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# Systematic Notes on Palearctic Birds. No. 7 Alaudidae and Motacillidae (Genus *Anthus*)

#### By Charles Vaurie

The following notes are observations made during a study of the Alaudidae and Motacillidae for a contemplated check list of the Palearctic region. The notes on the Motacillidae published here are restricted to the genus *Anthus*.

#### ALAUDIDAE

The Alaudidae have been reviewed by Meinertzhagen (1951, Proc. Zool. Soc. London, pt. 1, pp. 81–132) with the exception of the genera *Mirafra*, *Eremopterix*, and *Eremophila*. The forms of western Asia including a complete review of *Alauda* east of the Caucasus have been reviewed by Vaurie (1951, Bull. Amer. Mus. Nat. Hist., vol. 97, pp. 435–526).

#### **EREMALAUDA**

This monotypic genus has been merged with *Ammomanes* by Meinertzhagen (1951), from which it differs, however, by its spotted juvenal plumage and streaked upper parts in the adult. *Eremalauda* seems to be a valid genus, the correct position of which may be closer to *Eremopterix* as suggested by Sclater.

#### **EREMOPTERIX**

In Eremopterix nigriceps, I consider that affinis Blyth, 1867, Sind, and sincipitalis Blyth, 1867, Aden, are synonyms of melanauchen Cabanis, 1851, Jidda, Arabia. Specimens examined show that topotypes of affinis and sincipitalis are identical and that these two populations differ from melanauchen examined from Arabia, Red Sea Province, Eritrea, and Somaliland by being only very slightly paler in both sexes, the difference being too slight in my opinion to warrant separation. The size of the

white frontal patch and the posterior limits of the black on the crown vary individually to the same extent in all the populations examined.

#### **AMMOMANES**

In Ammomanes deserti I do not accept the forms below for the following reasons: A. d. intermedia Heim de Balsac, 1925, is a pure intermediate between algeriensis Sharpe, 1890, and mya Hartert, 1912, and I agree with Meinertzhagen (1951) that it is best synonymized with mya. I consider, provisionally, that bensoni Meinertzhagen (1933, Bull. Brit. Ornith. Club, vol. 53, p. 151, Ahaggar Plateau) is synonymous with geyri Hartert, 1924, Air. I did not examine bensoni, but the diagnosis given by Meinertzhagen fails to compare this dark form with the dark geyri. A. d. whitakeri Hartert, 1911, Tripoli, and mirei Berlioz (1950, Bull. Mus. Hist. Nat. Paris, ser. 2, vol. 22, p. 211, Tibesti) I consider to be synonymous with nominate deserti Lichtenstein, 1823. Egypt. I did not examine mirei which is based on a single specimen said to be in "deplorable condition" by Meinertzhagen (1951), but this form certainly requires confirmation, for the diagnosis fails to differentiate it from nominate deserti or geyri. In the case of whitakeri I find that two specimens (the type and a paratype) are not separable from an original specimen of nominate deserti of Lichtenstein.

#### ALAEMON

In Alaemon alaudipes, the range of the nominate race extends in Africa from Rio de Oro eastward to the Nile Valley, and in the Sahara from the foothills of the Atlas south to the Ahaggar and the Air. Of a large series examined, a series of 13 specimens from the following regions stands out conspicuously by being more richly colored, a warmer sandy buff, than specimens in comparative plumage from the rest of Africa. This series, which is very uniform, consists of two specimens from Oued el Abiodh, north of In-Salah, Tidikelt, one specimen from the Ahaggar, and 10 from the Air (see also Hartert, 1921, Novitates Zool., vol. 28, p. 128; 1924, ibid., vol. 31, p. 38, as to the characters of these specimens). This series is certainly uniform and distinct enough to warrant separation. but in the other parts of the range of nominate alaudipes one finds occasional specimens that are identical or very similar to those of the more richly colored series. I have examined such specimens from Biskra, Beni Ounif near Figuig, from Wadi Natrun and near Cairo in Egypt, and from Shereik and Nacheila in northern Sudan. Under the circumstances it seems best not to separate nomenclaturally the darker population.

#### *MELANOCORYPHA*

Melanocorypha maxima requires further study. Some of its populations were studied by Stegmann (1937, Ornith. Monatsber., vol. 45, pp. 54-56) who described two new forms, subgrisea from Oring Nor in Tsinghai, and flavescens from western Nan Shan. An additional form from Rupshu was described as kashmirica by Koelz (1939, Proc. Biol. Soc. Washington, vol. 52, p. 122). After study of the material in the American Museum and British Museum I came to the conclusion (1951) that it is best, for the present, to recognize only two races, a dark race (nominate maxima) in the southern part of the range, and a pale race (holdereri) replacing the dark race to the west, north, and east: subgrisea is a pure synonym of holdereri (for a similar opinion, see Meise, 1937. Jour. Ornith., vol. 85, p. 488). The other two forms, flavescens from the northeastern part of the range and kashmirica from the westernmost part of the range, require confirmation and may provisionally be regarded as synonyms of holdereri. I did not examine flavescens, but it does not seem that its separation from holdereri on the basis of smaller size. as proposed by Stegmann, can be maintained, though it may differ in coloration. The only material of kashmirica in existence is badly worn and not diagnostic but averages somewhat larger than holdereri. The wing length of males in holdereri, 12 specimens, is 148-158 (151), in kashmirica, five specimens, 151-160 (155); but as shown in 1951 there is a great deal of overlap in individual measurements.

#### **EREMOPHILA**

In Eremophila alpestris the populations breeding in the steppes east of the Volga eastward to Transbaicalia and the Khingan and in northern Mongolia, Gobi, Ala Shan to northern Kansu, Altai, Tarbagatai, and central and eastern Tian Shan vary very slightly geographically and have been divided into five races: brandti Dresser, 1874, Kirghiz Steppes; parvexi Taczanowski, 1876, Daurian Steppes and northern Mongolia; montana Bianchi, 1904, central Tian Shan; hachlowi Meise, 1932, Tarbagatai; and altaica Meise, 1932, Altai.

Specimens of hachlowi and parvexi were not available to me, but the validity of these two forms is considered to be dubious by Dementiev (1934, L'Oiseau, p. 601). Topotypical specimens examined by me of montana and brandti and specimens from the range of altaica show that montana has a somewhat thinner and more attenuated bill than brandti and that altaica averages very slightly darker and browner than brandti and has a somewhat shorter wing than montana (altaica, 106–113; mon-

tana, 106–119). None of the characters are constant, and it seems best to treat this complex of very slightly differentiated and ill-defined forms (including hachlowi and parvexi) under the oldest name, brandti Dresser, 1874.

Eremophila bilopha is usually considered to be conspecific with E. alpestris, but I entirely agree with Stresemann (1926, Ornith. Monatsber., vol. 34, pp. 136-137) that it must be regarded as a separate species. Both forms differ sharply in their ecology and in the plumage of the young. Juvenal bilopha is only very faintly spotted, but in juvenal alpestris the feathers of the upper parts are very boldly spotted with broad buffy edgings. A difference in pattern can be discerned also in the adult plumage. In alpestris the upper parts are streaked and in the male the pinkish tinge reaches usually only to the hind neck and in the female is even more restricted, whereas in both sexes of bilopha the entire upper parts are of one uniform tone (reddish sandy) and not streaked. In adult bilopha the "horns" are much longer than in adult alpestris, and there is a very clear-cut difference in body size, bilopha being much smaller and more slightly built than the races of alpestris with which it comes in contact. bicornis in the Near East and atlas in Morocco. Stresemann (loc. cit.) has separated the population of bilopha from Rio de Oro as elegans on the basis of smaller size; the wing length of four males from Rio de Oro is 93-96 (94+) as against 94-103 (97.7) in 19 males from Syria and Algeria. This difference does not seem sufficient to warrant nomenclatural recognition.

#### **GALERIDA**

In Galerida cristata many races have been separated nomenclaturally on slight differences in coloration, but an examination of the species taken as a whole shows that many of these races are not constant or are too slightly differentiated to warrant recognition (see also Meinertzhagen, 1951). The following forms may be briefly discussed:

Galerida c. tenuirostris C. L. Brehm, 1858, lower Volga; G. c. kleinschmidti Erlanger, 1899, Tangier; and G. c. moltschanowi Gawrilenko, 1926, Crimea, are synonyms of nominate cristata Linnaeus, 1758. Populations from the range of tenuirostris and moltschanowi are not constant in coloration or bill characters. In 1951, I suggested that tenuirostris be synonymized with caucasica, for some specimens from Romania and the lower Volga tend to approach caucasica in being grayer, less brownish, than nominate cristata. Upon reëxamination, however, I agree with Meinertzhagen that tenuirostris is best synonymized with nominate cristata, together with moltschanowi. In the case of kleinschmidti I find

that of nine specimens from Tangier about half are identical with the specimens from central Europe.

Galerida c. neumanni Hilgert, 1907, Rome, and G. c. apuliae von Jordans, 1935, Apulia, are synonyms of G. c. meridionalis C. L. Brehm, 1841, Dalmatia. In this I differ from Meinertzhagen who recognizes neumanni but not meridonalis which he considers to be synonymous with nominate cristata. I find, however, that although the populations of Dalmatia and Italy vary slightly geographically they are separable as a group from nominate cristata in being darker. I also differ in that I consider that the population of Spain (pallida) is sufficiently distinct from nominate cristata to warrant recognition as being slightly but distinctly paler.

I agree with Meinertzhagen that G. c. cypriaca Bianchi, 1907, Cyprus, and ioniae Kollibay, 1912, Priene, south of Smyrna, are not or are probably not separable from caucasica Taczanowski, 1887, Caucasus, but I have not examined specimens from the region of Smyrna, and this population may be found to be similar to that of Anatolia and the Taurus (subtaurica). Contrary to the opinion of White (1934, Ibis, p. 116) I find that a breeding series from Crete is not separable from caucasica. Meinertzhagen treats subtaurica Kollibay, 1912, Taurus, and ankarae Kummerlöwe and Niethammer, 1934, Anatolia, as synonyms of caucasica, but in my opinion these forms are sandy and constitute a valid form (subtaurica) related, not to caucasica, but to the magna group of populations. Specimens from Anatolia were not examined, but this population is described as similar to subtaurica.

Meinertzhagen synonymizes macrorhyncha Tristram, 1859, Laghouat, Algerian Sahara, and riggenbachi Hartert, 1902. Mazagan, western Morocco, with randonii Loche, 1858, northern Algeria, and carthaginis Kleinschmidt and Hilgert, 1905, Tunis, with arenicola Tristram, 1859, eastern Algerian Sahara and southern Tunisia. I cannot follow this drastic treatment which I find to be misleading, for all five races are perfectly valid. Galerida c. macrorhyncha is paler and more sandy and has a shorter wing than randonii; this last form is distinctly paler and larger throughout than riggenbachi. In the case of arenicola and carthaginis I cannot understand Meinertzhagen's statement, "It has been customary to identify all the pale worn specimens as 'arenicola' and the darker freshplumaged birds as 'carthaginis' when they are in reality the same," for I find that a series of 11 topotypes of carthaginis plus other specimens from northern Tunisia are very distinctly darker than a large series of arenicola from southern Tunisia which was collected at the same dates and is in precisely the same state of plumage.

Size variation in *riggenbachi*, *randonii*, and *macrorhyncha* in five males taken at random is:

	Wing	Bill
riggenbachi	104-114 (109)	21-24 (22)
randonii	115–119 (117)	23-25 (24)
macrorhyncha	111–114 (112)	23-26 (24.5)

Galerida c. moeritica Nicoll and Bonhote, 1909, Faiyum; G. c. halfae Nicoll, 1921, Wadi Halfa; and G. c. imami Meinertzhagen, 1923, Yemen highlands, are synonyms of G. c. maculata C. L. Brehm, 1858, Aswan. Examination shows that the populations of these regions of Egypt and of the Yemen are all dark and not separable in topotypical specimens in comparative plumage, though the specimens from Wadi Halfa average somewhat paler. Bates (1938, Ibis, p. 445) maintains that imami is a synonym of tardinata Hartert, 1904, Hadramaut (which I agree with Meinertzhagen is a synonym of altirostris), on the ground that the actual type locality of tardinata (Dthubiyat) is actually in the highlands where a dark form ("imami") is known to occur. However, examination of the type of imami and 11 other specimens and of the type of tardinata and 29 other specimens shows that in comparative plumage imami is much darker than tardinata but that, as stated, imami cannot be separated from maculata and that tardinata cannot be separated from altirostris.

Meinertzhagen treats maculata as a synonym of altirostris, but in my opinion his concept of this last form is far too broad, maculata is a very distinct form, and magna and leautungensis, treated also by Meinertzhagen as synonyms of altirostris, are clearly separable from this form. I do agree, however, that brachyura, caroli, tardinata, nubica, and eritreae are not separable in series from altirostris. Galerida c. magna from southern and eastern Iran, Afghanistan, Transcaspia, and both Turkestans to northern Kansu, Ala Shan, and northern Mongolia is consistently larger than the altirostris complex and though pale and buffy is less sandy, and leauntungensis from Manchuria and northern China to southern Kansu is browner, more "earthy," than magna or altirostris. In magna, large series show that the populations of Russian Turkestan (iwanowi) are cooler gray above, whiter below, and better streaked than topotypical magna (Sinkiang), and the populations of Transcaspia and Iran (vamberyi) are duller and more sandy, but the characters of iwanowi and vambervi though constant are insufficiently well marked to warrant separation from magna. I did not examine alaschanica but follow Meinertzhagen in treating it as a provisional synonym of magna.

The complex of the many names above is very confusing. The names of the races considered to be valid by Meinertzhagen or myself and the combination of their synonyms (in parentheses) are given below. The order followed summarizes the discussion above and does not imply priority or that the synonymy is necessarily complete.

MEINERTZHAGEN: Nominate cristata (meridionalis, tenuirostris, pallida, kleinschmidti, moltschanowi); neumanni (apuliae); caucasica (cypriaca, ioniae, subtaurica, ankarae); randonii (macrorhyncha, riggenbachi); imami; arenicola (carthaginis); altirostris (moeritica, halfae, tardinata, maculata, magna, leautungensis, brachyura, caroli, nubica, eritreae, iwanowi, vamberyi, alaschanica) = seven recognized subspecies.

VAURIE: Nominate cristata (tenuirostris, kleinschmidti, moltschanowi); meridionalis (neumanni, apuliae); pallida; caucasica (cypriaca, ioniae); subtaurica (ankarae); randonii; macrorhyncha; riggenbachi; arenicola; carthaginis; maculata (moeritica, halfae, imami); altirostris (tardinata, brachyura, caroli, nubica, eritreae); magna (iwanowi, vamberyi, alaschanica); leautungensis = 14 recognized subspecies.

In Galerida theklae, a cline, appreciable only in series, runs from Spain to southern Morocco and Rio de Oro, the populations becoming progressively duller as well as increasingly tinged with rufous as they range farther south. Meinertzhagen accepts only the ends of the cline, nominate theklae (type locality, Spain), the range of which he extends to south of the Grand Atlas, and theresae Meinertzhagen (1939, Bull. Brit. Ornith. Club, vol. 59, p. 65. Anti Atlas south of Tiznit). This division is in my opinion quite arbitrary, for the material examined shows that three races can be easily distinguished in series: nominate theklae on the Iberian Peninsula, from which the population of the Balearic Islands (polatzeki) cannot be separated in series, though individual specimens from the islands have a more slender bill, the difference being, however, extremely slight; erlangeri from northern Morocco to the Middle Atlas; and ruficolor Whitaker, 1898, to the south; the southernmost populations (theresae) are only very slightly differentiated from ruficolor and the older ruficolor cannot be replaced by theresae. The populations (harterti) of northern Algeria and northern Tunisia are most variable individually, and about half of the specimens cannot be distinguished from erlangeri, the other half being similar to nominate theklae. On the Hauts Plateaux of Algeria the population is more or less intermediate between the dark or reddish coastal populations and the pale populations (superflua) from the southern foothills of the Atlas.

Some local populations in Algeria and Tunisia show a close correlation between the coloration of the plumage and of the soil, resulting in a patchy distribution or in the presence of several "races" in the same area if there are local variations in the coloration of the soil (see also Ticehurst and Whistler, 1938, Ibis, pp. 729–731).

#### ALAUDA

In Alauda arvensis¹ the populations of Great Britain, Outer Hebrides, and Ireland vary slightly geographically, and several populations have been separated nomenclaturally. A few specimens examined from the Outer Hebrides tend to be somewhat more richly colored than nominate arvensis from Scandinavia, but others are identical. According to Meinertzhagen (1951) the population from the extreme west coast of Ireland, which he has separated as theresae (1947, Bull. Brit. Ornith. Club, vol. 67, p. 93), is more richly colored than nominate arvensis from Scandinavia but, he finds, is similar to some specimens from the Outer Hebrides. Clinal changes can be discerned, but judging from the geographical variation prevailing throughout the range of the species and the characters of the specimens that I have examined from the Outer Hebrides, I do not believe that this population and the other peripheral population from Ireland should be separated nomenclaturally from nominate arvensis.

Breeding specimens from Transcaucasia and northern Iran occasionally measure larger than those in the other populations of *cantarella*, and the name *armenica* Bogdanov, Tiflis, is available. These populations are, however, too variable individually to warrant separation.

It is not clear whether quelpartae Momiyama, 1927, Quelpart Island, is a synonym of kiborti Zaleski, 1917, which appears to be the form breeding in Korea, or of intermedia Swinhoe, 1863, the form breeding in Ussuriland (see Vaurie, 1951) and of which nigrescens, 1929, and pusilla, 1928, are synonyms. I did not examine specimens from Quelpart. Yamashina (1939, Tori, vol. 10, p. 474) recognizes quelpartae as a valid form, with nigrescens and pusilla as synonyms, but since these two names are synonyms of intermedia, quelpartae is synonymous with intermedia. If, on the other hand, the populations of Korea and Quelpart are identical, as stated by Yamashina, quelpartae is a synonym of kiborti.

<sup>&</sup>lt;sup>1</sup> A paper published very recently by Udagawa (1953, Tori, pp. 77, 83-84) which was kindly transmitted to me by Dr. Mayr is of much interest. The specific status of the skylark (*japonica*) which breeds in the Japanese Archipelago north to Hokkaido is in doubt (see Vaurie, 1951). This form seems to be derived from A. gulgula but appears to connect this species to A. arvensis. Alauda gulgula is sympatric with A. arvensis at the western end of its range, but in Japan, japonica appeared to be the geographical representative of A. arvensis. Now Udagawa states that he has found that japonica breeds side by side with lönnbergi, "mixed in the same territory on Yagishiri," a small island with a circumference of about 7 miles off the northwestern coast of Hokkaido. He adds that lönnbergi may breed also in northern Hokkaido. If Udagawa is correct, japonica should now be considered to be conspecific with A. gulgula.

# MOTACILLIDAE

#### **ANTHUS**

Anthus richardi and Anthus campestris

The Siberian forms of this genus have been discussed by Johansen (1952, Jour. Ornith., vol. 92 (1944), pp. 145–157). He describes three new races: A. richardi dauricus, Ukubun, Selenginsk district, western Transbaicalia; A. r. ussuriensis, Possiet Bay, southern Ussuriland; and A. campestris kastschenkoi, Novosibirsk, western Siberia. All three, although they represent terminal populations in clines of coloration and size, are but slightly differentiated. Of these, dauricus is said to be similar in size to richardi from western Siberia but paler, almost as pale as centralasiae from the Tian Shan and western Nan Shan but smaller. The size difference between richardi and centralasiae is not, however, very well marked. Johansen gives the wing length in males of richardi and dauricus as 93–101 and in males of centralasiae from the Tian Shan and Nan Shan as 100–102. I did not examine dauricus which may perhaps be retained provisionally.

Of the other two forms, ussuriensis requires confirmation before it can be accepted, and katschenkoi seems to be too poorly differentiated to warrant recognition. Johansen separated ussuriensis from sinensis of southern China on the basis of larger size, wing length of males 90–95 as against "up to 91" in male sinensis, but adequate comparative breeding material from the southern part of the range is lacking. The only published measurement of a breeding male that I am aware of is of a specimen from Szechwan with a wing of 91 given by Stresemann (1931, Jour. Ornith., vol. 79, p. 131). Winter visitors measured by me from Fukien and Hainan have a wing length in males ranging from 87 to 96, and Meinertzhagen (1921, Ibis, p. 653) gives the wing length in winter specimens of both sexes from south China as 85 to 91. Further study may show that a cline of decreasing size runs from Ussuriland to southern China.

The eastern populations of nominate *campestris* were separated by Johansen as *kastschenkoi* on the basis of being slightly paler and averaging smaller. These differences do not seem of taxonomic importance, and there is a great deal of overlap in measurements. Johansen gives the wing length in males of *kastchenkoi* as 85–92 and quotes the measurements of males given by Witherby from England as 89–98, and by Niethammer from Germany as 88–96. Breeding males measured by me from Europe have a wing ranging from 86 to 96. For additional measurements, see Stresemann (1920, Avifauna Macedonica, p. 70).

#### Anthus trivialis

In Anthus trivialis the populations breeding from Europe to Lake Baikal and the Lena in Siberia have been divided into two races by the Russian authors, nominate trivialis and sibirica replacing each other, respectively, west and east of the Urals. The latter is said to be paler, smaller, and to show a slight difference in the shape of the wing tip. The validity of sibirica is, however, in dispute. Dementiev (1934, L'Oiseau, p. 614) states that the differences in coloration are not constant and that the differences in size or shape of the wing are too slight to warrant separation. A contrary view is taken by Johansen (loc. cit.) who gives the wing length in male nominate trivialis as 88–94 as against 83–90 in male sibirica. My material is limited but supports Dementiev: I can see no significant difference in size or in coloration in specimens in comparative plumage between nominate trivialis from Europe and nine specimens from Siberia from Novosibirsk and Yakutia, the wing length of six males from Yakutia being 86–92.

In Anthus trivialis the status of the populations breeding in Russian Turkestan, western Tian Shan, and Pamirs to northwestern Himalayas requires further study. The populations of Russian Turkestan and western Tian Shan generally show the thickened bill but lack as a rule the heavy streaks of the Himalayan populations (haringtoni Witherby, 1917, Hazara, of which A. hodgsoni burzil Koelz, 1939, Proc. Biol. Soc. Washington, vol. 52, p. 75, Burzil Pass, Kashmir, is a synonym, based, I find, on worn specimens of A. trivialis haringtoni). The populations of Russian Turkestan and western Tian Shan may be found to be similar to those of the Pamirs, which I have not examined, and separable from haringtoni. If so they must be called schlüteri Kleinschmidt, 1920 (Falco, p. 16), Naryn, western Tian Shan, and not microrhynchus Severtzow, 1883, Pamirs, for this name is preoccupied by Anthus arboreus microrhynchos C. L. Brehm, 1856, a synonym of nominate trivialis.

## Anthus pratensis

Meinertzhagen in his remarks on Anthus pratensis (1953, Bull. Brit. Ornith. Club, vol. 73, p. 43) states that the population of northern Scotland described as whistleri by Clancey in 1942 (Bull. Brit. Ornith. Club, vol. 63, p. 6) is not separable in series from nominate pratensis from Scandinavia. He states, "I have examined 18 specimens from North Scotland; most of these cannot be separated from Scandinavian speci-

<sup>&</sup>lt;sup>1</sup>For a similar opinion and the form breeding at the Burzil Pass, see Whistler (1943, Jour. Bombay Nat. Hist. Soc., vol. 43, p. 36) and also Ripley (1948, Jour. Bombay Nat. Hist. Soc., vol. 47, p. 626).

mens though a few are intermediate between Scandinavian and West Irish birds." The latter he separates as theresae on the basis of being more richly colored, redder above, less white below, than nominate pratensis. My own examination confirms Meinertzhagen as to the lack of validity of whistleri, but I cannot judge as to the validity of theresae which I have not examined. The populations of western Ireland are often more saturated, however, and the characters of theresae may be sufficiently well marked to warrant separation.

I cannot agree with Meinertzhagen as to the characters of the eastern populations of A. pratensis or as to his proposed nomenclatural treatment of this species. Meinertzhagen says that a cline of decreasing pigmentation runs from west to east and states, "I suggest that A. p. intermedius Dresser be used for the pale eastern race and that all intermediates from intermediate areas be referred to as A. p. intermedius cl. A. p. theresae." I agree in principle with a further remark, "that intermediate races from intermediate areas should not bear scientific names," but in this case the "intermediate" is nominate pratensis of Linnaeus, a name that cannot very well be suppressed, and the population of Scandinavia is not, I find, truly intermediate, for specimens examined from the eastern part of the range show only a very slight tendency to be paler than specimens from Scandinavia. This tendency is not of taxonomic importance, and intermedius Dresser has always been correctly regarded by all modern authors as a synonym of pratensis Linnaeus.

#### Anthus cervinus

Some Russian authors, such as Portenko, followed by Johansen (loc. cit.) divide the various populations of Anthus cervinus into two races, rufogularis in the west and nominate cervinus in the east, the two races replacing each other at the Taimyr Peninsula. The eastern populations are somewhat duller and grayer above and paler and somewhat less heavily streaked below, but the differences are slight and do not warrant separation. The eastern populations are said to be smaller (see the measurements given by Johansen), but I find that the overlap in the measurements of specimens from the east and west is virtually complete: wing length of adult males, northern Europe, 14 specimens, 82–91 (86.5), northeastern Siberia (mouth of the Lena and Cape Svyatoi), 18 specimens, 80–89 (84.5).

#### Anthus spinoletta

In Anthus spinoletta some Russian authors, such as Portenko, followed by Johansen (loc. cit.) are of the opinion that the populations of north-

eastern Siberia differ from rubescens of North America and should be called härmsi Zarudny, described from migrants taken at Tashkent in Russian Turkestan. I find that I cannot separate in any way specimens from North America from breeding specimens from the Commander Islands and Bulun near the mouth of the Lena. I also have one of Zarudny's specimens from Tashkent, and it is identical with the specimens from North America, Commanders, and northeastern Siberia. Johansen states that härmsi is intermediate between rubescens and the more southern japonicus. It may, as such, be found to be an inconstant form, but on the basis of the material examined I must consider it to be synonymous with rubescens.

In Anthus spinoletta the populations breeding from the Caucasus and northern Iran eastward to Russian Turkestan, Altai, Sayans, Transbaicalia and Mongolia are pale and are usually called blakistoni Swinhoe, 1863, described from a migrant in the lower Yangtze Valley, and the population of the Caucasus is sometimes separated as caucasicus Laubmann, 1915. I have examined only a few breeding specimens from the Caucasus, western Tian Shan, and the Alma Ata region of Russian Turkestan, but these specimens are not separable from a very large series of winter specimens or specimens taken out of the breeding season from Egypt, Near East, Caucasus, many parts of Iran and Afghanistan, Kashmir, Russian Turkestan north to the Tarbagatai, Kansu, Shensi, Szechwan, and Yangtze Valley. There is of course a certain amount of individual variation in the streaking of the breast which may be more or less obsolete and in the coloration of the under parts which is more or less whitish or pale vinous buff. However, until adequate breeding material can be studied it seems wiser to follow the suggestion of Hartert and Steinbacher (1933, Die Vögel der paläarktischen Fauna, p. 139) and recognize but one form, the oldest name of which is coutellii Audouin, 1828, based on migrants from Egypt.

In the petrosus group of A. spinoletta I am unable to recognize more than three slightly differentiated races: kleinschmidti in the Faroes, petrosus in the British Isles and coasts of northwestern France, and littoralis in the Baltic and the White Sea. In the case of the last-named a certain number of specimens cannot be separated from petrosus, and I came to the conclusion that the differences in coloration between the two forms might be due to differences in the state of plumage. This was explained by a study of Mayaud (1952, Alauda, pp. 65–79) who finds that the characters of littoralis are acquired through a complete, or rather complete prenuptial, molt, but "if there is no prenuptial molt, or a partial

molt, the prenuptial plumage persists and the bird has a *petrosus* phenotype." These differences in the molt vary geographically.

Meinertzhagen, in his remarks on A. spinoletta (1953, Bull. Brit. Ornith. Club, vol. 73, p. 43), merges many populations under the name petrosus, including that of the Faroes. I agree that the difference in size between that population and that of Wales (the type locality of petrosus) is not well marked. Salomonsen (1935, Zoology of the Faroes, Aves, p. 136) gives the wing length of males in the Faroes as 93–96 (once 99), and males measured by me from western England range from 89–95 (92), but birds from the Faroes, though very similar to petrosus, can be distinguished by their darker upper parts and by their usually more heavily streaked under parts. I find, however, that the characters of birds from the Outer Hebrides (meinertzhageni Bird, 1936, Bull. Brit. Ornith. Club, vol. 56, p. 55) are not constant and that not this race nor hesperianus Clancey (1942, Bull. Brit. Ornith. Club, vol. 62, p. 58) from western Scotland nor ponens Clancey (1942, ibid., vol. 63, p. 41) from Ushant can be separated from petrosus.

### Anthus sylvanus

The Upland Pipit of the Himalayas (sylvanus Blyth) has been hitherto separated from the other pipits as the monotypic genus Oreocorys Sharpe which is based solely on the more pointed tips of the rectrices. I see, however, no reason why Oreocorys should be retained, for sylvanus is otherwise a typical Anthus in pattern as well as in habits. The bill of sylvanus is thicker and less attenuated than in most pipits but does not differ from that of some races of A. novaeseelandiae.

