Summer movements of waders in the Samur river delta: preliminary data and review of the problem for the Caspian Sea region

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The existence of summer movements is well-known for many wader species, although the scale of this phenomenon is still unclear both for some species as well as some large areas. During studies carried out from late May to June 1990 and late May to early July 1991 in the Samur river delta, Daghestan (41°6'N, 48°32'E), 18 species of waders were recorded, 15 of which took part in early southward migration, including six species breeding in Daghestan. Maximum numbers for the majority of species were counted between mid-June and the beginning of July. The most numerous species were Redshank *Tringa totanus*, Black-winged Stilt *Himantopus himantopus*, Wood Sandpiper *Tringa glareola*, Curlew *Numenius arquata*, Greenshank *Tringa nebularia*, Green Sandpiper *Tringa ochropus*, and Common Sandpiper *Actitis hypoleucos*. Flocks of Marsh Sandpiper *Tringa stagnatilis*, Black-tailed Godwit *Limosa limosa* and Whimbrel *Numenius phaeopus* were also observed. Birds were observed either flying along the coast in a south-easterly direction or staying at the coast and on drained fish ponds in the mouth of the Samur river. Analysis of a variety of published data revealed the existence of such early summer southerly movements over large areas of the Caspian region. The dates and numbers for individual species are discussed, as well as the rôle of the Caspian region as a summer reservoir for non-breeding and early breeding waders.

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Факт летних перемещений широко известен для многих видов куликов, хотя масштаб феномена еще неясен как для отдельных видов, так и для некоторых больших районов. Во время исследований, проведенных с конца мая по июнь 1990 года и с конца мая по начало июля 1991 года в дельте реки Самур, Дагестан (41° 6'с.ш., 48° 32'в.д.), было зарегистрировано 18 видов куликов, из которых 15 приняли участие в раннем отлете на юг, в том числе шесть гнездящихся в Дагестане видов. Для большинства видов была отмечена максимальная численность в период с середины июня по начало июля. Самыми многочисленными видами были травник *Tringa totanus*, ходулочник *Himantopus himantopus*, фифи *Tringa glareola*, большой кроншнеп *Numenius arquata*, большой улит *Tringa nebularia*, черныш *Tringa ochropus*, и перевозчик *Actitis hypoleucos*. Наблюдались также стаи поручейника *Tringa stagnatilis*, большого веретенника *Limosa limosa* и среднего кроншнепа *Numenius phaeopus*. Птицы, за которыми проводились наблюдения, или летели вдоль побережья в юго-восточном направлении, или останавливались на побережье и на осушенных рыбных прудах в устье реки Самур. Анализом разнообразных опубликованных данных было показано существование таких кочевок к югу в ранелетний период в обширных районах Прикаспии. Приведено обсуждение дат встреч и численности отдельных видов, а также роли Прикаспии как летнего резрвуара для негнездящихся и рано гнездящихся куликов.

Introduction

Summer movements of waders that have lost their clutches or broods, or have not bred at all are known for the majority of wader species. However, at least within the boundaries of the former USSR, there have been no attempts to evaluate the scale of the phenomenon over large geographical areas. Information on the numbers and distribution of waders during early summer movements is scattered in numerous publications. The majority of these state that summer migration in many regions starts in July and is at its most intense in late July, August and early September (Gladkov 1951; Kozlova 1961, 1962; Ilyichev *et al.* (ed.) 1985). During our studies at the Samur river delta (southern Daghestan) we found that noticeable southward movements of waders started in the middle of June. During the last ten-day period of June these movements were similar to those observed during intense autumn migration. This

was the main reason we became interested in the problem.

The Samur river delta is not known as an area favoured by waders, and no large wader concentrations occur there during migration. We therefore tried to analyse all the available data on the occurence of non-breeding waders during the early summer period (June and the first half of July) in the whole Caspian Sea region. Because wader studies were not the main task of our studies at the Caspian Sea and information on early summer movements of waders in this region is so scarce, this can only be considered as a preliminary review.

Study area and Methods

Observations were carried out by a group of ornithologists from the Zoology Department and Biological Laboratory of the Moscow Pedagogical State University in 1980-1991 at the Samur river delta (41°46'N, 48°32'E, Figure 1). During every expedition the same area of about 120 km² was explored. Observations in June-July were made only in 1990-1991.

The area of the Samur river delta is overgrown with broad-leaved forests and creeping plants, remnants of dry subtropical forests. The forests are separated from the sea by a narrow band of dry steppe habitat, coastal dunes and arable land. Migrating waders usually stop here on the narrow line of sandy beaches, coastal bars with sandflats and mudflats, temporary shallow waters and in the river mouths, as well as on the muddy bottoms of drained fish ponds. Migration concentrates along the shoreline, passing over coastal steppe habitats and the sea.

Counts of migrating birds (including waders) were made from sunrise until mid-afternoon (on some days until dusk), from a constant observation point. Waders were also censused on transects and temporary routes along the coastline as well as in other areas with large concentrations of birds (mudflats, bars *etc.*).

In order to evaluate the early summer movements of waders in the whole Caspian Sea region, all available published material was analysed. For Kazakhstan, data were used from Dolgushin (1962) and from Cheltsov-Bebutov (1950), for the Naurzum Lakes. For the Mangyshlak Peninsula and the surrounding area we used Zaletayev (1968). Data for the northern Stavropol region were obtained from Khokhlov & Kulikov (1991), for other parts of the area to the north of the Caucasus, we used information from Kazakov *et al.* (1981, 1982a, 1982b, 1983) and for Checheno-Ingushetia we used data from Gizatulin & Tochiev (1989). Information on waders which occur in summer in Kalmykia was

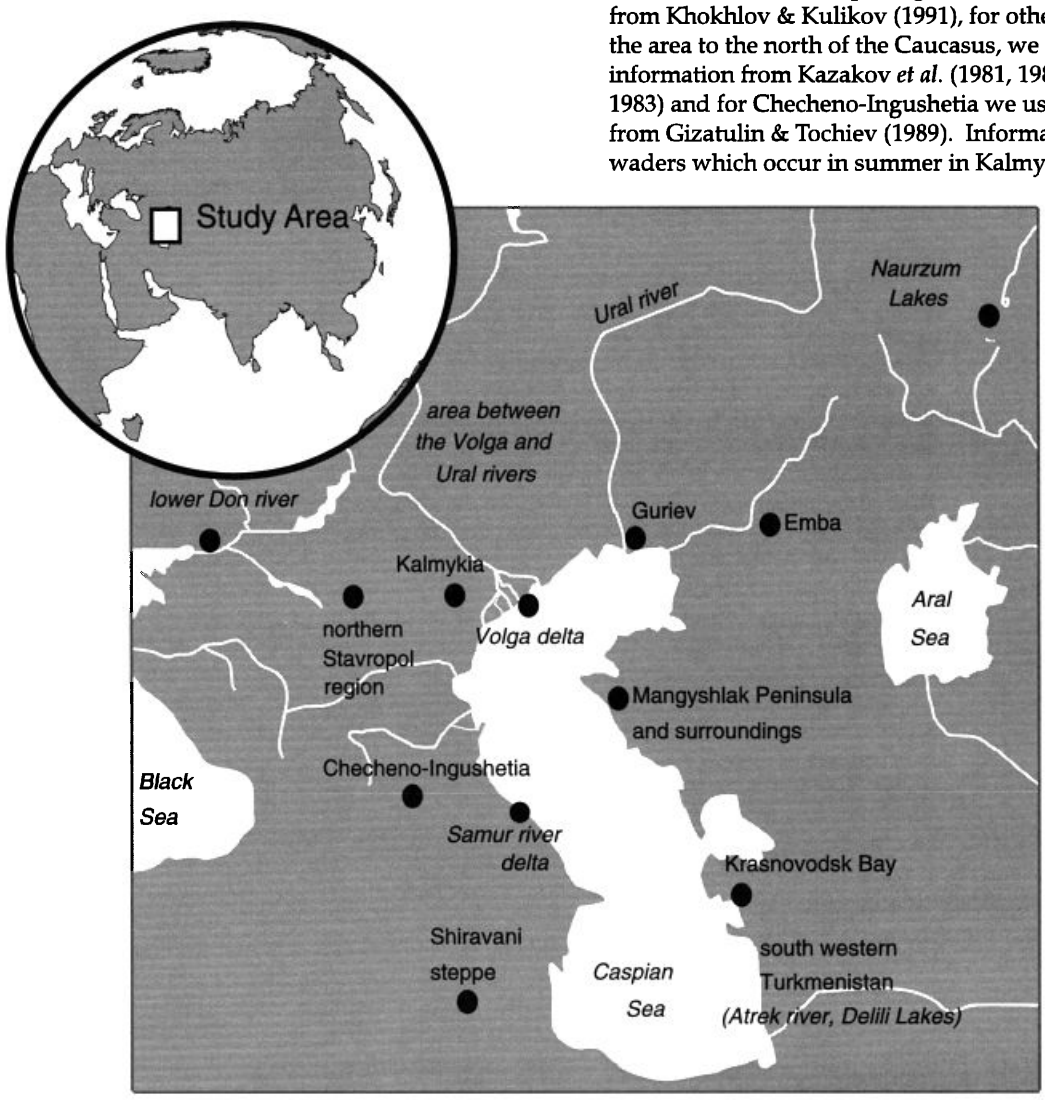

Figure 1. Location of the authors' study area and parts of the Caspian Sea region and the surroundings mentioned in the text.

obtained from Demianova & Kukish (1990); at the Volga delta, from Krivonosov (1973) and Rusanov *et al.* (1973); in western and south-western Turkmenistan from Vengerov (1973) and Karavayev & Belousov (1978, 1980). Comparative data for the lower Don river were found in Belik (1990). In all other cases sources of information are mentioned specifically.

Boundaries of breeding ranges (Figures 2-5) are taken from monographs by Gladkov (1951), Kozlova (1961, 1962), Cramp & Simmons (1983) and Stepanyan (1990). Although some parts of these boundaries are still doubtful, we considered that this problem deserves separate publication and is not discussed further in the present paper.

Results and discussion

Early summer southward migration of waders at the Samur river delta, 1990-1991

A total of 43 wader species were recorded during observations in various seasons between 1980-1991 at the Samur river delta, Southern Daghestan. The list of waders is the same as that presented by Shubin (this volume), apart from Red-wattled Plover *Lobivanellus indicus*. In early summer (1 June - 5 July) we recorded 18 wader species at the Samur river delta, including those for which regular or occasional breeding was confirmed in the study area (Lapwing *Vanellus vanellus* and Common Sandpiper *Actitis hypoleucos*) or in other regions of Daghestan (species underlined in Table 1, and Collared Pratincole *Glareola pratincola* which was not observed during early summer migration). Early southward migration was observed in a total of 15 out of the 18 species recorded.

Spring migration northwards in the study area finished by 25 May to 5 June, when only single passage waders or small flocks were recorded. At the end of the first and the beginning of the second ten-day periods of June, we observed mostly local breeding birds, or the few non-breeding individuals (Black-winged Stilts *Himantopus himantopus*, Little Ringed Plovers *Charadrius dubius*, Redshanks *Tringa totanus*, Green Sandpipers *Tringa ochropus* and Collared Pratincoles), that were over-summering in the study area. After 10-12-days break, both in 1990 and 1991, the numbers of recorded waders began to increase again; the birds were seen flying either in a southerly or south-easterly direction, or roosting and feeding on the shore. Redshank, Black-winged Stilt, Wood Sandpiper *Tringa glareola* and Green Sandpiper were among the earliest species to start these southward movements; these four species were also the most numerous during the study (see Table 1 for the results of regular counts).

By 20-25 June these southward movements had all the characteristics of normal migration, in other words the passage took place mainly in the early morning hours and, from the calls heard, also at night. Migration had usually finished for the day by 10 to 12 a.m. Passage flocks of Redshank and Wood Sandpiper reached 50 to 70 birds, those of Marsh Sandpiper *Tringa stagnatilis* reached 40 to 45 birds, those of Black-tailed Godwit *Limosa limosa* and Greenshank *T. nebularia* reached up to 40 birds and those of Whimbrel *Numenius phaeopus* and Curlew *Numenius arquata* up to 15-25. At the same time, the number of waders on coastal sandbars, mudflats of drained fish ponds *etc.* were also increasing. On the *c.*1km^2 of empty fish ponds within the study area, we recorded 100-200 waders during every count, most of which were Redshanks.

Review of early summer southwards migrations for the Caspian Sea region

A total of 40 wader species occur on the Caspian coast in early summer, including 12 breeding and 28 non-breeding species which spend part of the

Table 1. Species composition and total number of waders recorded during early summer southward migration in the Samur river delta (5 June - 5 July 1991).

Species		Total number	%	Earliest record
Redshank	***Tringa totanus***	530	26.3	10 June
Black-winged Stilt	***Himantopus himantopus***	262	13.0	13 June
Green Sandpiper	*Tringa ochropus*	193	9.6	14 June
Wood Sandpiper	*Tringa glareola*	200	9.9	16 June
Curlew	*Numenius arquata*	131	6.5	16 June
Ruff	*Phylomachus pugnax*	11	0.6	16 June
Common Sandpiper	***Actitis hypoleucos***	165	8.2	17 June
Ringed Plover	*Charadrius hiaticula*	1	0.1	22 June
Lapwing	***Vanellus vanellus***	72	3.6	23 June
Black-tailed Godwit	*Limosa limosa*	68	3.4	23 June
Little Ringed Plover	***Charadrius dubius***	30	1.5	23 June
Greenshank	*Tringa nebularia*	153	7.6	24 June
Marsh Sandpiper	*Tringa stagnatilis*	86	4.3	24 June
Spotted Redshank	*Tringa erythropus*	61	3.1	24 June
Whimbrel	*Numenius phaeopus*	43	2.2	25 June
TOTAL:	15 species	2,006		

Species that are indicated in bold are those occurring within their breeding range

summer there or are observed on early summer southward migration. During the first half of the summer, the list of wader species includes between 18 to 32 species in different parts of the Caspian region (Table 2). However, most of the species which occur in summer in the Caspian Sea region do not breed there. Moreover, Table 3 shows that most of these species are summering a long way south of their breeding ranges.

Abundant species

Below we mainly discuss the species which are either most numerous or because their occurrence is of some interest. The group of waders which are abundant during post-breeding movements in early summer includes 12 species, six of which are within their breeding ranges, the remainder staying more or less to the south of their breeding grounds.

Lapwing *Vanellus vanellus*

Lapwing is a common breeder in northern parts of the Caspian region (Figure 2). Dolgushin (1962) observed fledglings on the northern-Kazakhstan part of the Caspian coast from late June onwards, at the same time as birds were gathering into flocks and starting post-breeding movements. In the northern Stavropol region Lapwings are common and sometimes numerous, occurring locally in densities of more than 100 birds km^2 with up to 4,000 birds counted per 100 km route (Khokhlov & Kulikov 1991) . Summer movements start between 20 - 30 June, some birds departing in early July. Thus, from our observations in the Samur delta, we believe that some of the Lapwings which concentrate in the northern areas of the Caspian sea region during early summer may migrate south even in mid-June. Similar early summer movements were described for this species at the lower Don river (Belik 1990).

Black-winged Stilt *Himantopus himantopus*

Although this bird is included in various regional Red Data Books, during our study it appeared to be one of the commonest breeding waders of this area (Figure 2). However, this apparent relative abundance may be due to our special interest in the area and thus better knowledge of its distribution and numbers.

Our observations of birds on southward migration seem to be the earliest ones during the summer. Non-breeding birds were common in the north of the Stavropol region (at least 250-300 birds were counted) between 20-30 June. However, some of the birds observed there could be ones which have started their post-breeding movements, as it is known that Black-winged Stilts breeding to the north of the Caspian region (the Manych Lake) can start such movements immediately after the young fledge from early July onwards.

Green Sandpiper *Tringa ochropus*

Sporadic breeding of this species was believed to occur only in the middle reaches of the Ural river and its tributaries, as well as locally in some other areas of central Kazakhstan (Dolgushin 1962). Despite the fact that the southern boundary of its main breeding range lies far to the north of the Caspian region (Figure 3), in early summer this species can be found almost everywhere on the Caspian coast and in the surrounding area and even in the Caucasus mountains up to 3,500 m above sea level. We recorded Green Sandpipers at similar altitudes in one of the small river valleys on the upper reaches of the Samur river (the Great Caucasus range) on 5-6 July 1991.

The earliest southward movements (Figure 3) and arrival of birds from northern areas was recorded in mid-June in the Samur river delta (Table 1), between 20 - 30 June in the northern Stavropol region (Khokhlov & Kulikov 1991), from 20 June onwards in Kazakhstan at the Naurzum Lakes (Cheltsov-Bebutov 1950; Dolgushin 1962), and from 19 June onwards on the lower Don river to the west of the Caspian Sea (Belik 1990).

Although the species is considered common by the majority of observers, no attempts have yet been made to evaluate the exact numbers of birds which spend the summer in those parts of the Caspian region.

Wood Sandpiper *Tringa glareola*

Like Green Sandpiper, this species remains in the Caspian region in the summer, *i.e.* far to the south of its main breeding range (Figure 3). The published information on its relative abundance in various parts of the Caspian Sea and surrounding area suggest that the species is less numerous than Green Sandpiper, although it is also widely distributed over the whole area.

Southerly movements of birds are observed within this area at least from late June onwards, sometimes starting even earlier (Figure 3). Thus, it starts migration southwards on about 25 June in Kazakhstan, on 27 June in the northern Stavropol region, as early as 23 June (on average 6 July) on the lower Don river and from 19 June onwards on the Naurzum Lakes (Cheltsov-Bebutov 1950).

Redshank *Tringa totanus*

This wader has a wide breeding distribution within the Caspian region (Figure 4). Although its numbers differ locally, it is one of the commonest breeding wader species, at least in the northern parts of the Caspian region. Breeding is thought to have occurred as far south as the Shirvani steppe (Patrikeev 1991).

On summer migration the Lower Don river (Figure 4) was the only place where Redshanks were observed as early as at the Samur delta (11 June onwards). In the north of the Caspian region such movements were recorded only from late June - early July and evidently went unnoticed by most workers because they were concentrating on breeding birds.

Table 2. The number of wader species breeding or summering in different areas of the Caspian Sea region.

Area	Number of species			Source of data in addition to monographs by Kozlova 1961, 1962; Gladkov 1951; Stepanyan 1990
	Breeding	Oversummering and early migrating	Total	
Azerbaijan	8	11	19	Patrikeev 1991
Lowlands of Daghestan	7	16	23	our data; Pishvanov pers. comm.
Kalmykia	5-6	16	21-22	Demianova & Kukish 1990
Eastern and northern Stavropol region	9	16	25	Kazakov *et al.* 1981, 1982, 1983; Khokhlov & Kulikov 1991
Checheno-Ingushetia	6	12-13	18-19	Gizatulin & Tochiev 1989
Volga delta	7	14	21	Krivonosov 1973; Krivonosov *et al.* 1973 Rusanov *et al.* 1973
Area between the Volga and the Ural rivers (within Kazakhstan)	17	15	32	Dolgishin 1962; Poslavsky 1980; Rusanov & Krivonosov 1990
Area between the Ural and the Emba rivers (lower part)	10	17	27	Dolgushin 1962
Mangyshlak and Buzachi Peninsulas and the Ustiurt Plateau	6-7	18	24-25	Dolgushin 1962; Zaletaev 1968
Krasnovodsk Bay surroundings	5-6	12	17-18	Vengerov 1973;and the Karavayev & Belousov 1978, 1980
South-western Turkmenistan	7	13	20	Vengerov, 1973; Karavayev & Belousov 1978, 1980

Redshanks are obviously the earliest migrants throughout the vast area from northern, central and middle Europe (Gromadzki 1985) to Eastern Europe (Zhmud & Chernichko 1988; Belik 1990; our data) and Kazakhstan (Gavrilov *et al.* 1990).

Common Sandpiper *Actitis hypoleucos*

The Caspian Sea region is situated within the breeding range of this wader, although in the majority of explored areas it is a rather rare breeder. Non-breeding birds can be found in small numbers almost everywhere.

The dates of southward migration recorded in the Samur delta are the earliest known for the Caspian Sea region and nearby areas. In other parts of the Caspian Sea southward migration has never been observed before 20 - 30 June.

Curlew *Numenius arquata*

Curlew breed close to the northern Caspian coasts (Figure 4) and young fledge from the end of June (Dolgushin 1962). Post-breeding movements start almost immediately, at which time Curlews can gather into flocks of 50 to 300 birds.

Single and small flocks of non-breeding birds are regularly observed at the Mangyshlak Peninsula and to the east (Dolgushin 1962) in south-western Turkmenistan (Vengerov 1973). Early southward migration was noticed in several places (Figure 4): from 9-10 June single birds were observed in Kalmykia and from 8-10 June at the lower Don river. Large non-breeding concentrations of these waders are known for the northern Stavropol region: according to Khokhlov & Kulikov (1991) up to 1,300 birds could be counted on a 60 km route and more than 1,000 on 40 km route. Several large flocks of Curlew were observed in late June at the Mangyshlak Peninsula and the Ustiurt Plateau (Zaletaev 1968). Moulting flocks of these birds were observed on the northern Caspian coasts from the middle of June (Poslavsky 1980).

Judging by the dates of these observations, we can conclude that the majority of all the Curlews recorded in the middle of June in the Caspian region and surrounding area are non-breeders or failed breeders. In all probability they form the first migration flow, which was noticed during our study on the Western Caspian coast as early as the middle of June. It is noteworthy that southward migration of Curlew, as well as of Whimbrel, was recorded from about 10 June in much more northerly areas, for example in the area surrounding Ladoga Lake, Leningrad region (Noskov *et al.* 1981).

Ruff *Philomachus pugnax*

Although this wader breeds a long way to the north of the Caspian Sea region (Figure 5), it can be numerous in summer, particularly in the northern

parts of the Caspian Sea. It is known that Ruffs (mostly males and a few non-breeding females) can concentrate in large numbers for moulting (as with ducks) in the north-eastern and north-western parts of the Caspian region (Figure 5). Large concentrations of these birds were recorded in June at the Manych Lakes (Krivenko & Krivonosov 1973), at the Volga delta (Rusanov *et al.* 1973) and at the wetlands of the northern and north-eastern Caspian Sea (Poslavsky 1980; Rusanov & Krivonosov 1990).

The earliest flocks containing males which have bred are observed in Kazakhstan from 20 June onwards, in Kalmykia from the first ten-day period of June onwards and at the lower Don river from 11 June onwards. The number of Ruffs on southward migration was rather low at the Samur delta, and therefore we believe that they generally remain in the northern parts of the Caspian region with only a small proportion starting movements southward in early summer.

Black-tailed Godwit *Limosa limosa*

Like Curlew, the earliest pairs finish breeding in the southernmost parts of the range (Figure 5), such as the steppe area between the Volga and the Ural rivers, at least in late June (Dolgushin 1962). In June Black-tailed Godwits were recorded on summer movements in south-western Turkmenistan at Lake Delili and the lower Atrek river (Vengerov 1973), between 1 - 10 June on the northern Caspian coasts (Poslavsky 1980), from 23 June onwards at the Samur delta and at the end of June in the northern parts of Stavropol region (Figure 5). Although the birds are rather common and widely distributed in the Caspian region, they are not as numerous there as they are in areas to the west (at the same latitude): for example, mostly non-breeding Black-tailed Godwits occurred in June 1965 at the wetlands of the lower Kuban river and formed about 26% of all the waders counted there during early summer (Kartashev 1973). Thus, large concentrations at the Caspian Sea have been observed only in the surroundings of Guriev town (lower Ural river) where approximately 20,000 birds were counted on 21 June 1962 (Poslavsky 1980).

Rare species

On early summer movements, 19 species of wader appear to be rare, including five which breed in the Caspian Sea region; Avocet *Recurvirostra avosetta*, Little Ringed Plover, Kentish Plover *Charadrius alexandrinus*, Collared Pratincole *Glareola pratincola* and Black-winged Pratincole *Glareola nordmanni*. These breeding species are either rare and patchily distributed, or breed late and do not take part in early movements during June and early July. Therefore, these five breeding species are included in the group of "wandering" and early migrating species (Table 3). Avocet, which are rare breeders over the whole Caspian region, were only recorded on early summer movements at the Mangyshlak Peninsula and in the northern Stavropol region (in the latter area, during the third ten-day period of June). Little Ringed Plover, although widespread on the Caspian coast, were not recorded on southward migration in early summer anywhere else besides the Samur delta, although many authors have reported the presence of small numbers of non-breeding birds. Similar information is available for Kentish Plover. Only a few observations have been made on the northern Caspian Sea of "wandering" and early migrant Collared Pratincole *Glareola pratincola* and Black-winged Pratincole *Glareola nordmanni*, which are rather common and locally numerous breeders in various parts of the Caspian Sea.

Of the other waders in this group, the most interesting are from the genus *Tringa*: Greenshank, Spotted Redshank *Tringa erythropus* and Marsh Sandpiper. These three waders occur in summer on the Caspian coasts to the south of their breeding ranges. For the former two species, the dates of early southward migration are similar throughout the region: in the north-west of the Caspian sea, at the Samur delta, in the northern Stavropol region and on the lower Don river these birds were observed on southward migration from 20 June and locally from late June onwards. In spite of a lack of information concerning these movements, Marsh Sandpiper was included in this group based of our own observations and the fact that the southern boundary of its breeding range is almost bordering the Caspian Sea region (Kamysh-Samarskiye Lakes). Data collected on Red-necked Phalarope Phalaropus lobatus in Kazakhstan agree with our observations on other waders, *i.e.* that there is only a short period of about two weeks between the end of northward migration late in spring and southward migration early in summer.

Single birds

The third group mostly includes waders whose breeding ranges are situated a long way from the study area, usually in the tundra zone, as well as the species which are extremely rare breeders in both the Caspian region and the surrounding area.

Conclusions

In total, 12 breeding and 28 wandering species occur in summer in the Caspian Sea region. Southward migration, at least in some of the breeding and non-breeding species, starts in the whole region and its neighbouring areas from the second half of June onwards or even earlier. Some of them partially stopover and build up large numbers on the wetlands in the north, north-west and north-east of the Caspian Sea. Later they are joined by birds which have completed breeding and started post-breeding movements. Thus, the region is important not only for breeding wader species, but also as a summer reservoir for non-breeders and early breeding birds from northern territories. Some of the birds over summering in the Caspian region can form the first wave of southward migration.
It is also probable that the rapid transgression of the Caspian Sea, which has led to a reduction in the area

Table 3. The status and relative number of wandering and early migrating waders on the Caspian Sea (June - first half of July).

Vanellus vanellus	***Charadrius dubius***	*Pluvialis squatarola*
Himantopus himantopus	***Charadrius alexandrinus***	*Pluvialis apricaria*
Tringa ochropus	*Chettusia gregaria*	*Charadrius hiaticula*
Tringa glareola	***Recurvirostra avocetta***	*Charadrius leschenaultii*
Tringa totanus	*Tringa nebularia*	***Charadrius asiaticus***
Actitis hypoleucos	*Tringa erythropus*	*Charadrius morinellus*
Philomachus pugnax	*Tringa stagnatilis*	***Chettusia leucura***
Numenius arquata	*Xenus cinereus*	*Arenaria interpres*
Limosa limosa	*Phalaropus lobatus*	***Haematopus ostralegus***
Numenius phaeopus	*Calidris alba*	
Glareola pratincola	*Calidris alpina*	
Glareola nordmanni	*Calidris minutus*	
	Calidris temminckii	
	Calidris ferruginea	
	Limicola falcinellus	
	Gallinago gallinago	
	Gallinago media	
	Scolopax rusticola	
	Limosa lapponica	
12 species	**19 species**	**9 species**

Species that are indicated in **bold** are those occurring within their breeding range

suitable as wader stopovers (V.P. Litvinov pers. comm.), could cause earlier movements of waders to more southerly regions.

According to published data, early summer southward migration also takes place in other areas of the Palearctic. Thus, it is known in early June for Green Sandpiper and Lapwing, and in late June for Redshank, Curlew, Greenshank, Ruff *Philomachus pugnax*, and Black-tailed Godwit (Cramp & Simmons 1983). For some of these waders, for example Common Sandpiper, it is known that most of the early migrants are the failed breeders (Cramp & Simmons 1983). June migration has been recorded for several different species in different areas: Lapwing, Black-tailed Godwit, Redshank and Ruff in Mordovia (Lugovoi 1975), Lapwing and Ruff in the south of West Siberia (Yurlov 1977), and Redshank, Spotted Redshank, Greenshank, Wood Sandpiper, Curlew *etc.* at the Ili river delta, eastern Kazakhstan (Gavrilov *et al.* 1990). Little Ringed Plover and Dunlin *Calidris alpina* were the earliest species to be observed on southward migration on the south-western coasts of the Sea of Okhotsk (Babenko 1990), while Greenshank, Wood Sandpiper and Terek Sandpiper *Xenus cinereus* were the earliest observed on southwards migration at Lake Khanka (Gluschenko 1990). It is clear that this phenomenon is also observed in more northerly areas, where a number of non-breeding waders oversummer.

Thus, wader migration in the direction of autumn passage can be considered regular and is observed in early summer over large geographical areas. It seems rather strange that this phenomenon is still so little studied and has not yet attracted the attention of ornithologists. Therefore, many aspects of early summer migration, including the origin and numbers of birds, their stopover sites, main migration routes and other characteristics of this early passage are mostly unknown. It is obvious that special studies of this phenomenon will lead to a better understanding of wader biology and to more exact estimates of their numbers on seasonal migrations, as well as to the improvement of conservation strategies for the birds of this group along their flyways.

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