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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 2017, http://tinyurl.com/hfwra7b) (taxonomie en wetenschappelijke, Nederlandse en Engelse namen van West-Palearctische vogels); *The Howard and Moore complete checklist of the birds of the world* (derde editie, door E C Dickinson (redactie) 2003; vierde editie, deel 1, door E C Dickinson & J V Remsen Jr (redactie) 2013) (taxonomie en wetenschappelijke namen van overige vogels van de wereld); en *IOC world bird list 7.1* door F Gill & D Donsker (2017, www.worldbirdnames.org) (Engelse en Nederlandse namen van overige vogels in de wereld; Nederlandse namen door P Vercruijsse en A J van Loon).

Voor (de voorbereiding van) bijzondere publicaties op het gebied van determinatie en/of taxonomie kan het Dutch Birding-fonds aan auteurs een financiële bijdrage leveren (zie Dutch Birding 24: 125, 2001, en www.dutchbirding.nl onder 'Tijdschrift').

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For (preparation of) special publications regarding identification and/or taxonomy, the Dutch Birding Fund can offer financial support to authors (see Dutch Birding 24: 125, 2001, and www.dutchbirding.nl under 'Journal').

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Breeding biology of Desert Owl in Israel

Amir Ben Dov, Aviam Atar, Erez Baruchi, Kochav Levi & Nir Sapir

Desert Owl *Strix hadorami* (hereafter *hadorami*; formerly Hume's Owl or Hume's Tawny Owl) has recently been renamed after papers published by Robb et al (2013, 2016) and Kirwan et al (2015), backed up by taxonomic research by Kirwan et al (2015) and Robb et al (2016). It was concluded that *hadorami* is the western species, which can be found in much of the Arabian Peninsula, in eastern Egypt and through the Sinai, southern and eastern Israel and Palestinian Territories into Jordan (figure 1), while Omani Owl *S butleri* (hereafter *butleri*) is the eastern species now known from eastern Oman, north-eastern United Arab Emirates, the type locality in southern Pakistan and north-eastern Iran (Judas et al 2015, Robb et al 2016). The publications showed clear morphological, acoustic and genetic segregation between *butleri* and *hadorami*. Kirwan et al (2015) suggested the vernacular name Desert Tawny Owl for *hadorami* and maintained Hume's Owl for *butleri*. However, Robb et al (2016) suggested to shorten Desert Tawny Owl to Desert Owl and to use Omani Owl for *butleri* (described as Omani Owl '*Strix omanensis*' in Robb et al 2013), a treatment now followed in the IOC World Bird List (Gill & Donsker 2017), by various others (eg, HBW Alive) and in this paper.

In Israel, the distribution of *hadorami* was thoroughly studied in the Judean desert and northern Arava valley by Hadoram Shirihai (1978-84, 1986-95) and Barak Granit (2008-10) and in the southern Arava valley by HS (1986-99) and Noam Weiss (Eilat Birdwatching Center IRBCE; 2006-09). These studies, combined with many observations from the earlier years, assisted to map the distribution of *hadorami* (figure 2).

The first possible record of nesting *hadorami* (then *butleri*) in Israel was published by Subah

392 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, male (centre), female (right) and fledgling, Dead Sea area, site 1, Israel, 17 May 2016 *(Amir Ben Dov)*. Male with Sinai Fan-fingered Gecko *Ptyodactylus guttatus* as prey.

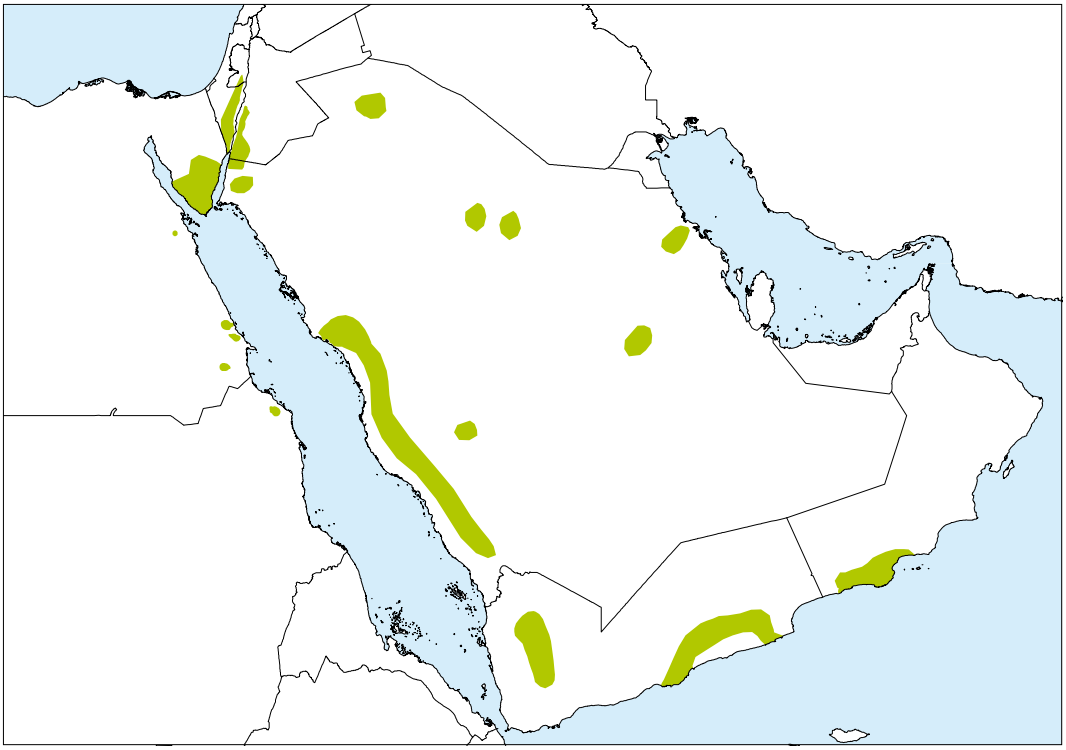


FIGURE 1 Distribution of Desert Owl *Strix hadorami* around Red Sea and on Arabian Peninsula *(© HBW Alive/BirdLife International)*

FIGURE 2 Rough boundaries of Desert Owl *Strix hadorami* territories found in Israel in 1961-2016 *(© 2016 Google)*

(1983). We now consider that his information was exceptional (see below) and propose that further studies of *hadorami* in the western desert areas of Israel are needed. No other documentation of nesting biology was done until 2015.

The only previous information concerning nestlings refers to two nestlings brought to the National Park Authority (NPA) Wildlife Hospital in Ramat Gan Safari Israel (see details below).

Following the taxonomic developments and especially the renaming of *hadorami*, we made an effort to locate and study the nesting biology of *hadorami* for the first time. The first nest was found on 15 April 2015 by Erez Baruchi, Amir Ben Dov and Kochav Levi in a known territory in the Dead Sea area (plate 393; site 1). In 2016, we followed this nest again and located an additional nesting pair in the area. For conservation reasons, the actual locations of the sites are withheld. The information in this paper is mainly based on these two

393 Site of nest 1 of Desert Owl *Strix hadorami* on upper third of cliff, Dead Sea area, Israel, 18 May 2015 *(Amir Ben Dov)*

394 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, fledglings, Dead Sea area, site 1, Israel, 22 May 2015 *(Amir Ben Dov)*. Moment of first flight by one fledgling (age c 30 days).

pairs and information collected from various observers and includes new information on, eg, behaviour of adults and fledglings, food repertoire/diversity and nesting period.

It is important to note that changes in weather and rain patterns from one year to the other, as well as differences in habitat, eg, between the northern Judean desert and the Arava valley, may create variations in nesting behaviour and food diversity, supply and timing and, therefore, the number of nestlings and nests density may vary between years and regions.

Methods

The nesting survey was divided into three different periods: the survey period when territories were checked for response (24 visits), the study period when responding territories were re-visited more than once for confirmation of the presence of both male and female (four visits), and the period when we focused on a single chosen site and looked for the possible nesting cavity (seven visits).

For locating the sites, sound recordings were used during the survey period but completely discontinued in the second period when searching for the nest location in order to minimize disturbance and keep the information collected unbiased. Once found, we revisited the nesting site as regularly as possible (18 nights in 2015 for the nest in site 1, six nights in 2016 for both nests in site 1 and site 2). We recorded the nest activities in writing, by photographs for better identification of the food items

395 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 22 May 2015 *(Amir Ben Dov)*. Adult feeding nestling of c 30 days with gecko (possibly Sinai Fan-Fingered Gecko *Ptyodactylus guttatus*). **396-397** Desert Owl / Palestijnse Bosuil *Strix hadorami*, nestling, Dead Sea area, site 1, Israel, 26 May 2015 *(Amir Ben Dov)*. Fledgling of c 35 days. **398** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, Israel, 7 July 2016 at mid-morning *(Ohad Binyaminy)*. Fledgling of c 70-75 days. Note appearing breast-feathers.

399 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, nestlings, Dead Sea area, nest 2 at site 1, Israel, 24 May 2016 *(Amir Ben Dov)*

and for ageing the nestlings/fledglings, and by video recordings for better study of behavioural activities. Camera flash and flashlights were used during the surveys. Sound recordings of male, female and nestlings were obtained to better study the vocal repertoire. Pellets were collected whenever possible (note that most roosting and nesting sites were unreachable) and examined. Former pellet analyses (Leshem 1974, 1978, 1981; Weiss & Shalmon in 2008, pers comm) were added to the new information collected (cf plate 425-426).

Some information in the literature about breeding *hadorami* is available from a nest in southern Oman, where 17 sound recordings were made by Robb & The Sound Approach (2015). Information about *hadorami* nestlings/fledglings is very limited. Therefore, we used information in the literature about nestling and fledgling development of mainly Tawny Owl *S aluco* (hereafter *aluco*) as a marker to the development of *hadorami* nestlings and fledglings (Heidrich et al 2014; table 4). We compared different characteristics of the birds with those of *aluco*, including the age of the nestlings' and fledglings' appearance on the 'nest shelf' (the nest edge or nearby spots where the nestlings perch until their first flight), collected information on the incubation period of *aluco*, added all information we collected about *hadorami* and evaluated from it the incubation period and nestlings development of *hadorami* until their appearance on the 'nest shelf'.

Results

Nesting survey

Looking for a possible nest started with a survey of territories, mainly following the territories located by BG in an NPA & SPNI 2010 survey (unpublished report; HS pers comm). The aim was to find the most accessible territory where both male and female were seen constantly, and find an active nest within that territory. Several territories fitting these requirements were found, out of which one territory was chosen in 2015 (site 1) and two were chosen in 2016 (again site 1 and site 2).

In 2015, within the search period, both male and female were seen and heard. Visiting the site at daytime (15 April 2015, 12:30-15:30) was very useful and helped us to gain better understanding of the possible nesting sites. The 2015 suspected nesting cliff was crowded with nesting activities of Pallid Swift *Apus pallidus*, Common Kestrel *Falco tinnunculus*, Pale Crag Martin *Ptyonoprogne obsoleta*, Fan-tailed Raven *Corvus rhipidurus* and Tristram's

400 Desert Owl / Palestijnse Bosuil *Strix hadorami*, nestling, Dead Sea area, site 1, Israel, 19 May 2016 *(Amir Ben Dov)*. Sleeping posture (head up). **401** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 30 May 2015 *(Amir Ben Dov)*. Fledgling of c 40 days. **402** Desert Owls / Palestijnse Bosuilen *Strix hadorami*, male (left), female (right) and fledgling (age c 35 days), Dead Sea area, site 1, Israel, 17 May 2016 *(Amir Ben Dov)*

403 Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 25 June 2015 *(Amir Ben Dov)*. Fledgling of c 64 days. **404** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 25 June 2015 *(Amir Ben Dov)*. Fledgling of c 64 days. **405** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 17 June 2015 *(Amir Ben Dov)*. Fledgling of c 56 days.

406 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 25 June 2015 *(Amir Ben Dov)*. Fledglings of c 64 days.

Starling *Onychognathus tristramii*. The male *hadorami* was heard calling during daytime and the visit made us decide to focus on that site. Nest 1 (2015) was found c 1.2 km (straight line distance) from the beginning of the gorge downstream towards the Dead Sea (which is about c 2.3 km walking distance along the stream from the beginning of the gorge). The cliff, facing west to north-west, was c 60 m high. The nest was located c 40 m from the surface of the stream (plate 393); at the nest site, the gorge was c 150 m wide from cliff to cliff.

Nest 1 (2016) of (most probably) the same pair at site 1 was found c 560 m further down the stream near a lower dry waterfall, c 25 m above the stream's surface; at the nesting point, the gorge was c 90 m wide from cliff to cliff.

Nest 2 (2016) of the second pair at site 2 was found in a later stage; the exact nest location is unclear, the suspected nest site was c 30 m high, c 2.4 km (straight line distance) from the beginning of the gorge. At the nesting site, the gorge was c 70 m wide from cliff to cliff.

Pairing and display during pre-breeding and breeding period

Display behaviour may already be observed in January (13 January 2008, southern Arava valley; NW pers obs). Display behaviour was observed three times during one night on 19 April 2016 (ABD, KL, Yoram Shpirer), during the breeding period (after eggs were laid; nestlings were heard on 6 May 2016). The male at site 1 in 2015 was heard calling from a distance, the female responded, both birds united and performed a display flight, including holding each other in the claws (possible transfer of food from male to female; later interpretation by ABD). The display behaviour, which has not previously been described, consisted of (in order): ***1*** the female calling to the male; ***2*** the arrival of the male; ***3*** the male landing near the female or on the female (possible mating trial); ***4*** the female flying down the cliff with wings spread and stretched forward; ***5*** the male following the female with the same flight posture; ***6*** the female flying off; and ***7*** the male landing nearby. NW (pers comm) reported such display behaviour in autumn as well, and a mating attempt outside the breeding period was seen at Ein Gedi on 19 October 1982 (Eyal Bartov, Teva Va'aretz 25 (2): 46, 1983).

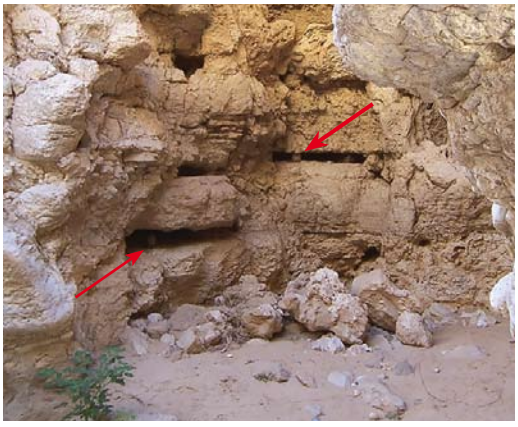
A second male was seen within the territory during the nesting period on 19 March 2015; the intruder was expelled by the dominant breeding male.

Nesting period and key dates

The nesting dates and locations change from one year to another, and most probably also between pairs, depending on the food availability. The nests studied in 2015-16 showed a difference of c 10 days between the hatching of the nestlings, with the 2016 nestlings hatching earlier. Ageing the fledglings of both nests found in 2016 in parallel streams (c 1.6 km straight line distance) showed that they hatched on roughly the same dates.

For nest 1 in 2015, the following events were noted in chronological order: ***1*** on 1 March, courting behaviour of the male at the site of nest 1, including passage in flight and transferring a gecko from the male to the female (in 2016, this display behaviour was still observed on 19 April); ***2*** on 15 April, three entries to a single point on the cliff, marked as a possible nest (entries were by both male and female and therefore we suspected that feeding of nestlings was taking place); ***3*** on 17 May, two nestlings were first seen on the cliff at the suspected 'nest shelf'; ***4*** on 18 May, the nestlings (still showing quills on primaries) seemed to move in and out of the nest at different times of the night; ***5*** on 19 May, nestlings were seen on the 'nest shelf'; further entries to the nest observed; ***6*** on 22 May, nestlings started to flap wings, older nestling flew 1 m further from nest (plate 394); ***7*** on 25 May, both nestlings were seen flying from the nest spot up to 30 m away and changing position from time to time; ***8*** on 26 May, both fledglings moved down to the cliff base for the first time, leaving the nest for good (plate 414-415); ***9*** on 28 May to 25 June, fledglings changed position up the stream,

407 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, Israel, 11 July 2016 at mid-morning *(Amiti Cooper)*. Fledglings of c 70-75 days at roosting site. **408** Roosting cavity of Desert Owls *Strix hadorami*, Dead Sea area, site 2, Israel, 2 June 2016 *(Amir Ben Dov)* **409-410** Roosting cavity of Desert Owls *Strix hadorami*, Dead Sea area, site 1, Israel, 21 May 2016 *(Amir Ben Dov)*



411 Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 2, Israel, 2 June 2016 at 04:55 (sunrise 05:35) *(Amir Ben Dov)*. Fledglings at roosting site. **412** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 2, Israel, 16 May 2015 at dawn (04:19) *(Amir Ben Dov)*. Female on roosting shelf, just before entering cavity. **413** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 21 May 2016 at 19:00 *(Amir Ben Dov)*. Female just before leaving roosting cavity.

414 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 26 May 2015 *(Amir Ben Dov)*. Fledgling of c 35 days being fed by female.

415 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 26 May 2015 *(Amir Ben Dov)*. Fledglings of c 35 days; left bird feeding on its own.

keeping together; and ***10*** on 25 June, first attempts of fledglings to hunt insects on their own, although still being fed by the parents.

Indications for the nesting period are also provided by two nestlings that were collected on two different occasions in the Dead Sea area and brought to the NPA hospital. One was collected from Ein Bokek on 29 July 2005 (weight 156 g, estimated age three to six weeks), the other from Arugot stream on 7 July 2007 (estimated age less than three weeks with all primaries and secondaries still in their quill) (Shmuel Landau/NPA Hospital pers comm 2016). Both birds were neither photographed nor studied further.

Hunting behaviour and food transfer

Males have been observed feeding the female from November to June (NW pers comm). This behaviour was observed on 21 March 2008 in the southern Arava valley (José Ardaiz pers comm) and on 1 and 16 March 2015 and 16 March 2016 in the northern Dead Sea area (ABD et al). The transfer of prey from the male to the female was done while perched as well as in flight.

Actual hunting was only rarely recorded; in most cases, the male was seen bringing prey to the female, calling while approaching. The female called back with a *wiiiooo* call and the food was transferred. Subsequently, the female called the fledglings and passed the prey to them or, alternatively, fed them piece by piece (seen up to the fledglings' age of 35 days). Nonetheless, both male and female were seen looking for prey in flight as well as while standing on a lower point of the cliff or stream banks. When prey was noticed, the adult approached it directly and in some cases caught it after briefly hovering. A single event of the male transferring Sinai Fan-fingered Gecko *Ptyodactylus guttatus* to the female during the pre-breeding period was recorded on 1 March 2015. The catch of a White-crowned Wheatear *Oenanthe leucopyga* was observed once (20 March 2009 at night, southern Arava valley; NW pers comm); the female jumped down from her perch to a lower shelf, plucking the wheatear and flying to a nearby cliff to eat it.

Another method of catching prey at night was observed with Sinai Fan-fingered Gecko (plate 422). The owls were seen jumping on the vertical cliff wall and tearing the gecko from the wall; this method may include several jumps when chasing the gecko (November 2009, southern Arava valley, NW pers comm; February 2015, northern Dead Sea area, EB & ABD pers obs).

Feeding behaviour of nestlings and fledglings and feeding intervals

From the hatching period onwards, the male was seen bringing food to the female (c 80% of all observed times), as well as directly to the nestlings (c 20%). The first prey was brought to nestlings 30-120 min after sunset. In most cases, nestlings 'sense' the presence of the adults and start begging for food, while the female calls the male with a special call (*wiiiooo, eiiiioooo*). When getting closer with food, the male gives a five-note call: *who, Hoo, hoo, hoo, hoo*. The female starts approaching the male and the food is transferred. The fe-

416 Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 2, Israel, 2 June 2016 *(Amir Ben Dov)*. Female with Levant Scrub Warbler *Scotocerca inquieta*.

male then calls the fledglings, either approaching them with the food or landing nearby and 'coaxing' them to a chosen point where the food is transferred (plate 395). Occasional active feeding of the fledglings was observed from the age of c 35 days (plate 415); otherwise, the food was given to the fledglings in one piece.

Pellets

33 pellets and parts of pellets were collected at both nesting sites in August 2016; all were found on known 'feeding shelves'. None were found at roosting sites. Although roosting sites were examined, no pellets were collected from nests (which were out of reach). There is no exact knowledge on how to age pellets collected in a dry desert, and therefore, all pellets were analysed without dating.

Full size pellets of most probably fledglings aged 35-65 days old were measured. Site 1: average length 29.34 mm (SD 1.97), average width 10.46 mm (SD 0.28 mm; n=13); site 2: average length 30.13 mm (SD 0.75), average width 10.37 mm (SD 0.25; n=8); both sites combined: average length 29.64 mm (SD 0.75), average width 10.43 mm (SD 0.2; n=21).

A total of four pellets from adult *hadorami* were found by NW in May 2008 at northern Arava area, measuring on average 43.25 mm in length (SD 2.86), and on average 23.5 mm in width (SD 1.14 mm) (plate 425-426). Pellets of adults collected by Yossi Leshem (pers comm) at Wadi Fatzael in 1973 and at Nekarot stream in 1978 were not measured and were not preserved.

Food collected and content of pellets

Very little has been published about the variation in food of *hadorami*. The information below was collected by ABD et al from nest 1 (2015) and nest 1 and 2 (2016), pellets collected and analysed but not measured (Wadi Fatzael, Leshem 1974; Nekarot stream, Leshem 1978); and pellets collected and measured (southern Arava valley, 2008, NW pers comm; northern Dead Sea area, 2016, ABD et al), and photographs taken in the mountains north of Eilat on 21 March 2008 (JA pers comm).

In the northern Dead Sea area, the main method to identify food brought to the nestlings/fledglings was by photographing the feed. We succeeded to identify 41 prey items out of the 55 photographed (74.5%). Sinai Fan-fingered Gecko was the most common single species seen to be collected by the owls. Before the nesting period (March 2015) and within the nesting period (April-June 2015 and May-July 2016), adults were seen collecting geckos in 29.3% of the identified food items photographed (n=12; plate 392, 395, 422). Rodents (identification through sporadic photographs taken in field) were collected in 46.3% (n=19) of the 41 identified food items photographed, birds represented 7.3% (n=3) of the identified food items, arachnids 14.6% (n=6) and orthoptherans 2.4% (n=1) (table 1).

In total, 33 pellets and pellet parts from fledglings, collected at both nesting sites in 2016 (EB, Eyal Deri, ABD and Amichay Giladi) were analysed in the laboratory of Tamar Dayan by Orr Comay and Michal Zaitzove-Raz (Department of Zoology, George S Wise Faculty of Life Sciences, Tel-Aviv University). These contained 114 identified remnants (table 2): rodents 35.1% (n=40), reptiles 16.7% (n=19), birds (seed-eaters) 6.1% (n=7), bats 0.9% (n=1), shrews 0.9% (n=1), grasshoppers Acrididae 6.1% (n=7), other insects 3.5% (n=4) and Solifugae 30.7% (n=35).

The content of four pellets from adults (May 2008, northern Arava area, analysed by Benny Shalmon; NW pers comm) (plate 425-426), was identified as gecko (n=1), *Sylvia* warbler (n=2) and Wagner's Gerbil *Gerbillus dasyurus* (n=2). Further

TABLE 1 Food brought to Desert Owl *Strix hadorami* fledglings, identified through photographs (site 1, 2015, 2016; site 2, 2016)

Prey item	Total number of identified hunts	% of identified hunt by class/order	Plate
rodents – Rodentia	**19**	**46.3%**	
Bushy-tailed Jird *Sekeetamys calurus*	4		415, 420
Arabian Spiny Mouse *Acomys dimidiatus* (cf Volobouev et al 2007)	3		419, 421
Wagner's Gerbil *Gerbillus dasyurus*	3		
unidentified rodent	9		
birds – Aves	**3**	**7.3%**	
Pallid Swift *Apus pallidus*	1		417
Levant Scrub Warbler *Scotocerca inquieta*	1		416
Sinai Rosefinch *Carpodacus synoicus*	1		418
reptiles – Reptilia	**12**	**29.3%**	
Sinai Fan-fingered Gecko *Ptyodactylus guttatus*	12		392, 422
arachnids – Arachnida	**6**	**14.6%**	
camel spiders or sun spiders – Solifugae	4		423
Jericho Scorpion *Nebo hierichonticus*	1		
unidentified scorpion – Scorpiones	1		
orthopterans – Orthoptera	**1**	**2.4%**	
European Mole Cricket *Gryllotalpa gryllotalpa*	1		
Total	**41**		

TABLE 2 Contents of 33 pellets and pellet parts from Desert Owl *Strix hadorami* fledglings (age c 35-65 days), collected in northern Dead Sea area (site 1 and site 2) in August 2016, analysed in laboratory of Tamar Dayan by Orr Comay and Michal Zaitzove-Raz

Name	Total number of remnants found	% of total remnants
camel spiders or sun spiders – Solifugae	35	30.7%
grasshoppers & crickets – Orthoptera	7	6.1%
unidentified insect – Insecta	4	3.5%
Sinai Fan-fingered Gecko *Ptyodactylus guttatus*	19	16.7%
Wagner's Gerbil *Gerbillus dasyurus*	6	5.3%
Golden Spiny Mouse *Acomys russatus*	2	1.8%
Arabian Spiny Mouse *Acomys dimidiatus*	16	14.0%
unidentified spiny mouse *Acomys*	4	3.5%
Tristram's Jird *Meriones tristrami*	1	0.9%
unidentified gerbil *Gerbillus*	1	0.9%
unidentified mouse *Mus*	1	0.9%
unidentified rodent – Rodentia	9	7.9%
White-toothed Shrew *Suncus etruscus*	1	0.9%
Larger Rat-tailed Bat *Rhinopoma microphyllum*	1	0.9%
unidentified passerine – Passeriformes	7	6.1%
Total	**114**	

observations by NW and JA (both in 2008) listed Sinai Fan-fingered Gecko (n=2) and White-crowned Wheatear (n=1).

Three pellets of adults collected in Wadi Fatzael in March 1973 (Arkan um Zafa) (Leshem 1974, 1978, 1981) contained remains of spiny mouse *Acomys*, Jericho Scorpion *Nebo hierichonticus* and a grasshopper.

The 52 pellets of adults collected in Nekarot stream in March 1978 (Leshem 1978, 1981) contained remnants of 47 rodents, two shrews, three bird species, three reptiles, 12 arthropods and 35 arachnids (table 3).

There is a single report of *hadorami* eating from a gazelle corpse hung on a tree to attract a local Arabian Leopard *Panthera pardus nimr*, near Bokek

TABLE 3 Contents of 52 pellets of adult Desert Owl *Strix hadorami*, collected in Nekarot stream, March 1978 (Leshem 1978)

Name	Total number of identified remnants	% of total remnants per class/order/family
rodents – Rodentia	**47**	**46.1%**
Sundevall's Jird *Meriones crassus*	14	
Pygmy Gerbil *Gerbillus henleyi*	5	
Wagner's Gerbil *Gerbillus dasyurus*	22	
Bushy-tailed Jird *Sekeetamys calurus*	1	
Golden Spiny Mouse *Acomys russatus*	2	
unidentified spiny mouse *Acomys*	1	
unidentified rodent	2	
shrews – Soricidae	**2**	**2.0%**
White-toothed Shrew *Crocidura suaveolens*	2	
birds – Aves	**3**	**2.9%**
Desert Lark *Ammomanes deserti*	1	
unidentified passerine – Passeriformes	2	
reptiles – Reptilia	**3**	**2.9%**
Yellow Fan-tailed Gecko *Ptyodactylus hasselquistii*	2	
unidentified gecko *Ptyodactylus*	1	
arachnids – Arachnida	**35**	**34.3%**
Sphodromerus pilipes	29	
Jericho Scorpion *Nebo hierichonticus*	6	
unidentified arthropod – Arthropoda	**12**	**11.8%**
Total	**102**	

TABLE 4 Parallel age patterns in Desert Owl *Strix hadorami* (field observations; this paper) and Tawny Owl *S aluco* (Mikkola 1983, Cramp 1985)

Key status	Tawny Owl approximate age (in days from hatching)	Desert Owl key events as recorded on site (nest 1, 2015), as base for ageing (in days from hatching)
egg laying		
hatching		
opening eyes partly	7	
opening eyes fully	9	
start of wing flapping	20-25	
standing on 'nest shelf' or branch	25-30	25 (17 May 2015)
first flight	30	30 (22 May 2015)
leaving nest site	32	34 (26 May 2015)
growing body-feathers	70	70-75 (7 July 2016)

TABLE 5 Approximate dates of each nesting stage of Desert Owl *Strix hadorami*. Calculation based on Tawny Owl *S aluco* ageing information in comparison with key dates for Desert Owl.

Nest	Egg laying	Hatching	Outside nest (nest shelf)*	Difference compared with previous year
nest 1, 2015	15-17 March 2015	15-17 April 2015	**17 May 2015**	
nest 1, 2016	6-8 March 2016	c 6-8 April 2016	**8 May 2016**	c 10 days earlier
nest 2	7-9 March 2016	c 7-9 April 2016	**9 May 2016**	c nine days earlier
nest 3**	9-15 March 2016	c 9-15 April 2016	**9-15 May 2016****	

*exact dates observed in field are marked in **bold**; these dates form basis for calculation of egg laying and hatching
**based on fledglings found on 28 June 2016, at age 70-75 days, hatching was counted backwards; 'outside nest' was counted from hatching plus 25 days

417 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 25 May 2015 *(Amir Ben Dov)*. Female with Pallid Swift *Apus pallidus* as prey.

418 Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 2, Israel, 24 May 2016 *(Amir Ben Dov)*. Female with Sinai Rosefinch *Carpodacus synoicus*.

419 Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 22 May 2015 *(Amir Ben Dov)*. Female with Arabian Spiny Mouse *Acomys dimidiatus* as prey and nestlings of c 30 days on 'nest shelf'. **420** Desert Owls / Palestijnse Bosuilen *Strix hadorami*, Dead Sea area, site 1, Israel, 26 May 2015 *(Amir Ben Dov)*. Female with Bushy-tailed Jird *Sekeetamys calurus* as prey and two fledglings of c 35 days. **421** Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 26 May 2016 *(Amir Ben Dov)*. Female with Arabian Spiny Mouse *Acomys dimidiatus* as prey.

422 Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 17 May 2016 *(Amir Ben Dov)*. Male with Sinai Fan-fingered Gecko *Ptyodactylus guttatus* as prey.

423 Desert Owl / Palestijnse Bosuil *Strix hadorami*, Dead Sea area, site 1, Israel, 31 May 2015 *(Amir Ben Dov)*. Female with Solifugae as prey.

424 Solifugae remains from pellets of Desert Owl *Strix hadorami*, Tel Aviv University, Tel Aviv, Israel, 7 September 2016 *(Michal Zaitzove-Raz)*

425 Pellets from adult Desert Owl *Strix hadorami*, northern Arava valley, Israel, 20 June 2009 *(Noam Weiss)*

426 Content of pellets from adult Desert Owl *Strix hadorami*, northern Arava valley, Israel, 20 July 2009 *(Noam Weiss)*

427 Pellets from fledgling Desert Owls *Strix hadorami*, Dead Sea area, Israel, 15 August 2016 *(Yosef Kiat)*. Collected at site 1 and 2.

stream on 16 November 1984 (David Menninger & Golan Avned pers comm; Teva Va'aretz 27 (4): 38, 1984).

The stomach of a specimen from Sinai contained Wagner's Gerbil and the stomach of an emaciated specimen found dead in the Negev held remains of beetles (Coleoptera) of the family Tenebrionidae (Mendelssohn et al 1975).

Number of nestlings per brood

The number of eggs per clutch is unknown as a nest with eggs was never found. All observations to date suggest one to three nestlings per brood. In our study, nest 1 (2015; plate 395) produced two nestlings, nest 1 (2016) again two, and nest 2 (2016) three (plate 399). Observations from Dead Sea to Eilat (Tomer Kahana, 14 July 1981; Teva Va'aretz 24 (5): 232-233, 1982, and others; Shirihai 1996) yielded one to three fledglings in each brood observed. Lachman (2013) reported three fledglings at Wadi El Gemal National Park, Red Sea, Egypt, on 1 August 2013.

Behaviour of nestlings and fledglings

At the age of c 25 days, the nestlings left the nest cavity and first appeared on the 'nest shelf'. From that first night, the nestlings found their way out of the nest, standing on the 'nest shelf', going in and out of the nest for c five nights. Around the sixth night, they started moving up to 10 m away from the nest cavity but still returned to the nest. On the ninth night, they moved up to 30 m from the nest and from each other. On the 10th night, the nestlings moved down the cliff towards the surface of the stream, not returning to the nest cavity again. After leaving the nest for good, the fledglings moved out of their roosting site just after sunset and climbed along the cliff to a low feeding point, where they called from time to time for food. In most observations, fledglings were seen changing roosting cavities. After c 40 nights since first moving to the 'nest shelf', the fledglings (still being fed) showed the first signs of interest in insects around them.

Sunset and sunrise behaviour of adults and fledglings

The activity of adults started at just about sunset. A female was seen moving out of the roosting cavity to the shelf three times c 50 min before sunset and leaving the roosting cavity around sunset (c 5 min before sunset; plate 413). In the early morning, the female was seen entering a roosting cavity c 5 min after sunrise, 50-200 m from the nesting cavity, using a separate cavity from the fledglings (plate 412). The male was seen joining the female from a roosting site that was in a high cavity as far as 500 m from the female and fledglings (found twice: 2010, 2015). NW reported the use of a certain cavity by the adult(s) several times throughout the year (2009) and once observed a bird entering this same cavity during rain.

The fledglings aged c 35 days were observed looking for roosting cavities c 40 min before sunrise. The cavity chosen was in one occasion down the stream, c 300 m from the nest (nest 2; 2016), c 3-7 m above ground level. In other cases (nest 1, 2015, and nest 2, 2016), the fledglings aged 35-50 days old were observed choosing cavities from 1 up to 7 m above ground level (plate 407-411).

Calls repertoire

A major difference between the five-note call of the male and the very clear one-note long call of the female was recorded (recording XC326458 on www.xeno-canto.org). The female was heard calling to the male during mating, incubation and the nestling and fledgling feeding period. When requesting food from the male or calling the nestlings or fledglings, the female called *wiiiooo* or *eiiiiwooo* (recording XC326457 on www.xeno-canto.org). On two occasions when the female warned the fledglings of human presence, the calls were reminiscent of high-tone barking: *haaavvvv… whaaavvvv*. The male repertoire consisted of three different calls: ***1*** the well-known five-note call; ***2*** a single low *woooow*; and ***3*** the repeating low *hooo hooo hooo hooo* call (recording XC326458 from 3 sec on www.xeno-canto.org).

The nestlings' or fledglings' very clear, soft, dysphonic *eiiiie* calls were easy to hear from up to 150 m distance (recording XC326455 on www.xeno-canto.org).

More recorded calls from 2015-16 can be found at www.xeno-canto.org (recording XC326454, XC326455, XC326456, XC326457, XC326458 and XC326459).

Birds seen outside known territories

From September to April, (possibly) young birds were reported at different sites outside their known birth territories. A first-winter was found dead (run over by car) by Itay Oren on main road 90 between site 1 and site 2 on 16 February 2016 (skin parts at Steinhardt Museum of Natural History, Tel Aviv University, no 19918). A single bird of unknown age was seen and photographed at Ein Prat (31.49°N 35.18°E) on 1-3 October 2015 (Asaf Vasana pers comm), at 259 m above sea level. A

bird was photographed at Nabiris cave on 9 September 2011 (Boaz Langford pers comm).

Discussion

Territory size and nesting site

Hadorami territories are found along the precipice and in almost every stream valley in the Dead Sea area, with up to two or three territories in a single stream valley in a few cases. Observations through the years suggest that the pairs are very local, remaining at the territory year-round. Shirihai (1996) reports that the territory size varies from a minimum of 400 m in the Dead Sea area to 2.5 km in the Eilat mountains. Granit (2010) mentioned a minimum distance of 300 m and up to 1.2 km between calling males (Dead Sea area) but most of the latter survey took place before the nesting period.

NW followed a particular female with heterochromous eyes, one dark and one orange eye (southern Arava, 2008). This bird was found to remain within a 2-3 km^2 area (September-November 2009). Males seem to wander over much larger distances, disappearing from one hunt to another for some hours. On one occasion, a bird of unidentified sex was seen hunting in flight far in the upper plains of the Dead Sea precipice, at least 5 km from any known nesting territory (EB & ABD, March 2015).

The nesting sites seem to vary within the Dead Sea area, between inner eastern stream cliffs, to western upper cliffs of the streams, to cliffs along the Dead Sea precipice. Granit (2010) mentioned five territories found along the Dead Sea precipice, 11 territories were found within the Dead Sea precipice small wadis, five territories within small streams and 16 territories within the larger streams. NW reported nine territories found in the southern Arava area, all in larger streams.

From all findings to date, we can conclude that *hadorami* nests can be found at sites where harder rock cliffs are present, and usually where the gorge gets narrower and cliffy. Nests may be found from 10 m above the stream surface and higher, usually in the upper third of the cliff.

Ageing Desert Owl nestlings and fledglings

Because all *hadorami* nests found so far were inaccessible due to local limitations, such as height, climbing and cliff stability problems as well as the need to minimize disturbance, we also used knowledge acquired by various sources about ageing nestlings of *aluco* (Mikkola 1983, Cramp 1985; www.godsownclay.com) and Common Barn Owl *Tyto alba* (hereafter *alba*; Mikkola 1983, Cramp 1985), in addition to expert opinion (Wolfgang Scherzinger, researcher of Ural Owl *S uralensis*). In order to get better accuracy, we compared significant nestling behaviour of *aluco* and *alba* such as 'nest shelf' behaviour, age of nestlings when leaving the nest for ever, with that of *hadorami*. We consider our ageing of nestlings and fledglings and the estimate of the incubation period of *hadorami* accurate (table 4-5).

The best indicator to age *hadorami* fledglings is the exact date when the nestlings leave the inside of the nest to the 'nest shelf'. This behaviour is similar in many owls, and in *aluco* happens after c 25 (± 7) days. The first flights of *aluco* nestlings take place at the age of c 28-30 days. The *aluco* nestlings leave the 'nest shelf' permanently at the age of c 32 (± 5 days) days. It is not fully clear whether *hadorami* follows the exact same pattern. Nonetheless, we were able to count the days from the *hadorami* nestling's appearance on the 'nest shelf' to the date of their first flight, and the date of leaving the 'nest shelf' permanently; these dates seem to be similar to the *aluco* dates. Other *aluco-hadorami* development milestones, ie, wing growth, first adult body-feathers, disappearance of facial down, etc, show similar development stages.

From incubation to fledging

Based on the observations of the pairs in 2015-16 and comparison with *aluco*, we constructed a schedule of the nesting period of *hadorami*: ***1*** egg laying period is second half of March; ***2*** incubation period is c 30 days; ***3*** hatching is in second half of April; ***4*** nestlings appear on the nest ledge outside the nest at mid-May (age c 25 days); ***5*** fledglings fly away from the nest in the last week of May (age c 35 days); and ***6*** fledglings become fully independent in the last week of July to first week of August (age c 105 days) (table 5).

Additional information from nestlings estimated to be three to six weeks old collected at two different sites in the northern Dead Sea area on 29 July 2005 and 7 July 2007 suggests that incubation took place in May and nestlings were being fed in June-July. Fledglings seen and photographed from 28 June to 7 July (OB & AC pers comm) were estimated to be 70-75 days old, based on the fresh breast-feathers (plate 398). On 31 July 2007, NW saw a fledgling in the southern Arava valley; based on his description of fresh breast-feathers, the fledgling was estimated to be 70-80 days old. This suggests a late hatching on c 13-23 May. Recordings of fledglings from Wadi El Gemal National Park, Sinai, Egypt, on 1 August 2013 (Lars Lachman) also

suggest a very late nesting period (recording XC152367 on www.xeno-canto.org; Lachman 2013). There is a need to further study the nesting period through drought years, as well as at different sites throughout the breeding range.

Food collection

From the observations of the three nests in 2015-16 and additional information collected by YL in 1973-78, HS in 1975-95 and NW in 2008, it is clear that *hadorami* has a varied food repertoire and does not depend on a single prey item. Its food varies from insects to reptiles, birds, bats and rodents, which helps the species to flourish in its chosen habitat. It is suggested that the food repertoire may vary among sites in accordance with the availability in the hunting area. Analysis of *butleri* pellets (Amr et al 2016) showed similar results.

Mortality

Very little is known about mortality of juvenile birds. In the three nests from 2015-16, all fledglings seemed well and healthy at least until the age of 70 days.

There are several reports (skins) of road casualties (cf Leshem 1981, Inbar 1982, Shirihai 1996). Additional reports are from main road 90 near the southern part of Einot Zukim reserve on 9 October 2005 (finder unknown, skin at Steinhardt Museum of Natural History, Tel Aviv University, no 16150) and a second calendar-year hit by a car between site 1 and site 2 on 16 February 2016 (Itay Oren; skin parts at Steinhardt Museum of Natural History, Tel Aviv University, no 19918).

A bird was found poisoned in 1975 on main road 90 near Ein Gedi Field Study Center; it was captured, treated and kept in a private house in Jerusalem until it was moved to Tel Aviv University Zoological Garden (Leshem 1981).

Two birds of unknown age, found dead in February 2006 near Eilat, just a few meters from each other (not collected), were estimated to have died only a few days before the find (Nimrod Ben Aharon, NPA warden, pers comm). The site was an active military training zone far from any human food source or site. The date suggests that both birds were at least 300 days old.

Analysis of Subah (1983)

Subah (1983) reported several biological and behavioural characters that do not match with our findings in 2015-16 and information collected by us throughout the years. The nest reported by Subah (1983) was found in Secher stream which has relatively low hills with sand dunes around. This habitat, besides being far west from any current known territory of *hadorami*, does not match the breeding habitat we know (but further study is needed). Subah (1983) reported that the nest was found in a well, below ground level, which does not agree with the newest findings. Finally, Subah (1983) reported five eggs and nestlings, as opposed to one to three. Therefore, we suggest more study of *hadorami* should be done in the western desert of Israel.

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Samenvatting

Broedbiologie van Palestijnse Bosuil in Israël Palestijnse Bosuil *Strix hadorami* is recent van wetenschappelijke naam veranderd na de taxonomische publicaties over deze soort en de verwante Omaanse Uil *S butleri* van Robb et al (2013, 2016) en Kirwan et al (2015). In dit artikel wordt verslag gedaan van het eerste uitgebreide onderzoek ooit naar de broedbiologie van Palestijnse Bosuil. Deze studie is gebaseerd op waarnemingen bij drie nesten (twee paren) in het noordelijke deel van de Dode Zee-regio in 2015 en 2016. Het artikel presenteert informatie over paarvorming en balts gedurende de periode voor en tijdens het broeden, jachtgedrag en naar het nest gebracht voedsel, analyse van braakballen, broedperiode en ontwikkeling en gedrag van de jongen. Tevens worden waarnemingen en andere informatie die in de loop der jaren door verschillende onderzoekers en waarnemers in Israël werden verzameld, besproken en geïnterpreteerd.

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Sexing Lanner Falcon in the field

Andrea Corso, Michele Viganò & Lorenzo Starnini

Information on ageing, sexing, identification and variability of Lanner Falcon *Falco biarmicus* of the subspecies *F b feldeggii* (hereafter *feldeggii*) were published by Massa et al (1991) and more recently by Corso (2000, 2001). Leonardi (2015) gives only a brief overview of sex-related plumage traits and how to sex adult Lanner. Therefore, we consider it helpful to report our findings on the easiest sexing method for usage in the field (in addition to size and voice). This paper deals mainly with the subspecies *feldeggii*, which occurs mostly in southern Europe and east to Azerbaijan, and only possibly in the area of lake Urmia, north-western Iran, with probably only small numbers breeding in Turkey (Mebs 1959, Cramp & Simmons 1980, Massa et al 1991, Krueger et al 1996, Clark 1999, Corso 2001, Gustin et al 2002, Kirwan et al 2008). This highly distinctive subspecies is well differentiated from all other Lanner taxa, especially from nominate *F b biarmicus* (hereafter *biarmicus*), which occurs in southern Africa. It is important to stress that *feldeggii* is steadily decreasing and is threatened to become extinct within the next 10 years or so (Corso 2013, Allavena et al 2015, De Lisio et al 2015; pers obs). It is nowadays one of the rarest breeding bird taxa in Europe and the Western Palearctic, and the number of breeding pairs so far reported in literature has been exaggerated and is often based on old data (eg, for Turkey) (Corso unpublished). A century ago, this taxon was still common; giving an idea on how much more common it was in the past is illustrated by the fact that, from January 1919 to February 1921, more than 200 specimens were collected in Puglia, Italy, alone (and sent to museums all over Europe and elsewhere in the world). Recent estimates of the world population of *feldeggii* are c 500-900 breeding pairs, including 123-172 pairs in Italy (65 in Sicily and 58-82 on the mainland; Allavena et al 2015, Leonardi 2015), and, most recently, 59-83 pairs in 2016-17 in Italy (Corso unpubl) with 60 territories counted in Sicily in 2016 (Di Vittorio et al 2017) reduced to 30-40 breeding pairs in 2017 (Corso unpubl, Gruppo Tutela Rapaci unpubl) and a world population is now estimated at no more than 170-230 pairs (Corso unpubl).

We also give information about the two subspecies *F b erlangeri* (hereafter *erlangeri*) from north-western Africa and *F b tanypterus* (hereafter *tanypterus*) from north-eastern Africa and the Arabian peninsula. A detailed analysis of the measurements of the dark tail bars will be published separately; here, we present a more 'in the field' approach, rather than 'in the hand'.

Materials and methods

For this paper, the identification characters used were verified on 59 breeding pairs observed between 1999 and 2015, all over the Italian distribution range of *feldeggii*: Abruzzo, Basilicata, Calabria, Emilia-Romagna Lazio, Molise, Puglia and Sicily (mostly). Sexing was done only when both adults were together at the nest by using: ***1*** size and structure when directly comparable; ***2*** characters previously proposed by Corso (2000, 2001; see below under 'Sexing'); and ***3*** vocalizations (males have a higher-pitched, clearer voice and females have a deeper, louder and hoarser voice (pers obs; Magnus Robb pers comm). We also analysed the same characters in c 35 breeding pairs of *erlangeri* and *tanypterus* from Tunisia (16) Morocco (10), Egypt (three to four) and Israel (three to four). To find additional sexing characters not specifically tested before, we recorded the differences in the width of the dark markings on tail and wing, tertials and greater coverts of upperwing and underwing during field observations, using telescopes with eyepiece 20-60x. In addition, we observed the boldness and conspicuousness of the dark markings on breast, flank and 'thigh', under-tail-coverts and mantle, alongside with the brightness of the upperparts, pattern and colour of the head and shape of the moustachial mark. Concerning museum material, 85 specimens (52 males, 33 females) of *feldeggii* from various European museums were studied and a further 60 specimens of adult *erlangeri* (37 males, 23 females) and 15 specimens of adult *tanypterus* (nine males, six females). Of the *feldeggii* skins, some were first-adult birds, while others were apparently mislabelled or wrongly sexed, leaving the sample considered consisting of 53 specimens of full adults (35 males, 18 females).

Skins originated from the following collections: Natural History Museum, Tring, England (NHMUK); Naturhistorisches Museum Wien, Vienna, Austria (NMW); Museo Civico di Scienze Naturali 'Angelo Priolo', Randazzo, Italy (MCR); Museo Civico di

FIGURE 1 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii (Lorenzo Starnini)*. Extreme examples of adult female (above) and adult male (below). Note general paler and brighter impression of typical fully adult male, with narrower dark markings, chiefly on central tail-feather (t1) but also all over plumage. These are most typical sexually characterized individuals but note that some younger adults or older females are more difficult to sex.

FIGURE 2 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (left) and adult male (right) *(Lorenzo Starnini)*. Note that dark markings on underwing-coverts are wider and more marked in typical adult female than in typical fully adult male. In female, breast is typically dark spotted/streaked and flank usually more markedly barred.

Storia Naturale di Milano, Milano, Italy (MCSM); Museo Civico dell'Università di Scienze Naturali di Catania, Cantania, Sicily, Italy (MCUCT); Museo Civico di Terrasini, Palermo, Sicily, Italy (MCT); Museo Civico di Zoologia di Roma, Rome, Italy (MCZR); Muséum National d'Histoire Naturelle, Paris, France (MNHN); Steinhardt Museum of Natural History, Tel-Aviv University, Israel (SMNH); Museo Ambientalistico Madonita, Polizzi Generosa, Palermo, Sicily, Italy (MAM); Collezione Ornitologica Fratelli Azzara, Chiaramonte Gulfi, Ragusa, Italy; and five private collections.

Results

First step (ageing)

Sexing Lanner Falcons on plumage characters, both in the field and in the hand, should be done only after correct ageing. In fact, first adults (from autumn of second calendar-year to spring of third calendar-year) of both sexes are more similar to each other than to full adults, so that differences between sexes are often more difficult to detect. At this age, after the first complete moult cycle, when birds do not yet show full adult traits, sexual differences in plumage are less evident and less constant, making sexing based only on plumage difficult (cf Corso 2000, 2001, Leonardi 2015, Forsman 2016). First adult males show a less bright plumage, less defined than fully adult males, thus appearing very similar to adult female (except for its size; pers obs). Usually, if seen well, a first adult plumage would show an abraded retained juvenile outer primary (p10) and a juvenile pattern on the outer secondary (s1), appearing much paler, shorter and more abraded than the rest of the wing. Also, some juvenile-type, brownish, much paler and abraded feathers would be detectable on breast, flanks, thighs and mantle, giving the bird a more 'fuzzy', less tight and clean appearance than a full adult.

Sexing

Sex differences previously reported by Clark (1999), Forsman (1999, 2016) and Corso (2000, 2001) refer to: ***1*** the pattern of breast area, with fully adult males (not first adult) showing a cleaner, less patterned breast with limited or no dark mark-

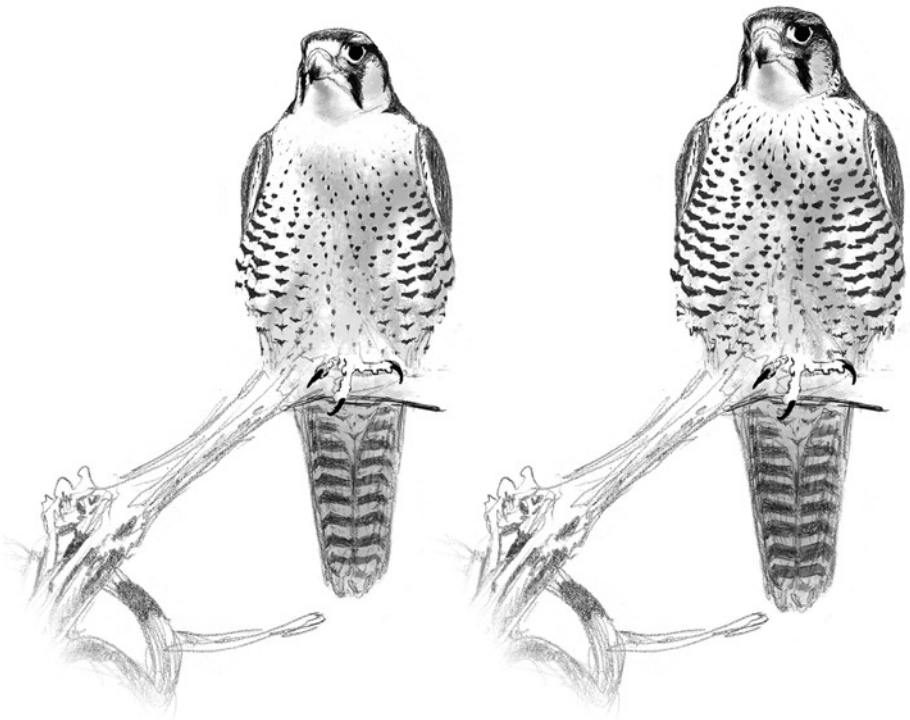

FIGURE 3 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (right) and adult male (left) *(Lorenzo Starnini)*. Note differences in breast pattern chiefly from distant view under field condition.

ings, and adult females showing conspicuous and bold dark markings (figure 2-3; plate 429, 431, 434, 437, 447-449); ***2*** the width and conspicuousness of the dark markings on flank and thigh, with fully adult males showing narrower and less conspicuous dark barring (figure 2-3; plate 429, 431, 434, 437, 447-449); ***3*** the head colour and pattern, with males showing a cleaner cheek-patch, narrower, better defined moustache and brighter, rustier, more orange crown/nape, and females usually having a wider and less well marked moustache, duller cheek with more extensive dark (pencil-like) streaking, and duller and more extensively dark blotched crown/nape (figure 1; plate 428, 430, 432, 435, 438, 447-450). For this paper, we further considered: ***4*** the width of the dark markings on tail, uppertail-coverts and wing (both remiges and greater coverts on upperwing and underwing) (figure 1; plate 429-440). In full adult males, dark markings on these feathers are on average narrower, better marked and more contrasting with pale areas that appear wider and paler, giving a brighter, more bluish aspect compared with the duller, darker females. Considering only the dark bars on the central tail-feather (t1), most of the full adult *feldeggii* studied were correctly sexed in the field (85 birds out of 119 birds, 59 breeding pairs) (figure 1; plate 428, 430, 432-433, 435-436, 438-439, 443-444). In fact, in no less than 72% of the birds observed, the central tail barring pattern agreed with the sexing made using size and vocalization. In the hand, sexing was possible for 100% of the studied skins of full adult birds (probably also because of a more precise assessment of the width of the dark bars when handling the specimens). Concerning first-adult and mislabelled skins (n=32), sexing was not possible using tail-pattern and dark markings.

In *erlangeri* and *tanypterus*, sexing often appeared more difficult using tail barring or the pattern of head and upperparts alone. However, when observing full adult males and full adult females of these taxa in the field, it is usually possible to sex them by using the characters discussed in this paper. In fact, adult males are usually brighter, cleaner, less marked than adult females, with: ***1*** a clean-

428-429 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult male, Sicilia, Italy, 30 March 2000 *(Andrea Corso)*. Note typical underwing pattern but otherwise very rusty bird, with more conspicuous rusty tinge on face and underparts, as well as unusually marked breast markings (although never as much and as bold as in female). On upperside, note typical very narrow dark barring to tail and uppertail-coverts.

430-431 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female, Sicilia, Italy, 30 March 2000 *(Andrea Corso)*. Very typical female *feldeggii*, almost like mix of Saker Falcon *F cherrug* and Gyrfalcon *F rusticolus*, with very well-marked and strongly contrasting underwing-coverts and heavily spotted breast. On upperside, note wider dark markings to uppertail compared with adult male, and generally darker appearance of upperparts.

432-433 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (collected at Brindisi, Puglia, Italy, in January; year unknown), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Note typical breast and flank pattern and broad tail barring and general dark appearance of upperparts, as well as restricted rusty area on nape.

434 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (collected at Brindisi, Puglia, Italy, in January; year unknown), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Same bird as in plate 432-433. Note broad dark tail barring, with pale area being rather narrow.

er breast with no or very small and limited dark spots, and narrower dark markings on flanks/thighs; ***2*** the dark band over underwing less conspicuous and striking than in females, in which it is darker, more extensive and more obvious; and ***3*** paler and brighter upperparts with narrower dark markings (Corso 2001; pers obs in Egypt, Israel, Morocco and Tunisia).

Conclusions

Sexing is possible in most full adult birds, often easily in the field, although even more reliably with birds in the hand. A certain amount of variability was recorded: in detail, character ***1*** (breast pattern) and ***4*** (tail barring) reported above are the most reliable, whereas character ***2*** (flank and thigh markings) and ***3*** (head pattern) for *feldeggii* are the most variable and the ones that we found to overlap in some individuals. Therefore, breast pattern and tail barring are the main characters to check. For *erlangeri* and *tanypterus*, character ***3*** appears quite variable while character ***2*** and, especially, ***1*** are the most reliable. However, we suggest to always combine these features when possible with size, voice and behaviour.

Final remarks

Feldeggii declined rapidly and is now possibly facing extinction, so it needs the strongest protection possible. Therefore, we think that disturbing such a rare and endangered taxon at its nest should strictly be avoided so we decided not to use photographs taken at the nest or close to it. The only photographs near the breeding sites used here were taken from very far away, as the quality clearly shows. We always avoided to approach the breeding cliff closer than to 400 m, both to photograph birds and to study them.

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435-437 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult male (collected in Montenegro on 3 March 1932), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Note cleaner looking breast than in female. This is rather dark and rusty bird, darker than typical adult male, less bright (possibly younger adult), but also note typical tail pattern for adult male.

438-439 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (collected at Foggia, Puglia, Italy, in January 1920), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Very well-marked female, one of those looking as mix of Saker Falcon *F cherrug* and Gyrfalcon *F rusticolus*. Note typical breast and flank pattern. Note also typical tail pattern (see also plate 440), dark, almost black upperparts and limited rusty area on nape, with dark central nape patch very extensive.

440 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (collected at Foggia, Puglia, Italy, in January 1920), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Same bird as in plate 438-439. Note typical tail pattern.

441 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, first-adult male (collected at Foggia, Puglia, Italy, on 3 March 1920), Museo Civico di Zoologia di Roma, Rome, Italy, 7 June 2013 *(Andrea Corso/MCZR)*. Note that tail pattern in first-adult birds is very similar in both sexes, with male showing wider dark barring than average in adult male, making sexing using only plumage characters difficult.

442-443 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult male (collected in Montenegro on 3 March 1932), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Same bird as in plate 435-437. Note facial and nape pattern and compare with plate 444-445.

444-445 Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female (collected at Foggia, Puglia, Italy, in January 1920), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Same bird as in plate 438-440. Note darker face of many females compared with typical adult males, and typically duller nape and crown of many females compared with typically rustier, brighter head of most males (cf plate 442-443).

446-447 Lanner Falcon / Lannervalk *Falco biarmicus erlangeri*, adult female (above) and adult male (below) (both collected in Morocco; date unknown), Natural History Museum, Tring, England, 22 March 2016 *(Andrea Corso/NHMUK)*. Usually, also in North African taxa, breast and tail pattern are good sexing characters, although apparently less constant than in *feldeggii*.

448 Lanner Falcons / Lannervalken *Falco biarmicus feldeggii*, pair (adult male left and female right), Sicily, Italy, 29 January 2012 *(Stefania Merlino)*. Note darker face and broader flank barring of female. Tail and breast pattern are not always easy to spot in the field, neither is underwing, as in this photograph. **449** Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult male, Sicily, Italy, 3 May 2014 *(Stefania Merlino)*. Note very clean breast contrasting with well-barred (although narrowly) flanks. **450** Lanner Falcon / Lannervalk *Falco biarmicus feldeggii*, adult female, Sicily, Italy, 1 April 2014 *(Stefania Merlino)*. Breeding mate of male in plate 449. Note well-spotted/streaked breast and vent/belly and broad flank barring that are typical. However, note cleaner face in this female compared with many other females.

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Samenvatting

Geslachtsbepaling van Lannervalk in het veld In dit artikel wordt de geslachtsbepaling besproken van Lannervalk *Falco biarmicus feldeggii*, de ondersoort die voornamelijk in Zuid-Europa voorkomt, oostelijk tot Turkije en Noordwest-Iran. Deze ondersoort staat op de rand van uitsterven: het aantal broedparen loopt gestaag achteruit en de huidige wereldpopulatie wordt thans geschat op niet meer dan 170-230 broedparen.

Informatie over de geslachtsbepaling in de literatuur richt zich voornamelijk op geluid (vrouwtje heeft scherpere en rauwere roep dan mannetje), grootte (vrouwtje is duidelijk groter dan mannetje), koppatroon (bij vrouwtje vager en minder opvallend dan bij mannetje) en borsttekening (zie onder). Enkele van deze en andere verenkleedkenmerken zijn nader onderzocht.

Geslachtsbepaling blijkt alleen goed mogelijk bij volledig adulte vogels en daarom is een juiste leeftijdsbepaling een eerste vereiste. Bij juvenielen en bij onvolwassen vogels in het tweede kalenderjaar tot en met het voorjaar van het derde kalenderjaar (herkenbaar aan de nog aanwezige oude en versleten juveniele buitenste handpen (p10) en de oude en versleten buitenste armpen (s1)) zijn de verschillen tussen mannetjes en vrouwtjes gering en minder constant.

De twee meest betrouwbare geslachtskenmerken zijn: ***1*** de tekening op de borst (bij vrouwtjes opvallende en brede vlekking, bij mannetjes veel minder tekening); en ***2*** de breedte van de zwarte banden ten opzichte van de lichte banden op staartpennen, bovenstaartdekveren en bovenvleugel (bij vrouwtjes zijn de zwarte banden breder dan de lichte en minder scherp afgetekend en contrastrijk dan bij mannetjes); de mannetjes tonen op die veerpartijen daardoor lichter en meer 'blauwachtig' dan de donkerdere vrouwtjes. Daarnaast hebben mannetjes meestal minder sterk getekende ondervleugeldekveren met kleinere en smallere donkere vlekken dan vrouwtjes.

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Bergheggenmus op Maasvlakte in oktober 2016

Jurriën van Deijk, Jacob Lotz & Enno B Ebels

Op 21 oktober 2016 waren wij (Jurriën van Deijk en Jacob Lotz) vanaf het eerste daglicht op de Maasvlakte, Zuid-Holland, om te zoeken naar zeldzame vogels. We begonnen onze zoektocht bij de greppel achter de brandweerkazerne. Hier zaten twee Heggenmussen *Prunella modularis*, redelijk veel Goudhanen *Regulus regulus* en een Zwartkop *Sylvia atricapilla*. Terwijl we rondliepen kwamen er nog meer Goudhanen uit zee aanvliegen. Hierna liepen we via de zeedijk naar de oude zeetrektelpost. In de bosjes naast de parkeerplaats zaten ook redelijk wat vogels, waaronder twee Kleine Barmsijzen *Acanthis cabaret*. Omdat er inmiddels andere vogelaars langs de greppel liepen, besloten we om over de Vuurtorenvlakte terug te lopen naar de auto en de duindoorncomplexen te checken. Er vlogen Goudhanen, Heggenmussen en Winterkoningen *Troglodytes troglodytes* op. Bij het achterste bosje nam JvD langs de rand van de duindoorns een kleine zangvogel waar en zette zijn kijker erop; hij zag dat het een Bergheggenmus *P montanella* was, dé soort waar – vanwege de influx die op dat moment plaatsvond in Europa – heel vogelend Nederland die week naar op zoek was. Toen hij JL inseinde vloog de vogel op en kon JvD snel wat foto's maken. JL volgde de vogel met de kijker, totdat hij weer inviel naast een duindoorncomplex. We checkten de foto's en stuurden iets na 09:00 haastig een Dutch Bird Alert uit. Het complex waar de vogel was ingevallen werd goed in de gaten gehouden. De eerste vogelaars waren snel ter plekke maar er was nog geen spoor van de vogel. Na een paar uur op afstand wachten werden de bosjes doorzocht en bleek hij niet meer aanwezig in het complex. De groep vogelaars ging uit elkaar om te

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zoeken. Rond 12:00 zagen Theo Admiraal, Harm Niesen en Gunther Vergauwen een Kleine Barmsijs langs de greppel bij de oude telpost. Eenmaal in de kijker bleek de Bergheggenmus er vlak naast te zitten! De meer dan 150 vogelaars op de vlakte werden met armbewegingen gewaarschuwd en even later kon iedereen hem uitgebreid bekijken. De vogel bleef de rest van de dag voornamelijk in de greppel scharrelen en liet zich uitgebreid bewonderen en fotograferen door enkele 100en vogelaars; de volgende dag was hij niet meer aanwezig (van Deijk & Lotz 2016).

Beschrijving

De beschrijving is gebaseerd op vele 10-tallen foto's en videobeelden van een groot aantal vogelaars (cf www.dutchbirding.nl, www.waarneming.nl, www.youtube.com; Dutch Birding 38: 472, plaat 717, 485, plaat 740-741, 2016).

GROOTTE & BOUW Als Heggenmus, mogelijk iets kleiner, en met verhoudingsgewijs langere staart. Snavel fijn en spits.
KOP Contrastrijk getekend, met vuilgele wenkbrauwstreep (van snavel tot ver achter oog reikend en verbredend achter oog) en vuilgele kin en keel. Zijkruinstreep donkergrijs. Kruin bruingrijs met donkere lengtestreepjes. Oorstreek donkergrijs met vuilgele vlek op achterst deel en paar verspreide gelige vlekjes onder oog. Lichte halve oogring rondom onderzijde van oog. Teugel naar snavel toe lichter wordend.
BOVENDELEN Grijs met bruinzwarte lengtestreping. Smalle grijze 'sjaal' tussen achterkop en mantel. Stuit grijs en vrijwel ongestreept.
ONDERDELEN Licht vuilgeel, iets bleker dan geel op kop. Borst vrijwel ongetekend. Op flank grijsbruine lengtestreping. Onderstaartdekveren gelig tot vuilwit, iets lichter dan buik. Onopvallende bruine lengtestreping op achterflank en onderstaartdekveren.
VLEUGEL Grijsbruin. Witte toppen aan grote vleugeldekveren, duidelijk vleugelstreep vormend. Tertials met donkergrijs centrum, lichtbruine randen en witte punt aan top.
STAART Bovenstaart grijs.
NAAKTE DELEN Snavel donker, hoornkleurig op basis van ondersnavel en op snijrand van basis van bovensnavel. Oog donkerbruin. Poot licht roze-oranje.
GELUID Niet vastgesteld.
RUI & SLEET Ruicontrast zichtbaar in grote dekveren.
GEDRAG Na terugvondst foeragerend op bodem van droge greppel, meestal tussen lage begroeiing. Af en toe wegvliegend en kort op stenen of talud zittend. Tam, foeragerend tot op enkele meters van waarnemers.

Determinatie

De herkenning van Bergheggenmus is eenvoudig.

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De soort heeft dezelfde bouw als Heggenmus maar kent een markant geel-zwart koppatroon en is lichter van kleed. De combinatie van een brede gele wenkbrauwstreep, zwarte wang met kleine gele vlek en gele keel past alleen op Bergheggenmus. Er is verwarring mogelijk met Zwartkeelheggenmus *P atrogularis*. Deze soort is in het najaar te herkennen aan de zwart met wit gevlekte keel en de meer gestreepte borst; de keelvlek kan echter heel beperkt van omvang zijn en is in dat geval dus een subtiel kenmerk. De volledig ongetekende keel en nauwelijks getekende borst van de vogel van de Maasvlakte sluiten Zwartkeelheggenmus echter met zekerheid uit (Alström & MacKay 1995, Beaman & Madge 1998, van Duivendijk 2011, Svensson et al 2012, Howell et al 2014).

Leeftijdsbepaling
De leeftijdsbepaling van Bergheggenmus is in de literatuur niet uitgebreid behandeld maar komt voor zover bekend in grote lijnen overeen met de leeftijdsbepaling bij Heggenmus. Op basis van meer dan 400 geringde exemplaren in Oost-Siberië, Rusland (Amur Bird Project), kwamen Heim & Heim (2016) met de volgende suggesties voor het bepalen van de leeftijd (deze konden echter niet worden geverifieerd aan de hand van vogels met een bevestigde leeftijd): ***1*** iriskleur: olijfbruin bij eerstejaars, warm roodbruin bij adult; ***2*** vorm van de grote dekveren: smaller en met roodbruine randen bij eerstejaars, breder en met grijsbruine randen bij adult; ***3*** toppen van de grote dekveren: breder en 'buff' of geelachtig bij eerstejaars, smaller en witter bij adult; en ***4*** vorm van de staartpennen: gesleten en meer puntig bij eerstejaars, verser, breder en meer afgerond bij adult. Hoewel de leeftijdsbepaling bij heggenmussen (zelfs in de hand) erg lastig kan zijn, achtte de Commissie Dwaalgasten Nederlandse Avifauna (CDNA) het op basis van de uitgebreide fotografische documentatie voldoende onderbouwd dat de Maasvlakte-vogel een eerstejaars betrof, op basis van (in aflopend belang), de twee generaties grote dekveren (de vlek aan de top van de adulte veren is meer 'vierkant'), de vorm van de staartpennen en de iriskleur (Vincent van der Spek in litt).

Verspreiding en voorkomen
Bergheggenmus broedt in een relatief smalle zone in Siberië, Rusland. Deze zone ligt verder noordelijk dan de broedgebieden van de meeste andere trekkende zangvogels die als dwaalgast in West-Europa bekend zijn. De soort overwintert in noordelijk gelegen delen van Oost-Azië en Zuidoost-Azië, voornamelijk in China en op het Koreaanse schiereiland (del Hoyo et al 2005). In het najaar van 2016 vond een influx zonder weerga plaats in Europa. De eerste dwaalgasten werden eind september in Noordwest-Rusland gezien en vanaf 4 oktober werd de influx merkbaar in Scandinavië. Na midden-november namen de aantallen snel af en in de winter van 2016/17 werden nog slechts weinig vogels gemeld, waaronder enkele overwinterend. In totaal waren er ten minste 211 gevallen in Noord- en West-Europa, verspreid over 15 landen; c 25 waarnemingen zijn nog in behandeling bij de betrokken dwaalgastencommissies. Het zwaartepunt van de influx lag ten noordoosten van Nederland, vooral in Finland en Zweden. Naast de waarneming in Nederland waren er gevallen (op volgorde van aantallen) in Finland (66+, c zes waarnemingen nog niet beoordeeld), Zweden (63+, c 18 waarnemingen nog niet beoordeeld), Brittannië (14), Denemarken (12), Noorwegen (11), Polen (10), Oekraïne (negen of 10), Duitsland (negen), Letland (negen), Estland (acht), Europees Rusland (ten minste vier), Litouwen (vier), Hongarije (één) en Tsjechië (één); het exacte aantal hangt af van de nog lopende beoordeling van een aantal gevallen (Łukasz Ławicki in litt). De drie meest zuidelijke waren in Hongarije, Nederland en Tsjechië. Tot en met 2015 waren er in totaal c 32 gevallen in Europa. Een uitgebreide publicatie over de influx van 2016-17 is in voorbereiding voor Dutch Birding (Łukasz Ławicki in litt).

De waarneming op de Maasvlakte is door de CDNA aanvaard als eerste geval voor Nederland. Ook in Brittannië, Duitsland, Estland, Hongarije, Letland, Litouwen, Noorwegen, Polen en Tsjechië werd de soort niet eerder dan 2016 vastgesteld.

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Dankzegging
Vincent van der Spek (CDNA) leverde informatie over de leeftijdsbepaling. Łukasz Ławicki leverde het overzicht van gevallen in Europa.

Summary
Siberian Accentor at Maasvlakte in October 2016 On 21 October 2016, the first Siberian Accentor *Prunella montanella* for the Netherlands was found at Maasvlakte, Zuid-Holland. It was present for just one day and seen by a few 100 birders. This observation coincided with the unprecedented influx of this species in Europe in the autumn of 2016, with a few in the winter of 2016/17. A total number of at least 211 individuals were seen in 15 countries; in addition, c 25 reports are still under consideration by the relevant rarities committees (mainly from Finland and Sweden). Before 2016, there were c 32 records in north-western Europe, mainly in Scandinavia.

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Oriental Plover on Røst, Norway, in June-July 2017

On 29 June 2017, Gunnar Gundersen and Aïda López arrived on Røst, Nordland, Norway, by ferry at 20:30 as part of their camping holiday in the Lofoten islands chain. Oddvar Heggøy gave them a lift from the ferry to the cemetery, a favoured camping site. After unloading their luggage, GG lifted his binoculars and the first bird he saw was a plover, a 'Caspian Plover with a white head'. After a few seconds, he realised that the bird in fact was an Oriental Plover *Anarhynchus veredus*! Neither he nor anyone else present could remember its Norwegian name – it is not one of the species you expect or even hope for. The alarm went out to other birders on the island, local resident Steve Baines and Martin Eggen, the latter working with OH on BirdLife Norway's survey of breeding Icelandic Godwits *Limosa limosa islandica*. All saw the bird and secured documentation within a quarter of an hour. The next day, 30 June, other birders arrived from further afield and were treated to excellent views. The bird was feeding in belts of dried seaweed and taking short flights, but always returned to the site where it was first seen. Many more birders were due to arrive with the ferry at 15:00 on 1 July, a Saturday. Unfortunately, the bird disappeared at around 11:30, possibly prompted by the attention of over-eager photographers. Despite extensive searches on Saturday afternoon and all day on Sunday (and here all day means until midnight), it could not be relocated. It was an amazing bird, not just because of its rarity, but as a real beauty, and those lucky enough to experience it will have memories for life.

Description
The description is based on the observations in the field and on photographs by SB, OH and GG (Dutch Birding 39: 257, plate 331, 2017) and video images by Thorbjørn Aakre (http://tinyurl.com/ybxx9y5l).

SIZE & POSTURE Size between Common Ringed Plover *Charadrius hiaticula* and European Golden Plover *Pluvialis apricaria*. Posture quite reminiscent of Eurasian Dotterel *C morinellus*. Legs and wings long. Bill of medium length.
PLUMAGE Head white, with poorly marked cap formed by some 'caffe latte' coloured feathers on rear crown. Upperparts brown. Reddish-brown breast-band with blackish lower edge, forming characteristic straight horizontal line from breast and along wings. Rest of underparts white. In flight, upperwing almost uniform pale brown, with just faintest hint of paler wing-bar (plate 455-456). Underwing darkish.

BARE PARTS Leg yellowish, bill and eye black.
VOCALIZATIONS Bird heard to call few times: series of short notes, similar in tone to Sanderling's *Calidris alba* '*plitt*' call.
BEHAVIOUR When discovered, in company of single European Golden Plover and, although being solitary most of the time, joining small flock of European Golden Plovers when disturbed by sheep or by noisy flock of large gulls. Although being absent for brief periods, repeatedly returning to initial location, feeding in typical plover manner with short runs, picking up small food items (probably insects) from belts of dried seaweed.

Identification

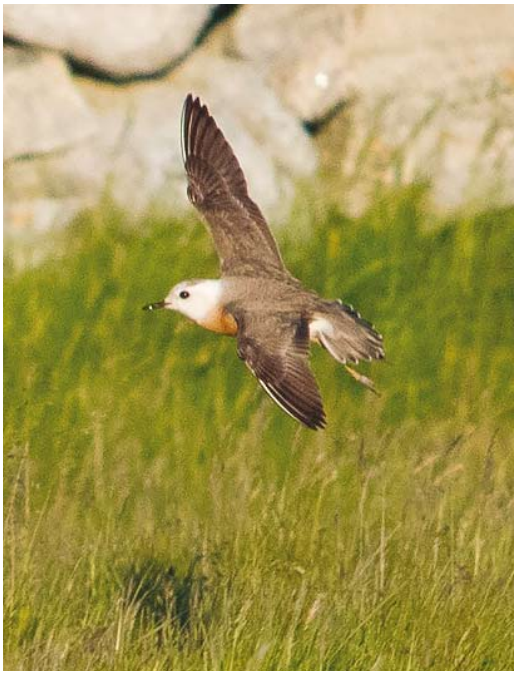
Initially, the bird looked like a Caspian Plover *A asiaticus* but with a white head (remarkably, several of the initial observers had seen a Caspian Plover just 800 m from this location on 20-21 October 2009!). The combination of characters rules out any wader other than Oriental Plover, including Caspian, which is smaller, lacks the almost completely white head and has paler underwings. The plumage features with largely white head identified the bird as an adult male; first-summer males show very worn primaries and usually attain a dull breast band (Prater et al 1977).

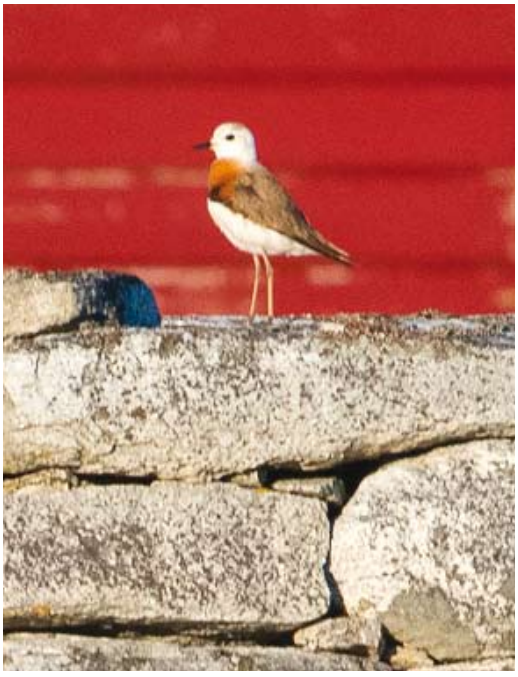
Distribution and vagrancy

This was the first record for Norway and the second for the Western Palearctic (cf Haas 2012). Oriental Plover breeds in dry steppe and desert habitat in southern Siberia, Russia (Tuva and southern Transbaikalia), through western, northern and eastern Mongolia, east as far as north-eastern China. It winters in northern and central Australia, scarcely in southern Australia and New Guinea (Chandler 2009, Wiersma & Kirwan 2017). At the beginning of the 21th century, the total population was estimated at 70 000 individuals (Bamford et al 2008). Based on a single survey at Eighty Mile Beach in north-western Australia in February 2010 (144 300 individuals along 75 km), yielding a count of more than twice the previous estimate (Piersma & Hassel 2010), the current population is estimated at 145 000-155 000 individuals (Wetlands International 2017). According to Piersma & Hassel (2010), a variation in seasonal rainfall is probably the main factor leading to the large aggregations of Oriental Plovers and other species of grassland waders in north-western Australia (during this same survey at Eighty Mile Beach in February 2010 as many as 514 900 Oriental Pratincoles *Glareola maldivarum*

454 Oriental Plover / Steppeplevier *Anarhynchus veredus*, adult male, Røst, Nordland, Norway, 1 July 2017 *(Steve Baines)*

455 Oriental Plover / Steppeplevier *Anarhynchus veredus*, adult male, Røst, Nordland, Norway, 30 June 2017 *(Gunnar Gundersen)* **456-457** Oriental Plover / Steppeplevier *Anarhynchus veredus*, adult male, Røst, Nordland, Norway, 29 June 2017 *(Steve Baines)*





and 14 200 Little Curlews *Numenius minutus* were counted). Relatively limited amounts of rain may result in a rapidly growing grasshopper population but persistent heavy rain may reduce the availability of food, leading the birds to seek drier conditions elsewhere.

During migration to and from the wintering grounds in Australia, the species occurs in small numbers in eastern and south-eastern Asia, the Philippines, New Guinea, Melanesia and Micronesia. A scarcity of records between China and non-breeding grounds suggests non-stop flights between these two zones (Wiersma & Kirwan 2017). Extralimital records come from New Zealand, Chagos Islands, Seychelles (Wiersma & Kirwan 2017), Lake Baikal in Russia (Mlíkovský 2009) and Kazakhstan – an adult male at Atanbaschik semi-desert, Aqtöbe province, on 9 May 2009 represented the first record for Central Asia (Wassink et al 2011). Besides the Norwegian bird, the most remarkable records concerned an adult male shot at Narsaq, Greenland, on 23 May 1948 (Boertmann 1994) and an adult male photographed at Alajoki, Ilmajoki, Finland, on 25 May 2003 (Rannila 2003, Haas 2012; Dutch Birding 25: 338, plate 374-375, 341, plate 380, 2003). Arkhipov (2005) pointed out that the record in Finland coincided with larger than usual numbers on southern Siberian breeding grounds in 2003. Interestingly, all of the most spectacular records (Finland, Greenland, Kazakhstan and Norway) concerned adult males in May-June (also three of four records at Lake Baikal were in May; Mlíkovský 2009). In Mongolia, the species arrives at breeding sites from early May. The breeding season lasts from May to July, and the birds leave their nesting grounds from late August to early September (Gombobattar & Monks 2011). According to Wiersma & Kirwan (2017), the first males depart their breeding grounds in July. This may suggest that these spring records concern birds overshooting their breeding grounds when returning from their wintering areas.

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Sykes's Nightjar at Muntasar oasis, Oman, in December 2016

In December 2016, we (five Catalan naturalists) visited Oman on a trip around the country. We specifically focused on birds and mammals, as Oman is an increasingly popular destination among birders to see wintering birds from Central Asia and Siberia, many Arabian specialities and also a good place for several interesting mammal species. On 12 December, we visited Muntasar oasis (19°27′11.8″N, 54°37′13.9″E) at night, after spending the last daylight in nearby Qatbit oasis, where we observed an Egyptian Nightjar *Caprimulgus aegyptius* hunting and sitting in front of us. At Muntasar, we hoped to see some night mammals and indeed we saw two Mountain Gazelles *Gazella gazella cora* and a Jerboa *Jaculus jaculus*, when a small and pale nightjar flew in. It had an unusual appearance, so we decided to approach it

with a spotlight. It was sitting on the ground regularly; we could approach the bird to c 2 m and took some photographs. At that moment, it was obvious that we were confronted with an uncommon nightjar species. A few days later, back home, we checked the internet for other nightjar species from countries around Oman and found Sykes's Nightjar *C mahrattensis*, which fitted perfectly with the bird we photographed (plate 458-459).

Description and identification

Because we had observed an Egyptian Nightjar only one hour before, we could easily note some differences in structure. The bird from Muntasar was a small nightjar. The short tail and short primary projection emphasized the general appearance of a short and large-headed bird. The tail only exceeded slightly beyond the wing-tip. The general coloration was rather uniform sandy-grey. The most obvious pattern on the upperparts were the scapulars irregularly marked black-and-buff and the boldly buff-spotted wing-coverts. It had a well-defined buff nuchal collar. The wing-tips were only slightly darker than the rest of the body. The head was also very uniform, with no moustachial stripe and with non-contrasting ear-coverts. The main marks on the head were only a very few small streaks on the crown and a diffuse buffish area above and in front of the eye. In flight, it showed well-marked white spots on the primaries and outer rectrices.

In Arabia, four species of nightjar have been recorded. Several subspecies of European Nightjar *C europaeus* occur on passage and this species is rare in winter; Egyptian Nightjar is also a migrant and winter visitor; Nubian Nightjar *C nubicus* is basically restricted to the southern coast of Yemen, Saudi Arabia and Socotra and rare elsewhere; finally, Sykes's Nightjar is a vagrant in the region (Porter & Aspinall 2010).

The bird's structure excludes any pale subspecies of European Nightjar, which are always larger and with a longer tail projection (Cleere & Nurney 1998). The observed small size and structural characters fit Sykes's Nightjar, which is smaller than Egyptian Nightjar and only slightly larger than Nubian Nightjar.

The plumage description easily excludes Nubian Nightjar and, again, European Nightjar. Nubian's subspecies from Middle East *C n tamaricis* also has a well-marked nuchal collar, usually much richer coloured, but when abraded it can

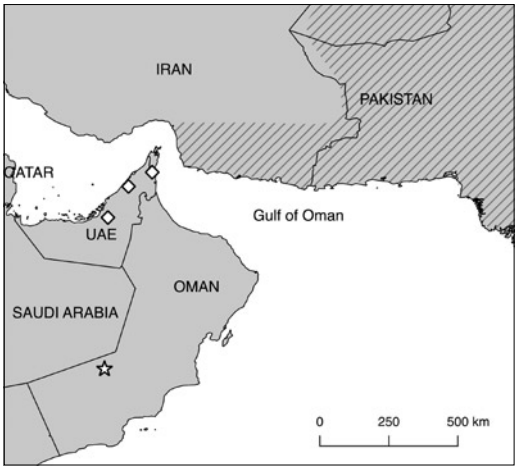
458 Sykes's Nightjar / Sykes' Nachtzwaluw *Caprimulgus mahrattensis*, Muntasar oasis, Oman, 12 December 2016 *(Albert Burgas)*

look quite buff (Shirihai et al 1996). However, Nubian has a white moustachial stripe, the wingtips are darker and it tends to be more heavily patterned overall than Sykes's Nightjar. The eastern subspecies of European, *C e unwini* and *C e plumipes*, are smaller and paler than *europaeus* but still have well-marked upperparts, with a typical dark area at the bend of the wing and a white moustachial stripe (Cleere & Nurney 1998). Egyptian Nightjar is the species most similar to Sykes's in coloration, being very uniformly coloured but also quite variable. Egyptian can sometimes also show a nuchal collar but usually less distinct than in Sykes's. In flight, the appearance is obviously different, as Sykes's shows wide and well-marked white spots on the primaries and outer tail-feathers. In contrast, Egyptian shows a uniform upperside of the primaries, generally with no traces of white. At most, some Egyptian may show a small amount of white in the outer primaries but it needs a fully spread wing and very good viewing conditions to see it (Oscar Campbell pers comm). Also, Egyptian can have small pale fringes on the outermost tail-feathers but much less evident than in Sykes's (Cleere & Nurney 1998).

Habitat

According to Cleere & Kirwan (2017), Sykes's Nightjar favours mainly semi-deserts with scattered thorn scrubs and also gravel or clay plains or flat salty ground with tamarisks. Muntasar is situated in the middle of a flat semidesert of sand and rocks with scattered bushes. The oasis is dominated by some thick palms, few scattered small trees, a reduced but dense reedbed and a flooding grassland that was quite dry when we visited the place. All the time during our observation, the Sykes's was sitting and flying around this grassland area.

FIGURE 1 Previous records of Sykes's Nightjar *Caprimulgus mahrattensis* in United Arab Emirates (white diamonds; four records at three locations, see table 1) and location of bird found at Muntasar, Oman (white star). Dashed area is closest breeding range (BirdLife International 2016).



459 Sykes's Nightjar / Sykes' Nachtzwaluw *Caprimulgus mahrattensis*, Muntasar oasis, Oman, 12 December 2016 *(Albert Burgas)*

Distribution and extralimital records

Sykes's Nightjar breeds in south-eastern Iran, Pakistan, southern Afghanistan and north-western India. Its movements are poorly known and it is regarded as a sedentary and partially migratory species with its wintering distribution extending to western and central India (Cleere & Kirwan 2017). It is an extremely rare species in Arabia, with only four previous records, all from the United Arab Emirates (UAE; table 1). Those sightings occurred in winter from late December to late February and, therefore, the Muntasar bird is the earliest record in the region (Pedersen & Aspinall 2010; Oscar Campbell pers comm). One should note that all sightings from the UAE are relatively close to the breeding grounds of Sykes's in Iran, just at the other side of the Strait of Hormuz (figure 1).

TABLE 1 Records of Sykes's Nightjar *Caprimulgus mahrattensis* in Arabia (Pedersen & Aspinall 2010; this paper)

Oman (1)
12 December 2016, Muntasar oasis

United Arab Emirates (4)
4 February 2001, Dubai Pivot Fields, male
9-28 February 2001, Al Wathba Camel Racetrack, male
14 January to 22 February 2005, Al Wathba Camel Racetrack, male
20-25 December 2007 and 18-23 January 2008, Wamm Farms, male

The record at Muntasar has been submitted to the Oman Bird Records Committee; if accepted, it becomes the first for Oman and a record much further south than the previous records in the region. However, the species may be overlooked. Bearing in mind that nightjars are especially hard to see properly and the low frequency of visiting birders in most of the region, we presume that, even if rare, it has to be of more regular appearance. We encourage birders and naturalists travelling in the region to take special care with those pale nightjars, in particular with birds that look like small Egyptian Nightjars.

Acknowledgements
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Brieven

Identification of female Pine Bunting – some remarks

With much interest, I read Alexander Hellquist's impressive study on the identification of Pine Bunting *Emberiza leucocephalos* and Yellowhammer *E citrinella* (Hellquist 2016). After many years, this identification problem is getting the attention it really needs. My biggest concern now is the general head-over-heels reaction in re-assessing Pine Bunting identification to the standards of this paper. As the title suggests, AH clearly tries to point out that the issue is immensely complicated and is only just starting to be addressed with lots of work still needing to be done. Therefore, it is odd to read that some rarities committees use extremely high assessment standards (eg, the Swedish committee; Hellquist 2016) or now consider an instant revision of all records of female Pine Buntings (eg, the Dutch and Belgian rarities committees). This would be an untimely decision to say the least, as lots of questions still await further (DNA) research.

Concerning the paper, I noted some puzzling clauses in the text, which results in some crucial information remaining somewhat hidden to the reader. Before submitting these remarks to the editorial board, I discussed them with AH. Personally, I have not seen many Pine Bunting or (possible) hybrid skins and AH's expertise was essential in writing this note, in which I include several reflections of our communication.

Grey Yellowhammers
Firstly, it is important to realize that the discussion of female Yellowhammers lacking any trace of yellow should be interpreted as a hypothesis. Fundamental DNA analysis has never been carried

out, so proof of each bird's identity is lacking. The fact that they can *seem to lack yellow* is a correct statement though. But such birds could be hybrids, rather than pure Yellowhammers.

Furthermore, the text reveals that especially first calendar-year Yellowhammers are inclined to show less yellow or may even appear to lack this colour entirely. A credible statement, as pictures of very drab Yellowhammers are quite easy to find. Perhaps the text does not stress enough that this pitfall applies to *first calendar-year* birds rather than to Yellowhammers in general. AH adds that in his study, second calendar-year (or older) Yellowhammers lacking yellow were not encountered, and that older pale birds always showed clearly visible yellow below. Grey adult Yellowhammers are probably extremely rare or even non-existent. When talking about grey Yellowhammers, it is best to make a clear distinction between the age groups. But be aware that ageing can prove very difficult in the field, especially in worn birds.

Similarly, the hypothesis that olive tones can be lacking in Yellowhammers, is an assumption that could also relate to hybrids, rather than to pure Yellowhammers. Even *if* both anomalies do exist, they have not yet been proven and DNA analysis of such birds is the first priority before any progress can be made. Therefore, we should be very careful in using the hypothetical existence of grey Yellowhammers as an argument to disqualify previously used Pine Bunting (or hybrid) characteristics. I fear that these 'grey' Yellowhammers are now wrongly treated as a key consideration in Pine Bunting identification.

Another interesting find is that Yellowhammers can lack yellow to their primary edges. In his research, AH found one out of 258 Yellowhammers (0.4%) showing this, yet no clear explanation was given in the text as to why this individual was considered a pure Yellowhammer. AH adds that, based on the combination of all characters it was unlikely to be a hybrid (the underparts were bright yellow with very limited rufous, there was no rufous on the head and it is not uncommon for Yellowhammers to have only very faint yellow tones on the primaries).

Apart from the difficulties in establishing the presence of yellow tones under field conditions, the statement that '*there are indications that large samples of female Yellowhammers hold birds that completely lack yellow in both body and primaries or at least birds that give such an impression in the field*' could be an overstatement as these assumed Yellowhammers could, in fact, include hybrids. Besides, AH also stated '*As hybrid males can lack yellow in all these feather tracts in combination* [ie, primaries, underwing and body]*, it is very likely that the same is true for hybrid females*'.

Eastern Pine Buntings

It was inspiring to read how the plumage variation of pure Pine Buntings was established by concentrating on the eastern population. Importantly, AH adds that Pine Buntings from the whole range were analyzed, but for some characters, the focus was on birds that wintered farther east. This is an important detail. However, as hybridization is a major issue in Pine Bunting ID, and with lots of important information only to be found in the center of the hybridization zone, it is essential that the complete variation in pure and hybrid birds around and within the hybridization zone is now investigated and described in full.

Since the publication of AH's paper, the presence of chestnut marks in the supercilium seems to have gained importance and is often referred to in the field, at least in Belgium and the Netherlands. In his research however, AH found five out of 175 Pine Buntings (2.8%) completely lacking any trace of these chestnut feathers. AH added that these five birds could well have been hybrids, but without DNA research this remains a guess. A few hybrid females (very faint yellow edges to the primaries) also lacked rufous in the supercilium. Apart from that, Yellowhammers *can* also show chestnut in the supercilium. Therefore, it is remarkable to note how many readers/birders now seem to place the importance of this character (which has proved not to be completely species-specific) above the importance of the lack of yellow, which actually remains the primary character. AH wrote, '*The lack of yellow plumage hues in Pine Bunting females is the single most important criterion for separation from Yellowhammer*', and this statement should not be overlooked. It is therefore highly recommended that all other characters, including the presence of rufous in the supercilium, are considered *in addition* to the presence of yellow, not *instead of*.

Puzzle not yet complete

AH made painfully clear that there is not one safe and consistent character that separates grey hybrids from pure Pine Buntings, perhaps apart from a [yellowish or] pinkish bill only being found in Pine. However, AH never stated that a pinkish billbase nor chestnut spots in the supercilium are must-have characters for all Pine Buntings. Apart from that, it is perfectly possible that a hybrid can share both characters and can also make the typical *tiu* call.

It is known that in many hybrids, the number of females is much lower than that of males; in some hybrid types, females are even non-existent (McCarthy 2006). But this author also states that, in Pine Bunting x Yellowhammer hybrids, at least some of the male and female hybrids *are* fertile. Besides that, fertility can vary individually and is not only species dependent. Today, it is still not clear what (proven) female hybrids Pine Bunting x Yellowhammer may look like. All these questions highlight that appropriate DNA research is needed. A better insight on precise sex ratio within this hybrid could clarify the identification criteria and the likelihood of females in this hybrid.

AH's paper is a firm advocate for extensive DNA and field research in the first place. Unfortunately, by concentrating on the assessment of individual characteristics, one of the most important standards in bird identification was lost: namely that the identification of a tricky species is usually only credible after the assessment of a combined, full set of characteristics, rather than that of isolated variable ones. Therefore, the findings of this paper do not necessarily replace previous standards, nor do they define 'the best character', rather they now make it possible to set out new standard character-sets for each type of Pine Bunting or hybrid.

The risk is that, with the potential erroneous rejection of many (most) records of female Pine Buntings, observers will lose interest in identifying, documenting and especially in submitting records of putative female Pine Buntings and respective hybrids to their rarities committees. Most hybrids originate from the overlap-zone, which makes them interesting vagrants as well. In some countries, hybrids in which rarities are involved, are also considered by the rarities committee, so they should all be documented in detail. The role of rarities committees may lie in assembling information of potential Pine Buntings and hybrids by categorizing them into several types: ***1*** female Pine Bunting beyond any doubt (showing the complete set of characters); ***2*** female Pine Bunting type (grey birds with an almost full set of characters); ***3*** female Pine Bunting type hybrid (birds with limited yellow or other shortcomings); and ***4*** female Yellowhammer type hybrid (birds with considerable amount of yellow).

This could prove to be the only way to gain insight into the numbers and distribution of these different types and the ratio between them. A priority could be to define sets of characters that separate these categories; especially for the female Pine Bunting type birds (types 1, 2 and 3). Apart from the presence or absence of yellow to their plumage (the main character), all other characters should be set out for each category in degree of importance. This could make it possible to classify birds objectively until DNA research clears this issue. A highly impeding factor in this stage is that we do not have insight on (visible) differences between F1 or F2 hybrids.

An important question that rarities committees should now clarify, is what information to assess/collect and how uniform standards can be set out for use across Europe. When using the most stringent approach, any female Pine Bunting could prove to be unidentifiable. But we are currently still in an early stage with much more needing to be investigated in future studies on this species and its hybrids.

I want to thank Alexander Hellquist for discussing identification features and sharing opinions on this interesting topic.

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WP reports

This review lists rare and interesting Western Palearctic birds reported mainly from **August to mid-September 2017**. 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.

GEESE A survey of the wild-origin population of **Lesser White-fronted Goose** *Anser erythropus* in Finnmark, Norway, resulted in 45 individuals being counted on 18 June, 28 of which were paired. There was only one nest with eggs, probably due to lots of snow in the most winterly summer for a century (Tomas Aarvak et al on www.piskulka.net). Monitoring in 1990-2016 at spring and autumn staging sites at Porsangen Fjord, Finnmark (used by on average 80% of the population), showed an annual decrease of 4.5% until 2010, followed by an annual increase of more than 14% up to a record 104 in 2016. Based on winter counts in the Netherlands, the reintroduced population in northern Sweden showed an increase from c 20 individuals in 2000 to more than 110 in 2012, followed by a decrease to 30-50 individuals in 2013-15 (partly caused by predation at the staging site; cf Dutch Birding 36: 42, 2014). In this reintroduced population, at least five males paired up with Barnacle Geese *Branta leucopsis* resulting in one to (in 2004) four broods a year since 2000. Up to 19 hybrids were counted in 2009 (www.piskulka.net/literature/Ansery1665.pdf).

DUCKS A female **White-headed Duck** *Oxyura leucocephala* raising four young in Jizreel valley in July concerned the first confirmed breeding record for Israel. The adult male **American White-winged Scoter** *Melanitta deglandi deglandi* off Aberdeenshire, Scotland, from 2 July remained to 19 August (in 2016, it was seen from 25 June to 29 August). A male photographed at Tjaldarvík, Suðuroy, on 16 September was the second for the Faeroes; the first was in 2011. The first breeding record of **Goosander** *Mergus merganser* for Luxembourg concerned a female raising nine chicks on the river Sûre near Rosport in late May. Satellite tracking of 15 **Ruddy Shelducks** *Tadorna ferruginea* showed them to fly at altitudes as high as 6800 m when crossing the Himalayas (J Avian Biol, http://tinyurl.com/y9js5pts); previously, a Bar-headed Goose *A indicus* had been shown to cross the Himalayas at 7290 m altitude (cf Proc Biol Sci 280: 2012-2114, 2012). If accepted, an eclipse adult male **Redhead** *Aythya americana* at Paul da Praia, Terceira,

460-461 Black-bellied Storm Petrel / Zwartbuikstormvogeltje *Fregetta tropica*, Banco de la Concepción, off Lanzarote, Canary Islands, 9 September 2017 *(Arne Torkler)*

462 Great Shearwaters / Grote Pijlstormvogels *Puffinus gravis*, Manx Shearwaters / Noordse Pijlstormvogels *P puffinus* and Sooty Shearwaters / Grauwe Pijlstormvogels *P griseus*, off Scilly, England, 3 August 2017 *(Joe Pender)*
463 Wilson's Storm Petrel / Wilsons Stormvogeltje *Oceanites oceanicus*, off Scilly, England, 20 August 2017 *(Joe Pender)*

from 1 September onwards will be the first for the Azores. In the WP, there are four records (one in England in 1996-97, two in Iceland in 1998 and one in Ireland in 2003), with two additional ones still under consideration (in the Netherlands in January-March 2016 and in France in February 2017). An adult male **Ring-necked Duck** *A collaris* at Anadyr, Chukotka, on 2 June was the first for Russia. The resident male **American Black Duck** *Anas rubripes* at Strontian, Highland, Scotland, remained into September. In Norway, the male at Hagabukta, Rogaland, from 22 June was last seen on 15 July.

GROUSE In Aves 54: 59-72, 2017, Jean-Jacques Pfeffer described the demise of the westernmost European subspecies of **Hazel Grouse** *Tetrastes bonasia rhenanus* in large parts of its range, that until the beginning of the 20th century stretched south to the Pyrenees. This taxon is gradually disappearing but still occurs locally in north-easternmost France, south-easternmost Belgium, northern Luxembourg and westernmost central Germany. The subspecies differs from all other subspecies in its warmer, reddish upperside and flanks, with smaller black spots on vent, and also by a different ecology as it uses mostly deciduous woods with a varied and rich undergrowth. A national survey of **Western Capercaillie** *Tetrao urogallus* in Scotland in the winter of 2015/16 estimated there were as few as 1114 individuals; the previous survey was in the winter of 2009/10 and estimated a population of 1285 individuals (Br Birds 110: 499, 2017).

FLAMINGOS TO DOVES Up to 25 adult **Greater Flamingos** *Phoenicopterus roseus* with 13 nests and three large young not yet able to fly near Churiuk island, northern Sivash, Cherson Oblast, in June-September constituted the first breeding record of this species for Ukraine. In Romania, six first-winters turned up inland at Jilavele, Ialomiţa, on 18 September. Three long-staying **Pied-billed Grebes** *Podilymbus podiceps* remained into September: on São Miguel, Azores; at Sesimbra, Portugal; and at Loch Feorlin, Argyll, Scotland. In Sweden, an adult **Oriental Turtle Dove** *Streptopelia orientalis* was found at Idivuoma, Karesuando, on 2 August. In Morocco, three pairs of **Namaqua Dove** *Oena capensis* bred this year near Mijk, Western Sahara; six juveniles stayed here on 11 August. The largest flock for Iran concerned 15 males at Band-Ali Khan, Tehran province, on 15 June.

NIGHTJARS TO CUCKOOS A new breeding population of **Egyptian Nightjar** *Caprimulgus aegyptius* was discovered at Ajban farms, Abu Dhabi, United Arab Emirates (UAE). In 2014-17, three to six territorial males were located, breeding was confirmed by nests and juveniles, and a maximum of 30-39 individuals was counted at a roost in July-August (Sandgrouse 39: 182-186, 2017). The first for Georgia was photographed at Chorokhi delta, Batumi, on 26-27 August; it constituted the country's seventh new species at or near Batumi in the past decade, preceded by Crested Honey Buzzard *Pernis ptilorhynchus* (September 2007), Shikra *Accipiter badius* (September 2012), Lesser Sand Plover *Anarhynchus atrifrons* (September 2014), Radde's Warbler *Phylloscopus schwarzi* (October 2014), Black-crowned Sparrow-Lark *Eremopterix nigriceps* (October 2015) and Pallas's Leaf Warbler *P proregulus* (October 2015). An **Alpine Swift** *Apus melba* over Vilnius on 2 September was (only) the second for Lithuania; the first was in 2009. The fifth **Little Swift** *A affinis* for Italy was reported at Cagliari, Sardinia, on 26 July. In Scotland, a **Black-billed Cuckoo** *Coccyzus erythropthalmus* photographed at Dale of Walls on 18 September was the second for Shetland; the first was on Foula in 1953. A male **Diederik Cuckoo** *Chrysococcyx caprius* shot at Al Ghassaniya on 1 December 2016 was the first for Lebanon and third for the 'WP sensu BWP'; the previous ones were in Cyprus on 27 June 1982 and in Israel on 13-26 March 1994 (Sandgrouse 39: 189-192, 2017). In the 'greater' WP, it is a breeding migrant in south-western Oman, Yemen and south-western Saudi Arabia, and it has been recorded as a vagrant in northern Mauritania (outside the WP sensu BWP).

RAILS TO CRANES In the Netherlands, a sudden decline of **Corn Crake** *Crex crex* numbers occurred this spring, with a total of 36 territories being the lowest since 1980. The first **Sora** *Porzana carolina* for Norway at Kurefjorden, Østfold, from 10 June remained until 13 August. The adult **Western Swamphen** *Porphyrio porphyrio* at Minsmere, Suffolk, from 31 July to 5 August 2016, and then at Alkborough Flats, Lincolnshire, between 30 August and 4 January 2017 has recently been accepted as the 610th species for Britain. An adult at Le Crotoy, Somme, from late July to 11 August was the most northerly in France. The species' breeding range extended northward this year into marshlands north of Lyon at La Dombes, Ain. A flock of 80 **Demoiselle Cranes** *Grus virgo* flew over Cyprus on 27 August. A record 22 pairs of **Common Crane** *G grus* with 16 nests and nine fledglings were found in the north of the Netherlands this year (in 2016, there were 21 pairs). The first for Chad was seen in a flock of Black Crowned Cranes *Balearica pavonina* at Zakouma national park on 2 March (Bull Afr Bird Club 24: 229-252, 2017).

BUSTARDS TO LOONS The shooting of nine **Little Bustards** *Tetrax tetrax* in Lebanon in December 2016 suggests that the species is (or has been) a scarce migrant in this country; previous records were in 1958 and 2013-14 (Sandgrouse 39: 189-192, 2017). A paper on the risk for breeding birds in Britain, listed six species as (regionally) extinct as there were no confirmed nesting records for at least 10 years: **Great Bustard** *Otis tarda* (notwithstanding a reintroduction project), **Kentish Plover** *A alexandrinus*, **Temminck's Stint** *Calidris temminckii*, **Black Tern** *Chlidonias niger*, **Eurasian Wryneck** *Jynx torquilla* and **European Serin** *Serinus serinus*. Two species, **Eurasian Golden Oriole** *Oriolus oriolus* and **Fieldfare** *Turdus pilaris*, were listed as possibly extinct as neither had been recorded breeding for at least five years (Br Birds 110: 502-517, 2017). Migration strategies of wild and captive-bred **Macqueen's Bustards** *Chlamydotis macqueenii* were compared using satellite telemetry on 29 captive-bred juveniles, 10 wild juveniles and 39 wild adults from the southern Kyzylkum semi-desert, Bukhara, Uzbekistan.

464 Snowy Egret / Amerikaanse Kleine Zilverreiger *Egretta thula*, adult, Ponta das Contendas, Terceira, Azores, 10 August 2017 *(David Monticelli)* **465** American Great Egret / Amerikaanse Grote Zilverreiger *Ardea egretta*, São Miguel, Azores, 29 July 2017 *(Gerbrand Michielsen)* **466** Redhead / Amerikaanse Tafeleend *Aythya americana*, adult male, Paul da Praia, Terceira, Azores, 9 September 2017 *(Kris De Rouck)*

467 Egyptian Nightjar / Egyptische Nachtzwaluw *Caprimulgus aegyptius*, Chorokhi delta, Batumi, Georgia, 27 August 2017 *(Simon Cavaillès)* **468** Eleonora's Falcon / Eleonora's Valk *Falco eleonorae*, first-summer, Laajalahti, Espoo, Finland, 21 August 2017 *(Samuli Laaksonen)* **469** Black-winged Pratincole / Steppevorkstaartplevier *Glareola nordmanni*, juvenile, Lahe, Tartumaa, Estonia, 22 August 2017 *(Uku Paal)*

470 Bateleur / Bateleur *Terathopius ecaudatus*, immature, Hula valley, Israel, 5 August 2017 *(Pablo Rudaeff)* **471** Black-browed Albatross / Wenkbrauwalbatros *Thalassarche melanophris*, immature, off Loctudy, Finistère, France, 23 July 2017 *(Erwan Le Guilloux)* **472** Ring-necked Duck / Ringsnaveleend *Aythya collaris*, adult male, Anadyr, Chukotka, Russia, 2 June 2017 *(Thomas Noah)* **473** Caspian Plover / Kaspische Plevier *Anarhynchus asiaticus*, adult male, Łaszka, Pomerania, Poland, 10 August 2017 *(Zbigniew Kajzer)* **474** Snowy Owl / Sneeuwuil *Bubo scandiacus*, adult female, Belmullet, Mayo, Ireland, 12 August 2017 *(Dave Suddaby)*

Captive-bred birds initiated autumn migration on average 21 days later and wintered 471 km closer to the breeding grounds, mainly in Turkmenistan, northern Iran and Afghanistan, than wild-origin individuals (both juveniles and adults); the wild-origin birds migrated 1218 km, predominantly wintering in southern Iran and Pakistan (Ibis 159: 374-389, 2017). Individuals shot at Sinay on 13 November 2016 and at Rachaya Al Foukhar on 22 November 2016 concerned the third and fourth record for Lebanon (Sandgrouse 39: 189-192, 2017). In May, one was photographed at Alharra on the Jordan/Syria border area. The third **Pacific Loon** *Gavia pacifica* for Ireland (and first in summer for the WP) was an adult swimming off Gormanston, Meath, and then off Bremore, Dublin, from 27 August to 1 September.

TUBENOSES Exceptionally high numbers of **Wilson's Storm Petrel** *Oceanites oceanicus* were reported off south-western England and Ireland this summer with, eg, more than 20 off Scilly on 27 July, more than 40 off Baltimore, Cork, on 30 July, and 56 off Baltimore on 6 August. Moreover, between 21 July and 3 August, another c 30 were recorded during seawatching in south-western England (the annual mean in Britain in 2010-15 was 14 individuals; cf Br Birds 110: 525, 2017). An influx was also noted in France in July-August, with 14 along the French Atlantic coast, mainly in Bretagne, and a further 34 in continental waters between Morbihan and Charente-Maritime, including a record flock of 22 at c 160 km from the coast on 7 August. The first for the Faeroes was photographed at sea on 13 August. Two flying over Gulf of Aqaba at Eilat on 12 September constituted the third record for Israel. A **Black-bellied Storm Petrel** *Fregetta tropica* (again) at Banco de la Concepción off Lanzarote on 9 September was the fourth for the Canary Islands and the fifth for the WP sensu BWP (cf Dutch Birding 39: 154, 2017); three of the previous ones were at the same site in 2011, 2012 and 2016 between 18 August and 10 September and they were preceded by one off Madeira on 8 August 2011. In Germany, the adult **Black-browed Albatross** *Thalassarche melanophris* was present on Helgoland and Sylt, Schleswig-Holstein, until 20 August (in the previous three years, it left these islands between mid-June and early July). The immature photographed off Belgium on 16 July (Dutch Birding 39: 265, plate 350, 2017) was later photographed by fishermen in Finistère, France, first off Loctudy on 23 July and then off Guilvinec on 5 August. The second for Russia (probably also the northernmost ever) was discovered off Franz Josef Land on 14 July; the first was off Novaya Zemlya in August 2007 (cf Dutch Birding 38: 441-442, 2016). The ninth to 11th **Swinhoe's Storm Petrel** *Hydrobates monorhis* for Israel were seen at sea off Eilat on 15 August and 12 September (two); in the Azores, one was reported at Bank of Fortune, Graciosa, on 29 August. If accepted, a **Kermadec Petrel** *Pterodroma neglecta* photographed near the Farallon Islands off San Francisco, California, USA, on 8 September will be the first for continental North America. A recently disclosed photograph of a **Black-capped Petrel** *P hasitata* flying c 30 km off Agadir on 23 March 2013 concerned the first for Morocco. On a pelagic trip from Scilly on 3 August, a remarkable c 4500 shearwaters of five species were seen, including more than 750 **Great Shearwaters** *Puffinus gravis* and more than 250 **Cory's Shearwaters** *Calonectris borealis* while, on 13 August, numbers were even higher with more than 1200 Cory's, more than 550 Great and 200 **Sooty Shearwaters** *P griseus* among 1000s of **Manx Shearwaters** *P puffinus*. In Spain, c 60 000 Manx were counted at Estaca de Bares, A Coruña, on 9 September. In Belgium, a record 808 were counted at De Panne, West-Vlaanderen, on 14 September.

STORKS TO HERONS In Israel, two **Yellow-billed Storks** *Mycteria ibis* stayed at the Harod valley and two immature **Pink-backed Pelicans** *Pelecanus rufescens* at Yeruham and in the north-western Galilee in June-August. The first successful breeding of **Black-crowned Night Heron** *Nycticorax nycticorax* for Britain with two fledglings occurred in Somerset, England. Some of the more eye-catching data from the report on scarce migrant non-passerines in Britain in 2015 (Br Birds 110: 518-539, 2017), were the high numbers of **Western Great Egret** *Ardea alba alba* and **European Bee-eater** *Merops apiaster*, with both species increasing as breeding birds as well. On the downside, surprisingly rare migrant species included **Spotted Crake** *P porzana* (11 records, excluding 17 calling birds in spring considered to be breeding), **Buff-breasted Sandpiper** *C subruficollis* (10 records), **Kentish Plover** (eight records) and **Ferruginous Duck** *A nyroca* (six records; now so rare that it is a rarities committee species again from 2017 onwards). In the Azores, an **American Great Egret** *A egretta* was seen on São Miguel on 29 July, and an adult **Snowy Egret** *Egretta thula* at Ponta das Contendas, Terceira, from 10 August to 1 September. If accepted, a **Western Reef Heron** *E gularis gularis* at Oroklini on 31 July will be the first for Cyprus. In July-September, no less than 10 individuals were reported in Italy.

IBISES TO CORMORANTS This spring, two new breeding sites of **Northern Bald Ibis** *Geronticus eremita* with at least three active nests were discovered at two cliffs 30-32 km north from the well-known colony at Tamri, Haha, on the Moroccan Atlantic coast (Mohammed Aourir et al in Int J Avian & Wildlife Biol 2 (3): 00021, 2017). In August, six colour-ringed juveniles from an introduced (or reintroduced) colony at Grünau im Almtal, Austria, turned up at a few sites in Poland (in the north-east on 4 August, and in the south on 24 August), north-western Latvia (on 17-18 August) and Czechia. A previous long-distance movement to the north-east by a bird from this colony involved a ringed individual found dead at Zelenogradsk, Kaliningrad Oblast, Russia, between 21 and 31 October 1998 (Russian J Ornithol 21: 655-657, 2012). For new plans releasing captive individuals from Morocco into Austria, southern Germany and Italy, see Vogelwarte 55: 129-140, 2017. A **Brown Booby** *Sula leucogaster* off Ponta de São Lourenço on 10 August was the third for Madeira. An adult photographed c 120 km east of Marmot Island, Kodiak, on 12 August was the third for Alaska, USA. Truly amazing was an adult flying

475 Oriental Turtle Dove / Oosterse Tortel *Streptopelia orientalis*, adult, Idivuoma, Karesuando, Sweden, 2 August 2017 *(Göran Bength)*

476 Cream-colored Coursers / Renvogels *Cursorius cursor*, adult with juveniles, Alhama de Granada, Andalucía, Spain, 26 July 2017 *(Juan Pérez Contreras)*

477 Grey-tailed Tattler / Siberische Grijze Ruiter *Tringa brevipes*, second-year or older, Cabo da Praia, Terceira, Azores, 8 August 2017 *(David Monticelli)*

478 Solitary Sandpiper / Amerikaanse Bosruiter *Tringa solitaria*, summer plumage, Cabo da Praia, Terceira, Azores, 11 August 2017 *(David Monticelli)*

north-east upstream the Lek river and past the migration watch post of De Horde, Lopik, Utrecht, the Netherlands, at 08:04 on 20 August. The same day, at two sites further to the north-east in Germany, birders picked it up again, first at 11:00 over Tinholt, Niedersachsen, and then at 14:10 near Bremen; it constituted the first record for both countries. In Portugal, one was reported at Albufeira, Algarve, on 24 August. The third for the Canary Islands landed on a boat c 2 km off Puerto Rico, Gran Canaria, on 14 September. The second **Pygmy Cormorant** *Phalacrocorax pygmeus* for Lithuania stayed at Ventė Cape, Curonian lagoon, from 28 August to 4 September; the first was in 2009. In Camargue, Bouches-du-Rhône, one was seen on 29 August.

WADERS The first **American Golden Plover** *Pluvialis dominica* for Serbia was photographed on 12 August. One at Zeebrugge, West-Vlaanderen, on 6 September was (only) the second for Belgium. An adult **Pacific Golden Plover** *P fulva* at Gyzylagach reserve on 20 August was the second for Azerbaijan; the first concerned two males collected in the 19th century. In Romania, an adult stayed at Vadu, Constanţa, from 26 August to 1 September, with two individuals on 4-5 September. On 9 September, an **American Golden** and a **Pacific Golden** were photographed side by side at Ebre delta, Tarragona, Spain. In Ireland, a first-winter **Semipalmated Plover** *Charadrius semipalmatus* stayed on Achill Island, Mayo, from 13 September onwards. A **Little Ringed Plover** *C dubius* photographed at Tankatara, Eastern Cape, on 26-28 August was the first for South Africa and (only) the second for southern Africa; another or the same individual was found c 700 km further west at Vermont, Hermanus, Western Cape, on 11-12 September. The third **Sociable Lapwing** *Vanellus gregarius* for Lebanon was shot at Al Doussa, Akkar, on 8 October 2016; the previous ones were in 1958 and 2004 (Sandgrouse 39: 189-192, 2017). During a survey in December 2016, more than 500, including a flock of 365, were found in Sindh province, Pakistan. In February, 12 flocks were reported in Sindh, the largest flock consisting of 290, and another 40 were seen in Balochistan. In Azerbaijan, an impressive 43 **Caspian Plovers** *A asiaticus* were counted at Gyzylagach on 26 July. The first for Poland was an adult male at Łaszka, Pomerania, on 9-11 August. If accepted, two photographed at Hafiri Gabsha on 5 September 2016 will be the firsts for Chad (Bull Afr Bird Club 24: 229-252, 2017). A pair of **Greater Painted-snipes** *Rostratula benghalensis* with young near Sabya in July concerned the species' second breeding record for Saudi Arabia. The long-staying **Hudsonian Whimbrel** *Numenius hudsonicus* at Santoña, Cantabria, Spain, from 29 January remained until at least 26 August. Others were found at Easkey, Sligo, Ireland, on 3-9 September, and on South Uist, Outer Hebrides, Scotland, on 4 September. In July, a female **Bar-tailed Godwit** *Limosa lapponica* with a satellite transmitter flew non-stop 4000 km from Bely island off the tip of Yamal peninsula, Siberia, Russia, to Hallum, Friesland, the Netherlands. This year's first **Sharp-tailed Sandpiper** *C acuminata* in the WP was an adult at Ezumakeeg, Friesland, from 29 August to 2 September. The Yellow Sea coast in southern Jiangsu province, China, is shown to be the most important migratory stopover area for **Spoon-billed Sandpiper** *C pygmaea* (with peak counts of 225 in autumn 2014 and 62 in spring 2015) and **Spotted Greenshank** *Tringa guttifer* (with concentrations of up to 1110 in autumn 2015 and 210 in spring 2014) (Hebo Peng et al in Bird Conserv Int 27: 305-322, 2017). Theunis Piersma et al suggested that plans to reclaim additional intertidal habitats in this region pose a substantial threat to these endangered shorebirds (Wader Study 124: 93-98, 2017). In England, a **Stilt Sandpiper** *C himantopus* stayed at Lodmoor, Dorset, from 11 September, together with a **Least Sandpiper** *C minutilla*. An adult **Red-necked Stint** *C ruficollis* photographed at Dragey-Ronthon, Manche, on 6-7 August was the fourth for France. A record 21 000 **Sanderlings** *C alba* counted at a single roost in the Wadden Sea on Griend, Friesland, on 1 August amounted to c 10.5% of the species' flyway population. A juvenile **Buff-breasted Sandpipier** *C subruficollis* at Tuzla lake, Traian, on 19 September was the third for Romania. A **Red Phalarope** *Phalaropus fulicarius* photographed at Gyzylagach on 28 July was the second for Azerbaijan. In the Azores, **Solitary Sandpipers** *T solitaria* were seen on São Miguel from 31 July to 1 August and on 8 September, and on Terceira on 11 August. In France, one was reported at Saint-Cyr-en-Retz, Loire-Atlantique, on 18 July. The first **Grey-tailed Tattler** *T brevipes* for the Azores at Cabo da Praia, Terceira, from 7 July remained at least until mid-September. In Azerbaijan, an impressive 4020 **Marsh Sandpipers** *T stagnatilis* were counted at Gyzylagach on 11 August. A **Collared Pratincole** *Glareola pratincola* photographed at Böönтsagaan Nuur, Bayankhogor, on 24 June 2016 was the first for Mongolia (BirdingASIA 27: 119-120, 2017). A juvenile **Black-winged Pratincole** *G nordmanni* at Lahe, Tartumaa, on 22 August was (only) the second for Estonia; the previous one was in 2007. This summer, two pairs of **Cream-colored Courser** *Cursorius cursor* bred at Alhama de Granada, Granada, and produced two chicks each; previous breeding in Spain was documented in Almeria in 2001 (one pair) and in Albacete in 2012 (two pairs).

SKUAS TO GULLS In Spain, a presumed **South Polar Skua** *Stercorarius maccormicki* flew past Estaca de Bares on 22 July. A high total of 320 **Sabine's Gulls** *Xema sabini* were recorded in Britain and Ireland between 6 and 12 September. At the Baltic coast, the fourth for Lithuania was seen at Joudkranté, Curonian Spit, on 15 September. The first breeding attempt of **Bonaparte's Gull** *Chroicocephalus philadelphia* in the WP at Raudasandur, Vestfjord, Iceland, failed as the three eggs appeared infertile. An adult photographed at Fuglafjørður on 13 September and two at Fuglafirði on 18 September constituted the second and third records for the Faeroes; the first was in 2012. A first-winter **Audouin's Gull** *Larus audouinii* at Ponta Delgada harbour, São Miguel, on 2-7 September was the third for the Azores. In Poland, it was one of the best summers for **Pallas's Gull** *L ichthyaetus* with 12 (mostly second-calendar year) between 25 May and 14 September. If accepted, an adult flying north past Simrishamn, Skåne, on 3 August will be the fifth for

479 Spectacled Warbler / Brilgrasmus *Sylvia conspicillata*, male, Rennaz, Vaud, Switzerland, 14 June 2017 *(Lionel Maumary)*

480 Pale Martin / Bleke Oeverzwaluw *Riparia diluta*, Jahra pool reserve, Kuwait, 5 January 2017 *(Omar Alsahaheen)*

Sweden. The third for Denmark was a first-winter reported at Blåvand, Syddanmark, on 12 August. In Mecklenburg-Vorpommern, Germany, probably the same immature was first found at Wampen, Greifswald, on 24 July and then at Polder Kamp on 4 September. In Portugal, the adult **Cape Gull** *L dominicanus vetula* at Quinta de Marim, Algarve, from 30 June stayed until at least 18 August; perhaps, it was the same bird as the one seen here in 2009. Possibly the same adult was photographed as the third for Spain on Isla Cristina, Huelva, on 8 August. In Lithuania, a record 2172 **Baltic Gulls** *L fuscus* (95% adults) was counted in six hours at Curonian Spit on 15 September. If accepted, a **Thayer's Gull** *L thayeri* at Mai Po on 4-5 March will be the first for Hong Kong, China.

TERNS In the Azores, an adult **Bridled Tern** *Onychoprion anaethetus* was found on Terceira on 18 August. This year, 33 breeding pairs of 'Polish' **Whiskered Terns** *C hybrida* near Zuidlaardermeer, Groningen, the Netherlands, produced 50-60 fledglings (cf Dutch Birding 39: 268, 2017). During a survey on Nasser lake in April-May, new breeding colonies of **Gull-billed Tern** *Gelochelidon nilotica* and a colony of **Little Tern** *Sternula albifrons* were found away from known breeding sites in Egypt (Jens Hering in litt). The first **Caspian Tern** *Hydroprogne caspia* for Iceland was an adult photographed at Siglufjörður on 11 July. A male at Kinseldam, Amsterdam, Noord-Holland, the Netherlands, on 30 July, and then reported at La Rochelle, Charente-Maritime, France, on 2 August, flying to Spain, wore a satellite device showing it had bred in Finland with a female that stayed in Ukraine on 30 July; the male had been ringed as a chick in 1997. In Spain, as many as 141 **Roseate Terns** *Sterna dougallii* were counted at Estaca de Bares on 9 September. From 19 July to at least 3 September, the adult **Forster's Tern** *S forsteri* was back at Dundalk, Louth, Ireland (where it returned to moult most summers since 2006). The fourth **Lesser Crested Tern** *S bengalensis* for China was seen at Jingtanggang, Hebei, from 28 July to 5 August. One photographed at Tas-Safra on 20 August was the second for Malta. In 2016, new breeding reports of the endangered **Chinese Crested Tern** *S bernsteini* included two pairs nesting and one chick fledging on an uninhabited island off the south-western coast of South Korea from April onwards; an adult with a juvenile seen on the eastern coast at Rudong, Jiangsu, China, on 7 August 2016; and two adults and two juveniles frequently seen in Jiaozhou bay, Qingdao, Shandong, China, between 19 August and 5 September, with a flock of six adults here on 30 August. Also, three pairs bred again in the Taiwan Strait on Jishanyu, Penghu islands (BirdingASIA 27: 86-87, 2017). The **American Royal Tern** *S maxima maxima* ringed in North Carolina, USA, on 5 July 2016 and first seen on Guernsey, Channel Islands, on 5 February turned up in Manche, France, at Bec d'Andaine on 10-11 July and at Saint-Pair-

481 Hybrid Western Marsh x Pallid Harrier / hybride Bruine Kiekendief x Steppekiekendief *Circus aeruginosus x macrourus*, juvenile, Wesselburen, Schleswig-Holstein, Germany, 23 July 2017 *(Tobias Epple)* **482** Sora / Soraral *Porzana carolina*, adult, Kurefjorden, Østfold, Norway, 30 July 2017 *(Tommy A Andersen)* **483** Pacific Golden Plover / Aziatische Goudplevier *Pluvialis fulva*, summer plumage, Gyzylagach reserve, Azerbaijan, 20 August 2017 *(Christoph Himmel)* **484** Saker Falcon / Sakervalk *Falco cherrug*, first-year, Tipperne, Vestjylland, Denmark, 19 August 2017 *(Per Bækgaard)*

sur-Mer on 13-17 July, before returning to Guernsey on 16 August (for other sightings, see Dutch Birding 39: 119, 124, 206, 259, 268, 2017).

RAPTORS In the Netherlands, a first-year **Black-winged Kite** *Elanus caeruleus* stayed at and nearby Schildmeer, Groningen, from 1 August through mid-September. In Germany, adults were seen in Rheinland-Pfalz on 1 August and at Burgbernheim, Bayern, on 10-12 September. In northern Israel, a **Crested Honey Buzzard** flew over Sarona on 30 August. A second calendar-year **Bearded Vulture** *Gypaetus barbatus* photographed at Pieniny mountains, Małopolska, on 12 June has recently been accepted as the second for Poland (the first was collected in 1885 or 1886); as it had no rings, it was probably a wild bird born in the Alps. A previous sighting of this species in Poland concerned a third-year male ('Adonis') with a satellite transmitter from a reintroduction project in Grands Causses, Aveyron/Gard/Lozère, France, between June and September 2016 (cf Dutch Birding 38: 331, 2016, 39: 53, 2017). In Israel, the long-staying immature **Bateleur** *Terathopius ecaudatus* moved from Judean plains to Hula valley in August; on 12 September, it flew south near Jerusalem. An urban population of **Hooded Vulture** *Necrosyrtes monachus* at Dakar, Senegal, declined by 85%, from c 3000 individuals in 1969 to only 400 in 2016 (Wim Mullié et al in Ostrich 88: 131-138, 2017). A second-year **Rüppell's Vulture** *Gyps rueppelli* photographed in Vallée d'Ossau, Pyrénées-Atlantiques, was the fourth for France. In August, 2459 **Griffon Vultures** *G fulvus* were counted in the western Alps in France and Italy, an increase of 40% from previous years. A flock of 360 individuals feeding at Lago di Cornino, Udine, on 7 September was the largest-ever




485 Paddyfield Warbler / Veldrietzanger *Acrocephalus agricola*, first-year, offshore platform 30 km north of Helgoland, Germany, 4 September 2017 *(Roland Neumann)* **486** Masked Shrike / Maskerklauwier *Lanius nubicus*, adult male, Aspromonte national park, Calabria, Italy, 17 September 2017 *(Angelo Scuderi)* **487** Green Warbler / Groene Fitis *Phylloscopus nitidus*, Fair Isle, Shetland, Scotland, 7 July 2017 *(David Parnaby)* **488** Trumpeter Finch / Woestijnvink *Bucanetes githagineus*, male, Maly Utrish, Anapsky, Russia, 30 May 2017 *(Oxana Lukyanchuk)*

in Italy. Between 2004 and 2016, 85 second-hatched juvenile **Lesser Spotted Eagles** *Aquila pomarina* were reared in captivity for release into the declining German population, including 50 birds that were brought in from Latvia over 940 km away. Since 2009, Bernd-Ulrich Meyburg et al (J Exp Biol 220: 2765-2776, 2017) compared the orientation of native and translocated juveniles on their first autumn migration, applying satellite tracking to 12 translocated juveniles, eight native juveniles and nine native adults. The eight native juveniles departed at around the same time as the adults and, like all adults, six of the eight took the eastern flyway around the Mediterranean. In contrast, the 12 translocated juveniles departed on average six days before the native individuals, and five travelled southward and died in the central Mediterranean region. Presumably, juveniles have a much better chance of learning the strategic south-eastern flyway when they depart at such a time that they can connect with experienced adult birds. Four **Booted Eagles** *A pennata* were seen in Switzerland between 15 May and 7 September. In July, a mixed pair of **Western Marsh Harrier** *Circus aeruginosus* and **Pallid Harrier** *C macrourus* breeding at Wesselburen, Schleswig-Holstein, Germany, produced at least two juveniles. Only five pairs of **Montagu's Harrier** *C pygargus* were found in Britain this year; four were successful, producing a total of 12 young (all were fitted with colour-rings); one juvenile ringed in south-western England on 20 July (ring code 'FX') was seen in the Netherlands on Vlieland, Friesland, on 21 August. A **Long-legged Buzzard** *Buteo rufinus* photographed at Suur-Nõmmküla, Noarootsi, on 11 September was the third for Estonia.

OWLS In Sandgrouse 39: 177-181, 2017, it was shown that the endemic **Cyprus Scops Owl** *Otus cyprius* in Cyprus usually commences singing by early February

(occasionally as early as mid-January), increases its song activity to a peak in early April after which it declines before having a second smaller song peak in June. From August to mid-January, the birds are either silent or absent (for diagnostic differences with Eurasian Scops Owl *O scops*, see Zootaxa 4040 (3): 301-316, 2015, and Magnus Robb & The Sound Approach in *Undiscovered owls*, 2015). In Ornithol Anz 55: 108-121, 2017, Wolfgang Scherzinger published photographs of owl hybrids produced in captivity and not mentioned in Eugene McCarthy's *Handbook of avian hybrids of the world* (2006), including **Snowy Owl** x **Eurasian Eagle-Owl** *Bubo scandiaca* x *bubo*, **Lapland** x **Brown Wood Owl** *Strix nebulosa* x *leptogrammica* and **Long-eared** x **Tawny Owl** *Asio otus* x *S aluco*. In Ireland, the adult female **Snowy** was present on Mullet Peninsula, Mayo, from 12 August to at least 5 September; it was first seen here on 9 September 2006. This year, five pairs of **Lapland Owl** *S lapponica* were breeding at Sobibór forest, Lubelskie, Poland, producing a total of 11 young (all were ringed, seven with colour-rings); the first two nests in Poland were discovered in 2010 (cf Dutch Birding 35: 145-154, 2013). **Turkish Fish Owls** *B semenowi* photographed at Dez Dam lake on 12 March 2016 and at Gazir mountain, Izeh, Khuzestan, in September 2016 concerned the north-westernmost records in Iran. The species was rediscovered in Iran in January 2004 after a gap of c 70 years without sightings (cf Dutch Birding 26: 287-296, 2004), and until now it has been found at more than 10 sites in six provinces (Bushehr, Fars, Hormozgan, Kerman, Khuzestan, Kohgiluyeh and Boyer-Ahmad) (cf Dutch Birding 38: 457, plate 694, 2016).

FALCONS TO SHRIKES A first-summer **Eleonora's Falcon** *Falco eleonorae* photographed at Laajalahti, Espoo, on 21 August was the second for Finland; the previous one was in 2001 (by contrast, in Sweden there are more than 20 records). Two dark-morph first-summers flying over Batumi on 21 and 22 August were the third and fourth for Georgia. A significant decline from 126 territories to 60 in 2001-16 was reported for the population of **Lanner Falcon** *F biarmicus feldeggii* in Sicily, Italy (Massimiliano Di Vittorio et al in Bird Study, tinyurl.com/y8mkexon), with a further drop to only 30-40 pairs in 2017 (cf Dutch Birding 39: 308-322, 2017). If accepted, a first-year **Saker Falcon** *F cherrug* without rings or any other obvious signs of captivity at Tipperne, Vestjylland, on 17-18 August will be the first for Denmark. All previous Danish records concerned captive individuals wearing rings, while a possibly unringed second-year migrating past Skagen in May 2006 was not accepted either (placed in 'category D'). The first **Masked Shrike** *Lanius nubicus* for India was a male at Kaanjan, Gujarat, on 18 December 2016 (Flamingo 15 (2): 6, 2017). An adult at Aspromonte national park, Calabria, on 17 September was the first for Italy. The first for the Netherlands photographed and seen by a single observer at Hoorn, Terschelling, Friesland, has been accepted for 3 January 2016 (not 2 November 2015; contra Dutch Birding 38: 115, 2016).

CROWS TO SWALLOWS In the Canary Islands, the **Pied Crow** *Corvus albus* at Las Palmas de Gran Canaria harbour was seen again on 13 July. If accepted, one photographed at a carcass dump near Jodhpur, Rajasthan, on 13 August will be the first for India and for the Oriental Region. If accepted, a **Pale Martin** *Riparia diluta* photographed at Jahra pool reserve on 5 January will be the first for Kuwait and the WP sensu BWP. In the greater WP, it is an uncommon migrant and winter visitor in the UAE, and a vagrant in Oman and Iran; there is no well-documented record for Egypt and Israel (Sandgrouse 35: 114-125, 2013; for identification of the species, see Alula 13: 152-158, 2007).

WARBLERS DNA analysis confirmed the identity of a **Green Warbler** *P nitidus* on Fair Isle, Shetland, on 4-7 July (the fourth for Britain). In Luzern and Valais, Switzerland, two singing **Greenish Warblers** *P trochiloides* were found in June; the first breeding in Switzerland was in 2015. On 15-17 September, the 27-29th **Arctic Warblers** *P borealis* for the Netherlands were found in the three westernmost provinces. This autumn's first **Yellow-browed Warbler** *P inornatus* for north-western Europe turned up in western Finland on 31 August and, by 17 September, the country's total had reached 175. A male **Eurasian Blackcap** *Sylvia atricapilla* ringed at Zuun Bayan valley, Binder, Khentii, on 10 September was the second for Mongolia. The first **Lesser Whitethroat** *S curruca* for Kenya and East Africa was photographed at the Turkana Basin Institute, Ileret, on 25-26 February 2016 (Scopus 37: 46-48, 2017). The first for Bhutan was seen on the periphery of Thimphu on 23 March 2016 (BirdingASIA 27: 121-122, 2017). In Italy, an 'unseasonal' adult female **Rüppell's Warbler** *S ruppeli* was found at Policoro, Matera, Basilicata, on 25 August; a juvenile stayed at the same site and in a similar period last year (there are no breeding records in Italy). In Switzerland, two males **Spectacled Warbler** *S conspicillata* were singing at Rennaz, Vaud, and at Arolla, Valais, in June. DNA analysis confirmed that not only the male but also the female of the pair raising five young at Dreiborner Hochfläche, Nordrhein-Westfalen, Germany, was a Spectacled (Arne Torkler in litt; cf Dutch Birding 39: 272, 2017). On 17 September, the first **Pallas's Grasshopper Warblers** *Locustella certhiola* in western Europe for this autumn were trapped at Castricum, Noord-Holland, on 17 September (11th for the Netherlands) and photographed at Burnham Overy, Norfolk, England (61st for Britain). This autumn's first **Lanceolated Warbler** *L lanceolata* for western Europe turned up at Quendale, Shetland, on 11 September. The first **Thick-billed Warbler** *Arundinax aedon* for North America was photographed at Gambell, Nome, Alaska, on 8 September. Presumably the first **Booted Warbler** *Iduna caligata* this autumn for western Europe (and the 29th for the Netherlands) was found at Neeltje Jans, Zeeland, on 19 September. If accepted, a **Sykes's Warbler** *I rama* at Lillbådan, Västerbotten, on 3 September will be the third for Sweden. The fifth **Eastern Olivaceous Warbler** *I pallida* for Austria was present at Thalerhof airport, Steiermark, on 3-5 September. If accepted, an **Upcher's Warbler** *Hippolais languida* at Takantara, Eastern Cape on 30 August will be the first for

489 American Yellow Warbler / Gele Zanger *Setophaga aestiva*, first-year, Portland, Dorset, England, 21 August 2017 *(Tim White)*

490 American Redstart / Amerikaanse Roodstaart *Setophaga ruticilla*, first-year, Eoligarry, Barra, Outer Hebrides, Scotland, 8 September 2017 *(Steve Duffield)*

South Africa. A **Paddyfield Warbler** *Acrocephalus agricola* stayed for c 10 min on an offshore platform 30 km north of Helgoland on 4 September. The sixth for Poland was ringed at Dąbkowice on the Baltic coast on 7 September. Among the first **Blyth's Reed Warblers** *A dumetorum* in western Europe for this autumn were first calendar-years trapped in France at Le Fort-Vert, Pas-de-Calais, on 15 August and in the Netherlands at Bloemendaal, Noord-Holland, on 28 August.

THRUSHES TO PIPITS A female **Siberian Thrush** *Geokichla sibirica* at Baltasound, Unst, Shetland, on 20 September was the 13th for Britain. If accepted, a **Black-throated Thrush** *T atrogularis* at Chek Lap Kok on 4 December 2016 will be the first for Hong Kong. An **Asian Brown Flycatcher** *Muscicapa dauurica* photographed at Gambell on 3 September was the fifth for North America; previous ones were also in Alaska. In eastern and north-eastern Finland, 110 territories of **Red-flanked Bluetail** *Tarsiger cyanurus* were found between 12 May and 31 August. A male **Common Rock Thrush** *Monticola saxatilis* photographed in upper Dolpa on 27 May 2016 was the first for Nepal (BirdingASIA 27: 116-117, 2017). The first **Whinchat** *Saxicola rubetra* for Sri Lanka and the Indian Subcontinent stayed at Udawalawe national park from 8 February to 1 March 2015 (Indian Birds 13: 108-111, 2017). The first **Desert Wheatear** *Oenanthe deserti* for Guinea-Bissau was photographed at Poilão on 13-27 October 2015 (Bull Afr Bird Club 24: 182-191, 2017). The fifth **Yellow-throated Sparrow** *Gymnoris xanthocollis* for Israel was trapped at Eilat on 11 September. In Egypt, many **African Pied Wagtails** *Motacilla aguimp* (including nests with eggs or chicks) were seen between Aswan and Abu Simbel in April-May. A very early **Olive-backed Pipit** *Anthus hodgsoni* turned up at Calf of Man, Isle of Man, on 21 August. An **American Buff-bellied Pipit** *A rubescens rubescens* on Mweenish Island, Tawin, Galway, on 12 September was the earliest-ever in autumn for Ireland.

FINCHES TO AMERICAN WARBLERS The first **Trumpeter Finch** *Bucanetes githagineus* for Russia was a male photographed at Maly Utrish, Anapsky, on 29-30 May (Russian J Ornithol 26: 3144-3147, 2017). An invasion of **Two-barred Crossbills** *Loxia leucoptera bifasciata* was noted in Norway, with a maximum of 110 at Jomfruland, Telemark, on 25 July. In Scotland, c 11 were reported between 21 July and 1 August. The first **Red Crossbills** *L curvirostra* for Lebanon concerned a male and female shot at Ftouh Kesrwan on 12 March (Sandgrouse 39: 189-192, 2017). In northern Germany, as many as five first-year **Citril Finches** *Carduelis citrinella* were found on Brocken mountain, Harz national park, Niedersachsen, on 6-19 August, and another one was ringed in Nordrhein-Westfalen on 17 August. A first-year **Yellow-breasted Bunting** *Emberiza aureola* on Out Skerries, Shetland, from 20 September was the first for Britain since 2013. In the Azores, a **Northern Waterthrush** *Parkesia noveboracensis* turned up at Ribeira Grande, Flores, on 11 September. A first-winter **American Redstart** *Setophaga ruticilla* at Eoligarry, Barra, Outer Hebrides, on 7-17 September was the sixth for Britain and the first since 1985. The sixth **American Yellow Warbler** *S aestiva* for Britain (and first for England) was photographed at Portland, Dorset, on 21 August. The fifth for Ireland stayed at Mizen Head, Cork, on 21-22 August.

WESTERN PALEARCTIC LIST In July, after successfully twitching the Amur Falcon *F amurensis* in Cornwall, England, Ernie Davis has become the first person to see as many as 850 species in the WP sensu BWP (Pierre-André Crochet is following him with 847 species).

For a number of reports Birdwatch, British Birds, Go-South Bulletin, Sovon-nieuws, www.birdguides.com, www.hbw.com, www.dutchavifauna.nl. www.netfugl.dk, www.rarebirdalert.co.uk, www.tarsiger.com and www.waarneming.nl were consulted. We wish to thank Omar Alsahaheen, Tommy Andersen, Jem Babbington, Göran Bength, Patrick Bergier, Per Bækgaard, Arjan Boele, Paul Bradbeer, Mika Bruun, Andreas Bruun Kristensen, Oscar Campbell, Simon Cavaillès, Simba Chan, Martin Collinson, José Luis Copete, Magnus Corell, Andrea Corso, Pierre-André Crochet, Kris De Rouck, Philippe Dubois, Steve Duffield, Guus van Duin, Nils van Duivendijk, Enno Ebels, Tobias Epple, Natalino Fenech, Robert Flood, Didone Frigerio, Raymond Galea, Luís Gordinho, Marcello Grussu, Ricard Gutiérrez, Trevor Hardaker, Gerd-Michael Heinze, Magnus Hellström, Jens Hering, Christoph Himmel, Remco Hofland, Johannes Jansen, Zbigniew Kajzer, Krys Kazmierczak, Abolghasem Khaleghizadeh, Leander Khil, Bence Kókay, Yann Kolbeinsson, Thomas Kuppel, Samuli Laaksonen, Erwan Le Guilloux, André van Loon, Pascual López, Oxana Lukyanchuk, Lionel Maumary, Gerbrand Michielsen, Kārlis Millers, Dominic Mitchell, Geir Mobakken, David Monticelli, Alexander Nastachenko, Roland Neumann, Thomas Noah, Gerard Ouweneel, Uku Paal, David Parnaby, Joe Pender, Juan Pérez Contreras, Yoav Perlman, René Pop, Nikos Probonas, Verena Pühringer-Sturmayr, Colin Richardson, Magnus Robb, Pablo Rudaeff, Michael Sammut, Angelo Scuderi, Roy Slaterus, Rasmus Strack, Dave Suddaby, Arne Torkler, Hugo Touzé, Norbert Uhlhaas, Peter de Vries, Ingo Weiß, Tim White, Claes Wikström, Bartek Woźniak and Michał Zawadzki 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 **juli-augustus 2017**. De vermelde gevallen zijn merendeels niet geverifieerd en het overzicht is niet volledig. Alle vogelaars die de moeite namen om hun waarnemingen aan ons 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 TOT RALLEN Zomerse **IJseenden** *Clangula hyemalis* verbleven tot half juli op de Waddenzee tussen Ameland en Schiermonnikoog, Friesland, en vanaf 17 augustus op het IJsselmeer nabij Hindeloopen, Friesland. Een mannetje **Buffelkopeend** *Bucephala albeola* in eclipskleed zwom van 3 juli tot ten minste 3 september in de Brabantse Biesbosch, Noord-Brabant. **Krooneenden** *Netta rufina* blijven zich uitbreiden in de duinstreek, met in Meijendel, Zuid-Holland, op 22 augustus een recordtelling van 430. **Witoogeenden** *Aythya nyroca* werden op vier locaties gezien, waaronder nog steeds het vrouwtje bij Blitterswijck, Limburg, dat hier op 21 april voor het eerst werd waargenomen. In totaal 15 **Kwartels** *Coturnix coturnix* werden van een ring voorzien: 10 bij Ooij, Gelderland, en vijf in de Kennemerduinen bij Bloemendaal, Noord-Holland. Telpost Breskens in Zeeland raakte een record kwijt toen op 29 juli 43 106 **Gierzwaluwen** *Apus apus* over telpost Dordtse Biesbosch, Zuid-Holland, vlogen; het record van Breskens bedroeg 41 365 op 26 mei 2012. Er werden dit jaar slechts 36 territoria van **Kwartelkoning** *Crex crex* vastgesteld, merendeels in Drenthe en Groningen (het laagste aantal sinds 1980). In augustus werden 12 **Porseleinhoenders** *Porzana porzana* geringd, waarvan acht bij Castricum, Noord-Holland. De Oostpolder in het Zuidlaardermeergebied, Groningen, was 'the place to be' voor **Kleinste Waterhoenders** *Zapornia pusilla*; hoeveel territoria er precies werden vastgesteld is nog onduidelijk.

KRAANVOGELS TOT OOIEVAARS Waarnemingen van een adulte **Jufferkraanvogel** *Grus virgo* op 24 augustus in de omgeving van Abcoude, Utrecht, en op 27 augustus bij Rijpwetering, Zuid-Holland, hadden (zoals vaker) betrekking op een ontsnapt exemplaar (met ring). Er werden dit broedseizoen 22 paren **Kraanvogels** *G grus* geteld, waarvan 16 nestelend, die in totaal negen jongen grootbrachten. Voor het eerst was er een geslaagd broedgeval (twee jongen) in Nationaal Park Drents-Friese Wold, Drenthe/Friesland. De **IJsduiker** *Gavia immer* in zomerkleed van de Oosterschelde, Zeeland, bleef tot 4

491 Grijze Wouw / Black-winged Kite *Elanus caeruleus*, eerstejaars, Schildmeer, Groningen, 10 augustus 2017 *(René Postema)*

juli, en op 11 augustus vloog een exemplaar langs Terschelling, Friesland. Bijzonder was de waarneming van een **Vaal Stormvogeltje** *Hydrobates leucorhoa* op 30 juli langs Camperduin, Noord-Holland. De database van trektellen.nl bevat slechts vier andere waarnemingen ooit uit juli. In totaal 14 **Noordse Stormvogels** *Fulmarus glacialis* werden vanaf trektelposten gezien, de meeste langs Camperduin. Slechts drie **Vale Pijlstormvogels** *Puffinus mauretanicus* werden opgemerkt, uitsluitend vanaf de beste telpost voor deze soort bij Camperduin (op 19 juli en 10 en 20 augustus). Sinds 1972 zijn er hier in totaal 226 geteld, met een maximum van 24 in 2010. Trektellers noteerden 71 **Zwarte Ooievaars** *Ciconia nigra*, met de hoogste aantallen over telposten Groote Peel (25) en Loozerheide (14) op de grens van Limburg en Noord-Brabant. De 200 **Ooievaars** *C ciconia* op 22 augustus over telpost Maldens Vlak bij Malden, Gelderland, betekenden de vijfde dag ooit voor deze soort in Nederland. Het record staat met 257 op 27 augustus 2016 op naam van telpost Hazewater bij Leusden, Utrecht.

REIGERS TOT JAN-VAN-GENTEN Een druk bezocht paar **Woudapen** *Ixobrychus minutus* met twee jongen liet zich tot 22 augustus mooi bekijken in een recreatiegebied bij Heerenveen, Friesland. 's Nachts overvliegende werden vastgelegd op 18 juli over Arnhem-Zuid, Gelderland, en op 13 augustus langs Noordwijk, Zuid-Holland. **Ralreigers** *Ardeola ralloides* verbleven tot 1 juli in het Zuidlaardermeergbied, Groningen, en op 8 augustus in De Onlanden, Drenthe. Eerste-kalenderjaar vogels verbleven op 15 augustus kortstondig op de noordpunt van Texel, Noord-Holland, en van 19 augustus tot 12 september in de Eempolders bij Eemnes, Utrecht. Vanaf 15 juli werden op c 35 locaties, vooral in de westelijke helft van het land, **Koereigers** *Bubulcus ibis* waargenomen, met onder meer acht bij Westdorpe, Zeeland, en zes bij

492 Grijze Wouw / Black-winged Kite *Elanus caeruleus*, eerstejaars, Overschild, Groningen, 13 augustus 2017 *(Marnix Jonker)* **493** Grote Grijze Snip / Long-billed Dowitcher *Limnodromus scolopaceus*, zomerkleed, Workumerwaard, Friesland, 23 juli 2017 *(Max Berlijn)* **494** Siberische Strandloper / Sharp-tailed Sandpiper *Calidris acuminata*, zomerkleed, Ezumakeeg, Lauwersmeer, Friesland, 29 augustus 2017 *(Michael Kopijn)* **495** Waterrietzanger / Aquatic Warbler *Acrocephalus paludicola*, Hendrik-Ido-Ambacht, Zuid-Holland, 12 augustus 2017 *(Edial Dekker)*

496 Bastaardarend / Greater Spotted Eagle *Aquila clanga*, tweedejaars, Kollumerwaard, Friesland, 4 juni 2017 *(Martin Olthoff)*

497 Slangenarend / Short-toed Snake Eagle *Circaetus gallicus*, tweedejaars, Kennemerduinen, Noord-Holland, 22 augustus 2017 *(Arnoud B van den Berg)*

Strijen, Zuid-Holland. Eind augustus (ver)trokken weer mooie aantallen **Purperreigers** *Ardea purpurea*, met een maximum van 319 op 31 augustus over telpost Dordtse Biesbosch. **Zwarte Ibissen** *Plegadis falcinellus* werden op c 20 plaatsen waargenomen, met de hoogste aantallen op inmiddels traditionele locaties bij Berkel en Rodenrijs, Zuid-Holland (vier), en Koedijk, Noord-Holland (vier). Een verzwakte adulte **Jan-van-gent** *Morus bassanus* werd op 22 augustus opgeraapt bij Maurik, Gelderland. Deze soort stond al jaren op de wensenlijst van de trektellers van De Horde bij Lopik, Utrecht: dat moest een keer kunnen langs de Lek. Het liep op 20 augustus nét iets anders toen er tot hun stomme verbazing een adulte **Bruine Gent** *Sula leucogaster* passeerde. De vogel vloog om 08:04 in oostelijke richting voorbij maar kon vervolgens in Nederland niet meer worden opgepikt. Ruim drie uur later werd de vogel echter net over de grens gezien bij Tinholt, Niedersachsen, Duitsland, en rond 14:00 bij Bremen, Duitsland (c 285 km ten noordoosten van Lopik). Indien deze eerste binnenlandwaarneming voor Europa wordt aanvaard, betreft het een nieuwe soort voor zowel Nederland als Duitsland.

GRIELEN TOT STRANDLOPERS **Grielen** *Burhinus oedicnemus* verbleven op 17 en 21 juli bij 's-Gravenzande, Zuid-Holland, en op 12 en 13 augustus op Schiermonnikoog. Vrij bizar was de waarneming van een boven zee trekkende **Steltkluut** *Himantopus himantopus* op 18 augustus langs telpost Huisduinen, Noord-Holland. Ook van ten minste 25 andere locaties werd de soort gemeld. Op 8 augustus werd een **Amerikaanse Goudplevier** *Pluvialis dominica* ontdekt bij Westkapelle, Zeeland. Indien aanvaard betreft dit het vijfde geval voor augustus. **Aziatische Goudplevieren** *P fulva* liepen van 2 tot 4 juli rond in de Brabantse Biesbosch, op 13 en 22 juli op Vlieland, Friesland, en van 21 juli tot 5 augustus op Texel. Vanaf telposten werden in augustus 44 **Morinelplevieren** *Charadrius morinellus* doorgegeven, met een mooi aantal van 11 op 23 augustus langs telpost Nolledijk bij Vlissingen, Zeeland. Een **Siberische Strandloper** *Calidris acuminata*, die op de avond van 29 augustus werd ontdekt in de Ezumakeeg, Friesland, liet zich opnieuw op 31 augustus bekijken en werd nog kortstondig gemeld op 1 en 2 september. Het betrof alweer het vierde geval en vijfde exemplaar voor deze locatie. In totaal zijn er nu negen gevallen (10 vogels). Een handvol **Breedbekstrandlopers** *C falcinellus* werd opgemerkt op enkele plekken in het Waddengebied. Een recordaantal van 21 000 **Drieteenstrandlopers** *C alba* werd op 1 augustus geteld op Griend, Friesland. Op 22 juli werd een **Bonapartes Strandloper** *C fuscicollis* gefotografeerd op Vlieland (eerste geval voor dit eiland). Andere werden waargenomen op 2 augustus bij Westhoek, Friesland, van 22 tot 24 augustus in de Ezumakeeg en van 26 tot 29 augustus pendelend tussen Goudswaard en de Beninger Slikken (eerste geval voor Zuid-Holland). Een adulte **Blonde Ruiter** *C subruficollis* verbleef van 19 augustus tot 3 september in de Zandkes nabij Oosterend op Texel en op 27 augustus werd een exemplaar gemeld in de Ezumakeeg. **Gestreepte Strandlopers** *C melanotos* doken vanaf 29 juli op c 10 plaatsen

498 Woudaap / Little Bittern *Ixobrychus minutus*, juveniel, Zevenhuizen, Zuid-Holland, 21 juli 2017 *(Martin van der Schalk)* **499** Woudaap / Little Bittern *Ixobrychus minutus*, adult, met Baars *Perca fluviatilis*, Zevenhuizen, Zuid-Holland, 18 juli 2017 *(Martin van der Schalk)* **500** Koereigers / Cattle Egrets *Bubulcus ibis*, Strijen, Zuid-Holland, 19 augustus 2017 *(Martin van der Schalk)*

501 Aziatische Goudplevier / Pacific Golden Plover *Pluvialis fulva*, zomerkleed, Texel, Noord-Holland, 22 juli 2017 *(Eric Menkveld)* **502** Lachstern / Gull-billed Tern *Gelochelidon nilotica*, adult, Abbekerk, Noord-Holland, 1 september 2017 *(Fred Visscher)* **503** Ralreiger / Squacco Heron *Ardeola ralloides*, eerstejaars, Eempolders, Utrecht, 6 september 2017 *(Rob Belterman)*

504 Aziatische Goudplevier / Pacific Golden Plover *Pluvialis fulva*, adult mannetje zomerkleed, Galeiwaard, Brabantse Biesbosch, Noord-Brabant, 3 juli 2017 *(Peter Verhelst)*

505 Gestreepte Strandloper / Pectoral Sandpiper *Calidris melanotos*, juveniel, Braakman, Zeeland, 28 augustus 2017 *(Thomas Luiten)*

506 Griel / Eurasian Stone-Curlew *Burhinus oedicnemus*, juveniel, 's-Gravenzande, Zuid-Holland, 17 juli 2017 *(Julian Bosch)*

507 Blonde Ruiter / Buff-breasted Sandpiper *Calidris subruficollis*, tweedejaars of ouder, Zandkes, Texel, Noord-Holland, 19 augustus 2017 *(Eric Menkveld)*

op, zowel aan de kust als in het binnenland, met twee druk bezochte vogels van 18 tot 24 augustus in De Hamert, Limburg. **Grauwe Franjepoten** *Phalaropus lobatus* kwamen in goede aantallen ons land binnen vanaf 10 juli. Het maximum bedroeg zeven in de tweede helft van augustus in de Kroonspolders op Vlieland. Van 21 tot 27 juli verbleef een **Rosse Franjepoot** *P fulicarius* grotendeels in zomerkleed in de Crezéepolder bij Ridderkerk, Zuid-Holland. **Terekruiters** *Xenus cinereus* werden uitsluitend in het Waddengebied aangetroffen, met waarnemingen op 20 juli op Ameland; van 22 tot 31 juli bij Termunten, Groningen; op 22 juli nabij Hornhuizen, Groningen; en van 22 tot 25 augustus op Griend. Een **Kleine Geelpootruiter** *Tringa flavipes* werd gemeld op 4 augustus in het Noordhollands Duinreservaat bij Egmond, Noord-Holland. Meldingen van **Poelruiters** *T stagnatilis* kwamen (slechts) van c negen locaties. Een adult-zomerkleed **Grote Grijze Snip** *Limnodromus scolopaceus* was van 22 juli tot 18 augustus aanwezig in het Lauwersmeergebied, Friesland/Groningen, en van 22 tot 24 juli bevond een ander exemplaar in zomerkleed zich in de Workumerwaard, Friesland.

ALKEN TOT STERNS De zomerkleed **Zwarte Zeekoet** *Cepphus grylle* vanaf 10 mei in de haven van West-Terschelling, Friesland, bleef de gehele periode. Opmerkelijk is dat op 24 augustus twee vogels in zomerkleed langs Terschelling vlogen (waarschijnlijk één daarvan passeerde even later ook Vlieland). De eerste **Kleinste Jager** *Stercorarius longicaudus* van het seizoen werd op 25 augustus gemeld van Vlieland. Trektellers noteerden verder in totaal 141 **Kleine** *S parasiticus*, vier **Middelste** *S pomarinus* en 11 **Grote Jagers** *S skua*. Een Grote Jager die op 15 juli dood werd gevonden op het strand van Terschelling bleek exact 38 jaar eerder te zijn geringd op Shetland, Schotland. Vermoedelijk betreft het een leeftijdsrecord voor de soort: de oudste vermeld op de Eurring-lijst (https://euring.org/data-and-codes/longevity-list) werd 34 jaar en zes maanden. Een **Franklins Meeuw** *Larus pipixcan* werd in de avond van 30 juli ontdekt op een meeuwenslaapplaats in de Ezumakeeg. Ook op 9 en 11 augustus werd hij daar vlak voor donker gezien. Indien aanvaard betreft dit het 11e geval. Vanaf de tweede week van juli verschenen de eerste **Lachsterns** *Gelochelidon nilotica*, zoals inmiddels gebruikelijk eerst in Groningen. Bij Alteveer, Groningen, verbleven op 30 juli maximaal 14 exemplaren (alle adulte). Vanaf begin augustus werden hier ook maximaal vier juveniele waargenomen. Op de slaapplaats op het Balgzand, Noord-Holland, werden op 11 augustus maximaal 21 vogels geteld (waaronder drie juveniele). Vanaf telposten werden 66 **Reuzensterns** *Hydroprogne caspia* gezien, waarvan ongeveer de helft langs Kamperhoek, Flevoland. In de omgeving van de Workumerwaard werden eind augustus tot wel 50 pleisteraars geteld. In totaal 33 paren **Witwangsterns** *Chlidonias hybrida* bij het Zuidlaardermeer brachten meer dan 50 jongen groot. Het vermelden waard zijn verder drie doortrekkers op 7 juli langs Egmond aan Zee. Van c 25 locaties werden **Witvleugelsterns** *C leucopterus* gemeld, de meerderheid in het IJsselmeergebied.

ROOFVOGELS Op de telposten werden de volgende aantallen roofvogels geregistreerd: 95 **Visarenden** *Pandion haliaetus*, vijf **Slangenarenden** *Circaetus gallicus,* 598 **Wespendieven** *Pernis apivorus*, een **Steppekiekendief** *Circus macrourus*, 19 **Grauwe Kiekendieven** *C pygargus*, 10 **Zeearenden** *Haliaeetus albicilla*, 14 **Rode Wouwen** *Milvus milvus*, zeven **Zwarte Wouwen** *M migrans*, vier **Roodpootvalken** *Falco vespertinus* en zeven **Smellekens** *F columbarius*. Het kon weer niet op met **Grijze Wouwen** *Elanus caeruleus*! Naast eenmanswaarnemingen op 22 juli in de Oostvaardersplassen, Flevoland, en op 19 augustus op de Sallandse Heuvelrug, Overijssel (beide gefotografeerd), was er een 'long-stayer' van 1 augustus tot in september bij Overschild, Groningen (eerste-kalenderjaar). **Slangenarenden** waren goed vertegenwoordigd. Naast vogels op bekende plekken zoals het Dwingelderveld, Drenthe, Fochteloërveen, Drenthe/Friesland (ten minste drie), en de Hoge Veluwe, Gelderland (ten minste vier), werden op nog minimaal 10 andere plekken pleisteraars gezien. Opvallende locaties betroffen de omgeving van het Naardermeer, Noord-Holland, en de Kennemerduinen. Een **Vale Gier** *Gyps fulvus* werd op 22 juli gemeld langs de A1 ter hoogte van Holten, Overijssel. **Schreeuwarenden** *Aquila pomarina* werden gemeld op 10 juli op enkele plekken in het noorden van Groningen, op 28 augustus op de zuidpunt van Texel en op 29 augustus in de Lepelaarplassen, Flevoland. Hoewel de soort de laatste jaren opvallend vaak gemeld wordt, zijn er pas 10 gevallen en was hij voor het laatst twitchbaar in september 2005. De onvolwassen **Bastaardarend** *A clanga* die op 4 juni werd gezien boven de Kollumerwaard, Friesland, werd op 13 juli opgemerkt bij Beetsterzwaag en op 14 juli in het Fochteloërveen in Friesland (foto's wezen uit dat het steeds om hetzelfde individu ging). Na bekendmaking van het spectaculaire nieuws over het succesvolle broedgeval van **Steppekiekendieven** in Noordoost-Groningen (vier jongen) werd deze familie nog geruime tijd waargenomen. Ook het bekende mannetje nabij Bentwoud, Zuid-Holland, gaf nog tot 26 augustus acte de présence.

HOPPEN TOT LEEUWERIKEN In augustus werden op c 12 locaties **Hoppen** *Upupa epops* aangetroffen, maar alleen een vogel in een tuin in Schinveld, Limburg, bleef langdurig. Naast geslaagde broedgevallen op een stil gehouden locatie bij Koningsbosch, Limburg, werden van c 20 plaatsen **Bijeneters** *Merops apiaster* gemeld. **Draaihals** *Jynx torquilla* kende geen goede augustusmaand. Zo was het aantal van 14 vangsten veruit het laagste sinds 2010 en lag dit ruim onder het augustusgemiddelde van 38 over de periode 2012-2016. Een **Kortteenleeuwerik** *Calandrella brachydactyla* in actieve vleugelrui verbleef van 13 tot 26 augustus in de Terschellinger Polder bij Lies. Het enige eerdere geval in augustus is eveneens afkomstig van Terschelling in 1995.

BOSZANGERS TOT GRASZANGERS Een roepende **Iberische Tjiftjaf** *Phylloscopus ibericus* in actieve vleugelrui werd op 14 en 15 juli waargenomen in Den Haag, Zuid-Holland, en betrof het derde geval voor deze stad. **Sperwergrasmus** *Sylvia nisoria* was met c zeven veld-

508 Struikrietzanger / Blyth's Reed Warbler *Acrocephalus dumetorum*, eerstejaars, Kennemerduinen, Noord-Holland, 28 augustus 2017 *(Arnoud B van den Berg/Vrs Van Lennep)*

509 Kortteenleeuwerik / Greater Short-toed Lark *Calandrella brachydactyla*, Terschellinger Polder, Terschelling, Friesland, 21 augustus 2017 *(Arie Ouwerkerk)*

waarnemingen in augustus schaars. Dat beeld werd bevestigd op ringplekken, met alleen vangsten op 22 augustus op Vlieland en op 31 augustus in de Eemshaven, Groningen. Ter vergelijking: het gemiddelde aantal augustusvangsten over de periode 2012-2016 lag op ruim 14. **Krekelzangers** *Locustella fluviatilis* zongen tot 18 juli bij Tynaarlo, Drenthe, en van 6 tot 10 juli bij Wolvega, Friesland. De laatste datum waarop de **Orpheusspotvogels** *Hippolais polyglotta* van het broedgeval bij Castricum werden gezien was 21 juli. Ringers vingen in augustus in totaal 10 **Grote Karekieten** *Acrocephalus arundinaceus*. Zes daarvan werden geringd bij Ooij, met liefst vier op 14 augustus. Een eerste-kalenderjaar **Struikrietzanger** *A dumetorum* werd op 28 augustus geringd in de Kennemerduinen. Na een reeks magere jaren waren er dit jaar weer wat meer **Waterrietzangers** *A paludicola*. Naast veldwaarnemingen op c 15 locaties (met het accent op Noord-Holland en Zuid-Holland), waren er 14 vangsten, waaronder zes bij Castricum en vier bij Ooij. Twee **Graszangers** *Cisticola juncidis* op Tiengemeten, Zuid-Holland, bleven de gehele periode, net als enkele exemplaren in het Verdronken Land van Saeftinghe, Zeeland. Elders waren er waarnemingen van 1 tot 8 juli bij Hilversum, Noord-Holland, en op 16 en 17 juli bij Rhoon, Zuid-Holland.

SPREEUWEN TOT GORZEN Juveniele **Roze Spreeuwen** *Pastor roseus* verbleven van 25 augustus tot in september op de noordpunt van Texel en van 27 augustus tot 1 september bij Camperduin. Een juveniele **Citroenkwikstaart** *Motacilla citreola* werd op 25 augustus waargenomen in de Crezéepolder bij Ridderkerk. In totaal werden op trektelposten 99 **Duinpiepers** *Anthus campestris* geregistreerd, waarvan 22 over telpost Loozerheide (zes op 23 augustus). Dit is het op één na hoogste aantal voor deze periode in de afgelopen 10 jaar; het gemiddelde ligt op 59. Tot half juli waren er nog waarnemingen van **Roodmussen** *Erythrina erythrina* in de duinen bij Castricum en IJmuiden, Noord-Holland, en op 27 augustus volgde een melding van Schiermonnikoog. Op telposten werden 31 **Ortolanen** *Emberiza hortulana* geteld; het gemiddelde voor deze periode over de afgelopen 10 jaren bedraagt 22. Daarnaast werden er nog c 19 op nachtelijke opnamen vastgelegd, waaronder liefst vijf over Noordwijk in de nacht van 27 op 28 augustus.

Bij het samenstellen van deze rubriek is dankbaar gebruikgemaakt van de websites dutchbirdalerts.nl, trektellen.nl, sovon.nl en waarneming.nl.

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DB Actueel

Transnational Brown Booby flying from Lopik, the Netherlands, to Tinholt and Bremen, Germany Sunday 20 August 2017 started as a normal day at migration site De Horde, Lopik, Utrecht, the Netherlands, close to the river Lek, 50 km inland from the North Sea. At 06:30, I (Arjan Boele) started the count in the special Trektellen-app, some minutes later I entered the first migrants (two Dunlins *Calidris alpina*) and during the first hour Frank Engelen, Kees de Leeuw and Gert Vonk arrived. The weather was fine (wind SW3, cloud-cover 6/8, visibility 20 km, 11°C) and we were hoping to see, for example, our first Western Osprey *Pandion haliaetus* of the season. At 08:04, Frank noticed a large bird flying to the north-east above the river and he immediately shouted 'What's this... is it a Northern Gannet? Yes a Northern Gannet!!' Some seconds later, while looking at the bird and taking photographs we were completely confused. Yes, we were looking at a gannet-like bird but with dark brown head, breast, upperparts and tail, a white belly and a pale bill and face!...'... is this a booby?... is this a Brown Booby!!??' The bird followed the course of the river, passed us at a minimum distance of c 180 m, made a dive without touching the water when it was chased by a Northern Lapwing *Vanellus vanellus* and after 2:20 min it disappeared, still following the course of the river. The incredible news of a migrating Brown Booby *Sula leucogaster* was immediately put on several WhatsApp groups and on the national Dutch Bird Alerts system and many birders hurried to the rivers east off De Horde, speculating the bird would follow the river further inland. We could not believe what had happened: a Brown Booby had just passed De Horde. I had often seen the species in Mexico and also at Eilat, Israel, and as a rare visitor in Cape May, USA, but at De Horde, that really seemed impossible... Of course, we have our 'dream-birds' we sometimes talk about at De Horde, especially at the moments with hardly any migration but we never ever had been thinking about a Brown Booby – a most unexpected first for the Netherlands! Ridiculously, after almost 20 years counting (9500 h), we have not even seen a single Northern Gannet *Morus bassanus* here but now we did see a booby. Unfortunately, and to our surprise, the bird that perfectly followed the river for more than 2 km, could not be found again in the Netherlands. But the story continued...

After an unsuccessful search for Eurasian Dotterels

510-511 Brown Booby / Bruine Gent *Sula leucogaster*, adult, De Horde, Lopik, Utrecht, Netherlands, 20 August 2017 *(Arjan Boele)*

512 Brown Booby / Bruine Gent *Sula leucogaster*, adult, Bremen-Arsten, Bremen, Germany, 20 August 2017 *(Thomas Kuppel)*

Charadrius morinellus in the nature reserve Dalum/Wietmarscher Moor, Niedersachsen, Germany, we (Gero Gülker and Günter Niehaus) decided to visit the rewetted areas near Bathorn. After we had counted all the waders, we decided to visit the small lake and sandpit near Tinholt, north-east of Wilsum and c 8 km from the Dutch border. We hoped to find the Eurasian Spoonbill *Platalea leucorodia* present for a couple of days. We found the bird sleeping at the eastern sandpit and we continued our tour to the western sandpit to check the geese, gulls and other birds. At 11:00, we decided to end our trip, when Gero suddenly found a big bird flying to the north-east at c 10 m above the lake. Our first impression was a juvenile Northern Gannet, a species which would already have been exceptionally rare so far inland. The bird flew at the other side of the lake back and forth and we had good hopes that it would land on the water or on one of the floating pipes, so that we could observe it better. But the small lake was obviously not good enough and the bird continued to fly around, sometimes very close of the water surface. In the meantime, we had made our first photographs, from c 400 m distance, and we started to doubt; why should a juvenile gannet show such a white belly, sharply bordered from the dark breast? After 5 min, the bird disappeared in a north-eastern direction. A quick glance in our Svensson birdguide made us even more confused, because our bird looked more like a Brown Booby! We did not have experience with this species and we decided to send a message via the local WhatsApp group. Then everything went quickly. A Club300 Rare Bird Alert was sent and soon we received the message that the same morning a Brown Booby had been seen in the Netherlands. This information made our blood pressure rise to a dangerous level: was it really possible that such a tropical seabird would find its way to a small sandpit near Tinholt? By then, it was clear that the identification as Brown Booby was correct and we realized that we had observed an amazing new species for Germany! The rest of the day was very hectic, with a lot of questions to answer about our observation and congratulations to enjoy – a day a birder will never forget! And the story continued...

On 20 August 2017, I (Thomas Kuppel) originally planned to stay at home, as my wife was spending the weekend in Groningen, the Netherlands, so I was in Bremen, Bremen, Germany, with our son. Checking mails and other information on the laptop in the morning, I stumbled on the observation of an adult Brown Booby in the Netherlands, flying north-eastwards. A bit later I read the news that it had been seen again, now near Tinholt, just across the Dutch border. I pondered a bit upon the flight direction: when the bird would continue to fly north-east in a straight line, it might pass just south of Bremen. After a short and serious talk to my son, I put on my boots, took my equipment and left him and home. Half an hour later I stood on a mountain of gravel near Bremen-Arsten close to the river Weser in the east of the city, one of my favourite birding spots. The weather changed a lot, offering sun and showers and westerly winds. Of course, I did not really expect to see the booby but hoped to find another interesting species like Caspian Tern *Hydroprogne caspia* or a skua *Stercorarius*. For nearly two hours nothing happened. Then, at 14:10, I found a large, elegant bird surfing along the shore opposite to the gravel mountain, which made me shiver: 'That's him!' I said to myself and 'photos, photos, photos!'. The already prepared camera was quickly out of my backpack and I took the first images – a brown-white bird with a Northern Gannet-like structure but a relatively heavier, whitish bill: doubtless the Brown Booby! I phoned the news out with my mobile and sent a spoken message to the WhatsApp group of Bremen Birders, then I ran down to the shore to shorten the distance to the bird. The booby flushed some very nervous Eurasian Coots *Fulica atra* and landed on the water. A swimming Brown Booby here, I still could not get it! But it stayed only for less than a minute on the surface and flew out of sight, behind some trees. I ran up the mountain again – but it was already gone. I had to check the pictures on the display to remain confident that I really had seen what I had seen. Regrettably, other birders looking for it upstream and downstream had no success.

Comparison of the photographs from Lopik, Tinholt and Bremen proved that it was the same bird based on, eg, the identical damage to the primary tips in both wings. From Lopik to Tinholt (145 km in a straight line), the bird flew on average 46 km/h and from Tinholt to Bremen (143 km) 49 km/h. This is a normal speed for the species with a fairly strong tailwind. Most probably, the booby flew at least six hours without resting for a longer period and apparently it was in good condition.

Brown Booby is a very rare vagrant from tropical seas to Europe with more than 20 records, in Ireland (3; of which two dead), Italy (3+), Portugal (4+) and Spain (11+). The Dutch-German bird reminds of other recent inland records of 'extreme seabirds'. For instance, a Red-footed Booby *S sula* stayed at Lac de Sainte-Croix, Bouches-du-Rhône, France, on 2-14 July 2011 (c 80 km inland from the Mediterranean Sea) and a Bulwer's Petrel *Bulweria bulwerii* found weakened at Kressbachsee, Baden-Württemberg, Germany, on 20 July 2015 was the first inland in the Western Palearctic (c 500 km from the North Sea and the Mediterranean Sea; Dutch Birding 3: 183-191, 2017). If accepted by the rarities committees of the Netherlands (Commissie Dwaalgasten Nederlandse Afivauna; CDNA) and Germany (Deutsche Avifaunistische Kommission; DAK), this Brown Booby will be the first for both countries. Most probably it also is the first inland record in Europe. Arjan Boele, Frank Engelen, Gero Gülker, Thomas Kuppel, Günter Niehaus & Peter de Vries

Bruine Gent Op 20 augustus 2017 werd een adulte Bruine Gent *Sula leucogaster* achtereenvolgens waargenomen en gefotografeerd bij telpost De Horde, Utrecht, Nederland (08:04), Tinholt, Niedersachsen, Duitsland (11:00) en Bremen, Bremen, Duitsland (14:10). De vogel volgde aanvankelijk de Lek maar vloog daarna strak naar het noordoosten (145 km naar Tinholt en vandaar 143 km naar Bremen). Indien aanvaard betreft dit het eerste geval van deze tropische zeevogel voor zowel Nederland als Duitsland; er zijn ruim 20 eerdere gevallen in Europa.