

ORGAAN DER CLUB VAN
NEDERLANDSCHE VOGELKUNDIGEN
VOORTZETTING VAN JAARBERICHT 1 — 17, 1911 — 1928

REDACTIE: Dr C. EIJKMAN, Dr C. G. B. TEN KATE (Secretaris, Kampen,
de la Sablonièrekade 31) en Tsj. Gs. DE VRIES

Ornithological Results of the Netherland
Karakorum Expedition 1929/30,

by J. A. SILLEM

(with plates 1—4, and 3 maps).

INTRODUCTION.

On the 2nd of February 1929 Dr P. C. VISSER, Mrs. VISSER and myself left Rotterdam by steamer on the first stage of our journey to Central Asia, with the object of undertaking an expedition to the Karakorum Ranges and Chinese Turkestan from which I returned to Holland in November 1930. As for my companions, it was the third time that they set out for Kashmir and beyond for the purpose of exploring unmapped territory in the Karakorum and studying the glaciers in this region, and I was very glad to be able to make use of their experience in my preparations for a stay of fifteen months away from civilisation¹⁾.

We landed in Bombay on the 26th February and stayed there for a week, having to forward our extensive luggage by rail to Rawalpindi. Happily, through the courtesy of the Government of India, customs and railway formalities were reduced to a minimum. In the mean while, I had the pleasure of coming into contact with the Bombay Natural History Society, whose curator, Mr. PRATER, and assistant-curator Mr. LAPERSONNE I have to thank for valuable help and advice in regard to my zoological outfit.

After visits to Goa, Delhi, Bharatpur, Alwar, Patiala,

¹⁾ Dr. & Mrs. VISSER's first journey to the Karakorum was in 1922, when they visited the mountains of the Saser group. The second expedition took place in 1925, when they explored in the Hunza and Nagar districts, accompanied by Baron VAN HARINXMA THOE SLOOTEN (who collected a number of birds on this occasion) and Khan Sahib AFRAZ GUL.

Lahore and Rawalpindi we reached Srinagar on the 11th April, where final arrangements for our expedition had to be made. Purchases of camping equipment, saddles and yakhdans (boxes) were effected, and in the latter all our stores, clothes and other belongings had to be repacked. In this we were assisted by our two Swiss guides who had joined us (coming straight from Switzerland) by this time: Franz LOCHMATTER, veteran mountaineer and companion of Mr. & Mrs. VISSER on their two previous Karakorum-expeditions, and Dr Rudolph WYSS of Berne, who was also to act as geologist to our party¹). In Srinagar we were likewise met by Khan Sahib AFRAZ GUL of the Survey of India, who was deputed as our topographer by that Government institution. Our scientific work was divided as follows: Dr VISSER, leader of the expedition, geographical subjects, meteorological observations and glaciology; Mrs. VISSER, botanical collection; and myself, zoological collections. As already mentioned, Dr WYSS would study geological subjects.

In Srinagar I was fortunate in meeting Mr. F. LUDLOW, who was similarly making preparations for an extensive journey over the Karakorum into Chinese Turkestan and the Tian Shan with the object of making ornithological and botanical collections. Subsequently we met several times during our travels in Central Asia, and I repeatedly profited by his experience and knowledge with regard to the zoological aspects of this region. It is for this reason that I have much pleasure in thanking him for valuable advice and assistance which he gave me on various occasions. Even in Srinagar, with his usual kindness, he immediately supplied me with all kind of information about the ornithology of the area which we were about to visit, and after I had returned home he generously allowed me to make use in the present paper of his own notes and observations.

I am likewise indebted to Mr. Hugh WHISTLER for his kind suggestions regarding the birds which I should collect. I am sure that, without his advice, I would not have collected such adequate series of birds of which the distribution has proved to be interesting both from the morphological and systematic point of view. Moreover, Mr. WHISTLER was kind enough to determinate some of my birds after I had returned to Europe, and for the comparison of others he allowed me to make use of his own collection of Central Asian skins.

I have to thank Mr. N. B. KINNEAR and Dr PERCY LOWE for permitting me to compare a large part of my collection with the extensive series of birdskins in the British Museum, and especially the first-named gentleman for his help during my visit to that institution.

During the course of our journey the Netherland Karako-

¹) Franz LOCHMATTER was killed in a mountain-accident on the Weiss-horn (Switzerland) in August 1933.

rum Expedition passed along the woods and fir-clad slopes of the Sind-valley, through the bare mountain-ranges of Ladakh and the Karakorum, over the desolate Tibetan uplands North and East of the Karakorum-Pass, through the gorges of the K'un-lun and along parts of the vast and impenetrable Takla Makan desert. Although I travelled to a certain extent in the Tarim Basin, none of us visited the ranges North and West of Kashgaria (i.e. the Tian Shan and the Pamirs), but on our return journey via Khotan, we traversed the desert foothills of the K'un-lun between Khotan and Sanju, a trip which did not prove to be very profitable from the ornithological point of view. It is typical of circumstances, that naturalists travelling along the Karakorum trade-route have in most cases practically refrained from collecting birds when they were traversing the area between the Saser La and the Kara-kash-valley. And even if they did collect, their locations often were very vague in a country where there is a change in aspect nearly every ten miles.

Since 1920, renewed interest has been shown by ornithologists in the Western Himalayas, the Karakorum Range and Chinese Turkestan. After Dr W. L. ABBOTT visited Singkiang and Ladakh in the nineties, Mr. ZUGMAYER was the only collector who had travelled through Turkestan and visited Kashmir via the Karakorum Pass. Colonel MEINERTZHAGEN and Messrs. OSMASTON and WHISTLER having made smaller expeditions in Ladakh, the James Simpson-Roosevelts expedition was the first party since the above-mentioned year which penetrated further into this mountain region and made a tour in Chinese Turkestan. Mr. CHERRIE, the naturalist attached to this expedition, visited in many cases the same localities as I did, although his journey in Turkestan took place in the summer months. In the following year (1926) Captain CAVE of the Shaksgam-expedition collected in the Aghil Range and the upper Yarkand-valley; and in 1928 Mr. F. LUDLOW travelled along the Central-Asian trade-route as far as the Karakorum Pass, while in the next year this ornithologist made a journey along the same route into Chinese Turkestan, where he spent the winter in Kashgar, after which he undertook an expedition into the Tian Shan in 1930. As already stated, his journey synchronised with that of the Netherland Karakorum Expedition, and in many instances it is interesting to compare the birds he and I encountered.

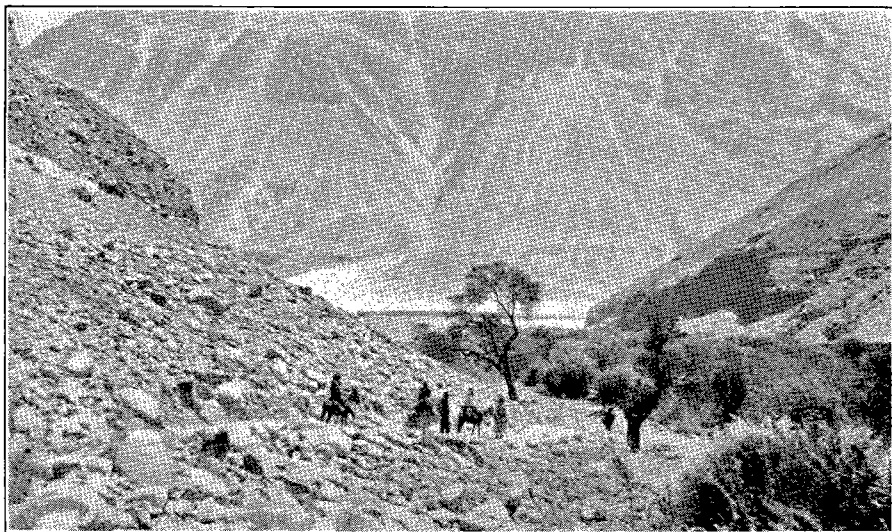
In compiling the following list of birds I have followed HARTERT's system in 'Die Vögel der Paläarktischen Fauna'. As an amateur ornithologist I have refrained from going into systematical problems; besides, this was in most cases unnecessary after Mr. C. E. HELLMAYR's excellent paper on the birds of the SIMPSON-ROOSEVELTS expedition¹).

¹) Birds of the James Simpson-Roosevelts Asiatic Expedition; Chicago, 1929, Field Museum of Natural History, Publication 263, Vol. XVII, No. 3.

As it is impossible to indicate every locality where birds were collected on a map within the size of this journal, I have added an itinerary comprising every place I visited in chronological order, and a map showing each camp and its number. For the use of the latter I am indebted to Dr P. C. VISSER. I have also given a large scale map of Asia on which may be noted the situation of the area, in which the expedition operated with regard to the surrounding regions.

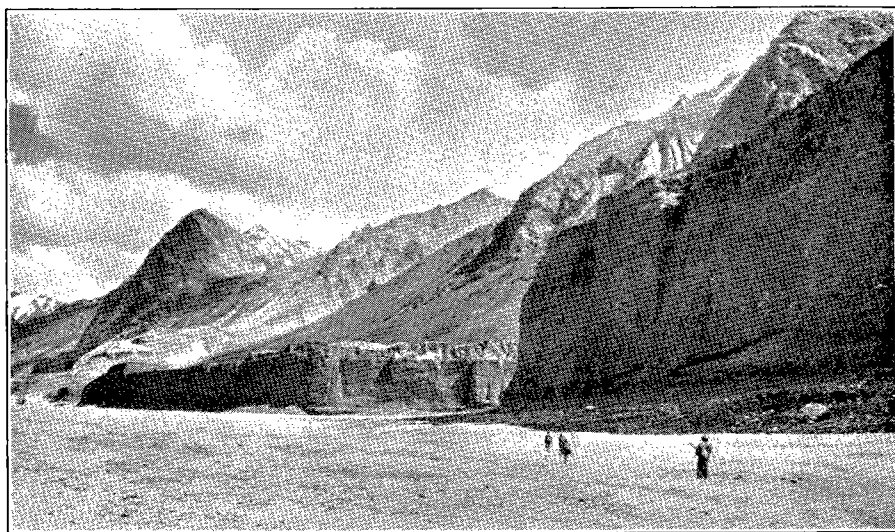
The expedition started from Srinagar on the 2nd May 1929 and proceeded up the Sind-valley, crossing the Zoji La on the 6th with a caravan of sixty ponies, the first one to do so that year¹). The journey along the well-known Treaty-road was uneventful, the first summer-birds only being seen at Nimu, where specimens of the Kashmir Skylark (*Alauda arvensis lhamarum*) and the Yellowheaded Wagtail (*Motacilla citreola calcarata*) were obtained, and an Oriole (*Oriolus oriolus kundoo*) was observed. In Leh we were kindly allowed to camp in the Residency garden, and although much of our time was taken up in making final arrangements for pony transport, postal service and selecting coolies for our excursions off the caravan-routes, a few ornithological observations were made. Kestrels, Magpies (*Pica p. bactriana*) and the Grey Wagtail, (*Motacilla cinerea caspica*) were found breeding. On June 3rd we went over the Khardong, our baggage being carried over by coolies, as the pass was not yet open for pony traffic. We forded the Shyok River opposite the Khardong ravine and entered the Nubra-valley where we halted for two days at Panamik. Choughs (*Pyrrhocorax p. himalayanus* and *P. graculus forsythi*), Pigeons (*Columba livia neglecta* and *C. rupestris turkestanica*) and Redstarts (*Phoenicurus ochruros phoenicuroides*) were found much in evidence and Rose-finches (*Carpodacus erythrina roseata*), Robin-Accentors (*Prunella rubeculoides muraria*) and Willow-warblers (*Phylloscopus collybita subsindianus*) were observed breeding. Spring-life had established itself well in the Nubra-valley, and we saw many wild roses in full blossom as we proceeded up the valley and passed the charming village of Kimi, where we were received with music and dances by the smiling inhabitants, not spoilt by the trade-caravan-traffic as were people on the Panamik side of the river. We reached the Siachen-glacier on June 18, and left Mrs. VISSER in base-camp in a sheltered grove by the snout, the rest of us advancing over the glacier and into the first side-valley on the right, afterwards called Te Rong-valley where we made a second base-camp

¹) Extensive accounts of our expedition are: (in Dutch) 'Door de Bergwoestijnen van Azië' by Dr Ph. C. VISSER, Rotterdam, NIJGH & VAN DITMAR, 1931; (in German) 'Durch Asiens Hochgebirgswelt' by the same author, Frauenfeld, HUBER & Co, 1934 (to be published shortly); in English a short report may be found in 'The Himalayan Journal', Vol. II.



P. C. Visser phot.

1. Khardong ravine.



P. C. Visser phot.

2. Shyok-valley with entrance into Chamshen Jilga valley.

Haunt of *Carpodacus rubicilla severtzovi* and
Montifringilla brandti haematopygia.

in which I remained for six days while the other four explored the glaciers at the head of this valley. As usual in the Karakorum, vegetation was lacking nearly entirely, and coolies had to be sent high up the cliffs in search of wood for the kitchen fires. In consequence, birdlife was not very satisfactory; Yellow-billed Choughs and Redstarts were common, and occasionally Rose-finches, Willow-warblers, Swallows and Gold-fronted Serins (*Serinus pusillus*) were seen. We returned to the Nubra-valley and retraced our steps as far as Panamik. Bluethroats were quite common by this time, and many Wagtails (*Motacilla alba alboides* and *M. citreola calcarata*) and Sandpipers (*Tringa ochropus*) were met. One or two specimens of the Blue Rock-Thrush (*Monticola solitaria pandoo*) were encountered in the fields round Panamik. We had difficulty in securing pony transport for going over the Saser Pass and onwards, and for this reason we had to stay at Panamik for 19 days; during this time LUDLOW also reached this village, and we made some excursions together, on which we met Short-toed Larks (*Calandrella acutirostris*), Tibetan Terns (*Sterna hirundo tibetana*), Kestrels (*Falco t. tinnunculus*), Orioles (*Oriolus o. kundoo*), and Hoopoes (*Upupa e. epops*), while LUDLOW shot a Cuckoo (*Cuculus c. canorus*).

On the 24 July we were glad to leave the last village of Ladakh behind us; the next one we saw was on 9 October in the Sanju valley! We crossed the Saser Pass in splendid weather, though all of us had a headache in the evening as a result of the height and the glare of the sun. I noted the Afghan Redstart (*Phoenicurus erythrogaster grandis*), Mountain-finches (*Montifringilla brandti haematopygia*) and Horned Larks (*Otocorys alpestris longirostris*). From Saser Brangsa we descended the Shyok-valley and entered the first side-valley on the right, the Chamshen Jilga, in which we camped at different places until the 6 August. In addition to Mountain-finches and Horned Larks which might be expected to occur here, a single Hoopoe was seen, probably on migration. After Dr VISSER, WYSS, LOCHMATTER and the Khan Sahib had explored this valley and the neighbouring Tughmo Zarpo Lungpa, we returned to Saser Brangsa through the Shyok valley, a proceeding which was not altogether without risk, as we were in danger of the bursting of the Chong Kumdan glacier, which had blocked the valley higher up, thus forming a lake, 13 miles long and 400 ft. deep at its lower end. However, everything went all right so far. We crossed the valley again and followed the Central-Asian trade-route via Murgo and over the Depsang-plains to Daulatbeg-öldi, a camping-place near the Chip-chap-river. On the lake near Murgo a Ruddy Sheldrake (*Casarca ferruginea*) was collected and in the neighbourhood Wheatears (*Oenanthe deserti oreophila*) and Stints (*Calidris temminckii*) were seen. On the Depsang-plateau a number of Ravens (*Corvus corax tibetanus*).

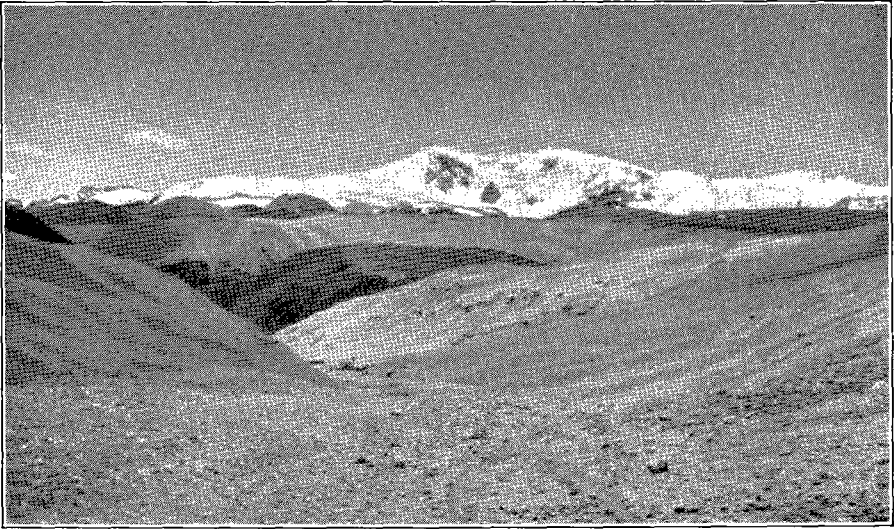
were met. Subsequently some of these birds followed our camp for several days.

While camping at Daulat-beg-öldi, we had a short visit from Mr. LUDLOW, this time on his way from the Shyok-lake, which he had investigated with an engineer of the Punjab Public Works Department, to the Karakorum Pass and thence to Chinese Turkestan. In the early hours of the next morning we heard a distant thundering noise which proved to be the bursting of the ice-dam formed by the Chong Kumdan-glacier referred to above, 20 miles from where we stood. It was awe-inspiring to realise that millions and millions of tons of water were being dislodged into the Shyok-valley, on the bottom of which we had marched peacefully only eight days before!

On the 16 August we started Eastwards along the Chip-chap-valley, and ascended a side valley to the North, leading to an area which had hitherto not yet been visited by ornithologists. During the first stages, between the Chip-chap-river and the Kara-tagh Pass, very few birds were seen, one day even not a single one. But further on, near some salt lakes which we found at an altitude of about 17500 ft., several Wagtails (*Motacilla citreola weræ*, *M. cinerea caspica*, *M. alba personata*), different Waders (*Tringa nebularia*, *T. ochropus*, *T. glareola*), Stints (*Calidris temminckii*) and Garganeys (*Anas querquedula*) were met. After crossing the Kara-tagh Pass we camped near the lake, in the vicinity of which a number of migrants were observed; besides Horned Larks and Mountain-finches we encountered *Anthus t. trivialis*, *Monticola saxatilis*, *Carpodacus c. roseata* and several of the above-named species. As I approached the lake, a flight of about 200 Garganeys went up, and I could see a Tibetan Tern in the distance. It was a pity that bad weather and a limited supply of food prevented us from staying more than one night on this interesting spot; it would certainly be worth while for an ornithological expedition to stay here for some time during the autumn migration. On another lake (the Tso-Rul Tso) we found Ruddy Sheldrakes (*Casarca ferruginea*) and Common Herons (*Ardea cinerea*), and a Sparrow-Hawk (*Accipiter nisus*). On our journey over the Kushku Maidan we were continuously hampered by bad weather; one night a snowstorm caused the temperature to fall to 16 degrees F. below freezing point. We were thankful to cross the Kawak Pass¹⁾ and descend into lower altitudes after living for three weeks above 16000 feet. In the Kawak-valley I secured a Dipper (*Cinclus c. leucogaster*).

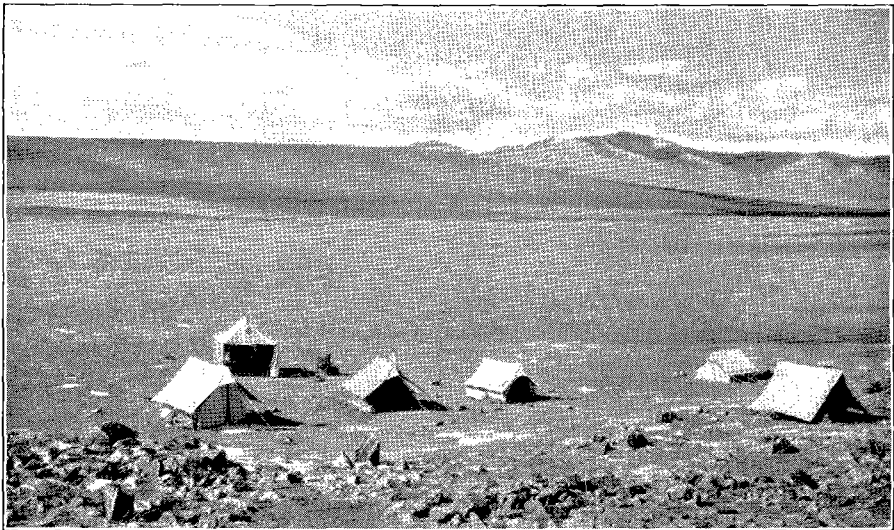
From Suget Karaul to Yarkand the usual route over the Sanju Pass was followed. We now sent our coolies back to Leh, as we were able to use pony transport during the rest of

¹⁾ The Khan Sahib had left us here, as he could not accompany us into Chinese territory. He returned to India via Daulat-beg-Öldi and Leh.



P. C. Visser phot.

3. Approach to the Depsang Plains. Haunt of *Syrrhaptes tibetanus*.



P. C. Visser phot.

4. Camp No. 58 near Kara-tagh Pass. In the background the Kara-tagh lake.
Haunt of *Montifringilla brandti haematopygia*, *Montifringilla blanfordi*
and *Anas querquedula*.

our stay in Chinese Turkestan. In the Sanju-valley the first autumn migration had already passed; only a few Bluethroats were still present, and between Sanju and Yarkand a couple of Lapwings were seen. Near Karghalik I saw the first Carrion Crows (*Corvus c. orientalis*) and Rooks (*Corvus frugilegus tchusii*). Yarkand was reached on the 22 October.

During a stay of the 4 winter months I had an opportunity to study the ornithology of this oasis. In the garden of the British Aksakal's bungalow, which we made our headquarters, I could always find a few Tian Shan Blue Tits (*Parus cyanus tianschanicus*), and occasionally a Wallcreeper (*Tichodroma muraria*), whilst Masked Wagtails (*Motacilla alba personata*) and Hoopoes (*Upupa e. epops*) were still to be seen in December. Near the walls of the city Carrion Crows (*Corvus corone orientalis*) and Rooks (*Corvus f. tchusii*) could be observed in great numbers and in the fields Hooded Crows (*Corvus cornix sharpii*). At the same time, a very few Thrushes and Jackdaws were seen. On the river, many kinds of Duck, and also Cranes and Black-headed Gulls were met with. Of the Birds-of-Prey Kestrels (*Falco t. tinnunculus*) and Hen-Harriers (*Circus c. cyaneus*) were very common. On an eight-days trip to Merket I encountered for the first time *Turdus ruficollis atrogularis*, *Rhopophilus pekinensis albosuperciliaris* and the Saxaul-Sparrow (*Passer ammodendri stoliczkae*).

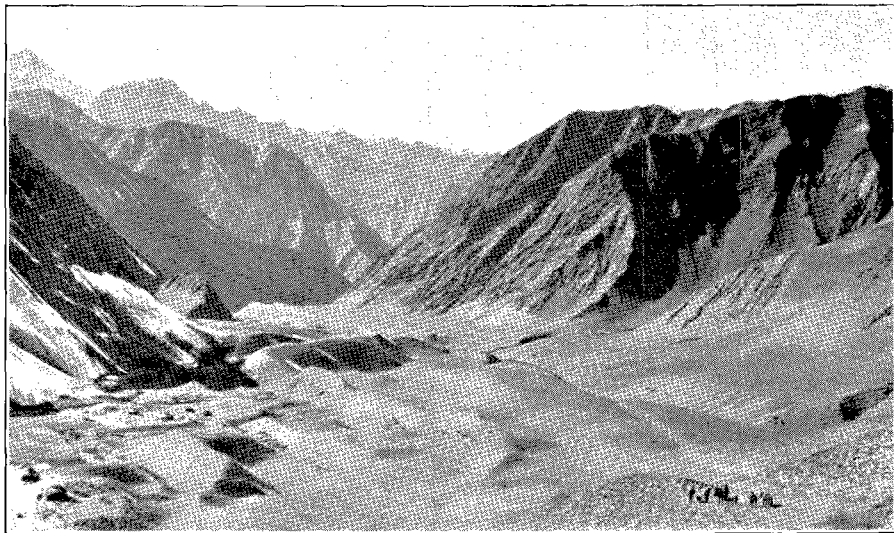
On the 13 December we started for Kashgar, where we had been invited by the British Consul-General and the Vice-Consul, Mr. F. WILLIAMSON and Captain G. SHERRIFF, to spend Christmas and the New Year. It was at their hospitable house that I renewed my acquaintance with a real bath, which I had not seen since April. Another guest at the Consulate was Mr. LUDLOW, whom I had already met at Merket, and who was staying with his friend Mr. WILLIAMSON for the winter. On the way from Yarkand I met with the Turkestan Redstart (*Phoenicurus erythronota*), Starlings (*Sturnus vulgaris porphyronotus*) and Magpies (*Pica p. hemileucoptera*). It was curious to note that several birds, not very common near Yarkand, were represented in great numbers at Kashgar; Jackdaws (*Coloeus monedula soemmeringii*), Reed-buntings (*Emberiza schoeniclus pallidior*), *Turdus ruficollis atrogularis*, *Turdus merula intermedia* and *Otocorys alpestris dilutus*. Other birds new to my collection were *Panurus biarmicus russicus*, *Lanius excubitor przewalskii*, *Alcedo atthis pallasii*, *Regulus r. tristis*, *Anthus spinoletta blakistoni* and *Phasianus colchicus shawii*. On the river a large number of Duck provided excellent shooting; most of these were *Anas platyrhynchos* and *Bucephala clangula*. White Egrets (*Egretta alba*) were seen in the neighbourhood.

Our return journey to Yarkand (5—9 January 1930) synchronised with the coldest part of the winter, during which the temperature fell to 50 degrees of frost at night. During day-

time the sun caused the cold to be quite bearable, but the nights in the wayside serais, where the newly-lit fires produced much smoke and little heat, were distinctly uncomfortable. In the desert between Kizil and Kok-rabat I obtained a specimen of *Bucanetes mongolicus*. In the Yarkand oasis Wrens (*Troglodytes tr. tianschanicus*), Thrushes (*Turdus ruficollis atrogularis*) and Desert-finches (*Rhodospiza obsoleta*) were now to be seen. As soon as the climate became milder, I made a trip of two or three days to the marshes of Rabat-ustang, about halfway between Yarkand and Kok-rabat. In this interesting region I encountered the Bearded Tit (*Panurus biarmicus russicus*), Reed-buntings (*Emberiza schoeniclus pallidior* & *E. s. centralasiae*), Thrushes, Marsh-Harriers (*Circus aeruginosus*) and Mallards and Pintails. I also saw an Eagle-Owl (*Bubo b. turcomanus*), a Swan and a few Pheasants (*Phasianus c. shawii*).

Early in March I started on a journey to Maral-bashi, where I was to meet Mr. LUDLOW, and where we would collect together in the vicinity. On the way I first followed the river as far as Merket, observing Red-crested Pochards (*Netta rufina*), Black Storks (*Ciconia nigra*) and Cormorants (*Phalacrocorax carbo sinensis*). Near Aksak-maral I met for the first time the Ground-Chough (*Podoces biddulphi*) and on the gravel-plains South of Maral-bashi I shot a specimen of *Podoces hendersoni*. After meeting LUDLOW, we first explored the immediate surroundings of the town. We collected Pheasants and Kites (*Milvus lineatus*) and after the middle of March we saw innumerable Shrikes (*Lanius isabellina*). In the fields and marshes a little further away from the town we met Wagtails (*Motacilla citreola werae* & *M. alba personata*), Bluethroats (*Cyanosylvia svecica kashgariensis*), and Sand-larks (*Calandrella rufescens seebohmii*). For three or four days we camped near the Anar Kul, one of the two large lakes in the neighbourhood, an excursion which the local Chinese magistrate considered most unusual. We were rewarded by finding an extensive bird-life: *Phasianus colchicus shawii*, *Panurus biarmicus russicus*, *Emberiza schoeniclus pallidior* and *E. s. centralasiae*, *Egretta alba*, *Larus r. ridibundus*, *Nyroca fuligula*, *Anas a. acuta*, *Netta rufina* and *Anser anser*. Twice we met a flight of Penduline Tits (*Remiz pendulinus stoliczkae*). In the desert of sand-dunes South of Maral-bashi LUDLOW was fortunate in securing a nest with one egg of *Podoces biddulphi*.

On 28 March LUDLOW departed from Maral-bashi on his way to the Tian Shan, and on the next day I set out for Yarkand. On the way back I found much the same birds as on my journey out, with the exception of a Little Owl (*Athene noctua bactriana*) and a Lesser Whitethroat (*Sylvia curruca minula*) which I shot near Aksak-maral. Many nests of Carrion Crows



P. C. Visser phot.

5. The Kirghiz encampment Kichik-yailagh, North of the Sanju Pass.
Haunt of *Tetraogallus himalayanus* and *Podoces humilis*.



J. A. Sillem phot.

6. An approaching dust-storm near Maral-bashi.
Haunt of *Phasianus colchicus shawii*, *Cyanosylvia svecica kashgariensis*
and *Motacilla citreola werae*.

were found, and in an orchard near Merket I collected a nest with eggs of *Rhopophilus pekinensis albosuperciliaris*.

Back in Yarkand I paid another visit to the marshes of Rabat-ustang, where the following birds were found breeding: *Anas pl. platyrhynchos*, *Anas a. acuta*, *Spatula clypeata*, *Falco t. tinnunculus*, *Milvus lineatus*, *Charadrius dubius curonicus*, *Lanius isabellina* and *Motacilla alba personata*. On the 19 April I heard the first Cuckoo in Yarkand.

Towards the end of April we were preparing to leave our comfortable house in Yarkand for our return journey to the Karakorum. After an exhausting round of farewell-dinner-parties with the Chinese officials who during the whole of our stay in Turkestan had been most kind and considerate to us, we were ready to start on the 27th. We were pleasantly surprised when half an hour before our departure we received a visit from all the local Chinese authorities who had come to say a final good-bye. It is sad to realise, that many of them have now probably been killed in the recent disturbances in Sinkiang.

Our 200-mile journey to Khotan, mostly through the desert, proved to be interesting. In the small oasis of Cholak-langar I encountered two Stilts (*Himantopus h. himantopus*) and a Little Ringed Plover (*Charadrius dubius curonicus*). When at Guma, on LUDLOW's advice I visited the marsh North of the town, and found a flourishing bird-life: a couple of Grebes (*Podiceps c. cristatus*), Duck (*Netta rufina*, *Anas a. acuta*, *A. querquedula*), Reed-Warblers (*Acrocephalus arundinaceus zarudnyi*), Wagtails (*Motacilla a. personata* and *M. citreola verae*), Terns (*Sterna hirundo tibetana*), Marsh-Harriers (*Circus a. aeruginosus*), Coots (*Fulica a. atra*), Moorhens (*Gallinula c. chloropus*), Greenshanks (*Tringa nebularia*), Ruddy Sheldrakes (*Casarca ferruginea*), Woodpeckers (*Dryobates l. leucopterus*) and Barn-Swallows (*Hirundo r. rustica*) were among the birds I saw.

Six days in Khotan were almost completely taken up by social calls on the Chinese magistrates and dinner-parties. In the mean time we had to make arrangements to engage a caravan for our journey to Sanju via the lower Kara-kash-valley. During this time Orioles and Cuckoos were becoming quite common, and both birds might be heard right in the centre of the town. On our way to Sanju, I collected a Roller (*Coracias garrulus semenowi*) near Faizabad. It was the only bird of this species which I saw in Chinese Turkestan. In the desert foothills between the latter village and Sanju, birds were found to be very scarce, only an occasional Wheatear (*Oenanthe deserti oreophila*) was met with. Birdlife seemed to concentrate in the cultivated valleys of Pujiya, Duwa, Puski and Sanju, which cut through this area. Many forms of Turkestan birds were observed here. Ascending the Sanju-

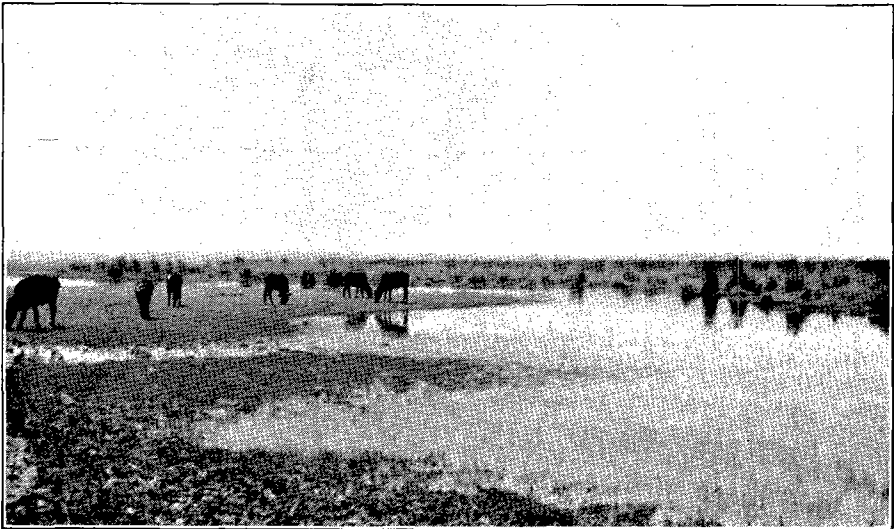
valley we found Bluethroats (*Cyanosylvia svecica* subsp.?) and Rose-finches (*Carpodacus rubicilla severtzovi*) and near Tam Karaul Accentors (*Prunella fulvescens dresseri*) and a couple of *Carpodacus synoica stoliczkae*. At Kichik-yailagh we could hear the Himalayan Snow-Cock calling on the mountain-sides, and next day, on our way to the Sanju-Pass, I encountered several specimens of *Podoces humilis*, contrary to October 1929, when I did not see a single bird of this species. On the other side of the pass, we camped for a week at Alinazar Kurghan, below which place Mr. VISSER, LOCHMATTER and WYSS explored the Kara-kash-valley. I was surprised to find a couple of Thrushes (*Turdus ruficollis atrogularis*) in the undergrowth near the river at this camping-ground. On our way to the Suget Pass I noted a large number of Horned Larks, which afterwards were determined as *Otocorys alpestris elvesi*. To the South of this pass we again found ourselves in the lonely Tibetan plateau with birds typical to this kind of country, viz. *Casarca ferruginea*, *Oenanthe deserti oreophila*, *Otocorys alpestris elvesi*, and *Montifringilla brandti*, which I likewise observed in the upper Yarkand-valley through which we had to return to encounter the second part of our caravan from Yarkand via Kok-yar, it being ten days late at the appointed meeting-place Malik-shah. Resuming our route to the Karakorum Pass, we halted a few days at Kum-bulak (Darwaz-sarigh-ot) where there was a little marsh in which I noted a couple of *Charadrius mongolus atrifrons* and a number of specimens of *Montifringilla b. blanfordi*. All this time the wheather was distinctly unfavourable which may be the reason that I did not collect very many birds after leaving Suget Karaul. We crossed the Karakorum Pass on 19 June, and camped for 3 days at Gumbaz-mazar on the other side. Thence we proceeded over the Depsang-plateau, where I met with the Tibetan Sand-Grouse (*Syrrhaptes tibetanus*), and reached the Shyok-valley on the 24th. Here we were met by our old Ladakhi coolies, sent up from Leh, and a new surveyor, MOHAMMED AKRAM, of the Survey of India. That day, the sky cleared, and we had beautiful weather the rest of our expedition.

The first thing we saw when entering the Shyok-valley was a large glacier protruding out of a side-valley. To explore this we made a base camp near the snout, and five days later moved this camp to Kataklik, one march to the South. In both camps, where Mrs. VISSER and I stayed while the other members of our party explored the neighbouring side-valleys and glaciers, I added several interesting birds to my collection: *Carpodacus rubicilla severtzovi*, *Montifringilla brandti haematopygia*, *Calandrella a. acutirostris*, *Pyrhocorax p. himalayanus*, *Columba rupestris turkestanica*, *Phoenicurus o. phoenicuroides* and *Oenanthe deserti oreophila*. An uncommon migrant, the Barred Warbler (*Sylvia n. nisoria*) was obtained. Although



7. Oasis Cholak-langar.

P. C. Visser phot.



8. Marsh near Tarbogaz.

P. C. Visser phot.

Haunt of *Motacilla citreola wera* and *Acrocephalus arundinaceus zarudnyi*.

it is very common in Turkestan, it seems to be rare in Kashmir.

Further progress down the Shyok-valley proved impossible as there was already too much water to enable us to ford the river. As a result we had to return to Leh by the Saser Pass and the Nubra-valley instead of via Shyok village, as was our intention. In the Thalam Buti-valley I noticed *Columba leucophaea* and parent-birds and chicks of *Prunella f. fulvescens*. After a stay of three days at Panamik, we were again detained by the Shyok-river, the boats by which the river had to be traversed in summer having been swept away by the flood in August 1929. After some difficulty we obtained a raft of inflated skins on which it took the whole of our caravan more than two days to cross the river. Between Khardong village and the Pass I obtained parent birds and juveniles of *Montifringilla a. adamsi*, *Oenanthe d. oreophila* and *Otocorys a. longirostris*. All the way from the Sanju Pass to Leh I collected Horned Larks at nearly every stage of the journey, with the object of obtaining a series of these birds illustrating the distribution and the intermediate forms. Mr. H. WHISTLER has commented on my specimens in his article in the Ibis 1932, p. 470—478.

Five days in Leh were used to repack our baggage and generally liquidate our mountain-escort. At the same time I observed several birds which might be expected there at that time of the year (July). The journey from Leh to Srinagar was made in 16 days, halting for one day at Lamayuru and Gund. In the garden of the dakbungalow at Nimu I shot a couple of Hobbies (*Falco s. subbuteo*) and at Nurla a young Sparrow-Hawk was brought to me by some coolies. On the 12 August we arrived at Srinagar.

ITINERARY.

In localities where the expedition only stayed for one night, the date recorded indicates the afternoon of arrival.

- 1929, 2 May, Srinagar (5000 ft.).
- 2 May, Camp No. 1, opposite Kangan, Sind-valley.
- 3 May, Gund (Camp No. 2, 5500 ft.), Sind-valley.
- 4 May, Sonamarg (Camp 3), Sind-valley.
- 5 May, Baltal (Camp 4, 7000 ft.), Sind-valley.
- Zoji La (11500ft.).
- Machoi.
- 6 May, Matayan (Camp 5).
- 7—9 May, Dras (Camp 6).
- 9 May, Shamshal Kharbu (Camp 7).
- 10 May, Kargil (Camp. 8).
- 11—13 May, Maulbeck (Camp. 9) 10300 ft.
- 13 May, Bod Kharbu (Camp 10) 11000 ft.
- 14 May, Lamayuru (Camp 11).
- Indus-valley.
- Kalatse.
- 15 May, Nurla (Camp 12) 10000 ft.

- 16 May, Saspul (Camp 13).
- 17 May, Nimu (Camp 14) 11000 ft.
- 18 May—3 June, Leh, Indus valley, 11500 ft. (Camp 15).
- 3 June, Leh Pulo (Camp 16).
- Khardong Pass, 17600 ft.
- 4—6 June, Khardong (Camp 17) 11500 ft.
- 6 June, Satti (Camp 18) lower Shyok-valley.
- Nubra-valley.
- 7 June, Tegur (Teggur, Tiggur, Taghar, Tegar) (Camp 19)
- 10000 ft.
- 8—11 June, Panamik, Nubra-valley (Camp 20) 10600 ft.
- 11 June, Sasoma, Nubra-valley, (Camp 21).
- 12—14 June, Kimi, Nubra-valley, (Camp 22) 11000 ft.
- 14—17 June, Lha-yul (Camp 23), Nubra-valley.
- 17 June, Camp 24A.
- 18—20 June, Camp 25 (Siachen Glacier).
- 20—26 June, Camp 26 (Te-Rong-valley) 13000 ft.
- 26—29 June, Camp 31, Nubra-valley 12000 ft.
- 29 June—2 July, Gonpa (Camp 32).
- 2—4 July, Nyungstet (Nungsted) (Camp 33) 11500 ft.
- 4 July, Kimi (Camp 34J).
- 5—24 July, Panamik (Camp 35) 10600 ft.
- 24 July, Umlung (Camp 36), Thalam Buti-valley.
- 25 July, Skyangpo-chhe (Skiang-poche) (Camp 37) 15000 ft.
- Saser Pass (17600 ft.).
- 26 July, Saser Brangsa (Camp 38) Shyok-valley.
- 27—29 July, Chamshen-Jilga-valley (Chimshin-Jilgha-v.) (Camp 39).
- 29 July—1 August, Chamshen-Jilga-valley (Camp 40).
- 1—6 August, Chamshen-Jilga-valley (Camp 41).
- 6—8 August, Saser Branges (Camp 44) 15500 ft., Shyok-valley.
- 8—10 August, Murgo (Camp 45) 14600 ft.
- 10 August, Burtza (Camp 46) 16000 ft.
- Depsang Plains (17000 ft.).
- 11—16 August, Daulat-beg-öldi (Camp 47) 16500 ft.
- 16 August, Camp 48 (Lung-nak Lungpa).
- 17—20 August, Camp 49, (Lung-nak Lungpa) 16800 ft.
- 20—26 August, Camp 50, 17500 ft.
- 26—28 August, Camp 51, 17900 ft.
- 28—30 August, Camp 52, 17500 ft.
- 30 August, Camp 53, 19500 ft.
- 31 August, Camp 54, 17500 ft.
- 1—3 September, Camp 55, 16500 ft.
- 3—6 September, Camp 56, 16800 ft.
- 6 September, Camp 57, 17100 ft.
- Kara-tagh Pass (17750 ft.).
- 7 September, Camp 58 (near Kara-tagh lake) 17000 ft. Kushku
- Maidan.
- 8 September, Camp 59 (16800 ft.) Kushku Maidan.
- 9—11 September, Camp 60, 15500 ft., Kushku Maidan.
- 11—13 September, Camp 61, 15600 ft., Kushku Maidan.
- 13 September, Camp 62, 16200 ft., Chumit Thang.
- 14 September, Camp 63, 16500 ft.
- Kawak Pass (16600 ft.).
- 15 September, Camp 64, 13000 ft., Kawak-valley.
- 16 September, Camp 65, 12300 ft., Kara-kash-valley (Karakash-v.).
- 17 September, Camp 66, 12000 ft., Kara-kash-valley.
- 18 September—4 October, Suget Karaul (Camp 67) 12000 ft.
- 4 October, Camp 68, 11600 ft.
- 5 October, Alinazar Kurghan (Camp 69) 10000 ft., Kara-kash-v.
- 6 October, Camp 70, 14000 ft.
- Sanju Pass (16650 ft.).

- 7 October, Kichik-yailagh (Kichik Yailak) 12000 ft. (Camp 71).
- 8 October, Camp 72, 8500 ft., Sanju-valley.
- 9 October, Keywas (Camp 73), 7500 ft., Sanju-valley.
- 10—12 October, Sanju (Camp 74) 6000 ft., Sanju-valley.
- 12 October, Sulaghiz-langar (Camp 75) 5700 ft.
- 13 October, Kosh-tagh (Camp 76).
- 14 October, Oi-toghrak (Camp 77) 5100 ft.
- 15 October, Bora (Camp 78).
- 16 October, Lok-langar (Camp 79) 4500 ft.
- 17—21 October, Karghalik (Camp 80) 4500 ft.
- 21 October, Posgam (Camp 81).
- 22 October—6 November, Yarkand (Camp 82) 4430 ft.
- 6 November, Abad (South of Merket).
- 7 November, Thadir Toghrak.
- 8—11 November, Merket, 4000 ft.
- 11 November, Thadir Toghrak.
- 12 November, Abad (South of Merket).
- 13 November—13 December, Yarkand.
- 13 December, Kok-rabat (Camp 83).
- 14 December, Kizil-bazar (Camp 84).
- 15 December, Yangi-hissar, (Camp 85).
- 16 December, Yapchan (Camp 86).
- 17 December—5 January, Kashgar (Camp 87) 4380 ft.
- 1930, 5 January, Yapchan (Camp 88).
- 6 January, Yangi-hissar (Camp 89).
- 7 January, Kizil-bazar (Camp 90).
- 8 January, Kok-rabat (Camp 91).
- 9 January—12 February, Yarkand.
- 12—15 February, Rabat-ustang, 4350 ft.
- 15 February—3 March, Yarkand.
- 3 March, Abad (South of Merket).
- 4—6 March, Merket, 4000 ft.
- 6 March, Akhdung (Yarkand River).
- 7 March, Sarigh-buya.
- 8—10 March, Aksak-maral, 3800 ft.
- 10 March, Shamal.
- 11—16 March, Maral-bashi (Maralbashi) 3700 ft.
- 16—20 March, Anar Kul (lake near Maral-bashi).
- 20—29 March, Maral-bashi.
- 29 March, Shamal.
- 30 March—2 April, Aksak-maral.
- 2 April, Sarigh-buya.
- 3 April, Akhdung.
- 4 April, Abad (West of Merket).
- 5—7 April, Merket, 4000 ft.
- 7 April, Abad (South of Merket).
- 8—15 April, Yarkand.
- 15—19 April, Rabat-ustang.
- 19—27 April, Yarkand.
- 27 April, Posgam (Camp 93).
- 28 April, Karghalik (Camp 94) 4500 ft.
- Besh-arik.
- 29 April, Akin-langar (Camp 95).
- 30 April, Cholak-langar (Camp 96).
- 1 May, Guma (Goma), (Camp 97) 4050 ft.
- 2 May, Moji (Camp 98).
- 3 May, Zanguya (Camp 99).
- 4 May, Pialma (Camp 100).
- 5 May, Tarbogaz (Camp 101).
- 6—12 May, Khotan (Chotan) (Camp 102) 4500 ft.
- 12 May, Faizabad (Camp 103).

- 13—15 May, Pujiya (Camp 104) lower Kara-kash River.
 15 May, Duwa-bazar (Camp 105).
 16 May, Puski-langar (Camp 106).
 17—19 May, Sanju (Camp 107) 6000 ft., Sanju-valley.
 19 May, Keywas (Camp 108), 7500 ft., Sanju-valley.
 20 May, Tam Karaul (Camp 109), 8750 ft., Sanju-valley.
 21 May, Kichik-yailagh (Camp 110) 12000 ft.
 Sanju Pass (16650 ft.).
 22 May, Camp 111, 12500 ft.
 23—31 May, Alinazar Kurghan (Camp 112), 10000 ft., Kara-kash-valley.
 31 May, Camp 117, Kara-kash-valley.
 Shahidulla.
 1—3 June, Suget Karaul (Camp 118), 12000 ft., Kara-kash-valley.
 3 June, Kotaz-jilga (Khotash Jilgha) (Camp 119), Suget-valley.
 Suget Pass (17610 ft.).
 4 June, Chibra (Camp 120).
 5—7 June, Malik-shah (Malecksha) (Camp 121) 15200 ft.
 7 June, Camp 122.
 Khapalung (Kufelang, Capalung) 14380 ft.
 8 June, Camp 123 (upper Yarkand-valley).
 9 June, Camp 124 (upper Yarkand-valley).
 Kirgiz Yangal.
 10—12 June, Camp 125 (upper Yarkand-valley).
 Kirgiz Yangal.
 12 June, Camp 126 (upper Yarkand-valley).
 13 June, Khapalung (Camp 127) 14380 ft.
 14 June, Malik-shah (Camp 128).
 15—18 June, Kum-bulak (Darwaz-sarigh-ot) (Camp 129) 15000 ft.
 Kizil-tagh.
 18 June, Balti Brangsa (Camp 130), 16000 ft.
 Karakorum Pass (18300 ft.).
 19—22 June, Gumbaz-mazar (Camp 131) 16500 ft.
 22 June, Camp 132, 15500 ft.
 23 June, Murgo (Camp 133) 14600 ft.
 24—29 June, Sultan Chhushku (Camp 134), Shyok-valley, 14400 ft.
 29 June—6 July, Kataklik (Camp 138), Shyok-valley, 13900 ft.
 6—9 July, Sultan Chhushku (Camp 144), Shyok-valley, 14400 ft.
 9—12 July, Saser Brangsa (Camp 145), Shyok-valley, 15500 ft.
 Saser Pass (17600 ft.).
 12—14 July, Skyangpo-chhe (Skiang-poche) (Camp 146) 15000 ft.
 14—17 July, Panamik (Camp 147), Nubra-valley, 10600 ft.
 17 July, Tegur (Teggur, Tiggur, Taghar, Tegar) (Camp 148)
 10000 ft.
 18 July, Thirit (Tirit, Tirrit) (Camp 149) Shyok-valley 10000 ft.
 19—21 July, Khalsar (Camp 150) 10500 ft.
 Khardong Ravine.
 21 July, Camp 151, 14000 ft. (Khardong-valley above Khardong village).
 22 July, Khardong-Pulo (Camp 152), 15000 ft.
 Khardong Pass (17600 ft.).
 23—28 July, Leh (Camp 153), 11500 ft., Indus valley.
 28 July, Nimu (Camp 154), Indus-valley.
 29 July, Saspul (Camp 155), Indus-valley.
 30 July, Nurla (Camp 156), Indus-valley.
 31 July—2 August, Lamayuru (Camp 157).
 Fotu La.
 2 August, Bod Kharbu (Camp 158).
 Namika La.
 3 August, Maulbeck (Camp 159).
 4 August, Kargil (Camp 160).

- 5 August, Shamshal Kharbu (Camp 161).
- 6 August, Dras (Camp 162).
- 7 August, Matayan (Camp 163).
Zoji La (11500 ft.).
- 8 August, Baltal (Camp 164), Sind-valley.
Sonamarg.
- 9—11 August, Gund (Camp 166), Sind-valley.
- 11 August, Kangan (Camp 167), Sind-valley.
- 12 August, Srinagar.

1. *Corvus corax tibetanus* Hodgs.

376, ♀, Gumbaz-mazar (camp 131) 16500 ft., 20 VI 30;
474, ♂, Machoi, 8 VIII 30.

Ravens were observed along the Karakorum trade-route as far as Kichik-yailagh, the Kirghiz camping-place North of the Sanju-pass. In the Nubra valley they were seen at Gonpa, and North of the Depsang-plateau they were met with in the Chip-chap valley, on the Kushku Maidan, in the upper Karakash valley and in the upper Yarkand valley.

When the expedition proceeded from the Chip-chap valley to the Kara-tagh pass, it was followed for 5 or 6 days by three ravens, feeding on the kitchen waste.

2. *Corvus corone orientalis* Eversm.

94, ♂, Yarkand, 1 XII 29; 245, ♂, Akhdung, 3 IV 30 (with eggs).

eggs:

cl/4, Akhdung, 3 IV 30 (with 245).

cl/1, Merket, 6 IV 30.

cl/5, Merket, 7 IV 30.

cl/1, Rabat-ustang, 17 IV 30.

cl/3, Rabat-ustang, 18 IV 30.

A very common resident bird in the plains of Turkestan. It was also encountered in the oases between Yarkand and Khotan, and to the S. W. of the latter city, in the desert hills near Faizabad, Pujiya and Sanju. In Ladakh it is a common bird along the trade-route.

3. *Corvus cornix sharpii* Oates.

132, ♀, Yarkand, 2 II 30; 134, ♀, Yarkand, 5 II 30.

In winter the Hooded Crow is a common sight outside the towns in the larger oases of the Tarim Basin. The first bird of this species was observed when the expedition arrived at Karghalik on the 17th October, and Hooded Crows had left the country by the middle of March.

Near the city of Yarkand, many hybrids with *Corvus corone orientalis* were observed. As the plumage varies a certain amount in colouration I have recorded them separately.

4. *Corvus corone orientalis* × *Corvus cornix sharpii*.

121, ♀, Yarkand, 21 I 30; 123, ♀, Yarkand, 24 I 30; 124,

♂, Yarkand, 28 I 30; 131, ♂, Yarkand, 31 I 30; 133, ♀, Yarkand, 5 II 30.

These birds were frequently seen near Yarkand, and a few were observed near Kashgar. The variation of the plumage is considerable, and ranges from *C. corone* to *C. cornix*. My Nos. 131 and 133 are nearly similar to *C. cornix*, but they show their relation to the Carrion Crow by their larger bill and the darker feathershafts on the mantle and the breast.

Except No. 133 which was shot in company with Hooded Crows, all the above specimens were met in company of Carrion Crows, feeding on refuse outside the city walls of Yarkand. They were not seen after mid-march. HARTERT (Die Vögel der Paläarkt. Fauna) states that in the vicinity of Tomsk in Siberia these hybrids are common.

5. *Corvus frugilegus tschusii* Hart.

93, o, Yarkand, 1 XII 29; 160, ♀, Yarkand, 25 II 30; 163, ♀, Yarkand, 23 II 30.

A very common bird in winter in Chinese Turkestan. It was observed from mid-October (when the expedition reached the plains) until the middle of March.

6. *Coloeus monedula soemmeringii* (Fisch.).

122, ♀, Yarkand, 23 I 30.

Jackdaws were numerous near Kashgar, where large flocks were seen near the British Consulate. It was much less common near Yarkand where it was only seen occasionally during the winter of 1929/30. In the Sind valley (Kashmir) this bird was met with in August 1930.

TICEHURST and WHISTLER (Ibis 1932, p. 44) appear unable to separate Kashmir Jackdaws from Swedish ones, in which case Central-Asian birds should be referred to *Coloeus m. monedula* (L.).

7. *Pica pica bactriana* Bp.

438, ♂, Leh, 24 VII 30; 440, 441, 442, ♂, ♂ juv., ♂ juv., Leh, 25 VII 30.

eggs: c/4, Leh. 30 V 29; c/1, Panamik, 9 VI 29.

This magpie was found in Leh and in the Nubra valley as far as Gonpa. It is a common bird in Ladakh.

8. *Pica pica hemileucoptera* Stegm.

The Turkestan Magpie is not a common bird in the Tarim Basin, although I saw a number in the Kashgar oasis. However, during the whole of my stay in Yarkand (4 months), I only observed 3 Magpies. Besides these, I met one bird near Maral-bashi and two near Sulaghizlangar.

It does not seem to be so rare in the foot-hills sur-

rounding the Takla-Makan desert; in the autumn of 1929 it was seen at Keywas and Sanju.

9. *Pyrrhocorax pyrrhocorax himalayanus* (Gould).
63, ♀, Panamik, 11 VII 29; 381, ♂, Shyok valley, 27 VI 30;
394, ♀, Shyok valley, 6 VII 30; 400, 401, ♂ ♀, Saser
Brangsa, 10 VII 30.

Common in the Karakorum Range and adjacent mountains. Is was met with in the valleys of the Nubra, the Shyok and the Kara-kash, and to the North as far as Sanju (10th October). Nearly always in company with the following bird.

10. *Pyrrhocorax graculus forsythi* Stoliczka.

Common with the previous bird along the Karakorum trade-route from Leh to Keywas (Sanju valley). It was also seen in the Te-Rong valley (Siachen glacier), but not on the Kushku Maidan.

11. *Podoces hendersoni* Hume.
191, ♂, Maral-bashi, 11 III 30.

This bird was shot on a gravel plain South of Maral-bashi, and although LUDLOW and I looked for more birds of this species in the vicinity, we did not see any.

12. *Podoces biddulphi* Hume.
181, ♂, Aksak-maral, 8 III 30; 182, 186, 187, ♂ ♀ ♀, Aksak-maral, 9 III 30; 188, 189, ♂ ♀, Shamal, 10 III 30; 217, ♂, Maral-bashi, 22 III 30; 236—239, ♂ ♀ ♂ ♀, Aksak-maral, 30 III 30; 241, ♀, Aksak-maral, 31 III 30; 242, ♀, Aksak-maral, 1 IV 30.

This Ground-Chough is quite common in the jungle near Aksak-maral, a village 2 marches South of Maral-bashi, and it becomes less frequent as one approaches the latter town. In the sand-dunes, about 10 kilometer (6 miles) South of Maral-bashi LUDLOW found a nest with one egg. Mr. CHERRIE, of the ROOSEVELTS expedition, who travelled through these localities, did not record it.

13. *Podoces humilis* Hume.
325—328, ♀ ♀ ♂ ♂, Kichik-yailagh (12000 ft.), 22 V 30.

Four birds were collected in the type-locality of this species. They were not observed elsewhere.

14. *Sturnus vulgaris humii* Brooks.
491, ♂, Srinagar, 14 VIII 30.

Common in the Kashmir valley.

15. *Sturnus vulgaris porphyronotus* Sharpe.
125, 126, ♀ ♀, Yarkand, 28 I 30; 147, ♂, Rabat-ustang, 13 II 30; 249, ♂, Abad (W. of Merket), 4 IV 30.

Very common in the Tarim Basin where it is chiefly

a resident bird. Entering the country from the South, it was first seen at Oi-toghrak.

16. *Oriolus oriolus kundoo* Sykes.

301, 302, ♂ ♀, Faizabad (nr. Khotan), 13 V 30; 306, ♂, Duwa, 16 V 30; 307, 308, ♂ ♂, Sanju, 17, 18 V 30; 452, ♂, Nimu (Indus valley), 29 VII 30.

The Oriole is a summer visitor to the plains of Chinese Turkestan. It was first observed on the 11th May, after which date it was common in every oasis between Khotan and Sanju.

In 1929 it was seen at Nimu on the 17th May, and on the return journey in both the Indus and Sind valleys.

17. *Carduelis caniceps caniceps* Vig.

462, 463, ♂ ♀, Bod Kharbu, 2 VIII 30.

Also observed in the Sind valley near Baltal.

18. *Acanthis flavirostris montanella* (Hume).

347, ♀, Alinazar Kurghan, 28 V 30; 352, 353, ♂ ♀, Alinazar Kurghan, 29 V 30.

Was seen several times in the patches of brushwood at Alinazar Kurghan (Karakash valley). LUDLOW, CHERRIE and other travellers collected birds in the same area (Karakash valley and near the Sanju and Puski rivers).

19. *Acanthis flavirostris ladacensis* Meinertz.

426, ♂, Khardong valley (14000 ft.), 21 VII 30.

This specimen, a typical example of the Ladakh representative of the Twite, was taken on the North side of the Khardong pass, halfway to Khardong village.

20. *Serinus pusillus* (Pall.).

413, 414, ♂ ♀, Panamik, 15 VII 30; 420, 421, ♂ ♀, Panamik, 16 VII 30.

Was observed in the Nubra valley and on the Siachen glacier and in the Te Rong-valley at an altitude of 13000 ft. Also in the Indus valley and on the Treaty road near Dras and Lamayuru. It was not met with in Chinese Turkestan, though LUDLOW collected a specimen near Kashgar on the 31st October.

21. *Bucanetes mongolicus* (Swinh.).

117, ♂, desert near Ak-rabat, 8 I 30.

No other specimens were observed. LUDLOW met with large flocks near Jam, East of Aksu, in mid-April. According to HELLMAYR it is a winter visitor to the Tarim Basin while it breeds in the surrounding higher ranges.

22. *Rhodospiza obsoleta* (Licht.).

119, ♀, Yarkand, 22 I 30; 137, ♂, Yarkand, 10 II 30; 150, ♂, Rabat-ustang, 14 II 30; 259, 263, ♀ ♂, Merket, 6 IV 30; 276, ♀, Rabat-ustang, 18 IV 30.

Not uncommon in the plains of Chinese Turkestan. I saw flocks near Yarkand in January and February, and later near Rabat-ustang, Merket and in nearly all the oases between Yarkand and Khotan (May). LUDLOW also took birds at Yarkand, Kashgar and on the way to Aksu. The ROOSEVELTS expedition did not collect it.

23. *Carpodacus rubicilla severtzovi* (Sharpe).

316, ♀, above Sanju, 19 V 30; 318, ♂, Tam Karaul, 20 V 30; 321, 322, ♀ ♂, Sanju valley (10000 ft.), 21 V 30; 340, 341, ♀ ♂, Alinazar Kurghan, 26 V 30; 349, 350, ♀ ♂, Alinazar Kurghan, 29 V 30; 356, ♂, Suget Karaul, 2 VI 30; 387, ♀, Kataklik (Shyok v.), 2 VII 30; 389, ♀, Kataklik, 3 VII 30; 397, 398, ♀ ♂, Sultan Chhushku (Camp 144), 8 VII 30.

This Rose-Finch was met with in the Karakorum Range, and in the K'un Lun (South of Sanju), in the valleys of the Karakash, the Shyok, and the Suget Pass. Birds of this species were also observed in the Indus valley and near Bod Kharbu, but they may have been of another race. LUDLOW collected *C. r. severtzovi* at Skyangpo-chhe, at Kharu (Shyok valley below the Nubra junction) and on the Southern foothills of the Tian Shan.

24. *Carpodacus erythrina roseata* (Blyth).

27, ♀, Nubra valley (near Siachen gl.) 12000 ft., 29 VI 29; 28, ♂, Nyungstet (Nubra v.), 4 VII 29; 29, ♂, Panamik, 15 VII 29; 30, ♀, Panamik, 18 VII 29; 31, ♂ juv., Camp 50, 21 VIII 29; 32, ♂ juv., Camp 62 (Kushku Maidan), 13 IX 29; 417, ♂, Panamik, 15 VII 30; 427, ♀, Khardong ravine,, 21 VII 30; 468, ♂, Tashgam (Dras river), 6 VIII 30.

Eggs:

c/5 Panamik, 18 VII 29 (with No. 30).

c/3 Panamik, 24 VII 29

c/3 Panamik, 24 VII 29 (incubated).

In summer this Rose-Finch is a very common bird all over Ladakh, where it arrives towards the end of May. It was observed in the Te-Rong-valley, but it was completely lacking in the upper Shyok-valley (North of the Karakorum Range), and only two migratory birds were collected East of the Karakorum Pass. It evidently only inhabits localities where it can nest in trees, hedges and wild roses. When the expedition entered the Kara-kash and Sanju-valleys it had already departed (October 1929); LUDLOW still met it in this area in August.

25. *Carpodacus synoica stoliczkae* (Hume).

323, 324, ♂ ♀, Sanju-valley (near Kichik Yailagh) 11000 ft, 21 V 30.

This is certainly not a very common finch, as neither CHERRIE nor LUDLOW met with it. Besides the two collected, I saw a third bird in the same locality and another near Alinazar Kurghan (Karakash-valley).

26. *Montifringilla adamsi adamsi* Adams.

428, 429, 430, 431, ♂, ♀ juv., o, ♀ juv., Khardong valley 21 VII 30; 460, 461, ♂, o juv., Fotu La, 2 VIII 30.

Numerous in the Khardong valley (between the pass and the village of that name) and on the Fotu La. The latter pass is the type locality for this race.

27. *Montifringilla blanfordi blanfordi* Hume.

95, ♂, Kushku Maidan 17000 ft., 7 IX 29; 369, 370, ♂ ♂, Kum Bulak, 15000 ft., 16 VI 30; 371, ♂, Kum Bulak, 17 VI 30.

The Kushku Maidan bird was collected from flocks of various migrants near the Kara-tagh-lake. The other three were shot near a little lake halfway between the Suget Pass and the Karakorum Pass, where this finch was numerous and where it may breed later in the year. Both these localities probably lie in Chinese territory, as it is generally assumed that the Karakorum Pass demarcates the frontier between Ladakh and Chinese Turkestan. It does not seem to have been collected previously so far West of its type-locality (Tibet).

28. *Montifringilla brandti haematopygia* Gould.

48, ♂, Saser Brangsa, 5 VIII 29; 50, ♂, Saser Brangsa, 7 VIII 29; 51, 53, ♂, ♂ juv., Kushku Maidan, 7 IX 29; 54, ♂ juv., Kushku Maidan, 8 IX 29; 55, ♀ juv., Kushku Maidan, 7 IX 29; 382, 383, ♂ ♀, Kataklik (Shyok-valley), 1 VII 30; 391, 392, 393, ♂ ♂ ♂, Kataklik (Shyok-valley), 5 VII 30.

This Mountain-Finch was seen in all the more elevated parts of the Karakorum trade-route, from the Khardong Pass as far as Daulat-beg-öldi, and also East of the Karakorum Pass near the Kara-tagh-lake where 4 specimens were obtained. This is contrary to HELLMAYR's statement that this subspecies does not reach beyond the Karakorum (Saser Pass). LUDLOW also collected birds at Saser Brangsa. The edges of the uropygial feathers are rather variable, ranging from light orange to dark rosy. The extremes are illustrated by my Nos. 392 and 393.

The Northern limit of this race is probably between the Karakorum Pass and the Suget Pass.

29. *Montifringilla brandti pallidior* Bianchi.

330, ♂, Gorge of Sanju Pass, 12500 ft., 23 V 30; 365, ♂, Khapalung (Kufelang) upper Yarkand-river, 14 VI 30.

This bird was also observed on the top of the Sanju

Pass and in the valley North of the Suget Pass. The ROOSEVELTS-expedition obtained birds in the same area.

30. *Passer domesticus parkini* Whistler.

443, 444, ♀, ♂ juv., Leh, 26 VII 30; 450, ♂, Leh, 27 VII 30.

This House-Sparrow is common in Kashmir and Ladakh. It was not met with in the upper Shyok-valley, so its distribution does not extend beyond the main Karakorum Range.

31. *Passer ammodendri stoliczkae* Hume.

78, ♀, Merket, 10 XI 29; 79, ♂, Merket, 11 XI 29; 176, ♂, Merket, 5 III 30; 215, ♀, Maral-bashi, 19 III 30; 223, ♂, Maral-bashi, 24 III 30; 244, ♂, Sarighbuya, 2 IV 30; 248, ♂, Abad (W. of Merket), 4 IV 30; 264, ♀, Merket, 6 IV 30.

Common in the plains of Chinese Turkestan. In certain localities it is even quite numerous (Merket, Maral-bashi). Its favourite haunt is the scrub jungle on the edge of the desert. I did not meet with it in the Yarkand oasis, and only saw a single specimen near Kashgar. As there is no tamarisk-jungle along the Yarkand-Khotan-road, I also failed to find the Saxaul-Sparrow in this area. LUDLOW's statement (The Ibis, October 1933, p. 666) that I collected a nest near Merket in early April is due to an error on my part.

32. *Passer montanus dilutus* Richm.

166—173, 5 ♂ ♂, 3 ♀ ♀, Yarkand, 27 II 30.

This is the common Sparrow of Chinese Turkestan where it may be found in all the towns and villages and even in the smallest oases. In the hills South of the Tarim Basin it was observed as far as Keywas, a village South of Sanju, at an altitude of about 7500 ft. Near Yarkand I occasionally saw large flocks of these birds sitting on the ground.

33. *Emberiza cia stracheyi* Moore.

465, 466, ♂ ♀, Lotsun (near Kargil), 4 VIII 30; 478, ♀ juv., Baltal (Sind-valley), 9 VIII 30.

Mr. WHISTLER tells me that birds he examined from Lahul, Baltistan, Suru, Gilgit, Astor, Guvez and the Lolab are intermediate in colour between *Emberiza cia par* and *Emberiza cia stracheyi*, but are not worth separation as a separate race. Of the two races between which they are intermediate he considers it most convenient to refer them to *Emberiza cia stracheyi*. The colour of my birds concurs with this point of view.

LUDLOW collected an example of *Emberiza cia par* in the Hunza valley.

34. *Emberiza schoeniclus pallidior* Hartert.

99, ♂, Kashgar, 20 XII 29; 100, ♂, Kashgar, 25 XII 29;

127, 128, o ♂, Yarkand, 29 I 30; 148, 149, ♀ ♀, Rabat-ustang, 13 II 30; 153, 155, 156, 157, o ♂ oo, Rabat-ustang, 14 II 30; 232, ♂, Maral-bashi, 27 III 30.

This Reed-Bunting is common in suitable localities in the Tarim Basin, and was occasionally seen near Yarkand and Kashgar. Near Rabat-ustang and Maral-bashi it was mostly seen in company with the next bird.

35. *Emberiza schoeniclus centralasiae* Hartert.

105, ♀, Kashgar, 31 XII 29; 145, ♂, Rabat-ustang, 12 II 30; 154, ♀, Rabat-ustang, 15 II 30; 184, ♀, Aksak-maral, 9 III 30; 224, ♂, Maral-bashi, 24 III 30; 272, ♂, Rabat-ustang, 17 IV 30.

This Bunting is not uncommon near marshes and swamps in the plains of Turkestan where it breeds in May. According to HELLMAYR it is a resident bird in this country.

36. *Calandrella acutirostris* Hume.

357, 358, ♂ ♂, Suget Karaul, 2 VI 30; 380, ♂, Murgo, 24 VI 30; 385, 386, ♀ ♀, Kataklik (Shyok-valley), 2 VII 30; 410, ♂, Popoche (Nubra-valley), 14 VII 30; 422, ♀, Panamik, 16 VII 30.

Both HELLMAYR and WHISTLER have written extensively about the question whether the short-toed Larks of this species are separable into two races, and the latter ornithologist is definite in his conclusion that two races cannot be admitted (Ibis 1932, p. 478). Common in the Nubra-valley and in the upper Kara-kash-valley, and occasionally seen in the Shyok-valley.

37. *Calandrella rufescens seebohmii* (Sharpe).

218, ♂, Maral-bashi, 22 III 30; 233, ♀, Maral-bashi, 29 III 30.

This Lark is not uncommon in the plains of Turkestan. Besides Maral-bashi I met with it near Besh-arik and between Moji and Zanguya, the latter localities on the desert road from Karghalik to Khotan. CHERRIE and LUDLOW similarly took birds on the outskirts of the Takla-Makan desert.

38. *Galerida cristata magna* Hume.

61, ♀, Lok-langar, 16 X 29; 90, ♂, Yarkand, 26 XI 29; 91, ♂, Yarkand, 27 XI 29; 92, o, Yarkand, 8 XII 29; 130, ♀, Yarkand, 31 I 30; 193, ♂, Shamal, 10 III 30.

After the Tree-Sparrow this is the commonest bird in the Tarim Basin. It may be observed in the desert as well as near lakes and marshes and in all the oases. In the hills it appears as far as Sanju (6000ft.). Its type locality is Yarkand.

39. *Alauda arvensis lhamarum* Meinertz.

47, ♀, Nimu (Indus-valley), 17 V 29.

Common in Kashmir and Ladakh. According to WHISTLER (Ibis 1932, p. 479) breeding Sky-Larks from Ladakh, Baltistan and Lahul are not separable from those of the Kashmir valley. In consequence the Sky-Lark of the whole of this area is referable to this subspecies, as *Alauda guttata* Brooks is preoccupied by *Alauda guttata* Lafresnaye.

40. *Otocorys alpestris longirostris* Moore.

35, ♂ juv., Chong Tash (near Murgo), 9 VIII 29; 36, ♂, Saser Brangsa (Shyok-valley), 7 VIII 29; 396, ♂, Upper Shyok-valley (Camp 144), 6 VII 30; 399, 402, ♂ ♂, Saser Brangsa, 10 VII 30; 406, ♂, Saser pass (Ankar-shak glacier), 16000 ft., 12 VII 30; 408, 409, ♀ ♂ Skyangpo-chhe 13 VII 30; 432, 433, ♂ ♀, South slope Khardong pass, 15500 ft., 23 VII 30; 436, 437, ♂ ♂, Khardong-valley, 22 VII 30.

This Horned Lark is common along the caravan-route from the Khardong pass to Murgo, where it is met with on the mountain-slopes above the tree-line.

Its type-locality is the Rhotang pass in Lahul (S. E. Ladakh). I compared my skins with specimens from that area in Mr. WHISTLER's collection. According to him my specimens Nos. 396, 406, 408, 409, 432, 433, 436 & 437 are typical examples of *O. a. longirostris* by measurements and plumage. The others (Nos. 35, 36, 399 & 402) are intermediate with *O. a. elwesi* Blanf., but they are closer to *longirostris*. For this reason I refer them to this subspecies. The boundary between *longirostris* and *elwesi* should probably be fixed on the trade-route at Murgo, where the mountainous aspect of the Karakorum changes into the more Tibetan country. Mr. WHISTLER has written extensively on this subject in the Ibis for July 1932, p. 470—478.

41. *Otocorys alpestris elwesi* Blanford.

37, ♀ juv., Daulat-beg-öldi, 15 VIII 29; 359, 360, ♂ ♂, Kotaz-jilga (Suget-valley), 3 VI 30; 361, 362, 363, ♀ juv., ♂ ♂, Kotaz-jilga, 4 VI 30; 366, ♂, Khapalung (upper Yarkand-valley), 14 VI 30; 367, 368, ♂ ♀, Kum Bulak, 16 VI 30; 374, ♂, Kum Bulak, 18 VI 30; 375, ♂, Daulat-beg-öldi, 20 VI 30; 377, ♀, Chip-chap-river, 16500 ft., 22 VI 30; 378, ♂, Burtza 16000 ft., 22 VI 30.

Common between the Depsang plateau and the Karakash-valley. Kotaz-jilga, where I shot 5 specimens, is considered to be the type-locality for OBERHOLSER's race *Otocorys alpestris argaleus*, but as WHISTLER has pointed out in his above-mentioned article, this subspecies must be considered identical with *O. a. elwesi*. Birds Nos. 37, 375,

377 & 378 are really intermediate between *O. a. longirostris* and *elwesi*, but as they are nearer to the last-named race I have recorded them under this name.

42. *Otocorys alpestris* subsp.?

331, ♂, Kichik-yailagh, 12000 ft., 22 V 30.

According to WHISTLER this bird is intermediate between *O. a. elwesi* and *O. a. teleschowi*. It has a distinct, though very narrow, postfrontal white band, and as both HARTERT and HELLMAYR are very definite in stating that *teleschowi* is entirely black from the base of the bill to the occiput, it is clear that the bird is not a distinct specimen of this race. And as regards *elwesi* the white frontal band is much too thin, although the measurements agree with this subspecies.

43. *Otocorys alpestris dilutus* Sharpe.

116, ♂, Kizil, 8 I 30; 152, o, Rabat-ustang, 14 II 30.

In winter this bird appears in small flocks in the plains of Turkestan. HELLMAYR assumes that it breeds in the Tian-Shan, but he could not lay hands on a single breeding specimen, although extensive Central-Asian collections were at his disposal. My No. 152 is not a pure *dilutus*, the black of the cheeks being separated by a thin white streak from the black jugular band. Perhaps it is again intermediate with *O. a. elwesi*!

44. *Anthus trivialis trivialis* L.

46, ♂, Kushku Maidan (17000 ft.), 8 IX 29; 49, o, Kawak-valley (Upper Karakash) (13000 ft.), 16 IX 29.

These birds were doubtless on migration. No. 46 was shot near the Kara-tagh-lake where many migrants were observed.

45. *Anthus hodgsoni hodgsoni* Richm.

87, ♂, Yarkand, 27 XI 29.

This Pipit, which was shot in the garden of our bungalow near Yarkand, winters in India. WHISTLER¹⁾ has separated this race from Tree-Pipits breeding in the Himalaya, which he names *Anthus hodgsoni berezowskii* Zarudny.

46. *Anthus spinoletta blakistoni* Swinh.

98, ♂, Kashgar, 25 XII 29.

This seems to be the common Water-Pipit in the Tarim Basin during the winter. A number of these birds were seen near Kashgar, but at Yarkand it was not so frequently seen, as there is not much water in the immediate vicinity of the city. A large number was observed in the marshes of Rabat-ustang.

¹⁾ Journal of the Bombay Natural History Society, Vol. XXXVII No. 1.

47. *Motacilla cinerea caspica* (Gmelin).

16, ♀, Leh, 1 VI 29; 21, ♂, Camp 50, 23 VIII 29.

Eggs: c/5 Leh, 1 VI 29.

This Grey Wagtail breeds in Kashmir and Ladakh and also in the Tian Shan where both CHERRIE and LUDLOW obtained it. According to HELLMAYR it is not a common breeding-bird in Ladakh. No. 21 is evidently a migrant, probably in its first year. LUDLOW procured a bird in the Karakash-valley.

48. *Motacilla citreola calcarata* Hodgs.

14, o, Nimu, 17 V 29; 17, ♀, Nungstet (Nubra), 4 VII 29; 15, ♀, Nungstet, 3 VII 29.

This Wagtail is common in cultivated areas in Ladakh. It also appears to breed in the Tian Shan where it is (according to HELLMAYR) in company with *M. c. werae*, these two races being very difficult to distinguish in summer plumage. Neither LUDLOW nor CHERRIE collected this bird in the Tian Shan, but the latter took birds between Maral-bashi and Aksu in July and August, which HELLMAYR professes to be unable to allocate. LUDLOW and I obtained specimens of *M. c. werae* near Maral-bashi in March.

49. *Motacilla citreola werae* But.

20, ♀, Camp 50, 22 VIII 29; 214, ♂, Maral-bashi, 20 III 30; 225, 226, 227, ♀ ♂ ♂, Maral-bashi, 25 III 30; 246, ♂, Akhdung, 3 IV 30; 291, ♀, Tarbogaz, 5 V 30.

Also observed on the 26th September near Suget Karaul in the Karakash-valley. After the 20th March this Yellow-headed Wagtail was a common bird in the plains of Chinese Turkestan where it is particularly numerous in marshy places, such as Maral-bashi, Rabat-ustang, near the river between Yarkand and Karghalik, and near the swamps near Guma and Tarbogaz.

Compared with skins from the Punjab in WHISTLER's collection, my ♀ ♀ Nos. 225 & 291 undoubtedly belong to this race.

The 4 ♂ ♂ are very probably also examples of this subspecies, but there is a small difference compared with birds from the Punjab in an olivaceous tinge on the upper parts which is not mentioned by any of the authors that have dealt with this Wagtail. In WHISTLER's collection there is one specimen with a totally grey back, lacking the black collar band, but I could not find a skin exactly similar to my Turkestan birds. (See TICEHURST, in Bull. B.O.C., CCCV, and SUSHKIN, Proc. Boston Soc. N. H., vol. 38, no. 1).

No. 20 is a young bird in first winter plumage, and is therefore hard to distinguish from immature specimens of *M. c. calcarata*.

50. *Motacilla alba dukhunensis* Sykes.

23, ♀, Suget Karaul, 23 IX 29; 25, ♂, Suget Karaul, 24 IX 29.

Very similar to skins of *M. a. alba*, but on comparison with specimens of this race in other collections it is evident that these two birds are referable to *M. a. dukhunensis*.

51. *Motacilla alba personata* Gould.

22, ♀, Kushku Maidan (17000 ft.), 8 IX 29; 24, ♂, Camp 54, 31 VIII 29; 26, ♂, Yarkand, 17 XI 29; 192, ♂, Maral-bashi, 11 III 30; 194, ♂, Ukalik, 11 III 30; 346, ♂, Alinazar Kurghan, 26 V 30; 492, ♂, Yarkand, 9 I 30.

eggs: c/4 Rabat-ustang, 18 IV 30.

c/3 Rabat-ustang, 18 IV 30.

The Masked Wagtail was seen many times during the 3rd Netherland Karakorum Expedition. It was observed East of the Karakorum pass by the lakes near Camp 50 and on numerous occasions (Camps 54, 59, 61, 64) in the whole area which our party traversed before reaching the Turkestan plains (Kushku Maidan and Karakash-valley). In November and December it was met with near Yarkand and Kashgar. As LUDLOW states, a few of these Wagtails remain in winter; a frozen bird was found in the courtyard of our bungalow near Yarkand on the 9th January. The spring migration begins in early March; in the second half of that month I found the Masked Wagtail very common near Maral-bashi, and by mid-April it was found breeding in the Rabat-ustang marshes. On my further journey in Turkestan I saw this bird in every oasis between Yarkand and Khotan, also in Pujiya and in the Sanju- and Karakash-valleys. A ♂, shot at Alinazar Kurghan (10000ft.) was evidently on its breeding ground. I did not see any more birds after the 31st May, when we left the Karakash-valley for the alpine regions of the Suget Pass.

52. *Motacilla alba alboides* Hodgs.

18, ♀, Nyungstet (Nubra), 3 VII 29; 19, ♂, Nyungstet, 4 VII 29.

This bird was common in the Nubra-valley, but it was not found in the adjoining area of the Upper Shyok River, although HELLMAYR states that it lives up to nearly 15000 feet. (Kataklik, Shyok-valley, has an altitude of 4150 m = 13600 feet).

53. *Tichodroma muraria* L.

118, ♂, Yarkand, 20 I 30; 129, o, Yarkand, 31 I 30.

Not uncommon in the plains of Chinese Turkestan. LUDLOW obtained a specimen in the Karakash-valley. In Ladakh, I observed a Wall-Creeper at Khalsar (lower Shyok-valley).

54. *Parus major caschmirensis* Hart.

445, 446, 447, 448, ♀ juv., ♂ juv., ♀, ♀ juv., Leh, 26 VII 30; 481, ♂ juv., Gund (Sind-valley), 9 VIII 30.

Common near Leh and in the Sind-valley. It is the typical Grey Tit of Kashmir and Ladakh, but it does not seem to cross the Ladakh Range, as I failed to observe it in the Nubra-valley.

55. *Parus cyanus tianschanicus* Menzb.

72, ♂, Yarkand, 25 X 29; 73, ♂, Yarkand, 27 X 29; 74, ♂, Yarkand, 29 X 29; 84, ♂, Yarkand, 20 XI 29; 85, ♀, Yarkand, 21 XI 29; 86, ♂, Yarkand, 25 XI 29; 88, 89, ♂ ♀, Yarkand, 5 XII 29.

In winter this Tit is a very common bird in the Tarim Basin. HELLMAYR states that its breeding area appears to be restricted to the central and eastern Tian Shan and the northern slopes of the K'un Lun, but according to Captain SHERRIFF (see LUDLOW, *The Ibis* for July, 1933, p. 450) it breeds in the Kashgar oasis. However, it certainly does not appear to be as numerous in the plains of Chinese Turkestan in spring and summer as it is in autumn and winter. Probably for this reason CHERRIE, who traversed the plains in July and September, did not collect it there.

56. *Remiz pendulinus stoliczkae* (Hume).

198, o, Maral-bashi, 14 III 30.

This Penduline Tit was observed twice near the Anar Kul-lake near Maral-bashi in the middle of March 1930. Small flocks of 5 or 6 birds were seen in the tamarisk-scrub. CHERRIE did not meet with it.

57. *Regulus regulus tristis* Pleske.

111, ♀, Kashgar, 31 XII 29; 112, 113, ♂ ♀, Yarkand, 17 I 30; 158, ♂, Yarkand, 24 II 30.

Not uncommon in winter in the plains of Kashgaria. Apparently it breeds in the Tian Shan, where LUDLOW collected a juvenile specimen.

58. *Panurus biarmicus russicus* (Brehm).

109, ♂, Kashgar, 31 XII 29; 140, 141, ♂ ♀, Rabat-ustang, 12 II 30; 142, o, Rabat-ustang, 14 II 30; 144, ♀, Rabat-ustang, 15 II 30; 200, ♀, Maral-bashi, 14 III 30; 206, 208, ♂ ♂, Maral-bashi, 19 III 30.

The Bearded Tit is a common bird in all the marshes of the Tarim Basin, where it is a permanent resident. In addition to the above-named localities, I observed it near Abad (S. of Merket) and in the marsh near Tarbogaz.

59. *Lanius excubitor przewalskii* Bogd.

110, ♀, Kashgar, 31 XII 29; 139, o, Rabat-ustang, 12 II 30; 183, ♀, Aksak-maral, 8 III 30.

The Grey Shrike is not uncommon near marshes and scrub on the edge of the Takla Makan desert. Except in the above-named localities I also observed specimens near the lakes round Maral-bashi.

LUDLOW collected two Grey Shrikes which both belong to *L. e. homeyeri*. The difference between the two races is the greater amount of white on the axillaries and the forehead in *L. e. przewalskii*.

60. *Lanius isabellinus* (Hemp. & Ehr.).
203, ♀, Maral-bashi, 16 III 30; 209, ♀, Maral-bashi, 17 III 30; 213, ♂, Maral-bashi, 19 III 30; 221, ♀, Maral-bashi, 23 III 30; 228, 229, ♂ ♂, Maral-bashi, 26 III 30; 314, ♂, South of Sanju, 19 V 30.
eggs: c/3 Merket, 6 IV 30.

This Shrike is a very common breeding-bird in the plains of Chinese Turkestan, where it was first met with on the 16th March; two days later great numbers of it had invaded the country.

HELLMAYR writes that the colour of the upper parts is variable, a fact which is clearly illustrated in my birds.

Besides in the plains it also seems to breed in the foothills of the K'un-lun, one specimen having been secured in the upper Sanju-valley. It was not seen at Alinazar Kurghan. The nest which I collected was found in a tree about 8 feet from the ground, and consisted of coarse pieces of cotton and dried grass and was lined with horse-hair and wool.

61. *Phylloscopus collybita subsindianus* (Zar.).
6, ♀, Camp 23 (Nubra-valley), 16 VI 29; 7, ♀, Nyungstet (Nubra-valley), 3 VII 29; 345, ♀, Alinazar Kurghan, 27 V 30; 449, ♂, Leh, 26 VII 30.
eggs: c/4, Camp 23, Nubra-valley, 12000ft., 16 VI 29.

Mr. WHISTLER tells me that these 4 birds belong to this race. In the summer it is a very common bird in the Nubra- and Kara-kash-valleys, as various travellers have recorded.

62. *Phylloscopus griseolus* Blyth.
8, ♀, Leh, 23 V 29; 335, ♀, Alinazar Kurghan, 23 V 30.
Several specimens of this Willow-Warbler were seen in the Residency garden at Leh, and a few were also observed in the undergrowth near Alinazar Kurghan. LUDLOW collected a specimen in the Sanju-valley on August 30th.

63. *Acrocephalus arundinaceus zarudnyi* Hartert.
265, ♂, Rabat-ustang, 16 IV 30.

This Reed-Warbler is a very common breeding bird in the marshes of the Tarim Basin. On my journey in

that country I met with it in the marshes near Maral-bashi, Rabat-ustang, Guma and Tarbogaz.

[Since this was written part 3 of the supplement to 'Die Vögel der Paläarktischen Fauna' has appeared. On p. 265 the authors mention *Acrocephalus arundinaceus orientalis* as the Reed-Warbler of Eastern Turkestan. In the light of this statement, I have not been able to recompare my bird with true specimens of *Acrocephalus a. orientalis* and I have therefore adhered to my original conclusion to which I came on examination of allied forms in the British Museum. The measurements of the skin in my collection are larger (wing 98 mm.) than those given by HARTERT for *A. a. orientalis*].

64. *Sylvia nisoria nisoria* (Bechst.).
311, ♂, Sanju, 18 V 30; 388, ♀, Kataklik (Shyok-valley), 2 VII 30.

In summer the Barred Warbler is very common in the plains of Chinese Turkestan where it appears in the last days of April. LUDLOW first met with it on the 10th May near the Tekkes River, and when he returned to the plains in September he did not collect a single bird, so that it seems probable that the species had by that time already departed on migration. According to HARTERT it winters in East Africa. Mr. WHISTLER tells me that beside my No. 388 the only other bird of this race, collected in Kashmir territory, is one shot by BIDDULPH at Gilgit on 6 Sept. 1879, but it was wrongly recorded as a young male of *Sylvia n. jerdoni* (see KINNEAR, in Ibis 1931, p. 575).

65. *Sylvia curruca minula* Hume.
240, o, Aksak-maral, 31 III 30; 250, ♂, Yarkand River near Merket, 5 IV 30; 281, ♂, Besh-arik, 29 IV 30.

A common breeding bird in all the oases of the Tarim Basin, where it was first observed in the end of March. LUDLOW, on his way to the Tian Shan, collected this White-throat on the 12th April near Jam, and back in Kashgar he obtained one on as late as the 31st October.

On our way South I did not see this bird beyond Sanju.

66. *Sylvia althaea althaea* Hume.
418, ♂ juv., Panamik, 16 VII 30; 419, ♀, Panamik, 16 VII 30.

In summer this is a common bird in the Nubra-valley. It was not observed across the Saser Pass, in the upper Shyok-valley, and it does not appear in Turkestan.

67. *Rhopophilus pekinensis albosuperciliaris* Hume.
80, 81, ♂ ♀, Thadir Toghrak (between Yarkand and Merket), 12 XI 29; 178, 179, ♀ ♂, Akhdung, 6 III 30; 185, ♂, Aksak-maral, 9 III 30; 196, ♀, Maral-bashi, 13 III 30; 216,

♂, Maral-bashi, 20 III 30; 258, 260, ♂ ♂, Merket, 6 IV 30. eggs: c/2, Merket, 6 IV 30 (with No. 260).

The two first-named birds are in fresh autumn plumage, the other skins showing rather worn feathers. No. 196 has a moulting tail, about half the normal length. Before securing it, LUDLOW and I chased it for some time without recognising it. No. 260 was shot near the nest.

A very restless bird, which in its individual habits rather resembles Tits. It was nearly always seen in couples or in small flocks, never flying far but from bush to bush where it is in constant motion in the undergrowth, also assuming acrobatic postures as it hunts for food. It is especially found in tamarisk-scrub, in open country as well as in the jungle (Aksak-maral).

The nest, which was taken in some reeds on the edge of an orchard near Merket consists of dried reeds and grass, some coarse cotton (cultivated in the neighbourhood) and a woollen thread. The inside is lined with dry grass and hair. Height from the ground $1\frac{1}{2}$ feet. The eggs are rather round in shape, and chiefly spotted at the blunt end. Shell dead (no shine). Spots grey, of irregular size with ashy-purple shell-marks. Ground dirty white. Not unsimilar to eggs of the Marsh-Warbler.

Size: 19.5×15 and 18.25×14.65 .

Weight (empty shell) 113 mg. and 112 mg.

The size differs considerably from that given by HARTERT (Vögel der Pal. Fauna) but the author himself is not sure of the correctness of his data.

68. *Turdus ruficollis atrogularis* Temm.

75, 76, ♂ ♀, Merket, 9 XI 29; 77, ♀, Merket, 10 XI 29; 106, ♀, Kashgar, 31 XII 29; 161, 165, ♀ ♂, Yarkand, 25 II 30; 164, ♂, Yarkand, 24 II 30; 197, ♀, Maral-bashi, 14 III 30; 342, ♀, Alinazar Kurghan, 26 V 30.

According to HELLMAYR this Thrush breeds in the Tian Shan and in Western Siberia. It is a winter visitor to the Tarim Basin where it is a very common bird. At the same time, it is curious to note that in the autumn of 1929 it was rarely observed near Yarkand, while at Kashgar (in December and January) it was exceedingly numerous. After February it was a common species near Yarkand. The spring migration starts in March, though a few birds were seen at Rabat-ustang in mid-April. The Thrush which I collected at Alinazar Kurghan was probably a late migratory bird, as its ovary did not suggest that it was on its breeding ground.

69. *Turdus merula intermedia* (Richm.).

101, ♂, Kashgar, 20 XII 29; 102, ♂, Kashgar, 22 XII 29; 103, ♀, Kashgar, 30 XII 29; 175, ♂, Merket, 5 III 30; 219,

♂, Maral-bashi, 23 III 30; 230, ♂, Maral-bashi, 25 III 30.

Occasionally seen near Yarkand, but very common near Kashgar and Merket. I cannot very well account for this variation in distribution. Perhaps it is caused by the fact that the neighbourhood of Yarkand consists exclusively of cultivated fields, which does not seem to be the favourite country for this Blackbird.

The spring migration begins in March. No birds were observed after the beginning of April. According to SCULLY it is said to breed near Maral-bashi, but I do not think this is correct, as the organs of two ♂♂, collected near this town late in March, were entirely undeveloped.

70. *Monticola saxatilis* L.

52, ♂ juv., Camp 55 (16500 ft., near Kara-tagh-Pass), 3 IX 29.

This bird was collected in one of the most uninhabitable areas which the expedition traversed. On the 17th of the same month an example of the same species was seen in the Kara-kash-valley near Suget Karaul. LUDLOW encountered a great number of these Rock-Thrushes near the Toghra-su in the same valley and HENDERSON (1st Yarkand expedition) met with this bird in this locality in mid-September.

71. *Monticola solitaria pandoo* (Sykes).

455, 456, ♀ ♂, Nurla (Indus-valley), 30 VII 30; 467, ♂ juv., Maulbeck, 4 VIII 30.

The Blue Rock-Thrush is common in Ladakh, including the Nubra-valley, where I observed it near Nyungstet and Panamik in July.

72. *Myiophoneus coeruleus temminckii* (Vigors).

469. ♂ juv., Tashgam (Dras River), 6 VIII 30.

This bird is an example of the Kashmir Whistling-Thrush. Several specimens were observed between Kargil and Matayan in the beginning of August, 1930.

73. *Oenanthe deserti oreophila* (Oberh.).

10, ♀, Leh, 18 V 29; 33, o, Murgo, 9 VIII 29; 34, ♂ juv., Murgo, 9 VIII 29; 57, o, Suget Karaul, 25 IX 29; 303, ♀, Hills near Pujiya, 13 V 30; 338, ♂, Alinazar Kurghan, 26 V 30; 373, ♂, Kum Bulak, 18 VI 30; 379, ♂, Murgo, 23 VI 30; 384, ♂, Kataklik, 1 VII 30; 404, 405, ♂, ♂ juv., Saser Brangsa, 11 VII 30; 434, 435, ♂, ♂ juv., Khardong-valley, 22 VII 30; 458, 459, ♂ ♀, Fotu La, 2 VIII 30.

Although HARTERT (Vögel der Pal. Fauna, Nachtrag I) was still uncertain as to the validity of this subspecies, subsequent authors have proved it to be the distinct race, of the Central Asian mountain ranges. Its whistling call

is often the only sound which one hears in those desolate regions.

Mr. Hugh WHISTLER was kind enough to determinate my Wheatears. According to him my No. 33 which is labelled a juvenile ♂, should be a ♀ and No. 57 (labelled a ♀) shows measurements and plumage of a ♂.

This bird is common along the caravan-route from Leh to Sanju, especially in uninhabited areas. It was also met with in the desert hills between Khotan and Sanju.

74. *Oenanthe isabellina* (Cretzschm.).

58, ♂, Alinazar Kurghan, 6 X 29; 294, 295, ♂ juv. ♀ juv., Khotan, 6 V 30.

Mr. WHISTLER also compared these birds with skins in his own collection. About the latter two specimens he writes:

'Apparently *isabellina*; very similar to chick of *oreophila*, but distinguished by (1) heavier beak, (2) longer upper tail coverts white and not washed with warm fulvous, (3) narrower band on tail, (4) chin and throat white, remainder of lower parts uniform fulvous'.

According to SCULLY this Wheatear is a summer visitor to the Tarim Basin, a fact which is illustrated by the 2 juveniles shot in the oasis of Khotan. No. 58 is a migrant.

75. *Saxicola torquata indica* Blyth.

476, 477, ♂ ♀, Sonamarg, 9 VIII 30.

Several specimes were seen in the Sind-valley below Sonamarg in August. The Indian Stone-Chat is a breeding bird in Kashmir and in the Tian Shan where LUDLOW found it. It apparently does not visit the plains of Turkestan, but it breeds in the surrounding ranges as the Pamirs and the foot-hills of the K'un-Lun (Sanju).

76. *Chaimarrornis leucocephala* (Vigors).

471, ♂ juv., Machoi (nr Zoji La), 8 VIII 30; 472, 473, ♂ juv. ♂ ad., Zoji La, 8 VIII 30.

A number of White-capped Redstarts was observed in the vicinity of the Zoji La where they were looking for food on patches of snow. Another specimen was observed near Kargil. According to several ornithologists this is the Easternmost limit of this bird in Ladakh.

77. *Phoenicurus ochruros phoenicuroides* (Horsfield & Moore).

1, 2, ♂ ♀, Maulbeck, 12 V 29; 3, 4, ♂ ♂, Te-Rong-valley, 20, 24 VI 29; 5, ♂, Nyungstet, 3 VII 29; 315, ♂, above Sanju, 19 V 30; 390, ♀, Kataklik, 4 VII 30; 403, ♂, Saser Brangsa, 10 VII 30.

This Redstart is one of the commonest birds of the Central-Asian mountain ranges where it frequents culti-

vated areas as well as desolate and rocky country like the upper Shyok-valley, the Karakorum Pass, the Suget Pass and the Kara-kash-valley. In the Sanju valley it does not appear below Sanju-bazar, and I did not observe it in the plains of the Tarim Basin. LUDLOW collected it in the Tian Shan.

78. *Phoenicurus erythrogaster grandis* (Gould).

334, ♂, Kichik-yailagh, 22 V 30.

This beautiful Redstart is tolerably common along the Karakorum trade-route between the Saser Pass and Kichik-yailagh, the Kirghiz encampment North of the Sanju Pass. East of the Karakorum Pass it was only seen near our Camp 61 on the Kushku Maidan, and in the upper Kara-kash-valley. In winter this bird descends to the plains of Turkestan; LUDLOW collected 4 specimens near Kashgar.

79. *Phoenicurus erythronota* (Eversm.).

107, ♀, Kashgar, 31 XII 29; 108, ♂, Kok-rabat, 9 I 30; 151, ♂, Rabat-ustang, 15 II 30.

This Redstart was observed on several occasions in the Tarim Basin. Though I never saw it in the immediate neighbourhood of Yarkand I met it on the road to Kashgar, on the outskirts of the various oases. I obtained one bird near the river a mile outside the last-named town.

It breeds in the Tian Shan where LUDLOW collected a number of specimens. CHERRIE failed to obtain it either in the plains or in the mountains.

80. *Cyanosylvia svecica abbotti* (Richm.).

11, 13, ♂♂, Nyungstet (Nubra-valley), 3 VII 29; 12, ♀ juv., Nyungstet, 4 VII 29; 416, ♂, Panamik, 15 VII 30.

Although the question of the number and distribution of the races of this species has not definitely been settled, it seems certain that the Ladakh Bluethroat belongs to this race. It comprises both white- and red-spotted specimens, it breeds in Ladakh but its winter quarters are not satisfactorily known. HARTERT (Vögel der Pal. Fauna, I, p. 750) is incorrect in stating that it breeds in Eastern Turkestan. Breeding birds from that area belong to *C. s. kashgariensis*.

The Netherland Karakorum-Expedition found *C. s. abbotti* very common in the Nubra-valley after the middle of June. It was not observed in the upper Shyok-valley.

81. *Cyanosylvia svecica kashgariensis* (Sar.).

211, ♂, Maral-bashi, 19 III 30; 222, ♂, Maral-bashi, 24 III 30; 247, ♂, Akhdung, 4 IV 30; 253, ♂, Yarkand River near Merket, 5 IV 30.

Common in suitable localities between Maral-bashi, Yarkand and Karghalik. It was first seen on the 18th March near Maral-bashi.

TUGARINOW (Bluethroats of the Eastern Palearctic) has separated breeding birds of the Tarim Basin from *C. s. pallidogularis* which he asserts inhabits Transcaspia, Western Turkestan and Southwestern Siberia. Apparently this form visits Ladakh and even the Tarim Basin on migration; LUDLOW obtained specimens near Skardu (Ibis 1933, p. 459) and considers them to be birds of passage.

Type-locality of this race is the Yarkand-darya; my No. 253 may be considered as topotypical.

82. *Cyanosylvia svecica* subsp.?

312, 313, ♂♂, Sanju, 18 V 30; 317, 319, ♂♂, Keywas, 20 V 30.

TUGARINOW includes the Northern slopes of the Russian Range (Western K'un-lun) in the distribution of this race. In consequence, these specimens should belong to *C. s. kashgariensis*. However, I cannot consider them identical with the Bluethroats which I collected in the plains of Chinese Turkestan. Although the upper parts are much the same, the blue of the throat is not of the pale (forget-me-not) shade, with silvery tinge, but nearer to the deeper blue of *abbotti*. From the latter form they are distinguishable by smaller measurements of culmen and wing, which average the same as typical examples of *kashgariensis*.

These Bluethroats were fairly common in the Sanju-valley between Sanju-bazar and Keywas, and were evidently on their breeding-ground.

83. *Prunella rubeculoides muraria* Meinertz.

9, o, Khardong, 5 VI 29.

eggs: c/2, 5 VI 29.

This Accentor is fairly common in Ladakh. I did not observe it in the upper Shyok-valley and I conclude that it does not cross the Karakorum Range. LUDLOW collected it near the Saser Pass, but the ROOSEVELTS expedition does not seem to have met with it.

84. *Prunella fulvescens fulvescens* (Sev.).

407, ♂ juv., Thalam Buti-valley, 14 VII 30; 411, ♂, Skyangpo-chhe, 13 VII 30; 412, ♂, Thalam Buti-valley, 14 VII 30.

In the Thalam Buti-valley (a gorge between the Saser La and the Nubra-valley) several families of the Brown Accentor, comprising parent birds and chicks, were met with, indicating that the birds were on their breeding ground. Birds of this species were also observed near Saser Brangsa, near Sultan Chhushku in the upper Shyok-valley, and above Khardong village, although not collected. It seems likely that these birds were of the same subspecies.

LUDLOW and OSMASTON's birds (from the same locality) in the British Museum are identical with mine: considerably darker than *P. f. dresseri*, a form which STUART BAKER does not consider distinct. LUDLOW also obtained the typical species in the Tian Shan, two ♂♂ on exactly the same day as my No. 411.

85. *Prunella fulvescens dresseri* (Hart.).
320, ♂, Tam Karaul, 21 V 30; 329, ♂, Kichik-yailagh, 22 V 30; 332, ♀, Alinazar Kurghan, 23 V 30; 339, ♀, Alinazar Kurghan, 26 V 30; 348, ♂, Alinazar Kurghan, 28 V 30; 351, ♂, Alinazar Kurghan, 29 V 30.

This pale form of the Brown Accentor was abundant in the upper Sanju-valley, South of Keywas, and also in the Kara-kash-valley near Alinazar Kurghan. It was not observed South of the Suget Pass.

It is curious that this bird which judged from its organs should be on its breeding ground, inhabits an island locality in an area where *P. f. fulvescens* is the common race. To the North, both CHERRIE and LUDLOW collected the last-named subspecies on the slopes of the Tian Shan, and the latter shot identical birds in the Gez Defile and in the Hunza district. In the South, I met several families of *P. f. fulvescens* near the Saser La, six weeks after I had obtained *P. f. dresseri* in the Kara-kash-valley.

Series of *dresseri* in the British Museum, taken by BIDDULPH and STOLICZKA, and all dated between October and January, differ only very slightly from my specimens, the latter even being a shade paler, and missing the ferruginous tinge which the older skins show. But this may very well be caused by the different season in which the birds were shot.

86. *Troglodytes troglodytes tianschanicus* Sharpe.
135, ♂, Yarkand, 6 II 30; 143, ♂, Rabat-ustang, 13 II 30.

This Wren was first observed near Merket on November 11th, and afterwards near Kashgar, Yarkand, Kok-rabat and Rabat-ustang on different occasions up to the middle of February. On the whole it is tolerably common in the Tarim Basin, where it is a winter visitor, as HELLMAYR states.

My specimens are identical with birds in the British Museum from the same area, although there appears to be a little more grey on the upper parts.

87. *Cinclus cinclus leucogaster* Bp.
56, ♂, Kawak-valley (upper Kara-kash), 16 IX 29.

Another Dipper of this race was observed in the gorge leading from the Kara-kash River to the Sanju Pass. LUDLOW collected a juvenile at Tam Karaul on the other side of the Sanju Pass. While this bird does not seem to

appear in the plains of Chinese Turkestan, it is fairly common in the mountain ranges surrounding the Tarim Basin. LUDLOW met with it in the Tian Shan, and Captain SHERRIFF shot birds at Bostan Terek (West of Kashgar) and near the Mintaka Pass. HELLMAYR gives other records from places in between these localities.

88. *Cinclus pallasii tenuirostris* Bp.
415, ♂ juv., Panamik, 15 VII 30.

Specimens of this form were also seen near Kargil, and higher up in the Nubra-valley at Kimi and Gonpa. It appears to be the common Dipper of the Karakorum; LUDLOW observed these birds in the Hunza-valley.

89. *Hirundo rustica rustica* L.
279, ♂, Yarkand, 23 IV 30; 292, 293, ♂ ♂, Tarbogaz, 5 V 30; 310, ♀, Sanju, 18 V 30.

The Barn-Swallow is a very common bird in Chinese Turkestan, where it breeds in great numbers. In the mountains it appears as far up as Alinazar Kurghan in the upper Kara-kash-valley. In the plains the first birds were seen in early April.

90. *Ptyonoprogne rupestris* (Scop.).
337, ♂, Alinazar Kurghan, 26 V 30.

The Crag-Martin is fairly common in the Karakorum and the K'un-lun. HENDERSON observed it as far down as Sanju, and Captain SHERRIFF collected a bird at Kashgar in April.

91. *Upupa epops epops* L.
71, ♂, Yarkand, 25 X 29; 82, 83, ♀ ♀, Yarkand, 19 XI 29; 234, ♀, Maral-bashi, 29 III 30; 251, 252, ♂ ♂, Abad (W. of Merket), 4, 5 IV 30; 256, 257, ♂ ♂, Merket, 6 IV 30; 275, ♀, Rabat-ustang, 18 IV 30; 278, ♂, Yarkand, 23 IV 30; 423, 424, ♂ juv., o, Tegur, 17 VII 30; 439, ♂, Leh, 24 VII 30; 451, ♀, Leh, 27 VII 30; 464, o, Maulbeck, 4 VIII 30; 470, ♀ juv., Tashgam, 6 VIII 30; 475, ♀ juv., Baltal, 9 VIII 30; 484, ♀, Gund, 11 VIII 30; 488, 489, ♀ juv., ♂ juv., Srinagar, 14 VIII 30.

Mr. Hugh WHISTLER, who has been kind enough to take the measurements of the Hoopoes in my collection and to compare them with specimens of his own, informs me that they all appear to be *e. epops*, although No. 82, 251, 252 & 257 are of a darker type, inclining towards *saturata*; however, HELLMAYR definitely states that the Hoopoes of the Tarim Basin are different to *U. e. saturata* which according to Madame KOSLOW is not a good form (Ibis 1932, p. 589). Mr. WHISTLER furthermore tells me that No. 489 should be an adult by measurements and plumage and that No. 464 is probably a juvenile.

Hoopoes were seen on both sides of the Karakorum Range, even as far as Murgo on August 9th and at Suget Karaul on the 2nd October. At our Camp No. 55, in the barren mountains East of the Karakorum Pass, a completely desiccated dead bird was brought to me; it had undoubtedly perished on migration. Stragglers seem to appear even in this country, for the Rev. PETER of the Moravian Mission in Leh told me that he had noticed a Hoopoe for a number of days up to the 15th January 1929, when a certain amount of snow had already fallen.

In Turkestan the first Hoopoes were met at Keywas on the 9th October, after which it was a common bird up to the 19th November. In spring its arrival was noticed on March 18th. In the intermitting winter it was never seen, contrary to HELLMAYR's statement that it is said to be a permanent resident in Kashgaria.

In the warm season the Hoopoe is a very common bird all over the Tarim Basin. Besides being noticed near the larger habitations, it was also observed in all the little oases along the desert roads between Karghalik and Khotan, and between the latter town and Sanju, via Pujiya, Duwa and Puski-langar. On our return journey through Ladakh (July and August) it was found well represented in the Nubra-valley and abundant along the Treaty Road from Leh to Srinagar.

92. *Coracias garrulus semenowi* Loudon & Tschusi.
300, ♀, Faizabad (nr. Khotan), 12 V 30; 482, 483, ♂ ♀,
Gund, 11 VIII 30.

The Roller was only observed on the occasions when it was collected. It seems to be a rare bird in the Tarim Basin, and neither LUDLOW nor the ROOSEVELTS expedition collected it there, though it is said to breed in that country, as the 1st Yarkand expedition obtained a young bird.

The specimen I shot at Faizabad is a one-year old bird in summer moult.

93. *Ceryle rudis leucomelanura* Rehb.
487, ♂, Srinagar, 14 VIII 30.

This Kingfisher is numerous in the Kashmir vale. It can be observed hovering over swamps and resting on telephone wires.

94. *Alcedo atthis pallasii* Rehb.
104, o, Kashgar, 22 XII 29; 486, ♂, Srinagar, 14 VIII 30.

The Kingfisher is not a common bird in the plains of Chinese Turkestan; it may be seen near the rivers or the irrigation-canals. LUDLOW also collected a bird at Kashgar, but several travellers do not record it. In Kashmir it is a common sight.

95. *Dryobates himalayensis albescens* Baker.

479, ♀ juv., Gund, 9 VIII 30; 480, ♀ juv., Gund, 10 VIII 30.

These 2 specimens are birds of the year, and were shot in the type-locality for this race. It is common in the Sind-valley, but it was not observed on the other side of the Zoji La, in accordance with HELLMAYR's statement that it does not cross this pass into Ladakh.

96. *Dryobates leucopterus leucopterus* (Salvad.).

97, ♀, Yarkand, 10 XII 29; 177, ♂, Akhdung, 6 III 30; 180, ♂, Sarigh-buya, 7 III 30; 195, ♀, Maral-bashi, 13 III 30; 254, 255, ♂ ♀, Abad (West of Merket), 5 IV 30; 288, ♂, Zanguya, 4 V 30; 289, 290, ♂ ♀, Pialma, 4 V 30; 296, 297, ♀ ♀, Khotan, 6 V 30; 309, ♂, Sanju, 18 V 30.

In the breeding season this Woodpecker is a very common bird in the plains of Chinese Turkestan. It does not seem to be shy of human habitations as I noticed several specimens in the garden of the British Aksakal's house right in the centre of Khotan. On other occasions I saw Woodpeckers sitting on walls and on the roofs of houses. In view of all this it seems curious that Mr. CHERRIE of the ROOSEVELTS expedition did not obtain a single specimen of this species.

I have compared my Woodpecker-skins with birds in the British Museum: *D. l. leucopterus*, *l. albipennis* and *l. leptorhynchus*. Although the three races of the White-winged Woodpecker are much alike, I have concluded that my birds belong to the typical form. KINNEAR comes to the same conclusion with regard to LUDLOW's specimens¹). The three subspecies are distinguished from one another by the amount of white on the inner secondaries and the scapulars. According to HARTERT Yarkand is the terra typica for *D. l. leucopterus*.

97. *Cuculus canorus telephonus* Heine.

280, ♂, Yarkand, 25 IV 30; 282, ♂, Besh-arik, 29 IV 30; 305, ♀, Duwa, 15 V 30.

The Cuckoo is a summer visitor to the Tarim Basin in which it was first observed on the 19th April at Yarkand. Subsequently it proved to be a common bird in the oases along the desert road from Yarkand to Khotan, where it was even heard in the middle of the town. It was likewise noticed many times in the oases of Pujiya, Duwa and Puski-langar on the way to Sanju.

My specimens are identical with skins labelled

¹) KINNEAR (Ibis 1933, p. 684) mentions that I collected a Woodpecker at Abad in the Tian Shan foothills. This is a misapprehension. I did not travel further East or North than Maral-bashi. The bird referred to was shot at Abad (West of Merket). Quite a number of villages in Chinese Turkestan bear the name of 'Abad'.

telephonus in the British Museum. Other ornithologists visiting the Tarim Basin similarly collected examples of this race. LUDLOW did not obtain any Cuckoos in the plains of Turkestan, but he shot specimens of *C. c. canorus* in Ladakh and in the Tian Shan.

98. *Bubo bubo turcomanus* (Eversm.).

An Eagle-owl was seen in the middle of February at Rabat-ustang. It does not seem to be very rare in the Tarim Basin, as LUDLOW also met with it near Kashgar.

99. *Asio otus otus* L.

212, ♀, Maral-bashi, 19 III 30.

Though I only observed it near Maral-bashi, the Long-eared Owl does not seem to be uncommon in Chinese Turkestan, for LUDLOW collected 4 specimens at Kashgar.

100. *Athene noctua bactriana* Hutton.

235, ♀, Shamal, 30 III 30.

Two Little Owls were seen in the sand-dunes on the edge of the desert near Shamal, and one was collected. Although it is said to be common in Turkestan in winter, I did not meet with any other birds of this species. Neither LUDLOW nor CHERRIE obtained it.

101. *Falco subbuteo subbuteo* L.

453, 454, ♂ ♀, Nimu, 29 VII 30.

The Hobby is not uncommon in the Tarim Basin where it was met with occasionally at Yarkand and Kashgar.

KINNEAR (Ibis 1933, p. 691) records that these birds and others from Central Asia are inseparable from European Hobbies. According to him *F. s. centralasiae* is not a valid race.

102. *Falco tinnunculus tinnunculus* L.

62, ♂, Sulaghiz-langar, 12 X 29; 67, ♀, Leh, 26 V 29; 68, ♀, Leh, 1 VI 29; 120, ♂, Yarkand, 19 I 30; 138, ♂, Yarkand, 10 II 30; 146, ♂, Rabat-ustang, 13 II 30; 273, 274, ♂ ♀, Rabat-ustang, 17 IV 30; 425, ♀, Khalsar, 20 VII 30. eggs: c/4 Leh, 31 V 29;

c/5 Rabat-ustang, 17 IV 30 (with No. 273 & 274).

Kestrels were common both in Ladakh and in Chinese Turkestan where they even appeared in small oases like Akin-langar and also in the Kara-kash-valley near Ali-nazar Kurghan.

HELLMAYR has compared Kestrels from Central Asia with European (German) birds and, allowing for individual variation, he comes to the conclusion that specimens from the Western Himalayas and Central Asia are inseparable from typical *tinnunculus*. In this he

agrees with ROTHSCILD, MEINERTZHAGEN and WHISTLER.

The eggs are considerably lighter in colour than European ones, the brown being more sparsely blotched so that the dirty white ground shows quite clearly. Also the brown is not redbrown but of a dark chocolate colour. Average measurements of the above-named eggs are:

c/4 from Leh: 43.25×32.23 mm.

c/5 from Rabat-ustang: 39.38×32.92 mm.

Both clutches are rather large, especially that from Leh in which the length of one egg (44.3×32.7 mm) exceeds maxima as given by HARTERT and WITHERBY.

103. *Hieraaëtus pennatus* (Gm.).

364, o, Khapalung (upper Yarkand-valley), 8 VI 30.

An old bird was found dead in the upper Yarkand-valley (14380 ft.). It is identical with skins from Spain and India in the British Museum. According to its measurements it should be a ♀.

104. *Buteo ferox ferox* (Gm.).

304, ♀, Pujiya, 14 V 30.

An old bird in extremely worn plumage was shot near the Kara-kash-river in the foothills of the K'un-lun.

105. *Circus aeruginosus aeruginosus* (L.).

210, ♂, Maral-bashi, 18 III 30; 269, ♀, Rabat-ustang, 16 IV 30.

The Marsh-Harrier is a common bird in suitable localities in the Tarim Basin, where it breeds, as a nearly developed egg was found in the oviduct of No. 269. LUDLOW holds that it is only a summer visitor to Turkestan, but according to my notes I observed Marsh-Harriers near Kashgar in December.

106. *Circus cyaneus cyaneus* (L.).

115, ♂, Kashgar, 22 XII 29; 162, ♂, Yarkand, 24 II 30.

Very common in the plains of Chinese Turkestan, where it is supposed to breed. I did not find any evidence to confirm this, though Hen-Harriers were still numerous in the Rabat-ustang marshes (18 April) shortly before we left for Khotan. I did not meet with it in the latter district.

107. *Accipiter nisus nisosimilis* (Tickell).

Sparrow-Hawks were occasionally seen, but not collected, in Turkestan. LUDLOW shot 5 specimens in the course of his stay at Kashgar. A bird of this species was seen near our Camp No. 61 on the Kushku Maidan on the 12th September, but as I failed to collect it I do not know if it was *A. n. nisosimilis* or the next subspecies.

108. *Accipiter nisus melanoschistus* Hume.

457, ♀ juv., Nurla, 30 VII 30.

This specimen was brought to me at Nurla on our return journey to Kashmir. It proved to be identical with skins in the British Museum from Simla (type-locality) and Sikkim.

109. *Milvus lineatus* (Gray).

205, ♂, Maral-bashi, 18 III 30; 267, ♂, Rabat-ustang, 15 IV 30; 355, ♀, Alinazar Kurghan, 30 V 30; 485, ♀, Kangan, 12 VIII 30.

eggs: c/1 Rabat-ustang, 18 IV 30.

Common in the Tarim Basin after the middle of March; it was also observed in the oasis of Cholak-langar and near Tarbogaz on the outskirts of the Khotan oasis. In the mountains its distribution extends as far as the upper Kara-kash-river.

On the 29th March an empty nest was inspected near Maral-bashi, and a nest at Rabat-ustang (18 IV) proved to contain one egg. In Ladakh and Kashmir this bird is common at Leh and below Gund in the Sind-valley.

110. *Pandion haliaëtus haliaëtus* (L.).

An Osprey was seen on the Kashgar-river at Maral-bashi on the 26th March. It was the only bird of its kind I saw. Though several other travellers in Chinese Turkestan did not meet it at all, LUDLOW considers the possibility that it may be less rare in this country in summer.

111. *Gypaetus barbatus grandis* Storr.

Lammergeyers were seen all along the Karakorum trade-route from the Khardong Pass as far as Kichik-yailagh, North of the Sanju Pass. None were observed in the area which the expedition traversed East of the Karakorum Pass, possibly through the absence of dead transport animals.

112. *Ciconia nigra* (L.).

Several Black Storks were observed in March and April between Yarkand and Maral-bashi and one specimen was seen on the 12th May near Faizabad (Khotan).

113. *Ardea cinerea cinerea* L.

On the 10th September 17 Herons were seen near the lake near our Camp No. 60 on the Kushku Maidan (alt. 15500 ft.); a skull was found near Camp No. 50 (alt. 17500 ft.).

In the plains of Turkestan the Common Heron is quite common; it was observed on the river near Kashgar, along the Yarkand-river between Yarkand and Maral-bashi, on

the Anar Kul near the latter town (where it was less numerous than the White Egret), and in the Rabat-ustang marshes.

114. *Egretta alba alba* (L.).
204, ♂, Maral-bashi, 16 III 30.

The Great White Egret is common in suitable localities in the Tarim Basin, where it breeds. I encountered it near Kashgar and on the Anar Kul near Maral-bashi. The specimen which I obtained was evidently on its breeding-ground.

115. *Cygnus cygnus* L.

A Swan, believed to be of this species, was seen in one of the marshes near Rabat-ustang on the 13th February.

116. *Anser anser* L.

The Greylag Goose was common on the Anar Kul lake near Maral-bashi in March 1930. Geese in flights of up to 60 birds were noticed over Yarkand towards the end of October 1929. They possibly belonged to this species.

117. *Casarca ferruginea* Pall.

96, ♀ juv., Chong Tash near Murgo, 9 VIII 29; 190, ♂, Shamal, 10 III 30.

The Ruddy Sheldrake, a typical bird of the Tibetan highlands, was met with in corresponding country between the Karakorum and the K'un-lun. On nearly every salt lake one was sure to find a number of these duck. They were first seen on the Chong Tash lake near Murgo and later (mid-September) on the lakes on the Kushku Maidan, where I counted as many as 60 in one instance. Three specimens were observed at Malik-shah, between the Karakorum and the Suget passes.

This bird seems to be a winter visitor to the plains of Turkestan, where it was encountered in considerable numbers, especially on the Yarkand river between Yarkand and Merket (sometimes over 200 at a time). A few were occasionally seen between Merket and Maral-bashi. No. 190 was shot from a couple on a frozen lake on the edge of the desert, and had well-developed organs. After the middle of March Ruddy Sheldrakes were not so prominent in the Tarim Basin. Early in May 6 or 8 birds were seen in a marsh near Guma.

118. *Anas platyrhynchos platyrhynchos* L.

Mallards were seen on the lake near our Camp No. 61 on the Kushku Maidan.

In the plains of Turkestan this duck is quite common,

and it was seen in considerable numbers on the Yarkand- and Kashgar-rivers. In the middle of April it was found breeding in the marshes near Rabat-ustang.

119. *Anas crecca crecca* L.

Teal were seen on the lakes East of the Karakorum pass, doubtlessly on migration. On the Kara-tagh lake as many as 200 were observed. In the plains of Turkestan this species is not as common as the Garganey, though a number was met with on the river near Kashgar.

In May, 1929, a specimen was seen at Dras.

120. *Anas querquedula* L.

65, 66, ♀ ♂, Camp 50, (17500 ft.), 23 VIII 29.

Several Garganeys were seen on the lakes near our Camp No. 50 in the Aghil Range, and a number was observed with *A. crecca* on the Kara-tagh lake.

Common in the Tarim Basin where it was encountered frequently, especially in the marshes near Rabat-ustang, where great numbers were seen in the middle of April.

121. *Anas penelope* L.

A few Wigeon were seen near Rabat-ustang in mid-April 1930.

122. *Anas acuta acuta* L.

Pintails were seen on the Kushku Maidan on the lake near Camp No. 61.

In the spring of 1930 these birds were observed in great numbers in the plains of Turkestan. While I was staying at Rabat-ustang in the middle of February I daily noted flights of up to 500 birds passing overhead in Western direction. They were besides met with all along the road from Yarkand to Maral-bashi, and early in May in a marsh near Guma. Nests with eggs were found near Rabat-ustang in mid-April.

123. *Spatula clypeata* L.

Shovelers were not uncommon in Chinese Turkestan. They were met with in the marshes of Maral-bashi, Abad (South of Merket), Rabat-ustang (where they possibly breed), Tarbogaz and on the lower Kara-kash-river near Pujiya.

124. *Netta rufina* L.

The Red-crested Pochard is a common duck in the Tarim Basin. A few were observed near Kashgar in January, but many of these birds were encountered on nearly all the lakes and marshes between Maral-bashi, Yarkand and Khotan up to the middle of May.

125. *Nyroca ferina ferina* L.

A single Pochard was seen in one of the marshes near Rabat-ustang on the 16th April 1930.

126. *Nyroca fuligula* L.

These duck were observed near Maral-bashi, on a flooded rice-field near Merket, and in April in the marshes of Rabat-ustang.

127. *Bucephala clangula clangula* L.

114, o, Kashgar, 25 XII 29.

A few Goldeneye were shot near Kashgar in December 1929.

128. *Phalacrocorax carbo sinensis* Shaw & Nodder.

174, ♀, Abad (South of Merket), 4 III 30.

The Cormorant is a common bird in Chinese Turkestan, where it apparently breeds. It was especially met with along the road from Yarkand to Maral-bashi; a few specimens were also seen in the Rabat-ustang marshes.

129. *Podiceps cristatus cristatus* L.

286, 287, ♂ ♀, Guma, 2 V 30.

The only place in Turkestan where Grebes were seen was in a little marsh North of Guma, where two specimens were collected. They were evidently on their breeding ground.

130. *Columba livia neglecta* Hume.

69, ♀, Panamik, 11 VII 29.

This Rock-Pigeon was found common in the Nubra-valley and near the Khardong pass. Northwards it was not met with beyond the Saser La.

131. *Columba rupestris turkestanica* But.

70, ♂, Panamik, 7 VII 29; 395, ♂, Shyok-valley, 6 VII 30.

Common all along the Karakorum trade-route from the Khardong-pass to Keywas in the Sanju-valley. I observed birds on the Saser La and in the Chip-chap-valley as well as on the Karakorum-pass at an altitude of 18300 ft.

132. *Columba leuconota leuconota* Vig.

On the 14th July 1930 three Snow-Pigeons were observed in the Thalam-Buti-valley, but no specimens were collected. LUDLOW met with these birds in the identical locality in the same month both in 1928 and 1929.

133. *Streptopelia senegalensis ermanni* Bp.

159, ♂, Yarkand, 24 II 30.

A very common dove in the plains of Chinese Turkestan, where it breeds. HELLMAYR considers the distri-

bution of this bird not yet clearly marked; he also doubts whether it breeds anywhere outside Turkestan.

134. *Syrrhaptes tibetanus* Gould.

Sand-grouse were seen on the Depsang-plateau in June, 1930, but none were collected.

135. *Charadrius dubius curonicus* Gmelin.

231, ♀, Maral-bashi, 27 III 30; 266, ♀, Rabat-ustang, 16 IV 30; 285, ♂, Cholak-langar, 30 IV 30.

The Little Ringed Plover is common in suitable localities in Chinese Turkestan, where it evidently breeds. The bird from Rabat-ustang was shot with a full-grown egg in its oviduct. The egg, being unbroken, was also preserved. No. 285 was shot in the water-basin of a small oasis between Karghalik and Khotan.

136. *Charadrius alexandrinus alexandrinus* L.

261, 262, ♂ ♂, South of Merket, 7 IV 30.

Several Kentish Plovers were seen in company with some Redshanks near a pool about half a march South of Merket. It was the only occasion on which I met with this species.

137. *Charadrius mongolus atrifrons* Wagl.

372, ♂, Kum Bulak, 17 VI 30.

A couple of these birds was observed in a small marsh halfway between the Suget-pass and the Karakorum-pass. The ♂ which was collected, is identical with a bird of this race in Mr. WHISTLER's collection.

138. *Vanellus vanellus* L.

268, 270, ♂ ♂, Rabat-ustang, 16 IV 30; 493, ♀, Oi-toghrak, 14 X 29.

Lapwings were also observed late in December in Kashgar, and on the 20th March near Maral-bashi, which dates lead me to believe that a number of these birds stay in Chinese Turkestan during the cold season. In April 1930 a considerable number of Plovers was met with in the marshes of Rabat-ustang. The organs of the two ♂ ♂ collected in this locality were well developed, so it seems probable that they breed in this area.

139. *Calidris temminckii* (Leisler).

39, 41, ♀ ♀, Camp 50, 22 VIII 29; 40, ♀, Camp 50, 21 VIII 29; 42, ♂, Kushku Maidan, 9 IX 29; 43, ♀, Kushku Maidan, 8 IX 29; 298, 299, ♂ ♂, Faizabad (near Khotan), 12 V 30.

Migratory birds of this species were very common near the lakes East of the Karakorum-pass and on the Kushku Maidan. A few specimens were also observed in the same month (August) at Murgo.

In Chinese Turkestan no Stints were seen except those shot near Faizabad and a few at Duwa, both localities in the desert foothills of the K'un-lun. The two birds collected in this area were evidently still on migration, though it seems rather late in the year. But the arid country in which they were met with hardly looked a place for Stints to breed and the organs of the two ♂♂ from Faizabad did not indicate that they were on their breeding ground.

140. *Tringa totanus eurhinus* (Oberh.).
271, ♀, Rabat-ustang, 17 IV 30; 277, ♂, Rabat-ustang, 19 IV 30.

Not uncommon in the plains of Chinese Turkestan, where it probably breeds. The first birds of this kind were seen in early April.

141. *Tringa nebularia* (Gunn.).
60, ♂ juv., Camp 50, 23 VIII 29.

Greenshanks were seen in the Nubra-valley, near the lakes East of the Karakorum-pass, and in the Kara-kash-valley near Suget Karaul, all in late summer. In the plains of Turkestan a bird of this species was observed in the small oasis of Cholak-langar, and a dozen in the little marsh North of Guma.

142. *Tringa ochropus* L.
38, ♀, Panamik, 11 VII 29; 59, ♀, Alinazar Kurghan, 5 X 29.

Common in July in the Nubra-valley. In August and September many Green Sandpipers on migration were met with near the salt lakes East of the Karakorum-pass and on the Kushku Maidan at altitudes of up to 17500 ft.

In the Tarim Basin this bird was observed late in December near Kashgar and in early May in the oasis of Cholak-langar.

143. *Tringa glareola* L.

LUDLOW shot a specimen near Yarkand in September. Like other Sandpipers this bird probably visits the lakes East of the Karakorum-pass on migration. However, I did notice it.

144. *Tringa hypoleucos* L.
44, o, Kushku Maidan, 8 IX 29.

This bird was taken near the Kara-tagh-lake, where many migratory birds were observed.

145. *Himantopus himantopus himantopus* L.
283, 284, ♂♂, Cholak-langar, 30 IV 30.

These birds were taken in a small oasis in the desert

between Yarkand and Khotan. They were evidently on migration.

Stilts were also seen in the middle of March near Maral-bashi and in mid-April near Rabat-ustang. The species seems to be quite common in marshy localities in the Tarim Basin.

146. *Numenius arquata lineatus* Cuvier.

Eight of these Curlews were seen near Maral-bashi on the 26th March. LUDLOW collected a specimen on that occasion.

147. *Sterna hirundo tibetana* Saund.

Tibetan terns were seen in the Nubra-valley in July and one was sighted on the Kara-tagh-lake in September.

In Chinese Turkestan this Tern is not uncommon on the rivers. It was observed on the Kashgar River near Maral-bashi, on the Tiznaf near Karghalik and on the Kara-kash near Khotan. It was also met with in the little marsh North of Guma.

LUDLOW collected Tibetan Terns near Panamik, near Yarkand and in the Tekkes-valley.

148. *Chlidonias leucopareia indica* Steph.

490, ♂, Srinagar, 14 VIII 30.

Many Whiskered Terns were seen in a swamp near Srinagar. This race breeds in the Kashmir valley.

149. *Larus ridibundus ridibundus* L.

202, ♂, Maral-bashi, 16 III 30.

Many Black-headed Gulls were seen in March near the Yarkand River between Yarkand and Maral-bashi. They were also very common near the Anar Kul lake, but after April they were not seen in the Southern part of the Tarim Basin.

150. *Gallinula chloropus chloropus* L.

220, ♂, Maral-bashi, 23 III 30.

Several couples were seen on the Kashgar River near Maral-bashi, and also early in May in a marsh near Guma and near Tarbogaz.

HELLMAYR states that there is no difference between Turkestan and European Moorhens.

151. *Fulica atra atra* L.

Coots were seen near Maral-bashi, Guma and Tarbogaz. It is quite a common bird in suitable localities in the Tarim Basin.

152. *Tetraogallus himalayensis grombcewskii* Bianchi.

333, ♂, Kichik-yailagh, 21 V 30.

One bird was shot on the Northern slope of the Sanju-

pass where many could be heard and seen from the Kirghiz encampment.

Snow-cocks could also be heard on the Khardong-pass; they probably belonged to *T. h. himalayensis*.

153. *Alectoris graeca pallescens* Hume.

64, ♀, Kimi, 13 VI 29.

This Partridge was met with in the Indus-valley near Leh, and it was found to be quite common in the Shyok- and Nubra-valleys. My bird was compared with the type-specimen in the British Museum and with other skins from Ladakh. In the upper Shyok-valley, North of Kataklik, no Partridges were seen.

As HELLMAYR has pointed out, there is a distinct difference between the 'chukor' of Northern Ladakh and the corresponding bird which inhabits the hills surrounding the Tarim Basin. My birds very clearly illustrate this conclusion.

154. *Alectoris graeca pallida* Hume.

336, ♂, Alinazar Kurghan, 23 V 30; 343, 344, ♂ ♀, Alinazar Kurghan, 26 V 30; 354, ♀, Alinazar Kurghan, 29 V 30.

Partridges of this race were also seen in the Sanju-valley, between the pass and the village of that name.

My skins were compared with the type-specimen, collected by G. HENDERSON in 'Yarkand' (which means the Kara-kash-valley), so that they may well be called topotypical.

Difference with *A. g. fallax* and *A. g. falki* is evident, and also with *A. g. pallescens*; the more sandy-coloured upper parts of *pallida* and its olivaceous instead of blue-greyish rump is conspicuous, though HELLMAYR's statement that 'the black bars on the flanks are rather narrower' is not so well illustrated.

155. *Phasianus colchicus shawii* Elliot.

199, 201, ♀ ♂, Maral-bashi, 14 III 50; 207, ♀, Maral-bashi, 18 III 30; 243, ♂, Aksak-maral, 1 IV 30.

Pheasants were seen near Kashgar, in the Rabat-ustang marshes and a great number near Maral-bashi, where they evidently breed. One bird was taken on the riverside near Aksak-maral.

Birds encountered near the larger towns in Turkestan are very often purposely fed by the local Turkis, who are very fond of hawking them. No Pheasants were met with in the Southern part of the Tarim Basin, between Karghalik and Khotan.

BUSSUM, Holland, April 1934.