NOTES ON PENDULINE TITS.

BY ERNST HARTERT, PH.D.

THE first modern review of the palaearctic forms of the Penduline Tits appeared in vol. viii. of the immortal Catalogue of Birds in the British Museum, by Dr. Hans Gadow.

First the generic name must be considered. Gadow, in common with general usage of the time when he was writing, used the name Aegithalus Boje 1822, uniting the palaearctic and African species. In this he was followed until Hellmayr brought Acgithalos Hermann 1804 into use for the Long-tailed Tits. This latter name invalidates Aegithalus of 1822 in the eye of most nomenclators, because it is virtually the same, being only the fully latinized Aegithalos. But even if this view is not taken, Aegithalus of Boie could hardly be used. because it was probably only taken from Hermann, and not a new invention. and Boie used it for both Long-tailed and Penduline Tits, as he expressly says that it is the round, artificial nest, distribution of colours, and structure of plumage that lead him to unite these two species. The next oldest name then is Anthoscopus Cabanis 1851, type Sylvia minuta Shaw, and I adopt this name for the palaearctic and African species. Hellmayr and others separate it on account of its longer first primary, and if that view is taken, the name for the palaearctic forms is not Remiza Stejneger 1886, but Remiz Taczanowski, Ool. Ptaków Polskich, p. 229 (1862-Monotyp Remiz pendulinus; in Polish!). A good diagnosis is given by Taczanowski, and his name cannot be disregarded.

Hans Gadow, in 1883, admitted four palaearctic species: A. pendulinus, coronatus, custaneus, and macronyx.

With pendulinus he united jaxartica of Severtzov and consobinus Swinhoe. Severtzov's name is to be looked upon as a nomen nudum, but it was named Remiza pendulina jaxartensis by Sushkin in 1904 and is a quite recognizable subspecies, and so is, of course, consobrina from far-away China. A. castaneus Severtzov is also a subspecies of pendulinus, but its oldest name is Aegithalus caspius Poelzam of 1870, which has thus three years' priority. Another error was the placing of stoliczkae as a synonym of coronatus, while it is really a subspecies of pendulinus, but this mistake was quite comprehensible, as no specimens were available.

Dresser, Manual Pal. B. i. pp. 183-184 (1902), did not improve in any way whatever on Gadow's treatment, but admitted the same forms, adding that he thought consobrinus and stoliczkae were separated from pendulinus without sufficient reason, and describing castaneus, coronatus, and macronyx as "subspecies," of pendulinus, moreover saying that all had the same habits and nidification as pendulinus, which is quite wrong, at least with regard to macronyx, which is an inhabitant of reed-beds, while pendulinus frequents bushes.

In my Vog. d. pal. Fauna, i. pp. 389-393 (1907) I separated :

Anthoscopus pendulinus pendulinus (L.).

**	,,	caspius (Poelzam).
,,	,,	jaxartensis (Sushkin).

Anthoscopus pendulinus stoliczkae (Hume).

" " consobrinus (Swinh.).

,, yeniseensis (Sushk.).

" coronatus (Severtz.).

macronyx (Severtz.).

This arrangement was, as far as I know, quite correct; but *yeniscensis*, of which nobody had then seen adult specimens, should, according to Zarudny, be looked upon as a subspecies of *pendulinus*, and very soon new forms were added.

In 1907 (Proc. U.S. Nat. Mus. xxxii. pp. 474, 475, Clark described Remiz consobrinus suffusus from Corea and Remiz consobrinus japonicus from Japan, but both names are synonyms of consobrinus.

In the same year appeared Anthoscopus ssaposhnikowi Johansen, Orn. Jahrb. xviii. p. 201, from Lake Balkash; which Zarudny at first considered also to be a subspecies of *pendulinus*; but in Mess. Orn. 1916, p. 254, after having examined the type, he thought that it should be looked upon as a separate species, the bill, feet, and first primary being that of a macronyx, while the coloration was not like any plumage of the latter, but rather more like *pendulinus caspins*. He further found that his Remiza macronyx puradoxa (from the Amu-Darya !) is identical with ssaposhnikowi !

When describing paradoxus the author had no hesitation to place it as a subspecies of macronyx! I am very doubtful whether it is right or not to attach so much importance to the shape of bill and size of feet as Zarudny does, and the length of the first primary (which I used to look upon as a safe diagnostic character) is variable, as Zarudny too admits; in my opinion the larger feet and stronger more chiscl-like bill of macronyx is also—though generally characteristic—to some extent variable, and specimens of pendulinus can be found which in this respect match some macronyx. I am therefore not at all sure if ssaposhnikowi cannot after all be looked upon as a large-billed, large-footed subspecies of pendulinus, with which it agrees essentially in coloration.

In the following year (Orn. Monatsber. 1908, pp. 162, 163) Zarudny adds two more subspecies of A. macronyx which he describes as Anthoscopus rutilans neglectus and Anthoscopus rutilans nigricans, the first from the reed-beds on the southern Caspian, near Lenkoran, and in the Persian provinces of Ghilan and Masanderan, to Astrabad and "Djebel" (?); the latter from the Helmind River and Lakes "Chamoon-i-Suwaran" and "Chamoon-i-Farrakh" in Seistan, Eastern Persia.

In 1911 E. C. Hellmayr gave a full review of all forms known until then, in Wytsman's *Genera Avium*, part 18, pp. 58-60. He recognized the following forms:

Remiza pendulina pendulina (L.).

,,	,,	<i>caspia</i> (Poelzam).
,,	,,	<i>jaxartensis</i> Sushk.
,,	,,	stoliczkae (Hume).
,.	,.	consobrina (Swinh.)

, yeniscensis Sushk. (He added: "Doubtful form. If anything it will prove to be a geographical race of R. pendulina. No adult males are known." Judging from the locality, this form should certainly be different. and it is indeed treated as pendulinus subsp. by recent Russian authors.)

Remiza coronata (Severtz.).

- " ssaposhnikowi Johansen.
- " macronyx macronyx (Severtz.).
- ", macronyx neglecta (Zar.).
- ,, macronyx nigricans (Zar.).

Soon afterwards more new forms were added.

In Mess. Orn. 1913, p. 46, Zarudny reviews (in Russian!) the Easter n Penduline Tits. He discusses two specimens already described by Menzbier from the Lower Ural River. These birds, he says, look like hybrids between A. pendulinus and macronyx, but, as the latter does not occur on the Ural River, he justly does not consider them to be hybrids, and he names them :

Remiza pendulina bostanjogli.

But this course appears to be also reckless, because A. pendulinus caspius lives on the Ural River, and as the birds were shot on April 26th they were probably on their breeding-ground—unless still on migration and from an unknown place in Western Siberia ?

Zarudny further describes in this article :

Remiza pendulina menzbieri

from the Karun River in South-Western Persia.

In the same periodical, Mess. Orn. 1914, pp. 184-220, he once more reviews (in Russian !) at great length the Turkestan forms of *Remiza*, after having already separated in Orn. Monatsber. 1914, p. 57, under the name

Remiza macronyx loudoni

the macronyx form from Lenkoran from that of Northern Persia; he thus restricts neglectus to the reed-beds of Ghilan, Masanderan, and Asterabad.

Of the same species, macronyx, he separates off another subspecies, which he calls

Remiza macronyx paradoxa,

and which he found near Chardjui on the Amu-Darya, thus apparently restricting macronyx macronyx to the Syr-Darya region !

We are thus having a nice assemblage of forms in a comparatively small region, but nevertheless some birds in the Tring and British Museum seem to be different from all the bitherto described forms.

For some time we had in Tring a male and female of a Penduline Tit collected at Eregli in Asia Minor, on May 8th and 11th, 1908, by P. Urmös, which did not seem to agree with A. pendulinus pendulinus; with these birds agree specimens from Lenkoran, *i.e.* one "male" dated 2. ii. 1882, from the H. H. Slater collection, and one in the British Museum, a male collected at Kaisarieh in Asia Minor, by C. E. Danford, and two from Lake Urmia in North-Western Persia. These birds are very much like A. p. pendulinus, but smaller, *i.e.* with shorter wings and tails, while the bills are equally slender and long, or even a little longer. The chestnut line above the black forehead is exceedingly narrow, sometimes hardly visible, top of head of male in spring pure white. Lesser upper

wing-coverts and rump paler, the latter therefore in sharper contrast to the interscapular region. Wings: 353, 53, $54\cdot5$; 952, $52\cdot3$, 53, 53, 54 mm.

I name this form Anthoscopus pendulinus persimilis, subsp. nov.

Type : J ad. Eregli, 8. v. 1908. P. Ürmös leg.

This form differs from A. p. stoliczkae by its larger bill. It eannot be the bird ealled by Zarudny Remiza macronyx loudoni, as that is said to be a form of macronyx. It seems that Zarudny separates the latter from the forms of pendulinus by its stouter bill and stronger feet, because (though easily separable by colour alone in spring) in winter plumage pendulinus and macronyx are very much alike. Even if, as it seems to me, too much stress is laid on the massiveness of the feet and the shape of bill—the former being not always apparent in a dry skin, the bill being sometimes very much alike—this loudoni cannot be my persimilis, because Zarudny says that it has more chestnut above the black forehead.

In menzbieri the chestnut band is also wider than in A. p. pendulinus, not narrower!

We have therefore now the following possible palaearetic species and subspecies of Anthoscopus:

A. pendulinus pendulinus (L.).

South Europe from Spain, Southern France, and Italy to Galicia, Poland, South Russia (Poltawa), Greece, and, judging from one specimen obtained by Krüper at Smyrna, westernmost Asia Minor.

A. pendulinus caspius (Poelzam).

Rivers and shores of Northern Caspian Sea, Volga and Ural Rivers, north to Orenburg.

A. pendulinus bostanjogli Zar.

Description of two specimens from the Lower Ural River, which have the appearance of hybrids between A. pendulinus and macronyx.

A. pendulinus yeniseensis (Sushk).

Upper Yenissey.

A. pendulinus ssaposhnikowi Johansen (? species).

Karatal River, southern Balkash Lake, also obtained (2 May! perhaps still on migration) by Zarudny at Chardjui on the Anu-Darya (paradoxus = ssaposhnikowi).

A. pendulinus jaxartensis (Sushk.).

Valley of the Syr-Darya.

A. pendulinus stoliczkae (Hume).

Eastern Turkestan to Dsungaria (Rivers Urungu, Bulugun, Bulun-tochoi) and Mongolia (Urot).

A. pendulinus menzbieri (Zar.).

Lower Karun River, South-Western Persia.

A. pendulinus persimilis Hart.

Eregli in South-Eastern Asia Minor to Kaisarieh, Lenkoran, and Lake Urmia.

A. pendulinus consobrinus (Swinh.).

Eastern China (Yantzekiang), Corea, and South Japan (Nagasaki).

A. coronatus (Severtz.).

Transcaspia and Turkestan to Afghanistan and Eastern Persia, at least in winter to Tirphul and Kohat, and even Sind.

A. macronyx macronyx (Severtz.).

Syr-Darya Valley, probably also Amu-Darya, where *ssaposhnikowi* may only be a migrant, besides belonging to another species.

A. macronyx neglectus Zar.

Ghilan, Masanderan, and Astrabad.

A. macronyx loudoni (Zar.).

Wintering at Lenkoran and Kumbashinsk, nesting on Lower Kura and Terek, according to Zarudny's surmise. (Requires further investigation.)

A. macronyx nigricans Zar.

Seistan in Eastern Persia.