Correcting the identification of two rare wheatear records in Israel

by Hadoram Shirihai

Received 1 December 2011

Summary.—Basalt Wheatear *Oenanthe lugens warriae* is one of the least known of its genus, but recent advances in knowledge of its characters have enabled records of Variable Wheatear *O. picata opistholeuca* and Black Wheatear *O. leucura* in Israel to be reidentified as *O. l. warriae*. Separating the three taxa is discussed, and the behaviours of Israeli Basalt Wheatears described, providing the first such data away from the breeding range. Israeli records also suggest that *warriae* often undertakes long dispersal, which is supported by the discovery of two misidentified specimens in Berlin, whose data are presented for the first time here. Details of a Turkish record of Basalt Wheatear, a bird that hybridised with Finsch's Wheatear *O. finschii* are also provided.

The recent description of Basalt Wheatear *Oenanthe lugens warriae* (endemic to the basalt deserts of Jordan and Syria; Shirihai *et al*. 2011) has led to a better understanding of its morphology, variation and identification. Field separation of *O. l. warriae* from male Variable Wheatear *O. picata opistholeuca* (treated as a morph in some literature), which mostly breeds in Central Asia, and the geographically well-separated Black Wheatear *O. leucura* (of Iberia and north-west Africa) are complex issues. Work on Shirihai *et al*. (2011) and related projects (Shirihai & Svensson in prep., Shirihai *et al*. in prep.) has established that *warriae*, *opistholeuca* and *leucura* represent a considerable identification challenge.

In Israel, the 1980s and early 1990s were marked by a core of *c*.15 young birders, among them Y. Baser, A. Ber, A. Ben Dov, E. Dovrat, Y. Golan, O. Horin, R. Mizrachi, E. Shochat and myself. From a European perspective, activity mostly centred on the migration hotspot of Eilat in the south, to which thousands of birders flocked each spring. The Eilat International Birdwatching Centre was founded in 1984, but prior to that the above-mentioned observers made casual visits to Eilat, mainly between summer and winter, especially to study migration and to find vagrants.

One 'surprise' was a 'Black Wheatear', found by E. Dovrat in fields at Kibbutz Eilot, near Eilat, on 11–15 December 1982, and photographed by A. Beer *et al*. Secondly, a male 'Variable Wheatear' was seen on 4 February 1986 by M. Gellert, H. Heldbjerg & HS at Eilat saltpans (Shirihai 1999). It was not photographed and only a written description is available. However, both were misidentified Basalt Wheatears.

'Black Wheatear'

The following is based on E. Dovrat's field notes (transcribed from Hebrew), two images by A. Beer (Figs. 1–2) and the brief description in Shirihai (1996).

Size.—Some observers (including myself) considered it larger than the nearby White-crowned Wheatear *O. leucopyga*, and even estimated the bird to be as large as Hooded Wheatear *O. monacha*. However, Dovrat described it as follows: '[no] real difference in size compared to *leucopyga*'. Thus, discrepancy existed among the observers concerning size, suggesting this was not easy to determine reliably. *O. leucura* is generally larger and heavier looking than *warriae*, being especially larger headed, stronger / longer billed and legged.

However, *warriae* is on average *c*.5% larger in wing and tail than Mourning Wheatear *O. l. lugens*, similar to *O. leucura*. Mean wing length of male *O. l. warriae* is 98.3 mm, the tail 64.8 mm, compared to male *leucura* 99.8 mm and 64.3 mm, respectively (Shirihai *et al*. 2011, Shirihai & Svensson in prep.).

All of the observers lacked experience with *leucura* and *warriae*, and the latter's characters, including size, were then unknown. We also did not consider the effect of strong desert light, which often makes birds appear larger, or that in winter, especially in early morning, birds often 'puff' out their body feathers and appear larger or heavier (at least temporarily). Thus, identification based on size was both inconstantly judged and mistakenly afforded too much import.

Structure.—Separating *warriae* and *leucura* rests on the former's distinctly longer primary projection, roughly equal to tertial length (rather than at most *c*.⅔ of tertial length in Black). The combination of longer primary projection and on average broader tail-band in *warriae* (*c*.17 mm on outer web of r6, vs. *c*.14 mm in *leucura*) is consistently diagnostic. The wingtip of *warriae* reaches the tail-band's upper border (at most the gap between them is as wide as the tail-band itself). In Black they are well separated, with the distance almost twice that of the tail-band (due to the shorter primary projection and narrower tail-band). Compare Figs. 1 and 3 with Fig. 5. If the band is invisible, it is still possible to appreciate Basalt's longer primary extention because the wingtip normally reaches ½–⅔ along the length of the black central rectrices (in Black the wingtip reaches only to where these are first exposed below the white uppertail-coverts; *cf*. Fig. 5 vs. Fig. 3). Despite this feature's utility, caution is needed: it is best judged on perched birds when the wing and tail are held straight and parallel. The Eilat bird clearly showed these pro-Basalt features (Fig. 1).

These wheatears can also be separated by wing formula, with p1 in *leucura* considerably longer than the tip of the primary-coverts (in both races p1 > 4–11 mm, and usually >6 mm; p1 > 0.0–4.3 mm or < 0.5 mm in *warriae*). In flight photographs, the long outermost primary in Black is often detectable, but not in Basalt. The bird in Fig. 2 shows no indication of a long p1.

The bill of *warriae* also averages shorter and thinner, appearing straighter and less broad-based than in most *leucura*. Again, the Eilat bird clearly had a shorter / slender bill. Unique in wheatears, however, the general jizz of Black Wheatear often suggests a 'small thrush' rather than a wheatear, due to the proportions of the body, head and bill.

Plumage and wing pattern.—Dovrat noted 'In flight a bright [= whitish-grey] tone across the mid wing…white 'flashes' on underwing brighter than on upperwing and encompassed a larger area, thus most of underwing looked very bright (the brightest area), emphasising the clear black shafts; on both wing surfaces the bright panel was surrounded by black (broadest on the trailing edge), giving a 'frame' effect; Y. Baser, O. Horin, R. Mizrachi & HS also reported that the white wing pattern recalled Mourning Wheatear.'

This description and the photograph (Fig. 2) best fit a young male *warriae* (Fig. 4), which often has relatively less white on the inner webs of the remiges than adult males (Shirihai *et al*. 2011). Male *leucura* often also has dull silvery white undersides to the remiges (Fig. 6), but this colour is more uniformly distributed over the underwing. The white inner webs on Basalt are narrow and mostly concealed but sometimes visible in flight. Young Basalt (especially females) can lack any such white edges or they are mostly concealed, but there is still a 'wing flash', enhanced by the dark trailing edge and mostly visible from below. Thus, the description of *lugens*-like white 'flashes' confirms that the Eilat bird had the diagnostic Basalt wing pattern.

Overall, the plumage of *warriae* and *leucura* are near-identical. However, first-year Basalt often still has white tips / spots on the primary-coverts (and frequently the alula and

tertials) which Black lacks. However, Shirihai *et al*. (2011) showed that, from late autumn, adult and some younger Basalt could have much-reduced, or lack, white spots. The Eilat bird seems to have been one such individual.

Conclusion.—Because *warriae* and *leucura* are close in size, this character (which was inconsistently judged) cannot be used. In all other features the bird was obviously a Basalt Wheatear. At the time (1982) Basalt Wheatear was effectively unknown, and in effect the observers had to choose between male Black and Variable Wheatears. Identification as the former was unsurprising, given that Basalt can be almost as large as Black Wheatear. Finally, it can safely be separated from male *opistholeuca* especially by the longer primary projection but relatively short tail, tail and wing patterns, and wing formula.

'Variable Wheatear'

No photographs exist of this bird, observed at Eilat on 4 February 1986, so the only material for comparison is my detailed description (summarised in Shirihai 1999).

Size.—Described as 'clearly smaller than White-crowned … marginally larger and heavier than Mourning Wheatear', or 'appreciably stockier than Mourning'. *O. l. warriae* is on average rather notably larger than *O. l. lugens*: e.g., male Basalt averages *c*.16 cm, with wing 98.3 mm and tail 64.8 mm, whereas male *O. l. lugens* is *c*.15.3 cm, 93.1 mm and 60.3 mm, respectively. In overall size (15 cm) and wing (93.1 mm) *opistholeuca* is closer to *O. l. lugens*, but has a proportionately longer tail (67.3 mm) than either (Shirihai *et al*. 2011, Shirihai & Svensson in prep.). Thus in size the bird corresponds better with *O. l. warriae*, being larger than *O. l. lugens* and *opistholeuca*.

Structure.—My field notes state that overall proportions were much like Mourning and Finsch's Wheatears *O. finschii*, with no indication of a proportionately longer tail, which affords Variable Wheatear a slimmer appearance than *O. l. lugens* or *warriae*. Thus, structure / jizz also favour Basalt Wheatear.

Plumage and wing pattern.—My description reads: 'the remiges appeared completely dark in flight, save for a grey basal tinge on the underwing … the bird was in fresh plumage and probably an adult, yet there was no trace of the white-tipped primary-coverts normally visible on adult Basalt Wheatear at this time of year; and the black on the belly was clearly

Legend to figures on page opposite

Figures 1–2. First Israeli record of Basalt Wheatear *Oenanthe lugens warriae*, Eilat, December 1982 (A. Beer). Originally misidentified as Black Wheatear *O. leucura*, note the narrow, pointed bill, long primary projection (upper arrows in Fig. 1) with wingtip almost reaching upper border of black tail-band (lower arrow), extensive pale wing 'flashes' enhanced by dark trailing edge, and contrast between pale inner webs and dark shafts, all of which features are diagnostic of *warriae*.

Figure 3. Basalt Wheatear *Oenanthe lugens warriae*, Kfar Barukh, Jezreel Valley, northern Israel, January 2010 (U. Makover). Note similarity to 1982 bird, especially narrow bill, long primary projection (distance between upper two arrows), broad black tail-band with the upper border of the latter falling level with the wingtip (rear upper and lower arrows).

Figure 4. Fourth Israeli Basalt Wheatear *Oenanthe lugens warriae*, 'km 32' north of Eilat, December 2001 (Y. Perlman)

Figures 5–7. Black Wheatear *Oenanthe leucura*, Spain (D. Jefferson, top, R. Armada, middle, and, M. Ullman bottom). Unlike *O. lugens warriae*, the primary projection (distance between upper two arrows, Fig. 5) is relatively short, the wingtip just reaching the point where the dark central rectrices are exposed (lower left arrow). In consequence, the wingtip falls further from the (narrower) black tail-band (distance between the upper right and lower right arrows). Note the rather strong bill and long p1 (Fig. 6). In flight, Black Wheatear has more uniform and diffuse dull silvery remiges, lacking the more contrasting pattern (especially from below) of Basalt Wheatear.

Figures 8–14. First-summer, probably female Basalt Wheatear *Oenanthe lugens warriae*, Ovda Valley, Israel, March–April 2012 (H. Shirihai)

demarcated from the white rear belly (in Variable Wheatear, the black usually extends further beyond the legs and gradually merges into the white vent, although this character varies individually and according to posture).'

Given recent advances in our knowledge of *warriae* and its separation from male *opistholeuca* (Shirihai *et al*. 2011), this description does not eliminate either. Some young Basalt lose the white tips to the primary-coverts quite early, yet still possess juvenile flight feathers with no or very narrow white edges to the inner webs, but for a pale grey tone that is most noticeable on the underwing. This combination best fits the bird in question. Furthermore, the border between the black and white in the ventral region is now known to be highly variable, but the fact that the demarcation was well defined favours Basalt. *Contra* Shirihai (1999), the demarcation in *warriae* is better defined and less likely to extend onto the sides of the undertail-coverts as tends to be true in *opistholeuca* (Shirihai *et al*. 2011).

Tail-band.—The description reads: 'Its smaller size, broad T-shaped tail-band and more extensively black belly (reaching just beyond the thighs) eliminated immature White-crowned'. The tail-band was very broad and I did not notice any indication of uneven black areas on the webs of the outer rectrices, or that the black on the outer web averaged longer, like Pied *O. pleschanka* or Black-eared Wheatears *O. hispanica* as is often partially true of *opistholeuca*. Again, the description better conforms to *warriae*.

Behaviour.—On landing 'it bobbed up and down—bowing low and then standing quite upright—while frequently cocking and flicking its tail' (i.e. like Finsch's Wheatear). This is the only clue that perhaps favours Variable Wheatear, but recent observations suggest *O. l. lugens* and *warriae* also 'bow' and tail-lift to some extent, but more slowly and less dramatically than Finsch's, as observed in winter in Israel. Nevertheless, a Basalt Wheatear in March–April 2012 (Fig. 13) cocked and flicked the tail almost as vigorously as Finsch's. Retrospectively, I cannot recall that the Eilat wheatear behaved differently from 'extreme' examples of *O. l. lugens* or *warriae*.

Conclusion.—Given variation in *warriae* and its separation from male *opistholeuca* (Shirihai *et al*. 2011), the description could correspond to either taxon, but better fits a young male Basalt. It lacks any features uniquely suggestive of male *opistholeuca*. The misidentification was, again, the result of limited knowledge of *warriae* at the time. Also, crucial diagnostics of male *opistholeuca* (like primary spacing and length of p1 vs. the tips of the primary-coverts) were then unknown. With hindsight I consider this bird to have been *warriae*, but in the absence of documentation it is best regarded as a 'presumed Basalt Wheatear'.

The 1986 bird was definitely not a 'black morph' *O. finschii*, a possibility also raised with respect to a Basalt Wheatear in Turkey in May 2011, which was reported to have successfully bred with a Finsch's Wheatear (see below).

These corrections have been approved by the Israeli Rarity and Distribution Committee, which has decided to remove Black and Variable Wheatears from the official Israeli list.

Records of Basalt Wheatear in Israel

There have been six records of (and seven individual) Basalt Wheatears in Israel. These provide the first data concerning dispersal and habitat preferences of *warriae* away from the breeding grounds. **11–15 December 1982**: one (apparently young, possibly male) just north of Eilat, in modified gravel desert with cultivated fields nearby; the bird used tall fence posts as lookouts (Figs. 1–2). **4 February 1986**: one (apparently young, possibly male) at Eilat, near the saltpans, sometimes foraged by the palm planation. **December 1994**: two in the Arava Valley (*c*.80 km north of Eilat) in flat desert adjoining gravel hillsides and fences (*cf*. Shirihai

1996). **6–21 December 2001**: first-winter male at 'km 32' north of Eilat (J. P. Smith *et al*.) on open sandy plains with some bushes (Fig. 4). **19 January 2010**: first-winter male near Kfar Barukh reservoir, Jezreel Valley (U. Makover; Fig. 3). **21 March–5 April 2012**: first-summer, probably female, Ovda Valley, southern Negev, north of Eilat (D. Berkowic *et al*.) in a desert wadi with bushy cover (Figs. 7–13).

December 2001 bird (*per* J. P. Smith & Y. Perlman): in patch of *Haloxylon* bushy habitat (amid barren desert), selecting notably high perches (*c*.1 m above ground), but also stones on ground. Generally 'chat-like', using bushes as lookouts to swoop down on ground-strata prey (insects), spreading the wings and tail on landing, like White-crowned Wheatear. The bird mostly fed alone. It was silent throughout. Observed in mid afternoon (14.10 h) when very active. Showed some aggression to a Blackstart *Cercomela melanura*, and seen once feeding on fruit of *Ochradenus baccatus*. Hovered, including several times when collecting something from a bush.

January 2010 bird (per U. Makover): found on a small side road near Kfar Baruch reservoir; alone and rather shy, mostly fed on open ground. Silent.

March–April 2012 bird (A. Balaban, I. Berger, A. Ben Dove, B. Granit, D. Berkowic, D. Forsman, Y. Perlman, I. Shanni, HS *et al*.): consensus existed among the above-mentioned observers, and many others familiar with *O. l. lugens*, that the bird had a quite different jizz, foraging and territorial behaviours. Prolonged observations were made on 22 and 26–30 March 2012. Especially on 22nd, the bird constantly bowed (crouching almost 90° forward and lifting the tail), somewhat like *O. finschii* (*O. l. lugens* may bow but usually less deeply and constantly). Bowing apparently is a territorial signal used, among other contexts, in the presence of observers, and appears to decrease with time as the bird adapts to human presence. To feed it often hovered above ground. Once it mobbed a small snake together with a Blackstart and Black-eared Wheatear (the *warriae* detected the snake first, attracted the other birds and called most persistently, frequently hovering above it, and followed the snake longest, for *c*.2 minutes). On 22 March we trapped the bird; on release it gave a short song sequence (in escape flight), which sounded faster and more musical than *lugens*. On all days, especially 30 March, it constantly fed around the bases of flowering *Zilla spinosa* bushes, mostly on small insects. Remained 1–3 minutes (once 11 minutes) within a single bush and in the bushes sometimes *c*.50% of a given observation period. In 35 years, I have never seen any wheatear forage in this way. This plant only lives a few years and grows especially in wadis subject to flash-flooding, but dies during droughts (peak flowering March–April). It is common in parts of north-east Jordan, where Basalt Wheatear at least formerly bred. Possible association between *Z. spinosa* and Basalt Wheatear, and the effect of drought on both would be interesting to study. The bird's 'feeding territory' was rather large, *c*.200 m × 500 m, but it spent most time in a better-vegetated depression of *c*.30 m × 80 m, which was excavated when a road was built. On 30 March the bird captured a scorpion, which was broken into pieces and completely consumed.

Despite straightforward separation from superficially similar black wheatears discussed above, the bird possessed some odd features requiring further investigation. On the right side of the breast were two feathers with whitish tips *c*.1 mm wide, and its wing formula was outside the previously known variation of *warriae* (Fig. 10, Table 1), possibly suggesting hybridisation with *O. l. lugens*? A blood sample was taken.

O. l. warriae appears to be an early-winter immigrant, with most records of short-staying individuals in December, suggesting the birds move further south thereafter. This corresponds with the theory that *warriae* regularly disperses longer distances like *O. l. persica* (Shirihai *et al*. 2011) and has a longer, more pointed wing than *O. l. lugens* (Shirihai *et al*. 2011). Most records are from deserts or partially modified habitats, but that in January

TABLE 1
Basic biometrics of Basalt Wheatear *Oenanthe lugens warriae*, including bird trapped in Ovda Valley, Israel, on 22 March 2012, and the two specimens in the Hemprich & Ehrenberg collection, Museum fur Natürkunde, Berlin (measurements, in mm, taken by H. Shirihai, based on standard protocols of Svensson 1992).

	Age	Date	Locality	Wing	Tail	Tail-band (r6): black area at tip, along shaft of outer web	Tarsus	Hindclaw	Bill (to skull)	Bill (to feathers)	Bill depth (to feathers)	Rump patch	p1 < pc	p1<2	p2=	primary projection	emarginated p6
Live bird	first-summer	22 March 2012	Ovda Valley, Israel	93	60.5	13.4	24.5		19.5	13.1		32.5	3.6+	41.2	p5/6		no
ZMB 4854	first-year	see main text	Nubia	96.5	62.0	11.5	26.4	6.8	20.2	14.8	4.5	30.0	4.3+	47.4	5/6 just a little lower than p5, *c.*3.2 mm < than it	29.5	no
ZMB 4851	first-year	see main text	Tor, Sinai, Egypt	93.0	61.0	15.7	25.6	6.6	19.7	12.3	4.2	30.4	3.7+	46.5	5/6 lower than p5 by *c.*4.8 mm	30.2	no

2010 was in northern Israel, which has a Mediterranean climate and where even *O. l. lugens* is a vagrant. Most records involved young males, which age/sex class might more regularly move longer distances.

Other records of Basalt Wheatear away from its breeding grounds

As part of ongoing study into the *lugens* complex, in January–April 2012 I visited the Natural History Museum, Tring, Museum für Naturkunde, Berlin (ZMB), Naturhistorisches Museum Wien, American Museum of Natural History, New York, Tel Aviv University Zoological Museum, and Jordan Natural Museum, Yarmouk University. Two overlooked specimens of *warriae* were identified in Berlin: one from 'Nubia' (see below) originally labelled *leucura* (but more recently placed with specimens of *leucopyga*), and one from Sinai, Egypt, found among the *O. picata* but labelled *leucopyga* (Figs. 15–20). The first had already been brought to my attention by F. D. Steinheimer, while investigating potentially older available names for *warriae*. I compared their biometrics with all available material of *warriae* and, with the help of S. Frahnert & P. Eckhoff, retrieved the following data concerning these specimens from the museum archive:

ZMB 4851: immature, collected by W. Hemprich & C. G. Ehrenberg [in October 1823] in Tor [El-Tor, Egypt]. It belongs to Hemprich & Ehrenberg's eighth shipment (Lichtenstein

Legend to figures on page opposite

Figures 15–20. The two overlooked Basalt Wheatear *Oenanthe lugens warriae* skins from the Hemprich & Ehrenberg collection, held in Berlin (ZMB 4854 and ZMB 4851) (H. Shirihai). Fig. 18 shows the original label of ZMB 4854, and Figs. 19–20 those of ZMB 4851.

Figures 21–22. First-summer male Basalt Wheatear *Oenanthe lugens warriae*, near Urfa, south-east Turkey, May 2011 (E. Yoğurtcuoğlu). Note the predominantly black body, clearly short outermost primary (p1) vs. the tip of the primary-coverts and p2, which tends to fall level with p5.

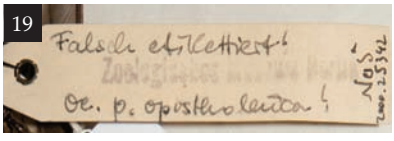
15

16

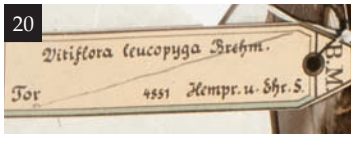
17

18

19



20



21

22

1824) sent from Alexandria on 16 November 1823 to Berlin (arrived 6 May 1824). Three specimens (nos. 247–249) of *Saxicola leucura capito nigro* are mentioned (Lichtenstein 1824). One (ZMB 4851) remained at ZMB, two were given away. Given the date of the shipment, the specimens should have been collected in July–October 1823. The date was further restricted based on the specimen's plumage.

ZMB 4854: immature, collected by W. Hemprich & C. G. Ehrenberg [in November 1821] in 'Nubien' [route along the Nile between first and second cataract, near Aswan/Egypt]. From Hemprich & Ehrenberg's seventh shipment (Lichtenstein 1823), sent from Alexandria on 1 October 1822 and arrived in Berlin on 19 March 1823. Twelve specimens (no. 426–437) of *Saxicola leucura capito nigro* were received taken in October / November at Deram and Gornu [localities unknown] (Lichtenstein 1823). Three (ZMB 4852–4854) remained in Berlin while nine were given away. ZMB 4852 and ZMB 4853 are juveniles of *O. leucopyga*. The collecting date of ZMB 4854 was further restricted based on the specimen's plumage.

Biometrics appear in Table 1. Identified as *warriae* by the broad black tail-band and smaller size, including shorter and narrower bill (unlike juvenile White-crowned Wheatear, and Black Wheatear). Unlike both of the latter species and male *opistholeuca*, both have more pointed wings, longer primary projection, but relatively shorter tail and broader tail-band, as well as the diagnostic white bases to the inner webs of the regimes.

No date is available for either specimen, but plumage and wear best fit first-years, taken in November–January for the bird from Egypt / Sudan, and October–December for the Sinai bird. No sex is given, and individual variation and bleaching renders any attempt to sex them unreliable. They further prove that *warriae* can migrate to Africa and how Basalt Wheatear has confused ornithologists from the outset.

Basalt Wheatear in Turkey

A Basalt Wheatear found in south-east Turkey, in May 2011 (Figs. 21–22), was first reported by D. Domuschiev (www.spatiawildlife.com/en/News/birding-Turkey-Basalt-new-subspecies.html), but because it was paired with a Finsch's Wheatear some observers speculated that the bird was a black morph of the latter species (www.surfbirds.com/forum/showpost.php?p=32140&postcount=7). This hybridisation event was confirmed by the birds' close pair-bond (E. F. Henriksen, K. M. Olsen, E. Yoğurtcuoğlu pers. comm.), and both sexes were observed feeding two young that successfully fledged (D. Domuschiev pers. comm.). The pair involved a male Basalt and female Finsch's Wheatears.

The male was definitely not a *O. finschii* for which there is no evidence of a black morph: *c*.20 photographs of the Turkish bird reveal that it had the typical plumage and structure of *warriae*, and sound-recordings clearly show that its song was unlike Finsch's. Aside from the predominantly black plumage, the wing formula best fits Basalt: p1 fell clearly short of the tip of the primary-coverts (in Finsch's it tends to extend beyond this), and p2 is level with p5, whereas in Finsch's it is closer to p6. The bird was a first-summer based on moult limits and the much-reduced whitish-grey flashes in the remiges.

This record is of some interest. *O. l. warriae* nests only in southern Syria and north-east Jordan, suggesting that this bird was an overshooting migrant, *c*.500 km north of its usual breeding grounds. Dispersal and hybridisation perhaps reflect the apparently severe decrease in this wheatear's population. In north-east Jordan, in spring 2012, I was unable to find any, and a decline has already been postulated, due to a series of drought years in the basalt desert (Khoury *et al*. 2010). Previous claims of hybridisation with *O. l. lugens* could be genuine and reflective of climatic conditions, but also correspond to the close genetic relationship between the *lugens* complex (including *warriae*) and *finschii* (Aliabadian *et al*. 2012; M. Schweizer & HS work in progress).

Acknowledgements

I thank the many friends mentioned, especially Ehud Dovrat, who discussed with me the 1982 record and translated his field notes pertaining to that bird. Uri Makover, Yoav Perlman and James P. Smith kindly sent their field notes concerning the 2004 and 2010 records, and Amir Balaban, Amir Ben Dove, Itai Berger, Danile Berkowic, Dick Forsman, Barak Granit, Yoav Perlman and Itai Shanni shared my field observations in March 2012. Rafael Armada, Alon Beer, David Jefferson, Uri Makover, Magnus Ullman, Yoav Perlman and Emin Yoğurtcuoğlu provided their photographs. Eyal Shohat of the Israeli Rarity and Distribution Committee confirmed their re-evaluation of the two Eilat records. Dobromir Domuschiev, Eva F. Henriksen, Klaus Malling and Emin Yoğurtcuoğlu also provided information on the Turkish record. Guy Kirwan made several suggestions that improved the manuscript. Staff at the Natural History Museum, Tring, and American Museum of Natural History, New York, are thanked for their assistance. Dr F. D. Steinheimer kindly checked nomenclatural issues, and Dr Sylke Frahnert and Pascal Eckhoff at ZMB were exceedingly helpful, especially in providing historical data. Lars Svensson has encouraged my wheatear studies throughout and made several helpful comments that improved the final draft. Manuel Schweizer provided early genetic results from our research into *Oenanthe* and useful suggestions concerning the manuscript. The referees, Pierre-André Crochet, José Luis Copete and Magnus Ullman, made several valuable comments.

References:

Aliabadian, M., Kaboli, M., Förschler, M. I., Nijman, V., Chamani, A., Tillier, A., Prodon, R., Pasquet, E., Ericson, P. G. P. & Zuccon, D. 2012. Convergent evolution of morphological and ecological traits in the open-habitat chat complex (Aves, Muscicapidae: Saxicolinae). *Mol. Phyl. & Evol.* 65: 35–45.

Khoury, F., Förschler, M. I., Janaydeh. M., Aliabadian, M. & Al-Hmoud, A.-R. 2010. Distribution, habitat and differentiation of the poorly-known black morph of Mourning Wheatear *Oenanthe lugens* in Jordan. *Sandgrouse* 32: 113–119.

Lichtenstein, H. 1823. Verzeichniss der siebenten Sndung der Herren Doctoren Hemprich und Ehrenber, welche vom Januar bis Julius 1822 in Ober-Aegypten und Nubien gesammelt und am 19. März 1823 angekommen ist. Unpubl. ms in Museum für Naturkunde an der Humboldt-Universität zu Berlin, Historische Bild- u. Schriftgutsammlungen, Bestand: Zool. Mus., Signatur ZMB S I, Hemprich & Ehrenberg, III: 75–110.

Lichtenstein, H. 1824. Verzeichniss der Gegenstände, welche von den Doctoren Ehrenberg und Hemprich in den und in ihrer achten Sendung aus Arabien und Ägypten übersandt worden und am 6. Mai 1824 im Museum angekommen sind. Unpubl. ms in Museum für Naturkunde an der Humboldt-Universität zu Berlin, Historische Bild- u. Schriftgutsammlungen, Bestand: Zool. Mus., Signatur ZMB S I, Hemprich & Ehrenberg, III: 111–180.

Shirihai, H. 1996. *The birds of Israel*. Academic Press, London.

Shirihai, H. 1999. Fifty species new to Israel, 1979–1998: their discovery and documentation, with tips on identification. *Sandgrouse* 21: 45–105.

Shirihai, H. & Svensson, L. in prep. *Handbook of Western Palearctic birds*. Christopher Helm, London.

Shirihai, H., Keijl, G., Gargallo, G. & Copete, J. L. in prep. *Wheatears*. Christopher Helm, London.

Shirihai, H., Kirwan, G. M. & Helbig, A. J. 2011. A new taxon in the Mourning Wheatear *Oenanthe lugens* complex. *Bull. Brit. Orn. Cl.* 131: 270–291.

Svensson, L. 1992. *Identification guide to European passerines*. Fourth edn. Privately published, Stockholm.

Address: c/o Ausserdorfstraße 6, 8052 Zurich, Switzerland, e-mail: albatross_shirihai@hotmail.com