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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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Dutch Birding is a bimonthly journal. It publishes original papers and notes on morphology, systematics, occurrence and distribution of birds in the Benelux, Europe and elsewhere in the Palearctic region. It also publishes contributions on birds in the Asian-Pacific region and other regions.

For taxonomy, sequence and nomenclature of birds in Dutch Birding the following lists are used: *Dutch Birding bird names* by A B van den Berg (2008, Amsterdam; online update 2016, www.dutchbirding.nl/page.php?page_id=229) (taxonomy and scientific, Dutch and English names of Western Palearctic birds); *The Howard and Moore complete checklist of the birds of the world* (third edition, by E C Dickinson (editor) 2003; fourth edition, volume 1, by E C Dickinson & J V Remsen Jr (editors) 2013) (taxonomy and scientific names of remaining birds of the world); and *IOC world bird names 5.4* by F Gill & D Donsker (2015, www.worldbirdnames.org) (English and Dutch names of remaining birds of the world; Dutch names by P Vercruijsse and A J van Loon).

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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Voorplaat / front cover

Spaanse Keizerarend / Spanish Imperial Eagle *Aquila adalberti*, met Vale Gier / Griffon Vulture *Gyps fulvus*, Extremadura, Spanje, 10 mei 2012 *(Martin van der Schalk)*

Identification of female Pine Bunting – new pieces to the puzzle

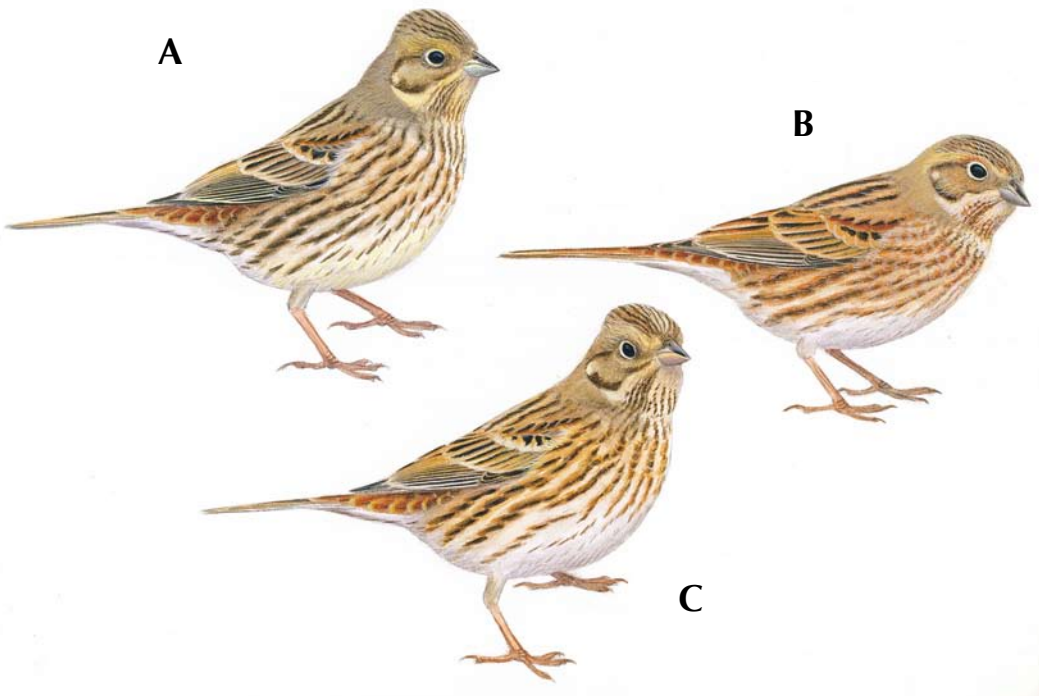
Alexander Hellquist

This paper deals with the separation of female Pine Bunting *Emberiza leucocephalos* from female Yellowhammer *E citrinella*. It is based on a literature review, studies of online photographs and examination of specimens in museum collections, as well as field studies in Europe and Asia.

Distribution and taxonomy

Yellowhammer breeds in northern and central Europe and in Asia eastwards to Lake Baikal. It is partly resident, with some populations wintering south of the breeding range from Central Asia westwards to the northern Mediterranean. Three subtly differing subspecies are usually recognized: *E c caliginosa* (hereafter *caliginosa*) in northern Britain, *E c citrinella* (hereafter *citrinella*) in southern Britain and western Europe and *E c erythrogenys* (hereafter *erythrogenys*) in eastern Europe and Russia. The nominate subspecies of Pine Bunting *E l leucocephalos* breeds from the western Urals eastwards through the taiga to Sakhalin, Russia, and in the Tien Shan. It winters from northern Japan westwards through Central Asia to the Middle East, and in (very) small numbers in northern Italy and

FIGURE 1 Yellowhammer / Geelgors *Emberiza citrinella*, pale female (**A**) and Pine Bunting / Witkopgors *E leucocephalos*, two females (**B, C**) *(Hans Larsson)*. Birds show similar plumages with type 1 pattern to underparts, common in both species. Note faint yellow cast to primary edges, belly and supercilium in Yellowhammer. It has pale blue lower mandible, which is rare in Pine Bunting. It further gives slightly greyer and less contrasting overall appearance with heavier dark streaking below, which is usually the case when comparing both species side by side. Pine Bunting B shows obvious rufous above eye, ruling out Yellowhammer. It also shows extensive rufous to throat and submoustachial stripe, which is a good feature. Pine Bunting C has entirely flesh-coloured lower mandible, which is probably never seen in Yellowhammer.



the Camargue in France. The allopatric subspecies *E l fronto*, with broader black lateral crown-stripes in both males and females, breeds in central China. It is not considered in this study. Pine Bunting and Yellowhammer hybridize with varying intensity over a large area between Urals and Lake Baikal, Russia (Panov et al 2003, 2007).

Pine Bunting and Yellowhammer differ in nuclear DNA (Alström et al 2008, Irwin et al 2009), which indicates that they separated from a common ancestor long ago and were isolated from each other over some time. However, mitochondrial DNA (mtDNA) of Pine Bunting and Yellowhammer is very similar (Alström et al 2008, Irwin et al 2009). This is likely due to gene flow through hybridization since the secondary contact between the species, which happened before strong reproductive barriers had been formed. The share of hybrids varies geographically, depending on how long the species have been mixing. In some areas, eg, the Russian Altai, hybrids are more common than pure birds, whereas hybrids are rare and non-mixed pairs breed side by side where the species met more recently (Panov et al 2003, 2007).

Material and methods

Pine Buntings and Yellowhammers were examined in the collections of Natural History Museum at Tring, England (NHMUK), Swedish Museum of Natural History at Stockholm, Sweden (NRM), Zoological Museum/Natural History Museum of Denmark at Copenhagen (ZMUK) and Zoological Museum of the Zoological Institute of the Russian Academy of Sciences at St Petersburg, Russia (ZIN). In total, 258 specimens from Yellowhammer females and 178 specimens from Pine Bunting females were examined, as well as five specimens from presumed female hybrids. In addition, field photographs of c 215 Pine Bunting females and 179 Yellowhammer females have been scrutinized.

Yellow plumage hues

The lack of yellow plumage hues in Pine Bunting females is the single most important criterion for separation from Yellowhammer. The possibility of Yellowhammer females lacking yellow is discussed in the literature but unquestionable evidence that such birds exist seems to be lacking (eg, Byers et al 1995). In the field, female Yellowhammers may give an impression of lacking yellow hues on the body but whether this is true also upon close inspection in the hand is uncertain. Faint yellow hues can be hard to assess. Sometimes, digital cameras seem better at confirming them than the naked eye – at least that of the author. Probably, pale individuals are mostly first-year birds (Cramp & Perrins 1994, Shirihai et al 1996), even though some older birds can be rather dilute as well. Sundberg (1994) shows that the extent of yellow in Yellowhammer males increases until up to four years of age and then decreases again – maybe the same tendency can be found in females.

A yellow cast to the primary edges and the underwing is emphasized as a good feature for Yellowhammer in the literature (eg, Byers et al

200 Yellowhammer / Geelgors *Emberiza citrinella*, second-year female (collected in Sweden, on 2 February 1924), NRM, Stockholm, Sweden, 22 October 2014 *(Alexander Hellquist/NRM)*. Second calendar-year female in rather fresh plumage entirely lacking yellow on primary edges, also beneath primary coverts. Specimen has yellow underparts, and there are no indications that it has bleached in an unnatural way. **201** Yellowhammer / Geelgors *Emberiza citrinella*, Gotland, Sweden, 31 October 2014 *(Fredrik Ström)*. Pale female with only faint yellow cast to primaries and supercilium.

FIGURE 2 Two versions of same photograph: Yellowhammer / Geelgors *Emberiza citrinella*, first-year (left bird, collected in France on 1 October 1929) and Pine Bunting / Witkopgors *E leucocephalos*, first-year (right bird, collected in China on 20 October 1940), NHMUK, Tring, England, 7 November 2011 *(Alexander Hellquist/NHMUK)*. In right-hand version, yellow hues have been replaced with white using photo editing software, in order to demonstrate how similar underpart pattern can be if ignoring yellow hues in most Yellowhammers.

1995). However, out of 258 examined Yellowhammers, one (0.4%) had completely white primary edges (plate 200). The yellow cast is regularly inconspicuous (plate 201). A few examined worn Yellowhammers and presumed hybrids without yellow on the visible distal part of the primaries have shown a yellow cast beneath the primary coverts, where they are protected from bleaching. Yellow hues on the underwing are difficult to study, both in the field and in collections, but they can be very faint in Yellowhammers (Shirihai et al 1995; examined specimens).

To summarize, there are indications that large samples of Yellowhammer females hold birds completely lacking yellow on both body and primaries, or at least birds that give such an impression in the field. It is not established if pure Yellowhammers can lack yellow on the underwing as well but it is clear that the colour can be very faint and difficult to establish in the field.

Both male and female hybrids may lack yellow on the primaries, the underwing and the body (Byers et al 1995, Blomdahl & Hägg 1997, McCarthy 2006; Evgeniy Panov in litt; studied specimens; see also plate 15-17 in Occhiato 2003). As hybrid males can lack yellow in all these feather tracts in combination (eg, Panov et al 2003; studied specimens), it is very likely that the same is true for hybrid females.

The lack of yellow in Pine Buntings means that they also lack olive hues, which are blends of yellow carotenoid-based pigments and dark melanin (Delhey et al 2010). Yellowhammers normally show olive hues to, for example, the lesser coverts, whereas those of Pine Buntings are greyish brown. However, a hypothetical Yellowhammer lacking yellow pigments would naturally also lack olive.

The occurrence of Pine Bunting candidates in Scandinavia is worth considering when evaluating yellow hues as an identification feature. Swedish records of Pine Bunting males have decreased markedly in recent years – 16 birds were seen be-

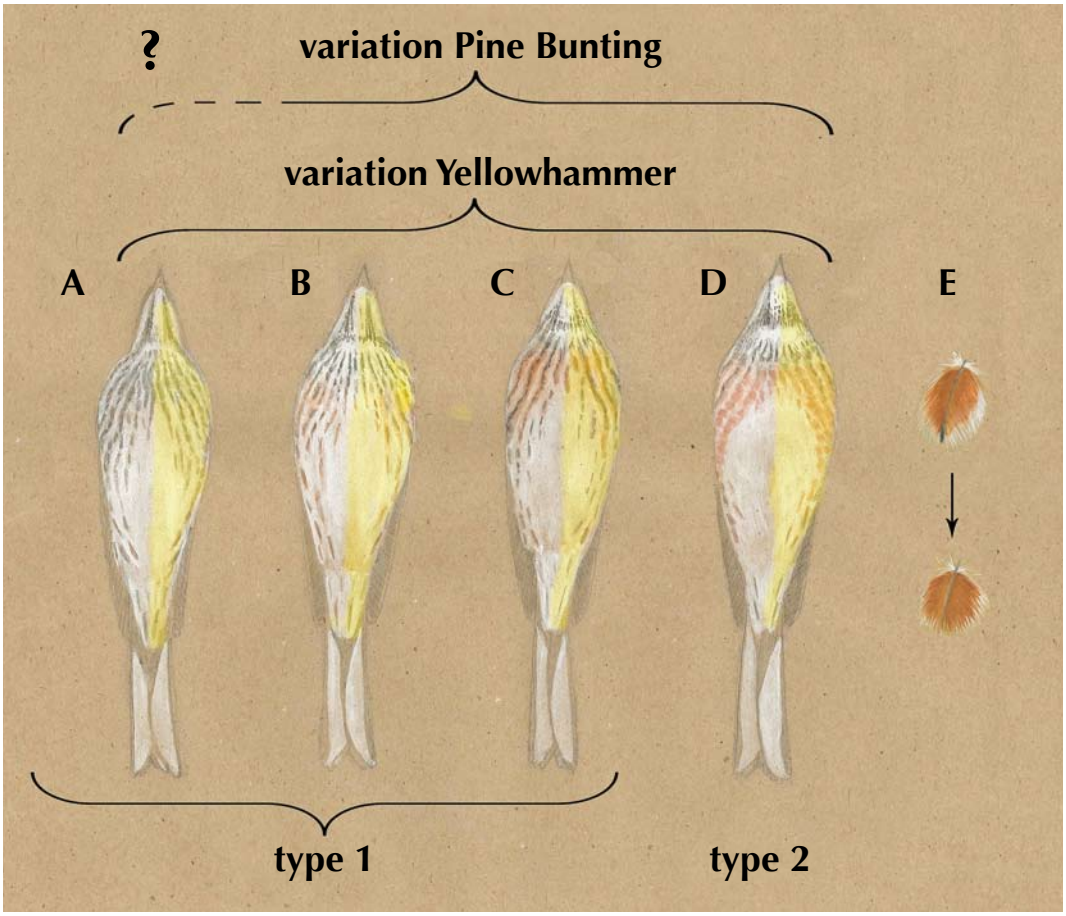


FIGURE 3 Variation in underpart pattern in Pine Bunting / Witkopgors *Emberiza leucocephalos* and Yellowhammer / Geelgors *E citrinella (Alexander Hellquist)*. Each bird shown with one side with yellow pigments and one without. Type 2 pattern occurs more frequently in Pine Bunting (see table 1), especially in worn plumage when faint dark shaft-streaks on breast-feathers are worn off (E). There is clinal variation in type 1 patterns (A-C). Whereas pattern A is regular in Yellowhammer, it is uncertain whether pure Pine Bunting can ever show that limited rufous (cf plate 220-221).

TABLE 1 Frequency of type 2 pattern (figure 3D) for Pine Bunting / Witkopgors *Emberzia leucocephalos* and Yellowhammer / Geelgors *E citrinella*, age and season/level of abrasion. Juvenile plumage, which is densely streaked without rufous in both species, is not included.

	Pine Bunting (n=152)		**Yellowhammer (n=218)**	
	first-year (n=75)	second calendar-year autumn+ (n=77)	first-year (n=124)	second calendar-year autumn+ (n=94)
fresh plumage (Sep-Mar)	28%	44%	4%	23%
worn plumage (Apr-Aug)	47%	65%	4%	21%

202 Pine Bunting / Witkopgors *Emberiza leucocephalos*, first-year female, Wilhelminadorp, Zeeland, Netherlands, 19 December 2015 *(Martin van der Schalk)*. Rather typical Pine Bunting female, demonstrating that not all northern European candidates are difficult to identify with reasonable certainty. Note extensive rufous below, some rufous discernable behind eye and typical bill colour.

tween 1988 and 2008 but none thereafter. Since 2010, there are four reports concerning Pine Bunting females without any visible yellow (eg, plate 216-217). The situation in Finland is similar – since 2006, two males have been accepted (the last one in 2008) while four reports concerning females are under review (Petri Lampila in litt). While not impossible, it is odd that male Pine Bunting records are suddenly followed by a sequence of less conspicuous females. It is hard to ignore the possibility that extreme Yellowhammers or hybrids are involved. There are several records of males with hybrid plumage traits from Finland and Sweden in recent years (eg, plate 229).

203-204 Pine Bunting / Witkopgors *Emberiza leucocephalos*, after second calender-year female (collected in northern China, in January), NRM, Stockholm, Sweden, 5 April 2013 *(Alexander Hellquist/NRM)*. Typical bird with extensive rufous feather bases in supercilium but colour is hidden when feathers lie in order. **205** Pine Bunting / Witkopgors *Emberiza leucocephalos*, first-year female (collected in northern China, October), NHMUK, Tring, England, 11 September 2013 *(Alexander Hellquist/NHMUK)*. This bird shows only limited and faint rufous. **206** Yellowhammer / Geelgors *Emberiza citrinella*, after first calendar-year female (collected in Tien Shan, China, September), NHMUK, Tring, England, 11 September 2011 *(Alexander Hellquist/NHMUK)*. Studied Yellowhammer specimens have shown at most small speckles of rufous above the eye, as this photograph or even less (visible only through a loupe).

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207 Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, Japan, 5 March 2012 *(Yoshio Kuboyama)* **208** Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, South Korea, 16 March 2014 *(Nial Moores)* **209** Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, Kazakhstan, 8 February 2014 *(Askar Isabekov)* **210** Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, Mongolia, 13 June 2011 *(Mathias Putze)*. In the field, rufous in supercilium is usually hidden in fresh plumage (plate 207). However, in the most typical birds it is visible (plate 208-209). In worn plumage during late spring and summer, rufous is visible in majority of birds (plate 210). Also note obvious rufous in submoustachial stripe in plate 209-210. Generally, Pine Buntings have more distinct head pattern than Yellowhammers *E citrinella*, with more contrasting dark borders around ear-coverts and darker lateral throat-stripe and lateral crown-stripe. However, both distinctly patterned Yellowhammers and diffusely patterned Pine Buntings occur.

Underpart pattern

The underpart pattern in both Yellowhammer and Pine Bunting females is variable – countless combinations of diffuse and distinct black, grey and rufous markings occur. If the yellow hues in most Yellowhammers are put aside, some birds are identical (figure 2). However, it is possible to divide the underpart pattern into two types that occur with different frequency in the two species (table 1 and figure 3):

- type 1 (figure 3A-C): females with this pattern show rufous on flank (always) and breast (often) but the individual feathers have a dark shaft-streak – unstreaked rufous areas are lacking;
- type 2 (figure 3D): females with this pattern show rufous feathers without a dark shaft-streak on breast and upper flank. The amount of clean rufous varies and can be smaller than depicted in figure 3. The pattern corresponds with that shown by a majority of males in both species.

Type 2 patterns are more frequent in Pine Bunting. Controlling for age and abrasion, the difference between the species is highly significant

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211 Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, Japan, 15 March 2010 *(Sugihara Satoshi)*
212 Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, Japan, 22 October 2010 *(Yasunori Yoda)*
213 Pine Bunting / Witkopgors *Emberiza leucocephalos*, female, Mongolia, 17 October 2007 *(Axel Bräunlich)*.
Wintering Pine Buntings in Japan and South Korea, where percentage of hybrids should be low, normally show extensive rufous below, as in plate 211. Such patterns are rare in female Yellowhammers *E citrinella*. Some Pine Buntings from Japan show limited but still obvious rufous, as in plate 212. When looking at entire Pine Bunting range, it is possible to find birds with even less extensive rufous that are similar to some northern European candidates, as example in plate 213. However, in continental Asia, uncertainty regarding prevalence of Yellowhammer genes is greater than among easternmost wintering birds.
Note horn/flesh lower mandible in plate 211-212.

($p<0.001$; see note 1 in appendix for statistics used). No difference was found between the Yellowhammer subspecies *citrinella* and *erythrogenys*.

The type 2 pattern becomes more common after the first complete moult in first-summer in both species, also when abrasion is controlled for ($p=0.04$ in Pine Bunting and $p<0.001$ in Yellowhammer). This explains why type 2 patterns in Yellowhammer are mainly seen in individuals showing intense yellow, which is more common in older birds. Yellowhammers showing a type 2 pattern and no or faint yellow hues should be rare (cf plate 223).

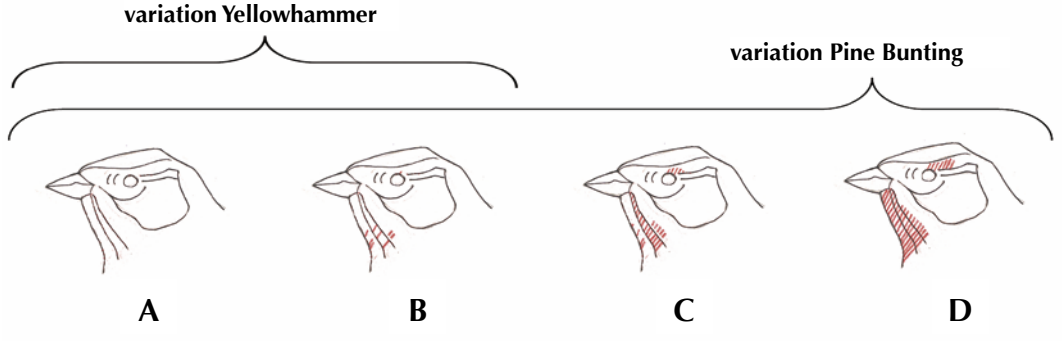
In Yellowhammer, there is no significant difference between fresh and worn plumage (September-March and April-August, respectively). However, in Pine Bunting type 2 pattern is significantly more frequent in worn plumage ($p=0.03$). The reason is that Pine Buntings in fresh plumage frequently show breast-feathers and flank-feathers with only a faint dark shaft-streak close to the tip. In autumn to early spring, the feathers form a type 1 pattern but then the shaft-streaks wear off creating a type 2 pattern (see figure 3E). This phenomenon is less common in Yellowhammer females as they normally have a stronger shaft-streak that runs along the entire length of the feather and therefore do not wear off. Instead, the streaking in Yellowhammer often becomes more distinct in worn plumage.

Also within the type 1 category, there are average differences between the species, albeit difficult to quantify due to clinal variation. Yellowhammers generally show stronger streaking below but there seems to be a total overlap. More importantly, Yellowhammers generally show less extensive and less saturated rufous. It is regularly limited to a faint brownish hue along the flank-streaks (figure 3A, plate 221). This pattern has not been found among wintering Pine Buntings in Japan and South Korea (n=145, cf plate 207-208 and

TABLE 2 Frequency of rufous in supercilium, submoustachial and lateral throat-stripe and on throat in females of Pine Bunting / Witkopogors *Emberiza leucocephalos* and Yellowhammer / Geelgors *E citrinella* from Scandinavia. See figure 4 for illustrations. Yellowhammers include wintering birds that partly may have easterly origin. It is possible that frequency of rufous is lower in samples including only breeding birds but rufous occurs in these as well (numbers studied here too small for safe conclusions).

		Pine Bunting (n=151)		**Yellowhammer (Scandinavia) (n=130)**	
		first-year (n=75)	second calendar-year autumn+ (n=76)	first-year (n=72)	second calendar-year autumn+ (n=58)
rufous in supercilium	no rufous (figure 4A)	5%	1%	89%	93%
	limited rufous (figure 4B-C)	39%	12%	11%	7%
	extensive rufous (figure 4D)	56%	87%	0%	0%
rufous in submoustachial and lateral throat-stripe	no rufous (figure 4A)	11%	5%	89%	86%
	limited rufous (figure 4B)	47%	24%	15%	13%
	extensive rufous (figure 4C-D)	41%	73%	0%	0%
rufous on throat	no rufous (figure 4A)	38%	26%	99%	99%
	limited rufous (figure 4B-C)	27%	13%	1%	1%
	extensive rufous (figure 4D)	35%	61%	0%	0%

FIGURE 4 Extent of rufous on feather bases in supercilium, submoustachial and lateral throat-stripe and on throat in females of Pine Bunting / Witkopgors *Emberiza leucocephalos* and Yellowhammer / Geelgors *E citrinella*. See table 2 for frequencies of different patterns.



214 Yellowhammer / Geelgors *Emberiza citrinella*, female, Halland, Sweden, 5 February 2012 *(Göran Snygg)* **215** Yellowhammer / Geelgors *Emberiza citrinella*, female, Skåne, Sweden, 15 February 2010 *(Hans Larsson)*. Note faint yellow hue on belly, head and primary edges, and pale blue lower mandible in bird in plate 214. Both birds have rather strong diffuse streaking and limited rufous below – typical pattern for Yellowhammer.

211-212), where the share of hybrids should be small – Yellowhammer is very rare there. A small share of birds from continental Asia show limited rufous below (plate 213) but there mixed genes constitute a greater pitfall when evaluating the appearance of females. Also in this part of the range, and among wintering birds in Italy, Pine Buntings usually show more rufous than Yellowhammers.

Adding to the concerns regarding northern European female Pine Bunting candidates is the fact that many show heavy streaking and limited rufous below (eg, plate 216-220). This can partly be explained by the fact that vagrants are mostly young birds in fresh plumage but still a larger share should statistically show a more typical Pine Bunting plumage – the difference between the age categories is not that large. Not all candidates from northern Europe are atypical though (see plate 202).

In the field, surrounding light affects the impression of rufous (plate 218-219). The level of saturation applied to photographs can create artefacts.

Rufous head markings

As in many other buntings, the head pattern of females in Yellowhammer and Pine Bunting may approach that of males. Occasionally, females show as much pure white/yellow on the crown as males. In Pine Bunting, females also show rufous markings of varying size and intensity on feather bases in the supercilium, the submoustachial and lateral throat-stripe (the latter formerly often called malar stripe)

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216 Possible Pine Bunting / mogelijke Witkopgors *Emberiza leucocephalos*, female (right), with Yellowhammer / Geelgors *E citrinella*, female (left), Västervik, Småland, Sweden, 28 January 2012 *(David Erterius)*. This individual shares characteristics with several other northern European candidates. It lacks yellow hues, judging from available photographs with visible underwing (eg, www.artportalen.se/Image/1129357). Obvious rufous spots on throat indicate Pine Bunting but might not eliminate extreme Yellowhammer or hybrid. Rather strong streaking and limited rufous below could be within variation of Pine Bunting but is more typical for Yellowhammer. Pale blue lower mandible is odd for Pine Bunting. In this plate, it can be compared with pale Yellowhammer (left bird). Note similar overall impression but yellow primary edges and faint yellow tinge to belly and head in the Yellowhammer. Because of deviations from typical Pine Bunting, the Swedish rarities committee decided not to accept this bird. During a recent review of all claims, the committee has found that typical Pine Bunting features have not been sufficiently documented in any Swedish candidate. Consequently, no accepted Swedish records remain. **217** Possible Pine Bunting / mogelijke Witkopgors *Emberiza leucocephalos*, female, Västervik, Småland, Sweden, 29 January 2012 *(David Erterius)* **218** Possible Pine Bunting / mogelijke Witkopgors *Emberiza leucocephalos*, female, with Yellowhammer / Geelgors *E citrinella*, male, Oulainen, Finland, 11 November 2006 *(Petri Lampila)*. **219** Possible Pine Bunting / mogelijke Witkopgors *Emberiza leucocephalos*, female, Oulainen, Finland, 12 November 2006 *(Ari Kakko)*. Same bird as in plate 218. Another northern European candidate showing limited rufous below. Note how surrounding light affects impression. Rufous on flank becomes fainter in warm reflection from ground in plate 219.

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220 Unidentified bunting / ongedetermineerde gors *Emberiza*, Paimio, Finland, 25 January 2012 *(Ari Kuusela)*. **221** Yellowhammer / Geelgors *Emberiza citrinella*, female, Gotland, Sweden, 4 February 2012 *(Alexander Hellquist)*. Pine Bunting *E leucocephalos* candidate in plate 220 shows even less rufous below than birds in plate 216-219. Such pattern is regularly seen in Yellowhammers (eg, bird in plate 221) but has not been noted among Pine Buntings from normal range of species (n=380). Possibly, it should be regarded as sign of hybridization. Pale blue lower mandible, greyish overall impression and strong streaking below in Finnish bird is also odd for Pine Bunting. Also in January 2012, another Pine Bunting candidate with similar plumage was noted in Latvia (photograph at http://tarsiger.com/images/Bruun/poss_embleu_01_DSC_8055.jpg). **222** Unidentified bunting / ongedetermineerde gors *Emberiza*, Qitbit, Oman, 16 November 2010 *(Tobias Berger)*. Another out of range Pine Bunting *E leucocephalos* candidate without yellow in plumage but also almost entirely lacking rufous on underparts and scapulars. Neither Pine Bunting nor Yellowhammer *E citrinella* has been recorded in Oman.

and on the throat. This corresponds with the characteristic pattern in males. Rufous markings are easiest to detect by exposing the feather bases (plate 203-205). In the field, the colour is often hidden beneath pale feather-tips when the plumage is fresh. It can then be spotted only occasionally, if the feathers are ruffled or in birds with most extensive rufous (figure 1B, plate 202 and 208-209). During spring, the pale feather-tips are worn off and in summer rufous is visible in the field in many, but not all, Pine Bunting females (plate 210).

Several authors point out that female Pine Buntings may show rufous in the supercilium and on the throat (Cramp & Perrins 1994, Byers et al 1995, Occhiato 2003) but estimates of the frequency seem to be lacking. Especially obvious rufous in the supercilium and on the throat is a very useful feature against Yellowhammer.

Figure 4 and table 2 show the differences between Pine Buntings and Scandinavian Yellowhammers (Denmark, Norway and Sweden). Allmost all Pine Buntings show rufous in the supercilium and in the submoustachial and lateral throat-stripe, and a majority show some on the throat. Many show extensive rufous (plate 204), and the most typical birds sport a solid chestnut throat and supercilium like males. However, a substantial share of birds show faint and limited rufous that requires careful examination to be confirmed (plate 205). Rufous is significantly more extensive in older birds than in first-year birds (see note 2 in appendix for statistics used). There is a strong correlation between the extent of rufous in the three feather tracts (see note 3 in appendix for statistics used).

Only five examined Pine Bunting specimens

223-224 Presumed hybrid Pine Bunting x Yellowhammer / waarschijnlijke hybride Witkopgors x Geelgors *Emberiza leucocephalos x citrinella*, Kazakhstan, 3 October 2012 *(Alexander Hellquist)*. Two different presumed hybrids. Both have yellow primary edges. In plate 223, type 2 pattern in combination with lack of yellow below creates odd impression for Yellowhammer. In Yellowhammer females, type 2 patterns are mainly seen in older birds that are bright yellow. Bird in plate 224 also looks odd due to combination of clean white belly and obvious yellow wing-panel. Normally, careful examination of rufous and yellow along with other plumage clues is required to identify hybrids with reasonable confidence. This is usually possible only with handheld birds.

(out of 175, including birds that were not aged) lacked rufous in the supercilium – four first-year birds and one older. They also lacked rufous on the throat and in the submoustachial and lateral throat-stripe. They were collected in Central Asia in autumn. It is possible that they carried Yellowhammer genes but as a fair share of Pine Buntings show only limited and faint rufous, it is conceivable that some lack it entirely.

Only a small percentage of Scandinavian Yellowhammers shows rufous in the supercilium, and then only as miniscule speckles just above the eye (plate 206). Again, only a very small percentage shows rufous on the throat but it is sometimes visible in the field. It is a bit more common among Yellowhammers to show rufous in the submoustachial and lateral throat-stripe. This echoes the pattern of males, in which rufous lateral throat-stripes are regularly seen throughout the range. Still, the rufous in Yellowhammer females is more limited and faint than in most Pine Buntings. The intensity can be difficult to assess in photographs, where brown hues easily become redder when saturation is boosted. In Yellowhammer, no significant difference between age groups was found.

Rufous in Yellowhammer females becomes more prevalent eastwards, corresponding with the pattern in males (Cramp & Perrins 1994, Panov et al 2003). 19 females from Britain, France and the Netherlands all lacked rufous in the supercilium and on the throat (three had rufous in the submoustachial and lateral throat-stripe). In *erythrogenys* (35 first-year and 23 older birds examined), rufous seems more prevalent than in Scandinavia. C 20% had rufous in the supercilium. 11% of first-year and 20% of older birds had rufous in the submoustachial and lateral throat-stripe. In some areas, eg, around the Altai, it seems possible that up to 50% may show rufous but the sample is too small for safe conclusions. The pattern can be explained by gene flow from Pine Bunting. But also in *erythrogenys*, the amount of rufous is much more restricted than in almost all Pine Buntings, particularly in the supercilium where Yellowhammers never show more than small speckles (plate 206). This can probably be considered normal variation while more extensive patches are likely a sign of recent hybridization.

No correlation between the amount of rufous on the underparts and in the head pattern in either Yellowhammer or Pine Bunting was found. The same is true for Yellowhammer males (Sundberg 1994, Pirhonen 2012).

Other plumage characters

In addition to the characters dealt with above, several others have been described in the literature (eg, Lewington 1990, Shirihai et al 1996, Occhiato 2003, Pirhonen 2012). Some of these have not been confirmed in the material studied here. For others, there seem to be average differences between the species but also extensive overlap that

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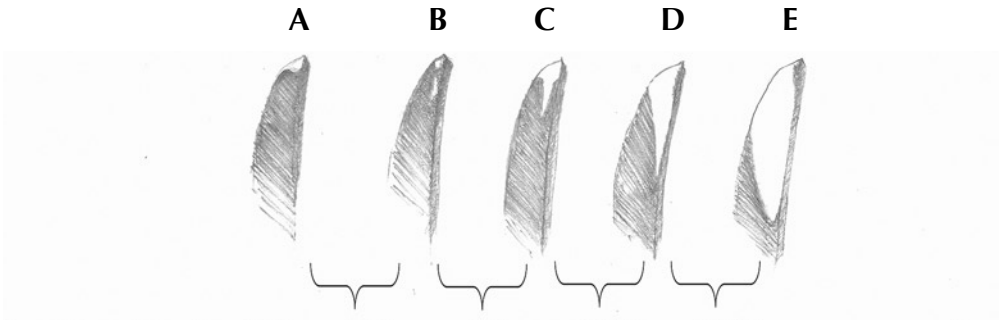
225-226 Unidentified bunting / ongedetermineerde gors *Emberiza*, possibly hybrid, Målilla, Småland, Sweden, 3 April 2015 *(Calle Ljungberg)* **227** Unidentified bunting / ongedetermineerde gors *Emberiza*, possibly hybrid, Målilla, Småland, Sweden, 30 March 2015 *(Calle Ljungberg)* **228** Unidentified bunting / ongedetermineerde gors *Emberiza*, possibly hybrid, Målilla, Småland, Sweden, 10 April 2015 *(Alexander Hellquist)*. Aged as second calendar-year based on moult limit among tertials. It showed seemingly white underwing (plate 225) and primary edges without yellow. In certain light, faint yellowish creamy hue was visible on belly (plate 228). Overall impression was greyer and less contrasting than typical Pine Bunting *E leucocephalos*. Fifth rectrix had rather limited white (plate 226) but is within variation in Pine Bunting. Damage above one eye revealed feather bases where no rufous could be detected (plate 227). Bird showed limited rufous below. Recorded calls of the bird match Yellowhammer *E citrinella* well (figure 7).

limits their usefulness. For the following three, it is possible that extremes in one of the species lie outside the variation of the other:

- Pine Buntings more frequently show extensive yellowish or flesh hues on the lower mandible, while Yellowhammers more frequently show a pale blue cast. Yellowhammers never seem to show an entirely yellowish or flesh lower mandible, which is common in Pine Buntings (see plate 230);
- on average, Pine Bunting shows more extensive white in the outermost and second outermost rectrices (t5-6; see figure 5). Rarely, Yellowhammers show just a small white tip on t5 (figure 5A-B), whereas it seems that Pine Bunting always shows more;
- on average, Pine Bunting shows narrower dark shaft-streaks on the undertail-coverts. In c 3%, shaft-streaks are absent (see also Blomdahl & Hägg 1997), which has not been noted on Yellowhammers (n=194; see also Lewington et al 1991). Both species regularly show some rufous along the shaft-streaks.

229 Presumed hybrid Pine Bunting x Yellowhammer / waarschijnlijke hybride Witkopgors x Geelgors *Emberiza leucocephalos x citrinella*, male, Målilla, Sweden, 8 February 2015 *(Calle Ljungberg)*. Bird seen in same garden as female in plate 225-228 and two other males with hybrid traits. It would be interesting to know origin of wintering birds in this area. All males with hybrid traits that have shown up in Sweden recently have been predominantly yellow, as this bird. However, there are records of presumed hybrid males in Finland with no or very little yellow. **230** Pine Bunting / Witkopgors *Emberiza leucocephalos*, Ulan Ude, Buryatia, Russia, 30 August 2009 *(Alexander Hellquist)*. No studied Yellowhammer *E citrinella* has shown entirely yellowish lower mandible as in this bird. Pine Buntings always show yellowish or flesh along cutting edge between mandibles. Most Yellowhammers show this as well but at least in the field some seem to lack it. Among Pine Bunting females in field photographs (n=190), c 40% showed more extensive yellowish hue covering at least upper half of lower mandible. Same was true for only c 1% of studied Yellowhammers (n=179). Yellowhammers often show pale blue cast to lower mandible, which is uncommon in Pine Bunting. Impression depends partly on light conditions and can be difficult to assess as hues blend seamlessly into each other.



Pine Bunting (n=57):	0%	5%	28%	67%
Yellowhammer (n=116):	7%	16%	41%	36%

FIGURE 5 Amount of white in fifth rectrix (t5) in females of Pine Bunting / Witkopgors *Emberiza leucocephalos* and Yellowhammer / Geelgors *E citrinella*. Percentages are rough estimates – it is quite common that amount of white differs between right and left side of tail. No correlation between age and tail pattern has been noted.

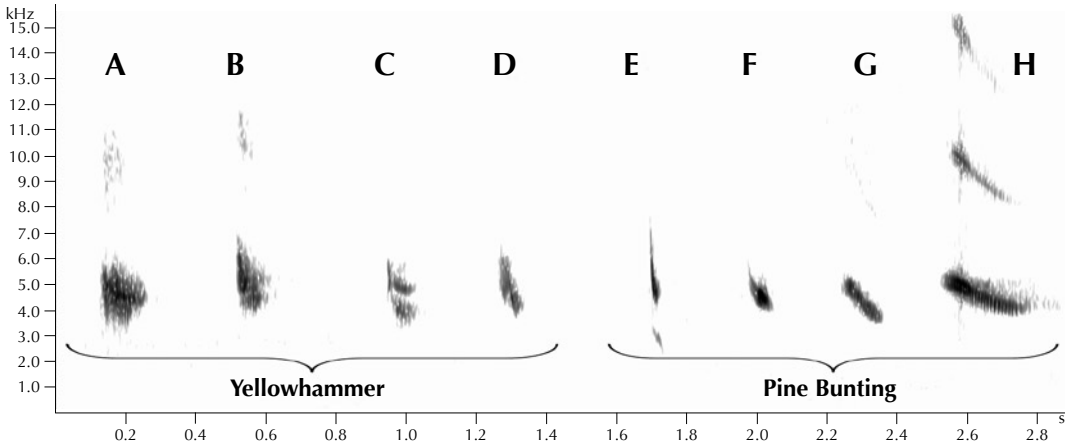


FIGURE 6 Vocalizations of Yellowhammer / Geelgors *Emberiza citrinella* and Pine Bunting / Witkopgors *E leucocephalos*. **A-D** Variation in common harsh call of Yellowhammer, Sweden, April, September, October. **E-F** Variation in corresponding call in Pine Bunting, Italy, January. Call of Pine Bunting is generally clearer than in Yellowhammer, which produces more distinct sonagrams. **G** Typical falling clear call of Pine Bunting, Kazakhstan, October. **H** Long variant of G, used on breeding grounds, Buryatia, Russia, May. Recordings A-D and G-H by Alexander Hellquist (www.idbysound.wikispaces.com); E-F by Daniele Occhiato (www.dutchbirding.nl/journal.php?id=145#tabblad-2), corresponding with recording 5 and 7.

Calls

In Yellowhammer, the most common contact call, used frequently throughout the year, is a harsh *tchy* or similar (figure 6A-D). It is variable; when birds are worried it often turns into a harder and more metallic *zeck*; in other cases, it is slightly clearer (figure 9). The corresponding call in Pine Bunting is similar and probably partly overlaps. Normally, it is slightly shorter, and the voice is clearer (figure 6E-F and 8-9). It is the most common call on wintering grounds in Italy (Occhiato 2003).

By contrast, the most common Pine Bunting call during autumn migration, heard both from flying and perched birds (c 20 studied individuals in Kazakhstan, September-October) is typical: a falling clear *tiu* (figure 6G). It is noticeably different from Yellowhammer calls and rather brings the clear call of Lapland Longspur *Calcarius lapponicus* into mind. It can also be heard in winter (Occhiato 2003) and in spring (eg, www.xeno-canto.org/36328). A longer variant of the same call (figure 6H) is given on breeding grounds (c five individuals heard in Buryatia, Russia, in May; see also Mild 1987), where it is uttered at a slow pace from perched birds.

Both species give similar rolling calls, mostly when worried and flushed.

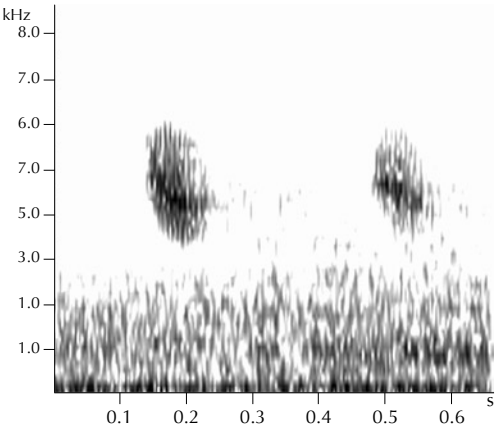


FIGURE 7 Unidentified bunting / ongedetermineerde gors *Emberiza*, possibly hybrid, Målilla, Småland, Sweden, March/April 2015 *(Calle Ljungberg)*. Calls from bird in plate 225-228. They fit Yellowhammer *Emberiza citrinella* well but may not rule out Pine Bunting *E leucocephalos*.

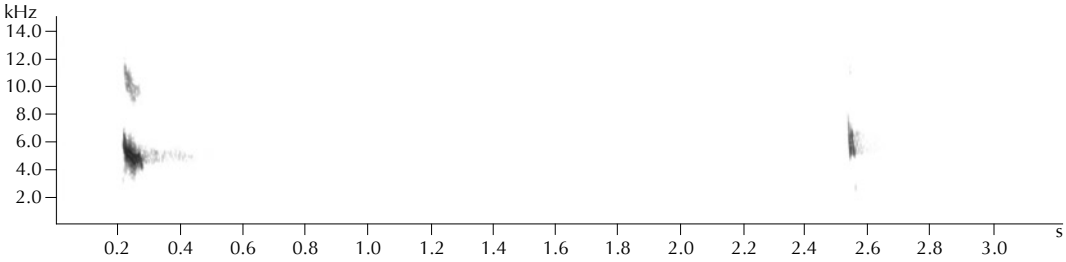


FIGURE 8 Pine Bunting / Witkopgors *Emberiza leucocephalos*, first-winter female, Wilhelminadorp, Zeeland, Netherlands, 11 January 2016 *(Arnoud B van den Berg/The Sound Approach)*. These calls match type E in figure 6 nicely, supporting the identification. Occasionally, Yellowhammers *E citrinella* give similar calls but still slightly less clear and sharp.

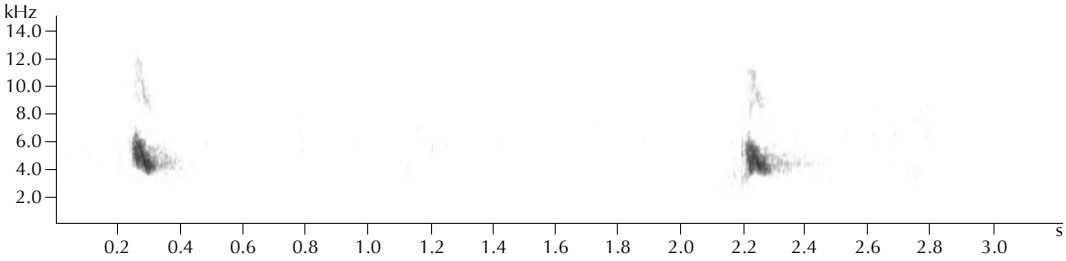


FIGURE 9 Yellowhammer / Geelgors *Emberiza citrinella*, Hoburgen, Gotland, Sweden, 14 October 2015 *(Alexander Helquist)*. Unusually clear Yellowhammer calls, resulting in sonagram that is very similar to that in figure 8. However, calls still slightly more low-pitched and harsh.

Concluding summary

Admittedly, any attempts to define the demarcation and extent of overlap between females in Yellowhammer and Pine Bunting, including those in this paper, are to some extent speculative in the absence of DNA establishing the identity of studied birds. The extensive hybridization further leads to inevitable difficulties in drawing the line between pure birds and back-crosses that are similar to either species.

There are indications that absence of yellow plumage hues is not enough to identify female Pine Buntings – at least not in the field and outside the normal range of the species. There is convincing evidence that Yellowhammers can lack yellow in the primaries and, at least in field conditions, on the body. The yellow on the underwing can be faint and hard to assess. As hybrid males can lack yellow plumage hues entirely, it is very likely that the same goes for hybrid females. That male Pine Bunting records in Finland and Sweden have been followed during the last decade by a series of female candidates lacking yellow but showing heavy streaking and less rufous below than normal in Pine Bunting has raised suspicions that Yellowhammers and/or hybrids are involved. Male hybrids reach Scandinavia regularly, and it is likely that cryptic female hybrids occur as well.

In order to avoid distortion of vagrancy patterns and detect more hybrids or atypical Yellowhammers, it is suggested that the following is taken into account along with presence/absence of yellow when assessing female Pine Bunting claims:

- very few Pine Buntings entirely lack rufous in the supercilium, whereas extensive rufous in the supercilium, in the submoustachial and lateral throat-stripe and on the throat seems to rule out Yellowhammer (checking this feature often requires examination in the hand, in particular when the plumage is fresh);
- Pine Buntings usually show extensive rufous below, and it is uncertain whether pure birds ever show as limited rufous as in many Yellowhammers;
- extensive yellowish or flesh hues on the lower mandible indicate Pine Bunting;
- limited white on the fifth rectrix indicates Yellowhammer;
- a small percentage of Pine Buntings lack dark shaft streaks on the undertail-coverts, which is rare or does not occur in Yellowhammer;
- the falling clear call of Pine Bunting is probably diagnostic; there are small differences in other calls as well that might be useful.

Acknowledgements
Many thanks to Tobias Berger, Axel Bräunlich, Magnus Elfwing, David Erterius, Jonas Fredriksson, Askar Isabekov, Ari Kakko, Henrik Knudsen, Yoshio Kuboyama, Ari Kuusela, Petri Lampila, Hans Larsson, Kåge Lindström, Calle Ljungberg, Nial Moores, Daniele Occhiato, Mathias Putze, Sugihara Satoshi, Göran Snygg, Fredrik Ström and Yasunori Yoda for allowing me to use their photographs and recordings. I am grateful to Hans Larsson for making nice illustrations, to Petri Lampila, Evgeniy Panov, Jan Sundberg and Lars Svensson for providing me with material and valuable information, and to Ulf Johansson, Jan Bolding Kristensen, Jon Fjeldså, Robert Prŷs-Jones and Vladimir Loskot for access to the collections in Stockholm, Tring and St Petersburg, respectively.

Samenvatting
HERKENNING VAN VROUWTJE WITKOPGORS – NIEUWE PUZZELSTUKJES Dit artikel bespreekt kenmerken voor het onderscheiden van vrouwtje Witkopgors *Emberiza leucocephalos* van vrouwtje Geelgors *E citrinella*. Het is gebaseerd op literatuuronderzoek, bestudering van balgen en foto's van internet en vogels in het veld in Azië en Europa. Men dient zich te realiseren dat iedere poging tot begrenzing van kenmerken en de mate van overlap daarvan tot op zekere hoogte speculatief zijn wanneer DNA-gegevens ontbreken die de identiteit van de bestudeerde individuen vaststellen. Uitgebreide hybridisatie zorgt eveneens tot onvermijdelijke problemen bij het onderscheiden van zuivere vogels en terugkruisingen die op beide oudersoorten kunnen lijken.

Er zijn aanwijzingen dat de afwezigheid van gele tinten in het verenkleed onvoldoende is om een vrouwtje Witkopgors te determineren – althans niet in het veld en buiten het normale verspreidingsgebied van Witkopgors. Er is voldoende bewijs dat bij Geelgorzen het geel kan ontbreken in de handpennen en, onder waarnemingsomstandigheden in het veld, op het lichaam. Het geel op de ondervleugel kan heel beperkt zijn en lastig vast te stellen. Aangezien bij hybride mannetjes gele tinten geheel afwezig kunnen zijn, is het aannemelijk dat dat ook voor hybride vrouwtjes geldt.

In Finland en Zweden werden gevallen van mannetjes Witkopgors in de laatste decennia gevolgd door een reeks 'kandidaat-vrouwtjes' waarbij gele tinten ontbraken maar die wel zwaarder gestreepte en minder rossige onderdelen hadden dan gewoonlijk bij vrouwtjes Witkopgors. Dit leidde tot de veronderstelling dat dit om hybriden of afwijkende Geelgorzen zou kunnen gaan. Hybride mannetjes worden met enige regelmaat vastgesteld in Scandinavië en het is aannemelijk dat cryptische hybride vrouwtjes ook voorkomen.

Teneinde een foutief beeld van het voorkomen als dwaalgast van Witkopgors te voorkomen en om meer hybriden en atypische Geelgorzen te herkennen, wordt aanbevolen om – naast de aan- of afwezigheid van geel – de volgende kenmerken te betrekken bij het beoordelen van claims van vrouwtjes Witkopgors: ***1*** bij zeer weinig Witkopgorzen ontbreekt de rossige tint in de wenkbrauwstreep volledig, terwijl uitgebreid rossig in de wenkbrauwstreep, de mondstreep/baardstreep en op de keel Geelgors lijkt uit te sluiten (dit kenmerk vereist meestal onderzoek in de hand, vooral bij vers kleed); ***2*** Witkopgors vertoont doorgaans uitgebreid rossig op de onderzijde en het is onzeker of zuivere vogels ooit zo beperkt rossig vertonen als veel Geelgorzen; ***3*** uitgebreide geelachtige of vleeskleurige tint op de ondersnavel wijst op Witkopgors; ***4*** weinig wit op de een-na-buitenste staartpen (t5) wijst op Geelgors; ***5*** bij een klein percentage Witkopgorzen ontbreken donkere schachtstrepen op de onderstaartdekveren (dit komt slechts zelden of niet voor bij Geelgors); ***6*** de dalende heldere roep van Witkopgors is waarschijnlijk diagnostisch en mogelijk zijn ook kleine verschillen in andere roepjes nuttige onderscheidende punten.

References
Alström, P, Olsson, U, Lei, F, Wang, H, Gao, W & Sundberg, P 2008. Phylogeny and classification of the Old World Emberizini (Aves, Passeriformes). Mol Phylogenet Evol 47: 960-973.
Blomdahl, A & Hägg, J 1997. Fältbestämning av honfärgad tallsparv. Vår Fågelvärld 56 (8): 32-33.
Blount, J D & McGraw, K J 2008. Signal functions of carotenoid colouration. Carotenoids 4: 213-236.
Bradshaw, C & Gray, M 1993. Identification of female Pine Buntings. Br Birds 86: 378-386.
Byers, C, Olsson, U & Curson, J 1995. Buntings and sparrows: a guide to the buntings and North American sparrows. Mountfield.
Cramp, S & Perrins, C M (editors) 1994. The birds of the Western Palearctic 9. Oxford.
Delhey, K, Roberts, M L & Peters, A 2010. The carotenoid-continuum: carotenoid-based plumage ranges from conspicuous to cryptic and back again. BMC Ecology 10: 13. http://tinyurl.com/je6nmfz.
Irwin, D E, Rubtsov, A S & Panov, E N 2009. Mitochondrial introgression and replacement between Yellowhammers (*Emberiza citrinella*) and Pine Buntings (*Emberiza leucocephalos*) (Aves: Passeriformes). Biol J Linn Soc 98: 422-438.
Lewington, I 1990. Identification of female Pine Bunting. Birding World 3: 89-90.
Lewington, I, Alström, P & Colston, P 1991. A field guide to the rare birds of Britain and Europe. London.
McCarthy, E M 2006. Handbook of avian hybrids of the world. Oxford.
Mild, K 1987. Soviet bird songs. Two sound cassettes. Stockholm.
Occhiato, D 2003. Identification of Pine Bunting. Dutch Birding 25: 1-16.
Panov, E N 1973. Interrelationships of two closely related bunting species (*Emberiza citrinella* L. and *E. leucocephalos* Gm.) in the area of their coexistence. Probl Evol 3: 262-29. [In Russian; English summary.]
Panov, E N, Rubtsov, A S & Monzikov, D G 2003. Hybridization between Yellowhammer and Pine Bunting in Russia. Dutch Birding 25: 17-31.
Panov, E N, Rubtsov, A S & Mordkovich, M V 2007. New data on interrelationships between two bunting species (*Emberiza citrinella*, *Emberiza leucocephalos*)

interbreeding in the zone of their overlapping ranges. Russian J Zool 86: 1362-1378. [In Russian; English summary.]
Pirhonen, J 2012. Problematic Yellowhammers and Pine Buntings in Finland. Caluta 3 (www.caluta.liitin.net).
Shirihai, H, Christie, D A & Harris, A 1995. Field identification of Pine Bunting. Br Birds 88: 621-626.
Shirihai, H, Christie, D A & Harris, A 1996. The Macmillan birder's guide to European and Middle Eastern birds, including North Africa. London.
Sundberg, J 1994. Sexual selection in the yellowhammer (*Emberiza citrinella*). The advantage of being yellow. Dissertation, Uppsala University, Uppsala.

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APPENDIX 1 Footnotes

1 The results in this section are based on binomial logistic regression analysis using the EViews software. The binary dependent variable is underpart pattern type (1 or 2), while the explanatory variables are species, subspecies (in Yellowhammer), season/level of abrasion and age.

2 The significance was estimated using ordered choice logistic regression in the EViews software. The amount of rufous in each feather tract was categorised into three classes according to table 2. There was a significant effect of age on rufous in the supercilium ($p<0.001$), on the throat ($p=0.006$) and in the submoustachial and lateral throat-stripe ($p<0.001$).

3 In the material studied (n=175), the correlation between rufous in the submoustachial and lateral throat-stripe and on the throat is 0.78 (Pearson's R test). The coefficient between rufous in the supercilium and on the throat is 0.59. The coefficient between rufous in the supercilium and in the submoustachial and lateral throat-stripe is 0.70. The last estimate can be compared with correlation coefficients of 0.54 and 0.64 between rufous in the supercilium and in the submoustachial and lateral throat-stripe in 'yellow' and 'white' hybrid males, respectively (Panov et al 2003).

Breeding Pallid Scops Owls in Rift valley, Israel, in spring 2015

Amir Ben Dov & Yosef Kiat

In Israel, the first breeding record of Pallid Scops Owl *Otus brucei* was documented by Israel Aharoni in May 1911, when he found a nest with eggs at Wadi Auja, Jordan valley (31.59°N, 35.19°E; figure 4); both adults were collected (Shirihai 1996). The skins are at the American Museum of Natural History (AMNH), New York, USA (collection numbers unknown). Since then, there had been no further indications of breeding in Israel. Shirihai (1996) mentions it as an irregular migrant and winter visitor in Israel. From the early 2000s, it became clear that it is a regular winter visitor to the Arava valley in small numbers (James Smith per comm, Susannah Lerman pers comm), with several 10s estimated to winter in southern Israel between November and March.

On 3 June 2015, a local farmer found a fledgling owl that had fallen out of its nest in a date palm plantation near Mitzpe Shalem, in the northern Dead Sea region (31.38°N, 35.25°E; figure 4 and plate 235). It was identified as Pallid Scops Owl by the authors; due to its condition, it was taken into care at the Nature and Parks Authority (NPA) Wildlife Hospital. Following this initial discovery, the authors, with the assistance of Kochav Levy, explored the possibility that this was not an incidental record. An instant survey was arranged in the same plantations where the fledgling had been found, which led to the discovery of two more territorial pairs. This fuelled the believe that the species could be a rather widespread breeder in Israel and a second and more intense survey was coordinated by Yosef Kiat in June 2015, from the Bet She'an valley in the north to the southern Arava valley in the south (figure 1). The aim of this survey was to assess the distribution, number and habitat

231-232 Pallid Scops Owl / Gestreepte Dwergooruil *Otus brucei*, adult, Kalia, Israel, 18 June 2015
(Amir Ben Dov)

233 Typical date palm breeding habitat of Pallid Scops Owl *Otus brucei*, Dead Sea area, Israel, 17 June 2015 *(Amir Ben Dov)*

FIGURE 1 Palm plantations sampled in Beit Shean valley, Israel (yellow pins); existing plantations are marked in red squares *(© 2016 Google)*

of breeding territories of Pallid Scops along the Rift valley, and to obtain data on breeding biology.

In this paper, we describe the survey results and our findings on the breeding biology of this little-studied species. We furthermore review some important identification features and address conservation issues and directions for future studies.

Survey methods

Our survey focused on mature date palm plantations (tree height 10 m or more; plate 233); 10 nights of active searching were carried out, including the use of playback to attract birds. The standard technique was playing the calls for five minutes, and then an additional five minutes were spent listening to the very soft response calls of the species (cf Robb & the Sound Approach 2015). Because of the very soft calls of adults, sampling spots were at a distance of only 100-150 m from each other.

In order to find active nests and to better understand the nesting biology, ie, nest location and height, cavity chosen and some initial information about the eggs and nesting period, we upheld a continuing dialogue with several farmers within the surveyed area. Torches were used to visually locate birds and nests. With the help of local farm-

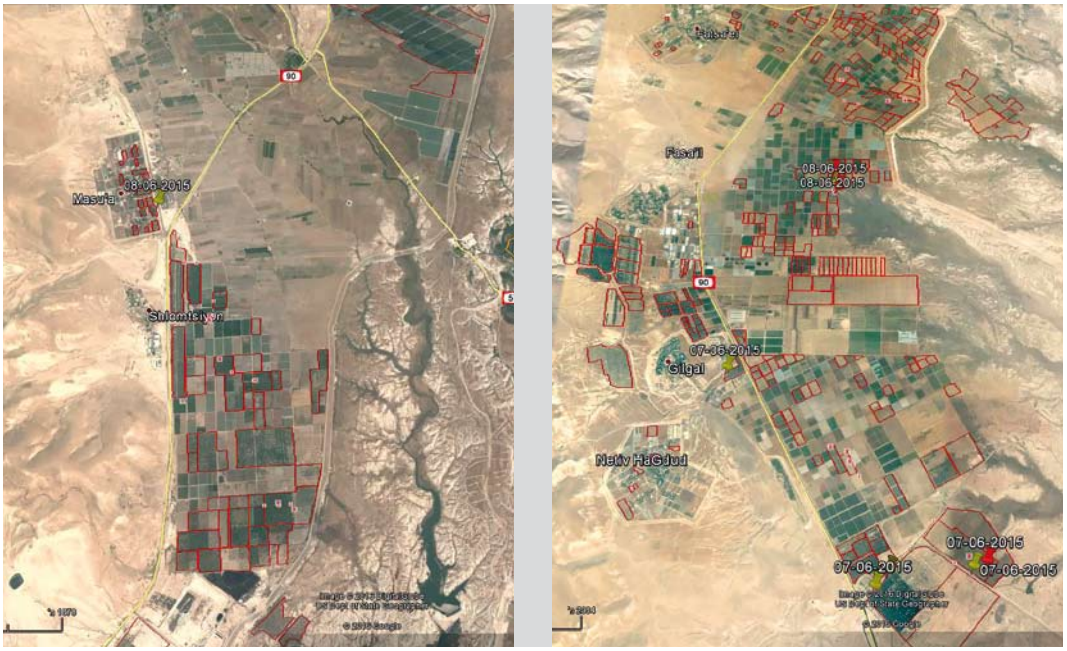

FIGURE 2 Palm plantations sampled in Mid Rift valley (yellow pins; red crosses in case of definite territory found; red pins in case of definite nest found); existing plantations marked as red squares *(© 2016 Google)*

FIGURE 3 Palm plantations sampled at Rift valley along road 90 and in northern Dead Sea area (yellow pins; red crosses in case of definite territory found; red pins in case of definite nest found); existing plantations marked in red squares *(© 2016 Google)*

ers, some of the nests that were found were examined using small cranes to obtain data on breeding biology.

In order to positively identify all Pallid Scops Owl skins in Israel and to discover any unknown or unpublished information on Pallid Scops collected over the years, all scops owl skins in the Steinhardt National Collections of Natural History, Zoological Museum, Tel Aviv University (TAU), Israel, and in the Natural History Museum (NHMUK) at Tring, England, were examined.

As the survey conducted by the authors was

FIGURE 4 Locations of breeding evidence and collected specimens of Pallid Scops Owl *Otus brucei* in Israel *(Eli Haviv/SPNI)*. ●: active territory in 2015; **+**: site where no evidence of breeding was found during 2015 survey; ●: two previously misidentified skins from TAU collection: juvenile AV 18329, 2 October 2013, Bekaot, and adult male AV 18822, 3 June 1988, Hatzor junction, Hula valley; ●: location of first breeding record in Israel in 1911.

FIGURE 5 Survey results at Kalia plantation, Israel, on 14 June 2015: sampling points marked with yellow dot; territories found marked with red dot *(Eli Haviv/SPNI)*

brief and rapid due to limited time and manpower, we used the plantations mapping survey done just recently (Glasner 2015) and focused on trees of more than 10 m height; from our understanding gathered through the survey, this was the minimum height for nesting.

In the survey conducted by Yosef Kiat, the borders of 10 palm plantations spots were examined in the Beit Shean valley from Kfar Ruppin plantations (32.14°N, 35.52°E) up to Tirat Zvi plantations (31.91°N, 35.47°E) in the south (figure 1). 34 spots were examined in the area between Masua (31.6°N, 35.29°E) to Naama (31.54°N. 35.28°E; figure 2) and 77 spots were examined in the north of the Dead Sea area from Beit Aarava plantations (31.78°N, 35.49°E) to Ein Gedi plantations (31.46°N, 35.39°E; figure 3). Finally, 19 spots were examined in Hatzeva plantations (30.76°N, 35.29°E) and two in the south Arava valley.

Results

Breeding survey

In total, 50 territories with adults performing territorial behaviour were found. In 10 territories, breeding was confirmed. All territories were found between Masua in the north (32.60°N, 35.29°E) and Mitzpe Shalem plantation (31.38°N, 35.25°E) in the south, a stretch of 54 km.

In the plantation of Kalia, with a surface area of 1.2 km², we found 23 territories – the highest density among all plantations surveyed (figure 5). The territories were found only in mature trees of 10 m height or more, with distances of 150-200 m between territories. One adult was trapped, measured, ringed and photographed. Due to limited time to request NPA permits, blood samples were taken only from the two nestlings brought to the NPA Wildlife Hospital.

234 Nest of Pallid Scops Owl *Otus brucei*, Mitzpe Shalem, Israel, 18 June 2015 *(Amir Ben Dov)* **235** Pallid Scops Owl / Gestreepte Dwergooruil *Otus brucei*, juvenile, Mitzpe Shalem, Israel, 3 June 2015 *(Melvin Blau)*. Bird taken into care after it had fallen out of its nest. **236** Pallid Scops Owls / Gestreepte Dwergooruilen *Otus brucei*, two nestlings at nest, Masua, Israel, June 2015 *(Moshe Mintz)*

In addition to this impressive population discovery of Pallid Scops Owl, we found several territories of Eurasian Scops Owl *O scops cycladum*. This species is widely spread in Israel with nests found from the upper north of Israel to Beit Shean valley, but it was unknown as a breeding species in the Dead Sea area until this survey. This new finding extends the distribution area of Eurasian Scops further south.

Breeding biology

All nests were found in cavities in the trunks of mature date palms (more than 25-30 years old), 2-3 m below the canopy (plate 234 and 236). These cavities are created during trimming of old branches as part of routine agricultural activities in the plantations. They are also used by Eurasian Scops Owls and Common Kestrels *Falco tinnunculus*, which share the plantations with Pallid Scops Owls.

Based on information from Cramp (1985) and Jennings (2010), Pallid Scops Owl starts laying eggs in the third week of April; the incubation period is 26-28 days, and fledging is after c 26 days. Based on nests and fledglings documented in Israel in June 2015 by the authors and also by local farmers, our data generally fit with this pattern: breeding began in early April to mid-April, hatching was from early May to mid-May, and fledging was in June.

One unhatched egg was collected and measured. Its dimensions were 29.61x30.05 mm, the estimated volume using a method described by Hoyt (1979) was 45.37 cc.

Five pellets were collected from one nest; pellet sizes were (in mm): 21x11, 22x12, 31x12, 24x11 and 20x11. These pellets were analyzed and contained mainly arthropods, mostly grasshoppers and crickets Orthoptera and beetles Coleoptera but also a few mantids Mantodea and sun spiders Solifugae (at least four individuals), one tarantule *Chaetopelma olivaceum* and one House Mouse *Mus musculus*, probably a young individual.

Skin collections

In the Tel Aviv University collection, we found two previously misidentified skins, now re-identified as Pallid Scops Owl. The first (TAU collection number AV.18329) was a juvenile found on 2 October 2013 in Beqa'ot, northern Jordan valley, Israel (32.14°N, 35.27°E), very close to where breeding territories were found in 2015 (figure 4). The second (AV.18822) was an adult male collected on 3 June 1988 at Hatzor Junction, southern Hula valley, northern Israel (32.59°N, 35.33°E). This is much further north compared with the breeding territories found in 2015 (figure 4) and indicates the need for further studies of the distribution of the species.

Discussion

Our results show that Pallid Scops Owl is a well-established breeder in the central area of the Rift valley in Israel. However, in this breeding season we surveyed only c 10% of the palm plantations of the Israeli Rift valley. Our finding of the skin of an adult male collected at Hatzor Junction in June 1988 and the nesting reported from Aleppo, Syria (36.12°N, 37.80°E), in 1919 (Cramp 1985), suggest the possibility that there is a more or less continuous breeding distribution from southern Turkey (Kirwan et al 2008) through Syria to Israel. We assume that Pallid Scops may have been breeding in this region of the Rift valley consistently since the discovery by Aharoni in 1911. At the same time, we speculate that the species expanded from the late 1980s onward, thanks to the massive development of palm agriculture that started in Israel just after 1967. We also believe that the development of palms agriculture in this area of Israel, the Palestinian Authority and Jordan will continue to contribute to the expansion of this species.

Our survey in June 2015 discovered 50 territorial pairs but it is likely that the number of pairs breeding in Israel is much higher. In order to carefully estimate the true number of breeding pairs, we used the statistical data provided by the Israeli Date Palm Agricultural Association (Glasner 2015). This survey shows that within the surveyed area with territories found (Masua to Mitzpe Shalem), there were 307 462 planted trees in 23 651 dunam (5844 acres); of these, c 217 000 palm trees were 10 m in height or more (which is suggested by us to be the minimum height suitable for nesting). Checking the densities of territories within the plantation resulted in 166-466 trees per territory; based on these results, we conservatively estimate that 200-400 (or more) pairs breed in Israel.

In the last 10 years, the Palestinian Authority planted over 100 000 trees, together with the plantation plans within Israel and the maturity of more than 90 000 already planted trees, we suggest that, unless external interference will occur, the species is due to expand.

In order to complete the understanding of the range and numbers of breeding Pallid Scops Owls in this section of the Rift valley, we recommend an intensive search in the next nesting season in Israel, the Palestinian Authority and Jordan.

Migration and wintering habits

Little is yet known about the migration habits of the breeding population in Israel but some indications were found when two birds of unknown age were caught in mist-nets at the Eilat ringing center area on 18 November 2015 and 27 November 2015 (plate 239-240). However, it is not clear if these birds originated from the Israeli breeding population. Some birds were wintering in Hatzeva area and Zeelim Stream not far from the nesting sites. It is also unclear whether the Israel birds are a continuation of the Turkish population (*O b obsoletus*) or the southern Arabian Peninsula population (*O b exiguus*).

Following the discoveries in 2015, new surveys were initiated in early spring 2016. Wintering individuals were seen in the streams of the Judea and Arava Desert until mid-March with overlap of territorial individuals seen in the palm plantations from late February onwards. This overlap may sug-

237-238 Pallid Scops Owls / Gestreepte Dwergooruilen *Otus brucei*, Zoological Museum, Tel Aviv University, Israel, 24 June 2015 *(Yosef Kiat)*. From top to bottom: adult male, collected in Hazor, Hula valley, Israel, in June 1988 (TAU AV.18822); adult male, collected in Eilat, Israel, in December 1971 (TAU AV.8249), and adult male, collected in Nahal Oz, western Negev, Israel, in March 1964 (TAU AV.5281).

239-240 Pallid Scops Owl *Otus brucei*, International Birding and Research Center Eilat, Eilat, Israel, 18 November 2015 *(Jari Latisalo/International Birding and Research Center Eilat)*

TABLE 1 Biometrics of skins of Pallid Scops Owl *Otus brucei* and Eurasian Scops Owl *O scops* (average length (mm) ± SD) / biometrie van balgen van Gestreepte Dwergooruil *Otus brucei* en Dwergooruil *O scops* (gemiddelde lengte (mm) ± SD). MTF = middle toe feathering length / lengte van bevedering op middelste teen

	wing	tail	tail/wing ratio	bill	hind claw	MTF
Pallid Scops Owl (n = 7)	151 ± 4.2	71 ± 2.3	0.47 ± 0.01	8.8 ± 0.3	7.7 ± 0.5	5.8 ± 0.6
Eurasian Scops Owl (n = 10)	156 ± 5.6	69 ± 2.3	0.44 ± 0.02	8.8 ± 0.5	6.9 ± 0.5	1.8 ± 0.4

TABLE 2 Biometrics of live birds of Pallid Scops Owl *Otus brucei* and Eurasian Scops Owl *O scops* (average length (mm) ± SD) / biometrie van levende individuen van Gestreepte Dwergooruil *Otus brucei* en Dwergooruil *O scops* (gemiddelde lengte (mm) ± SD).

	wing
Pallid Scops Owl (n = 7)	156.57 ± 2.7
Eurasian Scops Owl (n = 94)	158.98 ± 5.1

gest that the young (second calendar-year) birds and females move to the breeding grounds later than the males, as is known in some passerine species, or may indicate that a wintering population co-exists alongside the local population. On 8 March, one plantation visited was found to hold 15 birds singing within c 150 m², indicating that the birds were there but not yet settled in territories.

Conservation and hazards to nests and nestlings

The pruning period, which creates the nests cavities in the trees, is twice a year, in May and during October to December, 2-3 m below the canopy, where the nests are located. Pesticide spray is done mainly in April to June (the peak of the nesting period). In date palm agriculture, heavy use of herbicides and insecticides is part of the routine practice in almost all plantations. Spraying is mainly around the tree bases but also on the fruit below the canopy, at the same height as the nests were found. Therefore, the scops owls are exposed to poisoning as they breed and forage in such an intensively cultivated habitat, and their nests and nestlings could be hit directly by spraying. The dates harvest within the surveyed area is between the last week of July to third week of August, as far as we now know, after the nesting season. In some plantations, a special method of harvesting dates is

241-242 Pallid Scops Owl / Gestreepte Dwergooruil *Otus brucei*, adult, Kalia, Israel, 9 March 2016 *(Amir Ben Dov)*

used, involving trees shaking with special equipment. This method is definitely a threat to the nests. Nonetheless, within our quick study of this method, we were informed that it is damaging the fruits and therefore is not widely used within the surveyed area. Should such method be used, it is most often done during harvest time and, therefore, after the nesting period. Future research should address these conservation issues, and also focus on the possible contribution of breeding scops owls to pest control in plantations and on the correlation between the breeding success and the use of phosphorescent pesticide.

During the evenings, most of the year, including the nesting period, there are very strong winds in the northern Dead Sea area. These winds usually start around sunset and last until c 23:00. Such strong winds can move and shake the trees up to 0.5 m to each side and may have caused the fall of the first nestling (plate 235).

Sympatric breeding of scops owls in northern Dead Sea region

In part of the palm plantations, Pallid Scops Owl and Eurasian Scops Owl breed side by side (cf Pons et al 2013). From sporadic findings, it appears that there is some difference in the nesting period of the two species, with Eurasian Scops starting in early March, with nestlings aged three weeks found already in April (n=1), and Pallid Scops starting from mid-April to late June (n=9). The option of possible interbreeding between the two species has not been investigated.

Identification

The general plumage tone and pattern of some Eurasian Scops Owls can be very close to those of Pallid Scops Owl, and identification of difficult individuals should be accompanied by measurements. We measured several skins (table 1a) and found that an important distinguishing feature is the length of the feather patch on the upperside of the middle toe (plate 243, figure 6). We define this measurement as 'middle toe feathering length (MTF)' (table 1). In addition, the hind claw of Pallid Scops is on average longer than in Eurasian Scops and the wing length of Pallid Scops is on average smaller than in Eurasian Scops, reflecting its less migratory nature compared with the latter (table 1-2).

FIGURE 6 Comparison of extent of feathering on upperside of middle toe in nestling of Pallid Scops Owl / Gestreepte Dwergooruil *O brucei* (left) and Eurasian Scops Owl / Dwergooruil *Otus scops* (right), NPA Wildlife Hospital Ramat Gan Safari, Israel, 28 June 2015 *(Amir Ben Dov)*

243 Pallid Scops Owl / Gestreepte Dwergooruil *Otus brucei* (left) and Eurasian Scops Owl / Dwergooruil *O scops* (right), nestlings in captivity, INPA Hospital, Shmulik Landau, Israel, 28 June 2015 *(Amir Ben Dov)*. Main plumage differences as follows: ***1*** feathers on middle toe in *brucei* (no or very little feathers on middle toe in *scops*); ***2*** general coloration pale in *brucei* (grey in *scops*); ***3*** horizontal lines across chest and belly in *brucei* (vertical lines in *scops*); ***4*** pale 'eyebrow' and deep yellow eye in *brucei* (dark 'eyebrow' and pale yellowish eye in *scops*); and ***5*** horizontal lines across forehead in *brucei* (vertical lines in *scops*).

Field characters of nestlings

The field identification of adult Pallid Scops Owl has been well described (eg, van den Berg et al 1988, Shirihai 1993, Shirihai et al 1996, van Duivendijk 2011) but very little information has been provided on the identification of nestlings. We noted several differences that allow identification of nestlings: ***1*** noticeable stretch of feathering on upperside of middle toe (table 1; cf figure 6); ***2*** overall pale sandy-grey color (grey-brownish in Eurasian Scops Owl); ***3*** forehead and chest with horizontal barring (vertical barring in Eurasian Scops); ***4*** deep yellow iris (pale yellowish in Eurasian Scops; plate 243); ***5*** pale 'eyebrows' (dark or darkish in Eurasian Scops; plate 243).

Taxonomy

The taxonomic position of Pallid Scops Owl in relation to other *Otus* species has been reviewed recently and it has been confirmed as a robust species occurring in widespread sympatry with Eurasian Scops Owl but with no signs of interbreeding (Pons et al 2013). However, the subspecific classification of Pallid Scops is not as well studied. Shirihai (1996) concluded that birds collected and seen in Israel show characteristics of both *O b obsoletus* (more northern and migratory taxon, from southern Turkey, northern Syria, Iraq, Turkmenistan, Uzbekistan and northern Afghanistan) and *O b exiguus* (more southern and sedentary taxon, from central and eastern Iraq, southern Iran, Oman, southern Afghanistan and western Pakistan) and that some individuals seem intermediate between the two. Shirihai (1996) also noted that most migratory and wintering individuals approached the sandier *obsoletus*. However the birds collected by Aharoni in 1911 were closer to the greyish *exiguus* in plumage but with measurements fitting the larger *obsoletus*.

We find the current taxonomic structure of the subspecies vague and suggest that it needs to be studied in depth. This is because of the indications of intermediate individuals. A further reason to revisit the taxonomy is that the dimorphic phenomenon in the species is poorly documented and understood in the literature (Marks et al 1999) but in

Eurasian Scops Owl it is common (eg, Mikkola 2012). It is unclear how dimorphism may have affected subspecific descriptions and taxonomic treatment.

For the purpose of further biometric study, blood samples of two Pallid Scops Owl trapped in June 2015 were collected and a separate paper on the analysis will be published in due course.

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Samenvatting

Broedende Gestreepte Dwergooruilen in Riftvallei, Israël, in 2015 Het eerste en tot voor kort enige broedgeval van Gestreepte Dwergooruil *Otus brucei* in Israël was in 1911. Sindsdien werd de soort beschouwd als een onregelmatige, zeldzame wintergast in de Aravavallei, hoewel de laatste decennia regelmatig kleine aantallen overwinteraars werden vastgesteld. Op 3 juni 2015 werd nabij het noorden van de Dode Zee in een dadelpalmplantage een jong gevonden dat uit zijn nest was gevallen. Daarop werd nog in dezelfde maand een snelle inventarisatie van geschikte habitats uitgevoerd langs het Israëlische deel van de Riftvallei, die resulteerde in de vaststelling van 50 broedterritoria. Extrapolatie aan de hand van geschikte broedlocaties (palmplantages) leidde tot een schatting van 200-400 paar in Israël. Door onderzoek van in Israël verzamelde balgen van dwergooruilen kwamen twee voorheen foutief gelabelde balgen aan het licht, verzameld in juni 1988 en oktober 2013. De auteurs geven aan dat mogelijk sprake is van een min of meer continu broedgebied van het zuid-oosten van Turkije via Syrië naar Noord-Israël en aangrenzende delen van Jordanië en de Palestijnse gebieden. In het artikel wordt verder aandacht besteed aan de broedlocaties, dichtheden, bedreigingen (met name door gebruik van pesticiden in palmplantages), determinatie (verschillen met Dwergooruil *O scops*, die ook in Noord-Israël broedt), biometrie en taxonomie (de indeling in ondersoorten bij Gestreepte Dwergooruil verdient herziening).

References

van den Berg, A B, Bison, P & Kasparek, M 1988. Striated Scops Owl in Turkey. Dutch Birding 10: 161-166.

Cramp, S (editor) 1985. The birds of the Western Palearctic 4. Oxford.

del Hoyo, J, Elliott, A & Sargatal, J (editors) 1999. Handbook of the birds of the world 5. Barcelona.

Hoyt, D F 1979. Practical methods of volume and fresh weight of bird eggs. Auk 96: 73-77.

Jennings, M C 2010. Atlas of the breeding birds of Arabia. Fauna of Arabia 25. Riyadh.

Kirwan, G M, Boyla, K A, Castell, P, Demirci, B, Özen, M, Welch, H & Marlow, T 2008. The birds of Turkey. The distribution, taxonomy and breeding of Turkish birds. London.

Marks, J S, Cannings, R J, & Mikkola, H 1999. Family Strigidae (typical owls). In: del Hoyo, J, Elliott, A & Sargatal, J (editors), Handbook of the birds of the world 5, Barcelona, p 76-242.

Mikkola, H 2012. Owls of the world: a photographic guide. London.

Pons, J M, Kirwan, G M, Porter, R F, & Fuchs, J 2013. A reappraisal of the systematic affinities of Socotran, Arabian and East African scops owls (*Otus*, Strigidae) using a combination of molecular, biometric and acoustic data. Ibis 155: 518-533.

Robb, M & The Sound Approach 2015. Undiscovered owls: a Sound Approach guide. Poole.

Sangha, H S, & Malik, D 2010. Observations on wintering Pallid Scops Owl *Otus brucei* at Zainabad, Little Rann of Kachchh, Surendranagar district, Gujarat. Indian Birds 5: 176-177.

Shirihai, H 1993. Separation of Striated Scops Owl from Eurasian Scops Owl. Br Birds 86: 286-287.

Shirihai, H 1996. The birds of Israel. London.

Shirihai, H, Christie, D A & Harris, A 1996. The Macmillan birder's guide to European and Middle Eastern birds, including North Africa. London.

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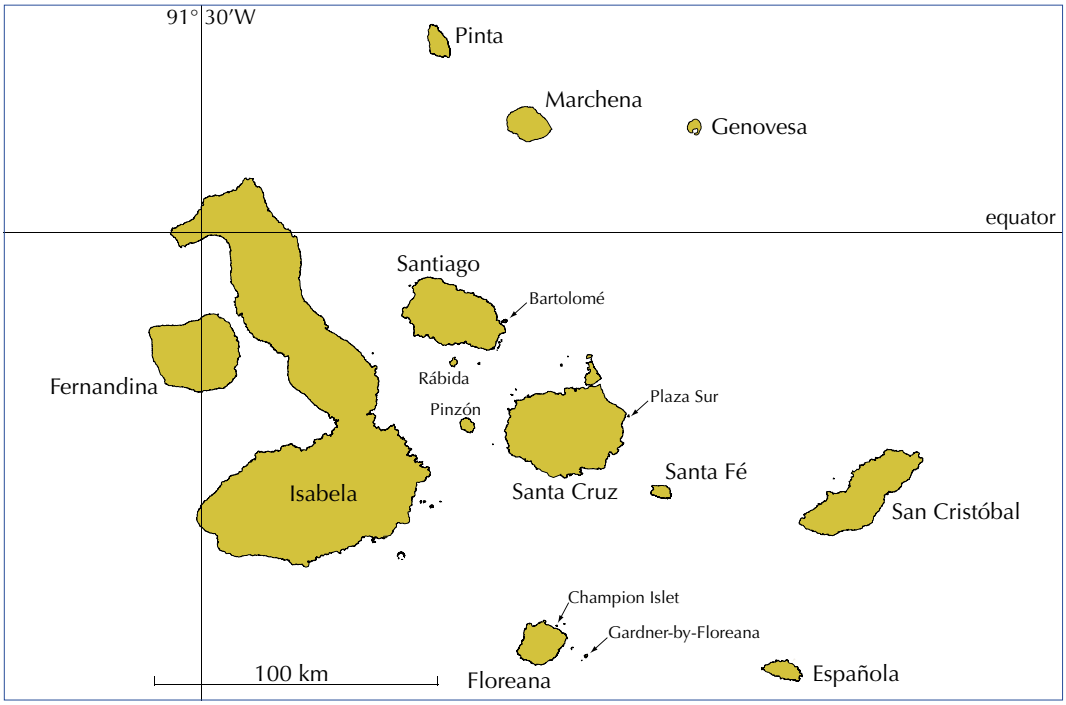
Birding in the Galápagos Islands

Dušan M Brinkhuizen

The Galápagos Islands straddle the equator in the Pacific Ocean c 1000 km west of mainland Ecuador in South America; politically, the islands are part of Ecuador. The archipelago is volcanic in origin and is still one of the most active volcanic areas in the world. The islands are named after their endemic Galápagos Giant Tortoises *Chelonoidis nigra* (galapagos meaning tortoise in Spanish), of which some subspecies still survive. In the 17th and 18th century, the tortoises were an easy and principal food source for pirates and whalers seeking shelter in what they called the 'Enchanted Islands'. The harsh desert-like environment and desolate scenery made the islands unattractive for human settlement. When Charles Darwin arrived in the islands aboard the Beagle in 1835, he wrote: 'Nothing could be less inviting – the country is comparable to what one might imagine the cultivated parts of the infernal regions to be'. Nevertheless, this visit provided Darwin the foundations for his theory of evolution (Darwin 1859), thereby making the islands, 'the world's natural laboratory', famous worldwide.

Today, the Galápagos Islands attract roughly 100 000 visitors a year. The beautiful volcanic formations together with the matchless wildlife and natural history make it a unique place. The birds and other animals are remarkably fearless of man and one must really be careful not to step on a Galapagos Sea Lion *Zalophus wollebaeki*, a Marine Iguana *Amblyrhynchus cristatus* or a Blue-footed Booby *Sula nebouxii*. The islands are a popular destination for birders, especially because of the high number of island endemics and specialties. Moreover, the birds are all tame, which means easy photography. Also, the snorkeling is fantastic, even for the birder: imagine watching Flightless Cormorants *Phalacrocorax harrisi* fishing underwater or being encircled by a raft of Galapagos Penguins *Spheniscus mendiculus*!

FIGURE 1 Galápagos Islands



244 Blue-footed Booby / Blauwvoetgent *Sula nebouxii* with Marine Iguanas *Amblyrhynchus cristatus*, Santiago, Galápagos Islands, 16 February 2013 *(Dušan M Brinkhuizen)*

245 Flightless Cormorant / Galápagosaalscholver *Phalacrocorax harrisi* with Marine Iguana *Amblyrhynchus cristatus*, Fernandina, Galápagos Islands, 24 January 2014 *(Dušan M Brinkhuizen)*

246 Red-footed Booby / Roodpootgent *Sula sula*, Genovesa, Galápagos Islands, 15 February 2013
(Dušan M Brinkhuizen)

247 Nazca Boobies / Nazcagenten *Sula granti*, Española, Galápagos Islands, 27 January 2014
(Dušan M Brinkhuizen)

248 Swallow-tailed Gull / Zwaluwstaartmeeuw *Creagrus furcatus*, Plaza Sur, Galápagos Islands, 29 January 2014 *(Dušan M Brinkhuizen)* **249** Swallow-tailed Gull / Zwaluwstaartmeeuw *Creagrus furcatus*, Genovesa, Galápagos Islands, 15 February 2013 *(Dušan M Brinkhuizen)* **250** Lava Gull / Lavameeuw *Leucophaeus fuliginosus*, Genovesa, Galápagos Islands, 15 February 2013 *(Dušan M Brinkhuizen)*

251 Galapagos Petrel / Zwartborststormvogel *Pterodroma phaeopygia*, off Isabela, Galápagos Islands, 20 February 2013 *(Dušan M Brinkhuizen)* **252** Galapagos Penguin / Galápagospinguïn *Spheniscus mendiculus*, Santiago, Galápagos Islands, 16 February 2013 *(Dušan M Brinkhuizen)* **253** Waved Albatross / Galápagosalbatros *Phoebastria irrorata*, Isla de la Plata, Manabi, Ecuador, 14 November 2008 *(Dušan M Brinkhuizen)*

Key islands for birding

The archipelago comprises 13 large islands (>10 km²), six smaller islands and over 40 small islets and rocks (figure 1). The total land area is c 8000 km² and c 97% of it has been declared National Park by the Ecuadorian Government. Although many of the bird species are widespread in the archipelago, some species are restricted to only a few islands and sites. In order to maximize your bird list, you must visit multiple islands and habitats. For some species, you will have to get up into the highlands because they are usually not found at lower elevations. The optimal birding itinerary includes the following islands (from west to east): Fernandina, Isabela, Santa Cruz, Floreana, Genovesa, Española and San Cristóbal. Together, these islands cover all the endemic birds and they include the most popular birding sites as well. There are four single-island endemics which occur on Floreana, Española and San Cristóbal so, if possible, these islands should definitely be part of your route. The highlands are only accessible on Isabela, Santa Cruz, Floreana and San Cristóbal and trips there should be arranged in advance. Other islands like Santiago, Bartolomé, Rábida, Plaza Sur and Santa Fé are often included in the cruise itineraries and have good birding opportunities but they are not necessarily a must to visit if your prime target is getting to see as many endemics as possible.

Galápagos birdlife

The birdlife on the Galápagos Islands is relatively poor in species numbers compared with mainland Ecuador. However, bird endemism in the archipelago is high and the total of endemics is about four times as high in absolute numbers as that of the mainland (eight compared with 29). True Galápagos endemics (not counting the 16 endemic subspecies of species that also occur elsewhere) add up to a total of 29 species (following IOC; Gill & Donsker 2015). Over the years, a total of 178 bird species has been recorded with 56 species being native breeders (Wiedenfeld 2006, Jiménez-Uzcátegui et al 2014). The rest of the total includes migrants, vagrants and a couple of introduced species. During a typical birding cruise of eight days, one usually ends up with a trip total of c 60-70 bird species.

Seabirds and waterbirds

The Galápagos Islands are great for those who enjoy watching seabirds. About a third of the resident species are seabirds and the vast majority of these are present year round. Visiting the colonies of nesting seabirds is truly amazing. You can just walk among Blue-footed Boobies and Nazca Boobies *S granti*, which often nest right on the trail and you do not really need binoculars. Red-footed Boobies *S sula*, Great Frigatebirds *Fregata minor* and Magnificent Frigatebirds *F magnificens* usually nest inside the bushes and can also be watched at close range. The spectacular Swallow-tailed Gull *Creagrus furcatus* is present in good numbers at many sites, where they nest on cliffs and in cavities. They look like a large version of Sabine's Gull *Xema sabini* but alien like with notably large eyes. When taking a cruise, you also have a good chance of seeing these gulls foraging at night when they follow the boats. The beautiful Red-billed Tropicbirds *Phaethon aethereus* typically nest on steep cliffs and are often seen in small numbers. Walking the trails along steep cliffs with the right wind conditions can result in fantastic eye-level views of both Swallow-tailed Gull and Red-billed Tropicbirds that shear by. The endemic Lava Gull *Leucophaeus fuliginosus* is widespread in the archipelago but scarce and can sometimes be hard to find. Usually, a few are seen along the shorelines where they scavenge for food. If you get lucky, Lava Gulls sometimes perch on the boat. Lava Heron *Butorides sundevalli* is a common resident and mainly found in the coastal zone along rocky shores and in mangrove swamps. Its unique slate-grey plumage allows it to blend in with the hardened lava and is a nice example of the adaptation of the fauna to these islands.

Genovesa and Española are great islands for the above-mentioned seabird colonies and species. In addition, Genovesa has a large colony of Wedge-rumped Storm Petrels *Oceanodroma tethys* that is most active from April to October; 1000s nest in burrows and crevices on a large lava plateau and dense clouds of storm petrels can be seen during the day. At this colony, Galapagos Short-eared Owls *Asio flammeus galapagoensis* have become specialized in catching storm petrels. When carefully scanning the lava cracks and gullies, a couple of owls are usually found. This taxon is darker in plumage compared with mainland Short-eared Owl subspecies and some consider it a separate species (Mikkola 2012). Recently, Robb & The Sound Approach (2015) showed that the vocalisations of Caribbean, South American and Galápagos Short-eared Owls differ diagnostically from Holarctic ones and should be grouped as 'Field Owl *A domingensis*'. On Española, the star attraction is the colony of Waved Albatrosses *Phoebastria irrorata*. The entire world population of this 'Critically Endangered' species (apart from a few pairs on Isla de la Plata, Manabi, Ecuador) breeds on this island and is estimated to be c 17 000 pairs (BirdLife

254 Galapagos Flycatcher / Galápagostiran *Myiarchus magnirostris*, Floreana, Galápagos Islands, 25 January 2014 *(Dušan M Brinkhuizen)*

255 Galapagos Dove / Galápagostreurduif *Zenaida galapagoensis*, Genovesa, Galápagos Islands, 15 February 2013 *(Dušan M Brinkhuizen)*

256 Small Ground Finch / Kleine Grondvink *Geospiza fuliginosa* (right) and Medium Ground Finch / Middelste Grondvink *G fortis*, Santiago, Galápagos Islands, 16 February 2013 *(Dušan M Brinkhuizen)* **257** Galapagos Hawk / Galápagosbuizerd *Buteo galapagoensis*, Española, Galápagos Islands, 27 January 2014 *(Dušan M Brinkhuizen)* **258** Woodpecker Finch / Spechtvink *Camarhynchus pallidus*, Fernandina, Galápagos Islands, 24 January 2014 *(Dušan M Brinkhuizen)*

259 San Cristobal Mockingbird / San-Cristóbalspotlijster *Mimus melanotis*, San Cristóbal, Galápagos Islands, 28 January 2014 *(Dušan M Brinkhuizen)* **260** Floreana Mockingbirds / Floreanaspotlijsters *Mimus trifasciatus*, Champion Islet, Galápagos Islands, 26 January 2014 *(Dušan M Brinkhuizen)* **261** Hood Mockingbird / Kapspotlijster *Mimus macdonaldi*, Española, Galápagos Islands, 27 January 2014 *(Dušan M Brinkhuizen)*

262 Grey Warbler Finch / Grijze Boszangervink *Certhidea fusca*, Española, Galápagos Islands, 27 January 2014 *(Dušan M Brinkhuizen)*

263 Large Cactus Finch / Grote Cactusgrondvink *Geospiza conirostris*, Española, Galápagos Islands, 27 January 2014 *(Dušan M Brinkhuizen)*

International 2015). Nesting starts from mid-April to June and individuals can remain until mid-January before they go entirely pelagic. In the breeding period, it is possible to watch pairs during courtship display (cf Plantema 2011). The bill clattering, funny head movements and sounds made by the pairs form a true spectacle and many tourists consider it a highlight of the trip.

Flightless Cormorant is an iconic Galápagos endemic. It is the largest cormorant in the world and unique because it has lost its ability to fly. Fortunately, it is not difficult to see when you go to the right place. The species breeds exclusively on Fernandina and northern Isabela where the population is estimated at c 700 pairs (BirdLife International 2015). The best site is Punta Espinosa on Fernandina, which can only be reached with an organized boat trip. The trail leads to a rocky peninsula where typically a few individuals can be found. The cormorants stand amongst the Marine Iguanas and often spread their tiny wings, which looks rather silly. At this site, the iguanas or so-called 'dragons' are abundant and very large. It is also a good place for Galapagos Hawk *Buteo galapagoensis* that preys on the young iguanas. The endangered Galapagos Penguin is the only penguin species that reaches the northern hemisphere. The species shares its nesting grounds with the cormorants and they are also frequently seen at Punta Espinosa. One has to carefully scan along the rocky shore for Galapagos Penguins because they can be tricky to spot when foraging in the water. The nearby Tagus Cove and Elizabeth Bay on Isabela are good places to look for penguins and if you get lucky you might get to swim with them.

A few pelagic species are chiefly seen offshore. Galapagos Shearwaters *Puffinus subalaris* (formerly considered a subspecies of Audubon's Shearwater *P lherminieri*) are abundant and usually large numbers are seen on a daily basis. However, for Galapagos Petrel *Pterodroma phaeopygia* you will have to be constantly on the lookout, especially at dusk when some return to the highlands for breeding. Also on windy days, when navigating between islands, you have good chances of seeing them but usually only a few individuals of this 'Critically Endangered' species are observed. Elliot's Storm Petrels *Oceanites gracilis* are the ones that most frequently follow the boats but Wedge-rumped Storm Petrels will do so as well. Of the three breeding species, Band-rumped Storm Petrel *O castro* is the hardest to see because it forages out in deep

waters during daytime and arrives at the colonies only after dark.

Mockingbirds

The mockingbirds of the Galápagos Islands were the crucial link in the history of evolutionary theory. The different types that Darwin collected provided the very first insights that eventually led to his idea of evolution through natural selection. Four species of mockingbird are found, of which three occur on single islands only, and their ranges do not overlap. Galapagos Mockingbird *Mimus parvulus* is the most widespread in the archipelago and is a common resident on most islands except for the south-eastern ones. The endangered San Cristobal Mockingbird *M melanotis* is endemic to San Cristóbal and is found in a variety of habitats at different elevations. The interpretation centre on the northern side of Puerto Baquerizo Moreno town is a good place to look for it. Hood Mockingbird *M macdonaldi* is endemic to Española and is the largest of the four species. It is abundant and often remarkably tame. Small groups often come to curiously investigate the tourists and their items. Sometimes the birds even perch on top of people's heads! Floreana Mockingbird *M trifasciatus* is 'Critically Endangered' and one of the rarest birds in the world. It used to inhabit Floreana but after Darwin's visit soon became extinct on the island. Now, it survives on two small satellite islets, Champion and Gardner-by-Floreana, which are located east of Floreana. The population has been fluctuating over the years with less than 50 adults remaining during dry and 'bad' years like 2007 (BirdLife International 2015). The only way to see Floreana Mockingbird is to navigate around the islet of Champion (0.1 km^2) and to be lucky to see it. It is difficult to get near the islet with a large boat so it is best to circle the rock with a rubber dinghy or in what locally is called a 'panga', for which you will need special permission from the National Park authorities.

Darwin's finches

Darwin's finches Geospizinae (more closely related to tanagers Thraupidae than to true finches Fringillidae; sensu Dickinson & Christides 2014) are scientifically the most interesting group of the Galápagos avifauna and, for years, have been an iconic model for studies of speciation and adaptive evolution. Currently, 14 species are recognized in the archipelago, while a single species, Cocos Finch *Pinaroloxias inornata*, occurs on Costa Rica's Cocos Island. The taxonomy of the group is complex and probably a few more species will be split in the future. In the Galápagos Islands, they are placed in four genera: ***1*** ground and cactus finches *Geospiza*; ***2*** tree finches *Camarhynchus*; ***3*** warbler finches *Certhidea*; and ***4*** Vegetarian Finch *Platyspiza crassirostris*. The first finches are usually seen on arrival at Baltra airport and one will immediately notice that identification can be challenging. Plumages are variable and drab and many species occur sympatrically. The size and shape of the bill is their most important identification feature and it is recommended to study the beak differences of the species in advance. It is also important to know which species occur on which island because it can help you to eliminate other species. Furthermore, some species are restricted to certain habitats and elevational zones.

Small Ground Finch *G fuliginosa* and Medium Ground Finch *G fortis* are the most commonly seen finches on the islands. They are widespread in the coastal, arid and transitional zones, where they often form mixed-flocks. Large Ground Finch *G magnirostris* is uncommon in the arid zone but readily recognized by its massive bill. Sharp-beaked Ground Finch *G difficilis* is most easily seen on the islands of Genovesa, Darwin and Wolf. It is often called 'vampire finch' as it pecks at the feather bases of nesting boobies to drink droplets of their blood. Common Cactus Finch *G scandens* is widespread in the arid zone but usually only occurs in areas with prickly pear cactus species *Opuntia*. Large Cactus Finch *G conirostris* is common but very local and only found on a few islands. The subspecies *propinqua* on Genovesa differs morphologically from nominate *conirostris* on Española and might in fact represent a different species. Small Tree Finch *C parvulus* and Large Tree Finch *C psittacula* are mainly found at higher elevations where they breed in the humid *Scalesia* forests. Medium Tree Finch *C pauper* is only found in the highlands of Floreana. It is 'Critically Endangered' because it has a very small range and is threatened by an introduced ectoparasite (BirdLife International 2015). Furthermore, recent research has shown that Medium Tree can hybridize with Small Tree, which has produced a new hybrid cluster on Floreana (Kleindorfer et al 2014). It complicates identification of Medium Tree and only individuals that have been DNA-analysed and colour-banded can be safely identified. A good place to look for Medium Tree is the road that goes up to Asilo de la Paz. Woodpecker Finch *C pallidus* is behaviourally the most fascinating of the darwin's finches. It is famous for its ability to use a tool while foraging and therefore often nicknamed 'carpenter finch'. Tools include cactus

264 Lava Heron / Galápagosreiger *Butorides sundevalli*, Santiago, Galápagos Islands, 20 February 2013 *(Dušan M Brinkhuizen)*

265 Galapagos Short-eared Owl / Galápagosvelduil *Asio flammeus galapagoensis*, Genovesa, Galápagos Islands, 15 February 2013 *(Dušan M Brinkhuizen)*

spines or short twigs that they actively use to pry grubs out of tree branches. The bird may adjust his tool to make it more manageable and often carries it from branch to branch for reuse. The species is usually easy to recognize by its distinct movements which are reminiscent of those of a nuthatch *Sitta*. It is most numerous in the highlands but it can also be seen at lower elevations. The very similar looking Mangrove Finch *C heliobates* is the rarest of the Geospizinae. It is 'Critically Endangered' and only occurs in a few small mangrove forest patches on Isabela. Playa Tortuga Negra is the key site for seeing it but for some years now it has been officially closed as a visitor site. Only researchers are allowed to visit the site with special permits. Recent records of Mangrove Finch at Punta Espinosa on Fernandina are promising to visiting birders. However, birds should be carefully studied and documented because there are also records of Woodpecker Finch from the same patch of mangrove forest. Warbler Finches are small-bodied, thin-billed and distinctly warbler-like members of the group and have recently been recognized as two species (Tonnis et al 2005). They are widespread and their ranges do not overlap. Green Warbler Finch *C olivacea* is principally found in the highlands of the larger central and western islands where it is restricted to humid forest habitat. Grey Warbler Finch *C fusca* is found throughout the smaller islands in the north, east and south where it is restricted to arid habitat. The distinct Vegetarian Finch is the largest of the Geospizinae and best recognized by its parrot-shaped bill. It is uncommon and occurs mainly in the transitional zones of the larger islands.

Other species

The Galápagos Islands have a few more endemic landbird species apart from the mockingbirds and Darwin's finches. Galapagos Flycatcher *Myiarchus magnirostris* is common and widespread in the archipelago and found in a variety of habitats. It is often very tame and frequently flies into camera lenses of birders because of the image reflection. The attractive Galapagos Dove *Zenaida galapagoensis* is common and widespread but chiefly confined to the arid zone. The tiny Galapagos Crake *Laterallus spilonotus* is a rare and much sought-after endemic that is restricted to the humid highlands of the larger islands. It is locally named 'pachay'. It inhabits grassland and forest with damp thickets and dense ground-cover. It is rather secretive in behaviour but, at times, can be tame. Good places to look for the crake include the trail up to the Volcán Sierra Negra crater on Isabela and Media Luna on Santa Cruz. Paint-billed Crake *Neocrex erythrops* also occurs in the highlands and can be easily confused with the slightly darker and smaller Galapagos Crake. Galapagos Martin *Progne modesta* is another endemic that can be hard to find. It is very similar to the larger Purple Martin *P subis* which is a rare migrant. The rim of the Volcán Sierra Negra crater, Elizabeth Bay and Tagus cove, all on Isabela, are probably the best accessible sites to look for Galapagos Martin.

Other resident birds (some of them being endemic subspecies) that are commonly seen in the archipelago include White-cheeked Pintail *Anas bahamensis*, American Flamingo *Phoenicopterus ruber*, Brown Pelican *Pelecanus occidentalis*, Yellow-crowned Night-heron *Nyctanassa violacea*, Striated Heron *B striata*, Great Blue Heron

266 Galapagos Shearwater / Galápagospijlstormvogel *Puffinus subalaris*, off Pinzón, Galápagos Islands, 17 February 2013 *(Dušan M Brinkhuizen)*

Ardea herodias, American Oystercatcher *Haematopus palliatus*, Brown Noddy *Anous stolidus*, Vermilion Flycatcher *Pyrocephalus rubinus* and Mangrove Warbler *Setophaga petechia*.

Common migrants to the Galápagos Islands are mainly shorebirds like Ruddy Turnstone *Arenaria interpres*, Hudsonian Whimbrel *Numenius hudsonicus*, Sanderling *Calidris alba*, Red-necked Phalarope *Phalaropus lobatus*, Wandering Tattler *Tringa incana*, Laughing Gull *Larus atricilla* and Common Tern *Sterna hirundo* and can be seen almost anywhere in the coastal zone of the islands. A good site to look for migrant shorebirds is the mangrove and pond system called 'Los Humedales' just outside of Puerto Villamil on Isabela. Apart from regular migrants you have the chance to find scarce species like Solitary Sandpiper *T solitaria* or even vagrants like Pacific Golden Plover *Pluvialis fulva*, a species that has been recorded here before. It is also a good place to see White-cheeked Pintail and American Flamingo. Passerine migrants are rare but species like Belted Kingfisher *Megaceryle alcyon* and Bobolink *Dolichonyx oryzivorus* are reported almost annually. There are many single-record vagrants in the Galápagos Islands and probably quite a few are under-recorded in the archipelago. Records of vagrants should be reported to the Committee for Ecuadorian Records in Ornithology (CERO; cero.ecuador@gmail.com).

Visiting the Galápagos Islands

There are several ways to organize a birding trip to the Galápagos Islands. A pre-arranged cruise package is by far the best and most efficient way to travel the archipelago. You visit the islands and sites during daytime and during the night you navigate between islands. Nowadays, standard eight-day cruise itineraries are generally set for two main routes: the northern route (which includes key islands like Fernandina, Isabela and Genovesa) and the eastern route (which includes key islands like Floreana, Española and San Cristóbal). This is a restriction to birders because a combination of both routes would be the optimal itinerary for seeing most endemics. You could either do both routes which means taking two back-to-back cruises or you could try to charter your own boat and request a desired itinerary. For the second option you will need to find a group of birders to make it affordable and the great advantage is that everybody aboard will share the same interests. However, the itinerary has to be approved by the National Park Authorities first and therefore such a trip should be organized well in advance. Several bird tour companies offer set-departure tours and this might be the easiest way to get a decent birding itinerary. Another option is to travel to the islands independently. The downside is that you will be limited to colonized areas and visitor sites close to towns that do not require a guide. Public transportation is available between the islands Santa Cruz, Isabela, Floreana and San Cristóbal but for other islands (and remote visitor sites) one is confined to, if available, private boat excursions at higher expense. One should keep in mind that in most places tourists are restricted to designated visitor sites and must be accompanied by an official Galápagos naturalist guide.

Although the birding is good throughout the year, the Galápagos Islands have a two-season climate produced by strong oceanic currents: a wet (warm) season from January to June, and a dry (cool) season at other times. The islands are relatively dry year-round but, during the wet season, occasional showers occur and the seawater is warm. Darwin's finches breed mainly during the wet season and their song activity is higher then. During the dry season, the seawater cools off and it is usually windier. The dry season might give better chances for accidental seabirds but the sea is generally choppier and snorkeling can be chilly. Boreal migrants typically occur between August and April but vagrants could show up any time of the year.

A good field guide to bring is *Birds, mammals, and reptiles of the Galápagos Islands* (Swash & Still 2006). It covers most of the bird species recorded in the Galápagos Islands, including vagrants. The distribution maps are accurate and the accompanying text on field characters is very helpful. The *Fieldbook of the birds of Ecuador* (McMullan &

Navarrete 2013) also includes the Galápagos Islands but is more concise and is especially handy for those that plan to bird mainland Ecuador as well. Darwin's finches are well illustrated in *Handbook of the birds of the world 16* (del Hoyo et al 2011).

Acknowledgements
I would like to thank Jane Lyons for arranging my wonderful trips to the Galápagos Islands and Jan Allex de Roos for checking the English text. John van der Woude assisted in preparing the map.

Samenvatting
VOGELEN OP DE GALAPAGOSEILANDEN De Galápagoseilanden liggen in de Grote Oceaan op c 1000 km afstand van Ecuador, waartoe de eilandgroep politiek behoort. De groep bestaat uit 13 grotere eilanden, zes kleinere en 40 kleine eilandjes of rotsen; de oppervlakte is c 8000 km^2 waarvan 97% is beschermd als nationaal park. Deze vulkanische eilanden zijn wereldberoemd vanwege de rijkdom aan flora en fauna, de grote tamheid van veel dieren en omdat hier de grondslag werd gelegd voor Charles Darwins evolutietheorie. Om de verschillende endemische vogelsoorten en ondersoorten te zien is een bezoek aan verschillende eilanden en habitats inclusief de hooglanden nodig. De optimale vogelreis bezoekt van west naar oost: Fernandina, Isabela, Santa Cruz, Floreana, Genovesa, Española and San Cristóbal. De ornithologische lijst van de eilanden is relatief laag, met 178 vastgestelde soorten waarvan 56 niet-geïntroduceerde broedvogels. Daarvan zijn maar liefst 29 soorten endemisch. Per groep worden de belangrijkste soorten beproken. ***1*** Zeevogels en watervogels: bijna een derde van de locale broedvogels betreft zeevogels, waaronder endemische soorten als de niet-vliegende Galápagosaalscholver *Phalacrocorax harrisi*, Galápagospinguïn *Spheniscus mendiculus* (de meest noordelijke pinguïnsoort ter wereld) en Lavameeuw *Leucophaeus fuliginosus* en de bijna-endemische Galápagosalbatros *Phoebastria irrorata*. De endemische Galápagosreiger *Butorides sundevalli* is wijdverspreid. ***2*** Spotlijsters. De vier soorten spotlijster *Mimus* zijn alle endemisch en stonden aan de basis van Darwins evolutietheorie. Galápagosspotlijster *M parvulus* is het meest algemeen en meest wijdverspreid. San-Cristóbalspotlijster *M melanotis* komt alleen voor op San Cristóbal, Kapspotlijster *M macdonaldi* alleen op Española en Floreanaspotlijster *M trifasciatus* alleen op Floreana; de laatste is één van de zeldzaamste vogelsoorten ter wereld, met in slechte jaren minder dan 50 adulte vogels. ***3*** Darwinvinken. Deze vormen vanuit wetenschappelijk oogpunt de meest interessante groep; er worden momenteel 15 soorten erkend (14 in de Galápagoseilanden en één op Cocos Island bij Costa Rica). De taxonomie is complex en mogelijk worden in de toekomst nog meer soorten afgesplitst. Op de Galápagoseilanden komen vier genera voor: *Geospiza* (zes soorten), *Camarhynchus* (vijf soorten), *Certhidea* (twee soorten) en Vegetarische Boomvink *Platyspiza crassirostris*. De soorten verschillend voornamelijk in vorm en grootte van de snavel en vormen een grote uitdaging om te determineren, vooral waar ze sympatrisch voorkomen. Goede kennis vooraf van de snavelvorm en kennis van de verspreiding per eiland en de favoriete habitats kan het determinatieproces helpen. De zeldzaamste soort is Mangrovevink *Camarhynchus heliobates* die alleen voorkomt in enkele gebieden met mangrovebos op Isabela. ***4*** Overige soorten. Andere endemische broedvogels zijn bijvoorbeeld Galápagostreurduif *Zenaida galapagoensis*, Galápagosral *Laterallus spilonotus*, Galápagostiran *Myiarchus magnirostris*, en Galápagospurperzwaluw *Progne modesta*. Het artikel eindigt met praktische tips voor vogelaars die de eilanden willen bezoeken.

References

BirdLife International 2015. Species factsheet: *Phoebastria irrorata*, *Phalacrocorax harrisi*, *Mimus trifasciatus*, *Camarhynchus pauper*. Website: www.birdlife.org.

Darwin, C R 1859. On the origin of species. London.

Dickinson, E C & Christidis, L (editors) 2014. The Howard and Moore complete checklist of the birds of the world. Fourth edition, vol 2: Passerines. Eastbourne.

Gill, F & D Donsker (editors) 2015. IOC World bird list (version 5.4). Website: www.worldbirdnames.org.

del Hoyo, J, Elliott, A & Christie, D A (editors) 2011. Handbook of the birds of the world 16. Barcelona.

Jiménez-Uzcátegui, G, Wiedenfeld, D A, Vargas, F H, & Snell, H L 2014. CDF Checklist of Galapagos birds – FCD Lista de especies de Aves Galápagos. In: Bungartz, F, Herrera, H, Jaramillo, P, Tirado, N, Jiménez-Uzcátegui, G, Ruiz, D, Guézou, A & Ziemmeck, F (editors), Puerto Ayora, Galapagos. Website: www.darwinfoundation.org/datazone/checklists/vertebrates/aves.

Kleindorfer, S, O'Connor, J A, Dudaniec, R Y, Myers, S A, Robertson, J & Sulloway, F J 2014. Species collapse via hybridization in Darwin's tree finches. Am Nat 183: 325-41.

McMullan, M & Navarrete, L 2013. Fieldbook of the birds of Ecuador. Quito.

Mikkola, H 2012. Owls of the world. London.

Plantema, O 2011. Pacific albatrosses: Laysan, Short-tailed, Black-footed and Waved Albatross. Dutch Birding 33: 386-394.

Robb, M & The Sound Approach 2015. Undiscovered owls: a Sound Approach guide. Poole.

Swash, A, & Still, R 2006. Birds, mammals, and reptiles of the Galápagos Islands, an identification guide. New Haven.

Tonnis, B, Grant, P R, Grant, B R, & Petren, K 2005. Habitat selection and ecological speciation in Galápagos warbler finches (*Certhidea olivacea* and *Certhidea fusca*). Proc Royal Soc B, Biol Sci 272: 819-826.

Wiedenfeld, D A 2006. Aves, the Galapagos Islands, Ecuador. Check List 2 (2): 1-27.

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Grijze Junco in Groningen in februari-april 2015

Jacob Bosma & Enno B Ebels

Op zondagmiddag 1 februari 2015 deed ik (Jacob Bosma) een rondje in mijn 'local patch', de begroeide geluidswallen van de ringweg tussen Beijum-Noord en Beijum-Zuid in Groningen, Groningen. Het was koud en mistig en ik zag maar weinig vogels. Op de terugweg hoorde ik bij de volkstuintjes een ijl getik op me af komen. Het klonk als een Zanglijster *Turdus philomelos* maar toen de bewuste vogel mij passeerde zag ik geen lijster maar een gorsachtige vogel. Hij riep nog een aantal keren en verdween hoog achter de bomen. Het geluid leek op dat van een Bosgors *Emberiza rustica* of Dwerggors *E pusilla*. De vogel liet zich die middag niet meer zien maar ik besloot om de volgende ochtend terug te gaan. Rond 11:00 was ik weer bij de volkstuintjes. Ik strooide wat zaad op verschillende plekken langs het schelpenpad en had mijn geluidsrecorder aanstaan, toen opeens dezelfde vogel weer uit de tuintjes kwam vliegen. Dit keer was de roep meer tweelettergrepig, een snel *p'tit* wat sterk deed denken aan Geelgors *E citrinella*. Ook de relatief lange staart pleitte voor deze soort. Maar ik was niet genoeg overtuigd en gelukkig kwam de vogel na een klein uur wachten weer luid roepend tevoorschijn en landde in een fruitboom dichtbij. Waar ik iets bruins en gestreepts verwachtte, zag ik in de kijker een grijze kop, witte buik en roze snavel: een Grijze Junco *Junco hyemalis*! De vogel leek ongeringd, was onrustig en riep veel, nu een Braamsluiper *Sylvia curruca*-achtig *tek*. Ik kon twee foto's maken voordat de junco opvloog naar de bomen bij de ringweg. Om 12:15 stuurde ik de waarneming met beide foto's door aan de whatsappgroep 'Grunn Twitchers' en even later werd het nieuws verder verspreid via DB Alerts. Een aantal mensen was snel ter plaatse en rond 13:00 werd de

267 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 3 februari 2015 *(Jaap Denee)*

vogel teruggevonden. We stelden vast dat hij inderdaad ongeringd was en de goede kenmerken had voor de nominaat *J h hyemalis*, die vaker in Europa als dwaalgast is gezien. Het aantal vogelaars groeide snel en de junco werd tot iets na 16:00 gezien, vaak kort en op afstand in de volkstuintjes, maar voor iedereen goed herkenbaar. De volgende dag werd hij al vroeg teruggevonden en vanaf die dag gezien door aanvankelijk 100en en later 10-tallen vogelaars per dag, ook uit andere Europese landen. Zoals vaker met dwaalgasten in woonwijken was er ruime aandacht in de pers voor zowel vogel als vogelaars, op televisie en diverse websites en in de dagbladen. Op 14 februari hoorde ik hem voor het eerst wat zangachtige geluiden maken. Een dag later zat de junco weer te 'zingen' en hiervan kon een goede opname worden gemaakt. In de daarop volgende weken werd de vogel nog regelmatig kwetterend gehoord. Omdat het in loop van de tijd in de volkstuintjes steeds drukker werd liet hij zich de laatste weken van zijn verblijf voornamelijk zien in de houtwal langs de ringweg. Op 10 april is de vogel voor het laatst waargenomen (Bosma 2015).

Beschrijving

De beschrijving is gebaseerd op foto's van een groot aantal fotografen (cf www.dutchbirding.nl, www.waarneming.nl; Dutch Birding 37: 138-140, plaat 218-220, 210, plaat 332, 2015) en geluidsopnamen van Arnoud van den Berg.

GROOTTE & BOUW Als Vink *Fringilla coelebs* of Huismus *Passer domesticus* met relatief lange staart en dikke nek en kop. Vrij kleine en iets afgeronde snavel.

KOP Grijsbruin met meest bruine tint op kruin en zuiver donkergrijze tint rond snavel, oog en oorstreek, vanuit bepaalde hoek resulterend in donker masker.

BOVENDELEN Mantel en rug grijsbruin tot bruin met donkere lengtestrepen. Schouderveren bruin met grijze tint. Stuit donkergrijs.

ONDERDELEN Keel, hals en borst overwegend grijs met, afhankelijk van belichting, bruine tint. Grijze borst sterk afgescheiden van witte buik. Flank licht bruingrijs. Anaalstreek en onderstaartdekveren zuiver wit.

VLEUGEL Tertials met donkerbruin centrum en brede crèmekleurige rand. Vleugeldekveren grotendeels grijs, met bruine zweem. Handpendekveren donkergrijs. Buitenste zichtbare handdekveer bruin. Armpennen en handpennen donker bruingrijs met lichte rand. Alula donkergrijs.

STAART Bovenstaartdekveren donkergrijs, sommige met licht randje. Staart donkergrijs met opvallende witte buitenste twee staartpennen, buitenste met donkere rand aan buitenvlag. Buitenste twee veren enigszins taps toelopend.

NAAKTE DELEN Iris donkergrijs met lichtere oogring. Snavel geheel lichtroze. Poot vleeskleurig.

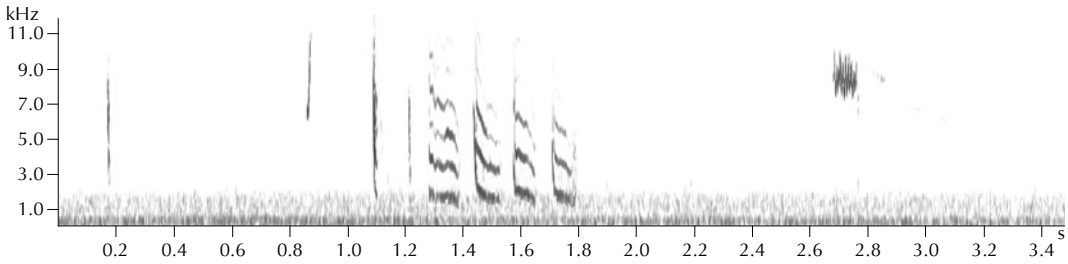
GELUID Bij opvliegen Zanglijster-achtig scherp *tik*, soms snel herhaald en af en toe tweelettergrepig *tetik* of *p'tit*. Bij onraad of in reactie op andere vogels herhaald smakkend *tek*, ook tijdens foerageren. Vanaf 14 februari af en toe zachtjes 'kwetterend', daarbij diverse snelle reeksen van *tek-*, *tik-* en *tjut*-klanken afwisselend met hoge trillers.

RUI & SLEET Staartpennen enigszins gesleten en daardoor hoekig en taps toelopend.

GEDRAG Tamelijk schuw. Foeragerend in vogelrijke omgeving. Regelmatig solitair maar ook dominant richting andere vogels. Honkvast, vaste plekken bezoekend binnen straal van c 150 m. Foeragerend voornamelijk op grond, etend van 'wild' zaad van volkstuintjes en later ook van grotere zaden zoals gestreepte zonnepit-

268 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 8 februari 2015 *(Cis Schut)*

269 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 28 februari 2015 *(Alex Bos)*



FIGUUR 1 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 15 februari 2015 *(Arnoud B van den Berg/The Sound Approach; 150215.AB.120000)*. Roepjes en zangstrofe (*tik*, *tek*, kwettergeluidje en hoge triller).

ten. In andere tuinen etend van vogelvoer op voedertafels en van kruimels van vetbollen op grond. In houtwal foeragerend op kleine insecten en spinnetjes, daarbij als Merel *Turdus merula* energiek bladeren omkerend. Na eten soms langdurig rustend en veren poetsend in dichte boom of struik. Slapend in conifeer.

Determinatie

De combinatie van formaat en bouw, ongestreepte bruingrijze kop en borst, witte buik, ongestreepte flank en roze snavel sluit alle gors- of vinkachtigen uit Noord-Amerika en het Palearctische gebied uit en past alleen op Grijze Junco. Andere Nearctische gorzen zijn bruiner en meer gestreept en hebben een andere koptekening. Dat geldt ook voor Palearctische gorzen, die bijvoorbeeld nooit een ongetekende witte buik hebben in combinatie met beperkt gestreepte bovendelen en vleugels en meer contrasterende streping op de bovendelen en vleugel (cf Byers et al 1995, Sibley 2014, van Duivendijk 2011). Van de

270 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 15 februari 2015 *(Jos Welbedacht)*

Nearctische gorzen vertonen Geeloogjunco *J phaeonotus* uit Mexico en Zwartkingors *Spizella atrogularis* uit het zuid-westen van de VS en Mexico enige gelijkenis met Grijze Junco maar verschillen in de kleur en tekening van de mantel en buik, kop en naakte delen (Sibley 2014). Deze twee soorten zouden in theorie als ontsnapte kooivogel in Nederland kunnen opduiken. Van de Palearctische gorzen lijkt alleen mannetje Blauwe Gors *Latoucheornis siemsseni* (een zeldzame lokale broedvogel in China) op Grijze Junco, door de verdeling van grijsblauw en wit. Deze soort heeft echter meestal een donkere snavel en mist het bruin op de bovendelen; de donkere veerpartijen zijn meer blauw dan grijs en de witte buikvlek is aanzienlijk kleiner (Byers et al 1995).

Ondersoort

Grijze Junco (Dark-eyed Junco) maakt deel uit van een variabel complex met een grote geografische verspreiding in Noord-Amerika en de systematiek is al vele decennia een onderwerp van discussie en langjarig onderzoek (cf Nolan et al 2002). Dickinson & Christidis (2014) vermelden inclusief de nominaat *J h hyemalis* 16 ondersoorten en er zijn zes ondersoortgroepen die soms als aparte soorten worden beschouwd (Byers et al 1995, Nolan et al 2002, del Hoyo et al 2011). De nominaat behoort tot de groep van 'Slate-coloured Junco' (drie ondersoorten: nominaat *hyemalis*, *carolinensis* en *cismontanus*). Andere ondersoortgroepen hebben diagnostische kenmerken waarmee ze van de nominaatgroep verschillen (hoewel grijsbruine vrouwtjestypes verwarring kunnen geven). De fenotypische verschillen uiten zich vooral in de kleurverdeling van kop en hals, rug en flanken. 'White-winged Junco' (één ondersoort: *aikeni*) heeft lichte toppen aan tertials en dekveren, resulterend in twee duidelijke vleugelstrepen. De *oreganus*-groep 'Oregon Junco' (acht

ondersoorten: *oreganus*, *shufeldti*, *montanus*, *thurberi*, *pinosus*, *pontilis*, *townsendi* en *mutabilis*) heeft een oranjeroze flank en een donkerdere kop en borst. De ondersoort *mearnsi* wordt door del Hoyo et al (2011) en Dickinson & Christidis (2014) als aparte ondersoortgroep beschouwd ('Pink-sided Junco'); dit taxon heeft dezelfde grijsbruine rug als *J h hyemalis* maar altijd sterker contrasterend met een egaal grijze kop en roze flank. De *caniceps*-groep 'Gray-headed Junco' (drie ondersoorten: *caniceps*, *dorsalis* en *mutabilis*) heeft een contrasterende roodbruine rug en een meer opvallende, donkerdere teugel. 'Guadalupe Junco' (één ondersoort: *insularis*) is endemisch voor het eiland Guadalupe, Mexico (Byers et al 1995, Sibley 2014).

Geslacht en leeftijd

Op enkele foto's van de Grijze Junco van Groningen is te zien dat de staartpennen enigszins gesleten waren en daardoor hoekig en taps toeliepen. Dit duidt op een eerste-winter; bij een adulte vogel zijn de staartpentoppen breder en meer afgerond (Byers et al 1995). Een ander onderscheidend kenmerk bij een eerste-winter is de kleur van de iris. Deze was bij de vogel van Groningen donkergrijs en zou bij een adulte roodbruin zijn, hoewel het verschil in het veld erg lastig te zien kan zijn (Byers et al 1995). Een eventuele ruigrens bij de grote en middelste dekveren kan helpen om de leeftijd te bepalen. Op een aantal foto's uit februari waar de buitenste grote dekveer net zichtbaar is, lijkt deze bruinig en te contrasteren met de overige, nieuwe en meer grijze dekveren. Ook dit wijst op een eerste-winter (cf www.migrationresearch.org/mbo/id/scju.html).

Het betrof een vrouwtje op grond van de bruingrijze kop en bovendelen. Eerste-winter mannetjes zijn veel donkerder grijs en hebben alleen een bruine waas op de rug (Byers et al 1995). Daarnaast wijzen de bruinige flanken en de brede, 'buffe' randen van de tertials op een (eerste-winter) vrouwtje (bij eerste-winter mannetjes bruiner en smaller; Rising & Beadle 1996). Verder waren bij de vogel van Groningen alleen de buitenste twee staartpennen (t5-6) vrijwel geheel wit. Dit komt vaak voor bij onvolwassen vrouwtjes terwijl in alle andere kleden vaak ook (een deel van) t4 wit is. Omdat hierin geografische variatie bestaat kan dit kenmerk echter niet als diagnostisch worden beschouwd voor het bepalen van het geslacht (cf www.migrationresearch.org/mbo/id/scju.html). De zachte 'zang' die de junco vanaf half februari liet horen is geen aanwijzing dat het een mannetje betrof. Het ging hier om een zacht gekwetter ('plastische zang') dat beide geslachten laten horen (cf www.arkive.org/dark-eyed-junco/junco-hyemalis).

Verspreiding en voorkomen

Nominaat *J h hyemalis* komt als algemene broedvogel voor in de VS en in grote delen van Canada. Het is een trekvogel en in de wintermaanden verblijft deze ondersoort tot in Mexico (Sibley 2014). De soort is redelijk 'winterhard' (de Amerikaanse bijnaam is 'snowbird') en overwintert noordelijk tot in het zuiden van Canada (Nolan et al 2002, Sibley 2014). Vrouwtjes overwinteren verder zuidelijk dan mannetjes en adulte mannetjes overwinteren het meest noordelijk (Elphick et al 2001). Het is het enige junco-taxon dat regelmatig als dwaalgast in het West-Palearctische gebied is gevonden. Er zijn buiten Nederland gevallen van de Azoren (één), Brittannië (ten minste 39), Denemarken (één), Gibraltar (één), Ierland (ten minste twee), IJsland (één), Noorwegen (drie gevallen van vier exemplaren) en Polen (één). Erritzoe & Svenningsen (1996) gaven een gedetailleerd overzicht van alle gevallen in Europa en in Groenland tot en met c 1995, met verwijzingen naar publicaties over de afzonderlijke gevallen. De meeste gevallen na 1995 zijn vastgesteld in Brittannië (Slack 2009). Een overzicht van alle West-Palearctische gevallen (52+ exemplaren) staat in tabel 1.

Er is één eerder geval van Grijze Junco voor Nederland; deze werd in februari 1962 tijdens een sneeuwstorm verzwakt gevonden door J van Werven op een volière in de Overijsselsestraat in Rotterdam-Zuid, Zuid-Holland. Deze vogel (een mannetje) sleet zijn verdere leven in diezelfde volière. Na zijn overlijden op 7 november 1968 werd de opgezette vogel opgenomen in de collectie van het Natuurhistorisch Museum Rotterdam (catalogusnummer NMR 9989-00692) (Polder & Voous 1969). Foto's van dit specimen zijn onder meer in Polder & Voous (1969), Erritzoe & Svenningsen (1996) en van den Berg & Bosman (2001) gepubliceerd (zie ook www.dutchavifauna.nl). Speciaal voor vogelliefhebbers werd de opgezette Rotterdamse junco in februari 2015 tijdelijk tentoongesteld; vanwege zijn zeldzaamheid in Europa bevindt hij zich normaliter in het collectiedepot. De Grijze Junco van Groningen betekent dus het tweede geval voor Nederland.

Discussie

Het is onmogelijk te achterhalen hoe lang de junco al aanwezig was voor de ontdekking en on-

TABEL 1 Gevallen van Grijze Junco *Junco hyemalis* in Europa; * nog niet aanvaard / records of Dark-eyed Junco *Junco hyemalis* in Europe; * not yet accepted (Erritzoe & Svenningsen 1996, Slack 2009, de Vries 2011; Arnoud van den Berg in litt, Marcel Haas in litt; www.bbrc.org.uk/main-information/statistics, www.tarsiger.com)

Azoren (1)
5 november 2009, Fajã Grande, Flores, mannetje

Brittannië (39+)
26 mei 1960, Dungeness, Kent, Engeland, mannetje, vangst
1 mei 1966, Foula, Shetland, Schotland
10 mei 1967, Foula, Shetland, Schotland
7 mei 1969, Out Skerries, Shetland, Schotland
12 februari 1972, Rye, East Sussex, Engeland
1-12 april 1975, Haresfield, Gloucestershire, Engeland
25 april tot 3 mei 1975, Bardsey, Caernarfonshire, Wales, vangst
3 januari 1977, bij Rotherham, South Yorkshire, Engeland
19 mei 1977, Loch Affric, Inverness, Highland, Schotland
24 mei 1980, Noordzee, c 50 km ten noord-oosten van Cromer, Norfolk, Engeland (53°19'N, 02°37'O) gevangen en geringd; van 31 mei tot 2 juni (na vrijlating) aanwezig te Holme, Norfolk (aanvankelijk beschouwd als 'ship-assisted', cf Erritzoe & Svenningsen 1996)
20 mei 1983, Christchurch, Dorset, mannetje
21 mei 1983, Langford Budville, Somerset, Engeland, mannetje
27 mei 1983, The Lizard, Cornwall, Engeland, mannetje
30 mei to 7 juni 1987 (eerste-zomer mannetje) en 20 mei 1988, 7 februari 1989 en 26 december 1989 tot 7 maart 1990, Church Crookham, Hampshire, Engeland, mannetje
8-9 april 1989, Wootton, Isle of Wight, Engeland, mannetje
3 december 1989 tot 8 april 1990, Weston, Portland, Dorset, Engeland, mannetje
3-4 mei 1992, Hamilton, Strathclyde, Schotland, mannetje
7-19 november 1993, Dorchester, Dorset, Engeland, mannetje (gevangen op 8 november)
29 april 1996, Thornton, Lancashire, Engeland, mannetje
5 mei 1996, Picket Piece, Hampshire, mannetje
15 december 1997 tot 19 april 1998, Vicar's Cross, Cheshire, Engeland
26-29 april 2000, Duncansby, Caithness, Schotland, mannetje
4 mei 2000, boorplatform Maersk Curlew, Doggersbank, Noordzee (56°44'N, 01°17'O), mannetje
1-9 mei 2003, Out Skerries, Shetland, Schotland, eerste-zomer mannetje (gevangen op 1 en 9 mei)
30 mei 2004, Whitehead, Antrim, Noord-Ierland, vrouwtje of eerstejaars mannetje
12 mei 2007, Illogan, Cornwall, Engeland
30 mei 2007, St Kilda, Outer Hebrides, Schotland, mannetje
19 juni 2007, North Ronaldsay, Orkney, Schotland, adult mannetje
23 juni 2007, Unapool, Highland, Schotland
14 juli 2007, Langham, Norfolk, Engeland, eerste-zomer mannetje
14-17 juli 2007, Terrington St Clement, Norfolk, Engeland
7-9 april 2008, Dungeness, Kent, Engeland, eerste-winter vrouwtje
13 april 2008, Newby, Yorkshire, Engeland, eerste-zomer mannetje
16-18 november 2008, East Coker, Somerset, Engeland, mannetje
26 november 2008, Ventonleague, Hayle, Cornwall, Engeland
8 januari tot 5 april 2010, Birdlip, Gloucestershire, Engeland, eerste-winter mannetje
15-17 mei 2010, Folkestone, Kent, adult mannetje
18-19 december 2010, Waltham Abbey, Essex, Engeland
24 december 2011 tot 11 maart 2012, Beaulieu, Hampshire, Engeland, eerste-winter mannetje
* 11 mei 2015, Toab, Mainland, Shetland, Schotland, mannetje (Dutch Birding 37: 274, plaat 426, 2015)

Denemarken (1)
13 december 1980, Skørping, Nordjylland, mannetje, gevangen en in gevangenschap gehouden tot aan dood op 18 februari 1993

Gibraltar (1)
18-25 mei 1986, North Mole, adult mannetje (gevangen op 19 mei)

IJsland (1)
6 november 1955, Kvísker í Öræfum, Austur-Skaftafellssýsla, onvolwassen vrouwtje, verzameld (IMNHR: RM5573)

Ierland (2+)
30 mei 1905, Loop Head, Clare, verzameld
10 augustus 2000, Ballygannon, Wicklow, mannetje
* 9 June 2015, Dursey Island, Cork

Nederland (2)
februari 1962, Overijsselsestraat, Rotterdam-Zuid, Rotterdam, Zuid-Holland, gevangen en in gevangenschap gehouden tot aan dood op 7 november 1968 (NMR 9989-00692)
1 februari tot 10 april 2015, Beijum, Groningen, Groningen, eerste-winter vrouwtje

Noorwegen (3; 4 exemplaren)
4 december 1987, Sånum, Mandal, Vest-Agder, twee
18 mei 1989, Jomfruland, Kragerø, Telemark, adult mannetje
20 december 2009 tot 25 februari 2010, Drottningholm, Grimstad, Aust-Agder, adult mannetje

Polen (1)
4 mei 1963, Hel peninsula, Puck, Pomorskie, vrouwtje, verzameld (MIZ 16864)

Op 28 oktober 2010 werd een exemplaar dood aangetroffen aan boord van een schip in Antwerpen, Antwerpen, België (van den Berg & Haas 2011); deze vogel wordt als 'ship-assisted' beschouwd.

271 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 5 april 2015 *(Thijs Glastra)*

272 Grijze Junco / Dark-eyed Junco *Junco hyemalis hyemalis*, eerste-winter vrouwtje, Beijum, Groningen, Groningen, 22 februari 2015 *(Martijn Bot)*

der welke omstandigheden hij in Groningen is verzeild geraakt. De piek van waarnemingen in Europa ligt – zoals bij de meeste Amerikaanse gorzen – in het voorjaar, maar de vogel van Groningen kan gezien de leeftijd (eerste-winter) de oversteek niet in die periode hebben gemaakt. Hij kan wel tijdens de najaarstrek uit koers zijn geraakt en in Nederland terechtgekomen. Het najaar is de piekperiode voor de meeste andere Amerikaanse zangvogels dan gorzen. De waarneming van een Grijze Junco op Flores, Azoren, in november 2009 is een eerder najaarsvoorbeeld van een trans-Atlantische oversteek (de Vries 2011) en er zijn meer dan 10 andere late najaars- en wintergevallen in Europa. Voor een aankomst eind januari zou pleiten dat de noordoostkust van Noord-Amerika in de weken voorafgaand aan de ontdekking gebukt ging onder extreem winterweer met veel sneeuwval. Het is bekend dat Grijze Junco's zich onder dergelijke omstandigheden over behoorlijke afstanden kunnen verplaatsen richting zuidelijkere streken (cf Rogers et al 1993, Lees & Gilroy 2009). Mogelijk is de vogel van Groningen tijdens zo'n vlucht uit koers geraakt.

Dankzegging
Wij danken Marcel Haas voor zijn hulp bij het samenstellen van het overzicht van WP-gevallen.

Summary
Dark-eyed Junco at Groningen in February-April 2015
From 1 February to 10 April 2015, a first-winter female Dark-eyed Junco *Junco hyemalis* stayed in a suburban area at Beijum, Groningen, the Netherlands. It belonged to the nominate subspecies *J h hyemalis*, the only subspecies of the large Dark-eyed Junco complex regularly recorded in Europe (and to be expected as a vagrant). It was often singing ('plastic song') from mid-February onwards; singing is not uncommon in females. This was the second record for the Netherlands; the first concerned a male trapped in February 1968 and kept in captivity until its death in November 1968. Up to 2015, at least 52 individuals have been recorded in Europe, with the majority (at least 39) in Britain. Other records are from the Azores (1), Denmark (1), Gibraltar (1), Iceland (1), Ireland (at least 2), Norway (3 records of 4 individuals) and Poland (1) (table 1). Most records are from spring but there have been several wintering birds or mid-winter records.

Verwijzingen

van den Berg, A B & Bosman, C A W 2001. Zeldzame vogels van Nederland – Rare birds of the Netherlands. Avifauna van Nederland 1. Tweede druk. Haarlem.
van den Berg, A B & Haas, M 2011. WP reports: December 2010 to late January 2011. Dutch Birding 33: 51-60.
Bosma, J 2015. DB Actueel. Grijze Junco in Groningen. Dutch Birding 37: 139-140.
Byers, C, Olsson, U & Curson, J 1995. Buntings and sparrows: a guide to the buntings and North American sparrows. Mountfield.
Dickinson, E C & Christidis, L (editors) 2014. The Howard and Moore complete checklist of the birds of the world. Fourth edition, vol 2: Passerines. Eastbourne.
van Duivendijk, N 2011. Advanced bird ID handbook – the Western Palearctic. London.
Elphick, C, Dunning, J B & Sibley D 2001. The Sibley guide to bird life and behaviour. London.
Erritzoe, J & Svenningsen, H 1996. Dark-eyed junco in Denmark in December 1980 and review of records from Europe and Greenland. Dutch Birding 18: 1-5.
del Hoyo, J, Elliott, A & Christie, D A (editors) 2011. Handbook of the birds of the world 16. Barcelona.
Lees, A C & Gilroy, J J 2009. Vagrancy mechanisms in passerines and near-passerines. In: Slack, R, Rare birds, where and when. An analysis of status and distribution in Britain and Ireland. 1: sandgrouse to New World orioles, York, p 1-23.
Nolan Jr, V, Ketterson, E D, Cristol, D A, Rogers, C M, Clotfelter, E D, Titus, R C, Schoech, S J & Snajdr, E 2002. Dark-eyed Junco (*Junco hyemalis*). In: Poole, A (editor), The birds of North America online, Ithaca. Website: http://bna.birds.cornell.edu/bna/species/716.
Polder, J J W & Voous, K H 1969. De Grijze Junco (*Junco hyemalis*), een nieuwe vogel voor de Nederlandse Avifauna. Limosa 42: 198-200.
Rising, J D & Beadle, D D 1996. A guide to the identification and natural history of the sparrows of the United States and Canada. London.
Rogers, C M, Ramenofsky, M, Nolan Jr, V, Ketterson, E D & Wingfield, J 1993. Plasma corticosterone, adrenal mass, winter weather, and season in nonbreeding populations of Dark-eyed Juncos (*Junco hyemalis hyemalis*). Auk 110: 279-285.
Sibley, D 2014. The North American bird guide. Second edition. New York.
Slack, R 2009. Rare birds where and when. An analysis of status & distribution in Britain and Ireland. 1: sandgrouse to New World orioles. York.
de Vries, N 2011. Two Dickcissels and Dark-eyed Junco on Flores, Azores, in November 2009. Dutch Birding 33: 44-46.

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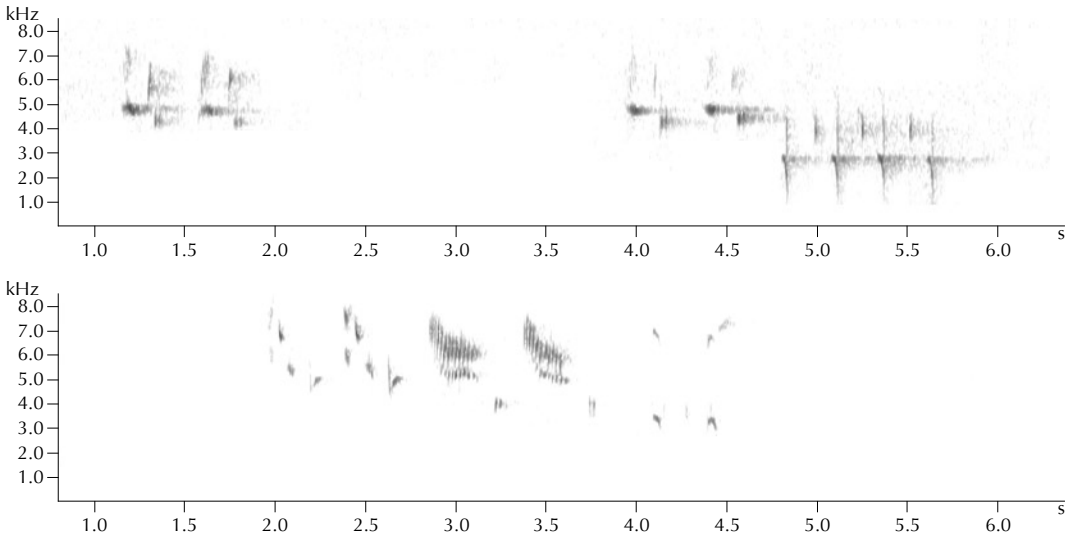
Brieven

Gevallen van broedverdachte Grote Kruisbekken in voorjaar 2014

In aanvulling op Gelderblom (2014) en Bos (2015), die het eerste zekere broedgeval van Grote Kruisbek *Loxia pytyopsittacus* in Nederland (Hoge Veluwe, Gelderland, voorjaar 2014) documenteerden, is ondertussen bekend dat er in het voorjaar van 2014 in Nederland een aantal gevallen was van broedverdachte Grote Kruisbekken. In de database van Sovon Vogelonderzoek Nederland waren begin oktober 2015 naast het broedgeval dat werd gedocumenteerd in Bos (2015) (broedcode 12 conform van Dijk & Boele 2011: 'pas uitgevlogen jongen van nestblijvers') ten minste 14 territoria opgenomen (Boele 2014; Arjan Boele in litt). Het ging hierbij om één geval met broedcode 13 ('bewoond nest met onbekende inhoud') en één geval met ieder broedcode 9 en 7 (nest-indicerende waarneming). De overige gevallen waren broedcode 4 (territoriumgedrag). Voor uitleg van broedcodes, zie van Dijk & Boele (2011). De 14 gevallen werden in vijf provincies vastgesteld; in Drenthe waren zeven territoria (hoogste broedcode 7), in Gelderland vier (hoogste broedcode 13), in Limburg één (broedcode 9), in Noord-

273 Grote Kruisbek / Parrot Crossbill *Loxia pytyopsittacus*, adult vrouwtje, Bakenberg, Ugchelen, Gelderland, 4 maart 2014 (*Arno ten Hoeve*). Vrouwtje van paartje, drinkend vlakbij nest. **274** Grote Kruisbek / Parrot Crossbill *Loxia pytyopsittacus*, adult mannetje, Bakenberg, Ugchelen, Gelderland, 24 februari 2014 (*Arno ten Hoeve*). Mannetje van paartje. **275-276** Grote Kruisbek / Parrot Crossbill *Loxia pytyopsittacus*, adult mannetje, Wieselse Bos, Wiesel, Gelderland, 4 maart 2014 (*Justin J F J Jansen*). Mannetje van paartje.

[*Dutch Birding 38: 180-182, 2016*]



FIGUUR 1-2 Grote Kruisbek / Parrot Crossbill *Loxia pytyopsittacus*, adult mannetje, Wieselse Bos, Wiesel, Gelderland, 4 maart 2014 *(Justin J F J Jansen*). Zang.

Brabant één (broedcode 4) en in Noord-Holland één (broedcode 4). De twee gevallen met respectievelijk broedcode 13 en 9 worden hier uitgebreider toegelicht.

Arno ten Hoeve ontdekte op 23 februari 2014 een paartje op de Bakenberg bij Ugchelen op de Veluwe, Gelderland (blok 33-33-12). Het vrouwtje was druk bezig met het slepen van takjes naar een nestlocatie. Binnen een uur vond AtH het nest. Het bevond zich net onder de top van een hoge dunne Grove Den *Pinus sylvestris*, aan de rand van de heidevlakte. Nestbouw werd waargenomen en paring werd gezien en gefotografeerd. Op 24 en 25 februari was het paartje nog aanwezig. Op 4 maart werden tijdens uren posten afwisselend het mannetje en vrouwtje voortdurend op en bij het nest vastgesteld (broedcode 13). Ook waren er nog vier andere Grote Kruisbekken in de buurt aanwezig. Een vervolgbezoek eind maart/begin april (exacte datum niet genoteerd) leverde geen activiteit op bij en op het nest terwijl een groot deel van de dag werd gepost (Arno ten Hoeve pers meded). De fotografische documentatie van het paartje (plaat 273-274) toont de kenmerkende snavelvorm en lichaamsbouw van Grote Kruisbek.

Justin Jansen ontdekte op 4 maart 2014 een paartje in het gebied Spaanse Kappen, Wieselse Bos, Gelderland (blok 33-12-23). Het mannetje zong bijna onafgebroken (figuur 1-2) en het vrouwtje sleepte takjes naar een onoverzichtelijke plek net onder de top van een Grove Den (hoog en dicht) midden in een naaldbos (broedcode 9). Beide vogels werden ook gezien op 7 maart en op 14 maart werd het mannetje zingend waargenomen (PieterGeert Gelderblom pers meded). Tijdens een bezoek op 5 april door Martin Jansen werden geen vogels meer aangetroffen (Martin Jansen pers meded). De fotografische documentatie van het mannetje (plaat 275-276) toont de kenmerkende snavelvorm en lichaamsbouw van Grote Kruisbek. Het vrouwtje werd gedocumenteerd met geluidsopnamen van de roep (http://waarneming.nl/waarneming/view/82111523 en /82182459).

De Commissie Dwaalgasten Nederlandse Avifauna (CDNA) heeft geen rol in het beoordelen van recente broedgevallen/territoria want de soort wordt vanaf 1 januari 2013 niet meer beoordeeld (van Rijswijk & van Duivendijk 2014). Echter, een revisie van (vermeende) territoria/broedgevallen (zie, eg, Hustings & van Winden 2002) en ook alle historische gevallen van Grote Kruisbek (cf van Beusekom 2002) wordt sterk geadviseerd door de auteur omdat vaak diverse vocale types van Kruisbek *L recurvirostra* met onvoldoende zekerheid werden uitgesloten, bijvoorbeeld omdat geluidsopnamen ontbreken (cf Robb 2000). Ook zijn 'forsere' (in bouw en snavel) Kruisbekken vaak niet uitgesloten.

Een woord van dank gaat uit naar Arjan Boele, Alex Bos, Arend van Dijk, Klaas van Dijk,

PieterGeert Gelderblom, Arno ten Hoeve en Martin Jansen; Magnus Robb verzorgde de sonagrammen.

Summary

Reports of possibly breeding Parrot Crossbills in the Netherlands in spring 2014 This letter discusses reports of possible breeding by Parrot Crossbill *Loxia pytyopsittacus* in the Netherlands in late winter/early spring 2014. The first well-documented breeding record (one fledged young) for the Netherlands (in 2014) has been documented separately. There were at least 14 additional reports of possible breeding. In one case, a nest was observed (no eggs or young seen) and, in another, a singing male was seen together with a presumably nest-building female. The other reports referred to birds showing signs or indications of territorial behaviour. The author urges previous reports of breeding Parrot Crossbills published by some authors to be critically reviewed, because some vocal types of Red Crossbill *L curvirostra* or the odd larger (in built and bill size) Red Crossbill may not have been safely excluded.

Verwijzingen

van Beusekom, R 2002. Grote Kruisbek. In: SOVON Vogelonderzoek Nederland. Atlas van de Nederlandse broedvogels 1998-2000 (Nederlandse Fauna 5). Leiden.

Boele, A 2014. Zeldzame broedvogels 2014: wouwen, Pontische Meeuwen, Velduilen, Witvleugelsterns, Grote Kruisbekken, Roodbuikwaterspreeuw en veel meer. Sovon-nieuws 27 (4): 8-10.

Bos, A 2015. Broedgeval van Grote Kruisbek op Hoge Veluwe in voorjaar 2014. Dutch Birding 37: 24-28.

van Dijk, A J & Boele, A 2011. Handleiding Sovon broedvogelonderzoek. Nijmegen.

Gelderblom, P G 2014. Succesvol broedgeval van Grote Kruisbek op de Hoge Veluwe, voorjaar 2014. Website: http://web.archive.org/web/20140516191539/http://birdingwageningen.blogspot.nl.

Hustings, F & van Winden, E 2002. De Grote Kruisbek: een blijvertje of niet? Sovon nieuws 15 (4): 9-10.

Robb, M S 2000. Introduction to vocalizations of crossbills in north-western Europe. Dutch Birding 22: 61-107.

van Rijswijk, W & van Duivendijk, N 2014. Recente CDNA-besluiten. Dutch Birding 36: 340.

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Corrigenda

In het bijschrift bij plaat 181 (Dutch Birding 38: 117, 2016) werd niet de juiste datum vermeld. De foto werd gemaakt op 17 december 2015. Redactie

In the caption of plate 181 (Dutch Birding 38: 117, 2016) the wrong date was mentioned. The photograph was taken on 17 December 2015. Editors

CDNA-mededelingen

Recente CDNA-besluiten Op zondag 24 januari 2016 hield de Commissie Dwaalgasten Nederlandse Avifauna (CDNA) haar wintervergadering in Santpoort-Zuid, waarin onder meer de volgende punten aan de orde kwamen en de volgende besluiten werden genomen.

Christian Brinkman is per januari secretaris geworden, deze positie was afgelopen halfjaar vacant. Per 24 januari is les Meulmeester gestopt als stemmend lid. Zijn positie is overgenomen door Ruud van Beusekom.

Tot nu toe moesten nieuwe taxa voor de Nederlandse lijst op een vergadering bekrachtigd worden voordat ze op de Nederlandse lijst werden toegelaten. Door het digitaal stemmen is deze methode overbodig geworden. In plaats daarvan krijgt een nieuw taxon voor Nederland nu altijd een tweede ronde, ook als in de eerste ronde overeenstemming was onder de stemmende leden; door de tweede ronde kunnen leden zien wat collega's in de eerste ronde hebben gestemd en dit meenemen in de tweede ronde.

Arnold Meijer (Blue Robin dtp) heeft voor de CDNA een nieuw logo ontworpen; het oude logo met een Terekruiter *Xenus cinereus* had zijn glans verloren nu die soort niet meer wordt beoordeeld. In dit logo is een Stekelstaartgierzwaluw *Hirundapus caudacutus* verwerkt, een extreme en spectaculaire dwaalgast in Europa die tot nu toe slechts één keer in Nederland is vastgesteld (mei 1996). De verwachting is daarom dat we met deze soort voorlopig weer even vooruit kunnen. Hierbij willen we Arnold Meijer hartelijk bedanken voor het ontwerpen van dit fraaie logo.

CDNA Commissie Dwaalgasten Nederlandse Avifauna

Van zowel Witkopgors *Emberiza leucocephalos* als Bastaardarend *Aquila clanga* is bekend dat hybridisatie met respectievelijk Geelgors *E citrinella* en Schreeuwarend *A pomarina* regelmatig voorkomt. De vraag is of oude gevallen van Witkopgors en beide arenden moeten worden herzien om een hybride herkomst uit te sluiten. Besloten is om voor komende zomervergadering met een voorstel te komen hoe hier mee om te gaan.

Op basis van een artikel van Fred Visscher en Nils van Duivendijk (Dutch Birding 37: 289-294, 2015) met nieuwe kenmerken voor de herkenning van Fluitzwaan *Cygnus columbianus* is besloten dat alle gevallen gaan herrouleren om deze aan de nieuwe kenmerken te toetsen. Op basis van een artikel van Andrea Corso et al (Dutch Birding 37: 392-402, 2015) over de herkenning van Afrikaanse Vink *Fringilla coelebs spodiogenys/africana/harterti* is besloten een afgewezen geval uit de winter van 2003/04 in Haren, Groningen, opnieuw te beoordelen. Op basis van nieuwe informatie over herkenning van vrouwtje Kleine Torenvalk *Falco naumanni* gaat het geval van 23 maart 2002 in Nationaal Park De Hoge Veluwe, Gelderland (Dutch Birding 37: 102-105, 2015), opnieuw rouleren. Op foto's van het enige geval van Witkruingors *Zonotrichia leucophrys* in Nederland, van december 1981 tot februari 1982 te Spaarndam, Noord-Holland, is te zien dat de vogel nagels mist. Op basis van deze nieuwe informatie gaat dit geval herrouleren.

Na aanvaarding van de eerste IJslandse Koperwiek *Turdus iliacus coburni* voor Nederland in 2014 lijkt dit taxon deze winter veelvuldig op te duiken. Besloten is deze ondersoort voorlopig in de ijskast te plaatsen tot een helderder beeld ontstaat van de status om zo te kunnen bepalen of dit taxon nog moet worden beoordeeld. Waarnemers wordt geadviseerd gevallen zo goed mogelijk te blijven documenteren om zo bij te dragen aan de kennis omtrent voorkomen en herkenning van deze ondersoort. Sander Bot & CDNA

WP reports

This review lists rare and interesting birds reported in the Western Palearctic mainly from **February to mid-March 2016**. 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.

SWANS TO DUCKS In the past 15 years, the numbers of wintering **Bewick's Swans** *Cygnus bewickii* in Evros Delta in north-eastern Greece has been increasing impressively with a high of 8400 in February; in the past, some individuals colour-ringed in the Netherlands have been recovered from this delta. Amazingly, individuals gps-tagged on the same day and at the same place in Yamal peninsula, north-western Siberia, were tracked down not only to Evros Delta but also to Poyang lake, Jiangxi, China; so, this Asian population is using wintering sites 8000 km apart (for their migration routes, see: http://tinyurl.com/hbeoxbw). The first **Whooper Swan** *Cygnus cygnus* for the Azores from 26 November 2015 was still present on São Miguel on 5 March. The British Ornithologists' Union (BOU) has added **Cackling Goose** *Branta hutchinsii* as the 601st species of the British list on the basis of a bird (probably *B h hutchinsii*) seen at Plex Moss, Lancashire, England, in November 1976. The female **White-headed Duck** *Oxyura leucocephala* at Rochefort, Charente-Maritime, France, from 12 November remained through February. An adult female **Steller's Eider** *Polysticta stelleri* at Sumba, Suðuroy, Faeroes, on 13 February was considered the same individual as the one in October 2015 (cf Dutch Birding 37: 403, 2015). An adult male **American White-winged Scoter** *Melanitta deglandi deglandi* was seen again at Keflavík, Iceland, until at least 5 March. If accepted, an adult male **Asian White-winged Scoter** *M d stejnegeri* at Frosta, Nord-Trøndelag, on 12-20 March will be the fourth for Norway (cf Dutch Birding 37: 261, 340, 2015). The male **Black Scoter** *M americana* was still present off Rossbeigh, Kerry, Ireland, until at least 19 March. Other males stayed off Bamburgh, Northumberland, England, from 27 January to 4 March; at Koggerudden, Halland, Sweden, on 7 February; and off Ålborg, Nordjylland, on 28 February (12th for Denmark). In England, **Buffleheads** *Bucephala albeola* were reported at Grune Point, Cumbria, on 24 January, and on the Wyre river at Hambleton, Lancashire, on 20 February. A male **Barrow's Goldeneye** *B islandica* at Kirchsee, Schleswig-Holstein, Germany, from 23 February to at least 8 March probably concerns a returning bird. In the Azores, a pair of **Hooded Mergansers** *Lophodytes cucullatus* was present on Pico into late January and then on Terceira to at least 6 March. An adult male stayed near Reykjavík, Iceland, from December 2015 to at least 18 March, and females on Corsham lake, Wiltshire, England, on 23-27 February, and at Halesowen, West Midlands, England, on 11 March. An unringed male **Redhead** *Aythya americana* was swimming in a canal between Aduard and Zuidhorn, Groningen, on 19 January and then irregularly and unpredictably present on 11 days between 2 February and 13 March; if accepted, it will be the first for the Netherlands and the fifth for the WP. Previous ones were males in Nottinghamshire, England, on 8-27 March 1996; in Iceland from 15 June to 10 July 1998 and another on 11-12 July 1998; and in Cork, Ireland, on 12-15 July 2003. The first **Baikal Teal** *Anas formosa* and the first **Falcated Duck** *A falcata* for the Philippines were seen at Candaba on 9 and 7 January, respectively. At Arava valley, Israel, the **Red-billed Teal** *A erythrorhyncha* from January 2015 remained into March 2016. A male **American Wigeon** *A americana* at Kis-Balaton on 13 March was (only) the fourth for Hungary. In the Azores, a male **American Black Duck**

277 Allen's Gallinule / Afrikaans Purperhoen *Porphyrio alleni*, first-year, Gleib Jdiane, Western Sahara, Morocco, 18 February 2016 *(Mohamed Mediani)*

278 Allen's Gallinule / Afrikaaans Purperhoen *Porphyrio alleni*, first-year, Pantano nuevo del Ángel, Marbella, Málaga, 17 January 2016 *(Álex Colorado)*

279 Bateleur / Bateleur *Terathopius ecaudatus*, second calendar-year (right), and Eastern Imperial Eagle / Keizerarend *Aquila heliaca*, third calendar-year, Kiryat Gat, Judean plains, Israel, 13 February 2016 *(Ezra Hadad)*

280 Basalt Wheatear / Basalttapuit *Oenanthe lugens warriae*, first-winter, K94, Lothan, Israel, 14 January 2016 *(Barak Granit)*

A rubripes was still present on Terceira in late January. Another one stayed at Baltimore, Cork, through February. In the Azores, a male **Wood Duck** *Aix sponsa* was seen again at Paúl da Praia, Terceira, on 27 January.

FLAMINGOS TO CRANES Six adult **Lesser Flamingos** *Phoenicopterus minor* stayed at Doñana, Sevilla, Spain, in January-February. In Italy, one was found at Valli di Comacchio Emilia-Romagna, on 21 February. At Saintes-Maries-de-la-Mer, Bouches-du-Rhône, France, two adults remained through February. Two **Pied-billed Grebes** *Podilymbus podiceps* were present at Estanques de Aldea Blanca, Gran Canaria, Canary Islands, from 2 November 2015 into March. On São Miguel, Azores, the long-staying adult was singing from 2 November 2015 through March. The adult **Rufous Turtle Dove** *Streptopelia orientalis meena* for its fourth winter at Suchedniów, Świętokrzyskie, Poland, was still present in early February, and the one at Espeland, Hordaland, Norway, from 21 December 2015 remained until at least 5 March. In Finland, a first-winter was observed at Linnainmaa, Tampere, on 16 March. A female **Namaqua Dove** *Oena capensis* photographed at Mandria on 21-23 February was the fourth for Cyprus. In Morocco, one turned up near Rabat on 14 March; two males at Gleib Jdiane, Western Sahara, on 15 March; a male and female at Gleib Jdiane on 16 March; and three near Aousserd, Western Sahara, on 18 March. In the Cape Verde Islands, a female was observed at Pedra Badejo, Santiago, on 20 March. At least four **Golden Nightjars** *Caprimulgus eximius* were heard, observed and photographed near Aousserd and at Oued Jenna, Western Sahara, Morocco, on 16 March (the first for the WP was between Dakhla and Aousserd in May 2015, cf Dutch Birding 38: 80-86, 2016). A male **Oriental Cuckoo** *Cuculus optatus* trapped at Sotkamo in June 2015 was accepted as the first for Finland and the WP outside European Russia (cf Dutch Birding 37: 262, 272, 2015). In Spain, a first-year **Allen's Gallinule** *Porphyrio alleni* stayed at Pantano nuevo del Ángel, Marbella, Málaga, on 16-18 January. On Lanzarote, Canary Islands, one was killed by a cat on 27 January, and another first-year was picked up exhausted here on 18 February. A photographed first-year at Gleib Jdiane, Western Sahara, from 18 February to 2 March was the 13th for Morocco. An adult **American Coot** *Fulica americana* at Lambhagi, Reykjavík, from 26 December 2015 remained through March. In the Azores, one or two were seen on São Miguel and Flores during February and March. Two **Demoiselle Cranes** *Grus virgo* were found at Agamon Hula, Israel, on 14 February. In England, an unringed, free flying and at times elusive adult (with only 'suggestions of abnormal feather damage') was foraging at Mockertin Tarn and Cockermouth, Cumbria, on 16-21 March; the species is not (yet) on the British list.

LOONS TO CORMORANTS In February and March, adult **Pacific Loons** *Gavia pacifica* were seen irregularly off Tawin, Galway, Ireland, and off Penzance, Cornwall, England. A **Great Northern Loon** *G immer* photographed at Massa on 25 February was the ninth for Morocco. A **Northern Fulmar** *Fulmarus glacialis* (dark morph) photographed east of Snares Islands on 9 February 2014 has been accepted as the first for New Zealand and the Southern Hemisphere. Arroyo et al (2016) showed that during post-breeding migration from mid-May to mid-July 2007-10 between 23 780 and 26 535 **Balearic Shearwaters** *Puffinus mauretanicus* migrated along the northern coast of the Strait of Gibraltar (Bird Conserv Int 26: 87-99, 2016). A **Yelkouan Shearwater** *P yelkouan* photographed off Berry Head, Devon, England, on 29 July 2008 has recently been accepted as the 600th species for Britain. A **Yellow-billed Stork** *Mycteria ibis* in Bet Sheen valley on 5-11 March was the 25th for Israel. The second calendar-year **Dalmatian Pelican** *Pelecanus crispus* in Wielkopolska, Poland, from March 2015 and again in August was seen through March. It was presumed to be the same individual as the first for Lithuania in 2015. The first for Belarus was an adult last seen on Druts river, Kirausk, on 18 January (so, this was not the same bird as the one in Lithuania/Poland; cf Dutch Birding 38: 105, 2016). A first-winter **Great Blue Heron** *Ardea herodias* photographed on Flores on 28 January was already the 42nd for the Azores. On Santiago, Cape Verde Islands, two **Intermediate Egrets** *A intermedia* were again reported on 27 January, and a **Black Heron** *Egretta ardesiaca* again on 7 February and 2 March (cf Dutch Birding 38: 105, 2016). In southern Spain, probably a total of four presumed hybrids **Little Egret x Western Reef Heron** *E garzetta x gularis* were present in January-February. If accepted, an adult male **Lesser Frigatebird** *Fregata ariel* at Haitham on 1 March will be the seventh for Oman. A subadult **Red-footed Booby** *Sula sula* photographed at Ilhéu de Curral Velho, Boa Vista, on 26 February was the sixth for Cape Verde Islands and the 12th for the WP. Europe's westernmost **Pygmy Cormorants** *Phalacrocorax pygmeus* concerned two in France; one wintering at Bourg-de-Péage, Drôme, from 20 December through February, and another at Saint-Laurent-d'Aigouze, Gard, on 8-19 January.

WADERS If accepted, a **Killdeer** *Charadrius vociferus* flying past Trönninge, Halland, on 7 February will be the first for Sweden. In the Azores, three **Semipalmated Plovers** *C semipalmatus* were foraging on Terceira on at least 14-15 February. The wintering **Sociable Lapwing** *Vanellus gregarius* at El Hondo, Alicante, Spain, from 5 January was still present on at least 4 March. In England, the long-staying **Hudsonian Whimbrel** *Numenius hudsonicus* in Cornwall remained at least until mid-March (cf Dutch Birding 37: 407, 2015, 38: 108, 2016). The one on São Miguel, Azores, was seen again on 6 March. In China, record numbers of **Spoon-billed Sandpipers** *Calidris pygmaea* have been found at four sites in south-western Guangdong province, including 38 near the Fucheng estuary in late January (the global population numbers c 400 adults). In Spain, a **Wilson's Phalarope** *Phalaropus tricolor* wintered in Murcia from 2 December 2015 into March. A **Solitary Sandpiper** *Tringa solitaria* wintering at Almanzora river, Cuevas de Almanzora, Almería, from 4 February into March was the fourth for Spain. Six **Lesser Yellowlegs** *T flavipes* were seen at Santa Maria, Sal, Cape Verde Islands, on 10 February. The first

281 Pallas's Fish Eagle / Witbandzeearend *Haliaeetus leucoryphus*, second calendar-year, Raysut, Oman, 28 February 2016 *(Jorrit Vlot)* **282** Solitary Sandpiper / Amerikaanse Bosruiter *Tringa solitaria*, Almanzora river, Cuevas de Almanzora, Almería, Spain, 4 February 2016 *(Andrew M Allport)* **283** Lesser Yellowlegs / Kleine Geelpootruiter *Tringa flavipes*, Santa Maria, Sal, Cape Verde Islands, 10 February 2016 *(René Pop)*




284 Pallas's Gull / Reuzenzwartkopmeeuw *Larus ichthyaetus*, adult, Jakuševec, Zagreb, Croatia, 13 March 2016 *(Luka Jurinović)* **285** Red-billed Teal / Roodsnavelpijlstaart *Anas erythrorhyncha*, Hazeva, Arava valley, Israel, 5 March 2016 *(Josh Jones)* **286** Cape Gull / Afrikaanse Kelp Meeuw *Larus dominicanus vetula*, adult, Agadir, Morocco, 25 January 2016 *(Arie Ouwerkerk)* **287** Red-footed Booby / Roodpootgent *Sula sula*, subadult, Ilhéu de Curral Velho, Boa Vista, Cape Verde Islands, 26 February 2016 *(Herbert Bödendorfer)*

Asian Dowitcher *Limnodromus semipalmatus* for Oman at Al Ansab lagoons, Muscat, from 3 November 2015 was last seen on 11 February. An adult **Cream-colored Courser** *Cursorius cursor* was foraging at Malta airport on 3-4 March.

AUKS TO TERNS This winter, a rare influx of **Razorbill** *Alca torda* for south-western Morocco occurred; for instance, up to 10 were foraging at the Tamri coast on 20 March (where earlier in the month several were picked up dead from the beach as well). The long-staying **Grey-headed Gull** *Chroicocephalus cirrocephalus* at Biceglie, Puglia, Italy, from June 2013 was still present on at least 13 March. At Oued Souss, Morocco, a first-winter **Franklin's Gull** *Larus pipixcan* was seen on 12 February and 11 and 21 March. On 25 January, a **White-eyed Gull** *L leucophthalmus* was found at Jaffa, Tel Aviv, Israel; it is very rare along the Mediterranean. An adult **Pallas's Gull** *L ichthyaetus* photographed on the dump at Jakuševec, Zagreb, on 13 March was the first for Croatia. In Morocco, adult **Cape Gulls** *L dominicanus vetula* were seen, eg, at Anza, Agadir, on 25 January and at Dakhla bay, Western Sahara, on 4 March. In February, juvenile **American Herring Gulls** *L smithsonianus* were reported at Mousehole, Cornwall; at Whalsay, Shetland, Scotland; at Whittlesey, Cambridgeshire, England; and near Raghly, Sligo, Ireland. The third-winter from 20 December 2015 in Cornwall was still present on 28 January. The adult at Ondarroa, Bizkaia, Spain, remained for its fourth winter from 5 December through February. At Castletownbere, Ireland, the adult **Glaucous-winged Gull** *L glaucescens* from 2 January remained until at least mid-March. A **Common Tern** *Sterna hirundo* ringed as an adult at Nabben, Sweden, on 30 July 2013 was found dead at Hermanus, south-east of Cape Town, South Africa, on 5 February 2016, at a distance of 10 004 km. In Ireland,

288 Steppe Eagle / Steppearend *Aquila nipalensis*, immature, Gärdslöv, Skåne, Sweden, 28 January 2016 *(Lars Bernitt Birk)* **289** Eyebrowed Thrush / Vale Lijster *Turdus obscurus*, first-winter male, Rosell, Castelló, Spain, 17 January 2016 *(Alfonso González)* cf Dutch Birding 38: 115, 2016 **290** Dead Sea Sparrows / Moabmussen *Passer moabiticus*, males, Jubail, Saudi Arabia, 26 February 2016 *(Jeremy Babbington)*

the returning adult **Forster's Tern** *S forsteri* was again reported in Galway into March. At least one adult and possibly one first-year **Chinese Crested Tern** *S bernsteini* were seen in a flock of 250 Greater Crested Terns *S bergii* near Seram, confirming that this endangered species is wintering in eastern Indonesia (cf Dutch Birding 37: 347, 2015). The **Whiskered Tern** *Chlidonias hybrida* from 6 to 19 March along the IJsselmeer coast of Flevoland was presumably the same bird as the one seen here from 20 November to mid-December 2015 but not in January-February (the first two wintering in the Netherlands were at the same locality in 1991/92; cf Dutch Birding 14: 214-218, 1992).

RAPTORS The **Black-winged Kite** *Elanus caeruleus* in Torino, Italy, from 27 December 2015 was found at various sites until at least 19 February, last in Cuneo. An adult male **Crested Honey Buzzard** *Pernis ptilorhynchus* was photographed at Eilat, Israel, on 16 March. On 1 March (already), a **Bearded Vulture** *Gypaetus barbatus* turned up north-west of Berlin in Brandenburg, Germany. At Kiryat Gat, Israel, the long-staying immature **Bateleur** *Terathopius ecaudatus* found on 31 May 2015 was still present in late February (cf Dutch Birding 37: 269, 347, 2015). In Sweden, an immature **Steppe Eagle** *Aquila nipalensis* wintered at Gärdslöv, Skåne, from October 2015 to 28 January. From September 2015 until at least late February, an adult male **Northern Harrier** *Circus hudsonius* remained on North Ronaldsay, Orkney, Scotland. In Ornithos 22: 312-325, 2015, it is shown that, in the winters of 2005/06 to 2014/15, eight **Pallid Harriers** *C macrourus* have been wintering in France, four of which in the winter of 2014/15, and five being first-winters; this winter, a first-winter remained at Baie du Mont Saint-Michel, Manche/Ille-et-Vilaine, and a male in Camargue, Bouches-du-Rhône. In the Netherlands, a first-winter male wintered at Onlanden, Drenthe, at least from 19 January to mid-March. In England, a

291 Syrian Woodpecker / Syrische Bonte Specht *Dendrocopos syriacus*, male, Kronach-Neuses, Bayern, Germany, 6 February 2016 *(Dominik Becker)*

292 Whiskered Tern / Witwangstern *Chlidonias hybrida*, second calendar-year, Lelystad, Flevoland, Netherlands, 12 March 2016 *(Karel A Mauer)*

long-stayer was seen at Flitcham, Norfolk, until at least 7 February and, in Spain, a first-winter female remained in Málaga from 24 February into March. A **Pallas's Fish Eagle** *Haliaeetus leucoryphus* at Raysut from 27 January to 1 March was the fifth for Oman. A **Rough-legged Buzzard** *Buteo lagopus* near Kiryat Gat from 3 February onwards (often together with the Bateleur) was the fourth for Israel, and the fifth was found near Kedma on 17 February. The **Long-legged Buzzard** *B rufinus* first seen as a juvenile on 25 September 2013 and present from 10 October 2015 for its third consecutive winter at Tweede Maasvlakte, Zuid-Holland, the Netherlands, remained until 8 March.

WOODPECKERS TO WALLCREEPERS After virtually being absent until 2012, **Middle Spotted Woodpeckers** *Dendropicos medius* increased rapidly in northernmost Schleswig-Holstein, Germany, with 48 territories by 2015 (Vogelwelt 135: 189-191, 2015); the species' range is expanding towards the border of Denmark, where it disappeared in the 1950s. A male **Syrian Woodpecker** *Dendrocopos syriacus* at Kronach-Neuses, Bayern, from November 2015 to at least 9 March was the first for Germany (after at least one previous record of a hybrid with Great Spotted Woodpecker *D major*). The **Pied Crow** *Corvus albus* from March 2015 south of Zagora, Morocco, was seen again at Ouled Driss, M'Hamid, on 29 February. The long-staying **Azure Tit** *Cyanistes cyanus* at Helsinki, Finland, from 22 November 2015 was trapped on 7 February; maybe, it will provide a clue about its alleged hybrid origin. A biometrical study by Broughton et al (http://tinyurl.com/jtuvzb3) on **Marsh Tits** *Poecile palustris* in Britain revealed that all belong to the small British subspecies *P p dresseri*, ie, also northern birds which were previously sometimes believed to belong to the significantly larger continental nominate, *P p palustris*; it was concluded that with no evidence of regional variation in size, reliable sexing methods based on biometrics could be applied in demographic studies throughout Britain. Six **Oriental Skylarks** *Alauda gulgula* were found at Yotvata, Israel, on 26 February. In Poland, a **Wallcreeper** *Tichodroma muraria* was photographed at Wałbrzych, Silesia, from 27 January to 22 February; up to eight pairs breed in the Polish Tatry mountains but records outside their breeding area are extremely rare.

WARBLERS TO WHEATEARS The first **Caucasian Mountain Chiffchaff** *Phylloscopus lorenzii* for Malta was trapped at Ghadira on 17 November 2015. In France, a total of 66 **Siberian Chiffchaffs** *P tristis* was found in January-February this winter. An adult **Black-throated Thrush** *Turdus atrogularis* stayed at Tynset, Hedmark, Norway, from 18 January to 15 February. In Denmark, a male was present at Bispebjerg, Copenhagen, from 20 January to at least mid-March. From 15 January (or earlier) to at least 23 March, the first-winter male **Siberian Rubythroat** *Calliope calliope* stayed at Hoogwoud, Noord-Holland, where it was visited by 1000s of birders from many coun-

293 Black-throated Thrush / Zwartkeellijster *Turdus atrogularis*, male, København, Denmark, 22 January 2016 *(Helge Sørensen)*

294 Namaqua Dove / Maskerduif *Oena capensis*, male, Gleib Jdiane, Western Sahara, Morocco, 16 March 2016 *(Franck Chevalier)*

295 White-winged Snowfinch / Sneeuwvink *Montifringilla nivalis*, Kalaat es Senam, Kef, Tunisia, 22 February 2016 *(Cédric Mroczko)*

296 White-winged Snowfinch / Sneeuwvink *Montifringilla nivalis*, Aljezur, Faro, Portugal, 2 February 2016 *(Luís Gordinho)*

tries; its frequently delivered plastic song contained imitations of more than 15 Siberian species such as Yellow-browed Warbler *P inornatus*, Pallas's Grasshopper Warbler *Locustella certhiola* and Richard's Pipit *Anthus richardi*. A **Red-flanked Bluetail** *Tarsiger cyanurus* was found at Norleywood, Hampshire, England, on 14 February. In January, four or five **Desert Wheatears** *Oenanthe deserti* wintered in Italy, including two males at Saline Joniche, Reggio Calabria. A **White-crowned Wheatear** *O leucopyga* at Cape Greco on 23-24 February was the c eighth for Cyprus. The first-winter **Basalt Wheatear** *O lugens warriae* at K94, central Arava, Israel, stayed from 12 January until at least 16 February (cf Dutch Birding 19: 18-19, 1997); it was ringed during its stay.

SPARROWS TO BUNTINGS Five males and six females **Dead Sea Sparrow** *Passer moabiticus* at Jubail on 26 February constituted the second record for Saudi Arabia (the first concerned a flock of 60-70 also at Jubail on 13 November 1991). A **White-winged Snowfinch** *Montifringilla nivalis* at Aljezur, Faro, from 31 January to 6 February was the sixth for Portugal. The first for Tunisia was photographed at Kalaat es Senam, Kef, on 22 February. A photographed male **Citrine Wagtail** *Motacilla citreola* stayed at Santa Maria, Sal, Cape Verde Islands, on 12-13 March. A **Masked Wagtail** *M personata* at the Dead Sea coast on 23 March was the third for Israel (previous ones were in 1989 and 2011; cf Dutch Birding 38: 96-97, 2016). In France, a total of 32 **Richard's Pipits** *Anthus richardi* were wintering in January-February; singles were present further north and west, eg, in the Netherlands. The **Blyth's Pipit** *A godlewskii* at Hable d'Ault, Somme, France, from 23 December was last seen on 5 January. If accepted, one at Arsuf, north of Tel Aviv, on 19 March will be the sixth for Israel. **Olive-backed Pipits** *A hodgsoni* were reported from Fuerteventura, Canary Islands, on 7 February and Piombino, Livorno, Italy, on 17-28 February. An adult **Greenland Redpoll** *Acanthis flammea rostrata* trapped at Łódź Romanów on 19 January 2014 was accepted as the first for Poland and probably also for continental Europe. In Bird Study, Amouret et al (2016) studied the morphological differentiation of **Icelandic Redpolls** *A f 'islandica'*; their biometrical analyses supported the grouping of three species (Lesser Redpoll *A cabaret*, Mealy Redpoll *A f flammea* sensu lato and Arctic Redpoll *A hornemanni*, with a large split between both Arctic subspecies, *A h exilipes* and *A h hornemanni*) but they concluded that the subspecies status of Icelandic Redpoll remains unclear (http://tinyurl.com/z642exy). The second **Grey-crowned Goldfinch** *Carduelis carduelis caniceps* for Kuwait was reported at Kabd reserve on 23 February. In the Netherlands, the first-winter female **Pine Bunting** *Emberiza leucocephalos* at Wilhelminadorp, Zeeland, from 15 December 2015 stayed until 14 March. Others were seen at Hunedoara, Sânpetru, on 18 January (the third for Romania); at Innstrand, Sør-Trøndelag, Norway, on 9-15 February (adult male); and at Magredi del Meduna, Pordenone, Italy, on 21 February. From 9 January, **Jankowski's Buntings** *E jankowskii* were wintering at Miyun reservoir, Beijing, China, with a maximum of 12 on 22 February (the only previous record for Beijing concerned two birds collected in February-March 1941); this endangered species declined drastically since the 1970s and is now known only from a restricted area in north-eastern China.

297 Desert Wheatear / Woestijntapuit *Oenanthe deserti*, second calendar-year male, Saline Joniche, Reggio Calabria, Italy, 26 January 2016 *(Angelo Scuderi)*

For a number of reports, Birdwatch, British Birds, Go-South Bulletin, Sovon-Nieuws, www.birdguides.com, www.netfugl.dk, www.rarebirdalert.co.uk, www.tarsiger.com and www.waarneming.nl were consulted. We wish to thank Andrew Allport, Mohammed Amezian, David Attard, Jeremy Babbington, Brahim Bakass, Dominik Becker, Patrick Bergier, Lars Birk, Herbert Bödendorfer, Davy Bosman, Dan Brown, Simba Chan, Franck Chevalier, Álex Colorado, Andrea Corso, Pierre-André Crochet, Klaas van Dijk, Philippe Dubois, Enno Ebels, Pekka Fagel, Raymond Galea, Luís Gordinho, Alfonso González, Barak Granit, Ricard Gutiérrez, Ezra Hadad, Axel Halley, Leo Heemskerk (Dutch Knights), Josh Jones, Luka Jurinović, Zbigniew Kajzer, Bence Kókay, Yann Kolbeinsson, Jelena Kralj, Semion Levy, André van Loon, Mohamed Mediani, Gerbrand Michielsen, Dominic Mitchell, Geir Mobakken, Cédric Mroczko, Killian Mullarney, Gert Ottens, Gerard Ouweneel, Yoav Perlman, René Pop, Magnus Robb, Angelo Scuderi, Jiri Sirek, Helge Sørensen, Lars Svensson, Didier Vangeluwe, Alexandre Vintchevski, Jorrit Vlot and Peter de Vries for their help in compiling this review.

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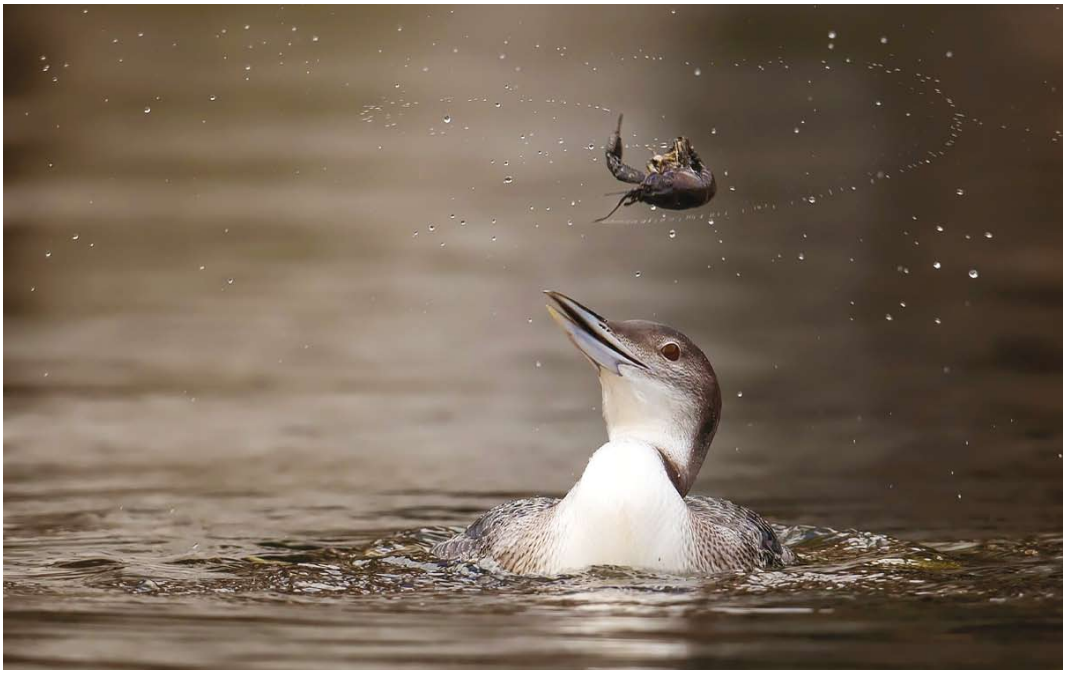
Recente meldingen

Dit overzicht van recente meldingen van zeldzame en interessante vogels in Nederland beslaat voornamelijk de periode **januari-februari 2016**. 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 Al op 31 januari werd een een fors aantal van 511 (ver)trekkende **Kleine Zwanen** *Cygnus bewickii* geteld langs Elburg, Gelderland; het dagrecord betreft 523 exemplaren op 24 februari 2008 langs dezelfde telpost. Het hoogste aantal **Witbuikrotganzen** *Branta hrota* bijeen betrof c 40 in februari bij Camperduin, Noord-Holland. Verspreid over het land werden veel **Roodhalsganzen** *B ruficollis* waargenomen, met zelfs een groep van negen op Ameland, Friesland – een evenaring van de tot nu toe grootste bekende groep. De enige **Taigarietgans** *Anser fabalis* die overtuigend kon worden gedocumenteerd verbleef van 26 januari tot 22 februari in het Hunzedal, Drenthe; opmerkelijk genoeg droeg hij een in Nederland aangebrachte halsring (geel Z78; bij het ringen was hij genoteerd als Toendrarietgans *A serrirostris*). Tot begin februari bleven ruim 30 **Dwergganzen** *A erythropus* bij Strijen, Zuid-Holland, waarna de aantallen iets afnamen. Bij Camperduin, Noord-Holland, werden maximaal 26 exemplaren geteld op 9 februari. Van c 15 andere plaatsen kwamen ook meldingen. De 115 153 **Zwarte Zee-eenden** *Melanitta nigra* die op 1 februari in drie uren langs Camperduin vlogen waren goed voor een nieuw dagrecord; het oude betrof 96 767 op 15 april 1993, eveneens langs Camperduin. De bekende mannetjes **Buffelkopeend** *Bucephala albeola* van Barendrecht, Zuid-Holland, en Den Oever, Noord-Holland, bleven de gehele periode. Een mannetje **Amerikaanse Tafeleend** *Aythya americana* liet zich op 19 januari en vanaf 2 februari tot in maart onregelmatig bekijken op het Van Starkenborghkanaal bij Zuidhorn, Groningen. Met wat beschadiging aan de toppen van vier buitenste handpennen van de rechtervleugel en enkele ontbrekende staartpennen was er vanzelfsprekend aanleiding voor uitvoerige discussies op internetforums over de herkomst van de vogel. Indien aanvaard betreft het een nieuwe soort voor Nederland, de vijfde voor de WP en de eerste voor continentaal Europa. Van c 20 locaties kwamen meldingen van **Witoogeenden** *A nyroca*.

298 Amerikaanse Tafeleend / Redhead *Aythya americana*, adult mannetje, Zuidhorn, Groningen, 7 februari 2016 *(Alex Bos)*



299 IJsduiker / Great Northern Loon *Gavia immer*, eerste-winter, met Gevlekte Amerikaanse Rivierkreeft / Spinycheek Crayfish *Orconectes limosus*, Den Haag, Zuid-Holland, 12 januari 2016 *(Annelies 't Hooft)*

300 IJsduiker / Great Northern Loon *Gavia immer*, adult, West-Terschelling, Terschelling, Friesland, 10 februari 2016 *(Arie Ouwerkerk)*

Een hybride **Ringsnaveleend x Kuifeend** *A collaris x fuligula* zwom van 20 januari tot ten minste 28 februari langs de Afsluitdijk in de omgeving van Koarnwertersân (Kornwerderzand), Friesland. Het mannetje **Kleine Topper** *A affinis* dat vanaf 12 december in de omgeving van Den Oever verbleef, werd nog regelmatig gemeld tot 1 februari en opnieuw in maart. Een ander mannetje liet zich op enkele dagen tussen 23 januari en 27 februari aanschouwen op het IJsselmeer bij Andijk, Noord-Holland. Een mannetje **Blauwvleugeltaling** *Anas discors* verbleef van 10 tot 18 januari in de Rammelwaard langs de IJssel bij Voorst, Gelderland. Het mannetje **Amerikaanse Wintertaling** *A carolinensis* van de Brabantse Biesbosch, Noord-Brabant, liet zich op 10 januari weer eens zien en op 11 en 12 januari zwom een mannetje in de Ezumakeeg, Friesland.

DUIVEN TOT IBISSEN De overwinterende **Zomertortel** *Streptopelia turtur* bleef de gehele periode bij Strijensas, Zuid-Holland. Een half vergane **Roodsnavelkeerkringvogel** *Phaethon aethereus* werd op 17 januari opgeraapt van het strand op de noordpunt van Texel, Noord-Holland; indien aanvaard betreft dit een nieuwe soort. Een eerdere vondst op het strand van Egmond aan Zee, Noord-Holland, dateert van 27 januari 1985 maar dit geval is niet aanvaard op basis van de onderzochte maaginhoud, die resten bevatte van vissoorten die niet in de Noordzee voorkomen. Er werden relatief veel **Kraanvogels** *Grus grus* gezien, waaronder ruim 700 in januari over trektelposten in het oosten; doorgaans worden er in deze maand slechts enkele door trektellers gemeld. In totaal c 25 **IJsduikers** *Gavia immer* werden waargenomen, met op het Volkerak, Zuid-Holland, maar liefst vier adulte. Van 9 januari tot 6 februari was een erg tamme eerstejaars te bewonderen in de binnenstad van Den Haag, Zuid-Holland. Ook van diep uit het binnenland kwamen meldingen, bijvoorbeeld bij Heel, Limburg, bij Wijk bij Duurstede, Utrecht, en bij Bemmel, Gelderland. Leuk – zeker voor de tijd van het jaar – was een **Stormvogeltje** *Hydrobates pelagicus* dat op 15 januari langs Westkapelle, Zeeland, vloog. Trektellers langs de kust noteerden verder in totaal 11 **Noordse Stormvogels** *Fulmarus glacialis* en twee **Grauwe Pijlstormvogels** *Puffinus griseus*. Er werden opnieuw slechts enkele **Koereigers** *Bubulcus ibis* gemeld, waaronder één de gehele periode bij Luntershoek, Zeeland. **Zwarte Ibissen** *Plegadis falcinellus* werden weer voornamelijk op de bekende plekken waargenomen: bij Koedijk, Noord-Holland (maximaal twee), bij Nieuwkoop, Zuid-Holland (maximaal drie) en bij Vogelplas Starrevaart bij Leidschendam, Zuid-Holland (maximaal vier).

PLEVIEREN TOT STRANDLOPERS Een knappe ontdekking was die van een **Aziatische Goudplevier** *Pluvialis fulva* tussen Goudplevieren *P apricaria* vanaf 4 februari in de omgeving van Ouddorp en Goedereede op Goeree-Overflakkee, Zuid-Holland. Er waren voor deze winterperiode opmerkelijk veel **Morinelplevieren** *Charadrius morinellus*: van 8 tot 21 januari bij Zürich, Friesland; op 22 januari op Wieringen, Noord-Holland; van 22 januari tot 1 februari bij Middelburg, Zeeland; op 7 en 8 februari in de Brabantse Biesbosch; en op 12 februari bij Ouddorp. Een **Paarse Strandloper** *Calidris maritima* van 28 februari tot in maart bij Werkendam, Noord-Brabant, was de eerste voor de Biesbosch en voor zover bekend ook voor deze provincie. Een **Rosse Franjepoot** *Phalaropus fulicarius* werd op 18 januari gefotografeerd langs de Brouwersdam, Zuid-Holland. Mogelijk dezelfde **Kleine Geelpootruiter** *Tringa flavipes* als op 7 oktober 2015 in de polder nabij Camperduin bevond zich hier weer van 26 januari tot 27 februari. Een ander exemplaar bevond zich vanaf 22 februari bij Kerkwerve, Zeeland. Een **Grote Grijze Snip** *Limnodromus scolopaceus* werd op 11 januari gefotografeerd ten noorden van Joure, Friesland.

ALKEN TOT MEEUWEN Langs de kust werden c 10 vluchtige **Papegaaiduikers** *Fratercula arctica* en vier **Kleine Alken** *Alle alle* opgemerkt. De **Zwarte Zeekoeten** *Cepphus grylle* van zowel Neeltje Jans, Zeeland, als de Brouwersdam bleven tot in maart. Trektellers langs de kust gaven in totaal 18 **Kleine** *Stercorarius parasiticus*, 31 **Middelste** *S pomarinus* en 38 **Grote Jagers** *S skua* door. Er werden c acht **Kleine Burgemeesters** *Larus glaucoides* waargenomen, waaronder de bekende tweedewinter de gehele periode in Amsterdam, Noord-Holland (vanaf 29 februari soms vergezeld door een eerste-winter). Het vermelden waard is een eerste-winter van 10 tot 15 januari bij Stadskanaal, Groningen. Ditmaal waren **Grote Burgemeesters** *L hyperboreus* iets beter vertegenwoordigd dan Kleine, met c 15. De meeste bekijks trok een eerste-winter vanaf 10 januari in de haven van Scheveningen, Zuid-Holland. Ook in het binnenland waren Grote aanwezig, zoals van 8 tot 23 januari bij Wildervank, Groningen, en van 20 februari tot 1 maart bij Barneveld, Gelderland.

SPERWERS TOT VALKEN Vanaf telposten werden in februari in totaal 21 **Rode Wouwen** *Milvus milvus* doorgegeven. Een vroege **Zwarte Wouw** *M migrans* werd op 13 februari gefotografeerd boven Burgum (Bergum), Friesland. De eerste overwinterende **Steppekiekendief** *Circus macrourus* was een eerstejaars mannetje vanaf ten minste 19 januari tot in maart in de Onlanden bij Peize, Drenthe. De **Arendbuizerd** *Buteo rufinus* verbleef de gehele periode op de Tweede Maasvlakte, Zuid-Holland. Een vermoedelijke eerstejaars **Toendraslechtvalk** *Falco peregrinus calidus* bij Callantsoog, Noord-Holland, trok de gehele periode de nodige bekijks.

KRAAIEN TOT WATERSPREEUWEN **Bonte Kraaien** *Corvus cornix* bleven schaars, met alleen in en rond het Lauwersmeergebied, Groningen, hogere aantallen bijeen (maximaal negen). Een veelbezocht exemplaar bevond zich bij Hoek van Holland, Zuid-Holland. Twee van de drie **Boerenzwaluwen** *Hirundo rustica* in Huizen, Noord-Holland, bleven tot 4 januari. Van een vijftal plekken in Zeeland kwamen meldingen tot 1 februari. **Huiszwaluwen** *Delichon urbicum* werden gemeld in Zeeland in de omgeving van Wissenkerke op 10 januari en nabij Terneuzen op 11 januari. Een overwinterende **Bladkoning** *Phylloscopus inornatus* bleef tot in maart in Gouda,

301 Dwerggors / Little Bunting *Emberiza pusilla*, Wijnjeterperschar, Friesland, 8 februari 2016 *(Enno B Ebels)* **302** Steppekiekendief / Pallid Harrier *Circus macrourus*, tweede-kalenderjaar mannetje, Onlanden, Drenthe, 25 februari 2016 *(Wim van Zwieten)* **303** Bladkoning / Yellow-browed Warbler *Phylloscopus inornatus*, Gouda, Zuid-Holland, 6 maart 2016 *(Jan den Hertog)* **304** Kleine Geelpootruiter / Lesser Yellowlegs *Tringa flavipes*, tweede-kalenderjaar, Camperduin, Noord-Holland, 11 februari 2016 *(Eric Menkveld)*

Zuid-Holland. Een **Humes Bladkoning** *P humei* bevond zich van 3 tot 28 januari bij Cadzand-Bad, Zeeland. Een **Bruine Boszanger** *P fuscatus* verbleef van 15 januari tot 17 februari bij Enschede, Overijssel. Er was een 10-tal meldingen van **Siberische Tjiftjaffen** *P tristis*. Een mogelijke **Humes Braamsluiper** *Sylvia althaea* overwinterde in een tuin op een niet nader bekend gemaakte plek in Zuid-Holland. Van 9 januari tot 6 februari liet een **Pestvogel** *Bombycilla garrulus* zich bekijken in Havelte, Drenthe. Van een 10-tal andere plaatsen kwamen ook meldingen. Er werden opmerkelijk veel **Taigaboomkruipers** *Certhia familiaris familiaris* doorgegeven, waaronder die van 2 januari tot 21 februari in Castricum, Noord-Holland; van 31 januari tot 23 februari bij Ferwert, Friesland (maximaal twee); en vanaf 12 februari bij Alblasserdam, Zuid-Holland (ten minste drie). **Zwartbuikwaterspreeuwen** *Cinclus cinclus cinclus* bleven tot 1 januari in de Amsterdamse Waterleidingduinen bij Zandvoort, Noord-Holland, en tot 9 maart bij Zutphen, Gelderland.

VLIEGENVANGERS Van een handvol plekken kwamen nog meldingen van (mogelijke) **IJslandse Koperwieken** *Turdus iliacus coburni*. Spectaculair nieuws kwam op 15 januari uit Hoogwoud, Noord-Holland, waar op dat moment al enkele dagen een eerste-winter mannetje **Roodkeelnachtegaal** *Calliope calliope* een achtertuin bezocht. Nadat het adres bekend werd, konden vele toegestroomde vogelaars hem de volgende ochtend tegen een vergoeding van vijf euro per persoon vanuit de woonkamer bewonderen. De vogel bleef de rest van de periode en liet zich geleidelijk aan ook steeds vaker vanaf de openbare weg bekijken en begon na enige tijd ook te zingen. Indien aanvaard betreft het een nieuwe soort voor Nederland. Het overwinterende **Paapje** *Saxicola rubetra* bleef de gehele periode bij Arcen, Limburg,

305 Roodkeelnachtegaal / Siberian Rubythroat *Calliope calliope*, tweede-kalenderjaar mannetje, Hoogwoud, Noord-Holland, 28 februari 2016 *(Alex Bos)*

306 Roodkeelnachtegaal / Siberian Rubythroat *Calliope calliope*, tweede-kalenderjaar mannetje, Hoogwoud, Noord-Holland, 14 februari 2016 *(Mark van der Capellen)*

307 Taigaboomkruiper / Eurasian Treecreeper *Certhia familiaris familiaris*, Castricum, Noord-Holland, 3 januari 2016 *(Eric Menkveld)*

308 Vermoedelijke Toendraslechtvalk / presumed Tundra Peregrine Falcon *Falco peregrinus calidus*, tweede-kalenderjaar, Callantsoog, Noord-Holland, 8 januari 2016 *(Eric Menkveld)*

en een ander exemplaar werd op 20 januari gefotografeerd in het Markiezaat bij Bergen op Zoom, Noord-Brabant.

PIEPERS TOT GORZEN **Grote Piepers** *Anthus richardi* vertoonden zich op 3 januari bij Huizen, van 8 tot 10 januari bij Colijnsplaat, Zeeland, en vanaf 16 februari bij Goedereede. Op c acht plekken verbleven **Europese Kanaries** *Serinus serinus*, waaronder populaire vogels bij Herkingen, Zuid-Holland (maximaal vijf), en Wageningen, Gelderland (maximaal vier). Waarnemingen van **Grauwe Gorzen** *Emberiza calandra* kwamen bijna traditiegetrouw alleen uit Limburg (maximaal 29 op 8 januari bij Doenrade) en uit Zeeuws-Vlaanderen, Zeeland (maximaal twee). Het eerste-winter vrouwtje **Witkopgors** *E leucocephalos* verbleef de gehele periode bij Wilhelminadorp, Zeeland. **Dwerggorzen** *E pusilla* waren goed vertegenwoordigd, met waarnemingen op 1 januari op Schiermonnikoog, Friesland; van 2 januari tot 19 februari bij Battenoord, Zuid-Holland; en van 3 februari tot in maart bij Wijnjewoude, Friesland.

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