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Short Notes on a collection of Birds from Tianshan.

By

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With 1 plate.

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The Birds of the Paleartic region are, for the present, the object of eager study from the side of the ornithologists as it has become evident of late that our knowledge about them still has many defects. It has been recognised gradually that many if not most species of Birds are represented by different and aberrant forms or types within different regions. These geographic subspecies or races are, however, not yet known all of them, the degree of variation is not ascertained in every case; nor is the distribution of each type of variety stated. This modern problem of the geographic variation can not be solved at once because the needed material cannotbe brought together suddenly, but the solution must come as the summed up result of many investigations. In such a case every little contribution is of value.

This autumn I have succeeded in procuring a collection of birds from the Tianshan district. When naming these I made a comparison between them and corresponding swedish specimens. The material has not been sufficiently large, but in several instances differences in size or colouration have been demonstrated which may help to distinguish some geographic subspecies when more material has been obtained,

and at the same time additional knowledge about the geographic distribution of different forms has been acquired.

The localities where these birds have been collected are chiefly at Baimgol, which is a tributary to the river Tekes, and on the mountain Chantengri. As the number of species amounts to no less than 79 the collection gives a pretty good idea of the ornis of Tianshan even if the collection is not by far complete. Especially the smaller birds are lacking.

Most of the specimens belong now to the Natural History Museum of Stockholm.

1. Podicipes auritus (L.)

♂ $^{22}/_{4}$, ♀♀ $^{5}/_{5}$, ♂ $^{6}/_{6}$ 1902 Baimgol.

2. Podicipes cristatus (L.)

♂ $^{10}/_{8}$ 1902 Baimgol.

A young Grebe hatched the same year.

3. Phalacrocorax carbo medius Nilsson.

Two young specimens $^{15}/_{8}$ 1902 Baimgol.

Wing 330 mm. tail 160—166 mm. culmen 61 mm. tarsus 64 mm.

The very small size of these and other specimens from Central Asia is very striking when these Cormorants are compared with Cormorants from the Scandinavian Westcoast. But in the same respect they agree quite closely with Cormorants which in former days were found nesting and breeding in trees in Southern Sweden as well at certain lakes as on the small wooded islands at the Baltic coast, NILSSON distinguished this bird with the subspecific name *medius* and I have retained this name for the quite similar bird from Central Asia.

4. Botaurus stellaris (L.)

♂ $^{5}/_{5}$ 1902 Baimgol.

Wing 320, tail 414, culmen 65 mm.

This Bittern has a very short bill, but the variability of this organ is so great that the shortness in this case must be regarded as of no importance.

5. Ardetta minuta (L.)

♀ $^{5}/_{5}$ 1902 Baimgol.

6. Ciconia nigra L.

$^{15}/_{7}$ 1902 Baimgol

7. Mergus merganser L.

♂ $^{30}/_{4}$, ♀ $^{26}/_{4}$, ♀ $^{3}/_{5}$ 1902 Baimgol.
Wing in ♂ 287, in ♀ 255–265 mm.

8. Nyroca nyroca (GÜLD.)

♂ $^{25}/_{4}$ 1902 Baimgol.

According to Cat. B. Brit. Mus. this locality should be rather beyond the eastern limit of distribution of this duck as in the work mentioned »the valley of the Obb» is indicated as its eastern boundary, but PLESKE[1] has recorded it still further east »aus Bulundschi, auf dem Wege nach Angssi». This was however as early in the year as in March and it has therefore been a migrating specimen.

9. Nettion crecca (L.)

♂ $^{4}/_{5}$, ♀ $^{5}/_{5}$ 1902 Baimgol.
Wing in ♂ 180, in ♀ 168 mm.

10. Dafila acuta (L.)

A female specimen, exact locality not recorded.
Wing 240, tail 105, culmen 45 mm.
The measurements of this pintail are rather small.

11. Querquedula querquedula (L.)

♂ $^{24}/_{4}$, ♂ $^{25}/_{4}$, ♂ $^{4}/_{5}$, ♂ $^{5}/_{5}$ ♂ $^{7}/_{5}$, ♂ $^{10}/_{5}$ 1902 Baimgol.
♀ $^{20}/_{4}$, ♀ $^{20}/_{4}$, ♀ $^{6}/_{5}$, ♀ $^{10}/_{5}$, ♀ $^{10}/_{5}$ 1902 Baimgol.
Wing in ♂ 195 mm., in ♀ 185 mm.
Colour as in Scandinavian specimens.

This duck seems to be common at Baimgol to judge from the number of specimens.

[1] Bull. Acad. Imp. Sc. S:t Petersbourg. N. S. III (XXXV).

12. Spatula clypeata (L.)

♂ 27/4, ♂ 27/4, ♀ 25/4, ♀ 6/5 Baimgol.

Wing	in ♂	245	in ♀	210	mm.
Tail	,, ,,	92	,, ,,	85	,,
Culmen	,, ,,	63	,, ,,	62	,,
Tarsus	,, ,,	36	,, ,,	35	,,

13. Anas boschas L.

♂ 1/5, ♀ 10/5 1902 Baimgol.

14. Casarca casarca (L.)

♂ 15/4, ♀ 25/4 1902 Baimgol.

15. Anser anser (Gm.)

♂ 15/4, ♀ 5/4, ♀ 3/5 1902 Baimgol.

♂ Wing 453, tail 155, culmen 67, tarsus 83 mm.

♀ ,, 435, ,, 155, ,, 67, ,, 76 ,,

If these specimens are compared with swedish Grey Geese they appear to be paler on their upper parts and with the colouration of the head and neck shading somewhat into sandy yellowish. The female shot 5/4 shews large bare spaces on its under side which indicate that she already has begun to sit on her eggs or at least to lay eggs which seems rather early in the year.

16. Anser indicus (Lath.)

♂ 25/4 1902 Baimgol.

17. Circus æruginosus (L.)

♂ 18/8 Baimgol.

A young specimen.

18. Circus macrourus (Gmel.)

♂ 6/8, ♀ 27/9, ♀ 10/8, juv. 15/7 1902 Baimgol.

The last mentioned specimen is a quite young bird, the quills of which are not yet fully developed and with some down left on the forehead. Its lower side is brilliant rufous, paler on the belly.

19. Circus cyaneus (L.)

♂ $^{5}/_{8}$ 1902 Baimgol.

20. Circus pygargus (L.)

♂ $^{18}/_{4}$ 1902 Baimgol.

21. Milvus govinda Sykes.

♀ $^{10}/_{8}$ 1902 Baimgol.

Wing 483 mm. The white on the inner web at the base of the primaries rather well developed.

This species is not recorded by Pleske[1] in his »Revision der Turkestanischen Ornis» and the locality where it has been collected now seems to be more northern than its normal distribution.

22. Pandion haliaetus (L.)

♂ $^{13}/_{5}$ 1902 Baimgol.

23. Cerchneis tinnuncula (L.)

♂ $^{10}/_{5}$, ♀ $^{4}/_{5}$, ♀ $^{19}/_{4}$, ♀ $^{20}/_{4}$ 1902 Baimgol.

The male specimen has very rich colours but is other wise not remarkable. All the females have a distinct bluish shade on the rump and upper tail coverts. In the first mentioned of the female specimens the tailfeathers are completely ashy grey only with a slight rufous shade on their outer web. On the tailfeathers of the second female specimen the rufous shade becomes more dominant on their distal half although bluish ash is the ground colour. In both these the tailfeathers are rather regularly barred by blackish. In the third female the tailfeathers are light rufous, the transverse bars are narrower than in the others and mostly broken up into irregular spots, or entirely wanting in the distal parts. The differences are consequently rather great and more material is needed before any definite opinion can be expressed about the variation of the Kestrel of the Tianshan

[1] Mém. Acad. Imp. Sc. S:t Petersbourg T. XXXVI N:o 3 1888.

district. OBERHOLSER has recently[1] stated that specimens »from Cashmere and Ladak are much darker, particularly above, than those from Europe and should apparently bear the subspecific name *interstincta* MC CLELLAND[2]». But he says that birds» from the Thianshan Mountains and Eastern Turkestan are, however, paler, and apparently must be referred to the European form». From the notes above is, however, apparent that these specimens do not agree with the common Kestrel, for instance in Scandinavia.

24. Falco subbuteo cyanescens subsp. n.(?)

♂ 1/5, ♂ 2/5 1902 Baimgol.

Wing 270 mm.

I have compared this Hobby with a number of specimens from Sweden and other parts of Europe, but I have not found any by far so pale-coloured as the birds from Tianshan. It is evidently adult birds to judge from the richness of the colouration and the absence of fulvous edgings to the feathers of the back and wings. — Forehead whitish, a rather broad white eyebrow. Crown of the head slaty but with rather broad sandy white edges to the feathers so that the general appearance is rather pale with the black shaftstripes well conspicuous. Spots on the nape ferrugineous. Upper part of the mantle, back, rump, wingcoverts and secondaries bluish ash (hardly darker than *Circus cyaneus*) with narrow blackish shaftstripes which are quite prominent against the pale ground colour. Primaries blackish, secondaries more slaty, all quills with pale rufous transverse markings on the inner web. Sides of head, foreneck and under parts like the same of the common Hobby. The distribution of the colouration of the axillaries and greater under wing coverts may suitably be described as follows[1]: blackish brown with large round spots on both webs arranged in pairs, creamy white with buff margins. Tighs rich ferrugineous red without spots Under tail-coverts a little paler. Tail pale slaty brown with rufous transverse bars on the inner web which, however, distally are rather faintly developed. In addition to the discrepancies with regard to colouration the Hobby from Tianshan

[1] Proc. U. S. Nat. Mus. Vol. 22. Washington 1900.

[2] The same also holds good for the Common Hobby in many instances.

is remarkable for its size. The specimens described above were males but, nevertheless, the measurement of their wings is fully as large as the same of the female of the common Hobby. All these characteristics taken together have compelled me to distinguish the bird from Tianshan with a subspecific name.

25. Phasianus mongolicus turcestanicus Lorenz.

♂ Febr. 1902 Sir Darja, Turkestan.

A male pheasant labeled as above, is quite typical, with the collar only narrowly interrupted in front. But this bird differs from some pheasants from Baimgol in a remarkable degree so that I must regard the latter as being more nearly related to

26. Phasianus mongolicus (semitorquatus (?) Sewertzow.)

♂♂ $^{28}/_{4}$, $^{29}/_{4}$ 1902 Baimgol.
♂ juv. $^{15}/_{8}$ 1902 ,,
♀♀ $^{16}/_{4}$, $^{20}/_{4}$ 1902 ,,

I have used Buturlin's synopsis of the true pheasants (»The Ibis», July 1904) for the determination of these birds and to judge from this most recent work on the subject the pheasants from Baimgol differ from the typical *mongolicus* in having strongly clouded or blackish centres to the wing coverts. Buturlin seems to regard this characteristic as the most important for the subspecies *semitorquatus*, together with the narrowness and slight development of the white collar, which even may be in some cases »nearly wanting» (l. c. p. 380). Now the white collar is widely interrupted in front in these specimens but otherwise quite well developed as in the typical *mongolicus*. It seems accordingly as if these Pheasants from Baimgol should be intermediate between the typical *mongolicus* and the subspecies *semitorquatus*. A comparison between them and the specimen representing the other subspecies *turcestanicus* may therefore be of interest

	Ph. m. turcestanicus.	*Ph. m.* from Baimgol.
Crown of the head, nape and hindneck	green with prevailing green and bronzy gloss;	green with decided purplish gloss;
sides of the neck	with strong bluish green, partly somewhat bluish violet gloss;	less bluish green in the upper parts, bronzy green on the lower;
throat maroon	the tips of the feathers with a slight bluish green gloss, a streak of bluish dividing the throat from the cheeks;	with a well developed bronzy green hue, the same colour all over the throat;
mantle coppery red	with purplish gloss when seen between the spectator and the light, bronzy when the light falls obliquely from the side; the black marks have in the former case a bluish in the latter a greenish gloss;	with golden orange gloss in the former case, a strong green gloss in the latter case; the black has always a green gloss if any;
chest	with a strong purple gloss, in a certain light even cherry-red;	with a coppery red gloss and when seen from the side somewhat bronzy, the latter gloss being somewhat more conspicuous in the middle of the breast;
flanks with golden orange gloss and the broad black ends to the feathers	with blue gloss;	with green gloss;
middle of the breast	distinctly oily green;	with a slight bronzy green gloss;
rump	with a strong oily green gloss;	in one specimen oily green, in the other only a little green on red maroon;
light transverse bars on the inner web of the primaries	less developed and leaving about 7—8 cm. of the distal part of the inner web of the four outer primaries unspotted;	better developed and extending to 4—5 cm. from the end of the primaries;
the black bars of the central tail feathers	broader about 4—6 mm.	narrower, usually 2—2½ mm.

The young male shot at Baimgol the 15:th of August has a very interesting plumage as it is in full moult. It has assumed the feathers of the semiadult male on the mantle and mostly on the chest and breast. On the back the plumage is mixed. On the rump the new feathers have appeared, the new tail-feathers are also developed, although not yet full-grown. The feathers of the wings are mixed. On the head only a few feathers on the crown are developed. Throat and neck are still clothed with the greyish white and mottled feathers of the young. The feathers of the semiadult differ from that of the adult in several respects and this difference

is of importance because it shows in which direction the development has gone. The feathers on the crown, for instance are only green at their ends and have a concealed central light spot. The mantle of the semiadult is less coppery red but more green than in the adult. The glossy margins to the feathers are as a rule less broad. The rump has in the young a stronger green gloss than in one of the adult. The transverse black bars of the central tailfeathers are much broader than in the adult being as broad as in *turcestanicus* and at the tip even still broader. The breast and chest have also, as in *turcestanicus*, a decided purplish gloss although the same parts in other lights have green gloss. These two last mentioned characteristics indicate that *turcestanicus* is the original form from which *mongolicus* has developed.

27. Tetraogallus himalayensis Gray.

(Pl. 1)

A young chick in down collected $^{6}/_{5}$ 1902 on Chantengri. Total length of the skin 125 mm. The ground colour of the upper parts is greyish or dirty white, but many or perhaps most feathers have black tips and a subapical buffish spot. Through this arrangement the chick becomes transversally but irregularly mottled with black and buffish. This results in the black being dominant. On the head again the black spots have a tendency to be arranged longitudinally and are partly confluent to stripes. From behind the nostril on either side a stripe extends over the head to the nape. A row of black spots is seen above the whitish eyebrow. A black stripe extends from the eye to the ear, another stripe (or row of spots) goes from the bill below the eye to the ear and still another from the gape along the cheeks curving upwards to a place somewhat behind the ear[1]. Throat white unspotted. Breast whitish mixed with buff; belly white. The small feathers of the wing are black, richly mottled with buffish white and with rather broad white tips. The still smaller rudimentary feathers of the tail are light buff with white tips and a few small mottlings of black. Bill black, claws pale above, dark on the sides.

[1] Corresponding stripes are found in the chick of the Ptarmigan although it otherwise is not similar to that of *Tetraogallus*.

28. Perdix dauurica (PALLAS.)

a) ♂ $^{10}/_{8}$ b) $^{15}/_{8}$ 1902 Baimgol.
c) ♀ $^{5}/_{8}$ d) $^{15}/_{8}$ 1902 Baimgol.
e) ♀ $^{15}/_{8}$ f) $^{15}/_{8}$ g) $^{18}/_{8}$ 1902 Baimgol.

Specimens *a—d.* have black horse shoe-marks on their breast although less developed in the females which latter also are less buff on breast and chest. These females are in moult. The new feathers on the hind neck and upper back have a ground-colour of (hoary) grey with black vermiculations while the old feathers are more sandy brownish. On the middle and lower back the ground colour of the new feathers is sandy brown, not quite as pale as in the males which appear to have finished their moult long ago.

Specimens *e—g* are young without any buff on the breast and also without any trace of the black horse-shoe mark. They are partly in moult. The rufous buff of the forehead is narrower than in the adult. On the throat and cheeks the new buff feathers appear to replace the whitish or light sand-coloured feathers (with light shaftstripes) of the chick. The grey on the hind neck is not so much developed as in the adult but it is due to the new feathers which also show the chestnut subterminal bar. The old feathers of the chick seem to have been sand-coloured with whitish shaft-stripes, on either side bordered with dark. On the whole these young birds have otherwise assumed a plumage similar to that of the old hens.

29. Coturnix coturnix (L.)

$^{25}/_{4}$ (sex unknown) 1902 Baimgol.

The breast of this specimen is almost without spots. Throat white.

30. Lyrurus tetrix mongolicus LÖNNBERG.

Last summer I published in REICHENOW's Ornithol. Monatsberichte Juli—Augustheft 1904 a description of a new subspecies of *Lyrurus tetrix*, specimens of which I had bought from a dealer the winter before. It was stated that these specimens were from the interior of Asia and they were labeled »Baimgol». In the geographical works and maps then

accessible to me I could find but one »Baimgol» which was situated in Mongolia not very far from the town Urga. Since that I have learned that several rivers in Central Asia have such a name and that the one meant in this special case is a tributary to Tekes in the Tianshan district and that the specimens of Black Grouse referred to above belong to the collection described in this paper. It was therefore an unfortunate mistake when I named this subspecies »*mongolicus*», but this cannot now be altered. It may, however, be observed that the type locality is Tianshan.

L. t. mongolicus differs from other geographical subspecies of Black Grouse through its large size, the wing in the male measuring 282 mm. in the females 244—247 mm. The male has blue gloss and differs thus from *L. t. viridanus*. Neither male nor female have any white at the base of the tailfeathers through which they are easily distinguished from *L. t. tschusii*. The female of the new subspecies is not so ferrugineous in the colouration of the neck and chest as the female of *L. t. viridanus*. The great development of the white on the wing — quills, greater coverts and bastardwing — indicate the eastern type so completely different from the Scandinavian. For other details I refer to the paper quoted above.

31. Fulica atra L.

♂♂♂ 15/8, ♂ 17/8, ♂ 18/8 1902, and a young without date on the label, all from Baimgol.

Wing 211—217, in one specimen, however, only 200 mm. although it was labeled as ♂, but it may have been a mistake about the sex. Middletoe and claw 90 mm. in a ♀.

The olive shade on the back and wings of these specimens seems to be more pronounced than in swedish specimens. Feet and tarsi look in the dry specimens quite black. The measurements agree pretty well with the corresponding ones in swedish specimens, but the colour differences mentioned might indicate that a comparison with greater material shall prove an eastern geographic race.

32. Otis dybowskii Tacz.

♂♂ 25/8, ♀ 19/4 1902 Baimgol.

The female specimen is rather similar to a female of *Otis tarda*, but a good deal lighter on the upper parts. The

two male specimens have no rufous on their necks which are wholly light bluish grey. They have also less black on their backs than *Otis tarda* from Sweden and Saxony. In the latter specimens the black is dominating in the former the sandy rufous ground colour. The median wing coverts of the Tianshan specimens are light grey or white with a bluish grey shade.

33. Tetrax tetrax (L.)

4 ♂♂ $^{24}/_{4}$, $^{28}/_{4}$, $^{3}/_{5}$, $^{10}/_{5}$; ♀♀♀ $^{4}/_{5}$ 1902 Baimgol.

34. Ægialitis dubia (Scop.).

♂ $^{20}/_{5}$, ♀ $^{14}/_{5}$ 1902 Baimgol.

Wing 115; tail 62—64 mm.

These specimens seem to have rather longer tails than average Scandinavian specimens.

35. Vanellus vanellus (L.)

$^{5}/_{5}$ (specimen of unknown sex), ♂ $^{15}/_{5}$ 1902 Baimgol.

Wing 217—230, tail 103—117, culmen 27, tarsus 49 mm.

The outer tailfeather is pure white, spotless in both specimens.

The male specimen seems to be rather larger than the average scandinavian Lapwings, but if this is always the case with the specimens from Central Asia cannot be decided.

36. Ibidorhynchus struthersi Vigors.

♂ $^{24}/_{3}$ 1902 Kegen.

37. Limonites temminicki (Leisler.)

♂ $^{19}/_{8}$ (without head), ♀ $^{3}/_{8}$, ♀ $^{5}/_{8}$ 1902 Baimgol.

Wing 95—97, tail 45—47, culmen 19, tarsus 18,5 mm.

All three specimens are young birds in migration (not in good condition).

38. Totanus totanus eurhinus Oberholser.

♀ $^{1}/_{4}$, ♀ $^{10}/_{4}$ 1902 Baimgol.

Wing 155—166, tail 65—71, culmen 43—46, tarsus 46—53 mm.

These measurements appear to be somewhat above the average for swedish specimens of the typical *T. totanus* and

agree whith those recorded by OBERHOLSER[1] for the subspecies mentioned above. There appears also to be some differences in colour, too. So for instance these specimens are almost unspotted in the middle of the under parts and less densely on the breast. In Cat. Birds B. M.[2] Dr. R. BOWLDER SHARPE writes »The Eastern Redshanks from Central Asia and India are much more richly coloured in the breeding season than European individuals». This is true about these specimens, especially are the blackish bars of the scapulars much more clearly defined and the dark bars of the greater wing-coverts are also sharper and contrast more against the light edges of these feathers etc. On the whole these specimens have a much more variegated appearance than swedish specimens, but Dr. SHARPE speaks of the eastern specimens as being more »rufous» than european. I do not see in these any exactly rufous shades.

39. Glottis litorea (L.)

♀ 4/8 1902.

Wing 185, tail 80, culmen 57, tarsus 62 mm. Adult in winterplumage.

40. Helodromas ochropus (L.)

♂ 5/8, a specimen of unknown sex 10/8 Baimgol.

Wing 141—139, tail 60, culmen 35—36, tarsus 35—37, middle toe and claw 32 mm.

These specimens differ from the typical *H.* ochropus from Sweden in several respects. The tail of the Tianshan specimens is longer. The under wing-coverts especially of the male are very dark almost black and to less extent, rather scantily barred with white. The tailfeathers are rather dark so that the middle ones have 4 or 5 dark bars which in the outer half are hardly separated by white but only by buffish white notches in the margin. Only the upper tail-coverts are white and most of them are narrowly fringed with blackish at their extremity. Some of the longer lower rumpfeathers are tipped with white, but even those are fringed terminally blackish.

[1] Proc. U. S. Nat. Museum. Vol. XXII. 1900. P. 207—208.
[2] Vol. XXIV, p. 419.

41. Tringoides hypoleucus (L.)

♀ $^{10}/_{4}$ 1902 Baimgol.

Wing 105, tail 57, culmen 25, tarsus 26 mm.

These measurements are perhaps a little smaller than in an average swedish specimen except that the tarsus when compared with the length of the culmen appears to be rather long.

42. Limosa limosa (L.)

♂ $^{25}/_{4}$, ♂ $^{30}/_{4}$, ♂ $^{8}/_{4}$ 1902 Baimgol.

♀ $^{25}/_{4}$ 1902 Baimgol.

In ♂♂: Wing 192—195, culmen 82—87, tarsus 67—72 mm.
,, ♀ ,, 210 ,, 106 ,, 84 ,,

These male birds are smaller than most scandinavian specimens and much smaller than the measurements in Cat. Birds B. M. (Vol. XXIV) indicate.

(In swedish specimens I have measured in
♂♂ wing 200, culmen 93—85 mm.
♀ ,, 210 ,, 100—107 ,,).

But the female from Tianshan appears to have attained almost as large size as those from Scandinavia so that the difference is not as large as it at first appeared to be. It seems, however, worth to be recorded till larger series are known and the degree of variation may be fully elucidated.

43. Numenius arquatus (L.)

♀ $^{24}/_{4}$ 1902 Baimgol.

Wing 282, tail 112, culmen 142, tarsus 85 mm.

44. Gallinago gallinago uniclava Hodgs.

♀ $^{10}/_{8}$ 1902 Baimgol.

Wing 130, culmen 70, tarsus 31 mm.

The axillaries are pure white and this bird belongs accordingly to the eastern race.

45. Gallinago solitaria Hodgs.

$^{23}/_{9}$ 1902 a specimen of unknown sex, but probably a male to judge from its dimensions.

Wing 165, tail 74, culmen 72, tarsus 35 mm.

46. Sterna hirundo tibetana (SAUND.).

♂ 2/5, ♀ 2/5, ♀ 2/5 1902 Baimgol.

Wing	♂ 273,	♀ 280,	♀ 262	mm.
Tail	,, 146,	,, 143,	,, 145	,,
Culmen	,, 35,	,, 37,	,, 34	,,
Tarsus	,, 21,	,, 20,	,, 20	,,

These specimens are very conspicuously different from average Scandinavian Terns being decidedly darker above and below.

47. Hydrochelidon nigra (L.)

♂ 20/5, ♀ 13/5 102 Baimgol.

Wing ♂ 217, tail ♂ 86, culmen ♂ 30, tarsus ♂ 17 mm.
,, ♀ 215, ,, ♀ 87, ,, ♀ 30, ,, ♀ 16 ,,

This locality is probably the most eastern where this bird has been found.

48. Pterocles arenarius (PALLAS.)

♂ 23/4 1902 Chantengri.

49. Turtur turtur (L).

♂ 4/5 1902 Chantengri.

Wing 175, tail 115, culmen 17, tarsus 24 mm.

The size of this specimen seems to be rather small even for the western species thus it is still smaller than the eastern *T. ferrago*. The locality mentioned is probably at the eastern boundary line of the species.

50. Turtur ferrago EVERSM.

♂ 12/8, ♂ 15/8, ♀ 5/8, ♀ 15/8 1902 Baimgol.

Wing 183—185 mm.

All four specimens are young, but I regard them as belonging to this species and not to *T. orientalis*, because the under tail-coverts are pure white and the band across the tail is also almost white. The size agrees with *T. ferrago*.

51. Columba casiotis Bonap.

♂♂ $^{23}/_{4}$, $^{1}/_{5}$, ♀ $^{16}/_{4}$, $^{23}/_{4}$, juv. $^{5}/_{8}$ 1902 Baimgol.
The young bird has no light patches on the neck.

52. Columba rupestris Bonap.

♂ $^{17}/_{8}$ 1902 Baimgol, ♀ $^{5}/_{5}$ 1902 Chantengri; 1 juv. $^{6}/_{7}$ 1902 Chantengri, 2 juv. $^{10}/_{8}$, $^{15}/_{8}$ 1902 Baimgol.

These specimens probably represent the subspecies *pallida* Rotsch. & Hart., but I am not quite sure about this as I have no material for comparison.

53. Columba intermedia Strickl.

♂♂ $^{5}/_{8}$, $^{10}/_{8}$ 1902 Baimgol, ♀♀ $^{15}/_{8}$, $^{20}/_{8}$ Baimgol.

These specimens are all of them true *C. intermedia* having the rump slate-blue like the back, but three other specimens show a very interesting intergrading to *Columba livia*. The first of these has the rump still slate-blue but of a much lighter shade than the back. It is a ♂ shot $^{10}/_{8}$ at Baimgol. The next specimen a ♀ shot $^{10}/_{8}$ 1902 at Baimgol has a still lighter rump, almost white with a shade of slaty bluish. The third a ♂ shot $^{15}/_{8}$ at the same locality might just as well be termed *C. livia*, as the rump is pure white with a very slight bluish tinge. These three specimens are all of them smaller than the typical *intermedia* from the same locality and have wings measuring 222—227 mm., while the wings of the typical *intermedia* measure 242. The specimens with lighter rump appear to be younger than the others. The last mentioned for instance is in moult and all the feathers of the neck that are glossy are either quite new or only partly developed. The second of the light-rumped specimens does not show any gloss on the feathers of the neck, and the first and comparatively darkest is the glossiest. This seems to indicate that the young specimens of *C. intermedia* have whiter rump than the adult. But if this is the case, it is evident that the form that represents a juvenile stage of another is the older of the two. Thus should in this case *C. livia* be the older and *C. intermedia* the younger or »higher» form which is just the reverse to what Salvadori expresses as his opinion in Cat. Birds. Brit. Mus. Vol. XXI, p. 255.

54. Cuculus canorus L.

♂ 6/5, ♂ 20/5, ♀ 8/5, ♀ 8/5 1902 Baimgol.
♂ Wing 221—228.
♀ Wing 208—210.

The bars on the under side are perhaps a little narrower than the average in typical swedish specimens but otherwise I see no difference.

55. Coracias garrula L.

♀ 13/5 1902 Baimgol.
Wing 190 mm.

56. Merops apiaster L.

♀ 5/5, ♀ 6/5 1902 Baimgol.
Wing 141—144 mm.
Culmen 37—39 ,,

Although these specimens are conspicuously old birds they have a stronger wash of green on the upper parts than the specimens I have had for comparison. Even the chestnut of the secondaries is obscured by this green wash in a rather striking manner. As this, however, is to be regarded as a retained juvenile characteristic I do not dare to proclaim this form as a geographic race when the material is so scanty, but it seems rather probable that such is the case when also the length of the bills is considered as this is a good deal greater than in the specimens for instance which I have shot at Kura river in Transcaucasia etc.

57. Upupa epops L.

♀ 20/4 1902 Baimgol.

58. Asio otus (L.)

♂ 10/4, ♂ 23/4, ♂ 20/5 1902 Baimgol.

The first mentioned of these specimens has the first primary of the right wing wholly white (through partial albinistic variation) otherwise the specimens are normal and typical.

59. Iynx torquilla L.

♂ $^{5}/_{8}$ 1902 Baimgol.
No difference from swedish specimens can be seen.

60. Alauda arvensis cantarella (BONAP.)

♂ $^{20}/_{5}$ 1902 Baimgol.
Wing 115, culmen $13\,^{1}/_{2}$ mm.
A specimen with much worn plumage.

61. Motacilla personata GOULD.

a) ♀ $^{10}/_{4}$, b) $^{4}/_{8}$, c) $^{5}/_{8}$.

a) is in breeding plumage, b) has the white throat etc. and is thus in typical winter plumage, c) is a young bird in first winter plumage, some feathers on the crown, nape and hind neck are black.

62. Motacilla leucopsis GOULD.

♀ $^{10}/_{8}$ 1902 Baimgol.
In winter plumage.

63. Motacilla alba L.

$^{1}/_{8}$ 1902 Baimgol.
In winter plumage.

64. Budytes citreola (PALLAS.)

♀ $^{20}/_{3}$ 1902 Baimgol.
This specimen has rather yellow forehead.

65. Ruticilla rufiventris (VIEILL.)

♂ $^{14}/_{5}$ 1902 Baimgol.
Wing 87 mm.

66. Cyanecula suecica (L.)

♀ $^{14}/_{4}$ 1902 Baimgol.

65. Cinclus leucogaster Bonap.

♂♂ 9/4, 1/5 1902 Baimgol.

Wing 92 mm.

The specimen shot in April is conspicuously paler on the sides of the mantle. The specimen shot in May has the mantle almost uniform with the crown of the head, but the feathers of the mantle still show some traces of the pale edges which in the former specimen in that place cause the pale hue.

66. Anorthura pallida (Hume.)

19/4 1902 Baimgol.

Wing 51 mm.

67. Hirundo rustica L.

1/8 1902 Baimgol.

A young specimen.

68. Pœcile songarus Severts.

♀ 25/4 Baimgol.

Wing 70 mm.

I refer this specimen to *P. songarus* although its colour above hardly is so »rusty brown» or »reddish» as Hellmayr indicates in his monograph of Paridæ[1]. Above this specimen is almost mouse-brown but below the colour is more rusty.

69. Corvus corone orientalis Eversm.

♂ 10/4 1902 Chantengri; ♀ 14/5 Baimgol.

Wing	in female	345,	in male	355	mm.
Tail	,,	,,	207	,,	,,	210	,,
Culmen	,,	,,	63	,,	,,	65	,,

Distance between outermost and median rectrices 30 mm.

The measurements above show that these specimens belong to the larger eastern race.

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[1] Das Tierreich. 18 Lief. Berlin 1903, p. 68—69.

70. Corvus frugilegus L.

♂ 12/4, ♀ 15/4, ♀ 5/8 1902 Baimgol.

Wing in ♂ 310, in ♀♀ 327 mm.
Tail ,, ,, 170 ,, ,, 125—192 ,,

The throat is bare to a rather great extent. The specimens do not seem to differ from european Rooks in colour or measurements. The outer tailfeathers are rather short about 3 cm. shorter than the median ones.

71. Colœus monedula (L.) var.?

♀ 5/5 1902 Baimgol.

Wing 250, tail 133, tarsus 42, culmen 33 mm.

This Daw is a very dark bird. The collar round the hind neck from ear to ear dark grey, otherwise it is above and below uniformly blackish, only a little more greyish on the belly. The feathers of the wings are much weatherworn and therefore somewhat brownish. The specimen does not agree with the description of any race of *Colœus* in HARTERT's manual[1]. It might be an individual aberration and no definitive statement can be based on a single specimen.

72. Nucifraga caryocatactes rothschildi HARTERT.

♂ 20/6, ♀♀ 24/6 Chantengri.

Wing in ♂ 200, in ♀ 194—199 mm.
Tail ,, ,, 144 ,, ,, 145 ,,

When compared with swedish specimens these are apparently darker on the upper parts and in two of them which appear to be old the white spots on the back measuring as a rule about 1 cm. in length, are decidedly longer than in the swedish specimens which I have had for comparison. The black quills have also a stronger metallic lustre than in swedish specimens. The ground colour of the lower parts is also darker than in swedish specimens, but the spots which are more purely white seem to be less numerous on the belly. The feathers of the chin on the contrary have much more white than in swedish specimens. The greater and median

[1] Die Vögel der paläarktischen Region.

wing-coverts are not at all (or very little and exceptionally) white-tipped. The sixth or seventh and some of the in proximal direction following quills have a small pointed white tip 1—2 mm. This is a discrepancy from HARTERT's diagnose[1] in which he says »— — die Schwingen haben keine weisse Spitzen», but otherwise these specimens agree with his *N. c. rothschildi*. The size agrees also with this form, being larger than in the swedish specimens. The white tips of the outer tailfeathers are about 2 1/2 cm. thus rather less than in other asiatic forms.

73. Pica pica (L.)

♂ 15/4, ♀ 10/5 Baimgol.

Wing 195—205, tail 245—260, culmen 37 mm.

I cannot find that these two specimens differ from swedish Magpies except therein that they perhaps are a little larger than the average. They are both old birds with very glossy plumage and somewhat worn tailfeathers. They have no traces of white on the feathers of the throat as *P. p. bactriana* is said to have in most cases. (Conf. HARTERT l. c. p. 21).

74. Pica pica leucoptera GOULD.

♂ 8/5 1902. Baimgol.

Wing 230, tail 290, culmen 40 mm.

This bird differs rather strikingly as well in size as in colouration from scandinavian Magpies and also from the two above recorded specimens. The metallic gloss is very strong so that the wings appear to be quite blue with only little greenish tint, the tail again quite green with the coppery and purple band well developed on the lateral feathers. The white on the quills is strongly developed so that it shows even when the wing is folded together. On the first and second primary it reaches the tip of the inner web, on the third it ceases 2 mm. from the tip on the fourth 3 mm., on the fifth 4 mm., on the sixth 4 1/2 mm., on the seventh 7 mm. etc. The name *leucoptera* seems therefore to be very suitable. The feathers of the throat have no white at their base, but

[1] Die Vögel d. paläark. Region. Hft. I, p. 27.

are wholly black. In this respect it differs not only from »*leucoptera*» but also from »*bactriana*» which by HARTERT are regarded to be identical. It is possible that the variation is so great that intervening links may be found between specimens such as the two mentioned above and this one. Their occurrence in the same locality speaks for such a possibility, but on the other hand the great size etc. is quite remarkable.

HARTERT uses the name »*bactriana*» given by BONAPARTE (Conspect. Av. I) who says about the bird for which he introduces this name, that it is »minus nitens» than the european Magpie. This name cannot therefore be referred to a Magpie like the specimen just described.

75. Pyrrhocorax pyrrhocorax (L.).

♂ $^{19}/_{4}$ 1902 Chantengri; ♂ $^{6}/_{6}$ 1902 Baimgol.

Wing 285—290, tail 165—170, tarsus 48, culmen 46—51 mm.

These specimens appear to be of medium size to judge from the measurements above, compared with HARTERT's statements (l. c. p. 36).

76. Sturnus vulgaris porphyronotus (?) SHARPE.

♂ $^{10}/_{4}$ Baimgol.

Wing 128, tail 65, culmen 30, tarsus 30 mm.

This specimen is very interesting in a certain respect, because, although it shows the normal measurement of the subspecies and with regard to its colouration on the whole agrees with the typical *porphyronotus*, certain differences make themselves very apparent. The whole head and neck are glossy green, the back is reddish as in the latter, but the light tips to the feathers are entirely wanting which is a rather striking feature. A second discrepancy shews itself in the colouration of the lower parts. These are not purple as in *porphyronotus*, but have a bronzy gloss which only on the chest just below the green of the foreneck has a narrow transverse zone of purple, otherwise there is more green than purple in the bronzy gloss of the under parts and the sides. The tips of the under tail-coverts are margined with white The scapulars are like the back, but the wings have the same bronzy gloss as the under parts. Under wing-coverts

margined with white. The differences from *porphyronotus* are consequently as great as those separating several geographical subspecies of *Sturnus* from each other. It is however impossible to draw any definite conclusions from only one specimen as to the presence of local race of Starling in the Tianshan district. The aberration described above appears, nevertheless to be of interest the more so as it does not approach the siberian *poltaratskyi*, but perhaps more *indicus*.

77. Uragus sibirica (Pallas.)

♂ $^{1}/_{4}$ 1902 Baimgol.

78. Carpodacus erythrinus (Pallas.)

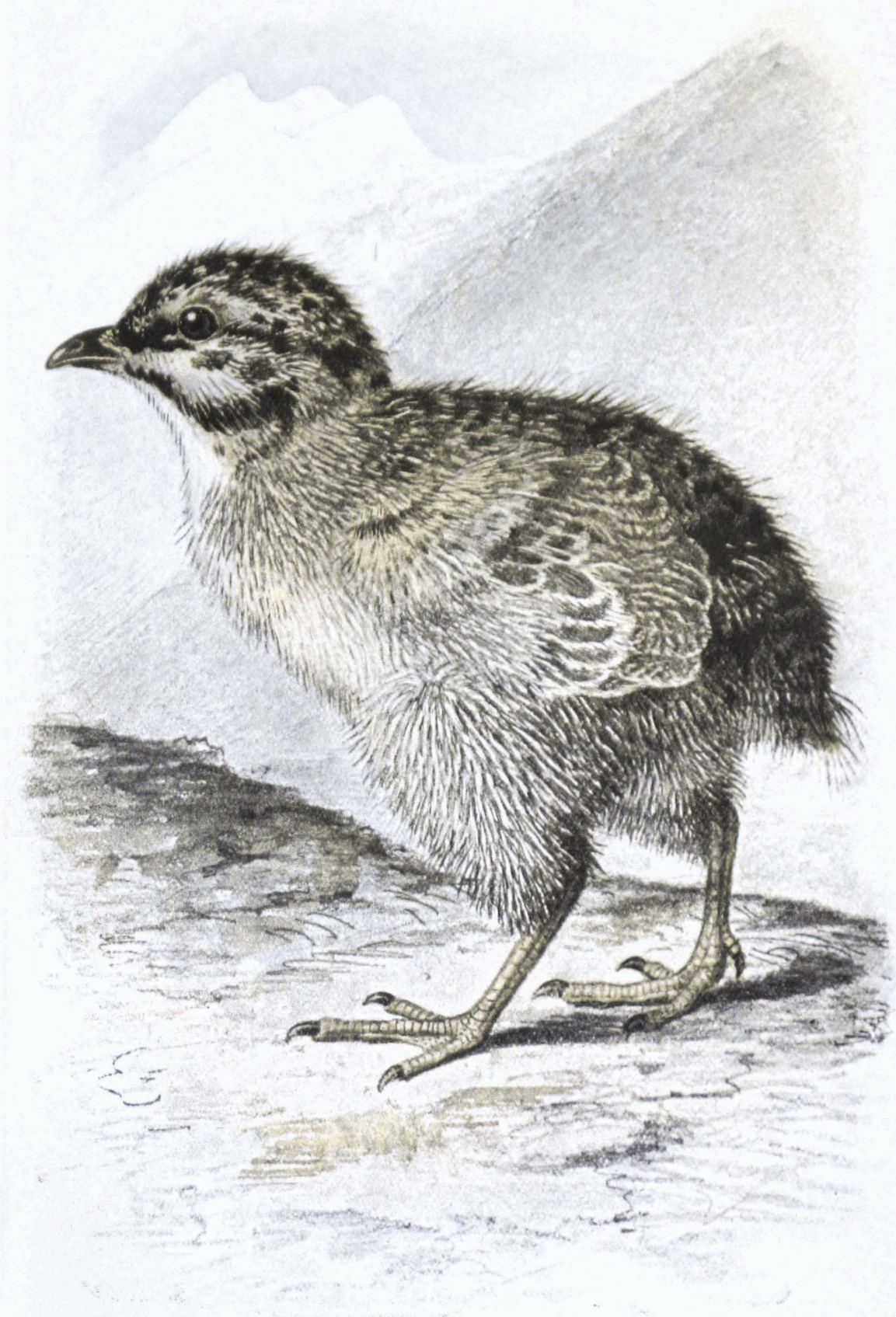
2 ♂♂ $^{15}/_{5}$, ♂ $^{30}/_{5}$ 1902 Baimgol.
Wing 84 mm.
Quite typical as it seems.

79. Emberiza leucocephala Gm.

♀ $^{14}/_{4}$ 1902 Baimgol.

Tryckt den 23 mars 1905.

Uppsala 1905. Almqvist & Wiksells Boktryckeri-A.B.



A. Ekblom, pinx. J. Cederquist repr. o. tr.

Tetraogallus himalayensis Gray pullus.