FEMALE PIED WHEATEAR: THE PROBLEM OF IDENTIFICATION

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Difficulties encountered in identifying the third British example of the Pied Wheatear (Oenanthe leucomela), trapped at Portland Bill, Dorset, in October 1954 (Ash, 1955), suggest the need for some clarification of the distinguishing features of Palaearctic wheatears, and particularly of the specific characters of female leucomela in the field and in the hand. The differences in the English and scientific names used by various authors are liable to cause considerable confusion for anyone referring to the literature (see Appendix II). Field-descriptions of most of the female wheatears are scanty: a slight but misleading discrepancy in The Handbook, between accounts of field-characters and plumage of the female Pied Wheatear in autumn, was ultimately explained by finding that the first British specimen had been wrongly sexed (see below). Other reference books available at Portland (including Dresser, 1902; Ramsay, 1923; Peterson et al., 1954) were insufficient for the certain exclusion of all other Oenanthe species which might conceivably occur as stragglers in Britain. It is hoped that this account may help anyone confronted with a similar problem in the future.

IDENTIFICATION

Provisional identification of the Portland bird as a female Pied Wheatear was later amply confirmed by comparing its description and measurements, also sketches and a few sample feathers, with published accounts and illustrations (including Whitaker, 1905; Meinertzhagen, 1930) and where necessary with skins (British Museum collection) of all 14 Oenanthe species of the Palaearctic and Oriental regions, listed by Wynne (1954).

Of the six species described in The Handbook, three (oenanthe, isabellina, leucura) were excluded by differences both in plumage and wing structure or measurements; deserti by plumage alone; leaving leucomela and hispanica for fuller consideration, particularly in the light of Witherby’s comment that “rarely some females of Pied Wheatear are very difficult to distinguish from some females of Oe. h. melanoleuca”, the Eastern Black-eared Wheatear (The Handbook, vol. II, p. 158). Reasons for excluding the remaining eight Palaearctic species are summarized in Appendix I, in which are included references to plates in the literature consulted.

Measurements and structure.

Portland bird:—Weight, 18.30 gm. (06.20 G.M.T., 19th
October. Bill from skull, 14 mm. Tarsi, 23 and 23.5 mm. (both approximate). For wing-characters, see Tables I and II.

**Table I—Wing-formula: comparison with Pied and Black-eared Wheatears (Oe. leucomela and hispanica)**

Published data from The Handbook except as indicated by: (V)—Vaurie (1949); (M)—Meinertzhagen (1930); or (C)—Eagle Clarke (1916).

(Note: (+) longer; (—) shorter; (=) equal.)

<table>
<thead>
<tr>
<th>Primaries (measured in mm.)</th>
<th>Portland bird (both wings)</th>
<th>Oe. leucomela leucomela</th>
<th>Oe. hispanica melanoleuca</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st relative to primary coverts</td>
<td>... 2(—) ...</td>
<td>3(+) to 3(—)</td>
<td>5(+) to (=)</td>
</tr>
<tr>
<td>Longest</td>
<td>...</td>
<td>3rd ...</td>
<td>3rd &amp; 4th ...</td>
</tr>
<tr>
<td>2nd shorter by</td>
<td>... 4</td>
<td>6(-) to (—)</td>
<td>8(+) to (=)</td>
</tr>
<tr>
<td>5th shorter by</td>
<td>... 4</td>
<td>1-4</td>
<td>1-3</td>
</tr>
<tr>
<td>6th shorter by</td>
<td>... 10</td>
<td>8-12</td>
<td>6-10</td>
</tr>
<tr>
<td>Relation of 2nd to 5th</td>
<td>...</td>
<td>2nd = 5th</td>
<td>(M) 2nd &lt; 5th</td>
</tr>
<tr>
<td>Emarginated</td>
<td>...</td>
<td>3rd to 5th</td>
<td>3rd to 5th</td>
</tr>
</tbody>
</table>

* In 57 skins, 1-6 (+), av. 2.2; in 27, (=); in 20, 1-3 (-), av. 1.5.
† In 42 skins, 1-8 (+), av. 3.1; in 11, (=).§

In the Orkney specimen (first winter female).

**Table II—Wing-length: comparison with Pied and Black-eared Wheatears (Oe. leucomela and hispanica)**

References as in Table I.

<table>
<thead>
<tr>
<th>Wing length (mm.)</th>
<th>Authority and Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland bird ...</td>
<td>Both wings measured</td>
</tr>
<tr>
<td>Oe. l. leucomela ♀</td>
<td>87-95 (V) 15 specimens in fresh plumage</td>
</tr>
<tr>
<td>&quot; &quot; ♀ ad. ...</td>
<td>88-96 (av. 92.6)</td>
</tr>
<tr>
<td>&quot; &quot; ♂ ♀ ...</td>
<td>88-98 (M) Egypt</td>
</tr>
<tr>
<td>&quot; &quot; ♀ (1st w.) ...</td>
<td>92.5 (C) Orkney specimen</td>
</tr>
<tr>
<td>Oe. l. cypriaca ♂ ♀</td>
<td>82, 84-90 (M) Cyprus, etc.</td>
</tr>
<tr>
<td>&quot; &quot; ♂ ad. ...</td>
<td>83-90 (V) 16 in worn plumage (Cyprus, spring)</td>
</tr>
<tr>
<td>Oe. hispanica ♀ ...</td>
<td>85-90 (H) both races the same</td>
</tr>
<tr>
<td>Oe. h. melanoleuca ♀ ad. ...</td>
<td>85-5-95.0 (V) 14 in worn plumage (Persia)</td>
</tr>
<tr>
<td>&quot; &quot; ♂ ♀ ...</td>
<td>83-93 (M) 24 specimens, Egypt</td>
</tr>
</tbody>
</table>

The tables show a close agreement in wing-structure between the Portland bird and Oe. l. leucomela, and that it had a longer wing than the Cyprus race (Oe. l. cypriaca); also that it differed from most female Oe. hispanica melanoleuca in having a longer wing (with the odd exception of some from Persia cited by Vaurie,
1949), shorter 1st and 5th primaries, and 2nd=5th. Its 6th primary was at the centre of the range given for \textit{I. leucomela}, but at the shortest extreme for \textit{h. melanoleuca}. It showed no sign of incomplete wing-moult. Though not large, these differences seem diagnostic of \textit{I. leucomela} as opposed to \textit{h. melanoleuca}, quite apart from plumage characters.

**Plumage.**

Portland bird:—Certain points noted in the hand amplify the previous field description (Ash, \textit{loc. cit.}). Upper-parts—crown to back, including scapulars, drab brownish-grey, rather greyer than in Meinertzhagen’s Pl. XI, fig. 3, of \textit{Q. leucomela} (though it was found in the field that upper-parts looked greyer in some lights and browner in others); crown and nape slightly paler and greyer than rest; distinct pale creamy-buff fringes to feathers of mantle, back and scapulars (giving a scalloped or mottled effect). \textit{Side of head}—pale buff supercilium above and behind eye, continued forwards as a barely perceptible pale line above light brownish-grey lores to indistinct pale patch on forehead; ear-coverts browner than crown, and slightly darker, but not as dark as in Meinertzhagen’s Pl. XI, fig. 3. \textit{Under-parts}—chin and upper throat whitish-buff, tinged grey, only slightly paler in tone than pectoral band* (lower throat and upper breast), which was light tawny-brown (almost orange-buff in some lights) becoming darker greyish-brown towards flanks, into which it merged; lower breast and rest of under-parts creamy-white with a very faint warm buff tinge, fairly sharply demarcated from pectoral band; axillaries and under wing-coverts blackish-grey with brownish tips. \textit{Rectrices}—extent of black (measured) very similar to that of \textit{leucomela} figured by Meinertzhagen (Fig. 33, 5).

**Comparison with Oe. 1. leucomela and hispanica melanoleuca.**

With only slight differences, indicated above, the Portland bird was very similar to Meinertzhagen’s coloured figure (Pl. XI, fig. 3) of \textit{Q. leucomela} (Kenya, 15th November 1915). Skins of \textit{Q. leucomela} in the British Museum resembled it closely, particularly one from India (30th August 1931) which was almost identical in colouring and well-marked pale fringes to feathers of upper-parts. Our account of the Portland bird also agrees very well with that by Eagle Clarke (1916) of the second British specimen (Orkney, 1st November 1916), obtained by Bain (1916)—probably both were first winter females. The Cyprus race \textit{(l. cypriaca)} is less white, more sandy below, and darker brown above in winter than the typical form (\textit{Handbook}, Meinertzhagen), to which the Portland example evidently belonged.

Ten skins of \textit{Q. hispanica melanoleuca} examined all had pectoral bands less distinctly demarcated than in the Portland bird. The

* Though distinct in colour, the pectoral band did not look much paler in tone than upper-parts in the field, presumably due to counter-shading.
one most nearly resembling it in general colour of upper-parts (Egypt, 8th November 1906) had only the faintest trace of pale tips to these feathers. The prominence of contrasting pale fringes on feathers of mantle, etc., in \textit{I. leucomela} is the best character by which to distinguish it in the field or in the hand in unworn plumage from \textit{h. melanoleuca}, in which they are virtually absent. In worn plumage when these pale tips are abraded, the two may be very difficult to distinguish, as pointed out in \textit{The Handbook} and by Vaurie. Typically, \textit{I. leucomela} are then more earth-brown (greyer)† above and have better demarcated pectoral bands (darker and richer) than \textit{h. melanoleuca}, but are not always distinct in these respects.

\section*{Sex of the First British Specimen}

As previously indicated, a reference in \textit{The Handbook}, under field-characters of female Pied Wheatear in autumn, to the Isle of May example (19th October 1909) which appeared darker than a common Wheatear, was at first rather misleading. Subsequent reference to the original description and coloured plate of this specimen (Baxter and Rintoul, 1910), to Witherby's (1910) account of it, and the coloured plate in Thorburn (1925), strongly suggested that it was \textit{not} a female, particularly because it had: "mantle black, each feather broadly margined with greyish-brown, lighter at the tips" (Baxter and Rintoul). Apart from wings and tail, there was no black on the upper-parts of the Portland bird, nor was there any in skins of female \textit{leucomela} examined later, nor is it mentioned in detailed plumage descriptions (e.g. \textit{Handbook}, Meinertzhagen). Our suspicions were later confirmed by Kenneth Williamson (in litt.), who kindly examined the mounted specimen in the Royal Scottish Museum and reported that it was undoubtedly a male, probably first winter.

\section*{Acknowledgements}

Thanks are due to those who contributed to the description and trapping of the Portland bird; to W. B. Alexander and O. E. Wynne for the loan of several relevant items of literature; to J. D. Macdonald and Derek Goodwin for their help in arranging for us to examine skins in the British Museum; and to Kenneth Williamson for examining the Scottish specimens.

\section*{Summary}

Difficulties in identifying female Pied Wheatears (\textit{Oe. I. leucomela}), and the features distinguishing them from other Palaearctic

† In Meinertzhagen's key (1930, p. 262) the typical colours of upper-parts of \textit{I. leucomela} and \textit{hispanica} are attributed to the wrong species in each case (cf. his Pls. X and XI, and text).
wheatears are discussed in relation to the occurrence of the third British example of the species, at Portland Bill, 17th-19th October 1954. The first British specimen is shown to have been a male, not a female, as was previously thought.

Reference is also made in an appendix to the confusion in the English names of the various species discussed.

REFERENCES


APPENDIX I: DISTINCTION OF PIED WHEATEAR (Oenanthe leucomela) FROM PALAEOARCTIC WHEATEARS NOT ON THE BRITISH LIST

The eight species of Palaearctic wheatears not on the British List were excluded owing to differences from the Portland bird (= Oe. l. leucomela ) summarized below. English and scientific names listed are those used by Wynne (1954); names used by some other authors are mentioned in Appendix II. The length of the first primary relative to the primary coverts is indicated as in Table I (q.v.).

Meinertzhagen (1930) and Vaurie (1949) each give very useful keys and tables of wing formulae of 12 species of Palaearctic wheatears, and should be consulted for other information. Together these cover all 14 species, Meinertzhagen excluding picata and alboniger, and Vaurie excluding leucura and moesta.

RED-TAILED WHEATEAR (Oe. xanthonopyrma).—Distinctive plumage (see Meinertzhagen: Pl. XII (2), text pp. 276-7). 1st primary longer: 4-9 mm. (+) (Meinertzhagen); 1-8 mm. (+), av. 4.0 mm. (Vaurie).
FINSCH’S CHAT (*Oe. finschii*).—Upper-parts of ♀ too pale sandy-grey and pectoral band absent (skins, and see also Meinertzhagen: Pl. XI (♀)). 1st primary longer: 4.7 mm. (+) (Meinertzhagen); 1.7 mm. (+), av. 4.0 (Vaurie). 6th slightly emarginated in 30% (Vaurie).

WHITE-UNDER-WINGED CHAT (*Oe. lugens*).—♀ *l. halophila* has much paler sandy-grey upper-parts and mainly whitish under-parts lacking pectoral band (skins; see also Whitaker Pl. p. 48, ♀♀, and Vaurie pp. 29 and 32). Plumage of other races distinctive, ♀ like ♀ (see Meinertzhagen: Pl. XII, ♀). 1st primary longer: 1.5 mm. (+) in Meinertzhagen; 1-6 mm. (+), av. 4.0 mm, in Vaurie.

PIED CHAT (*Oe. picata*).—1st primary longer: 3.8 mm. (+), av. 5.4 mm.; and shorter than 6th, and latter slightly emarginated in 94% (Vaurie).

HOODED CHAT (*Oe. monacha*).—Plumage distinctive, ♀ lacks white rump (Meinertzhagen: Pl. XII, ♀♀); also longer wing (100-107 mm.); 1st primary longer: 1.4 mm. (+).

HUME’S WHEATEAR (*Oe. alboniger*).—Black and white plumage distinctive, ♀ like ♀ (Dresser). Longer wing (♀, 100-107; ♂, 95-104); 1st primary longer: 4-10 mm. (+), av. 6.7; 6th slightly emarginated in 48% (Vaurie).

WHITE-RUMPED WHEATEAR (*Oe. leucopyga*).—Black or blackish plumage distinctive, sexes alike (Meinertzhagen: Pl. X). 1st primary: 6-12 mm. (+) in Meinertzhagen; 2-9 mm. (+), av. 5.5, in Vaurie. 6th slightly emarginated in 56% (Vaurie).

MOURNING WHEATEAR (*Oe. moesta*).—Lacks white in tail; rump and tail often rufous in both sexes (see Whitaker: Pl. p. 42, ♂♀; Meinertzhagen: Pl. XII, ♀♂). 1st primary longer: 4-9 mm. (+); 6th emarginated (Meinertzhagen).

APPENDIX II: NOTES ON THE SYNONYMY OF THE PIED WHEATEAR (*Oenanthe leucomela*) AND SOME OTHER PALAEARCTIC WHEATEARS NOT DESCRIBED IN The Handbook

PIED WHEATEAR (*Oe. l. leucomela*) in Handbook = “Siberian Chot” (sic) in Ticehurst (1926) = “Eastern Pied Wheatear”, *Saxicola morio* in Dresser (1902) = “Pied or Pleschanka’s Chat”, *Oe. pleschanka* in Meinertzhagen (1930) = “Pied Chat”, *Oe. leucomela* in Baker (1924). (Cf. also *lugens* and *picata*).

RED-TAILED WHEATEAR (*Oe. xanthopyrma*) = “Red-tailed Chat” in Baker and in Meinertzhagen = “Red-rumped Wheatear” in Dresser (cf. also *moesta*). Subsp. *x. chrysopygia* = “Red-tailed Wheatear” in Dresser and Ticehurst.


PIED CHAT (*Oe. picata*) = “Indian Pied Wheatear” in Dresser (cf. *leucomela*). Subsp. *f. halophila* = “Western Pied Chat” in Whitaker (cf. *picata* and *leucomela*).

HOODED CHAT (*Oe. monacha*) = “Hooded Wheatear” in Dresser = “Hooded Chat” in Baker and in Ticehurst.

HUME’S WHEATEAR (*Oe. alboniger*) = “Black and White Wheatear”, *Saxicola albinigra* Hume 1875, in Dresser = “Hume’s Chat” in Baker and in Ticehurst.
