

Identification of White-headed Long-tailed Bushtit and occurrence in the Netherlands

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White-headed Long-tailed Bushtit *Aegithalos caudatus caudatus* (hereafter *caudatus*) has been reported more or less annually in the Netherlands since many years. It has never been considered by the Dutch rarities committee (CDNA) and reports are rarely documented by descriptions or photographs. Moreover, van den Berg & Bosman (2001) mention only two invasion years in northern Europe during which flocks reportedly reached the Netherlands (1973 and 1992; but see below), and they state that individuals with a white head not belonging to *caudatus* may occur in flocks of Central European Long-tailed Bushtits *A. c. europaeus* (hereafter *europaeus*). This statement indicates that the identification of *caudatus* can be problematic. The ambiguous position of *caudatus* on the Dutch list (too 'common' to be considered, too 'rare' to produce many well-documented records) was reason for us to investigate the identification criteria by which it can be safely distinguished from *europaeus* with white heads (which are often assumed to have intermediate features as a result of intergradation). On basis of these criteria, we set ourselves to the task to re-evaluate all traceable reports of *caudatus* in the Netherlands. To reach this goal, we consulted literature, studied specimens in museum collections and investigated old reports. Furthermore, we received information on reports of (presumed) *caudatus* from a number of observers.

Long-tailed Bushtit subspecies groups

Long-tailed Bushtit is a widespread Palearctic species breeding in a continuous zone from Ireland in the west to Japan in the east. Four subspecies groups (with a total of 19 subspecies) are recognized (Harrap & Quinn 1996), of which the first three occur (partly) in the WP: the *caudatus* group (one subspecies); the *europaeus* group (including *rosaceus*, *aremoricus*, *taiti*, *europaeus*, *macedonicus*, *tauricus*, *magnus*, *trivirgatus* and *kisuiensis*); the *alpinus* group (including *irbii*, *italiae*, *siculus*, *tephronotus*, *major*, *alpinus* and *passekii*); and the *glaucoocularis* group (including *glaucoocularis* and *vinaceus*). The *alpinus* and *europaeus* groups together are often referred to as Southern Long-tailed Bushtit while the striking Sicilian Long-tailed Bushtit *A. c. siculus* is sometimes treated as a 'special' taxon (cf van den Berg 2008). As stated in Harrap & Quinn (1996) and Small (2004): 'In regions where the groups meet, there are extensive areas occupied by very variable populations of 'hybrids'. These areas of hybridization (and, probably, the whole range of the *europaeus* group) are zones of secondary

intergradation, where two populations have met relatively recently'. Indeed, intergradation can be found in both *caudatus* and *europaeus* and the intergrades are highly variable. This high level of intergradation between the groups clouds the taxonomic position of the different groups but it is noteworthy to mention that according to some authors *caudatus* is probably best treated as a separate species (Evans 2004, cf Small 2004).

Type localities of *caudatus* and *europaeus*

From the type localities designated by Linnaeus for *caudatus* as 'Sweden' in 1758 and by Hermann for *europaeus* as 'Basel, Switzerland' in 1804, the type specimens no longer exist. However, specimens collected at or near these type localities can be found in some collections and these were studied.

Distribution of *caudatus* and intermediates with *europaeus*

Caudatus inhabits Fennoscandia (Denmark (mixed breeding with *europaeus*; Rolf Christensen in litt, Klaus Malling Olsen in litt), Finland (up to Ivalo, northern Lapland; Dick Forsman in litt), Norway (up to Saltfjord; Haftorn 1971) and Sweden (Ojanen & Orell 1982)); continental Europe (Estonia, northern Germany (mixed breeding with *europaeus* in many areas), Kazakhstan, Latvia, Lithuania, Moldavia, Poland (also mixed breeding with *europaeus*), Russia and Ukraine (Dementiev & Gladkov 1970)); and the Far East (China, as far south as Beidahei, Hebei province (Williams 2000), Japan (Hokkaido, Rebun-to, Rishiri-to and Yezo; Swinhoe 1874, Vorobiev 1954, Gore & Won 1971), Mongolia, North Korea and Russia (including the southern Kurile Islands) (Cramp & Perrins 1993)). As a straggler, *caudatus* has been recorded in, for instance, Greece (Handrinos & Akriotis 1997) and Italy (eg, at Pejo, Dolomites, Italy, on 4 April 1997; Stefano Fantini in litt). *Caudatus* is still expanding to the south and now occurs south of the range indicated in Glutz von Blotzheim & Bauer (1993) and Cramp & Perrins (1993) in, for instance, China, where birds turned up in the Ili area, Xingjian (Ma Ming 2001, Ma Ming in litt); Kazakhstan, where it can be found in the Dzhungarskiy Alatau and at the Charyn river valley, Dzhabagly, in the Talasskiy Alatau (Gavrilov 1999, Wassink & Orel 2007; Sergey Sklyarenko in litt); Kyrgyzstan, where two birds were noted at Barskaun Gorge, Issyk Kul, on 14 April 2003; Michael Westerbjerg Andersen in litt); and northern South Korea (eg, at Seoul and on Socheong Island; Nial Moores in litt).



FIGURE 1 Long-tailed Bushtits / Staartmezen *Aegithalos caudatus* (Szabolcs Kókey). **1** *europaeus*, **2** *caudatus*. Both birds closely matching description of type specimens of both subspecies.

FIGURE 2 Central European Long-tailed Bushtits / Staartmezen *Aegithalos caudatus europaeus* (Szabolcs Kókey). **1** note faint band running from forehead over eye and nape. **2** note scattered darker feathers on head and not sharply defined neck-band. **3** note some dark feathers on nape and clearly visible indication of breast-band. Tertiaries in this bird showing prominent white outer web. **4** typical *europaeus* but lacking breast-band and showing dark streak on flank. **5** note small darkish spot above eye, otherwise strongly matching *caudatus* in plumage. **6** bird showing some brownish feathers at edge of neck-band rather than black feathers, rendering neck-band not sharply defined. Tertiaries in this bird showing prominent dark inner web.



Europaeus showing white heads have been found breeding in Austria (Brader & Auberecht 2003); Belgium (Justin Jansen pers obs); Bosnia & Herzegovina (specimens at various museums); Croatia (specimens at various museums); the Czech Republic (Kren 2000); Denmark (Brandt 1974, Harrap & Quinn 1996); France (Jouard 1929, Olioso 1997); Germany (eg, Brehm 1831, Gebhart & Sunkel 1954, Schmidt 1954, Mildenerger 1984, Wüst 1986, Schmidt & Wolf Colmorgen 1990, Steffens et al 1998); Hungary (Istvan Katona in litt); northern Italy (specimens in various museums); Liechtenstein (Schmid et al 1998); Luxembourg (Melchior et al 1987); Macedonia (Makatsch 1950); the Netherlands (eg, Voous 1968, 1972, van Santen & Rense 1970, van Dijken 1997); Poland (Bogucki 1959, Tomialojć & Stawarczyk 2003); Romania (Harrap & Quinn 1996); Serbia & Montenegro (Rašajski 2004); Slovakia (specimens in various museums); Sweden (Gotland; Källander 1978, Ullman 1989, Thor Veen in litt); Switzerland (Schmid et al 1998); Turkey (Roselaar 1995, Guy Kirwan in litt) and Ukraine (Harrap & Quinn 1996). Probably, white-headed ('intermediate') birds may also occasionally breed in Albania, Bulgaria and Greece but no proof has yet been published.

Movements, wintering and vagrancy of *caudatus* and *europaeus*

Caudatus shows dispersive movements and, in some years, individuals are found outside the breeding range. Invasions into north-western Europe have an eastern origin (Durango 1941, Svårdson 1957, Ehrenroth 1976) and some large ones have occurred. For instance, at the Ventes Ragas ringing station, Silute, Lithuania, several invasions have been noted; in normal years, only a few 10s of Long-tailed Bushtits (almost 100% *caudatus*) are trapped here but in 1985 (5754 individuals), 1986 (7893), 1996 (4416), 2000 (15 428), 2001 (5374) and 2003 (4470) the numbers were much higher than usual and, in total, no less than 70 935 have been trapped here in 1984-2003 (Vytautas Jusys in litt). At Rybachy, Russia, 16 571 individuals were trapped in 1956-97 with peaks in the same years as at Ventes Ragas. In 1973, a mass irruption occurred in northern Europe from mid-September (Hildén 1977). How far and quickly some birds can move is illustrated by a *caudatus* ringed at Rybachy, Murmansk, Russia (the northernmost part of continental European Russia) on 11 October 1958 which was retrapped eight days later at Falsterbo, Skåne, Sweden (c 500 km to the west; Pevskii 1973, Ehrenroth 1976). Some *caudatus* cover even larger distances. For example, a bird ringed at Kardon Lebedyanskiy (56:16 N, 47:18 E), Cheboksry, Chyrvach, Russia, on 25 June 2000 and retrapped in Lithuania at Ventes Ragas (55:21 N, 21:13 E) on 7 October 2000 had covered 1623 km in 104 days (Vytautas Jusys in litt).

Based on information from the Belgian and Swiss ringing centres, most *europaeus* are largely sedentary with movements of only up to 140 km. In some years, however, *europaeus* shows dispersive movements as well and can turn up far outside the breeding range, seemingly in all directions. Some move westwards (as

most *caudatus* do), as demonstrated by three birds ringed at Willebroek, Antwerpen, Belgium, on 10 October 2001 and retrapped at Walton-on-the-Naze, Essex, England, on 21 October 2001 (231 km) (the late Alphons Willemsen in litt). The c 200 seen at Happisburgh, Norfolk, England, on 31 October 1971 were most likely of continental origin as well (Brown & Grice 2005). Others move to the south-east. For instance, a bird ringed in Belgium on 2 March 1936 was found on Chios, Greece, on 2 November 1937 (c 2700 km), the furthest ringing recovery of any Long-tailed Bushtit (Handrinos & Akriotis 1997). There are also movements to the east as, for instance, noted in Poland every winter (Tomialojć & Stawarczyk 2003). In Lithuania, *europaeus* has been trapped at Ventes Ragas with, for instance, 15 individuals in 2000, 11 in 2001 and 15 in 2003 (Vytautas Jusys in litt). A south-eastward migration was also noted in a bird (presumably of subspecies *A c rosaceus* but possibly a 'returning' *europaeus*) ringed at Happisburgh, Norfolk, on 22 October 1983 and retrapped 205 km south-southeast at De Panne, West-Vlaanderen, Belgium, on 8 September 1984 (Mead & Hudson 1985, Herroelen 1991, Cramp & Perrins 1993).

As a vagrant, *europaeus* has been recorded in Estonia (a few birds trapped at Sörve bird observatory; Estonian Birding Society in litt); Finland (Helle et al 1976, Dick Forsman in litt, Antero Lindholm in litt); Norway (Folkestad 1974, Alf Tore Mjøs in litt); Russia (Shapoval 1989); and Ukraine (Wayne Scott in litt). In most countries, the number of sightings of intermediate birds is increasing. Also, there are sight records in Scotland, with a few in Orkney (Booth et al 1984) and six in Shetland (Pennington et al 2004).

Comparison of characters of *caudatus* and *europaeus*

In 2003-08, as part of a wider study on Long-tailed Bushtit subspecies, Justin Jansen examined specimens at the Institute of Zoology, Almaty, Kazakhstan (IZA); Natural History Museum, Tring, England (NHM); Nationaal Natuurhistorisch Museum Naturalis, Leiden, the Netherlands (NNM); University Museum of Zoology Cambridge, Cambridge, England (UMZC); Manchester Museum, University of Manchester, Manchester, England (MMUM); Muséum National d'Histoire Naturelle, Paris, France (MNHM); Oxford University Museum of Natural History, Oxford, England (OMNH); Zoologisch Museum Amsterdam, Amsterdam, the Netherlands (ZMA); and Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany (ZFMK). Additional information was received from the Institute of Zoology of the Academy of Sciences of the Republic of Armenia, Yerevan, Armenia (IZAC); Staatliches Museum für Naturkunde, Stuttgart, Germany (SMNS); Naturhistorisches Museum der Burggemeinde Bern, Bern, Switzerland (NMBE); and Zoological Museum of Moscow State University, Moscow, Russia (ZMUM).

For this paper specifically, JJ examined 235 individuals of *caudatus* and 415 of *europaeus*, both specimens in museums as well as from photographs taken in the respective breeding areas with localities noted by the photographers, to check their identification features.



358 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, female (collected at Leiden, Zuid-Holland, Netherlands, on 1 November 1859; RMNH 130.852), Nationaal Natuurhistorisch Museum/Naturalis, Leiden, 27 January 2006 (Justin J F Jansen). Note that this specimen was labelled as *europaeus*. However, it shows all characters of *caudatus*, the dark smudges on the head being dirt. **359** White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus* (collected at Stockholm, Sweden, without date; ZMA 41027), Zoologisch Museum Amsterdam, Amsterdam, Noord-Holland, Netherlands, 6 March 2003 (Maarten-Pieter Lantsheer). Note dark tertials with very limited pale fringes, indicating variability of this character in this taxon.

Only adult-type birds were taken into account, ie, adult birds and first-year birds that, from September onwards, had finished their (complete) post-juvenile moult (cf Svensson 1992). Identification in non-adult plumage, if possible at all, is beyond the scope of this paper. Excluded from the research were partially white birds (like, for instance, a bird observed in the autumn of 2003 at Stiffkey, Norfolk, England, with a white head, white tail and other anomalous white patches; Richard Millington in litt).

The variation in *europaeus* was notable when examining birds from the type locality area in Switzerland,

ranging from white-headed individuals to the ‘classic’ ones depicted in well-known field guides (eg, Jonsson (1992) and Svensson et al (1999)). Variation appeared more limited in *caudatus* during examination of birds from the type locality ‘Sweden’.

Head

The head of *caudatus* is all white. This all-white head is the sole feature that is conclusive to separate *caudatus* from *europaeus*. The statement in Kehoe (2006) that ‘... some pure *caudatus* do show some faint grey streaking on the head-sides behind the eye’ was not confirmed by

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360 Central European Long-tailed Bushtits / Staartmezen *Aegithalos caudatus europaeus* (collected at Leiden, Zuid-Holland, Netherlands), Nationaal Natuurhistorisch Museum/Naturalis, Leiden, 8 January 2006 (Justin J F J Jansen). From left to right: male, 5 February 1880; sex unknown, 26 January 1879; male, 7 January 1875; male, 5 March 1874; male, 17 December 1873; male, 14 December 1873; male, 25 January 1869; male, 14 December 1862; male, 23 March 1860; and female, 1 September 1859. Note variation in amount of white on head.

361 White-headed Long-tailed Bushtits / Witkopstaartmezen *Aegithalos caudatus caudatus*, Nationaal Natuurhistorisch Museum/Naturalis, Leiden, 8 January 2006 (Justin J F J Jansen). From left to right: male, collected at Hefanesti, Romania, on 20 February 1908; female, collected at Tarbagatai, south of Tomsk, Russia, on 23 December 1913; male, collected at Tarbagatai on 1 March 1914; and male, collected at Bielefeld, Nordrhein-Westfalen, Germany, in 1893. Note strong variation in tertiaries coloration.

362 Central European Long-tailed Bushtits / Staartmezen *Aegithalos caudatus europaeus*, Nationaal Natuurhistorisch Museum/Naturalis, Leiden, Zuid-Holland, Netherlands, 24 August 2005 (Justin J F J Jansen). From left to right: male, collected at Nuenen, Noord-Brabant, Netherlands, on 16 December 1911; male collected at Nuenen on 27 December 1911; collected at Wassenaar, Zuid-Holland, the Netherlands, on 11 February 1912; female collected at Nuenen on 9 December 1911; male collected at Woensel, Noord-Brabant, on 20 January 1919; male collected at Woensel on 10 June 1919. Note variation in tertiaries coloration.

our research. This all-white head and the sharply defined black neck-band on the nape and the upper mantle give *caudatus* a contrasting appearance. However, the sharply defined neck-band can also be found in some *europaeus*. The width of the neck-band varies in both subspecies. *europaeus* and other subspecies show a more or less pronounced lateral crown-stripe or remnants of this crown-stripe, especially behind the eye. A small percentage of *europaeus* are white-headed (probably c 2% in the Netherlands; this estimation being based on the fact that, up to July 2008, 15 449 sightings of *europaeus* have been uploaded on www.waarneming.nl and 366 'intermediates'). Some white-headed *europaeus* closely resemble *caudatus* but, upon close examination, a variable amount of dark mottling can be found. In

these individuals, the brownish to blackish mottling can be reduced to remnants of the lateral crown-stripes. The mottling varies throughout the whole range of *europaeus* (cf figure 2). When young birds are moulting their body-feathers in August-September, some black head-feathers can still be present (in both subspecies). From November onwards, no *caudatus* shows any dark mottling and a bird with some dark mottling on the head should be identified as an intermediate.

Breast-band

According to Harrap & Quinn (1996), *caudatus* usually lacks a (vague) breast-band. In our experience, however, *caudatus* never shows (even an indication of) a breast-band. In *europaeus* and other subspecies of the *alpinus*/



363 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, adult, Hanko, Hailas, Finland, 1 October 2004 (*Kari Soilevaara*). Note dark tertials.



364 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, Helgoland, Schleswig-Holstein, Germany, 12 October 2007 (*René van Rossum*). Classic nominate *caudatus*.

europaeus groups, like *aremoricus*, *macedonicus*, *rosaceus* and *italiae*, a breast-band is usually present. As many intermediate birds also lack a breast-band, it is not a reliable feature to separate *caudatus*.

Underparts

Compared with the average *europaeus*, *caudatus* may have clearer white underparts and a soft pinkish wash from the lower-breast towards the undertail-coverts, with the darkest parts on the undertail-coverts (cf Cramp & Perrins 1993), but some intermediate birds can also show this feature. Most intermediates show similar white underparts but the darker pinkish wash (clearer marked and sometimes with darker pinkish spots) and dark feathers (streaking) on the flanks and, most of all, the lack of an all-white head reveal their identity. An example of an intermediate that could not be separated from pure *caudatus* by its underparts coloration concerns a specimen at ZMFK collected at Mietingen, Baden-Württemberg, Germany, on 15 October 1929. This bird is white on its lower-breast and shows a whitish-pink coloration on its vent and undertail-coverts similar to *caudatus* but shows mottling on the head that reveals its identity as an intermediate.

Scapulars

Cramp & Perrins (1993) and Glutz von Blotzheim &

Bauer (1993) mention that the pink scapulars and pinkish rump are paler in *caudatus* than in *europaeus*. However, this feature varies and should therefore not be regarded as diagnostic.

Tertials, secondaries and greater coverts

A difference in the conspicuousness of the white margins on the tertials, secondaries and greater coverts is often quoted as a supportive character to separate *caudatus* and *europaeus*. Cramp & Perrins (1993) state: 'Strikingly whiter margins to tertials and secondaries, and tips to inner greater coverts white enough to form partial wing-bar', and Harrap & Quinn (1996) state: 'tertial and secondary fringes average broader, and dark in tertials sometimes reduced to a shaft streak, although tertials are usually dark on the inner web'. However, some *europaeus*, notably those with white heads, also show these broader and whiter fringes. On the other hand, some *caudatus* can show dark tertials with a narrow white fringe like, for instance, a specimen at ZMA collected at Liden, Lithuania, on 29 November 1902 (ZMA 40993). Some intermediate birds, like a specimen at NNM collected at Zoeterwoude, Zuid-Holland, the Netherlands, on 16 October 1916 (RMNH 130.747), have almost completely white tertials. Others show rather dark tertials with only a narrow white margin (see plate 359, 361-362). The tertials of '*sibiricus*' (included in *caudatus*) are



365 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, Makkum, Friesland, Netherlands, 29 November 2003 (Bas van den Boogaard)

variably coloured. According to Cramp & Perrins (1993), '*sibiricus*' has whiter tertials than *caudatus*. However, many *caudatus* from Fennoscandia also show much white on the tertials. It can be concluded that the amount of white on the tertials is not a reliable feature in itself but can be used as a supportive character.

Measurements

On average, female *caudatus* is longer tailed than female *europaeus* (the tail length in female *caudatus* is 87-99 mm and in female *europaeus* 80-91.5 mm); in males, the tail length of *caudatus* is 88-100 mm and of *europaeus* 84-99 mm (Witherby et al 1938, Cramp & Perrins 1993). So, in principle, some may be identified by tail measurements. However, it has not been specified whether measurements of intermediate birds were taken into account. There are no significant differences in wing length between *caudatus* and *europaeus*. The wing measurements largely overlap (male *caudatus* 64-67 mm, male *europaeus* 60-67 mm, female *caudatus* 58-67 mm, female *europaeus* 56-65 mm; Witherby et al 1938, Cramp & Perrins 1993). According to Naumann (1824), *caudatus* is smaller billed than *europaeus*. However, measurements (eg, Witherby et al 1938, Cramp & Perrins 1993, own measurements) show that there are no significant differences in bill size between *caudatus* and *europaeus*.

Vocalizations

According to van Marle et al (1973), there are vocal differences between *caudatus* and *europaeus*. So far, this has not been supported by vocal research (Arnoud van den Berg pers comm). In South Korea, some differences in vocalizations between *caudatus* and the local subspecies *magnus* have been reported (Mathias Ritchard in litt, Magnus Robb in litt) but these have not yet been analyzed.

Status of *caudatus* in the Netherlands

For the Netherlands, we examined the submitted photographs and descriptions received via requests on the Internet and in Dutch Birding (26: 125, 2004), as well as published records. These included photographs of (presumed) *caudatus* (or of presumed intermediate birds) published on national and regional websites, such as www.avifaunagroningen.nl, www.birdpix.nl, www.dutchbirding.nl and www.waarneming.nl. Additional information was asked where possible, if records were published and the observer(s) could be traced. The results cover 1800-2007 and deal only with the question whether or not the record was documented well enough to exclude white-headed *europaeus*. Subsequently, this led to the rejection of several records of which the documentation was regarded as insufficient or absent; 15 *caudatus* records appeared to be well documented, involving 56 individuals (see table 1). These 15 records were supported by a specimen or convincing photographs, and the all-white head could be established beyond doubt. The intriguing report of c 200 birds at Landgoed Groeneveld, Baarn, Utrecht, on 19 December 1971 (Voous 1972) is insufficiently documented and therefore not included. A bird found (already long) dead at Termunten, Groningen, on 2 February 1993 that had been ringed at Galenbecker See, Mecklenburg-Vorpommern, Germany, on 25 October 1992 might have been a *caudatus* but unfortunately its subspecific identity was not established at the time of ringing (Dierschke 1994, Jochen Dierschke in litt). A bird depicted in Thijsse (1906) clearly shows a white-headed *europaeus*, as some mottling on the head is visible. There has been a number of other reports that may refer to *caudatus* (such as several flocks in October 1992; cf van den Berg & Bosman 1999, 2001, Bijlsma et al 2001) but these could not be considered because of the lack of documentation.

The fact that only two (15 individuals) of the 15 records refer to trapped birds indicates that *caudatus* is genuinely rare amongst the large numbers of Long-tailed Bushtits ringed each year in the Netherlands (in 1911-2000, 36 927 individuals have been ringed of which 42 were reported as *caudatus* ('Noordelijke Staartmees') but most of these *caudatus* were not documented and in cases when there was some form of documentation, many appeared to concern white-headed *europaeus*; see www.vogeltrekstation.nl/ohv/094/05-ringverslag_nr85.pdf). On the other hand, there are also trapped and ringed individuals that may have concerned true *caudatus* without being reported as such (eg, one at Kamperhoek, Flevoland, on 16 April 2005 and a group of 11 birds on



366 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus* (right), with Central European Long-tailed Bushtit / Staartmees *A. c. europaeus*, Oostvaardersdijk, Lelystad, Flevoland, Netherlands, 7 January 2002 (*Kees Breek*) **367** White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, Kop Afsluitdijk, Friesland, Netherlands, 25 October 2003 (*Jan Hendriksma*) **368** White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, Arnhem, Gelderland, Netherlands, 27 February 2004 (*Rik Winters*) **369** White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, Katwijk aan Zee, Zuid-Holland, Netherlands, 6 February 2004 (*Menno van Duijn*)

Schiernonnikoog, Friesland, on 19 November 2005; Henri Bouwmeester in litt; www.ringstationkamperhoek.ampe.nl) but these also lack detailed documentation (only poor quality photographs) to safely establish the subspecific identity.

Status of *caudatus* elsewhere in north-western Europe

The status of *caudatus* in many European countries is unclear for the same reasons as why it has been in the Netherlands (by a lack of proper documentation, absence of clear identification criteria, no consideration by rarities committees). For Belgium and Britain, some information is presented here.

In Belgium, none of the 12 reports before 2004 is documented (Gunter De Smet in litt). After 2004, there has been a number of reports including some with good

documentation and it is assumed that *caudatus* reaches Belgium in some years (Carlo van der Rijdt in litt). The subspecies is not considered by the Flemish and Wallonian rarities committees.

Kehoe (2006) gave the following summary of the status of *caudatus* in Britain: 'The BBRC [British rarities committee] has not previously assessed claims of vagrant Long-tailed Tits but we now propose to consider reports of white-headed *caudatus*. We also welcome images of birds approaching, but not quite matching, the typical appearance of *caudatus*, and details of ringing recoveries that indicate the occurrence of other races. 'Northern Long-tailed Tit' is on the British List and, although its occurrence has not been closely monitored, it seems genuinely rare (with perhaps fewer than 30 British records), although prone to occasional small invasions.'

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TABLE 1 Records documented by specimen or photographs of White-headed Long-tailed Bushtit *Aegithalos caudatus caudatus* in the Netherlands in 1800-2007 / gevallen gedocumenteerd met balg of foto's van Witkopstaartmees *Aegithalos caudatus caudatus* in Nederland in 1800-2007

<p>1 1 November 1859, <i>Leiden</i>, Zuid-Holland, female, collected (collection NNM; RMNH 130.852) (Adriaan van Bemmelen; cf Ebels & Jansen 2004; plate 358)</p> <p>2 7 January 2002, Oostvaardersdijk, <i>Lelystad</i>, Flevoland, 12, trapped, photographed (Kees Breek; plate 366)</p> <p>3 25 October 2003, Kop Afsluitdijk, <i>Wûnseradiel</i>, Friesland, three, trapped, photographed (Jan Hendriksma; plate 367)</p> <p>4 29 November 2003 to 18 January 2004, Makkum, <i>Wûnseradiel</i>, Friesland, six, photographed (Sietze Bernardus et al; photographs in Ebels & Jansen 2004)</p> <p>5 18 January to 5 February 2004, Matendonk, <i>Apeldoorn</i>, Gelderland, photographed (Gerrit van Ooijen)</p> <p>6 5-9 February 2004, Katwijk aan Zee, <i>Katwijk</i>, Zuid-Holland, two, photographed (Menno van Duijn, Maarten Wielstra et al; plate 369)</p> <p>7 25-29 February 2004, De Laar West, <i>Arnhem</i>, Gelderland, two, photographed (Robert Keizer, Rik Winters et al; plate 368)</p> <p>8 29 February 2004, Dahliastraat, <i>Enschede</i>, Overijssel, photographed (Carl Derks)</p> <p>9 14 March 2004, Hemmeland, Monnickendam,</p>	<p><i>Waterland</i>, Noord-Holland, photographed (Henk J Eijgenraam; photographs on http://waarneming.nl/foto_details.php?id=2730 and -2731)</p> <p>10 31 March 2005 to 19 April 2005, Nijlände, Eldersloo, <i>Aa en Hunze</i>, Drenthe, four, photographed (Klaas van Haeringen; photographs on http://waarneming.nl/foto_details.php?id=2060,-2061 and -2062)</p> <p>11 21 October 2005, Rottumerplaat, <i>Eemsmond</i>, Groningen, 19, photographed (Erwin Goutbeek; photograph on www.dutchbirding.nl and www.avifaunagroningen.nl)</p> <p>12 23 December 2005, Hoornse Meer, <i>Groningen</i>, Groningen, photographed (Martijn Bot; photographs on www.dutchbirding.nl and www.avifaunagroningen.nl)</p> <p>13 21 February 2006, <i>Den Haag</i>, Zuid-Holland, photographed (John van de Graaf; photograph on www.dutchbirding.nl and www.vwgdenhaag.nl/verslagen/waarnemingen_06.htm)</p> <p>14 14 October 2007, De Cocksdorp, <i>Texel</i>, Noord-Holland, photographed (Willem van Rijswijk; photographs on www.dutchbirding.nl)</p> <p>15 19 October 2007, Wehl, <i>Doetinchem</i>, Gelderland, photographed (Bennie Teunissen; photograph on www.dutchbirding.nl)</p>
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In most cases, identification is straightforward, as classic white-headed *caudatus* is a striking and beautiful bird. However, as well as the possible pitfall of a leucistic or otherwise aberrant local bird, intergrades should be borne in mind (*caudatus* interbreeds freely with the central European *europaeus* across a narrow band from Denmark eastwards and these intergrades could poten-

tially occur in Britain). Key identification features include head pattern (although some pure *caudatus* do show some faint grey streaking on the head-sides behind the eye), tertial pattern (the precise extent of white on each feather), and the colour of the underparts. In Britain, only three out of 27 reports listed in Evans (2004) appear to be well documented: **1** one picked up dead at

370 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, Den Haag, Zuid-Holland, 21 February 2006 (*John van de Graaf*)



371 White-headed Long-tailed Bushtit / Witkopstaartmees *Aegithalos caudatus caudatus*, adult, Suomenoja, Espoo, Finland, 19 September 2004 (*Jussi Vakkala*)





372 Central European Long-tailed Bushtit / Staartmees *Aegithalos caudatus europaeus*, Leiden, Zuid-Holland, Netherlands, 8 March 2007 (*Herman Berkhoudt*). Intermediate bird. Note limited dark streaking behind eye and indication of breast-band, indicating *europaeus*. Sharply defined black neck-band more typical for *caudatus*.
373 Central European Long-tailed Bushtit / Staartmees *Aegithalos caudatus europaeus*, adult, Melven, Veghel, Noord-Brabant, Netherlands, 14 March 2008 (*Toy Janssen*). Intermediate bird. Head looking almost pure white but still showing some darker spots; black neck-band not sharply defined.





374 Central European Long-tailed Bushtit / Staartmees *Aegithalos caudatus europaeus*, Leiden, Zuid-Holland, Netherlands, 8 March 2007 (*Herman Berkhoudt*). Same bird as plate 372. Note whitish tertials more typical of *caudatus*.



375 Central European Long-tailed Bushtit / Staartmees *Aegithalos caudatus europaeus*, Stuw Hankate Hellendoorn, Overijssel, Netherlands, 28 March 2008 (*Gerrit Schepers*). Intermediate bird. Note brownish spot on neck-side and scattered darker spots on crown and nape.

Tynemouth, Northumberland, in November 1852, now at Hancock Museum (Witherby et al 1938, Galloway & Meek 1978); **2** up to six birds at Westleton Heath and Minsmere RSPB Reserve, Suffolk, from 25 January to 25 February 2004 (Small 2004); and **3** up to three birds at Lewes, Sussex, from 26 January to 17 February 2004 (Cooper et al 2004, Evans 2004). Photographs support the latter two records.

Conclusions

The identification criteria presented in this paper set a new standard by which old and new sightings of *caudatus* can be evaluated and its status as vagrant determined. The taxon's only diagnostic character is the all-white head. Supportive or indicative (but not diagnostic) characters are: **1** whiter underparts than *europaeus*, with the pink most clearly defined on the undertail-coverts, starting on the lower-breast; **2** tertials with a broad white outer margin; **3** a large proportion of white on the mantle; **4** white tips to the median wing-coverts; **5** tail length in some birds; and **6** the combination of the all-white head with a sharply defined black neck-band.

The 15 well-documented records of *caudatus* in the Netherlands (table 1) indicate that this taxon might be rarer in north-western Europe than generally thought (cf Voous 1968, 1972). The extremely small number of reports in Belgium and Britain seems to confirm this. On the other hand, due to increased observer awareness and better documentation, which may in part be a result of the onset of our research, *caudatus* has been recorded annually in the Netherlands since 2002. In the past, the Dutch rarities committee (CDNA) did not consider *caudatus* as it was assumed to occur too often; its occurrence is given as 'irregular and extremely scarce' by Bijlsma et al (2001). There is a number of reasons why its occurrence may have been overestimated in the past:

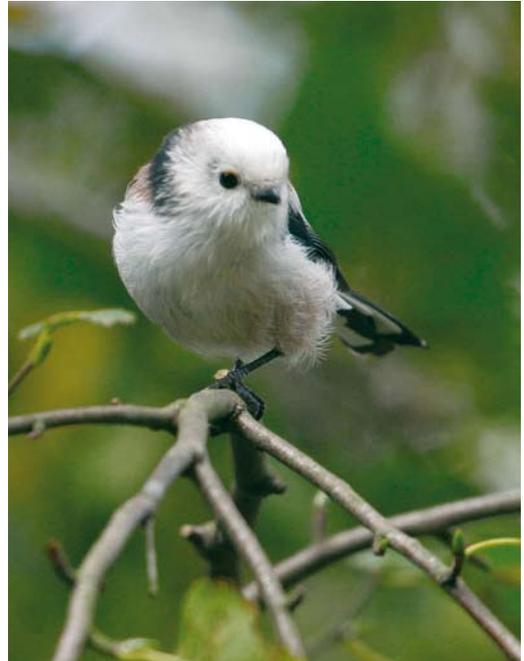
1 the diagnostic characters of *caudatus* have been misinterpreted; and **2** birds with intermediate characters are often misidentified as *caudatus* and occur more frequently than thought. Besides, it is now realized that *caudatus* shows less movements than possibly thought in the past, which may have led to a lack of scrutiny identifications.

On basis of the results described above, *caudatus* must be regarded as a vagrant or very irregular irruptive visitor in the Netherlands, often occurring in small flocks (occasionally of up to a few 10s of birds) and the CDNA is advised to admit it to the list of considered taxa. If, after a few years of consideration, the notion that it is actually more common than shown by the small number of current records is confirmed, this taxon can be removed accordingly from the list of considered taxa.

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376-377 Central European Long-tailed Bushtit / Staartmees *Aegithalos caudatus europaeus*, adult, Engbertsdijkvenen, Overijssel, Netherlands, 6 September 2006 (*Gerrit Schepers*). Intermediate bird. Note brownish wash on neck, indicating *europaeus*, but clear whitish underparts more indicative of nominate *caudatus*. **378** Central European Long-tailed Bushtit / Staartmees *Aegithalos caudatus europaeus*, adult, Vierlingsbeek, Noord-Brabant, Netherlands, 29 March 2008 (*Patrick Palmen*). Intermediate bird. Note whitish tertials and strong dark eye-stripe.



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Samenvatting

HERKENNING VAN WITKOPSTAARTMEES EN VOORKOMEN IN NEDERLAND De herkenning en het voorkomen in Nederland van Witkopstaartmees *Aegithalos caudatus caudatus* (hierna *caudatus*) wordt in dit artikel geanalyseerd aan de hand van museumstudies en studies van veldwaarnemingen en van literatuur en foto's.

Caudatus broedt in Fenno-Scandinavië, oostelijk Europa, het grootste deel van de voormalige Sovjet-Unie, delen van China en Japan, Noord- en Zuid-Korea en Mongolië. Sinds het verschijnen van de betreffende delen van Europese handboeken in 1993 wordt de ondersoort op diverse plaatsen zuidelijker vastgesteld dan het in dat jaar aangegeven verspreidingsgebied. Het is een standvogel met in sommige jaren een invasieachtig voorkomen, waarbij vaak grote aantallen in de Baltische landen worden vastgesteld, en in Noordwest-Europa vastgestelde exemplaren zijn van oostelijke herkomst. Zuidelijk en westelijk van het areaal van *caudatus* komen diverse ondersoorten van Staartmees voor die behoren tot de zogenaamde *alpinus/europaeus*-groepen, zoals in Nederland de ondersoort *A c europaeus* (hierna *europaeus*). Het verspreidingsgebied van *europaeus* reikt noordwestelijk tot in België, Denemarken, Duitsland, Nederland, Polen en Zweden (Gotland). *Europaeus* is als dwaalgast of schaarse gast vastgesteld in Engeland, Estland, Finland, Noorwegen, Oekraïne, Rusland en mogelijk ook in Albanië, Litouwen en Wit-Rusland. *Europaeus* is net als *caudatus* een standvogel die ook een invasieachtig voorkomen kan vertonen. De recordhouder wat verplaatsing betreft is een vogel die op 2 maart 1936 in België werd geïmporteerd en op 2 november 1937 werd gevonden op Chios in Griekenland (c 2700 km).

Een groot deel van de in de literatuur vermelde kenmerken van *caudatus* blijkt ook bij *europaeus* te kunnen voorkomen, met name in gebieden met veel intermediaire vogels. Een kenmerk van *caudatus* is echter diagnostisch: een zuiver witte en

geheel ongekleurde kop. Verschillen in biometrie zijn marginaal (alleen de gemiddeld iets grotere staartlengte van *caudatus* kan soms bruikbaar zijn). Verschillen in geluiden zijn tot op heden nog niet aangetoond. Daarnaast zijn er enkele aanvullende kenmerken die een aanwijzing voor *caudatus* zijn maar ook bij intermediaire vogels kunnen voorkomen.

In Nederland zijn 15 goed gedocumenteerde gevallen (van in totaal 56 exemplaren) van *caudatus* achterhaald die voldoen aan de in dit artikel geformuleerde determinatiecriteria. Daarnaast is er een aantal meldingen dat niet (goed) is gedocumenteerd. Opmerkelijk is het kleine aantal ringvangsten (twee gevallen van in totaal 15 exemplaren worden aanvaardbaar geacht). Omdat jaarlijks in Nederland veel Staartmezen worden geïmporteerd (36 927 in 1911-2000) bevestigt dit lage aantal het beeld dat *caudatus* daadwerkelijk zeldzaam is. Het feit dat dit taxon niet als een te beoordelen dwaalgast werd beschouwd kan de gebrekkige documentatie van oude meldingen in de hand hebben gewerkt. De ondersoort is ook in België en Brittannië zeldzaam en dat ondersteunt het beeld dat hij ook in Nederland zeldzamer is dan voorheen werd gedacht. Het verkeerde idee over het voorkomen kan onder meer zijn veroorzaakt door onbekendheid met diagnostische kenmerken die resulteerde in verwarring met intermediaire wtkoppige Staartmezen. Uit het feit dat 14 van de 15 gevallen dateren vanaf 2002 kan men ook concluderen dat het documenteren van dit taxon meer serieus is genomen toen ons onderzoek van start ging.

Geadviseerd wordt om Witkopstaartmees toe te voegen aan de lijst van (onder)soorten die worden beoordeeld door de Commissie Dwaalgasten Nederlandse Avifauna (CDNA) zodat waarnemers worden gestimuleerd om hun waarnemingen goed te documenteren en een beter inzicht ontstaat over zijn status en voorkomen. Indien in de toekomst gemiddeld meer dan twee waarnemingen per jaar worden aanvaard zou het idee dat het taxon algemener is dan men op basis van het geringe aantal gevallen zou verwachten worden bevestigd en kan de ondersoort weer van de beoordeelijst worden afgevoerd.

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