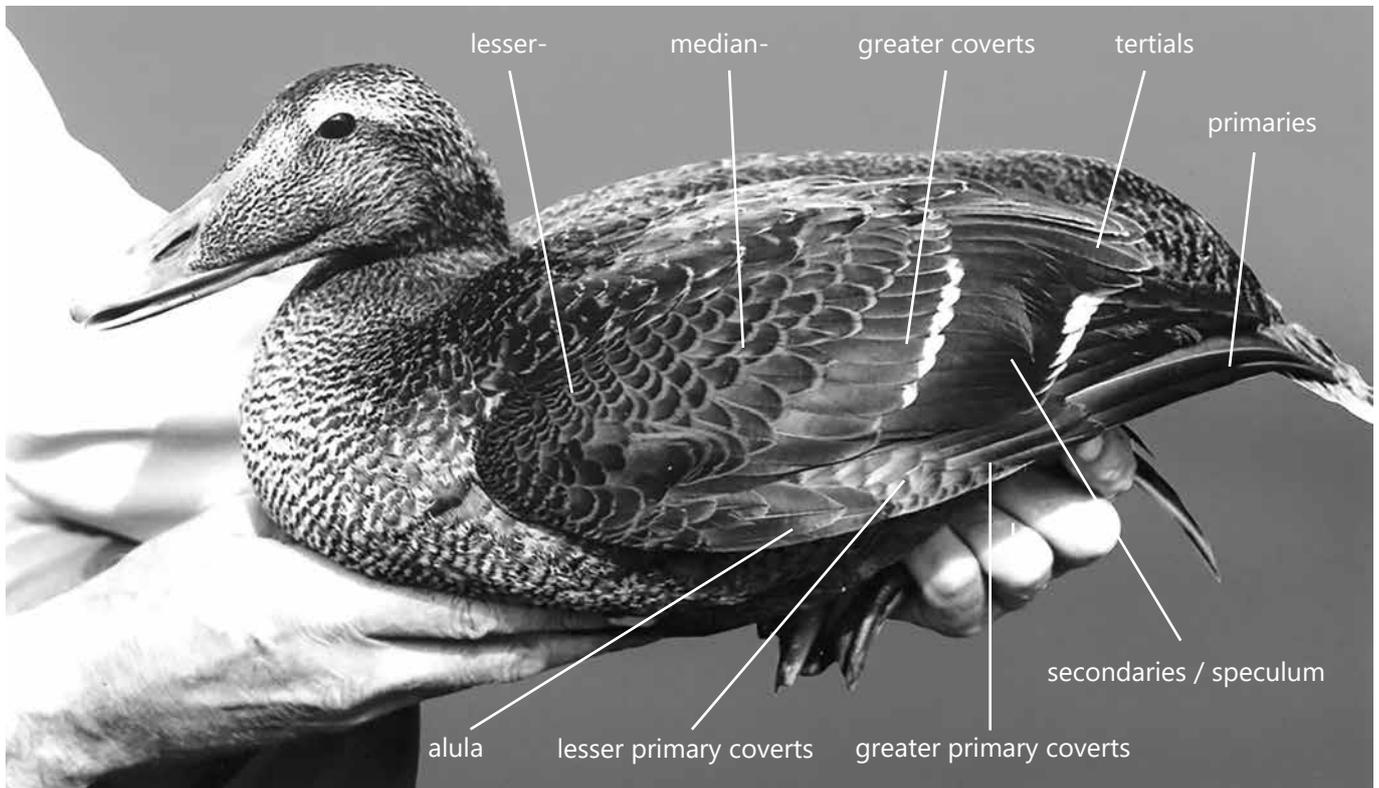


Figure 1. Juvenile female Eider in autumn of the year of hatching showing broad white wing bars, thought characteristic for adults, and a broad, mottled white streak over the eyes, more typical for yearlings. Photo: Bert Aggenbach *Juveniel vrouwtje eider in de herfst van het eerste kalenderjaar. De twee brede witte vleugelstrepen werden geacht een kenmerk te zijn voor adulten, terwijl de lichte wenkbrauwstreep karakteristiek is voor jonge vogels.*

coverts are only slightly paler than the remainder of the feathers, and therefore quite different from those of the lesser secondary coverts. In figure 1, the lesser primary coverts are partly visible below the secondaries, to the right of the alula feathers. In a sitting or swimming Eider, however, this part of the wing is covered by the secondaries and the flank feathers and therefore resting females can often not be aged with certainty during field observations.

Adult females with male-like plumages, supposed to be senile, can be distinguished from yearling males by (1) the occurrence of scattered white upper wingcoverts, and (2) brown and white feathers around and above the eyes instead of black ones (Swennen *et al.* 1989). However, a swimming bird with an incomplete male plumage and no such feathers on the head will be easily sexed as a yearling male when the wings are kept folded during the observation. The conclusion is that I have been working with Eiders for many years, but I still cannot age or sex 100% of my birds without having them in hand.

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SAMENVATTING – LEEFTIJSBEPALING VAN EIDERVROUWTJES IN HET VELD

Kees Swennen merkte tijdens zijn onderzoek aan eiders in de kolonie op Vlieland van 1963 tot en met 1992 op dat niet alle juveniele vogels eruitzien zoals dat op grond van de bestaande literatuur verwacht mocht worden. Een kenmerk zoals de aanwezigheid van brede witte zomen aan weersijden van de vleugelspiegel, typisch geacht voor volwassen wijfjes, werd bijvoorbeeld ook wel bij pas uitgevlogen exemplaren vastgesteld. Een betrouwbaarder onderscheidend kenmerk bij de leeftijdsbepaling van eidervrouwtjes bleek het patroon van de kleine bovenzweugelhandpendekveren te zijn: breed gezoomd, net als de kleine armpendekveren bij eiders van meer dan een jaar oud. Bij juvenielen zijn die zoompjes bovendien maar nauwelijks lichter dan de rest van de veer, waardoor ze duidelijk verschillen van de armpendekveren.



C. Swennen, voorheen Texel

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Postscript — When this note was written is not known, but the list of references suggests probably sometime in the early 1990s. Numerous new field guides and other works on the identification of European birds have been published since, but the ageing of (commoner) birds is often not analysed in much depth. The difference between species is apparently considered more interesting than any problems arising with the ageing of particular species. For ecological (field) studies, however, to be able to properly age and sex birds on the basis of plumage characteristics, is often of great importance. Mullarney *et al.* (2000), in the otherwise brilliant Collins Bird Guide, describe juvenile Common Eiders as 'Like adult ♀, but dark speculum usually not bordered white, and head and upperparts more uniform. Juvenile ♂ has dark head with pale stripe over eye (like 1st-summer eclipse ♂); tertials rather short and not strongly curved.' So, Swennen's juvenile female depicted in his note appears to combine characteristics that are more typical for an adult female with those characteristic for a juvenile male. Madge & Burn (1988!) described juvenile Common Eider as 'Resembles summer female, but with narrow buff barring on underparts and indistinct pale buffish supercilium; upperwing lacks whitish tips to secondaries and greater coverts; young male has blacker ground colour to upperparts and wings than female.' I have no idea what a 'blacker ground colour' could mean (the illustration shows just a 'juvenile'), but in this book the variability in the white wingbars of the adult female is also hinted on: Upperwing brown, with variable whitish tips to greater coverts and secondaries.' Baldassarre (2014) fails to mention the white wing bars in any (female) plumage, does not properly describe a juvenile plumage, and shows a wing pattern with a painting that could be anything (referred to as 'hen'). The new 'ringers bible' by Demongin (2016) states that juveniles show 'usually no white tip on secondaries and greater coverts (but feature perhaps variable).' More helpful is Reeber (2015), presenting several characteristics for ageing (*e.g.*, colour and patterns of flank feathers and tertials) before stating that 'upper- and underwing as adult female but white tips to greater coverts and secondaries often poorly marked or lacking.'

Though interesting as Swennen's observations are, it leaves us with some problems. There is no doubt that some birds have plumage characteristics that are 'wrong' given their age, sex or perhaps even species. They are out of line, in other words. The rightful warning is of interest, but how big is the mistake if one would age thousands of dead Common Eiders on the basis of the presence or absence of two distinct wing bars for example during beached bird surveys? The subtle differences in colour of lesser upper wingcoverts are notoriously difficult to evaluate on a wet or dirty wing during a search for carcasses on the beach. Would we better refrain from ageing, or, given the perhaps fairly small error made while using this easy characteristic, could

the resulting age ratio still be informative and of significant interest? A similar issue arose while ageing Common Guillemots *Uria aalge*, where juveniles were characterized on the basis of the presence (for older animals the absence) of distinct, clear-cut white tips on their greater under wingcoverts. Necropsies of hundreds of birds learned us, however, that the outcome was correct in practically all (~95-98%) cases (Sandee 1983). It also learned us that the 'no white tips' category included immatures in their 2nd and 3rd calendar year as well as adults, but still, the variable fraction of 'almost certainly juveniles' was an important statistic to monitor and a great help when explaining or characterizing certain mass strandings (Camphuysen 2007). It is not always possible to bring all your birds to the autopsy table, or to collect tissues for molecular analysis. Characteristics that give not full 100% certainty can still be of value.

It is highly likely that the 'aberrant' juveniles caught the attention sometime during all these years of ringing at Vlieland. It would have been helpful to immediately have started a scheme from which the frequency of occurrence could have been calculated but, alas, everybody knows with hindsight what to do.

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Kees Camphuysen, Texel, September 2020