06-157

rec'd April 1994
see Sibe MOU
document

About the Presence of the Siberian Crane(Grus leucogeranus Pallas) in the Fauna of the Western Palearctic.

/Summary/

Dimitar N.Nankinov

During its migrations the Siberian Crane used to penetrate and still penetrates into a number of regions of the Western Palearctic: the valleys of the rivers Ural and Volga, the Kama Region, the coasts of the Caspian Sea,the Caucasus,Ukraina,the northern coasts of the Azov Sea and the Black Sea, Asian Turkey and the Balkan Peninsula. It has been observed, above all, in September,March-May,January and July. In autumn the coming from West Siberia birds cross the rivers Ural and Volga. Afterwards some of them fly along the western coast of the Caspian Sea, in the direction of Iran, and others - to the Southwest through the Azov Sea,' the Crimean Peninsula, the Danube and to the inner reservoirs of the Balkan Peninsula. Before reaching the southern coast of the Caspian Sea, a part of the migrants turn to the West and stop along the reservoirs of Asia Minor. In spring probably most of the individuals return through the delta of the river Volga, because the spring migration of the species there is more regular and more numerous than the autumn migration. However some of the young individuals don't continue their way to the Northeast, to the nesting places, but fly to the middle and upper courses of the rivers Dnepr, Volga and Kama. The Balkan Peninsula and Asia Minor are one of the old, most western winterings of the Siberian Crane. If the presently run operation "Siberian Crane" succeeds to regenerate the Western Palearctic winterings of the species, then these winterings will become safer than the Iranian,Afghan and Pakistanian ones,where the Siberian Cranes are being shot, hunted and used as food.

About the Presence of the Siberian Crane(Grus leucogeranus Pallas) in the Fauna of the Western Palearctic.

Dimitar N.NANKINOV
Institute of Zoology,BAS,
Sofia,Bulgaria.

As it is known, the Siberian Crane is one of the rarest bird species in the world, which in the past used to breed near the lower course of the river Ural, in the valley of the river Tobol, in the northern parts of the Sur Daria water basin, in the region of Barnaul and Troitskosavsk, in the basin of the river Viliuia, near Jakutsk,in the Priamurie and in some other places of the tundra between the rivers Jana and Kolima(Buturlin,1935). In the recent decades an intensive research has been being carried out for the purpose of clarifying the breeding places of the Siberian Crane, for breeding it in captivity, and for its conservation. There is a great difference in defining the numbers of the Siberian Crane in the world. According to Flint(1987), at present the world population of the species amounts to 250-350 birds, which inhabit two places: the northern Jakutia and the valley of the river Ob. The birds breeding in the Jano-Indigirian tundra migrate through the Zabaikalie and winter in the middle course of the river Jantzi(China). The research, carried out by George Archibald, shows that in 1983/84 there wintered 840, and during the following winter - 1350 Siberian Cranes, among which 119 young birds(Vinokurov,1987). Van Li and other Chinese ornithologists report that from 1981 to 1987 the number of the wintering Siberian Cranes on the lake Poianhu in China grew from 140 to 1609 specimens. Individuals from

the Ob population (about 50 birds) fly through the Turgaian valley, Middle Asia and the delta of the river Volga, and winter in two separate groups in India and in Narthern Iran(Flint,Kischinskii,1975; Archibald,1981; Flint,1983,1987).

Still little is known about the migrations and the winterings of the Siberian Crane, but in fact the species suffers the greatest losses exactly during these periods of its yearly life cycle. There is a number of little known reports, spead about different literary sources, which show that during the time of migration and wintering the Siberian Crane has penetrated and continues to penetrate much further West and has been observed in some regions of Western Palearctic. But there are also reports (Harrap,1987) which deny the appearance of the Siberian Crane, for e.g. on the territory of Turkey. On the other hand, judging by the old literary sources ("The Life of Animals" by Brem, St.-Petersburg,1896,2:590), the Siberian Crane "has been several times killed in Europe as well".

The Western Palearctic presence of the Siberian Crane refers to the following regions (fig.1):

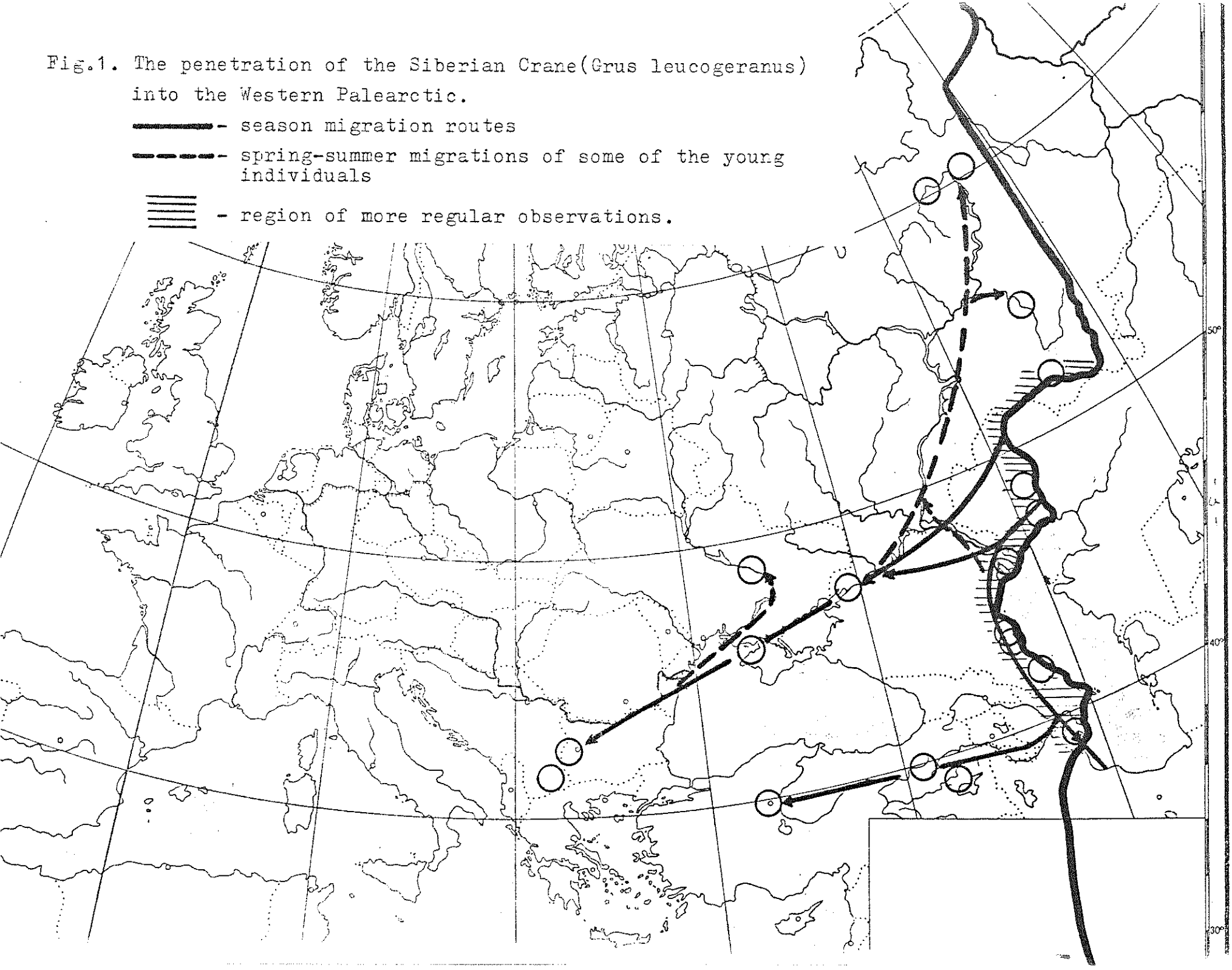
1. The valley of the river Ural and the delta of the river Volga. At the end of the last century the Siberian Crane used to appear around Oranenburg, in the steppes along the lower courses of the rivers Volga and Ural, very rarely single and in small flocks,reaching to 6 birds(from 22 July to 14 September and at the end of March) and even used to nest in the lower course of the river Ural (Zarudny,1888; Suschkin,1908). In 1931 Siberian Cranes were observed near the southern slopes of the mountain Ural(Kirikov,1952) and on 30.IX.1974 in the valley of the river Ural(65 km to the North from the town of Guriev) 5 birds flew westwards(Kovschar,1982). Pallas and Gmelin reported about that species in the delta of the river

Fig.1. The penetration of the Siberian Crane(Grus leucogeranus) into the Western Palearctic.

——— - season migration routes

– – – – - spring-summer migrations of some of the young individuals

≡≡≡ - region of more regular observations.



Volga in 1773 and in 1774 respectively(Buturlin,1935). In the XVIII and the XIX centuries the flocks of migrating Siberian Cranes in the delta of the river Volga reached to 300 specimens. The people near Astrahan hunted those birds, from Astrahan the Siberian Cranes were carried to the king's palace in as early as 1737(Lugovoi,1963; Kirikov,1966). The delta of the river Volga - this is only place in the Western Palearctic where at present the Siberian Crane is observed comparatively often during spring and autumn migrations(Rusanov, Tschernjavskaja,1976).

2. On the territory of Kama Region the Siberian Crane is observed seldom during the summer: on the river Kama below 58° 30' northern latitude; near Cherdin and in the suburbs of the town Ufa(Suschkin, 1897; Sudilovskaja,1951) and in July 1939 on the island Seredish, near the Zhiguli Reserve(Popov,1977).

3. The western coast of the Caspian Sea and the Caucasus. As Portenko(1958) writes, sometimes the Siberian Crane flies as well over the Caucasus. The migrating flocks appear during the second half of February near the town Lencoran, they have been observed near Derbent and the Astrahan Peninsula(Sudilovskaja,1951).

4. Ukraina and the northern coasts of the Azov Sea and the Black Sea. In the last century in Ukraina the Siberian Crane was observed regularly during the spring migration in the suburs of the town Dnepropetrovsk. A flock of 3 birds was observed there also on 11.IX.1906. The Siberian Crane used to be shot also near the town Rostov-on-Don(Valch,1911; Kistjakovskii,1957). In November 1974 4 Siberian Cranes flew among a flock of Cranes above the Lebjazhie Islands(Kostin,1974).

5. In Asian Turkey Siberian Cranes were observed in three places on the planes of Erzerum and in the marshes near the river Kurasu. In September 1854 H.Sandwith(1856) observed 2 flocks of Siberian Cranes composed of, according to him, 4-5 and 20 specimens, and he shot a bird. 25 years later, in April 1879, in the fringes of the town Ankara C.Danfort(1880) noticed a big flock and another flock of about 100 birds, flying near a large river. Supposedly a hybrid between a Siberian Crane and a Crane, was observed among a group of 50 Cranes on 21 May 1985, to the North from the lake Van(region Bulanik, near the village Murat)(Davidson,1985).

6. The Balkan Peninsula. On 9 January 1846 in Eastern Macedonia H.Drummond(1846) observed a big flock of those very rare birds. At the end of the last century in the Bulgarian magazine "Lovez"(1899, 9,page 5) was published an announcement which read that from 18 to 25.IX.1899 during the mass autumn migration of Cranes over the town Slivnitsa(to the west from the city of Sofia), a Siberian Crane had been observed in one of the flocks(Nankinov,1982). At that time it was supposed to have been an albino of the Crane. However, the albinism among the Cranes is almost unknown but the migration of Siberian Cranes among the flocks of Cranes is a vastly distributed phenomenon and is a characteristic feature from the biology of the Siberian Crane(Flint,1987;Kalinin,1988).

So, on the territory of the Western Palearctic the Siberian Crane has been observed mostly in September, March-May, January and July. Observations of that bird have occurred probably during the other months of the year as will, because it starts nesting at the age of 6-7 years, but the young individuals remain far from the nesting places during the summer.

On the basis of the observations of the Siberian Crane made so

far we can present the directions of its migration on the territory of the Western Palearctic. In autumn the coming from West Siberia birds cross in the West the river Ural and the northern coast of the Caspian Sea. Afterwards some of them fly over the Caspian Sea and along its western coast, in the direction of Iran (Flint,1987), and others - to the Southwest to the Azov Sea, the Crimean Peninsula, the Danube and the inner regions of the Balkan Peninsula. A part of the migrating birds, before reaching the southern coast of the Caspian Sea, turn to the West and land on the reservoirs of Asian Turkey. In spring most of the Siberian Cranes,already having wintered in the Western Palearctic, probably fly back through the delta of the river Volga, because the spring migration of the species there is more regular and more numerous than the autumn migration. However, some of the young specimens don't continue their way to the Northeast to the places of nesting, but fly upstream the river Volga and spend the summer near the river Kama and its tributaries. The non-breeding birds, having wintered on the Balkan Peninsula, migrate in spring to the upper course of the river Dnepr and they have been observed several times in the region of the town Dnepropetrovsk.

The Siberian Crane migrates independently or in combined flocks with the Crane. It is known that upon vast territories the migration routes of the Siberian Crane and the Crane coincide.

The inner regions of the Balkan Peninsula and Asia Minor are one of the old and most western winterings of the Siberian Crane. If with the help of the present operation "Siberian Crane" the return of the Siberian Crane again to the Western Palearctic winterings becomes a fact, then it will be a great success in the conservation of the species. We suppose that now those winterings will be safer than the Iranian, Afghan and Pakistanian ones, where the Sibe-

rian Cranes are being shot, hunted and eaten. In spring on the markets in Kabul Siberian Cranes are being sold(Hüe,Etchecopar,1970).

The main reasons for the disappearing of the Siberian Crane from the Western Palearctic winterings (together with the global negative factors, influencing the species as a whole) are the degradation of the habitats (destroyed or poisoned with chemicals shallow reservoirs, about half a metre deep, rich in roots and fresh stems of water plants),the rapid urbanization of the landscape,'the increasing factor of trouble upon the birds. In the past the Siberian Cranes in Turkey were well-known and the people recognized them by their voices. The birds were very careful and easily scared and they didn't let anyone come near them(Kasparek,1987). On the territory of the Balkan Peninsula cranes are not hunted. There is no custom to hunt cranes by means of birds-decoys. Cranes are not kept in captivity in order to be sold or used as food afterwards.

The processes of a calamitous decrease of the species during the last one hundred years and above all the gradual extinction of the West Siberian population are the main reason for the absence of the Siberian Crane in some countries of the Western Palearctic where it used to be observed in the past. It is true that separate individuals and small flocks once in a large period of time appear on the previous route of the species (for e.g. the latest observations on the Crimean Peninsula in 1974 and in Turkey in 1985), causing sensation, arguments and conflicting judgements among the researchers. In fact the Siberian Crane was present, is present (very seldom),and,we hope, will be present in the fauna of the Western Palearctic. The suggestion of Max Kasparek(1987), to include the Siberian Crane in the list of the birds in the past inhabiting Turkey, is correct. That species should be included also in the lists of the avifauna of Bulgaria and Yugoslavia. The present activities of breeding Siberian Cranes in

captivity(Flint,1979), putting eggs of a Siberian Crane to be hatched in the nests of the Cranes, breeding on the European territory of Russia, will lead to the following: the Siberian Cranes, following the migration route of their step-parents-the Cranes- will start to appear regularly (during migrations and wintering) in some of the Western Palearctic countries. It is necessary in these countries to create conditions for the inhabiting of the Siberian Cranes, it is necessary to organize observations of the appearance, the places of stopping and wintering of the birds. This will be the most certain way to the return of the Siberian Cranes to the regions, where they used to migrate and spend the winter in the past.

References

Archibald G.1981.Last call for the Siberian crane."Natur.Hist."90, 3:58-60.

Buturlin S.1935.Polnij opredelitel ptiz SSSR.2:280,M. KIOS.

Danford C.1880.A Further contribution to the Ornithology of Asia Minor."Ibis" 4,4:81-99.

Davidson N.1985.A possible Hybrid Common crane X Siberian white crane in Turkey."Bul.Orn.Soc.Middle East",15:1-3.

Drumond H.1846.List of the Birds observed to winter in Macedonia. "Ann.Mag.Nat.Hist."18:10-15.

Flint E.1979.Operatia "sterch"."Ochota i ochoth.h-wo",II:16-19.

Flint E.1983.Sterch. In "Krasnaja kniga RSFSR.Shiwotnie",M. Rosselhosisdat:237-238.

Flint E.1987.Semejstwo shurawlinie."Ptizi SSSR.Kuroobrasnie,Shurawleobrasnie":266-334.

Flint E.,Kistchinskii,1975.Sterch(Grus leucogeranus Pallas,1773) w Jakutii."Sool.sh." 54:1197-1212.

Harrap S.1987.Comments on historical records of the Siberian white crane in Turkey."Bull.Orn.Soc.Middle East",19:18-19.

Hüe F.,R.Etchecopar,1970.Les Oiseaux du Proche et du Moyen Orient, 1-951.Paris.

Kalinin S.1988.O sterche w Kurganskoi oblasti."Shurawli Palearktiki", Wladivostok:166-167.

Kasparek M.1987.Historical records of the Siberian white crane in Turkey."The Orn.Soc.of the Middle East",18:4-6.

Kirikov S.1952.Ptizi i mlekopitajuschtie w uslowijach landschaftow jushnoi okonetschnosti Urala. M.:1-412.

Kirikov S.1966.Promislowie shivotnie,prirodnaja sreda i tschelowek. "Nauka",Moskwa.

Kistjakovskii A.1957.Fauna Ukraini.Tom 4,Ptizi,ANUSSR,Kiew:1-432.

Kostin J.1983.Ptizi Krima.M:1-241.

Kovschar A.1982.O vstreschach sterchow w Kasachstane."Shurawli w SSSR",2:24-27.

Lugovoi A.1963.Ptizi delti reki Wolgi."Trudi Astrachan.Sapowednika", Astrachan,8:9-185.

Nankinov D.1982.Ptizite na grad Sofia."Orn.inf.Bull."12:1-386.

Popov W.1977.Ptizi Wolshsko-kamskogo kraja.Neworobinie.M."Nauka"1-296.

Portenko L.1958.Ptizi Kawkaza."Shiwotnii mir SSSR",5:220-260.

Rusanov G.,S.Tschernjavskaja,1976.Sterch w delti Volgi."Redkie,ists-chesajuschie i maloisutschenie ptizi SSSR","Trudi Okskogo gos.zapovednika",13:101-107.

Sandwith H.1856.Geschichte der Belagerung von Kars und des sechsmonatigen Widerstandes der türkischen Garnison unter General Williams gegen die russische Armee.Braunschweig:1-336.

Sudilowsraja A.1951.Otrjad shurawli."Ptizi Sowetskogo sojusa"2:97-138.

Suschkin P.1897.Ptizi Ufimskoi gubernii."Materiali k posn.fauni i flori Ros.imperii. Otd.zoologii",M.8:1-803.

Valch B.1911.Materiali dlja ornitologii Ekaterinoslawskoi gubernii. Peretschen ptiz,naidenich w gubernii s 1892 goda po 1910 g. "Ornitol.westnik",3-4:240-271.

Vinokurov A.1987.Redkie ptizi mira.M.Agropromizdat:1-205.

Zarudny N.1888.Ornitologitscheskaja fauna Orenburgskogo kraja."Sap. AN",57,1:1-338.