DUTCH BIRDING

VOLUME 41 • NO 4 • 2019

Dutch Birding

Internationaal tijdschrift over Palearctische vogels

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Voor taxonomie, volgorde en naamgeving van vogels in Dutch Birding worden de volgende overzichten aangehouden: *Dutch Birding-vogelnamen* door A B van den Berg (2008, Amsterdam; online update 2019, https://tinyurl.com/y47bg236) (taxonomie en wetenschappelijke, Nederlandse en Engelse namen van West-Palearctische vogels); en *IOC world bird list 9.1* door F Gill & D Donsker (2019, www.worldbirdnames.org) (taxonomie en wetenschappelijke, Engelse en Nederlandse namen van overige vogels in de wereld; Nederlandse namen door P Vercruijsse en A J van Loon).

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ISSN 0167-2878.

Printed by drukkerij robstolk®, Mauritskade 55, 1092 AD Amsterdam, Netherlands, www.robstolk.nl

Dutch Birding

International journal on Palearctic birds

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Dutch Birding

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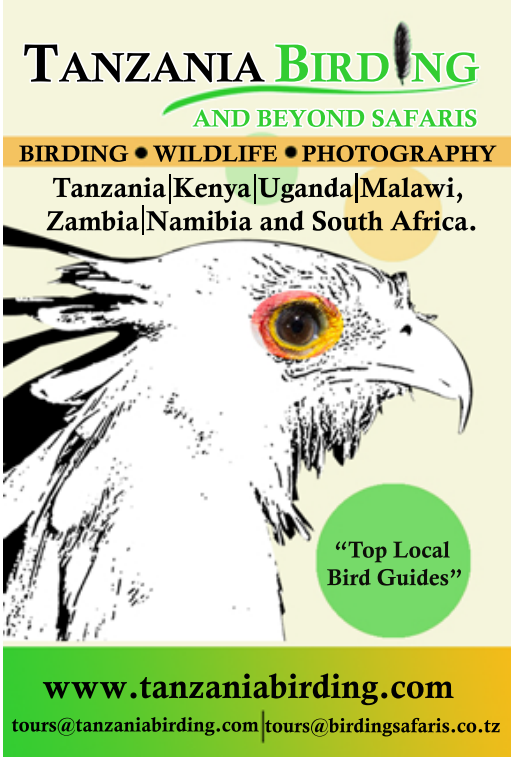
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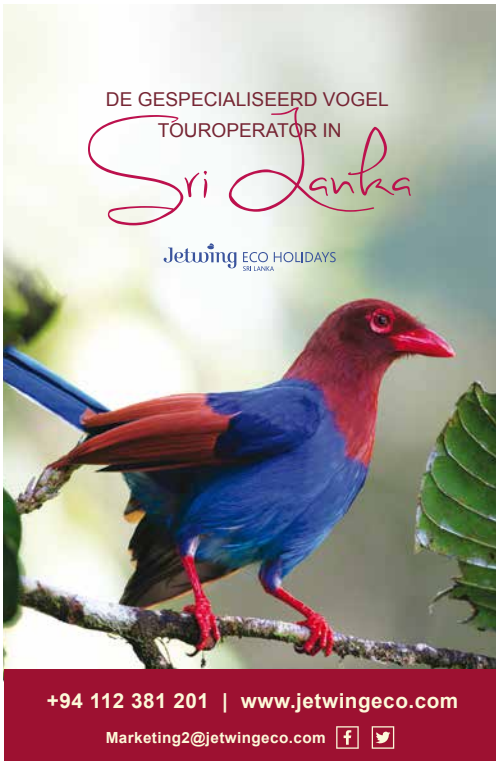
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Variation and identification of Barolo Shearwater and Boyd's Shearwater

Robert L Flood & Rinse van der Vliet

There are two main reasons why the field separation of Barolo Shearwater *Puffinus baroli* (hereafter *baroli*) from Boyd's Shearwater *P boydi* (hereafter *boydi*) has been neglected. First, historic taxonomic classification and recent taxonomic upheaval rarely afforded either taxon species-level status; *baroli* and *boydi* variously have been grouped under 'Little Shearwater *assimilis* types' and 'Audubon's Shearwater *lherminieri* types' (eg, Murphy 1927, Brooke 2004). Recent genetic research revealed ocean-basin centered evolution (Austin et al 2004, Sangster et al 2005, Olson 2010) and that the three North Atlantic Ocean taxa *baroli*, *boydi* and Audubon's Shearwater *P lherminieri* (hereafter *lherminieri*) form a clade. This clade is either treated as one species (Carboneras et al 2019), two species with *baroli* and *boydi* combined (Sangster et al 2005) or *lherminieri* and *boydi* combined (Onley & Scofield 2007), or three separate species (Olson 2010, Howell 2012, CSNA 2019). Second, *baroli* and *boydi* were assumed to be sedentary with non-overlapping ranges (eg, Onley & Scofield 2007). Recent data logger studies, however, revealed that at-sea ranges overlap, mainly during the breeding season (figure 1-2; references in captions). They visit each other's breeding islands, *baroli* visiting the Cape Verde Islands and *boydi* the Canary Islands. *Boydi* has been photographed in the Canary Islands (Gil-Velasco 2013) and one was sound-recorded in a *baroli* colony at South Timanfaya, Lanzarote (Marcel Gil-Velasco in litt).

The combination of birders travelling farther afield, increasing popularity of pelagic birding and cumulative evidence (eg, subtly distinct vocalisations; Robb et al 2008) that *baroli* and *boydi* are indeed separate species has brought more birders into contact with these two shearwaters. Like us (Robert Flood and Rinse van der Vliet), birders are finding that separating the two is not always straightforward: a friend sent photographs of a *boydi* from the Cape Verde Islands saying, 'This white-faced little shearwater must be *baroli*, don't you think?' During a tour, a client said about

269 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Lanzarote, Canary Islands, 21 August 2014 *(Juan Sagardia)*. Close to 'classic' with large dark eye mainly surrounded by white feathers, whitish in under primaries, white undertail-coverts, and two-toned upperwings with pale greater secondary coverts and secondaries visible on left wing.

270 Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off Raso, Cape Verde Islands, 24 March 2009 *(Vaughan Ashby)*. Close to 'classic' with dark feathering around eye leaving bulging whitish fore-supercilium, dark under primaries contrasting with white underwing coverts, and dark in undertail-coverts.

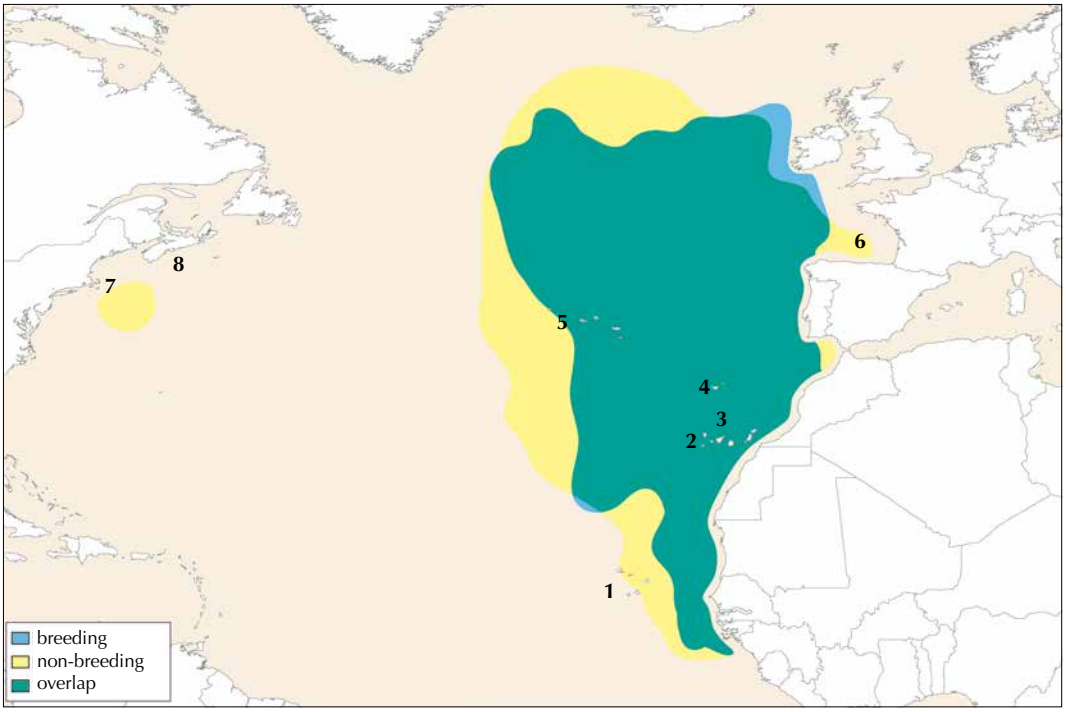

FIGURE 1 Breeding and non-breeding ranges of adult Barolo Shearwater *Puffinus baroli* from Azores, Porto Santo and Selvagens constructed from data logger results (Neves et al 2012, Ramos et al 2015, Fagundes et al 2016, Paiva et al 2016; map prepared by Ashley Fisher). Sight records incorporated for Bay of Biscay and north-western Atlantic Ocean over waters off Massachusetts, USA, and Nova Scotia, Canada. Additional extralimital records given in appendix 3. Breeding range includes results from 2010/11 when there was a marked negative North Atlantic Oscillation Index that caused low marine productivity and shearwaters to forage farther north and west than in 2011/12 (Fagundes et al 2016). **1** Cape Verde Islands, **2** Canary Islands, **3** Selvagens, **4** Madeira and Porto Santo islands, **5** Azores, **6** Bay of Biscay, **7** Massachusetts, **8** Nova Scotia.

our only *baroli* off Selvagens, 'I would like to have seen more of white in the face and in the underwings to convince me that it was *baroli*.' Photographs of a *baroli* taken from land at c 400 m range off South Uist, Outer Hebrides, Scotland, in September 2018 generated discussion on social media about the merits for *boydi*. In all cases, the questions raised were reasonable, highlight the need for this article and illustrate that the topic is not properly documented in well-used guides (eg, Blomdahl 2003, Brooke 2004, Onley & Scofield 2007, Svensson 2010, Howell 2012, Carboneras et al 2019).

Study features

We investigated 13 traits of *baroli* and *boydi*, searching for variation within and between species (plate 269-270, respectively, show 'near classics'): ***1*** face pattern; ***2*** lateral extension of dark hindneck; ***3*** two-toned upperwing; ***4*** whitish tips to upperwing median and greater secondary coverts; ***5*** pattern and tone of under primaries; ***6*** undertail-covert pattern; ***7*** fore inner underwing-covert pattern; ***8*** axillary pattern; ***9*** underwing greater secondary covert sub/terminal spots/blotches; ***10*** moult phenology; ***11*** bare parts; ***12*** flight behaviour; and ***13*** size and structure.

Data collection

Data collection involved museum skins, adults at breeding colonies and birds at sea. We studied a combined total of 246 *baroli* and 154 *boydi*.

Museum skins

We used online museum collection search platforms, contacted 38 museums in Europe and North America, and identified 25 museums that held skins of *baroli* and/or *boydi*. These museums combined held 139 *baroli* and 84 *boydi* skins. We visited museums with the largest collections of

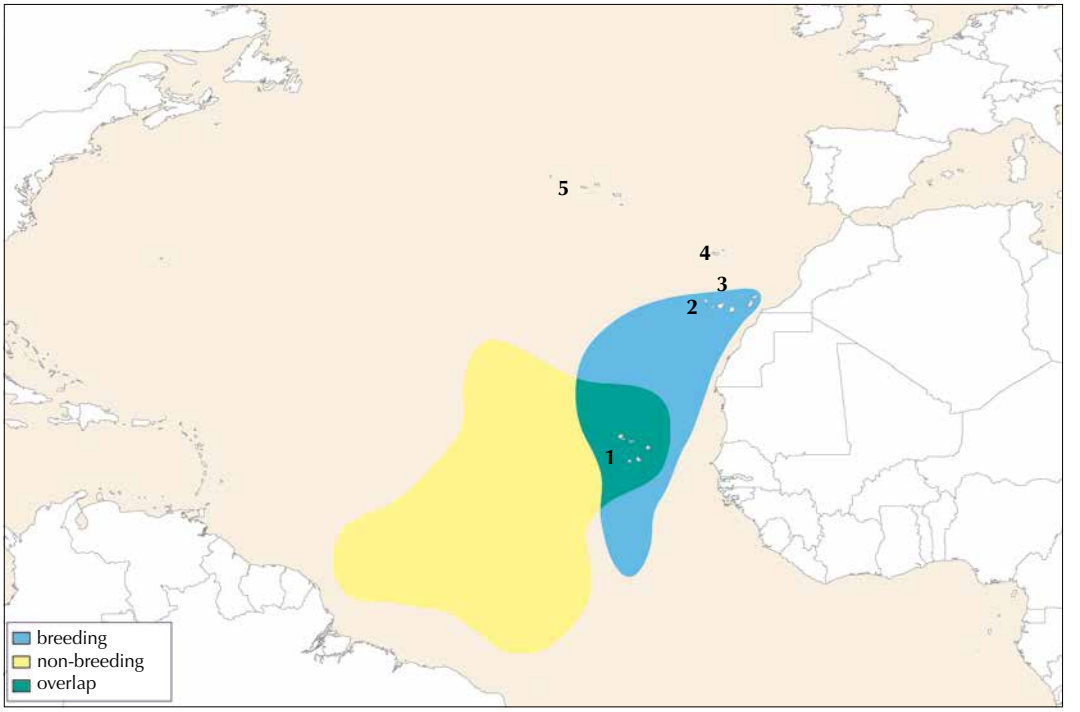

FIGURE 2 Breeding and non-breeding ranges of adult Boyd's Shearwater *Puffinus boydi* from Cima and Raso, Cape Verde Islands, constructed from data logger results (Zajková et al 2017; map prepared by Ashley Fisher). Sight records incorporated for Canary Islands. **1** Cape Verde Islands, **2** Canary Islands, **3** Selvagens, **4** Madeira and Porto Santo islands, **5** Azores.

skins where possible: Natural History Museum, Funchal, Madeira; Manchester Museum, Manchester, England; Muséum National d'Histoire Naturelle, Paris, France; American Museum of Natural History, New York, USA; and Natural History Museum, Tring, England (hereafter NHMUK). We asked curators of the other museums (see acknowledgements) to photograph where possible the nine plumage aspects mentioned above of each skin. A total of 81 *baroli* skins were examined (70 by us during museum visits, the rest using photographs taken by museum curators), and 83 *boydi* skins (44 by us during museum visits, the rest using photographs taken by museum curators). We measured bill dimensions using calipers and extracted biometric data from museum labels.

Adults at breeding colonies

We studied and photographed adult *baroli* on Cima islet, Porto Santo, Madeira, and Selvagem Grande, Selvagens. We received additional photographs and data from breeding colonies in the Azores, the Canary Islands, Madeira and Selvagem Grande (see acknowledgements). A total of 126 birds were photographed in hand at breeding colonies and we were present to see 96 of them. Seven skulls from Selvagem Grande were measured. We were unable to visit a colony of *boydi* in the Cape Verde Islands but received in-hand photographs of nine adults from the Rombo islands, eight adults from Raso and one adult from Branco (see acknowledgements).

Birds at sea

Baroli was observed numerous times offshore from several of the Canary Islands, Madeira, Porto Santo and the Selvagens, and from ferries across the Bay of Biscay; between Cádiz, Spain, and Lanzarote; between Madeira and Porto Santo; and between Tenerife and La Gomera, Canary Islands. Photographs of 39 birds were assembled from these and other trips. Videoing birds in flight proved difficult but we captured several minutes of useful video footage. *Boydi* was observed at sea in the Cape Verde Islands during five separate trips offshore from the islands Brava, Fogo, Praia, Raso, Sal, Santiago and São Nicolau. We assembled photographs of 53 birds and captured c five minutes of useful video footage.

Score design and results

We designed simple odd-numbered interval scales with a middle number to measure variation in plumage aspect. The interval scales are categories and entail a degree of subjective judgement in categorisation, so we scored birds separately and reconciled differences.

Face pattern

The common understanding among birders is that the face pattern of *baroli* is characterised by a large dark eye mainly isolated by white feathers (eg, Svensson et al 2010); the face of *boydi* is characterised by a largely dark upper face enveloping the eye (eg, Blomdahl et al 2003, Onley & Scofield 2007). However, matters are not so simple. In a study of the small North Atlantic *Puffinus* shearwaters, Lee (1988) observed: 'On all species dark face mottling extends into the white plumage to a varying degree'. Field guides note for *baroli* 'dusky shading on cheeks and ears' (Onley & Scofield 2007), and 'area around eye and upper auriculars often freckled dark' (Howell 2012). In fact, the head pattern of both shearwaters is formed by a dark cap and white face with variable dark markings from the cap to below the eye. We scored variation using the criteria in table 1 and the *crux of each score* is the amount of the area of the upper face that is white (plate 271-276). We scored birds at colonies and at sea, but not museum specimens because taxidermic work alters feather arrangement around the eye.

Figure 3A shows the result for *baroli* at colony (c 82% from the Selvagens, rest from elsewhere) and figure 3B for *baroli* at sea (c 56% off the Azores, rest from elsewhere). The mean score for birds at colony is 2.9 and the data is more or less bimodal score 2 and score 3. The mean score for birds at sea is 2.4 and the mode is 2. Median and mode scores are lower for the birds at sea, presumably because less dense face markings visible at close range are not visible at distance, even less so in strong and direct sunlight. In all likelihood, this explains the difference between 37% of birds at colony with a 'classic' white-face (score 1 and score 2) versus the 61% at sea, rather than geographical variation between populations in the Selvagens and the Azores. A noteworthy c 24% of *baroli* at colony had a 'dark face' (score 4 and score 5; eg, plate 275), which as such is not reported in the literature, although this translated to only c 3% of birds photographed at sea in the sunny climes of the breeding range. In dull conditions, we expect more than 3% to show a dark face. For example, at dusk several miles offshore from Porto Santo in May 2018 and in April 2019, we saw over 50 *baroli* and more than a few looked dark faced.

Figure 4A shows the result for *boydi* at colony and figure 4B for *boydi* at sea. The mean score for birds at colony is 3.7 and the mode is 4. The mean score for birds at sea is 3.2 and the mode is 3. As with *baroli*, the presumed reason for lower scores of birds at sea is the effect of distance and light on the visibility of less dense markings.

The mean and mode scores for *baroli* and *boydi* indicate that, on average, *boydi* is darker faced than *baroli*. Of importance, most *boydi* around mid-score show one or both of: ***1*** a pale fore-supercilium bulge; and ***2*** a dark band from eye to cap, angled forward and upward. One *boydi* at colony had a 'white face' (score 2; appearance similar to plate 272, on which also note fore-supercilium bulge and dark band from eye to cap), which as such is not reported in the literature. C 27% of birds at sea appeared 'white faced'.

TABLE 1 Criteria for scoring face markings of Barolo Shearwater *Puffinus baroli* and Boyd's Shearwater *P boydi*. Note that *boydi* around mid-score 2-4 typically show one or both of ***1*** pale fore-supercilium bulge, and ***2*** dark band from eye to cap, angled forward and upward.

Score	Criteria
1	Largely white upper face > 'white faced' Large dark eye isolated by mainly white feathers Thick largely white supercilium Small dark fore-supercilium smudge Ear-coverts with limited dark marks Few if any dark marks under eye Broad white gap separating cap from gape
2	Intermediate between score 1 and 3
3	Unbroken mainly narrowish white supercilium Posterior lore marked and joining cap Ear-coverts more densely marked Variable broken line of dark marks under eye Broad to narrow white gap separating cap from gape
4	Intermediate between scores 3 and 5
5	Almost complete cap to below eye > 'dark faced' Maximum small pale area in fore-supercilium May have narrow spectacles Ear-coverts densely marked Almost complete line of dark marks under eye Broad to narrow white gap separating cap from gape

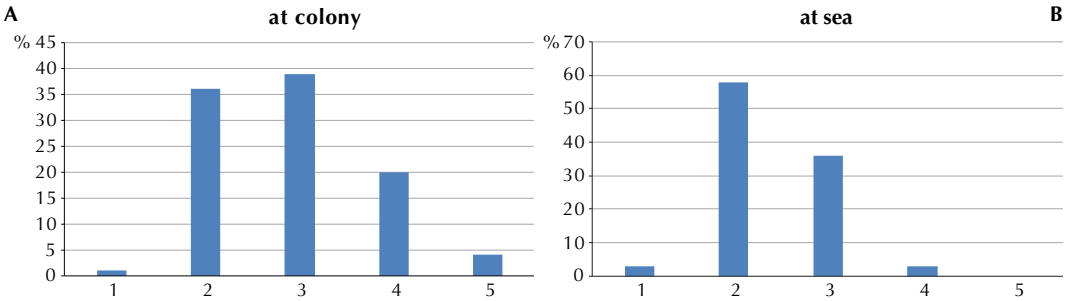

FIGURE 3 Face pattern score frequency (in %) for Barolo Shearwater *Puffinus baroli* for (A) birds at colony (n=118) and (B) birds at sea (n=36)

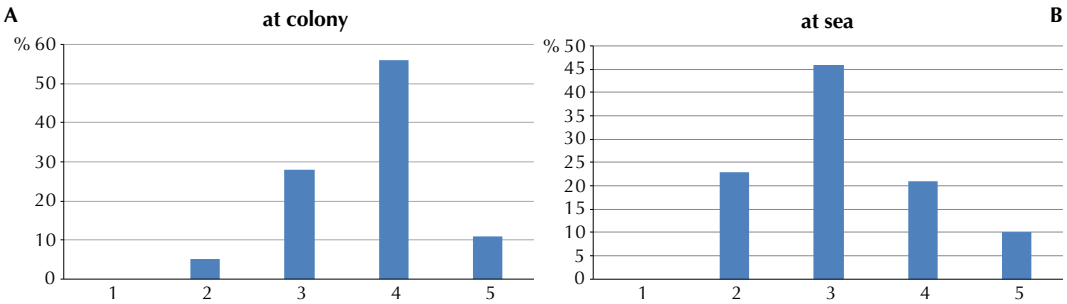

FIGURE 4 Face pattern score frequency (in %) for Boyd's Shearwater *Puffinus boydi* for (A) birds at colony (n=18) and (B) birds at sea (n=52)

Lateral extension of dark hindneck

The amount that the dark hindneck of bicolored *Puffinus* shearwaters extends laterally around the neck, and the amount that it continues under the forewing onto the fore-flank, varies *within and between* species. The blackish-grey hindneck of *baroli* typically extends a small amount laterally around the neck, leaving extensive white on the neck side, with a shallow extension under the forewing onto the fore-flank, falling just short of the upperbreast. The blackish-brown hindneck of *boydi* typically extends quite far laterally around the neck, with a deep extension under the forewing onto the fore-flank and onto the upperbreast. Compare *baroli* plate 278 with *boydi* plate 272, and *baroli* plate 289 with *boydi* plate 303. Presentation of this feature in the field is determined by the angle of view and the bird's head movements, although the 'true' lateral extension should be evident with the multiple angles seen during prolonged views (or in multiple photographs or in video footage).

Two-toned upperwing

The open upperwing of *baroli* is two-toned (Robb et al 2008, Svensson et al 2010). Photographs that we studied of *baroli* in flight show high-contrast pale grey panels variously on the inner wing and the outer wing (eg, plate 277). The panels have been attributed to reflection (in general discussion), to wear in adults (Curtis et al 1985) or to a consistent aspect of plumage (McGeehan & Mullarney 1995, BWPi 2006). The feature is not mentioned by Onley & Scofield (2007), Howell (2012) or Carboneras et al (2019). Curtis et al (1985) speculated that vagrants to north-western Europe are dispersive fresh juveniles, not worn adults with two-toned upperwings, but the point about age is disproved by geolocator studies of adults (figure 1; references in caption).

Baroli has a greyish 'bloom' structure over much of its plumage (plate 278). A property of the bloom, especially on the larger feathers of the upperwing, is its shiny pale grey appearance when catching the light, which is probably a result of the nanostructure of the feathers (appendix 1). In other words, the two-toned upperwing is attributable to the reflective property of a consistent aspect of plumage. The larger wing-feathers of near-fledgling museum specimens are covered in a greyish bloom, except for matt blackish-brown fringes and shafts (plate 279). The bloom on freshly moulted

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See captions on facing page

271 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 6 June 2010 *(Frank Zino)* **272** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 1 April 2017 *(Martin Gottschling)* **273** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 31 March 2016 *(Rinse van der Vliet)* **274** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 1 April 2017 *(Kris De Rouck)* **275** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 24 March 2016 *(Thijs Valkenburg)* **276** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off Raso, Cape Verde Islands, 24 March 2009 *(Vaughan Ashby)*.

We were forced to use photographs of *boydi* at sea because of relatively few suitable photographs available of *boydi* at colony. Left-hand column top down shows adult *baroli* with face score 1, 3, and 5, respectively. Top bird (plate 271) is 'classic white-faced' individual with large dark eye surrounded by white feathers and only limited dark markings. Middle bird (plate 273) has broken, mainly narrowish white supercilium, bulging somewhat at front, posterior lores marked and joining cap, ear-coverts quite densely marked, and some dark marks under eye. Bottom bird (plate 275) is 'dark-faced' individual with almost complete dark cap to below eye, small pale area in fore-supercilium, ear-coverts densely marked, and almost complete line of dark marks running under eye. Right-hand column top down shows *boydi* with face score 2, 3, and 5, respectively. Top bird (plate 272) is 'white-faced' rather like 'classic' *baroli*, although top and middle birds (plate 274) show characteristic *boydi* dark band in fore-supercilium, angled forward and up, from eye to cap, giving unfriendly look to face. Compared with bottom *boydi* (plate 276), extreme face score 5 has solid dark cap around and well below eye.

adults is more difficult to assess because they are at sea and the few that visit the colony out of season are mostly aerial and uncatchable (Frank Zino in litt). Photographs of fresh adults at sea give the impression of a bloom cover like near-fledglings. However, the bloom on breeding adults at colony is mainly restricted to areas of a feather protected by adjacent feathers, while the rest of the feather is matt blackish-brown where the bloom evidently has worn off (plate 280-281). Wear reduces the bloom and renders the upperwing-feathers increasingly matt and darker, not paler (contra Curtis et al 1985). It follows that the two-toned upperwing of worn *baroli* in flight should be less contrasting than fresh *baroli*.

The literature does not describe *boydi* with a two-toned upperwing. There was no opportunity for close study of freshly moulted adults for the same reason given for freshly moulted adult *baroli*. However, photographs of relatively fresh *boydi* in flight show some evidence of a greyish bloom over the larger wing-feathers (eg, plate 283 and 285), although they do not show a strongly contrasting two-toned upperwing (possibly different nanostructure cf *baroli*). There were no near-fledglings for study in museum specimens or photographed at colony. There is no clear evidence of *boydi* with a two-toned upperwing but further research is required.

Whitish tips to upperwing median and greater secondary coverts

In fresh plumage, adult *baroli* and *boydi* have white tips to the upperwing median and greater secondary coverts that form prominent white 'pencil lines' across the inner wing (plate 282-283). The pencil lines are a known feature of *baroli* (eg, Robb et al 2008, Svensson et al 2010, Howell 2012, although not mentioned by Onley & Scofield 2007) and a new feature for *boydi*. Juvenile *baroli* have an indistinct mid-grey pencil line across the tips of the greater secondary coverts, found on juveniles on Tenerife (this study) and museum skins at NHMUK (Howell 2012) (Robb et al 2008 show juvenile the same as a fresh adult). We were unable to check this feature for juvenile *boydi*. White pencil lines in fresh-plumaged adult *baroli* emphasize the two-toned appearance of the upperwing (plate 277).

As feathers age, the white tips become duller and wear off (noted in Howell 2012, rarely elsewhere). We found that median coverts wear more quickly than greater, and inner coverts more quickly than outer. We scored birds at colony and at sea by month by judging the prominence of the white tips in each covert tract: ***1*** prominent at range (fresh clean-white tip to all coverts); ***2*** visible with reasonable views (worn whitish tip to all coverts); ***3*** perhaps visible with good views (dirty white tip to about the outer third to two-thirds of the coverts); ***4*** probably only visible in photographs of birds in the hand (worn dingy tip to about the outer third of the coverts); and ***5*** completely worn off.

White tips to the median secondary coverts of 88 breeding adult *baroli* in the Selvagens were completely worn off in January and March (table 2; plate 284). White tips to the greater secondary coverts of 76 of them were either completely worn off or barely visible remnants (score 4-5) but pale tips were still potentially visible on the remaining 12 birds (score 2-3; plate 284). Light wear is expected in the few months that follow the complete post-breeding moult. Thus, the majority

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277 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Madeira, 6 August 2012 *(Hugo Romano/Madeira Wind Birds)* **278** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Graciosa, Azores, 17 August 2014 (*Chris Gibbins*). Bird in plate 278 shows grey 'bloom' covering dorsal surface of larger upperwing-coverts and remiges, as well as scapulars, nape to uppertail-coverts, and rectrices. Bird in plate 277 shows effect of shiny nature of this bloom with contrasting pale panels in inner wings and outer left wing. **279** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, 'female bird of the year' (collected 4 June 1913 by D A Bannerman, Montaña Clara, Canary Islands), Natural History Museum, Tring, England, 5 April 2019 *(Robert L Flood)*. Grey 'bloom' is apparent over entirety of these fresh feathers, except for matt fringes and shafts.

of 12 non-juveniles at sea in August showed prominent or fairly conspicuous white pencil lines across both median and greater secondary coverts (plate 282). Just two September birds were scored and, somewhat surprisingly, both showed heavy wear to tips of the median and greater secondary coverts, perhaps being older immatures or failed breeders that moulted earlier than successful breeding adults.

Of 36 *boydi* photographed at colony or at sea in February-June, white tips to the median secondary coverts were completely worn off on 35 birds (table 3; score 5; plate 285). The greater secondary coverts were largely or completely worn off on 26 birds (score 4-5), although may have been visible at sea on the other 10 birds (score 2-3; plate 285). Only three birds were photographed soon after the complete post-breeding moult, in October, and all had fairly prominent to prominent white pencil lines along both covert tracts (score 1-2; plate 283).

Pattern and tone of under primaries

Mainstream literature states that *baroli* has white under primaries with dark borders and little or no contrast between remiges and the white underwing-coverts; *boydi* has dark under primaries and strong contrast between remiges and the white underwing-coverts (eg, Onley & Scofield 2007). Carboneras et al (2019) simply liken *baroli* to Little Shearwater *P assimilis* that has 'a white underwing with dark trailing edge', and BWPi (2006) equally simply states that the underwing including the basal primary area is white. However, there are published photographs of *baroli* with dark under primaries resembling *boydi* (Holmström 2005, Crochet 2006; also plate 286-287).

We looked at the inner web of p8-10 (the most accessible/visible primaries) of 145 *baroli*, inspecting 44 museum specimens from many locations, and evaluating photographs of 101 adults at colony (86 from the Selvagens, rest from elsewhere). A clearly defined white tongue was present in c 61% of museum specimens and c 21% of

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280-281 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 19 March 2016 *(Thijs Valkenburg)*. Plate 281 shows magnified portion of plate 280. Greater secondary coverts and secondaries blackish-brown with grey 'bloom' over most of inner web and basally outer web, regions generally protected from wear by adjacent feathers, while marginal and lesser coverts are least grey. Pale grey in some of ruffled outer greater secondary/ inner greater primary coverts results from shine of grey bloom. **282** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Madeira, 24 August 2017 *(Martijn Verdoes)* **283** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 6 October 2017 *(Martin Gottschling)* **284** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 31 March 2016 *(Rinse van der Vliet)* **285** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, Raso, Cape Verde Islands, 14 February 2004 *(Arnoud B van den Berg)*. Middle row: in fresh autumn plumage, both adult *baroli* and the presumed adult *boydi* have white tips to upperwing median and greater secondary coverts, forming two prominent white pencil lines across inner wing. Bottom row: white tips largely wear away by breeding season, here with white tips to median secondary coverts completely worn away and just remnants on outer greater secondary coverts.

TABLE 2 Barolo Shearwater *Puffinus baroli* scores by month for prominence of white tips to median (MSC) and greater (GSC) secondary coverts at colony and at sea

Month	Score 1	Score 2	Score 3	Score 4	Score 5	Tract	Location
January	–	–	–	–	1	MSC	at colony
	–	–	1	–	–	GSC	
March	–	–	–	–	87	MSC	at colony
	–	1	10	70	6	GSC	
August	–	2	7	3	–	MSC	at sea
	1	8	3	–	–	GSC	
September	–	–	–	1	1	MSC	at sea
	–	–	1	1	–	GSC	

TABLE 3 Boyd's Shearwater *Puffinus boydi* scores by month for prominence of white tips to median (MSC) and greater (GSC) secondary coverts at colony and at sea

Month	Score 1	Score 2	Score 3	Score 4	Score 5	Tract	Location
February	–	–	–	–	2	MSC	at colony
	-	-	-	1	1	GSC	
March	-	-	-	-	8	MSC	at colony
	-	-	-	2	6	GSC	
	-	-	-	–	11	MSC	at sea
	–	1	1	–	9	GSC	
April	–	–	–	–	8	MSC	at sea
	–	3	2	1	2	GSC	
May	–	–	–	–	5	MSC	at sea
	–	–	2	1	2	GSC	
June	–	–	1	–	1	MSC	at sea
	–	1	–	–	1	GSC	
October	2	1	–	–	–	MSC	at sea
	3	–	–	–	-	GSC	

TABLE 4 Number of Barolo Shearwaters *Puffinus baroli* with or without clearly defined white tongues in under primaries (Y = clearly defined white tongues, N = no clearly defined white tongues, percentages to nearest whole number). Madeira includes Desertas Islands and Porto Santo (and islets).

Location	Museum		Colony		Museum + colony	
	Y	N	Y	N	Y	N
Azores	2 (100%)	0 (0%)	8 (62%)	5 (38%)	10 (67%)	5 (33%)
Canary Islands	8 (62%)	5 (38%)	0 (0%)	1 (100%)	8 (57%)	6 (43%)
Selvagens	3 (43%)	4 (57%)	12 (14%)	74 (86%)	15 (16%)	78 (84%)
Madeira	14 (64%)	8 (36%)	1 (100%)	0 (0%)	15 (65%)	8 (35%)
Σ	**27 (61%)**	**17 (39%)**	**21 (21%)**	**80 (79%)**	**48 (33%)**	**97 (67%)**

birds at colony (plate 288), averaging out to c 33% showing this characteristic (table 4). Clearly defined white tongues may have been easier to detect on skins in the hand or, more likely, the feature is on average scarcer in the Selvagens population that dominated the data (more research required). The ranges of the percentages of the length of the inner web covered by a white tongue were p10 (10-60%), p9 (5-40%) and p8 (0-30%). The middle and inner primaries may also show a white tongue.

Of 23 birds photographed at sea, 20 of which were photographed off the Azores and the Canary Islands, c 69% gave at least the impression of clearly defined white tongues in the under primaries (plate 289), fairly consistent with the percentage for museum specimens. However, experienced shore-based observers gain the impression of white in the under primaries from 'most' *baroli*. Assuming *baroli* with dark-grey under primaries have not been overlooked, a factor that may explain the difference is pale tones in the under primaries other than clearly defined white tongues.

We found that many adults at colony had variable-sized diffuse off-white or pale greyish regions in the under primaries that cross-dissolve with dark grey surroundings (plate 290). These pale regions could give rise to a whitish impression when observed at range. A noteworthy c 5% of birds had wholly dark grey under primaries (plate 286). At NHMUK, we investigated reflectivity of dark grey under primaries of *baroli* and found that the paleness changed somewhat with angle of light but at no time did it appear very pale or whitish. Thus, in the field we expect c 5% of *baroli* to show dark grey under primaries in strong contrast with white underwing-coverts (the nearest example that we have is plate 287). White tongues may not be clearly visible on back-lit wings (plate 291).

Of the 18 *boydi* photographed at colony, multiple photographs showed that one had clearly defined white tongues (plate 292) and one had diffuse whitish tongues (plate 294). Of 16 specimens at NHMUK, the inner web of p10 on one specimen had c 5% clearly defined white basally, while another specimen had a diffuse whitish tongue fading out about a third of the way along the inner web (plate 296). Of 37 birds photographed at sea, 35 showed dark under primaries in strong contrast with the white underwing-coverts (plate 293), of those 35 there were several examples of under primaries reflecting light and appearing mid-grey, thus softening the contrast (plate 295), while two birds showed fairly well-defined white tongues to about a third of the way along the inner web (present in multiple photographs of each bird; plate 297). White tongues in the under primaries is a new feature for *boydi*.

Undertail-covert pattern

Baroli is often illustrated with white undertail-coverts and *boydi* with much dark in the undertail-coverts (eg, Onley & Scofield 2007; plate 298-299, plate 306-307). However, Lee (1988) examined 25 *boydi* skins and found that about half of them had white extending well into the undertail-coverts, which led him to conclude that dark undertail-coverts are 'an unreliable field mark' for the separation of *boydi* from *baroli*.

In the Selvagens colony, 20% of 75 *baroli* had limited darkish markings to the tip of the longest undertail-coverts (plate 300) while the rest were unmarked (consistent with Onley & Scofield 2007, Robb et al 2008, and Howell 2012). C 80% had largely white inner and dark outer webs to the lateral undertail-coverts (plate 300) and most of the remainder also had limited to heavy markings on the inner web (plate 302), although a few had limited markings on the outer web only or an eccentric pattern. The undertail region can resemble *boydi* in cases where both webs of the lateral undertail-coverts are largely dark and the long white undertail-coverts are missing or parted (compare plate 304 of *baroli* with plate 305 of *boydi*).

The undertail-coverts of *boydi* range from largely whitish in exceptional cases (plate 301), thus resembling *baroli*, to largely dark (as suggested by Robb et al 2008; plate 303 and 305). We found the following variation in the undertail-coverts of museum specimens: all dark, dark with variable whitish distally, whitish inner web and dark outer web, and whitish with variable dark distally (similar to *lherminieri*; Howell 2012). The lateral undertail-coverts are usually all dark (plate 305). However, shorter pairs sometimes have white inner webs that form white sides to the undertail-coverts, thereby isolating the central dark undertail-coverts. In a sort of illusion, if the large feet cover the dark central undertail-coverts, it is easy to be fooled into thinking that the hidden undertail-coverts are also white.

We broadly agree with Lee (1988), in that c 50% of *boydi* have from little to quite extensive whitish extending into the undertail-coverts, although we disagree that undertail-covert pattern is an unreliable field mark per se.

Fore inner underwing-coverts

We studied the dark triangular-shaped wedge found in the fore inner underwing-coverts (base

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286 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 28 March 2016 *(Thijs Valkenburg)* **287** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Madeira, 11 September 2009 *(Carlos Gutiérrez Expósito)* **288** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Azores, 25 January 2017 *(Veronica Neves)* **289** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Lanzarote, Canary Islands, 17 August 2014 *(Miguel A Rouco Fernandez)* **290** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 25 March 2016 *(Rinse van der Vliet)* **291** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Madeira, 28 August 2012 *(Hugo Romano/Madeira Wind Birds)*. Middle row shows 'classic' birds, with clearly defined white tongues on inner webs of under primaries, which at sea translates to dark bordered largely whitish underwing. Top row shows birds with dark-grey under primaries like 'classic' *boydi* (although bird at sea shows some whitish in middle under primaries). In bottom row, left-hand bird shows only fairly diffuse pale regions in under primaries, while white tongues of right-hand bird are barely visible in back-lit left wing.

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292 Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, Rombo islands, Cape Verde Islands, 12 March 2019 *(Jacob Gonzáles-Solís)* **293** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off Raso, Cape Verde Islands, 30 April 2018 *(Geoff Jones)* **294** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, Rombo islands, Cape Verde Islands, 12 March 2019 *(Jacob Gonzáles-Solís)* **295** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 25 March 2007 *(René Pop)* **296** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi* (collected 15 March 1897 by Alexander Boyd, Brava, Cape Verde Islands), Natural History Museum, Tring, England, 31 October 2018 *(Robert L Flood)* **297** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 1 April 2017 *(Martin Gottschling)*. Top left bird (plate 292) has clearly defined white tongues c 45% of length of inner web of p8-9 in left wing (same in right wing, except p8 diffuse whitish), middle left bird (plate 294) has diffuse whitish tongues fading out along inner webs of p8-10, and bottom left bird (plate 296) has diffuse whitish tongue fading out along inner web of outermost primary. Top right bird (plate 293) has 'classic' all dark under primaries in strong contrast with white underwing-coverts, middle right bird (plate 295) has under primaries reflecting light and appearing mid-grey, and bottom right bird (plate 297) has whitish tongues in under primaries rather like 'classic' *baroli*.

along the leading edge and apex in the lesser coverts; plate 308-309). We scored three variables: ***1*** size of triangle (large, medium or small); ***2*** pattern (uniform dark, boldly chequered or lightly chequered); ***3*** tone (blackish-grey, mid-grey or pale grey). For both species, most of the 27 possible combinations occurred, the most frequent size was medium, all three patterns were found in roughly equal numbers, and the tone in about half of the birds was mid-grey, with blackish-grey and pale grey each accounting for the rest in roughly equal numbers. Quite often, white shortest lesser secondary coverts running along the base of the triangle separated the dark triangle from the dark leading edge of the inner forewing.

Axillaries
We analysed the amount of dark markings in the axillaries. For both species, c half of the birds had unmarked axillaries, the rest had a relatively small amount of markings, mainly comprising a small to large dark sub/terminal spot/mark on the longest axillaries.

Underwing greater secondary covert spots
We studied the dark sub/terminal spots/markings that are often found in the greater secondary coverts. The tally for spots/markings in the following categories was similar for both species: on all of the coverts (plate 310), on the inner 75%, on the inner 50%, on the inner 25%, unmarked (plate 311). The last two categories occurred least frequently and accounted for c 20% of the birds, while the other three categories each accounted for somewhere between 20-35% of the birds.

Moult phenology
We investigated primary moult but found moult phenology of the two species too closely aligned to be of value to the process of identification.

Bare parts
The tibia, tarsus and toes of both *baroli* and *boydi* are blue, the webs bluish/pinkish; and the outer side of the tarsus and toes, and the toe pads and claws blackish (plate 312). *Boydi* at colony mainly showed a clearly defined two-toned bill, with dark-grey nasal tubes, culminicorn and ungues, while the rest of the bill was paler grey-blue (plate 313). *Baroli* at colony had similar colours and pattern but the borders of the markings generally were not as well defined, hence the bill most typically appeared less two-toned (plate 271, 273 and 275). Research is required on a larger sample of *boydi* to establish whether a well-defined bill pattern offers a useful field mark.

Flight behaviour
In our experience, *baroli* in travelling flight flies like no other shearwater and once seen should not be forgotten. *Baroli* propels itself along (McGeehan & Mullarney 1995) rather than utilising wind to arc and shear. The flight is fast and direct, involving short series of stiff wing-beats interspersed by short glides. It tilts rather than shears, remains close to the sea surface, and fre-

298 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, off Graciosa, Azores, 6 February 2015 *(Peter Alfrey)*
299 Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 1 April 2017 *(Martin Gottschling)*. Undertail-coverts of small *Puffinus* shearwaters are best seen on birds resting at sea. These photographs show 'classic' *baroli* (plate 298) with white undertail-coverts and 'classic' *boydi* (plate 299) with extensive dark in undertail-coverts.

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300 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 19 March 2016 *(Thijs Valkenburg)* **301** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 25 March 2007 *(René Pop)* **302** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 31 March 2016 *(Rinse van der Vliet)* **303** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, off São Nicolau, Cape Verde Islands, 1 April 2017 *(Martin Gottschling)* **304** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 28 March 2016 *(Thijs Valkenburg)* **305** Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, Rombo islands, Cape Verde Islands, 12 March 2019 *(Jacob Gonzáles-Solís)*. Left-hand column (plate 300, 302, 304) shows variation in undertail-coverts of *baroli*. Of particular note is bottom bird (plate 304) with white-tipped otherwise all-dark long lateral undertail-coverts not covered by white undertail-coverts, suggesting *boydi*. Right-hand column (plate 301, 303, 305) shows variation in undertail of *boydi*. Of particular note is top bird (plate 301) showing extensive white in undertail-coverts, suggesting *baroli*.

306 Barolo Shearwaters / Kleine Pijlstormvogels *Puffinus baroli*, Muséum National d'Histoire Naturelle, Paris, France, 12 September 2018 *(Rinse van der Vliet)* **307** Boyd's Shearwaters / Kaapverdische Kleine Pijlstormvogels *Puffinus boydi*, Muséum National d'Histoire Naturelle, Paris, France, 12 September 2018 *(Rinse van der Vliet)*. Despite variation in undertail-covert coloration and pattern discussed in this article, there is fairly high degree of consistency as shown here in trays of museum specimens.

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308 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 19 March 2016 *(Thijs Valkenburg)* **309** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 31 March 2016 *(Rinse van der Vliet)*. Left-hand example (plate 308) is most common variant with medium-sized 'triangle' that is lightly chequered and mid-grey. Right-hand example (plate 309) has fairly large 'triangle' that is reasonably uniform and blackish-grey. **310** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 31 March 2016 *(Rinse van der Vliet)* **311** Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 28 March 2016 *(Thijs Valkenburg)*. All greater secondary coverts in left-hand example (plate 310) have dark subterminal spots, while in right-hand example (plate 311) none have dark spots.

quently makes exaggerated head lifts. In light winds, *baroli* typically makes rapid stiff wing-beats, from two in less than 1 sec to 10-12 in just over 4 sec, interspersed with short glides lasting from 1 to 3-4 sec (Martin & Rowlands 2001) and often lands on the sea (Curtis et al 1985; pers obs). In moderate to strong winds, *baroli* makes low ascents, refrains from long sailing glides (Lee 1988), and banks rather than arcs (Martin & Rowlands 2001).

Boydi in light winds typically flies low to the surface, makes bursts of quick wing-beats interspersed by buoyant glides, and the slightly longer wings (see below) are visibly more flexible. In moderate to strong winds, *boydi* performs 'truer' shearwater flight than *baroli* with relatively few wing-beats and longer glides, and makes shallow to fairly high wheeling arcs (appearing like a small *lherminieri*).

Many *baroli* and *boydi* sightings involve feeding birds. The modes of feeding behaviour in *Puffinus* shearwaters are mainly shared and not useful for identification: hydroplaning, pursuit-plunging, hanging and foot-pattering, snorkelling, pursuit diving, and surface-seizing.

Size and structure

Differences in biometrics of *baroli* and *boydi* summarized in table 5 identify several structural differences that are apparent in the field with experi-

312 Barolo Shearwater / Kleine Pijlstormvogel *Puffinus baroli*, Selvagem Grande, Selvagens, 6 June 2010 *(Frank Zino)*. Note colours and pattern.

313 Boyd's Shearwater / Kaapverdische Kleine Pijlstormvogel *Puffinus boydi*, Ilhéus do Rombo, Cape Verde Islands, 9 November 2018 *(Jacob Gonzáles-Solís)*. Note well-defined two-toned bill.

ence and good views (additional biometrics in appendix 2). Wing and tail measurements on average are slightly shorter for *baroli*. The wing of *baroli* is short and broad and the wing-tip can appear clipped and the wing action looks stiff. The wing of *boydi* is short-medium in length, fairly broad and the wing-tip often appears slightly blunt. The wing action looks more flexible than *baroli*. In terms of *Puffinus* shearwaters, on average the tail of *baroli* is short, while the tail of *boydi* is on average somewhat longer. Bill measurements of the two species largely overlap.

Variation between populations of baroli

We looked for evidence of differences in traits between populations of *baroli* from different island groups. Despite considerable effort, we were unable to compile sufficient data for multiple island groups, necessary to make substantive cross-comparisons. We are unable to comment on whether a greater percentage of *baroli* from the Canary Islands have dark-grey under primaries as suggested by Howell (2012). However, there is evidence that the Selvagens population has a less than average number of birds with clearly defined white tongues in the under primaries (as distinct from diffuse pale tones). We found that the dark face and the dark-grey under primaries are not specific to any island group (ie, both were evident in birds at colony and at sea off the Azores, Desertas, Madeira, Selvagens and Tenerife). We also noted that, broadly speaking, the Azores population is largest in size, the Selvagens smallest, and the Porto Santo islets intermediate (table 6).

Guidelines for separation and identification

Seven traits from the above presentation are useful to varying degrees for separation and identification of *baroli* and *boydi*: undertail-covert pattern, face pattern, pattern and tone of under primaries, two-toned upperwing, lateral extension of dark hindneck, travelling flight behaviour, and size and structure.

A notable amount of dark in the undertail-coverts eliminates *baroli* and all or nearly all white undertail-coverts virtually eliminates *boydi*. Caution is required, as c 50% of *boydi* have white extending into the undertail-coverts, and some have white running down the side to the undertail-coverts suggesting that the coverts if hidden by the feet are also white. That said, the undertail-covert pattern is a difficult feature to get to grips with in the field. In travelling flight, it is best seen in photographs taken when a bird banks, offering a ventral view. Even then the large feet of *baroli* and *boydi* can obscure most of the undertail region. Legs are used during take-off and landing offering an opportunity to see or photograph the undertail-covert pattern. Birds swimming at sea generally reveal their undertail-coverts (plate 298-299).

Face markings of *baroli* and *boydi* overlap considerably and the distribution of face markings is surprisingly variable, especially on *baroli*. On average, *boydi* is darker faced than *baroli*. In general, a white-faced bird (scores 1 and 2) is most likely to be *baroli*, while a dark-faced bird (scores 4 and 5) is most likely to be *boydi*, though only *baroli* is known to occur with face score 1. A pale foresupercilium bulge and well-defined dark band an-

TABLE 5 Comparison of wing, tail and bill measurements (mm) of Barolo Shearwater *Puffinus baroli* and Boyd's Shearwater *P boydi*. Data are: mean ± 1SD, range (sample size) or range (sample size); sexes combined unless shown otherwise. [1]Olson (2010), [2]Howell (2012), [3]BWPi (2006), [4]Silva & Olmos (2010), [5]Rinse van der Vliet et al (unpublished at colony data), [6]Robert Flood & Rinse van der Vliet (unpublished museum data) (source 2 incorporates measures from source 1).

Species	Wing	Tail	Bill
baroli	173.9±4.9, 165-183 (n=15)[1]	71.3±3.7, 67-79 (n=15)[1]	
	165-183 (n=18)[2]	67-79 (n=18)[2]	(24-28, n=18)[2]
	♂ 184±4.9, 176-190 (n=7)[3]	71.8±3.7, 67-78 (n=14)[3]	♂ 26.1±1.0, 24-28 (n=8)[3]
	♀ 179±5.0, 170-185 (n=6)[3]		♀ 25.0±0.6, 24-26 (n=6)[3]
	177.9±5.8 (n=8)[4]	75.5±7.8 (n=8)[4]	25.7±1.2 (n=8)[4]
	181.3±4.1, 170-192 (n=114)[5]		
	177.9±6.6, 168.9-189.2 (n=9)[6]		25.0±0.8, 23.0-26.6 (n=54)[6]
boydi	182.2±4.4, 174-188 (n=20)[1]	76.7±2.0, 73-80 (n=20)[1]	
	174-188 (n=20)[2]	73-80 (n=20)[2]	23-28 (n=20)[2]
	188±3.9, 180-193 (n=15)[3]	77.6±4.0, 71-84 (n=14)[3]	25.2±1.0, 23-28 (n=14)[3]
	181.6±11.4 (n=12)[4]	82.6±7.6 (n=12)[4]	25.2±4.7 (n=12)[4]
			24.5±0.8, 22.9-27.3 (n=42)[6]

gled forward and upward from eye to cap are characteristic of *boydi*.

The pattern and tone of under primaries is a fairly reliable though not diagnostic way of separating *baroli* from *boydi*. Clearly defined white tongues or pale tones in the under primaries were found in c 95% of *baroli* and only c 8% of *boydi*. White tongues found in the under primaries of three *boydi* were about a third of the length of the visible under primary, shorter than many *baroli*. C 5% of *baroli* in dull light are likely to show dark under primaries contrasting with white underwing-coverts. We noted a small number of *baroli* with both dark face and dark-grey under primaries.

Two-toned upperwing as a support feature for *baroli* should be used with the caveat that our study does not completely eliminate a two-toned upperwing in *boydi*. The two-toned upperwing of *baroli* presumably becomes less contrasting with wear thus the feature is less useful during the breeding season December-June.

Lateral extension of dark hindneck, treated with due caution, can be a useful indicator, with minimal extension pointing to *baroli*, and considerable extension pointing to *boydi*.

Overlap in the main aspects of plumage and further complications, for example, caused by light conditions and feather wear, mean that plumage traits are not always sufficiently revealing for safe separation of *baroli* from *boydi*. For this reason it is advisable to include all plumage traits in the process of identification.

Given our findings on plumage aspect, traits of

TABLE 6 Comparison of four key biometrics mass (g) and wing, tarsus and bill length (mm) for breeding adult Barolo Shearwater *Puffinus baroli* from three widespread geographical sites: Selvagem Grande, Selvagens; Cima islet, Porto Santo; and Vila, Baixo and Praia islets, Azores. Data are: mean (sample size); sexes combined, unless shown otherwise. [1]Robertson & James (1988), [2]Fagundes et al (2016), [3]Rinse van der Vliet et al (unpublished at colony data), [4]Monteiro et al (1996), [5]Veronica Neves (unpublished at colony data).

Location	Mass	Wing	Tarsus	Bill
Selvagens	♂ 160.3 (n=24)[1]	♂ 177.5 (n=4)[1]	♂ 36.8 (n=24)[1]	♂ 25.4 (n=24)[1]
	♀ 151.2 (n=17)[1]	♀ 178.6 (n=3)[1]	♀ 36.2 (n=17)[1]	♀ 25.1 (n=17)[1]
	163.5 (n=173)[2]	181.1 (n=173)[2]	36.7 (n=173)[2]	
	165 (n=114)[3]	181.3 (n=114)[3]	36.6 (n=114)[3]	
Porto Santo	169.3 (n=83)[2]	182.6 (n=83)[2]	37.2 (n=83)[2]	
Azores	171.8 (n=157)[4]	182.6 (n=133)[4]	37.8 (n=93)[4]	25.4 (n=131)[4]
	202.5 (n=24)[5]	186 (n=24)[5]	37.3 (n=24)[5]	25.2 (n=24)[5]

travelling flight behaviour, and size and structure take on an added importance. Travelling flight behaviour can be studied using video clips given in Flood & Fisher (2019). Wing and tail structure may be apparent in the field or in photographs.

Separation of *baroli* from *boydi* in most cases involves establishing agreement between a combination of the above traits. Particularly important are undertail-covert pattern, under primary pattern, face pattern and flight behaviour.

Acknowledgements

We are grateful to Steve Howell for feedback on an earlier version of this article. At our request, Dani López-Velasco kindly applied our *boydi* identification criteria during a field trip to the Cape Verde Islands in April 2019 and prompted us to include the feature 'lateral extension of dark hindneck'.

Shearwater colonies: Special thanks go to Isabel Fagundes for inviting RvdV to join the Barolo Shearwater project on Selvagem Grande and for providing data from Cima islet, Porto Santo. Many thanks go to Fabia Azevedo, Jacques da Mata, Paulo Moniz, Joost Valkenburg and Thijs Valkenburg for facilitating the invitation, sharing data and being good company during the fieldwork. TV also provided 100s of photographs of Barolo from Selvagem Grande. Many thanks go to Paulo Oliveira, Carolina Jardim Santos and Jardim Botânico da Madeira for arranging and issuing a permit for RLF to visit Cima islet to study Barolo. Many thanks go to Angus Wilson and Kirk Zufelt who were good company during the fieldwork. Data on Barolo was shared by Veronica Neves from Vila and Praia islets, Azores, Frank Zino from Madeira, Selvagem Grande, and the Azores, and Marcel Gil-Velasco from the Canary Islands. Jacob Gonzáles-Solís shared data and photographs on Boyd's Shearwater from Cape Verde Islands. Wouter van Gestel prepared the skulls collected on Selvagem Grande.

Museums: We are very grateful to the following museum curators and staff for organizing and supporting our study visits: Patrick Bousses and Jérôme Fuchs of Muséum National d'Histoire Naturelle, Paris, France; Manuel Biscoti and João Silva of Funchal Natural History Museum, Madeira; Mark Adams and Hein van Grouw of Natural History Museum (NHMUK), Tring, England; Bentley Bird and Paul Sweet of American Museum of Natural History (AMNH), New York, USA; and Henry McGhie, Rachel Petts and Kate Sherburn of Manchester Museum, Manchester, England. Jan Bolding Kristensen of Statens Naturhistoriske Museum, København, Denmark, organized the loan of a specimen for us to study at NHMUK. Many thanks go to the following museum curators for taking photographs of specimens on our behalf: Michael Brooke of University Museum of Zoology, Cambridge, England; Mary Henen of Field Museum of Natural History, Chicago, USA; Janet Hinshaw of University of Michigan Museum of Technology, Michigan, USA; Kristof Zyskowski of Peabody Museum at Yale University, Yale, USA; Nate Rice of Academy of Natural Sciences, Philadelphia, USA; Jeremiah Trimble of Harvard Museum of Comparative Zoology, Harvard, USA; and Jacob Saucier of Smithsonian National Museum of Natural History, Washington, USA. The following museums provided information on specimens: Museum voor Natuurwetenschappen / Muséum des sciences naturelles, Brussel, Belgium; Royal Ontario Museum, Toronto, Canada; University of British Columbia Beaty Biodiversity Museum, Vancouver, Canada; Nova Scotia Museum of Natural History, Halifax, Canada; Canadian Museum of Nature, Ottawa, Canada; Staatliches Naturhistorisches Museum, Braunschweig, Germany; Museo Civico di Zoologia, Roma, Italy; Naturalis Biodiversity Center, Leiden, Netherlands; Natuurhistorisch Museum Rotterdam, Rotterdam, Netherlands; Universidade de Lisboa, Lisboa, Portugal; Naturhistoriska Riksmuseet, Stockholm, Sweden; Natural Museums, Liverpool, England; National Museums of Scotland, Edinburgh, Scotland; Cornell University Museum of Vertebrates, Ithaca, USA; Louisiana State University of Natural Science, Baton Rouge, USA; Delaware Museum of Natural History, Wilmington, USA; Museum of Vertebrate Zoology, Berkeley, USA; Carnegie Museum of Natural History, Pittsburgh, USA; North Carolina Museum of Natural Sciences, Raleigh, USA; and Cleveland Museum of Natural History, Cleveland, USA. Justin Jansen helped in our museum search. Angus Wilson supported RLF at AMNH.

Photographs and video: We are very grateful to the following who provided photographs or video footage for our study: Antonio Acedo, Peter Alfrey, Vaugh Ashby, Rodríguez Martín Beneharo, Arnoud van den Berg, Tony Clarke, Mark Darlaston, Richard Ek, Carlos Gutiérrez Expósito, Paul Gale, Raül Ramos Garcia, Eduardo Garcia del Rey, Chris Gibbins, Marcel Gil-Velasco, Jacob Gonzáles-Solís, Martin Gottschling, Lee Gregory, Justin Hart, Jemmy Holmes, John Holmes, Tom Johnson, Geoff Jones, Gerby Michielsen, Kelle Moreau, Killian Mullarney, Veronica Neves, David Perez, René Pop, Colin Rogers, Hugo Romano (Madeira Wind Birds), Kris de Rouck, Juan Sagardia, Laurens Steijn, Scott Surner, Arne Torkler, Thijs Valkenburg, Martijn Verdoes, Edwin Winkel, Pim Wolf and Frank Zino.

Samenvatting

Variatie en determinatie van Kleine Pijlstormvogel en Kaapverdische Kleine Pijlstormvogel Dit artikel biedt nieuwe inzichten in de variatie en determinatie van Kleine Pijlstormvogel *Puffinus baroli* en Kaapverdische Kleine Pijlstormvogel *P boydi*. Uit dit onderzoek blijkt dat de variatie in sommige, voorheen belangrijk geachte kenmerken, groter is dan werd aangenomen. Zeven van de 13 bij beide soorten onderzochte kenmerken zijn meer of minder goed bruikbaar voor de determinatie. In de tekst is aangegeven welke bevindingen zijn gebaseerd op een kleine steekproef, hier moet een slag om de arm gehouden worden en is verder onderzoek nodig. De belangrijkste criteria in het verenkleed om beide soorten te onderscheiden zijn in volgorde van significantie als volgt:

Een aanzienlijke hoeveelheid donker in de onderstaartdekveren sluit *baroli* uit, terwijl volledig of bijna volledig witte onderstaartdekveren *boydi* in de meeste gevallen uitsluit. Echter de variatie is groot, zo heeft

c 50% van de onderzochte *boydi* wit op het basale deel van (vooral) de kleine onderstaartdekveren. Er zijn ook exemplaren met witte buitenvlaggen aan met name de buitenste onderstaartdekveren. Houd er bij vogels met een dergelijke tekening rekening mee dat in de vlucht de poten het grootste deel van de onderstaartdekveren bedekken. De kleur van de onderstaartdekveren is vaak goed te bepalen bij zwemmende vogels.

Er is veel overlap in de hoeveelheid tekening aan de zijkop (rond het oog en aan en bij de oorstreek). Echter, gemiddeld heeft *boydi* meer donkere tekening dan *baroli*. Een vogel met een hoofdzakelijk witte zijkop (score 1 en 2) is waarschijnlijk een *baroli*, een vogel met een uitgebreide donkere zijkop (score 4 en vooral 5) is waarschijnlijk een *boydi*.

Het patroon en de kleur aan de onderzijde van de (buitenste) handpennen is een redelijk betrouwbaar kenmerk om beide soorten te onderscheiden. Duidelijk lichte en lange tongen zijn een goede indicatie voor *baroli*. Houd hierbij rekening met het licht: door reflectie kan de onderhand lichter lijken en bij donker weer juist donkerder.

De tweekleurige bovenvleugel (met zilvergrijs zweem) van *baroli* is een aanvullend kenmerk maar sluit *boydi* mogelijk niet uit. Dit kleurcontrast op de bovenvleugel is tijdens het broedseizoen, tussen december en juni, minder opvallend door sleet.

De grootte van de zijborstvlek kan een indicatie zijn. Een vrij uitgebreide vlek wijst op *boydi*, een minder uitgebreide op *baroli*. Als het donker van de achterhals ver naar opzij loopt tot ver onder de voorvleugel op de voorflank en de bovenborst, wijst dat op *boydi*.

Door aanzienlijke overlap bij alle kenmerken is het vaststellen van een combinatie van deze kenmerken noodzakelijk, bij voorkeur ondersteund door goede foto's. Daarnaast is ook een juiste inschatting van structuur en formaat en het herkennen van de verschillende vliegwijzes van groot belang.

De twee vleugelstrepen (lichte toppen aan de grote en middelste bovendekveren) in vers kleed zijn niet diagnostisch voor *baroli*, maar ook aanwezig bij pas geruide *boydi*.

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APPENDIX 1 Nanostructures and colours in feathers

Nanostructures in feathers are responsible for blooms, shine and iridescence. A bloom results from elongated, curved and frilled barbules on the distal sides of the barbs and these wear off, revealing, for example, underlying dark in the outer primaries of terns Sternidae (Pyle 2008). Shine and iridescence result from a single layer of keratin over a melanin underlayer (Maia et al 2011) and possibly the keratin layer scratches or abrades, exposing a matt melanin underlayer. Low level magnification (20x) of coated large upperwing-coverts and upperside of remiges of Barolo Shearwater *Puffinus baroli* in a trial study with Hein van Grouw at Natural History Museum, Tring, England, revealed an impression of a bloom-type nanostructure (Scanning Electron Microscopy required for confirmation). A general inspection of these wing feathers on museum skins of other species of *Puffinus* shearwater found evidence of a bloom but apparently not with the same shiny property as *baroli* (possibly the result of a different nanostructure but further research is required).

APPENDIX 2 Biometrics of Barolo Shearwater and Boyd's Shearwater (table 7-9)

TABLE 7 Biometrics of Barolo Shearwater *Puffinus baroli* from Azores; Cima islet, Porto Santo; Selvagem Grande, Selvagens; and Madeira, and museum skins from multiple locations. Data are mean ± 1SD, range (sample size) or mean (sample size); sexes combined unless shown otherwise; mass (g), other measures (mm). TL = total length, WS = wingspan, HB = head to bill tip. [1]Monteiro et al (1996), [2]Frank Zino (unpublished at colony data), [3]Fagundes et al (2016), [4]Rinse van der Vliet et al (unpublished at colony data), [5]Robert Flood & Rinse van der Vliet (unpublished museum data).

Location	Mass	TL	WS	Wing	Tail	Tarsus	HB
Azores[1]	171.8±13.3 140-211 (n=157)			182.6±4.0 174-193 (n=133)	72±3.1 67-81 (n=48)	37.8±1.03 34.3-40.1 (n=93)	65±1.4 61.6-67.8 (n=105)
Azores[2]	175.5 (n=2)	307.5 (n=2)		183.5 (n=2)	68.5 (n=2)	39.9 (n=2)	66.2 (n=2)
Madeira[2]	146 (n=2)	305 (n=1)	620 (n=1)	186 (n=1)	75 (n=1)	40.6 (n=1)	
Porto Santo[3]	169.3 (n=83)			182.6 (n=83)		37.3 (n=83)	
Selvagens[3]	163.5 (n=173)			181.1 (n=173)		36.7 (n=173)	
Selvagens[4]	165 (n=114)			181.3 (n=114)		36.6 (n=114)	
Selvagens[2]		300.6 (n=5)	596.7 (n=3)	179.8 (n=5)	73 (n=5)	38.1 (n=6)	64.4 (n=7)
Multiple[5]				177.9 (n=9)		36.5 (n=9)	62.5 (n=8)

TABLE 8 Biometrics of bill (all mm) of Barolo Shearwater *Puffinus baroli* from Azores and Selvagem Grande, Selvagens, and museum skins from multiple locations. Data are: mean ± 1SD, range (sample size); sexes combined. NT = nasal tubes, C = culminicorn, MU = maxillary unguis, (l) = length, (h) = height; live birds unless museum skins. [1]Monteiro et al (1996), [2]Frank Zino (unpublished), [3]Robert Flood & Rinse van der Vliet (unpublished museum data).

Location	Bill	NT (l)	C (l)	MU (l)	NT (h)	C (h)	MU (h)
Azores[1]	25.4±1.0 22.9-27.7 (n=131)				8.5±0.6 7.0-9.8 (n=132)		5.5±0.4 5.0-6.9 (n=132)
Azores[2]	25.7, 25.0-26.2 (n=2)						
Selvagens[2]	24.5±1.3 22.7-26.6 (n=7)						
Multiple[3]	24.9±0.8 23.0-26.6 (n=54)	7.8±0.5 6.5-8.6 (n=33)	6.2±0.8 4.8-7.6 (n=33)	11.1±0.9 9.1-12.6 (n=33)	7.9±0.4 7.1-8.5 (n=33)	5.0±0.4 4.1-6.0 (n=33)	5.4±0.3 5.0-6.0 (n=33)

TABLE 9 Biometrics of bill (all mm) of Boyd's Shearwater *Puffinus boydi* from museum skins from multiple locations in Cape Verdes Islands. Data are: mean ± 1SD, range (sample size). NT = nasal tubes, C = culminicorn, MU = maxillary unguis, (l) = length, (h) = height. Robert Flood & Rinse van der Vliet (unpublished museum data).

Location	Sex	Bill	NT (l)	C (l)	MU (l)	NT (h)	C (h)	MU (h)
Multiple	mixed	24.5±0.8 22.9-27.3 (n=42)	6.7±0.8 5.1-8.4 (n=42)	6.6±1.1 3.9-8.7 (n=34)	11.1±1.0 9.1-12.7 (n=34)	7.8±0.7 6.2-9.2 (n=42)	5.2±0.5 4.0-6.6 (n=42)	5.5±0.4 4.8-6.2 (n=42)
Multiple	male	24.8±0.6 23.5-26.1 (n=16)	6.8±0.6 5.8-8.4 (n=16)	6.0±0.8 3.9-7.9 (n=13)	11.9±0.6 9.1-12.7 (n=13)	8.1±0.6 6.2-9.2 (n=16)	5.4±0.5 4.5-6.6 (n=16)	5.5±0.4 4.8-5.8 (n=16)
Multiple	female	24.5±0.9 23.1-27.3 (n=23)	6.5±0.7 5.1-7.8 (n=23)	6.8±1.0 4.9-8.7 (n=20)	11.1±0.8 9.9-12.7 (n=20)	7.7±0.6 6.3-8.6 (n=23)	5.2±0.4 4.3-6.2 (n=23)	5.5±0.3 4.3-6.2 (n=23)
Raso	mixed	24.6±0.5 23.5-25.4 (n=15)	7.0±0.5 6.3-8.4 (n=15)	6.3±0.9 4.9-8.0 (n=15)	11.3±1.2 9.1-12.7 (n=15)	7.6±0.8 6.2-9.2 (n=15)	5.2±0.6 4.3-6.6 (n=15)	5.3±0.4 4.8-5.9 (n=15)
Rombos	mixed	24.6±1.1 22.9-27.2 (n=19)	6.4±0.7 5.1-8.4 (n=19)	7.0±1.1 3.9-8.7 (n=16)	11.1±0.6 9.1-12.4 (n=16)	8.0±0.5 6.7-8.8 (n=19)	5.3±0.3 4.0-6.2 (n=19)	5.6±0.3 4.9-6.2 (n=19)

APPENDIX 3 Extralimital records of Barolo Shearwater *Puffinus baroli* in Europe

The species was scarce but regular, including double figure counts, in French and Spanish waters in August-September in the late 1990s to early 2000s from the Portsmouth/Plymouth (England) to Bilbao/Santander (Spain) ferries (especially in the southern Bay of Biscay; eg, Martin & Rowlands 2001), but is now rarely seen. The following records exclude the ferry sightings as well as birds identified as Barolo/Boyd's Shearwater *Puffinus baroli/boydi*. All records provided by national rarities committees (several committees reviewing records). The species has been deleted from the national list in Austria (two from Bodensee, Vorarlberg, now considered not proven) and Norway (review found all previously accepted reports not proven).

Britain: 45 records involving 48 birds (April 2, May 1, June 7, July 4, August 9, September 15, October 8, November 1, December 1). Records include male prospecting on Skomer, Wales from 26 June to 10 July 1982 (James & Alexander 1984, James 1986); same bird, 21 June to 25 July 1983; male singing 4-24 June 2010; same bird 21 April to 5 May 2011. Records under review (per British Birds Rarities Committee).

Belgium: 2 (Oostende, 19 September 1990; Zeebrugge, 25 September 1990)

France: 30 from 1985 onwards (April 1, May 1, June 1, August 4, September 13, October 9, November 1)

Germany: 1 (found dead, Bodensee, Baden-Württemberg, 25 April 1962)

Ireland: 24 (May 1, June 1, August 19, September 3)

Isle of Man: 1 (10-11 September 1994)

Italy: 4 (Sardinia, October 1892; Stura di Demonte river, Cuneo, October 1895; Ladispoliu, Roma, May 1990; Capo Murro di Porco, Sicily, September 2001)

Northern Ireland: 1 (25 August 2004)

Portugal: 22 records involving 48 birds (including 4 from coast, 1 under review, 9 not submitted).

Spain: 3 (Cádiz, 12 May 1986; Gozón, 31 August 1991; Cádiz, 2 January 2010).

Breeding population of African Pied Wagtail at lake Nasser, Egypt

Jens Hering, Stefan Fischer, Olaf Geiter, Stefan Siegel, Hans-Jürgen Eilts, Elmar Fuchs, Mohamed I Habib & Martin Winter

Surveys specifically targeting breeding birds of lake Nasser, Egypt, have been lacking so far. Only for the surroundings of Aswan and Abu Simbel breeding data are available for a few species (Goodman & Meininger 1989, Baha el Din & Baha el Din 1990, Baha el Din 1994, Hoek & Ibrahim 2007). In the spring of 2016 and 2017, and in January 2018, we did boat trips to investigate breeding birds from Aswan to Abu Simbel. The survey primarily targeted African Pied Wagtail *Motacilla aguimp* (plate 314), which as a breeder in the Western Palearctic (WP) occurs only here. It concerns the subspecies *M a vidua* with a wide distribution in central and eastern Africa; nominate *M a aguimp* with a slightly different plumage is distributed in western Africa and central South Africa (Keith et al 1992, Alström et al 2003, del Hoyo et al 2004). Main focus was the collection of data on its breeding distribution and breeding biology.

Study area and methods

Our study area was the Egyptian side of lake Nasser (lake Nubia on the Sudanese side was not covered), which is defined as an Important Bird Area (Baha el Din 2001). More information about the lake can be found in Entz (1976), Goodman & Meininger (1989) and Baha el Din (2001). The study area was investigated with the permission and support of local authorities. Expeditions took place on a c 450 km long route from Aswan to Abu Simbel on the western side of the lake from 24 April to 7 May 2016, from 23 April to 5 May 2017 and from 2 to 6 January 2018. We searched specifically for wagtails showing breeding behaviour and their nests. Data collected included

314 African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*, adult, lake Nasser, Egypt, 26 April 2016 *(Mohamed I Habib)*

[*Dutch Birding 41: 238-244, 2019*]

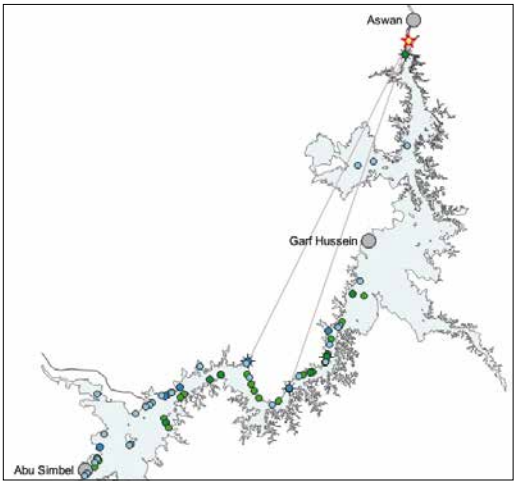

FIGURE 1 Records of African Pied Wagtail *Motacilla aguimp vidua* at lake Nasser, Egypt, during breeding season in April/May 2016 (blue) and April/May 2017 (green). Darker points indicate breeding records. Ringing locations marked with stars in same colours for a year. Recovery site of ringed bird shown by red star connected with grey lines to possible ringing locations.

details on nest location, nest size, nesting material, clutch size and number of young. Nestlings or already fledged juveniles were ringed with rings from Germany's Helgoland ringing scheme.

An Olympus LS-3 digital audio recorder was used to record songs and calls. The recordings were made in uncompressed wav format with 44.1 kHz sampling frequency and 16-bit resolution, and were analysed in the animal voice archive of the Museum für Naturkunde, Leibniz Institute for Evolution and Biodiversity Research, Humboldt University, Berlin, Germany, using Avisoft SASLab Pro (version 5.0.14). The recordings are available at www.tierstimmenarchiv.de (TSA: Motacilla_aguimp_Eil_1_1_0).

Results

Distribution

In 2016, African Pied Wagtail was found at 35 sites (Hering et al 2016). The species was commonest south of Garf Hussein (figure 1). The northernmost occurrences were at Khor Kalabsha. In 2017, a similar distribution pattern was noted with 28 sites; there were no birds found at Khor Kalabsha but there was a breeding site in the port of Aswan, the northern starting point of our investigations (Hering et al 2017). In January 2018, only single adult birds were observed at four sites between Seboua Temple and Abu Simbel without evidence of breeding.

Nesting sites

A total of 14 nests of African Pied Wagtail were found of which 10 were on extremely sun-exposed small islets, free of any vegetation. Two nests were built on the steel framework of maritime aids, with one each in an abandoned motorboat and in the wreck of a barge (plate 315-318). Out of the 14 nests, eight were occupied and six were old nests from this or the previous breeding season. In three cases, old and new nests were 2, 3 and 4 m apart (perhaps indications of a second brood). On the rocky islets, that project up to c 15 m above the water, small caves served as nest sites (plate 319). The caves were of different heights, up to a maximum of 7 m above the water. One nest was located on a flat island between block-like stones and covered by a stone slab, c 2 m from the water edge and c 0.5 m above it (plate 317). The two nests located on struts on the maritime aids were c 10 m above the water level (plate 318 and 320). For the one in the abandoned boat, a cavity in the floor was used as nest site.

African Pied Wagtails nested several times in the immediate vicinity of colonies of House Sparrow *Passer domesticus* (Hering & Grimm 2017).

Breeding biology

Nesting material consisted almost exclusively of spiked watermilfoil *Myriophyllum spicatum*, an aquatic plant, and also partially of dried algae, mud covered branches, feathers, sheep wool and fishing line. On the rocky islets, the plant stems mostly hung from the nest cave, making the nests easy to find (plate 319). The average outer diameter of the nests was 15.5 cm (range 13.5-19.5; n=6), and the average nest height 6.3 cm (range 4.5-8.5; n=6). The hollows of the nests were hard to measure. In one case, the internal dimensions of the hollow were 70x80 mm. In the two occupied nests which could be checked, we found one and two eggs, respectively (plate 321). Fledglings and older young were observed several times (plate 323-324).

Out of the 14 nests found, a total of five contained nestlings (plate 322). The number and estimated age of the nestlings is given in table 1. A total of six nestlings from four nests was ringed: three nestlings from one nest and one young bird each from three other nests. One other young bird was already fully fledged when ringing was carried out on 23 April 2017. We were unable to

315 Rocky islet with breeding site of African Pied Wagtail *Motacilla aguimp*, lake Nasser, Egypt, 26 April 2016 *(Jens Hering)* **316** Rocky islet with breeding site of African Pied Wagtail *Motacilla aguimp* and House Sparrow *Passer domesticus* colony, lake Nasser, Egypt, 2 May 2016 *(Jens Hering)* **317** Flat rocky islet with breeding site of African Pied Wagtail *Motacilla aguimp* at edge of colony of Gull-billed Tern *Gelochelidon nilotica*, lake Nasser, Egypt, 29 April 2017 *(Jens Hering)* **318** Maritime aid with nest of African Pied Wagtail *Motacilla aguimp* from previous season and occupied breeding site of Yellow-billed Kite *Milvus aegyptius*, lake Nasser, Egypt, 6 January 2018 *(Jens Hering)* **319** Rock caves with one occupied and one empty nest of African Pied Wagtail *Motacilla aguimp*, lake Nasser, Egypt, 1 May 2016 *(Jens Hering)* **320** Nest of African Pied Wagtail *Motacilla aguimp* from previous breeding season on steel girder belonging to maritime aid, lake Nasser, Egypt, 6 January 2018 *(Jens Hering)*

321 Nest of African Pied Wagtail *Motacilla aguimp vidua* containing two eggs, lake Nasser, Egypt, 1 May 2016 *(Jens Hering)* **322** African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*, nestling of c 10 days old, lake Nasser, Egypt, 2 May 2016 *(Jens Hering)* **323** African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*, juvenile, lake Nasser, Egypt, 6 May 2016 *(Mohamed I Habib)* **324** African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*, juvenile, lake Nasser, Egypt, 1 May 2016 *(Mohamed I Habib)*

catch any adult African Pied Wagtail with either mist-nets or traps.

Analysis of the pellets (n=49) of the nestlings showed that most of the food consisted of larvae of caddisflies (Trichoptera) and water beetles (Coleoptera). These prey items were preferably searched for on large carpets of aquatic plants, mainly spiked watermilfoil and hornwort *Ceratophyllum demersum*. These observations fit the data presented in Keith et al (1992) and del Hoyo et al (2004).

TABLE 1 Nests found of African Pied Wagtail *Motacilla aguimp vidua* at lake Nasser, Egypt, in 2016-17, with location co-ordinates and number and estimated age of nestlings

Date	Co-ordinates	n (pulli)	Age (days)
1 May 2016	22°41′02″N, 32°24′43″E	3	6
2 May 2016	22°47′20″N, 32°15′15″E	1	10
23 April 2017	23°58′21″N, 32°51′45″E	2	14
30 April 2017	22°48′55″N, 32°33′40″E	1	16
30 April 2017	22°48′18″N, 32°33′26″E	4	2

Ringing recovery

On 14 March 2018, Massimilano Dettori photographed a ringed adult male African Pied Wagtail in breeding plumage on a boat in the harbour of Aswan c 200 m south of the old dam (24°2′4″N, 32°53′0″E) (plate 325). Parts of the ring number could be read from the photograph. This made it possible to assign it to one of four nestlings of two nests c 20 km apart ringed on 1 or 2 May 2016.

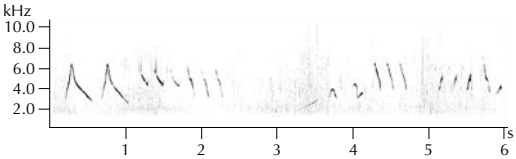

FIGURE 2 African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*, lake Nasser, Egypt, 6 May 2016 *(TSA: Motacilla_aguimp_Eil_1_1_0; recording Hans-Jürgen Eilts, sonagram Karl-Heinz Frommolt)*. Song.

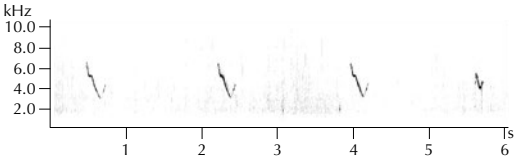

FIGURE 3 African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp*, lake Nasser, Egypt, 6 May 2016 *(TSA: Motacilla_aguimp_Eil_1_1_0; recording Hans-Jürgen Eilts, sonagram Karl-Heinz Frommolt)*. Calls.

So, the ringed individual was seen 682 or 683 days later at a distance of c 155 km north-east of its nesting site, possibly at another breeding site.

Vocalizations
Songs and alarm calls by adult birds were heard frequently (figure 2-3) and it proved to be easy to make sound-recordings. So far, only one sonagram of an African Pied Wagtail singing in the WP had been published (www.xeno-canto.org/341759, Alström et al 2003).

Discussion

Distribution and population numbers
Our observations showed the presence of a relatively large breeding population of African Pied Wagtail at lake Nasser, located at various sites, especially south of Garf Hussein. Goodman & Meininger (1989) stated that the species was a rare breeding bird in this area. So, the species may have become more common in the past three decades (eg, Baha el Din 1994), or it had been overlooked before due to a lack of breeding season surveys at that time.

König (1924) first encountered African Pied Wagtail at the cataract of Aswan on his journey up the Nile in April 1897. South of Aswan, it was not until the next cataract near Wadi Halfa that he saw the species again. It was not present at the Nile at that time in the area of today's lake Nasser between Aswan and Abu Simbel.

Whether African Pied Wagtail breeds more frequently along the dam and lake shores of southern Egypt today than along the shores of the Nile river in the past is hard to say because historical data are sparse and inconclusive (eg, Adams 1864, Shelley 1872, Gurney 1876, Russel 1905). It can be assumed, however, that the 'new' islets, which are mostly free of predators and sometimes very small, are excellent breeding locations (see also Baha el Din 1994). Here, the only competition for nest sites comes from House Sparrow. Our sightings of African Pied in 2016 and 2017 do not support Tyler's (2018) assumption that the species 'appears to have declined as a breeding bird during the 20th century in the Nile Valley in Egypt'.

Breeding biology
According to Keith et al (1992) and del Hoyo et al (2004), the incubation period of African Pied Wagtail is 13-14 days. The young leave the nest after another 15-16 days. This implies that our broods hatched between 9 and 28 April. As a consequence, the beginning of egg laying in these broods took place between 24 March and 10 April. The main period of egg laying at lake Nasser may thus be defined as ranging from March to May. This fits the reports by Shelley (1872), who observed breeding birds near Aswan in April, and Baha el Din (1994), who found a brood near Abu Simbel in early May 1994. Unfortunately, there are no comparative data on the breeding in the

325 African Pied Wagtail / Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*, adult, with 'Helgoland' ring, Port of Aswan, lake Nasser, Egypt, 14 March 2018 *(Massimilano Dettori)*

Nile valley further south in Sudan and South Sudan (Nikolaus 1987, Keith et al 1992, del Hoyo et al 2004). For Ethiopia, four findings of clutches were in March and April (Ash & Atkins 2009).

The data on nesting and eggs correspond with relevant literature (Keith et al 1992, del Hoyo et al 2004). For instance, measurements of two eggs were within the range known for African Pied Wagtail as were colour and shape (Keith et al 1992). Also, nests have been found on small boats before (Donnelly 1977), and Shelley (1872) often found African Pied close to anchoring boats near Aswan, while spike watermilfoil has been mentioned as nesting material before as well.

Dispersal

The recovery of a ringed African Pied Wagtail c 155 km north-east of its hatching site during the breeding season gives an indication of possible dispersal distance and constitutes the first distant ringing recovery for the species in the WP. It shows the species' potential to colonise new areas relatively quickly.

Acknowledgements

We are very grateful to Heidi Hering, Mathias Mähler, Mary Megalli, Gerhard Nikolaus, Carlotta Schulz and Andreas Sigmund, who participated in the various expeditions at lake Nasser. We thank Ramadan Fox, Mourad, Tabschun and Bessam, and the company 'Lake Nasser Adventure', especially Steven Mayor, and Hartmut Meyer from Bartmeise-Reisen for their support in the field work. We would like to thank Herbert Grimm for analyzing the pellets of the nestlings. We received financial help from NABU Germany (Lars Lachmann). Carl Zeiss Sport Optics Division was kind enough to provide optical equipment for one expedition. For other assistance, we also would like to thank Peter Barthel, Massimilano Dettori, Karl-Heinz Frommolt, Dick Hoek, Natalie Kelsey, Dieter Saemann, Petra Schnabel, Karl Schulze-Hagen, Niels Sigmund and the Institute for Avian Research 'Vogelwarte Helgoland'.

Samenvatting

Broedpopulatie van Afrikaanse Bonte Kwikstaart in Nassermeer, Egypte In het voorjaar van 2016 en 2017 en in januari 2018 voerden de auteurs in het Nassermeer, Egypte, veldonderzoek uit aan de relatief onbekende noordelijke ondersoort van Afrikaanse Bonte Kwikstaart *Motacilla aguimp vidua*. In beide voorjaren werden de kwikstaarten aangetroffen op respectievelijk 35 en 28 plaatsen, voornamelijk op zeer kleine eilandjes tussen Abu Simbel and Aswan. Er werden gegevens verzameld over het broedgedrag en broedgewoonten. Er werden ook nestjongen geringd en dat leverde de eerste langeafstandsterugmelding op van Afrikaanse Bonte Kwikstaart in de WP: een exemplaar werd 682 of 683 dagen na het ringen teruggevonden op 155 km ten noordoosten van de nestplek, mogelijk als broedvogel. Dit is een aanwijzing dat de soort nieuwe gebieden relatief snel kan koloniseren. Verdere gedetailleerde en grootschalige studies kunnen wellicht meer informatie opleveren over de broedbiologie en verspreidingsvermogen.

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Blue Grosbeak on Corvo, Azores, in October 2018

Peter Stronach, Marcin Sołowiej, Robert Swann & Ernie Davies

The autumn of 2018 on Corvo, Azores, was exceptional for Nearctic vagrants, even by Corvo's high standards, and 16 October was incredible. On that day, the northern slope of Da Ponte, 2.5 km north-east from the village (cf Alfrey et al 2018), turned into a Western Palearctic birder's paradise! A Wood Thrush *Hylocichla mustelina*, an American Redstart *Setophaga ruticilla*, a Bay-breasted Warbler *S castanea*, a flock of three Black-throated Green Warblers *S virens* and three species of vireo *Vireo* including Yellow-throated Vireo *V flavifrons* were all in the same wood! (cf Dutch Birding 40: 407-423, 2018). It was one of those days on Corvo when a portal opens to another dimension and you can skim through 'Sibley' and think that anything really was possible. As the day progressed it felt like it was building up to something, a first for the WP was surely imminent. So there was a touch of disappointment at the end of the day that one had not come, but not much!

On 17 October, Peter Stronach and Robert Swann walked up Tennessee Valley (cf Alfrey et al 2018) from the village to the reservoir, finding a Yellow-billed Cuckoo *Coccyzus americanus* feeding surreally out in the open grass amongst the Atlantic Canary *Serinus canaria* flocks. Carrying on they relocated a Northern Parula *S americana* in Upper Lapa, where an Indigo Bunting *Passerina cyanea* also flew past, calling as it went. As they arrived at Upper Poço do Agua, they met Marcin Sołowiej who had been in the Caldeira, and then birded together as they made their way down the ribeira. Separating for a while, PS and RS found an Ovenbird *Seiurus aurocapilla* skulking in the undergrowth whilst MS found two Red-eyed Vireos *V olivaceus*. Regrouping further down, they saw Ernie Davies sitting on grass on the other side of the ribeira. As it was mid-afternoon they joined him. After 5-10 min, a bird began calling from the ribeira 20 m below. On Corvo, many strange or unfamiliar bird calls can be heard during the course of the day, especially from the resident Azores Chaffinches *Fringilla coelebs moreletti*. This call, however, just did not fit. MS and PS were the first to show interest and soon the call attracted everybody's attention. It was a constant regular metallic *chink* call. Getting closer and closer, the call kept going until everybody was within several metres of the calling bird which was in a Hortensia *Hydrangea* hedge on the other side of the gully. Even being so close they still could not see it. PS played a tape for Northern Waterthrush *Parkesia noveboracensis*, which was his closest guess for the call and fitted the streambed habitat, but it was not that. The bird stopped calling briefly and then restarted. With all four birders standing in the gully of the ribeira, there was a hilarious bit of confusion when another birder walked past downhill on the other side; had he been playing a

326 Blue Grosbeak / Blauwe Bisschop *Passerina caerulea*, first-winter, Corvo, Azores, 17 October 2018 *(Peter Stronach)*. Initial view as it briefly perched in *Hydrangea* hedge.

327 Blue Grosbeak / Blauwe Bisschop *Passerina caerulea*, first-winter, Corvo, Azores, 17 October 2018 *(Marcin Sołowiej)*. Feeding on plant seeds, showing large bill.

328 Blue Grosbeak / Blauwe Bisschop *Passerina caerulea*, first-winter, Corvo, Azores, 17 October 2018 *(Vincent Legrand)*. Perched on Canary Grass *Phalaris canariensis* of which it was fond of eating. Largely juvenile plumage but note two adult type inner greater coverts and two adult type pale-tipped uppertail-coverts. **329** Blue Grosbeak / Blauwe Bisschop *Passerina caerulea*, first-winter, Corvo, Azores, 17 October 2018 *(Vincent Legrand)*. Showing strong coloration around face.

tape? Luckily the bird started calling again after he had passed, at which point MS and PS decided to crawl under the barbed wire and out of the gully into the field to view the *Hydrangea* hedge where the call was coming from. Edging around the bush, a medium sized passerine flew out and along, briefly perching in the hedge, and both MS and PS quickly took some photographs. At this point, Mika Bruun and Markku Santamaa arrived on the other side of the valley. The bird then flew into the corner of the field again, perched in a hedge, and more photographs were taken before it went out of sight into the hedge.

The bird had the size of a tanager *Piranga* and was fairly uniform brown-orange all over with a tanager-like darker wing and a large black eye. At this point, we were scratching our heads, none of us had any experience with Blue Grosbeak *P caerulea* and it was not on our radar at all. The closest we could get was that it was possibly a tanager and definitely not Scarlet Tanager *P olivacea*, although the bill and the basic colour of the plumage did not fit Summer Tanager *P rubra*. PS put out a message to that effect on the whatsapp group and the best photograph he had taken, to make everybody aware. Whilst PS flicked through Sibley (2014), looking at other possible tanager species, the first reply came, with Josh Jones in an office in London texting back 'Blue Grosbeak'. PS instantly got it up on his Sibley app and played the call, a 100% match. PS then rapidly announced the news over the radio, which certainly got the adrenaline flowing! The Blue Grosbeak eventually performed well after a stressful 20 min and fed in the grass field it had originally been found in. All the birders on the island connected with the bird which stayed until 24 October, then being found 1.5 km away near Lighthouse Valley, identified as the same individual by its missing feathering on the left wing.

Description

GENERAL IMPRESSION Initial impression tanager sized, with pink Hawfinch *Coccothraustes coccothraustes* sized bill. No strong plumage tones with ceramic brick colour all over, similar to that on male Azores Chaffinch's face, strongest around face and upper breast. Very dark eye and massive bill also standing out.

PLUMAGE Head strongest coloured section of plumage, with deep brick-red coloration, and short crest raised on several occasions (plate 329). Lore darkish. Prominent black rictal bristles but only viewable from photographs. Nape greyish, with scapulars similar with dark-centred feathering. Breast and belly again ceramic brick-coloured, palest at upperbreast and grading down to belly. Black streaking to feather centres of vent. Tail very dark grey with pale edging, with slight slate bluish hue to basal areas of rectrices and continuing onto rump area. Single adult type feather in tail (t2) on left side, presumably replacement for lost feather as no moult visible on other side of tail. Remainder of feathers juvenile, with t3-5 especially pointed. Several adult type uppertail-coverts, darker than surrounding juvenile feathers, with defined sharply edged white tip, two on right side and one on left side. Undertail-coverts almost white with hint of ceramic brick coloration but with obvious dark central shaft-streak.

WING Much darker than head and breast, with flight-feathers and greater coverts black with pale fringing, strongest on greater coverts and producing faint wing-bar. On both wings, two adult type inner greater coverts visible, outer seven coverts juvenile. Left wing maybe with more adult type greater coverts but these not visible due to wing damage. Strongest feature of wing was strong, thick, brick-coloured wing-bar on median coverts, base of these feathers sharply demarcated black. Inner median coverts not viewed, so unknown whether there being moult contrast, too. Lesser coverts all dark. Left wing with feathers missing, including all three tertials and maybe two or more greater coverts not visible.

BARE PARTS Flesh-coloured bill enormous, with sharp and pointed tip, convex on top of upper mandible and straight on lower mandible, with large gape. Slight hint of dark colour at base of upper mandible. Eye large and completely black. Leg and toes very dark metallic grey, undamaged (plate 327-329).

BEHAVIOUR Feeding for prolonged periods on grass seeds, primarily Canary Grass *Phalaris canariensis*, either on ground or perched on plants. Following these feeding bouts, perching up in hedge for long period presumably digesting seeds which it had just eaten. Whilst perched, constantly flicking and pumping tail. No interactions with other species seen.

VOICE Call leading to discovery was single metallic *chink* (recorded by MS, figure 1; https://www.xeno-canto.org/440607). No other calls or sounds heard.

Identification, ageing and sexing

Juvenile and first-winter Blue Grosbeak can be separated from Indigo Bunting and all other North American *Passerina* species by their larger size. A Blue Grosbeak is the same weight as a Scarlet Tanager (c 28 g), an Indigo Bunting is c 14.5 g (Sibley 2014). The adult male plumage is unmistakable, with an almost entirely blue body, apart from two large rufous wing-bars on the greater and median coverts. The rufous wing-bars rule out Blue-black Grosbeak *Cyanoloxia cyanoides*, which may occur as an escape from captivity only. Juveniles are uniformly brown all over without any blue feathering. The moult contrast in the greater coverts also identify the bird as a first-winter. Sexing in this age group is not reliable in the field; however, some birds with blueish edging

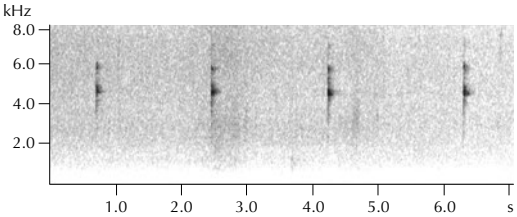

FIGURE 1 Blue Grosbeak / Blauwe Bisschop *Passerina caerulea*, Corvo, Azores, 17 October 2018 *(Marcin Sołowiej)*. Call.

to the base of the rectrices can be identified as males. First-year birds maintain their juvenile body plumage into March in their second-calendar year (Pyle 1997).

Distribution and vagrancy

Blue Grosbeak is distributed across much of the southern half of North America but it is generally scarce throughout its range. There are seven subspecies, three in the USA and four others in Mexico and Central America. The most likely subspecies involved in vagrancy to the Western Palearctic is nominate *P c caerulea*, which breeds in the eastern USA as far north as New Jersey and migrates in winter to eastern and southern Mexico, south to Panama and the West Indies (Brewer 2019). Plumage differences between the subspecies are slight and clinal, involving mainly small differences in size and bill measurements (Pyle 1997). The north-western subspecies *P c salicaria* and *P c interfusa* are totally migratory while the other subspecies appear to be more sedentary (Brewer 2019). Most Blue Grosbeaks breeding in the western USA migrate south over land but those in the eastern USA are trans-gulf migrants, crossing the Gulf of Mexico (Brewer 2019).

Blue Grosbeak is a vagrant well north of its breeding range. The eBird map for the species shows vagrant sightings all the way up the east coast of North America to Newfoundland and Nova Scotia, Canada (https://ebird.org/species/blugrb1). In British Columbia, Canada, the species is accidental with only a few provincial records. It has reached Alaska, USA, with at least two records, both adult males in July and August (Toochin & Cecile 2016). These vagrants have two peaks, one of spring overshoots and another in autumn. Lowther & Ingold (2011) noted a pronounced spring overshoot in areas north of the established breeding areas primarily during April and May, and there were also years with major irruptions in 1956 and 1973.

From August to November 2018, extraordinary vagrancy and movements of Blue Grosbeaks were noted in North America. There were eBird sightings up the east coast to Nova Scotia, none in Newfoundland, but then exceptional numbers in Bermuda with flocks of eight and 10 and two singles. The first dates for the Bermudan birds were 11, 14, 16 and 21 October (https://ebird.org/species/blugrb1). Blue Grosbeaks have been noted as late as December in Newfoundland but usually occur annually during October (Mactavish 2017). Most records in autumn involve immature birds but there are occasional spring records of adults and apparent second calendar-year birds (Jared Clarke pers comm). It should be noted that Blue Grosbeaks have expanded northward in the USA in the past century, possibly taking advantage of forest clearing, and have only started breeding in New Jersey since the late 1970s (Lowther & Ingold 2011).

Escapes and captive-bred birds

Any potential vagrants found in the WP need a careful assessment of their potential to be escaped cage birds. There are widespread misconceptions amongst the birding community as to plumage traits associated with cage birds. Depending on species, bill and tail damage usually result from a wild bird being turned into a cage bird, ie, a short time after capture (Richard Broughton pers comm). Usual signs of this are wear where the bill meets the forehead, caused by rubbing it against the cage meshes and the tail tips getting heavily worn in bids to escape. However, the reality is that captive bred or kept birds often are in immaculate condition, with undamaged plumage and feet. During a search of bird trade websites and speaking to bird traders across Europe for this paper, it was found that Blue Grosbeaks are commonly found in captivity, particularly in Belgium and the Netherlands. Subspecies for sale are not specified. In the Netherlands, an adult was found at Zwolle, Overijssel, on 25-31 October 2016. Because of its very poor plumage state, it was considered an obvious escape and (therefore) never submitted (cf www.waarneming.nl/species/79077). They are slightly less common and therefore more expensive than the South American grosbeaks, particularly Blue-black Grosbeak, which are also confusingly advertised as Blue Grosbeaks (Ron Azure pers comm). The lack of damage to the bill and tail in this case speaks against a wild bird formerly kept in captivity and subsequently escaped. The immaculate nature of the rest of the plumage is consistent with either a wild bird or a captive bred bird.

Status in the WP

The 2018 bird was accepted by the Portuguese rarities committee (SPEA) as the first in category A for the Azores and the WP (Pedro Ramalho in litt). A previous report of one on Corvo on 14 October 2011 mentioned by Mitchell (2017) was not accepted by the PRC due to lack of photographs (Matias et al 2018). There have also been previous reports in England, Norway, Scotland and Sweden which were considered uncertain (category D) or escapes from captivity (category E).

August 1970, Scotland

An adult male was found on Out Skerries, Shetland, on 23-26 August 1970. Deemed a very early date for a natural autumn arrival and in the absence of a favourable weather pattern, it was considered an escape and placed in category D in 1972, then placed in category E in 2007 (British Ornithologists' Union 2009, Hudson & Rarities Committee 2009).

March 1972, Scotland

A second-calendar year male was seen on feeders in a garden (no photographs were taken) at Kiltarlity, Inverness, Highland, on 11-12 March 1972. Previously it was included within category D but after review by BOURC moved to category E, just because the date was thought to be anomalous for a natural vagrant; it was identified as an adult male, but the head described as brown (British Ornithologists' Union 2009, Hudson & Rarities Committee 2009). Subsequent communication discovered that the bird was in fact considered to be a second calendar-year male (contra Hudson & Rarities Committee 2009; Malcolm Harvey pers comm).

May 1977, Scotland

A male was found dead at Ettrick, Borders, on 22 May 1977. Feathers were reported as not abraded (Scottish Birds 1978). The bird was recorded in an exceptional late May period, which brought White-crowned Sparrows *Zonotrichia leucophrys*, a Dark-eyed Junco *Junco hyemalis* and a Myrtle Warbler *S coronata* to Scotland as well. This individual may have been a good candidate for a potential wild-origin bird. However, it was assumed to be an escape, no photographs or description were obtained and the corpse was discarded. It was placed in category E (British Ornithologists' Union 2009, Hudson & Rarities Committee 2009).

July 1980, Sweden

A male found on Kostenen, Studsvik, Södermanland, on 5 July 1980 was placed in category D (Raritetskommittén 2018). The comment of the Swedish rarities committee (SRC) was as follows: 'Even if it cannot be ruled out that this North American bird managed to reach our country by natural means, it seems more likely that it concerns an escaped cage bird' (Vår Fågelvärld 40: 499, 1981; Magnus Corell in litt).

May 1983, Sweden

A second-calendar year male trapped at Abisko, Torne, on 8 May 1983 was placed in category D (Raritetskommittén 2018). In a report, the SRC commented that 'This beautiful North American finch has probably not reached Europe spontaneously' (Vår Fågelvärld 47: 460, 1988; Magnus Corell in litt).

May 1986, England

One individual (sex and age unknown) caught by a cat at Newent, Gloucestershire, on 9 May 1986, was previously included within category D but after review moved to category E (British Ornithologists' Union 2009, Hudson & Rarities Committee 2009).

July 2011, Norway

A second-calendar year female trapped and ringed at Store Færder, Tjøme, Vestfold, on 10 July 2011 was placed in category D, partly supported by stable isotope analysis (Heggøy & Olsen 2013; cf Dutch Birding 33: 344, plate 444, 2011). Levels of lead (Pb) isotope indicate pollution sources and can be used to indicate geographic areas as Pb pollution varies across the globe. Levels of Pb found in the feathers were considerably lower than those found across the USA. Pb isotope levels were similar to those measured in northern Europe, and correlated well with those from Norway. Thus an American origin was considered to be unlikely (Heggøy & Olsen 2013).

Conclusion

Future reports of this species in the WP need an accurate assessment of the possible captive origins made. Taking into account the vagrancy figures in North America, an adult in the WP in July/August should not be instantly dismissed as an escape. The peak overshooting period for adults and subadults is April to May. Based on the vagrancy pattern in autumn in Bermuda and Corvo, juveniles should show a peak in mid-October.

Acknowledgements
Thanks to the people of Corvo who graciously accept getting overwhelmed with birders for several weeks during autumn with very few complaints. Thanks also to the following people who have assisted with information provided in this paper: Ron Azure, Richard Broughton, Jared Clarke, Jane Cleaver, Magnus Corell, Ian Ellis, Malcolm Harvey, Vincent Legrand and Pedro Ramalho.

Samenvatting
Blauwe Bisschop op Corvo, Azoren, in oktober 2018 Op 17-24 oktober 2018 verbleef een eerste-winter Blauwe Bisschop *Passerina caerulea* op Corvo, Azoren. Het betreft het eerste geval voor de Azoren en de WP. Zeven eerdere gevallen in Engeland (mei 1986), Noorwegen (juli 2011), Schotland (augustus 1970, maart 1972 en mei 1977) en Zweden (juli 1980 en mei 1983) werden door de betreffende zeldzaamhedencommissies (uiteindelijk) beschouwd als van onzekere herkomst (categorie D) of uit gevangenschap afkomstig (categorie E); de eventuele redenen voor die beslissingen worden vermeld.

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First breeding record in Britain of Egyptian Goose from mainland Europe

Egyptian Goose *Alopochen aegyptiaca* is a breeding bird in large parts of Africa south of the Sahara and in the southern part of Egypt (Cramp & Simmons 1977, Scott & Rose 1996). Naturalized Egyptian Geese are also breeding in several countries in north-western Europe (overview in Gyimesi & Lensink 2012). To date, there are no records of birds ringed abroad and recovered in Britain and Ireland and vice versa (Bairlein et al 2014, Robinson et al 2018, Vogeltrekstation Arnhem). Here, we document the first records of an Egyptian Goose in Britain which was ringed on the mainland of Europe.

Field observations
On 8 April 2018, Frank Majoor received an e-mail from Nicholas Forrest who had observed on the morning of that day four Egyptian Geese at RSPB nature reserve Saltholme (54°36'17''N, 01°14'58''W), east of Billingham, Durham, north-eastern England. One of the birds was colour-ringed (yellow X/blue V, YXBV, plate 330). The bird stayed for only a short period of time in these surroundings. Soon afterwards, FM received an e-mail from Andy Meaton that he had photographed YXBV on 29 April 2018 at Swanley Park in Swanley (51°24'16''N, 00°10'40''E), Kent, England, c 24 km south-east of central London. YXBV turned out to be a male. He became a local resident of Swanley Park, with many follow-up observations by AM and other regular visitors of this park. YXBV soon got paired with an unringed

330 Egyptian Geese / Nijlganzen *Alopochen aegyptiaca*, Saltholme nature reserve, Billingham, Durham, England, 8 April 2018 *(Nicholas Forrest)*. In front YXBV, second-calendar year male, hatched mid-May 2017 at Vondelpark, Amsterdam, Noord-Holland, Netherlands, colour-ringed as pullus on 21 July 2017.

female (plate 331). Breeding was confirmed on 1 April 2019 when AM took photographs of YXBV guarding a female breeding on a nest in a bowl in a fork of a large willow *Salix* (plate 332). The tree was located on a tiny island, and an undated photograph taken by the keeper of the park's café shows that the nest contained seven eggs. AM reported that breeding continued for another two weeks, but that the nest was abandoned on 20 April. Young were not observed and there was no clear cause of the failure of this breeding attempt (the pair was still present on 14 May).

YXBV hatched in mid-May 2017 at Vondelpark, Amsterdam, Noord-Holland, the Netherlands (52°21′25″N, 04°51′57″E). It was ringed at this site by FM on 21 July 2017 as one of eight young of a local breeding pair (YXBV got the metal ring Arnhem 8.060.967). There were several follow-up sightings at Vondelpark, for the last time on 1 September 2017. The bird was seen afterwards along the nearby river Amstel on 7 September 2017 (4 km to the east-south-east). The distance between Vondelpark and Saltholme is 475 km (direction west-north-west). The distance between Saltholme and Swanley Park is 368 km (direction south-south-east), the distance between Vondelpark and Swanley Park is 340 km (direction west-south-west).

Discussion

The sightings at Saltholme and Swanley are, to the best of our knowledge, the first confirmed records in Britain of an Egyptian Goose from the mainland of Europe and vice versa (Bairlein et al 2014, with updates in Vogelwarte, Robinson et al 2018, Vogeltrekstation Arnhem, Royal Belgian Institute of Natural Sciences). The sighting at Saltholme also exceeds the maximum distance for ring recoveries of Egyptian Geese ringed in both countries. The former maximum distance for a Dutch bird was 376 km (Arnhem 8.025.905, ringed as nestling by FM at Arnhem, Gelderland, on 19 June 2006 and

331 Egyptian Geese / Nijlganzen *Alopochen aegyptiaca*, with Canada Geese / Grote Canadese Ganzen *Branta canadensis*, Swanley Park, Swanley, Kent, England, 29 November 2018 *(Andy Meaton)*. Left YXBV, male, paired with unringed female, hatched mid-May 2017 at Vondelpark, Amsterdam, Noord-Holland, Netherlands, colour-ringed as pullus on 21 July 2017. **332** Egyptian Goose / Nijlgans *Alopochen aegyptiaca*, female breeding on nest, Swanley Park, Swanley, Kent, England, 1 April 2019 *(Andy Meaton)*. Partnered with male YXBV (cf plate 331).

reported as shot nearby Kiel, Schleswig-Holstein, Germany, on 26 October 2009, direction north-east). The maximum distance for a British bird is 106 km (London 1420649, ringed as first-calendar year by P J Belman at Laleham, Surrey, on 9 July 2009 and resighted at Pennington Marshes, Hampshire, on 6 February 2010, direction south-west; Robinson et al 2018). The maximum distance for a German bird is 523 km (Helgoland E06324 with yellow neck band 3X, ringed as nestling at Bochum, Nordrhein-Westfalen, on 14 July 2012, and observed at Nationalpark Unteres Odertal, Brandenburg, on 22 April 2013, and in 2014-15 breeding bird at Feldberger Seenlandschaft, Mecklenburg-Vorpommern, 463 km from Bochum; Geiter 2015). Other long-distance ring recoveries of German individuals include a bird ringed at Leipzig, Sachsen, and recovered in the Netherlands (468 km, Bairlein et al 2014, details lacking) and a bird ringed on 2 June 2011 nearby Bad Nauheim, Hessen, which was observed on 12 August 2012 at Gießen, Hessen, c 25 km to the north, and which was afterwards observed at Lindach, Oberösterreich, Austria, on 16 March 2013 (409 km between Gießen and Lindach, the first ring recovery in Austria of a German-ringed Egyptian Goose; Fiedler et al 2013).

YXBV was ringed within the framework of five RAS (Retrapping Adults for Survival) projects by FM of urban Egyptian Geese in the Netherlands. The study sites, with the total number of ringed birds between brackets (rounded numbers, totals including 2018, the majority with colour rings), are Den Haag, Zuid-Holland (1090), Arnhem (710), Amsterdam (550), Groningen, Groningen (300), and urban habitats in Limburg (120). The grand total (2770) is considerably higher than the grand total for Britain and Ireland (none ringed in 1909-86, 888 ringed in 1987-2017; Robinson et al 2018). We earlier reported about two cases of natal dispersal from the Netherlands to Germany and vice versa (van Dijk & Majoor 2011). They refer to a breeding record in Groningen in 2010 of a male born in Jever, Niedersachsen, in 2009 (failed, distance 96 km, direction west-south-west) and a breeding record at Essen, Nordrhein-Westfalen, in 2010 (five fledglings) and 2011 (nine fledglings) of a male born in Arnhem in 2009 (distance 92 km, direction south-east). These breeding records indicate genetic exchange between populations breeding in Germany and in the Netherlands; the breeding attempt of YXBV indicates that genetic exchange can also occur between naturalized populations in Britain and those on the mainland of Europe (the orgin of the unringed female is unknown). All four cases of natal dispersal (Swanley, Den Haag (see below), Groningen, Essen) refer to males. Females show a high level of philopatry (own data, mainly from Groningen), although a female born in Groningen in 2014 bred in Leeuwarden, Friesland, in 2017 (five fledglings, distance 51 km, direction west, van Dijk 2017).

Long-distance movements in Egyptian Geese are not unusual, as birds ringed on a moulting site in the southern part of South Africa have been recovered on distances of up to 1100 km (Cramp & Simmons 1977, map in Siegfried 1967, see for more recent information Ndlovu et al 2013). Maps with recoveries in Bairlein et al (2014) and in Majoor & Voslamber (2013, with updates) reveal a pattern of random dispersal for the naturalized populations. A record in Britain of a bird from the mainland of Europe is thus not totally unexpected. Recent overviews of ring recoveries in the provinces of Friesland (van Dijk 2017) and Drenthe (van Dijk 2018) indicate that the majority refers to observations of birds ringed as pullus and recorded in their first or second winter, and that some birds only stayed for a very short period of time at a specific site. The records at Saltholme and at Swanley fit with these observations. The follow-up observations of YXBV at Swanley are in line with observations of other cases of natal dispersal of colour-ringed birds of our study population, for example of a male which was born in Groningen in the beginning of June 2014 and which was seen for the first time at Zuiderpark, Den Haag, on 12 April 2015. Since that time, this male is a local resident of this city park in Den Haag. He got paired after some time with an unringed female and got five fledglings in 2018 (Leo Snellink, distance 201 km, direction south-west).

Sutherland & Allport (1991) argue that Egyptian Geese recorded in the 19th century on the eastern coast of England were presumably originating from the Netherlands and refer to Cramp & Simmons (1977) to support this view. Cramp & Simmons (1977) do not mention any details about such movements, nor do Bauer & Glutz von Blotzheim (1968). In hindsight, it seems more likely that these records were birds from other parts of Britain, in particular because naturalized Egyptian Geese were only present in Britain in the 19th century (Cramp & Simmons 1977, Sutherland & Allport 1991, Gyimesi & Lensink 2012).

Final remarks

A map in Siegfried (1967) lists several long-distance ring recoveries from the inland of Namibia

and shows that the species can cross large areas of desert and other habitat which are unsuitable for waterbirds. These long-distance ring recoveries, together with the ring recoveries presented in this article, indicate that it is not excluded that in the future there will be contact between naturalized Egyptian Geese from Europe and birds of the African population. By 2019, naturalized populations of Egyptian Geese have become widespread and increasing in both Portugal and Spain (overviews at ebird.org and at observado.org, see also Matias 2012 and Mayordomo et al 2015). However, there are no recent records of this species in Morocco (Bergier et al 2017), although Thévenot et al (2003) list an unconfirmed report of three individuals at Merzouga lake, Tafilalt, on 15 May 1995.

Acknowledgements
We thank all ring-readers for their prolonged efforts and we encourage all birders to document their sightings of colour-ringed Egyptian Geese and to report them at www.geese.org (or contact us in case of queries). FM was partly funded by Faunafonds and the province of Groningen, all other expenses were privately funded. Trapping and ringing was conducted by the licenced bird-ringers FM, Jeroen Nagtegaal, Rob Voesten and Henri Zomer, Vogeltrekstation Arnhem is thanked for issuing these licences. We thank the editors for their comments.

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Golden Nightjar breeding in Western Sahara, Morocco, in March 2019

In May 2015, a Golden Nightjar *Caprimulgus eximius* was killed on the road between Dahkla and Aousserd (Awserd), constituting the first record of this species in Western Sahara, Morocco (Dyczkowski 2016). This rather unexpected find emphasized that the vast deserts of Western Sahara may hold more bird species than known. Between 2016 and 2018, the species was observed by many birders west of Aousserd at Oued Jenna and surroundings but breeding there could not be proven (Drukker et al 2017, Lawrie et al 2017; Dutch Birding 40: 113, 182, 2018).

In 2019, I planned to visit Morocco for four weeks and drive with my rental car into Western Sahara. My timing was crucial as the peak activity of Golden Nightjar in previous years seemed to be the end of March. With my visit coming closer, there were some reports of people searching the species at Aousserd in vain. My own efforts to locate it were fruitless as well; Oued Jenna was dry and only held a few birds of other species. In the morning of 19 March 2019, however, I met a large group of German birdwatchers who had hired a guide to see all the local specialties. They immediately showed me photographs they made the previous night, when they had seen a Golden Nightjar with two small chicks! However, they told me that the location was c 40 km off the only road towards Aousserd, which meant it was impossible to go there with my rental car. It left me pondering how to get to the site. I did try it on my own, driving off the road and into the desert, making slow progress. However, after c 15 km it became too difficult and I couldn't continue. On the way back, I happened to come across some gold prospectors who immediately agreed to take me to the site in their 4x4.

333 Golden Nightjar / Goudgele Nachtzwaluw *Caprimulgus eximius*, female at roost in the afternoon, Oued Chiaf, c 55 km from Aousserd, Western Sahara, Morocco, 19 March 2019 *(Felix Timmermann)*

A long drive followed but in the afternoon I stood in front of the Golden Nightjar with two chicks. The female was resting in the shadow under a tiny bush of grass with the two chicks lying next to her in the sun (plate 333). I took a few photographs and left the birds. I returned three times from the picnic site we had set up and each time the birds had shifted their position. The chicks only once sat under the female's wings, the other times they moved independently (plate 334-335). The site was characterized by 3-5 m high trees and high grass amongst them on sandy ground (plate 336). In the evening the female started to become active. She stood up and moved out into the open, started bobbing her head and gave very soft calls. I took some final photographs and left them, as I had to get back to my car parked somewhere in the desert. The birds were visited by a number of birders and the two chicks were flying by the second week of April.

This was the first confirmed breeding of Golden Nightjar for Morocco and the Western Palearctic (WP) sensu Shirihai & Svensson (2018). In the WP sensu BWP, the first breeding took place near Ouadâne in northern Mauritania in April 2018 (Swann et al 2019). It seems likely that there are more sites for Golden Nightjar in the south of Western Sahara. However, the inaccessibility of the desert makes it difficult to search and find them.

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334-335 Golden Nightjars / Goudgele Nachtzwaluwen *Caprimulgus eximius*, female with two chicks, Oued Chiaf, c 55 km from Aousserd, Western Sahara, Morocco, 19 March 2019 *(Felix Timmermann)*

336 Breeding habitat of Golden Nightjar *Caprimulgus eximius*, Oued Chiaf, c 55 km from Aousserd, Western Sahara, Morocco, 19 March 2019 *(Felix Timmermann)*

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Black-billed Common Grasshopper Warblers in Finland

Common Grasshopper Warbler *Locustella naevia* is an uncommon and localised breeding species in the southern half of Finland up to 65ºN (Valkama et al 2011). The first spring arrivals are typically recorded during the first half of May at bird observatories on islands along the southern coast. Apparently, it has not yet been recorded in April. Territories are occupied from mid-May onwards and the song can be heard until the first nights of August. During September and exceptionally in early October, very few, mostly juveniles, are trapped at sites inland or at bird observatories on islands.

Cramp (1992), del Hoyo et al (2006), Kennerley & Pearson (2010) and Shirihai & Svensson (2018), for instance, describe the species' upper mandible as uniformly dark, and the lower mandible as having a lighter dorsal and darker distal part – the latter being similar in colour to the upper mandible. Among only a few, Glutz von Blotzheim & Bauer (1991) mention that the bill of males is sometimes lead-black. Alström (1989) published a photograph of a black-billed male trapped in Norrköping, Sweden, in June 1985. In a caption for a photograph of the eastern subspecies *L n straminea*, Kennerley & Pearson (2010) mention that the bill of breeding adults is frequently entirely black.

When trapping territorial males in south-western Finland in 2016-18, Jari Korhonen noticed several black-billed individuals. Also in earlier years, JK had trapped a small number of black-billed birds in the south. In the description of the very

337 Common Grasshopper Warbler / Sprinkhaanzanger *Locustella naevia naevia*, male, Turku, Finland, 14 June 2016 *(Jari Korhonen)* **338-339** Common Grasshopper Warbler / Sprinkhaanzanger *Locustella naevia naevia*, male, Kaarina, Finland, 2 July 2016 *(Jari Korhonen)* **340** Common Grasshopper Warbler / Sprinkhaanzanger *Locustella naevia naevia*, male, Salo, Finland, 30 July 2016 *(Jari Korhonen)* **341** Common Grasshopper Warbler / Sprinkhaanzanger *Locustella naevia naevia*, yellow morph male, Turku, Finland, 26 May 2016 *(Jari Korhonen)* **342** Common Grasshopper Warbler / Sprinkhaanzanger *Locustella naevia naevia*, Raisio, Finland, 4 June 2016 *(Jari Korhonen)*. Note slight emargination on p4.

TABLE 1 Biometrical data of males Common Grasshopper Warbler *Locustella naevia* trapped in south-western Finland in 2016-18. Primaries numbered ascendantly. Number of measured birds in brackets. P1-pc = position of p1 relative to longest primary covert: shorter (-) or longer (+); p1-p2 = distance between tips of p1 and p2. Tail graduation = distance between tip of shortest (t6) to longest (t1) tail feather.

	wing length (max chord) (mm)	**tail length (mm)**	**tail graduation**	**wing-tail ratio (mm)**	**p1-pc (mm)**	**p1-p2 (mm)**	**weight (g)**
black-billed	64-68 (18)	56-61 (18)	15-18 (15)	0.85-0.91 (18)	-3 to +2 (17)	34-38 (16)	11.9-15.0 (17)
others	64-70 (22)	55-60 (23)	16-19 (22)	0.83-0.91 (22)	-2 to +2 (24)	33-38 (22)	12.5-15.2 (23)

TABLE 2 Distance between tips of primaries to wing-tip (mm) of males Common Grasshopper Warbler *Locustella naevia* trapped in south-western Finland in 2016-18. Primaries numbered ascendantly. Number of measured birds in brackets.

	p2	**p3**	**p4**	**p5**	**p10**
black-billed	1.0-3.0 (17)	= wing-tip	1.0-2.0 (17)	2.0-5.0 (17)	13-15 (8)
others	0.5-3.5 (24)	= wing-tip	1.0-3.5 (24)	3.0-6.0 (24)	13-16 (7)

TABLE 3 Position of tip of second outermost primary (p2) relative to other primaries of males Common Grasshopper Warbler *Locustella naevia* trapped in south-western Finland in 2016-18. Primaries numbered ascendantly.

	p3/4	**p4**	**p4/5**	**p5/6**	**n**
black-billed	3	4	8	1	16
others	10	4	10	0	24

first, in June 1986, the bill is noted as 'completely black, except for narrow grey cutting edges'. This description fits a Finnish bird depicted in Shirihai & Svensson (2018). There were no biometrical differences between black-billed and other males. Measurements of trapped birds in south-western Finland in 2016-18 (table 1-3) are clearly within the range of the nominate subspecies *L n naevia* (cf Kennerley & Pearson 2010). Cytochrome oxidase I (COI) gene sequences of the mtDNA of accidentally dropped feathers performed at Ecology and Genetics Research Unit, University of Oulu, Finland, also confirmed that three black-billed birds belonged to the nominate (plate 337-340). Results were compared with samples of *L n naevia* collected in Europe in the GenBank sequence database. Interestingly, results matched less well with several samples of Common Grasshopper Warbler (subspecies unknown) collected in Krasnodarskiy Kray area, western Caucasus, Russia, and one from Erzinsky, Tuva, Russia, on the border with Mongolia. Those birds most probably belong to different subspecies.

Colour morphs

Within *L n naevia*, Kennerley & Pearson (2010) distinguish a 'brown morph' and a 'yellow morph'. Based on JK's experience of 300+ territorial males in southern Finland since 1981, the brown morph is most common here. In the brown morph, wing-coverts and the outer web of the flight feathers and tail feathers have uniform greyish-brown edges and the feather edges on crown, mantle and scapulars have a similar coloration. Underparts vary from completely off-white to a somewhat brownish hue to the side and centre of the breast, but the throat is white. The upperparts of yellow-morph males are not so rich brown but clearly paler brown. This also creates a larger contrast between black feather-centers and brown edges. The underparts from upper to lower breast and flank can be surprisingly rich yellow, but the throat is white. JK's experience is that the yellow morph is uncommon in southern Finland.

The three analysed black-billed birds differed in plumage coloration. The Turku bird (plate 337) was a brown morph, showing brown edges to the upperpart feathers. The underparts were off-white, not as grey as in the other two, and the buff breast sides were connected by a narrow buff breast band (not well visible in the photograph). The Kaarina bird (plate 338-339) had much greyer underparts than the Turku bird, and the edges of the upperpart feathers were also greyer. The Salo bird (plate 340) was extremely grey on both upper- and underparts. Could this bird represent a 'grey morph'? According to Kennerley & Pearson (2010), a small number of nominate *L n naevia* in the eastern part of its range are greyer than the typical brown morph, although they do not distinguish these as a separate grey morph. South-western Finland, however, is not situated at

the eastern edge of the breeding range. In addition to the brown morph, the yellow morph can be found in south-western Finland (plate 341). So far, JK has not seen all-black bills in yellow morph birds.

Emargination on p4

The presence of an emargination on p4 (which is more common in *L n straminea* than in *L n naevia*) was routinely checked in all processed birds. It was lacking in most birds but nine out of 41 showed a slight but measurable emargination (plate 342). Five of these nine had a black bill. Prevalence of this character in *L n naevia* may be more common than previously thought. Shirihai & Svensson (2018), for example, write 'sometimes a faint emargination on p4'.

Movements of Finnish Common Grasshopper Warblers

The few recoveries of Common Grasshopper Warblers ringed in Finland indicate a south-westerly migration direction. The only recoveries abroad are of two birds ringed as singing males in June. Both were found dead in September, the first in Belgium in the same year that it was ringed and the other in Morocco in the year after ringing (Valkama et al 2014). Two males with foreign rings have been trapped in Finland as singing birds. They had been ringed during autumn migration near Liège, Liège, Belgium, and near Toulouse, Haute-Garonne, France (Markus Piha pers comm). These ring recoveries fit those from Norway (Bakken et al 2006), Sweden (Fransson & Hall-Karlsson 2008) and Germany (Bairlein et al 2014), and indicate western wintering grounds of Common Grasshopper Warblers breeding in northern Europe, also confirming that they belong to nominate *L n naevia*.

Conclusion

In 2016-18, c 40% (cf table 1-2) of trapped male Common Grasshopper Warblers in south-western Finland were black-billed. Apparently, a black bill is a normal but overlooked morphological character of nominate *L n naevia*, at least in south-western Finland. Most identification guides do not mention this, which is perhaps not surprising as the species is not easy to study in the field.

Acknowledgements

Daniele Occhiato asked Finnish twitchers in summer 2016 whether there are black-billed Common Grasshopper Warblers in Finland. Answering him was the start of this article. Jyrki Normaja and Roni Väisänen (Finnish rarities committee) organised the mtDNA analysis to confirm the subspecific identity of three individuals. Markus Piha (Finnish ringing centre) kindly provided detailed information about Common Grasshopper Warblers ringed abroad.

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DBA-nieuws

Nieuwe leden redactie-adviesraad De redactie van Dutch Birding is verheugd te kunnen mededelen dat per juni 2019 José Luis Copete en Manuel Schweizer zijn toegetreden tot de redactie-adviesraad. Redactie

New members of editorial advisory board The editors of Dutch Birding are pleased to announce that as of June 2019 José Luis Copete and Manuel Schweizer have joined the editorial advisory board. Editors

Corrigenda

In het bijschrift bij plaat 257 (Dutch Birding 41: 207, 2019) werd niet de juiste fotograaf vermeld. De foto werd gemaakt door Phil W Koken. Redactie

In the caption of plate 257 (Dutch Birding 41: 207, 2019) the wrong photographer was mentioned. The photograph was taken by Phil W Koken. Editors

WP reports

This review lists rare and interesting Western Palearctic birds reported mainly from **June to late July 2019**. The reports are largely unchecked and their publication here does not imply future acceptance by a rarities committee. Observers are requested to submit their records to each country's rarities committee. Corrections are welcome and will be published.

OSTRICHES In Morocco, three intact eggs of **Common Ostrich** *Struthio camelus* were found at Taguerzimt near Bir Anzarane, Oued-ad-Deheb, Western Sahara, in mid-May; before the species became locally extinct, the last breeding occurred here in the early 1970s. Since 2008, it was reintroduced in Safia reserve, Bir Guendouz, where semi-captive breeding was confirmed in 2013 (also in 2008, a reintroduction program started in national parks in southern Tunisia). The first fossil evidence of giant flightless prehistoric birds in Europe, *Pachystruthio dmanisensis*, has been uncovered in a cave in Crimea; the 40 cm long thigh bones enabled palaeontologists to calculate that the bird stood about 3.5 m tall and weighed about 450 kg – 0.8 m longer and three times heavier than Common Ostrich (J Vertebr Paleontol: e1605521, 2019).

SWANS TO DUCKS This spring, a pair of **Whooper Swan** *Cygnus cygnus* with two young at Glabušovce reservoir, Banská Bystric concerned the first breeding for Slovakia. A female with four young at Chropyne, central Moravia, in June constituted the third breeding record for Czechia. The long-staying adult **Lesser White-fronted Goose** *Anser erythropus* commuting between Eilat, Israel, and Aqaba, Jordan, from 3 January 2018 was still present on 19 June. Koshkina et al (2019) showed that the post-breeding population of **White-headed Duck** *Oxyura leucocephala* in northern-central Kazakhstan is at least twice as large as the current global population size estimate; other high counts for the eastern population suggest a positive trend as well (Bird Study 66: 111-120, 2019, cf Dutch Birding 41: 186, 2019). In Flevoland, a female **Long-tailed Duck** *Clangula hyemalis* photographed in late June with four chicks at Marker Wadden, new artificial islets in IJsselmeer created for birds in 2016, constituted the species' first breeding record for the Netherlands and perhaps the southernmost for the WP. A male **Spectacled Eider** *Somateria fischeri* on Herschel Island, Yukon, on 17 June was the first to be photographed in Canada. In Denmark, a male **Black Scoter** *Melanitta americana* was seen at Lakolk Rømø, Sønderjylland, on 30 May. The fifth for Norway was an adult male at Komagvær, Finnmark, from 11 to at least 17 July; on the basis of matching bill-pattern, it is believed to be the same individual that usually spends the winter in Northumberland, England. A female **Smew** *Mergellus albellus* with three chicks photographed in Vlaams-Brabant on 9 July represented the first breeding for Belgium (since a few years, several pairs also breed in Friesland, the Netherlands; cf Dutch Birding 41: 51, 2019). In Norway, seven **Ruddy Shelducks** *Tadorna ferruginea* photographed at Adventdalen, Spitsbergen, on 12-14 July were the second record for Svalbard (the first concerned three in May-June 2011); the species' nearest breeding sites in central Asia are at a distance of 3000 km but feral populations in western Europe can be found at similar distances. If accepted, a male **Baikal Teal** *Sibirionetta formosa* at Sneum Digesø, Allerup, on 6 June may be the second for Denmark; the first was a first-year shot at Skælskør, Sjælland, on 24 November 2005 for which a stable isotope analysis showed an Asian origin from Siberia, Russia (Ibis 149: 622-625, 2007).

GROUSE TO GREBES In Britain, 43 million juvenile **Common Pheasants** *Phasianus colchicus* are released annually in July-August for pleasure shooting, which is a 10 times higher total than 45 years ago (https://tinyurl.com/

343 Saker Falcon / Sakervalk *Falco cherrug*, juvenile, Wieringen, Noord-Holland, Netherlands, 20 July 2019 *(Maurits Martens)*

y3277fqt, Br Birds 112: 372-389, 2019). In late summer, the 'wild-living' UK population numbers an estimated eight million which means that, by September, pheasants form a staggering 50% of the total UK bird biomass. Of all these pheasants, 13 million are actually shot from October onwards, and many more die from various causes. The ecological impact on insects, reptiles and plants of extremely high pheasant numbers must be huge but are largely unknown. Worryingly, pheasant meat after removal of shot fragments has an average of 980 ppb lead concentration, ie, 10 times the maximum levels allowed for consumption meat. It is believed that in Denmark and the Netherlands, where the use of lead ammunition is prohibited, such high lead levels would have inhibited the recent population growth of scavengers like White-tailed Eagle *Haliaeetus albicilla*. In Italy, the breeding population of **Greater Flamingo** *Phoenicopterus roseus* increased from 1300 pairs in 1993 to over 27 000 in 2015, including 21 326 in Sardinia. **Lesser Flamingo** *Phoeniconaias minor* (now c 37 records) occurs annually in Italy since the early 2000s and bred successfully in a Greater colony for the first time in 2012; a mixed pair of Greater and Lesser bred successfully in Sardinia in 2017 (Brichetti & Fracasso 2018, Birds of Italy). Long-staying **Pied-billed Grebes** *Podilymbus podiceps* remained at Loch Feorlin, Argyll, Scotland, and (two) on São Miguel, Azores. In Cyprus, **Great Crested Grebes** *Podiceps cristatus* at three sites with eggs and young constituted the first successful breeding since 1982.

PIGEONS TO CUCKOOS A **Speckled Pigeon** *Columba guinea* has been added to the Iraqi list based on three records: a male in a cage found at a market in Diwaniya on 18 September 2014; one in the Hawr Al Dalmaj region on 22 October 2015; and a male photographed after being shot by a hunter at Rumaitha, Samawa, on 7 January 2019 (Salim et al in Indian J Nat Sci 9: 16270-16273, 2019). The only previous record in the greater WP was in Yemen on 18 December 1997 (cf Sandgrouse 20: 145, 1998). The first **Common Wood Pigeon** *C palumbus* for North America was seen at La Romaine, Quebec, Canada, on 5-13 May. A male **Namaqua Dove** *Oena capensis* near Cayli, Tartar, on 21 May 2018 was the first for Azerbaijan but it was not breeding (contra Dutch Birding 41: 186, 2019, Sandgrouse 41: 128, 2019). The third **Little Swift** *Apus affinis* for the Cape Verde Islands was photographed on Sal on 6 June. If accepted, a **Great Spotted Cuckoo** *Clamator glandarius* at Kohallen, Halland, on 11 July will be the ninth for Sweden. One was seen at Amash fish ponds, 50 km south-east of Yerevan, Armenia, on 10 July.

RAILS TO LOONS This spring, an influx of **Baillon's Crakes** *Zapornia pusilla* occurred in western Europe with, eg, seven singing in Belgium, four in Denmark, one in England and c 30 in the Netherlands. In France, at least 15 males were singing at Brière, Loire-Atlantique, in May-June (the last time that many were singing at one French site was more than a century ago); elsewhere in

344 Red-footed Booby / Roodpootgent *Sula sula*, subadult, Caleta de Vélez harbour, Málaga, Spain, 18 June 2019 *(Álex Colorado)*

345 Pied-billed Grebe / Dikbekfuut *Podilymbus podiceps*, adult, Furnas, São Miguel, Azores, 18 June 2019 *(Gerbrand Michielsen)*

346 Red-footed Booby / Roodpootgent *Sula sula*, juvenile, Cape Sardão, Odemira, Portugal, 3 June 2019 *(Humberto Matos)*

347 Oriental Pratincole / Oosterse Vorkstaartplevier *Glareola maldivarum*, with Common Gull / Stormmeeuw *Larus canus*, Hillesland, Karmøy, Rogaland, Norway, 27 May 2019 *(Frank Steinkjellå)*

348 Audouin's Gull / Audouins Meeuw *Larus audouinii*, third calendar-year, Toruń, Kujawsko-Pomorskie, Poland, 15 June 2019 *(Radosław Gwóźdź)* **349** South Polar Skua / Zuidpooljager *Stercorarius maccormicki*, at sea c 200 km south of Mizen Head, Cork, Ireland, 22 June 2019 *(Paul Connaughton/Shearwater Wildlife Tours)* **350** Cape Gull / Kelpmeeuw *Larus dominicanus vetula*, adult, Lea estuary, Lekeitio, Bizkaia, Spain, 6 June 2019 *(Jon Zubiaur)* **351** Slender-billed Gulls / Dunbekmeeuwen *Chroicocephalus genei*, adults, with Mute Swan / Knobbelzwaan *Cygnus olor*, Bugaj, Małopolska, Poland, 11 June 2019 *(Paweł Malczyk)*

France, at least eight more were heard. In Iran, a **White-breasted Waterhen** *Amaurornis phoenicurus* was photographed at Minab, Hormozgan, on 16 April. Male **Little Bustards** *Tetrax tetrax* were seen at Hiivaniemi, Lappeenranta, Finland, on 4 June and at Slimbridge, Gloucestershire, England, on 23-26 June. Aerial surveys using high-resolution digital video resulted in a record 22 280 **Red-throated Loons** *Gavia stellata* at Outer Thames estuary, England, in February 2018 (Br Birds 112: 349-357, 2019). In Norway, a total of 84 **Yellow-billed Loons** *G adamsii* flew past Slettnes, Finnmark, on 13 May.

TUBENOSES An immature **Black-browed Albatross** *Thalassarche melanophris* photographed at Garðskagi lighthouse on 12 June was the third or fourth for Iceland (it may have been the same individual seen in the same area on 5 August 2018). The first **Swinhoe's Storm Petrel** *Hydrobates monorhis* for the Cape Verde Islands was trapped on Ilhéu de Cima on 29 May. In England, a **Southern/Northern Giant Petrel** *Macronectes giganteus/halli* flew north at Whitburn, Durham, and then at Cullernose Point, north of Howick, Northumberland, on 2 July; the only previous WP records were (Piet Meeth's) presumed Southern (but Northern not ruled out) off Ouessant, Finistère, France, on 2 November 1967 and a (Frédéric Jiguet's) Southern seen from a ferry in the Adriatic Sea between Greece and Ancona, Italy, on 2 September 1991. On Papa Westray, Orkney, Scotland, a pile of at least 469 corpses and a number of surviving **Northern Fulmars** *Fulmarus glacialis* were found in May 2016 in a little open-roofed room of a croft that had been abandoned three years earlier. Apparently, the birds had entered the room to prospect for nesting but were unable to fly out of the 4x5 m large space surrounded by 2 m

352 Crested Honey Buzzard / Aziatische Wespendief *Pernis ptilorhynchus*, female, Masalli, Azerbaijan, 23 May 2019 *(Richard Ek)* **353** Grey-headed Lapwing / Grijskopkievit *Vanellus cinereus*, Strandvik, Värmland, Sweden, 14 May 2019 *(Jan Gustafsson)* **354** Trindade Petrel / Arminjons Stormvogel *Pterodroma arminjoniana*, pale morph, c 3 km south of Pico, Azores, 26 May 2019 *(Roxane Rambert)* **355** Black-browed Albatross / Wenkbrauwalbatros *Thalassarche melanophris*, immature, Garðskagi lighthouse, Iceland, 12 June 2019 *(Fredrik Sahlin)*

high walls, supposedly attracting other individuals into the death trap by calling; 15% of the corpses had rings which revealed that most must have been subadults (Scott Birds 39: 132-135, 2019). A pale-morph **Trindade Petrel** *Pterodroma arminjoniana* was photographed c 3 km south of Pico, Azores, on 26 May. On Montaña Clara islet near Lanzarote, Canary Islands, a **Cape Verde Shearwater** *Calonectris edwardsii* was again trapped on 9 July (the first on this islet was trapped on 6 June 2010 and then the species was found here, eg, on 22 July 2016; Dutch Birding 32: 266, 2010, 38: 398, 2016); this time, however, the bird not only had a brood patch but also went into an inaccessible burrow when released. On Lundy, England, the breeding population of **Manx Shearwater** *Puffinus puffinus* increased from 297 pairs in 2001 to 5504 in 2017-18, in response to the eradication of rats from the island in the winters of 2002/03 and 2003/04 (Br Birds 112: 217-230, 2019).

STORKS TO HERONS If accepted, a **White Stork** *Ciconia ciconia* briefly at Víkingavatn on 26 May will be the fifth for Iceland. In France, an influx of **Great White Pelicans** *Pelecanus onocrotalus* involved eight at Voreppe, Isère, on 22-23 May and three second calendar-years at l'Etang des Landes, Lussat, Creuse, from 25 May to at least 5 July. On 14 July, the latter group was found at Leese, Niedersachsen, Germany. An injured and very confiding individual which had been taken into care, ringed (blue X75) and released in Israel in November 2018, turned up in western Hungary at three sites (Irmapuszta-fishponds, Kis-Balaton and lake Fertő) between 4 and 21 June; at Neusiedler See, Burgenland, Austria, on 22-23 June; and at Vestonice reservoir, Czechia, on 20 July. In Germany, a first-summer at Beltringharder Koog, Schleswig-Holstein, on 21-22 June moved to Filsø, Sydvestjylland, on 22-23 June and then to Vejlerne, Nordjylland, on 23-24 June (potentially, the

first for Denmark). On 26-27 June, the same bird was seen on Randøya and at Hauge, Vest-Agder (potentially, the first for Norway), after which it returned to Schleswig-Holstein where it stayed at Meldorfer Speicherkoog from 9 July onwards. The long-staying **Dwarf Bittern** *Ixobrychus sturmii* on Fuerteventura, Canary Islands, from 1 December 2017 remained until at least 27 May. A **Squacco Heron** *Ardeola ralloides* at Slevdalsvann, Vest-Agder, on 6-7 June was (only) the second for Norway. A hybrid **Squacco x Western Cattle Egret** *Bubulcus ibis* at Novara, Piedmont, Italy, in March 2012 and March 2014 (Riv Ital Ornitol 87: 3-79, 2017) may be the same individual as the one at Ebro delta, Catalunya, Spain, in September 2010 and January 2011 (cf Dutch Birding 33: 316-321, 2011). The first **Purple Heron** *Ardea purpurea* for Brazil stayed on Fernando de Noronha, 350 km off the Pernambuco coast, from 19 March 2017 to late April 2018 and the second **Little Egret** *Egretta garzetta* was found here on 21 March 2017 (Bull Br Ornithol Club 139: 160-163, 2019). Intriguingly, Brichetti & Fracasso (2018) mention more than 100 records of **Western Reef Heron** *E gularis* for Italy, including a few probable hybrids with Little Egret (cf https://tinyurl.com/yy3dr364).

IBISES TO CORMORANTS The feral breeding population of **African Sacred Ibis** *Threskiornis aethiopicus* in Italy increased from 25-28 pairs in 2000 to 400-420 in 2016. Based on an analysis of 28 (former) Moroccan breeding colonies of **Northern Bald Ibis** *Geronticus eremita*, Schenker et al (2019) outlined ecological criteria, such as a low level of disturbances at breeding sites and adequate feeding areas within 5-15 km, to be used for future translocation projects of this endangered species (https://tinyurl.com/yyptfyb7). In Spain, a **Red-footed Booby** *Sula sula* was hand-trapped and released at sea on Sálvora, Ribeira, A Coruña, on 22 May and another one stayed at Caleta de Vélez harbour, Málaga, from 16 June to at least 14 July. The first for Portugal was photographed at Cabo Sardão, Odemira, on 3 June. In Belgium, the long-staying **Pygmy Cormorant** *Microcarbo pygmaeus* at Auderghem, Bruxelles, from January 2018 remained into late July and another one was seen at De Kuifeend, Antwerp, on 1 June. The seventh for the Netherlands was photographed at Hurwenen, Gelderland, on 3 June and at Keent, Noord-Brabant, on 5-6 June.

WADERS A **Eurasian Oystercatcher** *Haematopus ostralegus* photographed at Gun Galuut on 15 June was the first for Mongolia. An **American Golden Plover** *Pluvialis dominica* at Hukbogen on 8 July was the third for Svalbard. GPS tracking showed an unknown migration route for two **Pacific Golden Plovers** *P fulva* from New Zealand to Alaska, USA. After they were trapped in New Zealand on 8 and 13 April, they traveled non-stop nearly 10 000 km to Japan; by mid-May, both left Japan heading to the Yukon delta, Alaska, with one flying directly to its destination and the other making a brief stop in the Russian Far East (https://tinyurl.com/y3lhxp8f). An adult photographed at Garður on 12 July was the fourth for Iceland. A **Grey-headed Lapwing** *Vanellus cinereus* at Workum, Friesland, on 27-28 June was the first for the Netherlands; it is still disputed whether it could be the same individual as the one at Strandvik, Värmland, Sweden, on 13-19 May. Between 14 May and 23 June, a **Red-wattled Lapwing** *V indicus* of the western subspecies, *V i aigneri*, appeared to have been photographed at five sites in four countries over a distance of at least 1400 km; at Kolansko Blato on Pag in the Adriatic, Croatia, on 14 May; at Buchersried, Wolnzach, Bayern, Germany, on 31 May; at Doel, Oost-Vlaanderen, Belgium, on 11 June; and then in the Netherlands at the northern tip of Texel, Noord-Holland, on 19 June and on Ameland, Friesland, on 23 June. When connecting these sites by a line on a map it leads back into a south-eastern direction. There are three previous records in Europe, all in south-western Russia. One was found in a flock of 31 Northern Lapwings *V vanellus* along the Aygurka river in northern Stavropol on 28 August 1982; an attempt to shoot and collect it failed. In Dagestan, the species turned up twice; the first was at the Akusha mouth on 24 May 1956 and the second 40 km north of Sulak on the Agrakhansky peninsula on 24 April 1984, flying off over the Caspian Sea. In France, an adult **Sociable Lapwing** *V gregarius* stayed at Estreux, Nord, on 1-15 May and a **White-tailed Lapwing** *V leucurus* turned up at Camargue, Bouches-du-Rhône, on 30 May; it means that four very rare eastern lapwing species were found in north-western Europe in May. In Norfolk, England, an **Upland Sandpiper** *Bartramia longicauda* was reported at Sheringham on 26 May. A **Little Curlew** *Numenius minutus* photographed at Tofta Kile, Bohuslän, on 10-11 July was the second for Sweden and eighth for the WP; previous ones were in Belgium in 2010, England in 1985, Finland in 1996, Kuwait in 2007, Norway in 1969, Sweden in 2005 and Wales in 1982. In Shetland, Scotland, an adult **Great Knot** *C tenuirostris* at Skaw, Unst, from 30 May to 4 June was the fifth for Britain. An adult **Stilt Sandpiper** *C himantopus* at Odinsloch, Meldorfer Speicherkoog, on 13 July and then re-found at Wapeler Groden, Jade, Niedersachsen, on 20 July was the third for Germany; previous ones were in 1980 and 2008. The eighth **Baird's Sandpiper** *C bairdii* for Norway was present at Orrevatnet, Rogaland, on 17-19 July. A pair of **Little Stints** *C minuta* with nest and eggs near Utqiagvik, Barrow, Alaska, in June concerned the first breeding for North America. The first **Red Phalarope** *Phalaropus fulicarius* for Tanzania was photographed at Serengeti national park on 25 June 2014 (Scopus 39: 73-74, 2019). The fourth **Common Redshank** *Tringa totanus* for Newfoundland at St Vincents, Avalon peninsula, on 10 July was probably the fourth for Canada and North America as well. An **Oriental Pratincole** *Glareola maldivarum* photographed at Hillesland, Karmøy, Rogaland, on 27 May may be the third for Norway unless it concerned the same individual as the one in Rogaland on 27-28 May 2018 (cf Dutch Birding 40: 259, 2018).

AUKS TO GULLS A **Tufted Puffin** *Fratercula cirrhata* photographed on Bjørnøya, Svalbard, on 14 July was the first for Norway and third or fourth for the WP; previous ones were in Halland, Sweden, on 1 and 8 June 1994

356 Pallas's Gull / Reuzenzwartkopmeeuw *Larus ichthyaetus*, Lillskärsudden, Västerbotten, Sweden, 25 May 2019 *(Per-Olof Erixon)*

357 Greater Sand Plover / Woestijnplevier *Anarhynchus leschenaultii*, adult, Slettnes, Finnmark, Norway, 16 May 2019 *(Markku Saarinen)* cf Dutch Birding 41: 194, 2019

358 Red-wattled Lapwing / Indische Kievit *Vanellus indicus*, De Tuintjes, De Cocksdorp, Texel, Noord-Holland, Netherlands, 19 June 2019 *(René Pop)*

359 Little Curlew / Kleine Regenwulp *Numenius minutus*, Tofta Kile, Bohuslän, Sweden, 11 July 2019 *(Björn Dellming)*

360 Red-wattled Lapwing / Indische Kievit *Vanellus indicus*, Kolansko Blato, Pag, Croatia, 14 May 2019 *(Dejan Grohar)*

361 Grey-headed Lapwing / Grijskopkievit *Vanellus cinereus*, Workum, Friesland, Netherlands, 27 June 2019 *(Jaap Denee)*

362 Great Knot / Grote Kanoet *Calidris tenuirostris*, adult, Skaw, Unst, Shetland, Scotland, 31 May 2019 *(Rebecca Nason)*

363 Elegant Terns / Sierlijke Sterns *Sterna elegans*, adults, with Sandwich Terns / Grote Sterns *S sandvicensis*, Marjal dels Moros, Valencia, Spain, 25 May 2019 *(Massimiliano Dettori)*

364 Hybrid Lesser Spotted x Greater Spotted Eagle / hybride Schreeuwarend x Bastaardarend *Clanga pomarina x clanga*, second calendar-year, Witkowo, Western Pomerania, Poland, 5 June 2019 *(Marcin Sołowiej)*. Ringed as pullus at Kampinowska forest, Mazowsze, Poland, on 3 July 2018. **365** Cinereous Vulture / Monniksgier *Aegypius monachus*, second calendar-year, Hellendoorn, Overijssel, Netherlands, 25 May 2019 *(Arnoud B van den Berg)* cf Dutch Birding 41: 198, 2019

and at Swale, Kent, England, on 16 September 2009 (cf Dutch Birding 31: 318, plate 413-414, 2009); the one off Cornwall, England, on 20 May 2016 has not yet been submitted to the British rarities committee (cf Dutch Birding 38: 330, 2016; https://tinyurl.com/y3cbwjrh). A record 9460 jaegers flew past in 2.5 hours at Hamningberg, Finnmark, Norway, on 30 May, including 6850 **Long-tailed** *Stercorarius longicaudus*, 900 **Parasitic** *S parasiticus* and 110 **Pomarine Jaegers** *S pomarinus* and 1500 unspecified. Already on 12 May, as many as 1487 Pomarine flew past here. On 22 June, a **South Polar Skua** *S maccormicki* was photographed from RV Celtic Explorer c 200 km south of Mizen Head, Cork, Ireland. If accepted, a first-summer **Sabine's Gull** *Xema sabini* videoed at Jahra pool on 16 June may be the second for Kuwait. Two adult **Slender-billed Gulls** *Chroicocephalus genei* at Bugaj, Małopolska, on 11 June (one staying until the next day) constituted the sixth record for Poland. A **Franklin's Gull** *Larus pipixcan* at Sneum Digesø, Sydvestjylland, on 6 June was the third for Denmark. An adult near Bodensee on 22 June was the first for Austria. A third calendar-year **Audouin's Gull** *L audouinii* at Vistula river in Toruń, Kujawsko-Pomorskie, on 14-17 June was the first for Poland. An adult flying off north over the Wadden Sea near Horumersiel, Niedersachsen, on 13 July was the sixth for Germany. The first **Pallas's Gull** *L ichthyaetus* for North America discovered on Shemya Island, Alaska, on 2 May was found dead on 14 May (the skin was taken to the museum of the University of Alaska at Fairbanks). The fifth for Sweden was photographed at Storviksanden, Umeå, Västerbotten, on 25 May. A **Cape Gull** *L dominicanus vetula* turned up at Lea estuary, Lekeitio, Bizkaia, Spain, on 6 June. Recently, an adult **Armenian Gull** *L armenicus* photographed at Grønningen, Blåvand, Vestjylland, on 4 May 2017 has been accepted as the first for Denmark and western Europe (https://tinyurl.com/y2ps7jy7).

TERNS In the Azores, **Sooty Terns** *Onychoprion fuscatus* bred on Ilhéu da Praia, Graciosa, on 13 June (pair with chick) and on Ilhéu da Vila, Santa Maria, on 25 June (pair with one egg). On 24 June, in England, an adult flew past Bempton Cliffs, East Yorkshire, and north past Filey Brigg, North Yorkshire; probably the same bird was reported on 9 July, initially in Yorkshire and later past Durham to Northumberland. A **Bridled Tern** *O anaethetus* was seen at Praia da Vitória, Terceira, Azores, on 23 June. The remains of a 32 years old **Arctic Tern** *Sterna paradisaea* at Forvie reserve, Aberdeenshire, Scotland, on 8 June 2018 concerned the oldest-known individual of this species for Britain; it had been ringed as a chick at Buddon Ness, Angus, Scotland, on 3 July 1986 (the world record belongs to a 34 year old non-British bird). The long-staying **Forster's Tern** *S forsteri* was seen at Inishroo, Galway, Ireland, on 6 June. In May-June, three adult **Elegant Terns** *S elegans* stayed in a Sandwich Tern *S sandvicensis* colony at Marjal dels Moros, Valencia, Spain, and a fledgling was seen here on 12 June (cf Br Birds 112: 110-117, 2019, Dutch Birding 41: 131, 2019). The colour-ringed adult at Polder de Sébastopol at Île de Noirmoutier region, Vendée, France, from 23 June onwards was the same bird first seen in 2002 at Banc d'Arguin, France, where it had been trapped, ringed and sampled in 2003 for DNA that confirmed its identification. Since then, it has been paired with a Sandwich breeding either at Banc d'Arguin or Île de Noirmoutier raising a number of hybrid young. It was also wintering in South Africa in January 2007 and presumably the same bird was the first for Britain in Devon in May 2002 and seen at several sites in England in June 2017 (cf Dutch Birding 38: 330, 403-405, 2016, 39: 258, 268, 2017, J Ornithol 158: 351-361, 2017, Br Birds 112: 99-109, 2019). The **American Royal Tern** *S maxima* ringed in North Carolina, USA, first seen on Guernsey, Channel Islands, on 5 July 2017 and then turning up during almost two years at various sites in northern France, southern England, the Channel Islands and Wales was photographed at Hayle estuary and Carbis bay, Cornwall, England, on 3 June.

RAPTORS In Iran, **Black-winged Kites** *Elanus caeruleus* were breeding at four sites in Khuzestan in January-February (the species first bred here in 2014) and at Helleh, Bushehr, in June. The first **Crested Honey Buzzard** *Pernis ptilorhynchus* for Azerbaijan was photographed at Masalli on 23 May. In Israel, one was seen over Oranit on 14 June, and a few were summering at Eilat. The breeding population of **Egyptian Vulture** *Neophron percnopterus* in the Balkans declined from 71 pairs in 2012 to 45 in 2019, of which 24 were in Bulgaria, 13 in North Macedonia, five in Albania and three in Greece (https://tinyurl.com/y3dkpzy9). Recently, an immature **White-backed Vulture** *Gyps africanus* photographed at Garducho, Mourão, on 25 August 2014 has been upgraded from category D to category A on the Portuguese list; however, the adult at St Vincent, Faro, on 14 October 2006 remains in category D (ie, of 'uncertain origin'). A wild-origin female **Cinereous Vulture** *Aegypius monachus* ('Brinzola'), released with a GPS tracker in Spain in October 2018, travelled through northern Europe (Belgium, the Netherlands, Germany, Denmark, Sweden and Norway) between 8 and 18 May. In Norway, she remained for a month in an area of 57 hectares feeding on, eg, a Reindeer *Rangifer tarandus* carcass and, in late June, she flew back to Sweden (cf Dutch Birding 41: 198, 213-214, 2019). Unmarked individuals were reported, eg, in Latvia (at a few sites on 4-22 June), Belgium (over Koksijde, West-Vlaanderen, on 2 June, and another over Honnay, Namur, on 20 June with nine Griffon Vultures *G fulvus*) and Czechia (near Plzen, western Bohemia, on 24-25 June; third since 1989). At one locality in Botswana, as many as 537 vultures were found dead due to poisoning, including 468 **White-backed**, 28 **Hooded** *Necrosyrtes monachus*, 17 **White-headed** *Trigonoceps occipitalis*, 14 **Lappet-faced** *Torgos tracheliotos* and 10 **Cape Vultures** *G coprotheres*; the poisoning was believed to have been caused by lacing of three poached elephant carcasses with poison. In June, 36 **Griffon Vultures** were observed at five sites in Belgium, including a flock of 23 at Neuville, Namur, on 21 June. Two **Booted Eagles** *Aquila pennata* (a dark and a pale morph) migrating past Kolka, Dundaga, on 20 May were the fourth and fifth for Latvia. An immature

366 Masked Skrike / Maskerklauwier *Lanius nubicus*, adult female, Lou Bertalan, Tulcea, Romania, 14 May 2019 *(Axel Auhagen)* **367** Hume's Leaf Warbler / Humes Bladkoning *Phylloscopus humei*, Ural mountains, west of Severouralsk, Russia, 14 June 2019 *(Patric Lorgé)* **368** Mourning Dove / Treurduif *Zenaida macroura*, Ventlinge, Öland, Sweden, 21 May 2019 *(Bengt Svensson)* cf Dutch Birding 41: 186, 2019 **369** Lesser Short-toed Lark / Kleine Kortteenleeuwerik *Alaudala rufescens*, Hel, Pomerania, Poland, 30 May 2019 *(Wojciech Janecki Jr)*

Eastern Imperial Eagle *A heliaca* at Randowbruch, Brandenburg, from 29 May to 24 June was (only) the first twitchable for Germany since 25 years. In north-eastern Groningen, the Netherlands, **Pallid Harriers** *Circus macrourus* successfully raised six young in June at the same site as where the species bred for the first time in 2017 (in 2018, an unsuccesful breeding attempt took place at that site between the same female Pallid and a male Montagu's Harrier *C pygargus*). This spring, a female young that fledged here in 2017, wearing a black ring with C3 inscription, was nesting with a male Pallid in northern Spain, constituting the country's first documented breeding of this species. In north-eastern Germany, 137 **White-tailed Eagles** were found dead as wind turbine victims in 2003-14; Heuck et al showed a relation between the density of wind turbines and the number of eagle collisions (Biol Conserv 236: 44-51, 2019). At Poltva, Ukraine, a mixed pair of a female **Black Kite** *Milvus migrans* and a male **Red Kite** *M milvus* produced three young both in 2017 and 2018. DNA of the three young from 2018 showed that the male parent was not a pure Red and may have had a Black among its ancestors (https://tinyurl.com/y5o9ndpm). De Broyer et al showed an increase in the breeding populations of both species in Wallonia, Belgium; between 2001-07 and 2015-16, Red increased from 150-180 territories to 360-410, and Black from 59-61 to 70-80 (Aves 56: 3-27, 2019).

OWLS TO FALCONS A **Eurasian Scops Owl** *Otus scops* was found dead on Bressay, Shetland, on 10 June. Recently, the Hellenic rarities committee accepted the first **Ural Owl** *Strix uralensis* for Greece photographed at Falakro mountain, Drama, on 18 November 2015. A female **Snowy Owl** *Bubo scandiacus* remained on St Kilda, Outer Hebrides, Scotland, through late July. In Ireland, one stayed on Great Blasket Island, Kerry, from 8 June

370 Myrtle Warbler / Mirtezanger *Setophaga coronata*, first-summer male, Ramsey, Pembrokeshire, Wales, 31 May 2019 *(Peter Ramsey)* **371** Black-backed Citrine Wagtail / Zwartrugcitroenkwikstaart *Motacilla citreola calcarata*, male, Kizil Agach, Azerbaijan, 26 May 2019 *(Olof Strand)* **372** Red-headed Bunting / Bruinkopgors *Emberiza bruniceps*, male, Halikonlahti, Salo, Finland, 24 June 2019 *(Mika Bruun)* **373** Cirl Bunting / Cirlgors *Emberiza cirlus*, male, Hirtshals, Nordjylland, Denmark, 11 July 2019 *(Poul Bastholm Nørgaard)*

until at least 3 July. Hahn et al (2019) used geolocators to compare the migration patterns of **European Bee-eaters** *Merops apiaster* from two established western (Portugal) and eastern (Bulgaria) breeding populations in Europe, with those from a newly founded northern population (Germany). Western birds used the western flyway to winter in West Africa and the eastern birds headed south to southern Africa, demonstrating a complete separation in time and space between both populations. The recently founded northern population used a western corridor on migration but crossed the Mediterranean further east than the western population and overwintered mainly in a (new) winter area in southern Congo and northern Angola (https://tinyurl.com/y55fw3q3). A **Blue-cheeked Bee-eater** *M persicus* was seen for 10 minutes on wires at Achnahaird, Highland, Scotland, on 23 June. In England, a **European Roller** *Coracias garrulus* rested for two hours aboard a yacht in the Bristol Channel off Devon on 30 June until it flew off at c 5 km from Lundy. In May-June, a large influx of **Red-footed Falcons** *Falco vespertinus* occurred in southern Sweden, and some birds attempted to nest. This summer, the species bred for the first time in 30 years in Czechia. An adult **Eurasian Hobby** *F subbuteo* at South Lake, Perth, Western Australia, from 6 February to 12 March 2016 was the first for mainland Australia (Austral Field Ornithol 36: 71-73, 2019). The first **Saker Falcon** *F cherrug* for the Netherlands was a juvenile flying along the inside of the Wadden Sea dike at high tide on Wieringen, Noord-Holland, on at least 18-20 July; potentially, it was the country's fifth new species in two months.

SHRIKES TO CROWS A **Balearic Woodchat Shrike** *Lanius senator badius* at Oostvaardersplassen, Flevoland, on 14 June was the second for the Netherlands; the first was on 6 June 1993 (cf Dutch Birding 19: 65-67, 1997). An

adult female **Masked Shrike** *L nubicus* photographed at Tulcea, Dobruja, on 14 May was the second for Romania. In Iran, a **Black Drongo** *Dicrurus macrocercus* was seen at Esfahak, Tabas, Khorasan, on 8 July. The extremely confiding **Siberian Nutcracker** *Nucifraga caryocatactes macrorhynchos* present since 19 November 2018 at Wageningen, Gelderland, the Netherlands, stayed until 1 July. The resident **Pied Crow** *Corvus albus* at M'Hamid, Morocco, from November 2015 was again seen here on 26 May. The famous individual that turned up at Den Oever, Noord-Holland, the Netherlands, on 22 May after criss-crossing England and Wales for nearly a year since June 2018 was refound at Leens, Groningen, on 25-30 May. In Britain, it is regarded as either a ship-assisted arrival or a wild-origin bird but there is no indication that it escaped from captivity. In June, the bird stayed in the Wadden Sea region with multiple-day sightings on Schiermonnikoog and Ameland, Friesland; at Leer, Niedersachsen, Germany, where it was (last) seen at 07:15 in the morning of 20 June and back again at 16:46 the same day on Schiermonnikoog; and alternately on Ameland and at Burdaard, Friesland, from 29 June to 5 July. From 7 July onwards, it remained more inland at Leeuwarden, Friesland.

FIRECRESTS TO SYLVIAS A pair of **Common Firecrests** *Regulus ignicapilla* feeding juveniles at Sørkedalen, Oslo, on 2 July constituted the first breeding record for Norway. If accepted, a **Lesser Short-toed Lark** *Alaudala rufescens* photographed at Hel, Pomerania, on 30 May will be the first for Poland. A **Calandra Lark** *Melanocorypha calandra* at Paible, North Uist, Outer Hebrides, on 3 June was the 10th for Scotland and the latest spring record for Britain. A singing **Green Warbler** *Phylloscopus nitidus* at The Lizard, Cornwall, England, was trapped on 10 June and its identification was confirmed by DNA analysis. If accepted, a singing male sound-recorded at Lehtisaari, Helsinki, on 18 June will be the second for Finland (the first was in May 2012). The song and calls of the first for the Netherlands were recorded at Holy, Vlaardingen, Zuid-Holland, in the morning of 24 June but the bird could not be found again during the rest of the day. On 13 July, an **Arctic Warbler** *P borealis* was the 98th for Fair Isle but the first for July since 2002. A singing territorial male **Hume's Leaf Warbler** *P humei* photographed in the Ural mountains west of Severouralsk (60°7′41.6″N 59°4′48.1″E), Russia, on 14 and 17 June concerned the first possible breeding for the WP. A male **Rüppell's Warbler** *Sylvia ruppeli* discovered at Djanet, Illizi, on 8 December 2018 was the first for Algeria (Alauda 87: 165, 2019). The first **Eastern Subalpine Warbler** *S cantillans* for Estonia was photographed on Ruhnu island, Pärnumaa, on 30 May.

REED WARBLERS The first nest with chicks of **Booted Warbler** *Iduna caligata* for Belarus was found at Minsk on 16 June. An alleged Egyptian Olivaceous Warbler *I pallida pallida* photographed at Siracusa, Sicily, on 5 May has been re-identified as the first **Sykes's Warbler** *I rama* for Italy (contra Dutch Birding 41: 202, 2019). The fifth for Sweden was trapped at Nidingen, Halland, on 4 June. An **Eastern Olivaceous Warbler** *I pallida* photographed at Wittmoor, Schleswig-Holstein, on 25-27 May was the fifth (and the first twitchable) for Germany. The third and fourth for Poland were singing at Jarosławiec, Pomerania, on 6 June and at Hel on 18 June. The seventh for Finland was singing on Lågskär, Åland, on 14 June. In Shetland, the fourth for Fair Isle was trapped on 16 June. **Melodious Warblers** *Hippolais polyglotta* trapped at Ottenby, Öland, on 13 June and 14 July were the sixth and seventh for Sweden. The second and third **Paddyfield Warbler** *Acrocephalus agricola* for Czechia were trapped near Hodonin, southern Moravia, on 23 May and 6 July. The seventh for Poland was photographed at Nadrzecze, Western Pomerania, on 18 May. A singing **Blyth's Reed Warbler** *A dumetorum* at Kaltbrunner Riet, Sankt Gallen, on 12 June was the second for Switzerland; the first was on 10 June 1992.

STARLINGS TO WHEATEARS An **Asian Pied Starling** *Gracupica contra* photographed on an electricity cable along the Suq-Al Shuyoukh-Kermashiya road, Iraq, on 27 October 2017 had probably escaped from a cage (Eco Env Cons 25: 106-110, 2019); in the WP, the species has been introduced (category C) in the United Arab Emirates. In Malta, a female **Spotless Starling** *Sturnus unicolor* ringed on Comino on 19 April and paired with a male **Common Starling** *S vulgaris* bred successfully, with both parents carrying food to a cliff nest on 19 May. Between 11 April and 30 June, 110 territories of **Red-flanked Bluetail** *Tarsiger cyanurus* were found in Finland. An **Eastern Black-eared Wheatear** *Oenanthe melanoleuca* was reported on Christiansø, Bornholm, Denmark, on 24-25 May. The first **Pied Wheatear** *O pleschanka* since 1971 for Hungary was a male at Kecskemét, Bács-Kiskun, on 11 July. Also a male was found on Vlieland, Friesland, the Netherlands, on 16 June. A female at Vik, Klepp, Rogaland, from 25 June to 10 July was the first in summer for Norway. DNA analysis confirmed the identification of the first **Red-tailed Wheatear** *O chrysopygia* for Israel; it stayed at Amsa from March 2017 to April 2019 and was trapped on 9 November 2018.

SPARROWS TO CROSSBILLS A flock of 17 **Pale Rockfinches** *Carpospiza brachydactyla* at Cape Greco on 7-12 May constituted the first record for Cyprus since 2008 and the largest flock ever. If accepted, a **Yellow-throated Sparrow** *Gymnoris xanthocollis* reported at Keta, Golan Heights, on 21 May will be the seventh for Israel. A male **Black-backed Citrine Wagtail** *Motacilla citreola calcarata* photographed at Kizil Agach on 26 May was the first for Azerbaijan and the second for the WP 'sensu BWP' (the previous one was in Turkey in May 2011). Recently, a **Blyth's Pipit** *Anthus godlewskii* at Irakleio, Omalos Viannou, on 30 September 2014 has been accepted as the first for Greece. A **Trumpeter Finch** *Bucanetes githaginea* at Morups Tånge, Halland, on 8 July was the 11th for Sweden. From the second week of July onwards, an invasion of record proportions of **Two-barred Crossbills** *Loxia leucoptera bifasciata* took place in northern Scotland. On 16 July, the total for Shetland alone stood at a minimum of 138, with 20 at Voe on 12 July and 18 at

374 Balearic Woodchat Shrike / Balearische Roodkopklauwier *Lanius senator badius*, second calendar-year, Praamweg, Oostvaardersplassen, Flevoland, Netherlands, 14 June 2019 *(Pim Julsing)*

Stromfirth on 14-15 July. On Fair Isle, a daily record of 16 was counted on 11 July, a higher number than the previous record of 15 in 2008. In Orkney, a group of eight reached Westray on 13 July. Just before the invasion in Scotland, high numbers had turned up along the Norwegian coast as well with, eg, 19 at Svolvær, Nordland, on 8 July; nine on Sklinna, Nord-Trøndelag, on 9 July; and two on Utsira, Rogaland, on 9 July. In Germany, a male was found dead at Friedrichskoog Spitze, Schleswig-Holstein, on 17 July.

BUNTINGS TO AMERICAN WARBLERS A male **Northern Cardinal** *Cardinalis cardinalis* at Gorseinon, Glamorgan, Wales, on 7-8 July was presumed to be an escape (there have been at least nine such escape records of this species in Britain between 1966 and 2018). The fourth **White-crowned Sparrow** *Zonotrichia leucophrys* for Scotland was discovered in a garden at Mull of Oa, Islay, Argyll, on 12 June. In England, a **Dark-eyed Junco** *Junco hyemalis* was found at Abbotsbury Swannery car park, Dorset, on 21 June. A male **Red-headed Bunting** *Emberiza bruniceps* stayed at Halikonlahti, Salo, Finland, on 21-30 June. The first **Black-headed Bunting** *E melanocephala* for the Russian Far East was a male photographed at Nachodka, Primorye, on 5 May (Russian J Ornithol 28: 2446-2447, 2019). A male at Sõrve säär, Saaremaa, on 27 May was the third for Estonia. A female **Cretzschmar's Bunting** *E caesia* at Minsmere reserve, Suffolk, England, on 31 May was the seventh for Britain and the first on the mainland. Jiguet et al (2019) used geolocators, stable hydrogen isotypes and population genetics to show that a third of the **Ortolan Buntings** *E hortulana* migrating through south-western France come from declining northern populations, and it is concluded that hunting in France is unsustainable, being partly responsible for a decline in numbers by 88% since 1980; as many as 30 000 individuals are killed in France each autumn (https://tinyurl.com/y47p2yd5). In the Netherlands, a male **Cirl Bunting** *E cirlus* was singing at Nederweert, Limburg, from June into July (c 10 km from where a male held territory in April-July 2018); a female was photographed near Rotterdam, Zuid-Holland, on 10 June. The second for Denmark was a male singing near Hirtshals, Nordjylland, on 11-12 July (the first was a female trapped at Blåvands Huk, Vestjylland, on 10 June 1995). A first-summer male **Yellow-breasted Bunting** *E aureola* photographed at Marjaniemi, Hailuoto, on 20 June was the first for Finland since 2007. Not far east from Moscow, a population was found at Nizhniy Novgorod, Russia, where five were trapped, now flying with either geolocators (in three males) or colour-rings (http://amurbirding.blogspot.com). A first-summer male **Myrtle Warbler** *Setophaga coronata* was seen on Ramsey, Pembrokeshire, Wales, from 31 May to 1 June.

For a number of reports Birdwatch, British Birds, Go-South Bulletin, Sovon-nieuws, www.birdguides.com, www.birdinglatvia.lv, www.clanga.com, www.dutchavifauna.nl, www.hbw.com, www.magornitho.org, www.rarebirdalert.co.uk, www.rarebirdspain.net, www.tarsiger.com and www.waarneming.nl were consulted. We wish to thank Mohamed Amezian, Vladimir Arkhipov, Axel Auhagen, Garry Bakker, Chris Batty, Patrick Bergier, Lou Bertalan, Paul Bradbeer, Mika Bruun, Don Cecile, Martin Collinson, Álex Colorado, Paul Connaughton, José Luis Copete, Magnus Corell, Björn Dellming, Massimiliano Dettori, Philippe Dubois, Nils van Duivendijk, Jon Dunn, Enno Ebels, Richard Ek, Per-Olof Erixon, Raymond Galea, Eduardo Garcia del Rey, Kai Gauger, Dejan Grohar, Geert Groot Koerkamp, Jan Gustafsson, Ricard Gutiérrez, Radosław Gwóźdź, Tomas Haraldsson, Harry Hussey, Petteri Hytönen, Wojciech Janecki Jr, Josh Jones, Zbigniew Kajzer, Leander Khil, Yosef Kiat, Bence Kókay, Yann Kolbeinsson, Richard Kvetko, André van Loon, Patric Lorgé, Paweł Malczyk, Humberto Matos, Lionel Maumary, Dave McAdams, Gerbrand Michielsen, Geir Mobakken, Killian Mullarney, Rebecca Nason, Poul Bastholm Nørgaard, Yoav Perlman, René Pop, Nikos Probonas, Pedro Ramalho, Roxane Rambert, Peter Ramsey, Colin Richardson, Magnus Robb, Markku Saarinen, Fredrik Sahlin, Mudhafar Salim, Mariona Sardà Serra, Dare Šere, Jiri Sirek, Roy Slaterus, Marcin Sołowiej, Frank Steinkjellå, Rasmus Strack, Olof Strand, Ed Stubbs, Bengt Svensson, Ehsan Talebi, Hugo Touzé, Neil Tovey, Johan van der Vegt, Sam Viles, Fred Visscher, Roland van der Vliet, Peter de Vries, Leon Wischenbarth and Jon Zubiaur for their help in compiling this review.

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Recente meldingen

Dit overzicht van recente meldingen van zeldzame en interessante vogels in Nederland beslaat voornamelijk de periode **mei-juni 2019**. De vermelde gevallen zijn deels niet geverifieerd en het overzicht is niet volledig. Alle vogelaars die de moeite namen om hun waarnemingen door te geven worden hartelijk bedankt. Waarnemers van soorten in Nederland die worden beoordeeld door de Commissie Dwaalgasten Nederlandse Avifauna (CDNA) wordt verzocht hun waarnemingen zo spoedig mogelijk in te dienen via www.dutchavifauna.nl.

EENDEN In totaal vier **Witbuikrotganzen** *Branta hrota* vlogen langs trektelposten. Pleisterende vogels werden hoofdzakelijk in het Waddengebied gezien; het hoogste aantal bij elkaar bedroeg vier op 6 mei op Texel, Noord-Holland. Eind mei waren de laatste verdwenen. Ook **Zwarte Rotgans** *B nigricans* had zich vrijwel geheel teruggetrokken in het Waddengebied, waarbij wederom Texel het hoogste aantal bijeen herbergde, namelijk drie op 11 en 21 mei. De laatste waarneming is van 23 mei bij Koehool, Friesland. Een **Roodhalsgans** *B ruficollis* vloog op 9 mei mee in een groepje Brandganzen *B leucopsis* over het Noordhollands Duinreservaat bij Egmond aan Zee en passeerde een half uur later telpost Camperduin, Noord-Holland. Verspreid over het land waren nog diverse exemplaren aanwezig, met maxima van drie op 1 mei op Schiermonnikoog, Friesland, en op 16 mei op Ameland, Friesland. Op 25 mei werd op Schiermonnikoog de laatste van de 'winter' waargenomen. De ongeringde **Ross' Gans** *Anser rossii* van Werkendam, Noord-Brabant, werd opnieuw gezien van 17 mei tot 11 juni, op het laatst behoorlijk in de rui. Daarnaast zwommen er twee op 14 juni in Nationaal Park De Alde Feanen, Friesland. Nederland is weer een nieuwe broedvogelsoort rijker. Al geruime tijd verbleef een paartje **IJseend** *Clangula hyemalis* op de nieuw aangelegde Marker Wadden, Flevoland. Maar wat niemand in zijn stoutste dromen kon bevroeden, gebeurde toch: op 27 juni zwommen er vier schattige pulli bij het vrouwtje! Een tweede paar bleef tot half mei bij Lienden, Gelderland, maar daarna werd hier alleen het vrouwtje nog af en toe gemeld. De grootste concentratie van het afgelopen half jaar, op de Noordzee bij Ameland, telde nog maximaal vier exemplaren op 3 mei. Een mannetje **Koningseider** *Somateria spectabilis* verbleef vanaf 14 mei rondom Vlieland, Friesland. Op 18 mei werd deze vogel op de Noordzee bij Vlieland waargenomen en op die dag ook rustend op een zandplaat in de Waddenzee bij de noordpunt van Texel. Hij werd echter het meest op grote afstand vanaf de oostpunt van Vlieland gezien op Richel in de Waddenzee. Op 24 juni is hij hier voor het laatst waargenomen. Maximaal drie adulte mannetjes **Brilzee-eenden** *Melanitta perspicillata* zwommen nog tot 14 mei op de Noordzee boven Ameland in een grote groep Zwarte Zee-eenden *M nigra*. Enigszins verrassend was de terugkeer van het overzomerende adulte mannetje **Buffelkopeend** *Bucephala albeola* op 25 mei in de Brabantse Biesbosch, Noord-Brabant (voor het vierde achtereenvolgende jaar); aangenomen wordt dat dit de bekende vogel van Barendrecht, Zuid-Holland, betreft, die daar afgelopen winter voor het eerst sinds 2004/05 niet meer werd aangetroffen. Solitaire **Witoogeenden** *Aythya nyroca* werden waargenomen in 14 uurhokken, voornamelijk in het noordoosten. Het meeste bekijks trok een mannetje dat zich de gehele periode ophield bij Kampen, Overijssel.

RALLEN TOT STORMVOGELS Een veel bezocht **Klein Waterhoen** *Zapornia parva* riep van 10 mei tot en met 11 juni langs Wetering-West in de Weerribben, Overijssel. Van twee andere plekken in dit gebied kwamen incidentele waarnemingen op 22 mei en 3 juni. Op 18 mei werd een exemplaar ontdekt op een stilgehouden locatie bij Valkenswaard, Noord-Brabant. Het eerste **Kleinst Waterhoen** *Z pusilla* van het jaar was een mannetje in de Kennemerduinen, Noord-Holland, dat op 9 mei overdag zomaar bij toeval in een mistnet vloog dat opgesteld stond tussen de duindoorns. Het was het eerste in Nederland geringde exemplaar sinds 1997. Bovendien kon vermoedelijk voor het eerst de alarmroep van de soort worden opgenomen. Er tekende zich vervolgens een prima voorjaar voor de soort af. Hij werd van c 25 locaties uit 11 provincies gemeld; alleen Zeeland bleef verstoken van een waarneming. Nog 15 **Parelduikers** *Gavia arctica* passeerden de zeetrektelposten in noordelijke richting; de laatste op 12 juni langs telpost Camperduin. Op 25 en 26 mei zwom een onvolwassen exemplaar op de Waddenzee bij Texel. **Noordse Stormvogels** *Fulmarus glacialis* werden vrijwel uitsluitend ver op de Noordzee gezien tijdens surveys, maar er was ook een exemplaar dat op 6 juni boven het Noordhollands Duinreservaat bij Wijk aan Zee, Noord-Holland, een rondje vloog, bijna een kilometer landinwaarts. Vier **Noordse Pijlstormvogels** *Puffinus puffinus* keilden eind juni noordwaarts langs telpost Camperduin (twee op 27 juni) en telpost Westerslag op Texel (twee op 30 juni). Ook op het Nederlands Continentaal Plat werden enkele waarnemingen verricht. De eerste **Vale Pijlstormvogel** *P mauretanicus* van het jaar was er vroeg bij: op 30 juni vloog een exemplaar naar zuid langs telpost Camperduin. Inclusief dit exemplaar zijn er nu ooit acht gezien in juni volgens de database van trektellen.nl (de vroegste op 9 juni 2012 langs telpost Egmond aan Zee). Er zitten overigens ook vier mei-waarnemingen in trektellen.nl.

OOIEVAARS TOT AALSCHOLVERS **Zwarte Ooievaars** *Ciconia nigra* waren met negen exemplaren schaars op de trektelposten. Daarentegen kwamen er uit niet minder dan 119 uurhokken waarnemingen van overvliegende of pleisterende vogels (maximaal vier bijeen). Het leek een goed jaar voor **Woudaap** *Ixobrychus minutus*, met waarnemingen op minimaal 15, dikwijls stilgehouden, locaties. In de nacht van 17 op 18 juni werd een roepen-

de opgenomen boven Grevenbicht, Limburg. Het was een goed voorjaar voor **Ralreiger** *Ardeola ralloides*, met waarnemingen van acht locaties, zoals het nieuwe natuurgebied de Marker Wadden, waar vanaf 27 juni een vogel verbleef. Op 23 mei trok een **Koereiger** *Bubulcus ibis* over telpost Maarnsche Berg bij Maarn, Utrecht. Waarnemingen van pleisteraars kwamen opnieuw vooral uit het zuidwesten, maar nergens werden er meer dan twee bijeen gezien. Broedgevallen, zoals dit voorjaar in Brittannië, bleven ook dit jaar weer uit. Na jarenlange focus op Noord- en Zuid-Holland werden in deze periode **Zwarte Ibissen** *Plegadis falcinellus* weer vooral in Drenthe en Groningen gezien. Op 26 juni vloog het hoogste aantal, negen, over De Onlanden, Drenthe. Een adulte **Dwergaalscholver** *Microcarbo pygmaeus* trok op 5 en 6 juni veel bekijks bij Keent, Noord-Brabant. Later werd bekend dat mogelijk dezelfde vogel op 3 juni reeds was gefotografeerd bij Hurwenen, Gelderland.

GRIELEN TOT STRANDLOPERS Er waren drie waarnemingen van **Grielen** *Burhinus oedicnemus*, maar alleen een exemplaar op 8 juni bij Rhoon, Zuid-Holland, trok veel bekijks. **Steltkluten** *Himantopus himantopus* broedden onder meer met drie of vier paar in het Zuidlaardermeergebied, Groningen, met twee paar bij Kampen, Overijssel, en met twee paar bij Woensdrecht, Noord-Brabant. Op 11 mei trok een exemplaar langs telpost Breskens en op 12 mei konden er twee worden bijgeschreven op telpost Loozerheide bij Weert, Limburg. Een naar zomerkleed ruiende **Amerikaanse Goudplevier** *Pluvialis dominica* werd op 25 en 31 mei gemeld in de Dollard bij de Punt van Reide, Groningen. Op 4 juni werd hier een exemplaar in volledig zomerkleed gefotografeerd. Het bleef een goed voorjaar voor **Morinelplevieren** *Charadrius morinellus*. Trektellers noteerden er nog 14. Het maximale aantal ter plaatse op Texel bedroeg 28, met de laatste van het voorjaar op 25 mei. Tamme, veelbezochte vogels verbleven op 13 en 14 mei op het Kootwijkerzand, Gelderland, van 13 tot 17 mei in de Niftrikse Waarden, Gelderland (twee), en van 15 tot 22 mei in de Amsterdamse Waterleidingduinen, Zuid-Holland (twee); het waren laatstgenoemde die mogelijk later op 22 mei in het Noordhollands Duinreservaat, Noord-Holland, werden gezien. Spectaculair was de **Grijskopkievit** *Vanellus cinereus* die zich op 27 en 28 juni tussen Kieviten *V vanellus* ophield bij Workum, Friesland. De soort heeft een beperkt broedgebied in het noord-oosten van China en Japan en wordt soms ver ten zuiden van het wintergebied als dwaalgast waargenomen, zoals zes keer in 2006-17 in Australië; er waren echter tot vorig jaar geen westelijke waarnemingen in de 'kleine' WP (de eerste was in Turkije in maart 2018). Toch kwam deze vogel niet geheel onverwacht omdat de soort in mei dit jaar voor het eerst in Europa werd gezien: in Noorwegen en Zweden. De toekomst zal leren of er net als in Australië een nieuw patroon ontstaat. Een **Indische Kievit** *V indicus* van de westelijke ondersoort *V i aigneri* op 19 juni op de noordpunt Texel zorgde aanvankelijk voor heel wat minder enthousiasme. Zo namen maar weinig vogelaars de boot naar het eiland. Hij was bovendien al in de middag weer verdwenen maar werd op 23 juni nog door twee vogelaars op Ameland gefotografeerd. Al snel werd bekend dat hij ook, steeds door slechts een enkele waarnemer, was gefotografeerd in Bucher Ried, Bayern, Duitsland, op 31 mei, en bij Doel, Oost-Vlaanderen, België, op 11 juni. Het werd echt spectaculair toen op basis van het vergelijken van foto's van een exemplaar op 14 mei op Pag, Kroatië, bleek dat ook dit hetzelfde individu betrof. Het deed het beeld over de herkomst bij veel vogelaars kantelen. Het broedgebied van deze kievit is veel dichterbij dan dat van Grijskopkievit (onder meer Oost-Turkije, waar hij 's winters wegtrekt) maar hij staat niet bekend als langeafstandstrekker; wel bleek naderhand dat het geen nieuwe soort voor Europa betrof want er doken drie gevallen uit het zuidwesten van Rusland op. Een **Woestijnplevier** *Anarhynchus leschenaultii* werd op 20 mei ontdekt op het Slufterstrand bij de Maasvlakte, Zuid-Holland. Later op deze dag verplaatste hij zich naar de Kwade Hoek bij Stellendam, Zuid-Holland, waar hij tot 23 mei bleef. Op c 11 locaties zaten, vooral eind mei, **Breedbekstrandlopers** *Calidris falcinellus*. Het hoogste aantal, vier, liep op 25 mei in de Dollard, Groningen. Een **Gestreepte Strandloper** *C melanotos* bevond zich van 26 mei tot 1 juni in de Lauwersmeer, Friesland. De eerste **Grauwe Franjepoten** *Phalaropus lobatus* van het jaar verschenen op 16 mei bij Goes, Zeeland, en in de Emmapolder, Groningen. Daarna volgden waarnemingen op nog zes plekken langs de kust. Een **Rosse Franjepoot** *P fulicarius* verbleef op 19 mei in de Sophiapolder bij Hendrik-Ido-Ambacht, Zuid-Holland. **Terekruiters** *Xenus cinereus* werden gemeld op 11, 18 en 19 mei bij de Punt van Reide; op 19 mei bij Serooskerke, Zeeland; op 24 mei op Richel; op 1 juni op Rottumeroog, Groningen; en op 27 juni over Arnhem-Zuid, Gelderland (nachtelijke geluidsopname). Op c zeven plekken liepen **Poelruiters** *Tringa stagnatilis* rond, zoals in juni langdurig in de Ezumakeeg, Friesland.

ALKEN TOT STERNS Een **Zwarte Zeekoet** *Cepphus grylle* vloog op 21 mei langs Richel. Een adulte **Kleinste Jager** *Stercorarius longicaudus* werd op 17 juni gefotografeerd op Het Rif, een zandplaat tussen Ameland en Schiermonnikoog. Zeetrektellers noteerden in totaal 45 **Kleine Jagers** *S parasiticus* en drie **Grote Jagers** *S skua*. De bekende tweede-kalenderjaar **Kleine Burgemeester** *Larus glaucoides* werd tot 18 mei gezien in Amsterdam, Noord-Holland, waar hij helaas ook zijn einde vond; hij liep een botbreuk op en werd naar een vogelopvangcentrum gebracht, maar was niet meer te redden. Voorts werden tot 19 mei op vier plekken langs de kust exemplaren gemeld. De tweede-kalenderjaar **Grote Burgemeester** *L hyperboreus* in en rond de haven van Vlissingen, Zeeland, bleef de gehele periode. Andere late waarnemingen werden verricht tot 22 mei in Den Helder, Noord-Holland, en op 27 mei op Schiermonnikoog. **Lachsterns** *Gelochelidon nilotica* waren op één hand te tellen. Op 8 mei vloog een exemplaar over Castricum, Noord-Holland, op 14 mei passeerde een exemplaar telpost Breskens, Zeeland, en op 10 juni was er een waarneming op de Slikken van Bommenede, Zeeland. Er werden 17 **Reuzensterns** *Hydroprogne caspia* geteld

375 Grijze Wouw / Black-winged Kite *Elanus caeruleus*, Terhole, Zeeland, 11 mei 2019 *(Corstiaan Beeke)*

376 IJseenden / Long-tailed Ducks *Clangula hyemalis*, vrouwtje met jongen, Marker Wadden, Flevoland, 27 juni 2019 *(Eric Menkveld)*

377 Monniksgier / Cinereous Vulture *Aegypius monachus*, tweede-kalenderjaar, Hellendoorn, Overijssel, 25 mei 2019 *(Arnoud B van den Berg)*

op trektelposten en de soort werd in 56 uurhokken gezien. Het hoogste aantal was een groep van acht op 18 mei in de Lauwersmeer, Groningen. In het Zuidlaardermeergebied, Groningen, kwamen opnieuw **Witwangsterns** *Chlidonias hybrida* tot broeden; in totaal zijn hier c 35 broedparen geteld. Ook elders in het land doken exemplaren op, waarbij de waarneming van negen kortstondig foeragerende vogels in het Zwanenwater bij Callantsoog, Noord-Holland, het meest in het oog springt. Op 13 mei trokken er twee langs telpost Breskens. Op trektelposten werden zes **Witvleugelsterns** *C leucopterus* gezien. Hoewel er veel waarnemingen waren in het Zuidlaardermeergebied, zijn er geen broedgevallen bekend. Het hoogste aantal hier was vijf op 2 4 mei. Maximaal vier vlogen er op 16 en 17 mei in de Brabantse Biesbosch en op 18 mei boven Mariëndal, Den Helder, Noord-Holland. Een **Dougalls Stern** *Sterna dougallii* werd op 20 mei gefotografeerd in De Putten bij Camperduin.

ROOFVOGELS Na de ongekende roofvogeltrek in de vorige periode was de koek in mei-juni duidelijk op. Alle leuke soorten scoorden slechts fracties van de aantallen in maart-april, of ontbraken zelfs op de telposten, zoals Steppekiekendief *Circus macrourus* en Ruigpootbuizerd *Buteo lagopus*. Van de andere soorten werden de volgende aantallen geteld: 51 **Visarenden** *Pandion haliaetus,* 31 **Blauwe Kiekendieven** *C cyaneus*, 18 **Grauwe Kiekendieven** *C pygargus*, 29 **Rode Wouwen** *Milvus milvus*, 36 **Zwarte Wouwen** *M migrans*, acht **Zeearenden** *Haliaeetus albicilla*, drie **Roodpootvalken** *Falco vespertinus* en 119 **Smellekens** *F columbarius*. **Grijze Wouwen** *Elanus caeruleus* werden gezien op 10 en 11 mei bij Terhole, Zeeland, en op 11 mei over het Dijkgatbos in de Wieringermeer, Noord-Holland. Een **Slangenarend** *Circaetus gallicus* trok op 18 juni over telpost Lettele, Overijssel, en werd even later opgepikt boven Almen, Gelderland. Op traditionele plekken zoals De Hamert, Limburg, waren er maximaal twee, net als in de omgeving van het Deelensche Veld op de Hoge Veluwe, Gelderland, en dit jaar was er slechts één in het Fochteloërveen, Drenthe/Friesland. Het eerste broedgeval in Nederland blijft nog steeds uit... Verder werd op 7 mei een exemplaar gemeld boven Gouda, Zuid-Holland, en op 12 mei boven Sellingen, Groningen. **Vale Gieren** *Gyps fulvus* vlogen op 19 mei over telpost Strabrechtse Heide, Noord-Brabant; op 21 mei over Maastricht, Limburg (twee); op 1 juni over Geleen, Limburg (twee); op 2 juni over Middelburg, Zeeland; op 4 en 5 juni bij Sint Anthonis, Noord-Brabant (drie); op 9 juni boven Arnhem, Gelderland, en Hengelo, Overijssel; op 10 juni op de Hoge Veluwe; op 11 juni bij Herveld, Gelderland (twee); op 21 juni bij Molenhoek, Limburg, en over telpost Hazewater bij Amersfoort, Utrecht; en op 23 juni in het Haaksbergerveen, Overijssel (twee). In mei verschenen maar liefst drie **Monniksgieren** *Aegypius monachus*. Een vierde-kalenderjaar vrouwtje ('Brinzola'), dat in 2016 verzwakt was opgeraapt in Noord-Spanje en na een verblijf in een opvangcentrum in oktober 2018 was losgelaten en voorzien van een GPS-zender vloog in mei via België, Nederland, Duitsland, Denemarken en Zweden naar Noorwegen; ze passeerde Nederland ongezien op 9 mei. Vervolgens stak een gekleurringd exemplaar (wit FUH) afkomstig uit een reïntroductiepopulatie in Zuid-Frankrijk vanuit België de grens over bij Maastricht, Limburg, maar ook deze wist te ontsnappen aan bijna alle Nederlandse vogelaars en vloog door. Op 24 mei werd tot slot een tweede-kalenderjaar

378 Dwergaalscholver / Pygmy Cormorant *Microcarbo pygmaeus*, Keent, Noord-Brabant, 5 juni 2019 *(Harvey van Diek)*

zonder ringen of gebleekte pennen ontdekt in De Onlanden. Niet veel later verdween deze in noordelijke richting tot boven Groningen, Groningen. Kort voor donker werd hij echter teruggevonden bij Hellendoorn, Overijssel. De volgende ochtend liet hij zich hier uitvoerig bewonderen door veel vogelaars, alvorens rond het middaguur in zuidwestelijke richting weg te vliegen naar België (om 13:00 vloog hij al boven Apeldoorn, Gelderland). Een **Schreeuwarend** *Clanga pomarina* werd op 13 mei gemeld bij Dalfsen, Overijssel. Daarna volgden meldingen van niet tot op soort gedetermineerde *Clanga*-arenden op 1 juni op Ameland, op 6 juni bij Piaam, Friesland, en op 13 juni op Vlieland. Een tweedekalenderjaar **Steenarend** *Aquila chrysaetos* vloog op 24 mei noordwaarts langs Zwartsluis, Overijssel, maar werd nadien helaas nergens opgepikt; het laatste twitchbare geval dateert alweer van 2002. Een lichte vorm **Dwergarend** *A pennata* die op 4 mei al bij Tienen, Vlaams-Brabant, België, was gefotografeerd, liet zich op 14 mei kortstondig bekijken in de omgeving van Yerseke, Zeeland, en werd een dag later nogmaals opgemerkt in de buurt van Hulst, Zeeland. Andere meldingen volgden op 13 juni bij Driel, Gelderland, op 21 juni bij Houten, Utrecht, en op 29 juni bij Beesd, Gelderland. Op dezelfde locatie in Noordoost-Groningen als in 2017 werd ook dit jaar met succes gebroed door **Steppekiekendieven**; zes jongen vlogen uit. Bovendien werd bekend dat een van de jongen van 2017 (een vrouwtje) dit jaar broedde (met een mannetje Steppekiekendief) in Noord-Spanje. Een **Dwergooruil** *Otus scops* werd op 24 mei omstreeks 01:40 opgenomen in het Soesterkwartier in Amersfoort. Latere zoekacties leverden helaas niks op. Eind juni was het aantal broedende **Velduilen** *Asio flammeus* in Friesland gestegen tot bijna 60; net als in 2014 profiteerde de soort van hoge aantallen Veldmuizen *Microtus arvalis* in sommige delen van het agrarische gebied.

HOPPEN TOT MEZEN **Hoppen** *Upupa epops* werden gemeld op c 24 plekken verspreid over het land, waarbij het in enkele gevallen ging om zingende exemplaren. **Bijeneters** *Merops apiaster* doken op in zeker 60 uurhokken; de grootste groep telde c 20 en vloog op 2 juni eerst boven Heinkenszand, Zeeland, en een half uur later over De Banjaard, Zeeland. Tot half mei snelden nog vier **Roodstuitzwaluwen** *Cecropis daurica* langs trektelposten. Een **Kleine Klapekster** *Lanius minor* die op 18 juni bij Grijpskerk verbleef, betrof pas de eerste twitchbare voor Groningen. **Roodkopklauwieren** *L senator* werden gemeld op 17 mei melding bij Voorst, Gelderland; op 26 mei bij Enschede, Overijssel; op 1 juni in de Lauwersmeer, Friesland; op 13 en 14 juni bij Oostkapelle, Zeeland; en op 16 juni bij de Dijkwielen in de Wieringermeer, Noord-Holland. Een **Balearische Roodkopklauwier** *L s badius* verbleef op 14 juni langs de Praamweg in de Oostvaardersplassen, Flevoland, waar hij 's avonds door veel vogelaars werd bezocht. Indien aanvaard betreft dit het tweede geval; het eerste was op 6 juni 1993 bij Voorhout, Zuid-Holland. Het verwachte vertrek van de **Dunsnavelnotenkraker** *Nucifraga caryocatactes macrorhynchos* diende zich niet aan; de vogel bleef de gehele periode in Wageningen, Gelderland. Een **Schildraaf** *Corvus albus* die op 22 mei voor het eerst bij Den Oever, Noord-Holland, werd gezien, hield de gemoederen flink bezig. Volgens de één was het de beste dwaalgast ooit, volgens anderen een flop van jewelste en dan is er een derde groep die denkt dat de vogel wel wild is, maar met behulp van een boot in Noordwest-Europa

379 Indische Kievit / Red-wattled Lapwing *Vanellus indicus*, De Tuintjes, De Cocksdorp, Texel, Noord-Holland, 19 juni 2019 *(Arnoud B van den Berg)*

380 Indische Kievit / Red-wattled Lapwing *Vanellus indicus*, Ameland, Friesland, 23 juni 2019 *(Robert Pater)*

381 Grijskopkievit / Grey-headed Lapwing *Vanellus cinereus*, Workum, Friesland, 27 juni 2019 *(Jaap Denee)*

382 Morinelplevier / Eurasian Dotterel *Charadrius morinellus*, Amsterdamse Waterleidingduinen, Zuid-Holland, 16 mei 2019 *(Hans Overduin)*

383 Monniksgier / Cinereous Vulture *Aegypius monachus*, tweede-kalenderjaar, De Onlanden, Peize, Drenthe, 24 mei 2019 *(Theo Bakker)* **384** Bijeneter / European Bee-eater *Merops apiaster*, Berkheide, Wassenaar, Zuid-Holland, 16 mei 2019 *(René van Rossum)* **385** Dwergaalscholver / Pygmy Cormorant *Microcarbo pygmaeus*, Keent, Noord-Brabant, 6 juni 2019 *(Wim van Zwieten)* **386** Woestijnplevier / Greater Sand Plover *Anarhynchus leschenaultii*, Maasvlakte, Zuid-Holland, 20 mei 2019 *(Jacob Molenaar)*

verzeild is geraakt. Een ontbrekende binnenste handpen verraadde dat het dezelfde vogel betrof die van 13 juni 2018 tot in elk geval 19 mei driftig door heel Engeland en Wales zwierf en aan het eind van zijn verblijf in Kent, bij de Straat van Dover, die handpen kwijtraakte. De vogel sloeg na de ontdekking in Den Oever ook hier flink aan het reizen, met waarnemingen van 22 tot 30 mei bij Leens, Groningen; op 31 mei en 13, 14 en (in de namiddag van) 20 juni op Schiermonnikoog; tussendoor op 17 juni op Ameland en vermoedelijk over de Duitse grens in Leer, Niedersachsen; en vanaf 26 juni bij Burdaard, Friesland. De ruim 40 000 **Pimpelmezen** *Cyanistes caeruleus* die in juni langs telposten passeerden betroffen aantallen die aan najaarsinvasies deden denken. Koplopers waren Kamperhoek (15 692) en De Vulkaan (11 321). De absolute piek van deze ongeevenaard sterke dispersie van juvenielen lag tussen 23 en 25 juni. In de lijst van hoogste dagtotalen die ooit in juni zijn geteld op trekposten, stamt de hele top 30 nu uit 2019. Daarbij zijn 13 tellingen met meer dan 1000 getelde vogels, terwijl tot dit jaar het hoogste dagtotaal voor juni op een bescheiden 86 lag. De beste dag was meteen een Nederlands record: op 25 juni passeerden er 6363 de Kamperhoek (oude record was 6230 langs Vlissingen, Zeeland op 13 oktober 2008). Begin juli 2010 gebeurde er iets soortgelijks, maar op een kleinere schaal en meer gecentreerd langs de oostzijde van het IJsselmeer, Friesland. Andere omvangrijke zomererupties zijn vanaf telposten niet vastgelegd.

BOSZANGERS TOT GRASZANGERS Een **Groene Fitis** *Phylloscopus nitidus* zong in de ochtend van 24 juni in een park in de wijk Holy in Vlaardingen, maar werd aanvankelijk als Grauwe Fitis *P trochiloides* gedetermineerd. Nadat in het begin van de middag alarmbellen waren gaan rinkelen, kon hij helaas niet meer worden teruggevonden. Indien aanvaard betreft dit het eerste geval. **Grauwe Fitissen** zongen op 20 mei op de westpunt

387 Kleine Klapekster / Lesser Grey Shrike *Lanius minor*, mannetje, Grijpskerk, Groningen, 18 juni 2019 *(Kees Bode)* **388** Balearische Roodkopklauwier / Balearic Woodchat Shrike *Lanius senator badius*, tweede-kalenderjaar, Praamweg, Oostvaardersplassen, Flevoland, 14 juni 2019 *(Co van der Wardt)* **389** Bonte Tapuit / Pied Wheatear *Oenanthe pleschanka*, mannetje, Noordoosthoek, Vlieland, Friesland, 16 juni 2019 *(Durk Lautenbag)* **390** Iberische Tjiftjaf / Iberian Chiffchaff *Phylloscopus ibericus*, Houten, Utrecht, 10 mei 2019 *(Julian Bosch)* **391** Withalsvliegenvanger / Collared Flycatcher *Ficedula albicollis*, vrouwtje, Julianadorp, Noord-Holland, 20 mei 2019 *(Gerrit Welgraven)* **392** Citroenkwikstaart / Citrine Wagtail *Motacilla citreola*, vrouwtje, Lentevreugd, Wassenaar, Zuid-Holland, 20 mei 2019 *(Arjan Portengen)*

393 Orpheusspotvogel / Melodious Warbler *Hippolais polyglotta*, Oostkapelle, Zeeland, 15 juni 2019 *(Kris De Rouck)* **394** Roodsterblauwborst / Red-spotted Bluethroat *Luscinia svecica svecica*, mannetje, Eempolders, Eemnes, Utrecht, 25 mei 2019 *(Jaap Dijkhuizen)* **395** Kleine Vliegenvanger / Red-breasted Flycatcher *Ficedula parva*, adult mannetje, Hoge Veluwe, Gelderland, 23 juni 2019 *(Alex Bos)*

396 Schildraaf / Pied Crow *Corvus albus*, adult, Leeuwarden, Friesland, 15 juli 2019 *(Co van der Wardt)*

397 Zwartkopgors / Black-headed Bunting *Emberiza melanocephala*, mannetje, Nes, Ameland, Friesland, 9 juni 2019 *(Andries Zijlstra)*

398 Vale Gier / Griffon Vulture *Gyps fulvus*, Sint-Anthonis, Noord-Brabant, 5 juni 2019 *(Harvey van Diek)* **399** Vale Gier / Griffon Vulture *Gyps fulvus*, Hoge Veluwe, Gelderland, 10 juni 2019 *(Hans Tetteroo)* **400** Roodkopklauwier / Woodchat Shrike *Lanius senator*, mannetje, Oostkapelle, Zeeland, 14 juni 2019 *(Hans Tetteroo)*

van Ameland; op 25 en 26 mei in de Staatsbossen op Texel; op 26 mei bij Oost-Vlieland, Friesland; en op 5 juni bij Zwolle, Overijssel. Daarnaast waren er nog meldingen op 24 mei in Alphen aan den Rijn, Zuid-Holland, en op 30 mei op Vlieland, Friesland. Een **Bladkoning** *P inornatus* werd op 1 mei gefotografeerd nabij Purmerend, Noord-Holland. Verrassend was de melding van een **Bergfluiter** *P bonelli* op 23 mei kortstondig zingend in de tuin van een vogelaar in de wijk Lunetten in Utrecht, Utrecht. Een stevige influx van **Iberische Tjiftjaffen** *P ibericus* zorgde voor veruit het beste jaar ooit, met goed gedocumenteerde op 10 mei bij Houten, Utrecht; van 11 tot 17 mei in Kwintsheul, Zuid-Holland; vanaf 13 mei op Vlieland (nieuwe soort voor het eiland); van 14 tot 20 mei in Lelystad, Flevoland; op 16 en 17 mei op Solleveld bij Den Haag, Zuid-Holland; vanaf 18 mei tot zeker 18 juni bij Veenklooster, Friesland; en op 29 mei bij Sint Laurens, Zeeland. Daarnaast was er nog een reeks meldingen zonder opnames, de één serieuzer dan de andere, of van afwijkend zingende vogels. Met de vier van april erbij opgeteld, waarvan die van Groningen ook deze periode aanwezig was, lag het totaal voor dit voorjaar op minimaal 11. Voorheen was 2010 het beste jaar, met zes. **Krekelzangers** *Locustella fluviatilis* zongen op 22 mei op Texel en vanaf 2 juni nabij Almere, Flevoland. Het was een topvoorjaar voor **Orpheusspotvogel** *Hippolais polyglotta*. De eerste zekere exemplaren doken op 11 mei op bij Oost-Maarland, Limburg, en Alblasserdam, Zuid-Holland. Er waren c 33 gevallen, de meeste op breed gedeelde locaties. Limburg spande met minimaal negen de kroon, maar de soort dook ruim verspreid in het land op. Er waren buiten Limburg met bewijs ondersteunde exemplaren in Flevoland (een tot twee), Friesland, Gelderland (twee), Groningen, Noord-Brabant, Noord-Holland (vijf tot zes), Utrecht (twee), Zeeland (vier) en Zuid-Holland (vijf). Daarbij waren drie ringvangsten: op 16 juni op de Kamperhoek, Flevoland, op 17 juni bij Sumarreheide, Friesland, en op 23 juni bij Castricum, Noord-Holland. De meest bezochte vogels zongen van 21 mei tot 2 juni bij Oostvoorne, Zuid-Holland; van 23 mei tot 6 juni bij Sint-Michielsgestel, Noord-Brabant; vanaf 30 mei bij de Grevelingen, Zuid-Holland; en van 14 juni tot in elk geval 23 juni in de Gagelpolder, Utrecht. Het paar dat in de voorgaande twee jaren succesvol broedde bij Castricum, Noord-Holland, keerde niet terug, maar elders in het Noordhollands Duinreservaat was tot zeker 17 juni wel een territoriaal paar aanwezig. Een **Struikrietzanger** *Acrocephalus dumetorum* verbleef op 12 juni in het Noordhollands Duinreservaat bij Castricum maar zong weinig en was daardoor lastig te observeren. **Graszangers** *Cisticola juncidis* lieten zich bewonderen op verschillende plekken in Zeeland en vanaf 28 juni bij Beugen, Noord-Brabant. Tevens werd op 20 juni een exemplaar opgenomen bij Muntendam, Groningen.

SPREEUWEN TOT GORZEN Een **Roze Spreeuw** *Pastor roseus* werd op 2 mei gefotografeerd in Oostburg, Zeeland, en op 29 juni werd een exemplaar gemeld bij Burdaard. Opmerkelijk voor de tijd van het jaar was een ringvangst van een mannetje **Beflijster** *Turdus torquatus* op 18 juni in de Kennemerduinen bij Bloemendaal, Noord-Holland. Op 18 mei werden 76 **Grauwe Vliegenvangers** *Muscicapa striata* geteld op telpost Kustweg, Lauwersmeer, Groningen. Dit betreft de tweede dag ooit voor Nederland; het record bedraagt 87 op 10 mei 1993 langs telpost Breskens, Zeeland. Een **Noordse Nachtegaal** *Luscinia luscinia* zong op 2 juni langs de Slufterweg op Texel. In mei werden c vijf **Roodsterblauwborsten** *L svecica svecica* ontdekt, waaronder een veel bezocht mannetje op 25 mei bij Eemnes, Utrecht. Op 23 mei werd een vogelaar in Alkmaar, Noord-Holland, 's ochtends vroeg verblijd door een zingende **Kleine Vliegenvanger** *Ficedula parva* in zijn tuin. Gedurende de rest van de periode werd nog een handvol waarnemingen bekend, waaronder (weer) een zingende op de Hoge Veluwe. Een vrouwtje **Withalsvliegenvanger** *F albicollis* werd op 20 mei gefotografeerd bij Julianadorp, Noord-Holland, maar pas later herkend. Een mannetje **Bonte Tapuit** *Oenanthe pleschanka* verbleef op 16 juni op de oostpunt van Vlieland (derde juni-geval). Vrouwtjes **Citroenkwikstaart** *Motacilla citreola* werden gefotografeerd op 1 mei bij het Naardermeer, Noord-Holland, en op 20 mei in Lentevreugd bij Wassenaar, Zuid-Holland. Voorts was er een melding van een overvliegend vrouwtje op 14 mei over telpost Eemshaven, Groningen. Trektellers registreerden in totaal vier **Duinpiepers** *Anthus campestris*, vijf **Roodkeelpiepers** *A cervinus* (tegen 14 in de vorige periode), zes **Europese Kanaries** *Serinus serinus* en een **Grauwe Gors** *Emberiza calandra*. Een late **IJsgors** *Calcarius lapponicus* verbleef van 20 tot 22 mei bij Hollum op Ameland. Een mannetje **Zwartkopgors** *E melanocephala* verbleef op 9 juni bij Nes op Ameland en op 10 juni werd een mannetje gefotografeerd op een stilgehouden locatie in Groningen. In mei werd slechts een handvol **Ortolanen** *E hortulana* opgemerkt en op 2 juni verscheen nog een laatkomer op Rottumeroog, Groningen. Net als in 2018 werden dit voorjaar liefst twee **Cirlgorzen** *E circlus* gevonden. Een vrouwtje werd op 10 juni gefotografeerd bij de Zevenhuizerplas bij Rotterdam, Zuid-Holland, en vanaf 21 juni zong een mannetje op een niet vrijgegeven locatie bij Nederweert, Limburg, op nog geen 10 km van de twitchbare vogel op de provinciegrens van Limburg en Noord-Brabant in 2018.

Voor het samenstellen van deze rubriek is dankbaar gebruik gemaakt van de websites dutchbirdalerts.nl, sovon.nl, trektellen.nl en waarneming.nl.

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DB Actueel

New bird species described in 2018 In 2018, six new bird species have been formally described.

Western Square-tailed Drongo / Westelijke Rechtstaartdrongo *Dicrurus occidentalis* (Fuchs, J, Douno, M, Bowie, R C K & Fjeldså, J 2018. Taxonomic revision of the Square-tailed Drongo species complex (Passeriformes: Dicruridae) with description of a new species from western Africa. Zootaxa 4438: 105-127). The species was described based on a molecular and morphological study of African drongos. Its closest relative is Sharpe's Drongo *D sharpei* (from which it diverged about 1.3 million years ago) and it differs from this species in its bill width and height, and from other western African drongo species by its dull purplish blue gloss. This taxon was overlooked by previous avian systematists because they either lacked comparative material from western Africa or because the key diagnostic bill characters had not been measured. The holotype is an adult female collected at Sérédou, Macenta prefecture, Nzérékoré region, Guinea, in December 1959. Western Square-tailed Drongo inhabits secondary forest and gallery forest from coastal Guinea to Nigeria. At the time of writing, only one vocalization of this species was available on xeno-canto (a call recorded at Dande, Kédougou, Sénégal; XC353659). The paper can be found at https://tinyurl.com/y2c5kqww.

Cordillera Azul Antbird / Cordillera-Azulmiervogel *Myrmoderus eowilsoni* (Moncrieff, A E, Johnson, O, Lane, D F, Beck, J R, Angulo, F & Fagan, J 2018. A new species of antbird (Passeriformes: Thamnophilidae) from the Cordillera Azul, San Martín, Peru. Auk 135: 114-126). In July 2016, Josh Beck visited Flor de Café, Cordillera Azul, San Martín region, Peru, and heard an unknown alarm call of an antbird. The next days, the authors collected sound recordings, photographs, videos and voucher specimens to document this new species. Plumage, voice and molecular evidence distinguish this species from its sister taxon Ferruginous-backed Antbird *M ferrugineus*. The new species is currently known only from the Flor de Café ridge around the type locality, between 1340 and 1670 m asl. This distribution encompasses just 15 km^2. It is named after Edward Osborne Wilson to honor his tremendous devotion to conservation and his patronage of the Rainforest Trust. The paper is available at https://tinyurl.com/y2jcl75v.

Southern Dark Newtonia / Zuidelijke Groene Newtonia *Newtonia lavarambo* (Younger, J L, Strozier, L, Maddox, J D, Nyári, Á S, Bonfitto, M T, Raherilalao, M J, Goodman, S M & Reddy, S 2018. Hidden diversity of forest birds in Madagascar revealed using integrative taxonomy. Mol Phylogen Evol 124: 16-26). In an integrative taxonomic study of the genus *Newtonia* of the endemic family Vangidae (vangas) of Madagascar, using genomic, morphological and ecological data, a strong diversification was discovered within Dark Newtonia *N amphichroa*, revealing two distinct lineages isolated in different regions of humid forest. The southern lineage was described as a new species, Southern Dark Newtonia *N lavarambo*. Perhaps somewhat remarkable, the formal description is to be found in the Supplemental information of the above-mentioned paper and is authored by Goodman, Younger, Raherilalao & Reddy. Interestingly, Common Newtonia *N brunneicauda* (widespread on Madagascar in all kind of habitats), which was beforehand suspected to reveal hidden diversity, was not found to show distinct diverging lineages. The scientific name of the new species is derived from the Malagasy words *lava* (long) and *rambo* (tail), referring to one of the morphological differentiating characters. Note that in the IOC list this taxon is (still) treated as subspecies of *N amphichroa*. The paper can be found at: https://tinyurl.com/y2x6877r.

Blue-throated Hillstar / Blauwkeelbergnimf *Oreotrochilus cyanolaemus* (Sornoza-Molina, F, Freile, J F, Nilsson, J, Krabbe, N & Bonaccorso, E 2018. A striking, critically endangered, new species of hillstar (Trochilidae: *Oreotrochilus*) from the southwestern Andes of Ecuador. Auk 135: 1146-1171). In April 2017, Francisco Sornoza-Molina observed and photographed a previously unknown hillstar during fieldwork in the southern highlands of Ecuador – an area historically poorly explored by ornithologists. After one month, the team returned to capture several specimens and confirm the discovery of a new species, Blue-throated Hillstar *Oreotrochilus cyanolaemus*. It is most similar in adult male plumage to Green-headed Hillstar *O stolzmanni* and Ecuadorian Hillstar *O chimborazo*. However, male and female show unique combinations of plumage characters that are likely to act as social signals. Phylogenetic analyses based on mitochondrial DNA indicate that this new species is closely related to Green-headed Hillstar and Black-breasted Hillstar *O melanogaster*, whereas genetic distances and preliminary comparisons of vocalizations suggest a sister relationship with Green-headed. Both the scientific and vernacular names describe the species' most distinctive character: the deep to ultramarine blue (*kuanos*) throat patch or gorget (*laimos* = throat). The geographic distribution of the new species seems to be restricted to five localities in Cordillera de Chilla-Tioloma-Fierro Urcu, in the western Andes of southern Ecuador (3325-3680 m asl). Based on its restricted distribution (an area of c 114 km^2), apparently low population size (probably only c 250-750 individuals), and lack of protection of its habitat, Blue-throated Hillstar has already been evaluated as 'critically endangered'. The paper is available at https://tinyurl.com/y5q3ntxr.

Whenua Hou Diving Petrel / Whenua-Houalkstormvogeltje *Pelecanoides whenuahouensis* (Fischer, J H, Debski, I, Miskelly, C M, Bost, C A, Fromant, A, Tennyson, A J D, Tessler, J, Cole, R, Hiscock, J H, Taylor, G A & Wittmer, H U 2018. Analyses of phenotypic differentiations among South Georgian Diving Petrel (*Pelecanoides georgicus*) populations reveal an undescribed and highly endangered species from New Zealand. PLoS ONE 13

(6): e0197766). Differences in breeding habitat and results from a preliminary molecular analysis indicated that the New Zealand population of the South Georgian Diving Petrel *Pelecanoides georgicus* was a distinct, yet undescribed, species. Analyses of differences in biometric and plumage characters showed it to be a new species, Whenua Hou Diving Petrel *P whenuahouensis*. The population is limited to a single breeding colony on the predator-free Codfish Island. The species is named after this island in the Māori language: Whenua Hou. Based on subfossil remains, this species formerly nested on Auckland Island and Stewart Island, and possibly on the Chatham and Macquarie islands as well. The offshore distribution of Whenua Hou Diving Petrel remains unknown. Due to severe reductions in its range and the very low number of remaining birds (c 150 individuals) the species was classified as 'critically endangered'. The paper can be found at https://tinyurl.com/y6boyprj.

Rote Leaf Warbler / Rotiboszanger *Phylloscopus rotiensis* (Ng, N S R, Prawiradilaga, D M, Ng, E Y X, Suparno, Ashari, H, Trainor, C, Verbelen, P & Rheindt, F E 2018. A striking new species of leaf warbler from the Lesser Sundas as uncovered through morphology and genomics. Sci Rep 8 (1): 15646). A combination of morphology, bioacoustics and analysis of 1000s of genome-wide markers contributed to the description of a new leaf warbler species, Rote Leaf Warbler *Phylloscopus rotiensis*. Probably, it was the first bird species to be described partly on the basis of genome-wide data. The species is endemic to Rote in Indonesia's Lesser Sunda Islands. The presence of a leaf warbler of unknown identity on this island was first noted by Colin Trainor in December 2004. In July 2009, Belgian birders Veerle Dossche and Philippe Verbelen made detailed observations and obtained a series of photographs of the bird. The species is morphologically and genomically highly distinct from its congenerics but there is no vocal differentiation between different island taxa. It inhabits intact primary deciduous forest as well as secondary forest. Due to heavy agricultural use on Rote for many years, only two major forest areas remain that can sustain this species. Thus, it likely qualifies for 'vulnerable' under the IUCN Red List criteria. The island is also the site where another bird species new to science – Rote Myzomela *Myzomela irianawidodoae* – was recently discovered (cf Dutch Birding 40: 140, 2018). The paper is available at https://tinyurl.com/y3ddjufk. Łukasz Ławicki & André J van Loon

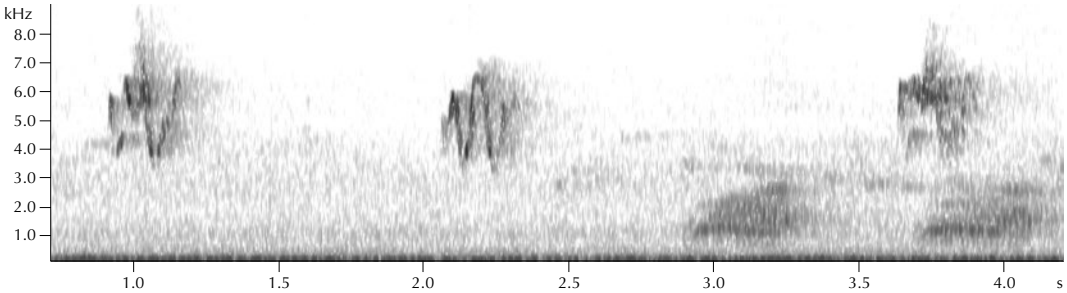
Groene Fitis zoek in Vlaardingen Op maandag 24 juni 2019 kwam ik rond 12:30 thuis na een ochtend veldwerk bij Lochem, Gelderland. Ik maakte op mijn laptop mijn dagelijkse rondje langs vogelwebsites zoals waarneming.nl. Veruit de leukste melding op deze warme zomerdag betrof een zingende Grauwe Fitis *Phylloscopus trochiloides*. Deze was om c 07:00 ontdekt door Francien Domenie, toen ze haar honden uitliet in het park achter haar huis in de wijk Holy in Vlaardingen, Zuid-Holland. De vogel bleek inmiddels door acht vogelaars te zijn bezocht, waaronder Karel Hoogteyling, die twee geluidsopnames bij zijn waarneming had geplaatst. Zonder er al te veel bij na te denken, klikte ik een daarvan aan. De roepjes die volgden deden mij echter opschrikken. In plaats van het gehaaste *twi-tjoe* van Grauwe Fitis, hoorde ik roepjes die mij aan Groene Fitis *P nitidus* deden denken. En dat mijn oren mij niet bedrogen, werd niet veel later duidelijk toen ik een sonagram maakte. Een vreemde mix van ongeloof en paniek was het gevolg.

Ik besloot om Karel een WhatsApp-bericht te sturen met de vraag of hij de vogel ook had kunnen bekijken en of hem daarbij iets vreemds was opgevallen. Mijn opmerking dat ik aan Groene Fitis dacht, resulteerde in een ietwat chaotische conversatie, waarbij sonagrammen afkomstig van Xeno-canto over en weer vlogen. Ik werd er niet rustiger van en kreeg de indruk dat ook Karel het inmiddels enigszins benauwd had gekregen.

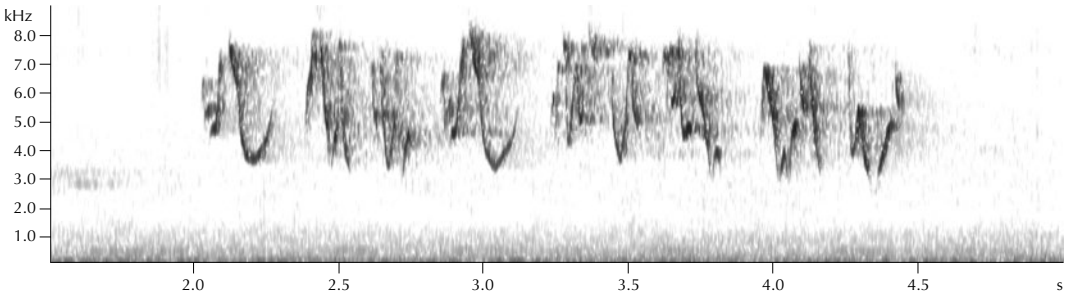
Middels een Dutch Bird Alert stelde ik de rest van vogelend Nederland op de hoogte van mijn vermoeden, waarna ik gespannen maar hoopvol naar Vlaardingen reed. Het feit dat de vogel na 10:53 niet meer was gemeld, verontrustte mij niet erg. Op het heetst van de dag kon deze nachttrekker nooit ver weg zijn, zo meende ik. De daaropvolgende zoekactie door c 40, vanuit het gehele land toegesnelde, vogelaars bleef echter jammer genoeg zonder resultaat. Toen ik de volgende dag eenmaal meer tijd had gevonden om de geluidsopnames (ook de zang) aandachtiger te bestuderen en mijn aanvankelijke determinatie overeind bleef, drong het pas goed tot me door hoe hard onze hobby soms kan zijn... De eerste Groene Fitis voor Nederland ontmaskerd en spoorloos tegelijk!

Zowel de roep als de zang van Groene Fitis zijn met enige oefening te onderscheiden van de andere taxa uit het Grauwe Fitis-complex. De westelijke ondersoort *P t viridanus* van Grauwe Fitis, die tegenwoordig jaarlijks in Nederland wordt vastgesteld, is vrij eenvoudig uit te sluiten. De roep van dit taxon klinkt tweedelig en gehaast, waarbij het tweede deel sterk daalt. Het sonagram toont daardoor n-vormig. De zang van *viridanus* start gewoonlijk met een kort en hoog introductienootje (*tjiet*), waarna onmiddellijk de rest van de zang volgt. Deze bestaat uit een snelle reeks van eenvoudige, veelal snel dalende, zangelementen en vaak zit er een soort slag in de zang, ongeveer zoals bij Vink *Fringilla coelebs*. Groene Fitis heeft daarentegen een meer driedelige roep (w-vormig in een sonagram) en een vrij korte zang zonder het introductienootje van *viridanus*. De zangelementen zijn vaak complexer van structuur (dikwijls v- of w-vormig) en herhalingen van dezelfde elementen binnen een zangstrofe komen minder vaak voor. De vogel van Vlaardingen laat precies die kenmerken zien. Op waarneming.nl waren tevens drie foto's geplaatst, die echter naar alle waarschijnlijkheid een Tjiftjaf *P collybita* tonen en dus geen bijdrage leveren aan de determinatie.

Ook de andere taxa uit het Grauwe Fitis-complex (nominaat *P t trochiloides*, *P t ludlowi*, *P t obscuratus* en Swinhoes Boszanger *P plumbeitarsus*) zijn uit te sluiten door de combinatie van roep en zang. Swinhoes Boszanger staat reeds op de Nederlandse lijst, met drie najaarsgevallen, en lijkt qua roep meer op Groene dan op Grauwe Fitis, maar de zang verschilt duidelijk. Deze is



FIGUUR 1 Groene Fitis / Green Warbler *Phylloscopus nitidus*, roep / call, Vlaardingen, Zuid-Holland, 24 juni 2019 *(Karel Hoogteyling)*



FIGUUR 2 Groene Fitis / Green Warbler *Phylloscopus nitidus*, zang / song, Vlaardingen, Zuid-Holland, 24 juni 2019 *(Francien Domenie)*

langer en melodieuzer, met een snellere opeenvolging van elementen en meer herhalingen. De drie overige taxa, die in een zone zuidelijk van het Tibetaanse Hoogland broeden, vallen op door korte en eenvoudige zangtypen, met nog markantere herhalingen van zangelementen (duidelijkst bij nominaat *trochiloides*). Eerdere studies naar de vocalisaties van deze taxa en talloze geluidsopnames op websites geven een goed beeld van de variatie, onder meer van de overgang tussen nominaat *trochiloides*, *ludlowi* en *viridanus*. Dat het Grauwe Fitis-complex een prachtig en uitdagend studieonderwerp was, wist ik reeds maar ik had nooit verwacht dat ik er op deze manier nog dieper in zou worden gezogen.

Indien aanvaard door de CDNA betreft dit het eerste geval van Groene Fitis voor Nederland. Gelet op de ligging van de overwinteringsgebieden (zuidelijk India en Sri Lanka) en de broedgebieden (onder meer de Kaukasus), is het verschijnen van Groene Fitis als 'overshooting migrant' in het late voorjaar in Noordwest-Europa niet helemaal onverwacht. De soort is reeds vastgesteld als dwaalgast in Brittannië (vier aanvaarde gevallen en twee nog roulerende, waaronder een zingende in Cornwall op 10 juni 2019, bevestigd met DNA), Denemarken (één), de Faeröer (één), Finland (een aanvaarde en een zingende in Helsinki op 18 juni 2019), Duitsland (drie) en Zweden (één). Een relatief groot deel van de gevallen dateert van de laatste vijf jaar. Hopelijk zal een herkansing dus niet al te lang op zich laten wachten. Roy Slaterus

Green Warbler In the morning of 24 June 2019, a Green Warbler *Phylloscopus nitidus* was found in a suburban area at Holy, Vlaardingen, Zuid-Holland, and seen by at least eight observers. The bird was identified from recordings of its song and calls uploaded on the internet. It was not found again in the afternoon and evening. If accepted, it concerns the first for the Netherlands.

Vijf potentiële nieuwe soorten in twee maanden: Schildraaf, Indische Kievit, Groene Fitis, Grijskopkievit en Sakervalk Tussen 22 mei en 20 juli 2019 werd een recordaantal van vijf potentiële nieuwe soorten voor Nederland ontdekt. Geen van de vijf was een makkelijke 'inkopper' want het waren soorten die niet werden verwacht zodat er bij alle veel discussie was (en soms nog is) over herkomst en/of determinatie. Het betekende dat lang niet iedereen erin slaagde tijdig te reageren.

Op 22 mei fotografeerde Fred Visscher bij Den Oever, Noord-Holland, een Schildraaf *Corvus albus*. In het grijze verleden waren al eens eerder exemplaren gezien maar die waren naar werd aangenomen uit gevangenschap afkomstig. Echter, omdat de soort de afgelopen 10 jaren steeds vaker ten noorden en oosten van de Sahara opduikt, wordt er nu anders tegen de status aangekeken. Hij wordt tegenwoordig niet alleen jaarlijks op verschillende plekken in Marokko gezien maar heeft daar (en ook in Libië) zelfs gebroed. Bovendien zijn er waarnemingen in Zuid-Italië, Portugal en Spanje. Een aantal vogelaars hoopte dan ook dat de vogel werd teruggevonden. Hun belangstelling werd alleen maar sterker

toen bleek dat het om de beroemde vogel ging die al bijna een jaar zich kriskras door heel Engeland en Wales verplaatste en voor het laatst op 19 mei nabij de Straat van Dover in East Kent, werd gezien. Daar bleek hij een recente vleugelbeschadiging te hebben identiek aan die op Freds foto. Na zijn korte bezoek aan Den Oever bleek de raaf zich vanaf 24 mei 100 km ten oosten van Den Oever in Leens, Groningen, op te houden en hier kon hij door veel vogelaars worden bezocht. Daarna verbleef hij niet alleen op allerlei plekken op het vasteland van Friesland maar blijkbaar ook in Leer, Niedersachsen, Duitsland, om nu en dan de Waddenzee over te vliegen naar Ameland of Schiermonnikoog, Friesland; vanaf 7 juli verbleef hij in Leeuwarden, Friesland. In Brittannië is er nog geen beslissing genomen of hij als een 'ship-assisted arrival' of een wilde vogel in de boeken gaat, maar men heeft geen aanwijzingen dat hij er ergens uit gevangenschap is ontsnapt.

Op 19 juni zag Jos van den Berg tot zijn verbazing een Indische Kievit *Vanellus indicus* op het Renvogelveld (nu Indische Kievit-veld...) bij De Cocksdorp, Texel, Noord-Holland. Omdat er op dat moment van deze soort geen Europese waarnemingen bekend waren (inmiddels blijken er drie gevallen in Zuidwest-Rusland te zijn) namen maar weinig vogelaars tijdig de boot van de vastewal, voordat de vogel om 15:30 wegvloog. Vier dagen later, op 23 juni, werd hij nog door twee waarnemers gefotografeerd op Ameland. Het betrof de lichtgekleurde westelijke ondersoort, *V i aigneri*, die sinds 1983 in toenemend aantal als zomervogel in Oost-Turkije voorkomt. Vrij snel bleek dat dezelfde vogel op 11 juni door Lamien Verstraete bij Doel, Oost-Vlaanderen, België, was gefotografeerd. Nog weer later dook een foto op van de 13-jarige Leon Wischenbarth die als enige in Bucher Ried, Bayern, Duitsland, de vogel op 31 mei een half uur lang aan de grond zag voordat hij in noord-westelijke richting wegvloog. De klap op de vuurpijl kwam toen Dare Šere van deze zelfde vogel foto's opstuurde die Dejan Grohar op 14 mei op Pag, Kroatië, had gemaakt. Fred Visscher ontfermde zich over al het beeldmateriaal en bewees op basis van veerdetails dat alle waarnemingen met zekerheid hetzelfde exemplaar betroffen. De vogel had zich in 5-6 weken verplaatst over een totale kortste-vluchten-afstand van 1400 km. Het begin van een doorgetrokken lijn tussen de vijf locaties ligt in het zuiden van Turkije of verder in het Midden-Oosten...

De derde nieuwe soort was een in de vroege ochtend van 24 juni door Francien Domenie in Holy, Vlaardingen, Zuid-Holland, ontdekte zingende en roepende *Phylloscopus* die aanvankelijk als Grauwe Fitis *P trochiloides* werd doorgegeven. Een geluidsopname van Karel Hoogteyling werd echter dezelfde middag nog door Roy Slaterus als Groene Fitis *P nitidus* gedetermineerd. De vogel kon toen al niet meer worden teruggevonden.

Op 27 juni zag Libbe Zijlstra vanuit zijn rijdende auto langs de provinciale weg tussen Workum en Parrega, Friesland, een afwijkende vogel tussen de Kieviten *V vanellus* staan. Het bleek een Grijskopkievit *V cinereus*, een broedvogel van Noordoost-China en Japan die 's winters regelmatig ver wegtrekt naar Zuidoost-Azië en in 2006-17 zelfs zes keer als dwaalgast Australië bereikte. Deze vogel trok anders dan de vorige drie nieuwe soorten wel direct heel veel vogelaars. Dat kwam omdat het mogelijk dezelfde was als de eerste voor Europa die twee maanden eerder in het zuiden van Noorwegen en Zweden verbleef en waarvan de foto's nog vers in het geheugen lagen. Hij liet zich ook op 28 juni nog bekijken maar vloog om 20:45 weg en was daarna niet meer te vinden. Of het echt om het-

401 Sakervalk / Saker Falcon *Falco cherrug*, juveniel, Wieringen, Noord-Holland, 20 juli 2019
(Arnoud B van den Berg)

zelfde exemplaar ging als in mei in Scandinavië kon niet met zekerheid worden vastgesteld omdat de foto's te weinig details lieten zien.

Alsof het niet genoeg was, fotografeerde Johan van der Vegt rond het middaguur van 18 en 19 juli een vliegende ongeringde juveniele Sakervalk *Falco cherrug* bij Stroe, Wieringen, Noord-Holland. Ook deze soort, die in de afgelopen decennia al wel een paar keer in Duitsland tot broeden kwam, was nog niet eerder in Nederland vastgesteld. Zoals gebruikelijk bij grote valken was er direct discussie of het een uit een kooi ontsnapte hybride kon zijn. Dat zal verklaren waarom er op zaterdag 20 juli maar weinig vogelaars kwamen kijken. Net als Johan zagen zes van hen de vogel opnieuw rond 13:00 vanuit het westen langs de zeedijk oostwaarts vliegen, van Stroe tot aan Den Oever. Rond 15:00 verdween de vogel weer in westelijke richting en toen de rook was opgetrokken bleek dat iets meer dan 30 vogelaars snel genoeg hadden gereageerd. De volgende dag werd hij niet meer gezien maar op 22 juli was er een melding van de noordpunt van Texel waaruit bleek dat hij nog steeds in het zuidwesten van het Waddengebied verbleef. Mätyäs Prommer liet weten dat 'satellite tracking' aantoont dat jonge vogels uit centraal Europa al in juli onafhankelijk kunnen zijn en dat sommige grote afstanden afleggen, tot in de Baltische landen. Qua terugmeldingen is er bijvoorbeeld een juveniel op 15 juli 1983 in Duitsland dat 27 dagen eerder op 964 km afstand op een Hongaars nest was geringd; een ander juveniel dat op 31 mei 1996 op een nest in Hongarije was geringd bevond zich op 26 juli 1996 al op een afstand van 1478 km. Arnoud B van den Berg

Five potentially new species in two months: Pied Crow, Red-wattled Lapwing, Green Warbler, Grey-headed Lapwing and Saker Falcon Between 22 May and 20 July, five potentially new species for the Netherlands were found. As all five were unexpected and rare also in a European context, there was initial (and in some cases ongoing) discussion on either their provenance or identification. It meant that many twitchers responded (too) late and that nobody managed to see all of them. On 22 May, a Pied Crow *Corvus albus* was discovered at Den Oever, Noord-Holland. Thanks to a damaged wing, it could be identified as the famous individual touring England and Wales for almost a year, last seen in East Kent on 19 May. After its discovery at Den Oever, the bird was refound 100 km further east at Leens, Groningen, and from there it started to tour along the Wadden Sea coasts of Friesland, frequently flying across to the islands of Ameland and Schiermonnikoog, and possibly turning up across the German border at Leer, Niedersachsen, as well. On 19 June, a Red-wattled Lapwing *Vanellus indicus* stayed for seven hours on the northern end of Texel, Noord-Holland; it was also photographed by two observers on Ameland on 23 June. Later, an analysis of feather details demonstrated that the very same individual was photographed by single observers on Pag, Croatia, on 14 May, at Bucher Ried, Bayern, Germany, on 31 May, and at Doel, Oost-Vlaanderen, Belgium, on 11 June. In 5-6 weeks, it had covered a total shortest-flight-distance between these sites of 1400 km from a south-eastern direction. There are only three previous European records, all from south-western Russia. In the morning of 24 June, a Green Warbler *Phylloscopus nitidus* was calling and singing in a suburban area at Holy, Vlaardingen, Zuid-Holland; the sound-recordings were identified later that day, when the bird could not be relocated already. On 27-28 June, a Grey-headed Lapwing *V cinereus* was among Northern Lapwings *V vanellus* in meadows between Parrega and Workum, Friesland. It immediately attracted 100s of birders as it was regarded the same individual as the first for Europe which turned up seven weeks earlier in southern Norway and Sweden. However, pictures do not show sufficient details to confirm this. During high tide at midday on 18-20 July, an unringed fresh juvenile Saker Falcon *Falco cherrug* flew past the Wadden Sea dike of Wieringen, between Stroe and Den Oever. Next day, to the dismay of many birders, it did not repeat this behaviour but on 22 July someone watched it in flight during high tide on the northern end of Texel. Satellite tracking has shown that, already by July, juveniles from nests in central Europe can be independent with some individuals covering huge distances, even to the Baltic countries.

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