# Further Spring Observations on the Birds of Gilan, Northern Iran

### By Bent Pors Nielsen

(Med et dansk resumé: Yderligere forårsiagttagelser af fuglelivet i Gilan, Nord-Iran).

#### INTRODUCTION

In late March 1963 Mr. O. GEERTZ-HANSEN, Mr. H-J. SPEYER and the author paid a three days' visit to the isthmus between Lake Mordab and the Caspian Sea, west of Bandar Pahlavi in the northwestern Persian lowland province of Gilan. On that occasion we received a very striking impression of the variety of migrating, resting and breeding birds in the area, and we briefly described our observations (NIELSEN & SPEYER 1967).

Although the avifauna of Gilan is much better known than that of other parts of Iran, thanks primarily to the work of Schüz (1959), our short visit in 1963 urged us to carry out – if possible – more detailed investigations of the spring migration, which seemed to present a number of problems not yet solved.

The chance came in 1967, when Speyer for a few months lived in Ghazian, the

eastern suburb of Bandar Pahlavi, and he once again invited GEERTZ-HANSEN and the author to a four weeks' visit in Gilan.

Owing to the short time we had at our disposal, we decided to concentrate on migration, so the observations presented in this paper are largely on that subject and only to a very limited extent on breeding.

A thorough account of the spring migration requires at least three months' observations, and we had only one. But in spite of this limitation our results threw new light on a few problems, which will be descussed later.

Besides Schüz (1959), who spent three months (mid-February till mid-May) in Gilan and described his observations in detail, some information on migration can be derived from Buxton (1921), Passburg (1959), and WOOSNAM (WITHERBY, 1910).

#### ACKNOWLEDGEMENTS

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#### ITINERARY

We arrived in Gilan from Teheran via Qazvin on March 24, 1967. The following four weeks we spent in the lowland, and almost exclusively at the littoral from Mullah-rud in the west to about 10 km east of Ghazian.

Our house in Ghazian was situated only about 50 meters from the sea, and this favourable position enabled us to survey sea and beach from the roof, so many observations were made from here and the immediate vicinity.

Much time was spent at the farm Gulega, where we had had the unforgettable days in March 1963. At this point the isthmus is only about one km wide, and from the dunes we had a fine view both of sea and lake. Again this year the owner of Gulega, Mr. Dadaschi, very kindly invited us to travel around his beautiful property as much as we wanted, and we took great advantage of this generous offer.

We left Gilan on 21 April by the same route as the outward journey. Speyer returned a few days later and stayed until the end of May, and some of his observations from this period are included in the present paper.

#### THE WEATHER

The spring 1967 in Gilan was late, wet and cold (We were told by Mr. Dadaschi that the winter had been very mild), and this highly complicated or even impeded observations. The prevalent winds came from NW to ENE, the force usually being from light breeze to moderate wind, only once (29 March) the force was 6–7 Beaufort; a few times it was calm. The wind might alter quite suddenly, for instance on 19 April the wind shifted 90° (from NE to NW) in five minutes, and at the same time we watched three different layers of clouds moving in each direction. Such phenomena were seen more than once.

Precipitation was frequent and abundant, but as Gilan is the most humid part

of Iran, with an annual rainfall of c. 1470 mm, we could not expect it much better. On 29 March it rained constantly for 24 hours, and next morning our rain meter, which could hold 100 mm, had run over, and the garden had literally become a lake, the Elburz Mountains were covered with snow nearly down to the foothills.

On this deluge 29 March the thermometer showed  $3^{\circ}$  C at night and  $5^{\circ}$  C at noon. The following days were bitterly cold, and until the middle of April the temperature rarely exceeded  $10^{\circ}$  C. Really nice and warm weather  $(19^{\circ}$  C) occured on 20 April, the day before our departure.

#### THE MIGRATION IN GENERAL

The departure of wintering Cormorants (*Phalacrocorax carbo*) and gulls (*Larus* spp.) took place in late March and early April. The departure of dabbling ducks (*Anas spp.*) was still going on in this period, but the majority had left before our arrival, and so had almost all diving ducks (*Aythya spp.*).

The migration of land birds was much affected by bad weather, and it was not

until 2–3 April that it really started, in the beginning dominated by Rooks (Corvus frugilegus) and Sparrows (Passer spp.). 6 and 7 April were two fine days, especially for raptors, Swallows (Hirundo rustica) and Yellow Wagtails (Motacilla flava). Another peak day was 20 April, and the 21st showed signs of similar qualities. For further details on each species see the systematic list.

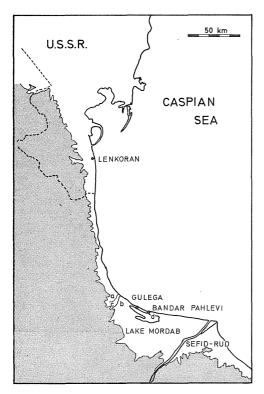


Fig. 1. The position of Gilan between the Elburz Mountains and the Caspian Sea.
a: Mullah-rud; b: Tis-rud; c: Punnell; d: Floo-

ded airfield.

Fig 1. Gilans beliggenhed melllem Elburz bjergene og Det Kaspiske Hav.

The great majority of migrants was coasting towards NW. Exceptions were many herons, the ducks, and some waders; these will be discussed separately. The birds often moved on a broad front, the concentration on the isthmus not always being too marked, and sometimes the migrants were seen far out over Lake Mordab. What happened south of the lake was not observed by us.

Particularly interesting was the migration on 20 April, when at least 80 % of the birds at Gulega came in from NE, including storks (*Ciconia spp.*), raptors and passerines (fig. 3 and table 1). The wind at Gulega was E, but later in the afternoon

we learned that there had been a strong southerly wind south of Rasht all day, so our migrants at Gulega might have been driven out to sea somewhere east of Pahlavi, probably too high to be detected even with binoculars.

The height this day was fantastic, 1.000 meters for some of the raptors may be a conservative estimate. All the larger raptors, such as eagles (Aquila spp.) and Buzzards (Buteo buteo), came in slow gliding (and thus losing height when advancing), which implies a still greater height out at sea.

Such great heights were observed many times. Once we saw two Grey Herons (Ardea cinerea) at approx. 3.000 meters, and other herons, e.g. Great White Egret (Egretta alba) and Little Egret (Egretta garzetta) were seen at heights between 1.000 and 2.000 meters. Sometimes the migrating passerines were flying so high that it was a hopeless task to count or identify them.

We left too early to observe the migration of Turtle Doves (Streptopelia turtur), bee-eaters (Merops spp.), Rollers (Coracias garrulus), many warblers and the shrikes (Lanius spp.), but many of these were seen later by Speyer.

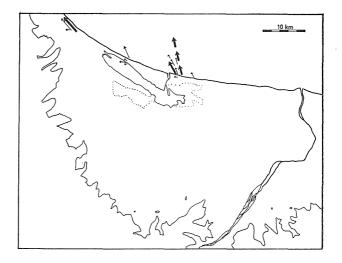
Before turning to the systematic list some of the more interesting families will be mentioned.

#### Herons

This family proved a conspicuous proportion of the migrants. The greater part of the passage started 14 April, and the following five species were recorded equally numerous: Ardea cinerea, Ardea purpurea, Egretta alba, Egretta garzetta, and Nycticorax nycticorax. The tendency for them to leave the coast was appreciable and is illustrated in fig. 2. Three species, A. cinerea, A. purpurea, and N. nycticorax, most often passed by late in the afternoon and about sunset; the former two were now and then heard at night.

Fig. 2. The migration of herons (see p. 52).

Fig. 2. Trækket af hejrer (se p. 52).



#### Ducks

As we had expected most ducks had left when we arrived, yet some flocks of dabbling ducks were seen flying N until mid-April. The species were Teal (Anas crecca), Garganey (Anas querquedula), Pintail (Anas acuta), and Shoveler (Anas clypeata). Over land they were flying at a considerable height, but reaching the coast they descended and continued very low over the surface, most of them due north, a few northwest.

#### Raptors

The great number of migrating raptors is shown in table 2. Compared with North-European conditions the multiplicity of eagles and harriers was remarkable and a great experience.

The majority - 72 % - was seen in three days, April 6, 7 and 20, and often within a few hours each day. Especially the eagles appeared with a surprising suddenness, thus the seven Imperial Eagles (Aquila heliaca) on 7 April passed by within a quarter of an hour, and seventeen Steppe Eagles (Aquila rapax) on 20 April came in ten minutes. On 6 April we counted fifteen Greater Spotted Eagles (Aquila clanga), one Lesser Spotted Eagle (Aquila pomarina, and six White-tailed Eagles (Haliaëtus albicilla) in one hour.

The number of Buzzards is not very high compared with European conditions. Migrating specimens, which were not too far away, could all be safely identified as *vulpinus*, though some of them slightly resembled Long-legged Buzzards (*Buteo rufinus*); we did not, however, record that species in the lowland.

The Black Kite (*Milvus migrans*) was by far the most numerous migrating raptor (table 2), the passage was at times very conspicuous, and besides being a common breeding bird the Black Kite is no doubt a winter visitor and passage migrant. This may be the case for *Haliaëtus albicilla* also.

The harrier migration was considerable and was dominated by Pallid Harriers (Circus macrourus). We had an impression that the greater part of unidentified harriers were macrourus. The first Montagu's Harrier (Circus pygargus) was seen 17 April, so we missed the climax for that species, which is supposed to be about 1 May. The harriers, too, were sometimes seen at incredible heights, and many may have passed undiscovered.

Seven species of falcons were noted, the two Kestrels (Falco tinnunculus and naumanni) not surprisingly being the most numerous. Resting and foraging Peregrines (Falco peregrinus) and Merlins (Falco columbarius) were frequently seen, once a

Ciconia ciconia	68	Accipiter nisus	27	Apus apus 8
Ciconia nigra	2	Falco cherrug	1	Upupa epops 1
Plegadis falcinellus	17	Falco peregrinus	1	Calandrella rufescens 40
Aquila heliaca	1	$Falco\ subbuteo$	3	Hirundo rustica thousands
Aquila rapax	18	$Falco\ naumanni$	12	Riparia riparia hundreds
Aquila clanga	1	$Falco\ tinnunculus$	1	Corvus frugilegus 20
Aquila pomarina	1	$Falco\ naum./tinn.$	7	Anthus trivialis 4
Buteo buteo vulpinus	10	Grus grus	31	Anthus cervinus 6
Milvus migrans	30	Tringa ochropus	2	Motacilla flava hundreds
Circus aeruginosus	2	$Columba\ oenas$	59	Emberiza calandra 1
Circus cyaneus	1	Columba palumbus	15	Passer dom./hisp. 60
Circus macrourus	3	Columba $sp.$	39	

Table 1. The migrants at Gulega on 20 April (fig. 3).

Tabel 1. De trækkende fugle ved Gulega den 20. april (fig. 3).

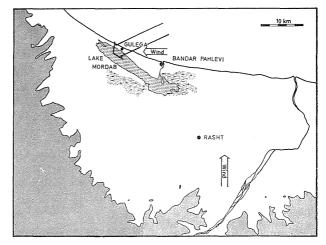
Species Art	6.4.	7.4.	20.4.	Other days Andre dage	Total I alt
Gyps fulvus				2	2
Aquila heliaca		7	1		8
Aquila rapax		1	18		19
Aquila clanga	16	8	1	4	29
Aquila pomarina	1	1	1		3
Circaëtus gallicus		1			1
Buteo buteo vulpinus	23	43	10	10	86
Milvus migrans	82	79	30	c. 50	c. 240
Haliaëtus albicilla	6			1	7
Circus aeruginosus	10	4	2	8	24
Circus cyaneus		1	1	5	7
Circus macrourus	3	6	3	12	24
Circus pygargus				3	3
Circus sp. non aerug.	20	12		9	41
Accipiter brevipes				2	2
Accipiter nisus	7	20	27	25	79
Falco cherrug			1		1
Falco peregrinus	3		1	4	8
Falco subbuteo		1	3		4
Falco columbarius				2	2
Falco vespertinus				2	2
Falco naumanni	8	3	12	33	56
Falco tinnunculus	4	7	1	16	28
Falco naum./tinn.	4		7		11

Table 2. The migration of raptors in the Pahlavi-Gulega area, April 1967. Resting and foraging birds are not included.

Tabel 2. Trækket af rovfugle i Pahlavi-Gulega området, april 1967. Kun egentligt trækkende fugle er medtaget.

Fig. 3. The migration on the 20th April (see p. 52).

Fig. 3. Trækket den 20. april (se p. 52).



male of the beautiful Steppe Merlin (F. c. pallidus Sushkin (= christiani-ludovici Kleinschmidt)). The two Red-footed Falcons (Falco vespertinus) on 21 April were apparently a pair; another one was seen on 30 April by Speyer. These Falco vespertinus — although not surprising — seem to be the first records for Gilan.

#### Waders

The greater part of waders was found resting and foraging on the beach; a few species were coasting and a few were seen leaving the coast. Coasting flocks of Ruffs (*Philomachus pugnax*) were not unusual in late March; they were almost exclusively males, only once we saw a few females in a flock. On 25 March 27 Blacktailed Godwits (*Limosa limosa*) were flying due north a little east of Ghazian late in the afternoon. Other waders leaving the coast were 90 Caspian Plovers (*Charadrius asiaticus*) on 16 April, and 40 (probably this species) very high on 15 April.

The occurence of *Charadrius asiaticus* was very interesting. The first male was found on 4 April on the beach; it was so exhausted that even a dog could not force it to fly. The first female appeared on 9 April. Three days later we found  $5 \ \mathring{\circ} \ \mathring{\circ} \ 2 \ \mathring{\circ} \ \mathring{\circ}$  on the flooded airfield, next day  $1 \ \mathring{\circ} \$  on the beach. On 14 April we counted

about 400 between Pahlavi and Tis-rud (25 km), half of them in two large flocks, males and females equally represented. Few resting birds were recorded after this date.

These large numbers of *Charadrius asiaticus* are remarkable, as the species has so far been found only once <sup>1</sup>) by Buxton (1921), and such a conspicuous plover is not likely to be overlooked. For discussion see p. 66.

The lack of suitable feeding grounds in Gilan is perceptible and may be one of the reasons why wader numbers are low and why most of them are found on the beach itself. We had an impression that most waders on the beach stayed for a very short time. Wader habitats are — besides the sea shore — the flooded airfield and the shores of Lake Mordab. Some species, such as Snipe (Gallinago gallinago), Common Sandpiper (Tringa hypoleucos), and Green Sandpiper (Tringa ochropus), are also found on the rice fields.

All 29 species are mentioned in the systematic list.

#### **Passerines**

Except for 20 April (fig. 3 and p. 52) no passerines were seen leaving the coast, all were following the coast towards NW, but many of them, e.g. Swallows, came on a very broad front, and the concentration

<sup>1)</sup> Recorded by Genenger (1968) in 1966.

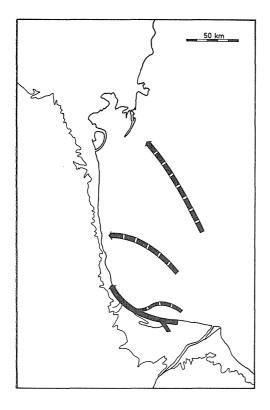


Fig. 4. The migration of land birds. Unbroken arrow indicates normal coasting movement. Broken arrows indicate presumed high-altitude migration under certain favourable conditions.

Fig. 4. Trækket af landfugle. Fuldt optrukken pil normalt kysttræk. De stiplede pile angiver formodet højtgående træk under visse gunstige betingelser.

on the isthmus was not always too marked, so countings were difficult and inaccurate. Only one genus, the Sparrows (Passer), kept strictly to the dune zone.

A number of early migrants, e.g. Skylarks (Alauda arvensis), Rooks and Starlings (Sturnus vulgaris), had almost gone before our arrival, and these species were never seen in large numbers by us. The predominant migrants in our period were Swallows, Yellow Wagtails, and the three Sparrows. Greenfinches (Carduelis chloris). Goldfinches (Carduelis carduelis), and Linnets (Carduelis cannabina) were fairly common but less numerous than expected.

#### SYSTEMATIC LIST

In this part all species observed in Gilan between 24 March and 21 april are listed. Some of Speyer's notes until the end of May are included.

Order Podicipedes

Great Crested Grebe (Podiceps cristatus)

Toppet Lappedykker

Fairly common in Lake Mordab, where display was seen, and they most probably were going to breed here. Very few seen in the sea, where it was much more common in 1963, especially off Meyan Kaleh in the east Caspian (NIELSEN & Speyer, 1967).

Black-necked Grebe (Podiceps nigricollis) Sorthalset Lappedvkker

Astonishingly numerous both in sea and lake, often lying in great flocks quite near the coast. At Gulega we counted about 400 in the lake on 26 March. On 25 March we counted 100 off one mile of the coast at Ghazian. All these March birds were almost entirely in winter plumages, but about 10 April the majority was in summer plumage and by now the number was decreasing. Still on 19 April we found a few small parties in the sea.

Little Grebe (Podiceps ruficollis) Lille Lappedykker Very few seen in the lake at Gulega.

Order Pelecani

Cormorant(Phalacrocorax carbo) Skarv The migration ended shortly after our arrival, and all the numerous winter visitors had gone by 3 April. We did not visit any breeding colony, but the species seemed to be fairly common.

Pygmy Cormorant (Phalacrocorax pygmaeus) Dværgskarv

It was not uncommon in Lake Mordab, where we saw it regularly, singly or in small flocks. Never seen in the sea.

Order Ciconiae

Grey Heron (Ardea cinerea) Fiskehejre In addition to 43 migrating birds resting and foraging birds were frequently seen. A common breeding bird.

Purple Heron (Ardea purpurea) Purpurhejre

Besides 39 migrants we found it fairly common in the reeds at Gulega; many of them were probably going to breed.

Little Egret (*Egretta garzetta*) Silkehejre 32 migrants were noted, and many resting were seen everywhere.

Great White Egret (Egretta alba) Sølvhejre We noted 52 migrants, and besides these we found the species fairly common though less numerous than Egretta garzetta.

Squacco Heron (Ardeola ralloides) Tophejre The first were seen at Gulega on 10 April, but it never became common and we did not see any migration.

Cattle Egret (Bubulcus ibis) Kohejre One seen near Ghazian and one at Gulega.

Night Heron( *Nycticorax nycticorax*) Nathejre In addition to 39 migrants we found some resting birds, but never large numbers.

Spoonbill (*Platalea leucorodia*) Skestork 2 +3 moved north at Gulega, April 7.

Glossy Ibis (*Plegadis falcinellus*) Sort Ibis Two coasting flocks were noted at Gulega: 4 on 10 April and 17 on 20 April.

White Stork (*Ciconia ciconia*) Hvid Stork A fairly common passage migrant. Migration started 6 April and reached a total of 150 until 21 April. The Stork migration was discussed by Schüz (1959).

Black Stork (*Ciconia nigra*) Sort Stork One was seen in the wooded foothills near Punnell on 9 April, probably a breeding bird. Another two were coming in from the sea together with raptors on 20 April.

Flamingo (*Phoenicopterus ruber*) Flamingo 6 coasting very low over the sea near Ghazian, March 28.

#### Order Anseres

Greylag Goose (Anser anser Swinhoe) Grågås One of the subspecies rubrirostris was seen by Speyer on the flooded airfield on 27 April.

Mallard (Anas platyrhynchos) Gråand Very few seen; they had no doubt gone north earlier in March. Teal (Anas crecca) Krikand
Only a few in late March and the beginning of
April; the majority had left.

Wigeon (Anas penelope) Pibeand Very few were present when we arrived.

Pintail (Anas acuta) Spidsand Comparatively more numerous than the preceeding three species, and it was not uncommon until 19 April.

Garganey (Anas querquedula) Atlingand Fairly common from our arrival till mid-April; in this period it was one of the commonest ducks in the market.

Shoveler (Anas clypeata) Skeand The commonest duck in April, migrating as well as resting flocks were frequently seen.

Pochard (Aythya ferina) Taffeland Not very numerous but more common than Tufted Duck.

Tufted Duck (Aythya fuligula) Troldand Very few seen at Gulega, all had left Gilan before 24 March.

#### Order Accipitres

Griffon Vulture (*Gyps fulvus*) Gåsegrib
The two migrants (table 2) passed Ghazian on 3
April. They were possibly local birds from the mountains.

Imperial Eagle (Aquila heliaca) Kejserørn All the eight migrants (p. 53 and table 2) were immatures in transition plumages, probably 3-5 years old.

Steppe Eagle (Aquila rapax) Steppeørn Five of the 18 seen on 20 April were adults (p. 53 and table 1 & 2), all others were young birds, two of them in transition plumages (probably 3-5 years old), the rest younger birds with very typical wing patterns (see field notes).

Greater Spotted Eagle (Aquila clanga) Stor Skrigeørn

Besides the 29 migrants (table 2) we saw local birds at Gulega and over the hills at Punnell, probably breeding birds.

Lesser Spotted Eagle (Aquila pomarina)
Lille Skrigeørn
Besides the few migrants (table 2) we found one

in display flight over the foothills at Punnell, no doubt a breeding bird. A soaring adult was seen

over Karadj (south of the mountains) as early as 24 March.

Short-toed Eagle (Circaëtus gallicus) Slangeørn The migrating eagle (table 2) was a grey phase. A beautiful white bird was seen hovering over Sefid-rud on 21 April. According to HARTERT these white specimens are not necessarily adults and vice versa.

Buzzard (Buteo buteo) Musvåge

As mentioned above (p. 53) all migrating Buzzards seemed to be Steppe Buzzards (B. b. vulpinus GLOGER). The local dark subspecies menetriesi BOGDANOW was fairly common, e.g. in the foothills at Punnell.

Black Kite (Milvus migrans) Sort Glente Besides being the most numerous migrating raptor (p. 53 and table 2) the Black Kite is the most common breeding raptor, dominating the whole lowland and often congregating in parties on the beach and in roosts at night. Great variation in coloration was noted.

White-tailed Eagle (Haliaëtus albicilla) Havørn The migrating birds (table 2) suggest some wintering of northern populations. A fairly common breeding bird, perhaps somewhat reduced in numbers since 1956 (Schüz 1959). Very few juveniles were seen.

Marsh Harrier (Circus aeruginosus) Rørhøg It is difficult to say whether the migrants (table 2) were winter visitors or passage migrants, probably both. Also a common breeding bird at the lake, at least three pairs were going to breed at Gulega; they were sometimes seen in display flights at incredible heights.

Hen Harrier (Circus cyaneus) Blå Kærhøg Less common than expected (table 2). It is possible that a few of the unidentified harriers were this species.

Pallid Harrier (Circus macrourus) Steppehøg The predominating migrating harrier (p. 53 and table 2), males and females equally represented. For field notes of the female see p. 68.

Montagu's Harrier (Circus pygargus) Hedehøg The three migrants (p. 53 and table 2) were males.

Levant Sparrowhawk (Accipiter brevipes) Balkanhøg

The two birds in table 2 were seen on 14 April near Tis-rud and seemed to be typical brevipes, which is migratory. A little grey hawk with very close bars on the light underside and a yellow eye was seen several times at Gulega and behaved

like a local bird; it was possibly a Shikra (Accipiter badius cencroides Severtzov) which was found breeding here in 1966 (Genenger 1968).

Sparrowhawk (Accipiter nisus) Spurvehøg A common migrant (table 2).

Osprey (Pandion haliaëtus) Fiskeørn Effects of the disaster described by Österlöf (1965) were only too obvious: During four weeks at the sea shore of Gilan we found max. 6 (six!) Ospreys, and no nest was seen. So this beautiful raptor, recently a common breeding bird at the coast, has now become very scarce at the Caspian Sea.

Saker Falcon (Falco cherrug) Slagfalk The sole Saker (table 2) followed the same route as other migrants that day, April 20.

Peregrine Falcon (Falco peregrinus) Vandrefalk Not uncommon, resting and migrating (table 2).

Hobby (Falco subbuteo) Lærkefalk A fairly common migrating and resting falcon (table 2), probably the climax was after 21 April.

Merlin (Falco columbarius) Dværgfalk A few resting and migrating, at least some of them the subspecies pallidus Sushkin (p. 53 and table 2).

Red-footed Falcon (Falco vespertinus) Aftenfalk Besides the two on 21 April (table 2) another one was seen by Speyer in the evening of 30 April.

Lesser Kestrel (Falco naumanni) Lille Tårnfalk A common passage migrant but often difficult to distinguish from F. tinnunculus (table 2). We found a breeding colony in the mountains on 21 April.

Kestrel (Falco tinnunculus) Tårnfalk A common passage migrant (tåble 2).

Order Galli

Pheasant (*Phasianus colchicus*) Fasan Fairly common in the scrub at Gulega.

Quail (Coturnix coturnix) Vagtel One heard at Gulega on 20 April.

Order Grues

Crane (Grus grus) Trane

We waited long for the Cranes, which were seen over Gulega in 1956 (Schüz 1959) and by us in 1963 (Nielsen & Speyer 1967). We expected them to arrive about 1 April, but no Cranes turned up

before 20 April, when 31 came along the coast and not due north as expected. The flock was extremely high, at least 1.000 meters, and no voice was heard. At this height many Cranes may pass undiscovered.

Water Rail (Rallus aquaticus) Vandrikse A few were frequently heard in the reeds of Gulega.

Spotted Crake (*Porzana porzana*)
Plettet Rørvagtel
One heard in the reeds of Gulega, April 15.

Little Crake (*Porzana parva*) Lille Rørvagtel One heard in the reeds of Gulega, April 6.

Moorhen (Gallinula chloropus) Rørhøne Common in the reeds of Gulega.

Purple Gallinule (*Porphyrio porphyrio*) Sultanshøne Seems to be fairly common in the reeds of Gulega, where we once saw 10 at sunset.

Coot (Fulica atra) Blishøne Very few of the wintering masses were left by our arrival.

Order Charadrii

Oystercatcher (Haematopus ostralegus) Strandskade

1 +4 on 9 April and 2 on 20 April on the beach.

Lapwing (Vanellus vanellus) Vibe 20-30 were frequently seen on the flooded airfield; as late as 18 April there were still 15.

Sociable Plover (Vanellus gregarius) Steppevibe One seen on the flooded airfield on 2 April.

Grey Plover (*Pluvialis squatarola*) Strandhjejle The first was found 10 April and from now on we saw small parties on the beach.

Ringed Plover (Charadrius hiaticula) Stor Præstekrave

We did not see any winter visitors (Schüz 1959). The first four were found on the beach 21 April, and from now until 11 May Speyer saw small parties, often 6-8 birds. These late migrants, not noted by previous observers, were probably *Ch. h. tundrae* Lowe which is known to winter in tropical areas.

Little Ringed Plover (Charadrius dubius) Lille Præstekrave

In late March it was scarce, but it soon became extremely abundant at the sea shore. Probably many were passage migrants, but many were breeding birds, display was often seen from mid-April.

Kentish Plover (*Charadrius alexandrinus*) Hvidbrystet Præstekrave

Very scarce in late March, but it became extremely numerous in April, often far outnumbering *Ch. dubius* on the beach.

Greater Sand Plover ( $Charadrius\ leschenaultii$ ) Ørkenpræstekrave

The first male appeared 31 March, and soon it was fairly common on the beach though in small numbers. The first two females were seen 7 April. On 14 April we counted about 25 between Pahlavi and Tis-rud (25 km), the two sexes being equally represented. After 18 April we saw very few males.

Caspian Plover (Charadrius asiaticus) Kaspisk Præstekrave See account p. 55 and discussion on p. 66.

Turnstone (Arenaria interpres) Stenvender 15 recorded by Speyer on 22 May.

Common Snipe (Gallinago gallinago) Dobbeltbekkasin

A very common winter visitor in the wet rice fields and around Lake Mordab. A few migrants seen.

Curlew (Numenius arquata) Storspove Seen regularly but in very small numbers.

Whimbrel (*Numenius phaeopus*) Småspove Much more numerous than *N. arquata*, the first flocks appearing on 9 April.

Black-tailed Godwit (*Limosa limosa*)
Stor Kobbersneppe
650 birds on the flooded airfield left durin

650 birds on the flooded airfield left during the last days of March. A few migrants were seen (p. 55).

Bar-tailed Godwit (*Limosa lapponica*) Lille Kobbersneppe One in transition plumage on the beach 19 April.

Redshank (*Tringa totanus*) Rødben Seen regularly on the beach and the flooded airfield but in very small numbers. Greenshank (*Tringa nebularia*) Hvidklire A few migrants heard in the afternoon and evening of 16 April.

Green Sandpiper (*Tringa ochropus*) Svaleklire Common in the rice fields and at Lake Mordab, only one seen on the beach. Sometimes migrants were heard at night.

Wood Sandpiper (*Tringa glareola*) Tinksmed Two seen by Speyer on 10 May. The scarcity of this species in Gilan was emphasized by Schüz (1959). We have seen it migrating northeast in the Teheran area, and it is by no means uncommon at Gorgan Bay, so the majority no doubt go to the eastern part of the Caspian.

Common Sandpiper (Tringa hypoleucos) Mudderklire

The first two were seen on the beach on 7 April, and it soon became very common, e.g. 27 in one flock on 20 April. Speyer saw 50 on 11 May.

Terek Sandpiper (Xenus cinereus) (= Tringa terek) Terekklire

We found two on 13 April, and up to 21 April we had seen 10 on the beach. Also seen in May by Speyer, e.g. two large flocks (20+45) on 22 May.

Little Stint (Calidris minuta) Dværgryle One on the beach on 14 April, and 5+3 seen by Speyer 22 May.

Dunlin (Calidris alpina) Alm. Ryle Seen regularly but in small numbers on the beach, the first appearing 2 April.

Sanderling (Calidris alba) Sandløber Two on the beach on 9 April, another two on 14 April, and two seen by Speyer 8 May.

Ruff (*Philomachus pugnax*) Brushane Several found resting on the flooded airfield. Migrating flocks in March-April were all moving along the coast; in one of the flocks we saw 2-3 females, all others were males (see Schüz 1959).

Red-necked Phalarope (*Phalaropus lobatus*) Odinshane

The first one appeared on 4 April, and from 13 April flocks were seen along the coast, often lying in the surf itself. We may have seen some hundreds altogether, and thus never reaching the vast numbers occuring in Gorgan (NIELSEN 1963; Schüz 1965).

Avocet (Recurvirostra avosetta) Klyde A few small flocks on the beach in April (max. 26 on the 19th).

Black-winged Stilt (*Himantopus himantopus*) Stylteløber

Five resting birds on the north coasts of Lake Mordab on 10 April.

Stone Curlew (Burhinus oedicnemus) Triel We found a few resting near the coast and on the rice fields. A flock of 11 made a migration attempt in the late afternoon of 18 April, but they turned south again.

Herring Gull (*Larus argentatus*) Sølvmåge Lesser Black-backed Gull (*Larus fuscus*) Sildemåge

The Larus argentatus-fuscus group is in the cold season represented by several interesting subspecies, which can be divided into three different types, all of them with yellow legs:

- 1) Birds with light mantle and wings, much resembling nominate argentatus though looking a little smaller. These light Herring Gulls were the commonest and the last to leave, a few remained until 12 April.
- 2) Much darker birds with mantle and wings dark slate and of a size much greater than the light birds, sometimes almost as large as *Larus ichthyaëtus*. In spite of this very dark slate colour on the wing, the black wing tip (with white spots) was always visible. These »dark-slates« disappeared by 6 April.
- 3) Birds with somewhat lighter slate-coloured mantle and wings than the »dark-slates« but considerably darker than the light birds. They usually seemed a little smaller than the »dark-slates«. These »medium-slates« had gone by 2 April.

Using the nomenclature of Vaurie we concluded as follows: The light, small birds were no doubt local Caspian Herring Gulls, Larus argentatus cachinnans Pallas (Vaurie includes L. a. ponticus Stegmann in cachinnans). Apparently all breeding places are to be found in the Russian part of the Caspian Sea.

The very large »dark-slates« were L. a. heuglini Bree from northern Russia. We obtained evidence of when we found a dead specimen on the beach (for wing patterns see Meinertzhagen 1954).

The »medium-slates« were most probably *L. a. taimyrensis* Buturlin which includes a number of not welldefined subspecies. This group breeds in north-western Sibiria and is by Russian authorities considered an intermediate between *heuglini* Bree and the East-Sibirian *vegae*. *Taimyrensis* was obtained by Schüz (1959).

On 4 April we saw a true Lesser Black-backed Gull (*Larus fuscus*). It was seen together with a *L. a. heuglini*, and the difference in the dark wings was distinct, *fuscus* being plain and more brownblack than *heuglini*. Furthermore, there was a

great difference in size, heuglini being about 25 % larger than fuscus. Another Lesser Black-back was seen next day, again together with an heuglini, and the size-difference was once again very striking. There is no doubt that these two Lesser Black-backed Gulls were L. fuscus fuscus Linna-eus which we know so well from Danish waters.

Common Gull (*Larus canus*) Stormmåge Fairly common but not very numerous. The last seen on 11 April.

Great Black-headed Gull (Larus ichthyaëtus) Stor Sorthovedet Måge

About 5-10 adults and one juvenile seen until 6 April.

## Black-headed Gull (*Larus ridibundus*) Hættemåge

By far the most numerous gull, often seen in hundreds at the coast and the lake. A large departure took place on 30 March, including many *L. argentatus*. Of these numerous *L. ridibundus* in March-April only a minority was in breeding plumage. Practically all adults had left by 8 April, but many juveniles were still there on 21 April, often moving along the coast in large flocks.

Slender-billed Gull (*Larus genei*) Tyndnæbbet Måge

A fairly common gull at the coast, most often in parties of 5-10 and in company with *L. ridibundus*. Both adults and juveniles left by 7 April, but a new influx occured on 19 April, apparently passage migrants from further south.

Mediterranean Gull (*Larus melanocephalus*) Sorthovedet Måge

One adult was seen among several *L. ridibundus* on 21 April, and Speyer saw two adults on 27 and 29 April.

Whiskered Tern (Chlidonias hybrida) Hvidskægget Terne

Two calling birds flew due north very high east of Ghazian on 19 April, but whether they left the coast was not observed. They uttered their very characteristic nasal call. Another one was seen over the coast on 21 April. These birds seem to have arrived unusually early compared with 1956 (Schüz 1959).

Caspian Tern (*Hydroprogne caspia*) Rovterne Seen occasionally but in small numbers. 6 moving east on 5 April were the last.

Sandwich Tern (Sterna sandvicensis) Splitterne One coasting on 28 March.

Order Columbae

Wood Pigeon (Columba palumbus) Ringdue The Wood Pigeon proved more common than stated by Schüz (1959), in fact they formed 30  $^{0}/_{0}$  of all doves; perhaps they are later migrants than  $G.\ oenas$ .

Stock Dove (Columba oenas) Huldue Migrating flocks were seen during the whole period, but the total was not high, and most Stock Doves had apparently left before our arrival.

Turtle Dove (Streptopelia turtur) Turtledue The first Turtle Dove was noted by Speyer on 30 April.

Orders Cuculi, Striges and Caprimulgi Cuckoo (Cuculus canorus) Gøg The firs was seen by Speyer on 30 April.

Scops Owl (Otus scops) Dværghornugle We did not hear any until 20 April when two were calling just outside the garden. In the Teheran area it arrives about mid-March.

Nightjar (Caprimulgus europaeus) Natravn One seen by Speyer over the house on 30 April at 7,30 p.m.

Orders Apodes, Coraciae and Pici

Swift (Apus apus) Mursejler

A very rare bird in the lowland, though it is common in and south of the mountains. We saw eight coming in from the sea together with other migrants at Gulega on 20 April (fig. 3). Four weeks earlier we had seen several in Teheran. Abundant in autumn on Meyan Kaleh (FEENY et al. 1968).

Alpine Swift (Apus melba) Alpesejler Not uncommon in the mountains, but very rare in the lowland. We saw one coasting at Gulega on 4 April.

Roller (Coracias garrulus) Ellekrage We found the first two at Gulega on 20 April, and thus we did not witness the passage, which is culminating in the beginning of May.

Kingfisher (Alcedo atthis) Isfugl A common bird at the streams in the lowland. We found a nest hole at Mullah-rud.

Bee-eater (*Merops apiaster*) Biæder We saw an isolated vanguard of seven in Gulega on 15 April. The migration seemed to start on 21 April, the day we left. Blue-cheeked Bee-eater (Merops superciliosus) Blåkindet Biæder

The first 20 noted by Speyer on 11 May, but some may have arrived earlier.

Hoopoe (Upupa epops) Hærfugl

The first two were seen on 24 March, the day we arrived, but very few were observed before 4 April when 11 migrants were found in the dunes at Gulega. From now on small numbers were often seen moving low along the coast, always following the dunes and frequently stopping to rest. Larger parties were also watched, e.g. 16 in the dunes at Mullah-rud on 14 April.

Wryneck (*Jynx torquilla*) Vendehals One in the garden on 13 April.

Order Passeres

Calandra Lark (Melanocorypha calandra) Kalanderlærke

Migration was noted by Schüz (1959). We possibly saw a few at Mullah-rud on 14 April.

Lesser Short-toed Lark (Calandrella rufescens) Dværglærke

A common passage migrant. Apparently many had passed before the bad weather in late March, and very few were seen until 13 April. Subsequently not uncommon on the beach and in the dunes. We did not with certainty find any Shorttoed Larks (Calandrella cinerea), but there may have been some among the C. rufescens (see Schüz 1959).

Crested Lark (Galerida cristata) Toplærke We saw a few in the dunes, probably passage migrants.

Skylark (Alauda arvensis) Sanglærke A fairly common migrant until the beginning of April, but the majority had no doubt left earlier in March.

Swallow (*Hirundo rustica*) Landsvale The predominant passerine migrant in April, sometimes occuring in thousands and moving on a broad front. Many of the local breeders in towns and villages had arrived on 24 March, but migration did not start before 3 April, and we watched the first large-scale passage on 9 April.

Sand Martin (*Riparia riparia*) Digesvale A very common passage migrant in April, though outnumbered by Swallow. The first were seen in company with Sallows on 9 April, which is earlier than noted by Schüz (1959).

Golden Oriole (Oriolus oriolus) Pirol 4-5 males and 2-3 females were seen by Speyer on 10 May.

Hooded Crow (Corvus corone) Gråkrage A very common breeding bird. No migration recorded.

Rook (Corvus frugilegus) Råge A very common breeding bird, winter visitor and passage migrant. The majority of migrants had gone before 24 March and only a few hundred were seen in April.

Magpie (Pica pica) Skade A common sedentary breeding bird.

Great Tit (Parus major) Musvit Fairly common in the lowland.

Blue Tit (Parus caeruleus) Blåmejse Much scarcer than Parus major.

A few recorded in the scrub at Gulega.

Penduline Tit (Remiz pendulinus) Pungmejse Occasionally a few in the trees at Gulega. On 20 April we saw a flock of 18 moving around very restlessly. They were of the light-headed type and quite different from the dark-headed breeding birds we found in 1963 (NIELSEN & SPEYER 1967). The did not behave like breeding birds and were probably winter visitors from further north.

Wren (*Troglodytes troglodytes*) Gærdesmutte Recorded regularly but in small numbers until the beginning of April.

Redwing (*Turdus iliacus*) Vindrossel Fairly common until 8 April. Night migration was heard on 4 and 7 April.

Song Thrush (*Turdus philomelos*) Sangdrossel Less common than *T. iliacus*. Night migration was heard on 4 and 7 April.

Blackbird (*Turdus merula*) Solsort Very few seen, they had probably left earlier in March.

Wheatear (Oenanthe oenanthe) Digesmutte The first migrants appeared as late as 9 April. Great falls occured on 13 and 14 April, and sub sequently Wheatears were fairly common on the beach. Black-eared Wheatear (Oenanthe hispanica) Middelhavsdigesmutte

The first pair (black-throated phase) was recorded 13 April, and during the following week we saw a few on the beach. These and some autumn migrants on Meyan Kaleh (FEENY et al. 1968) may belong to an isolated population on the Mangyschlak peninsula in the northeastern Caspian (GLADKOV 1957).

#### Pied Wheatear (Oenanthe pleschanka) Nonnedigesmutte

The first male was found on 14 April among several *Oe. oenanthe*, and during the following days we saw a few on the beach.

## Isabelline Wheatear (Oenanthe isabellina) Isabelladigesmutte

A common passage migrant, seen more regularly than *Oe. oenanthe* during the whole period, but on peak days (13–14 April) it was outnumbered by *Oe. oenanthe*.

#### Stonechat (Saxicola torquata) Sortstrubet Bynkefugl

Early migrants or winter visitors were not seen. The first (a female) was observed on 9 April, and only a few were seen subsequently.

Whinchat (Saxicola rubetra) Bynkefugl
The first female was seen on 8 April, and from
now on Whinchats were seen regularly but in
small numbers.

Redstart (*Phoenicurus phoenicurus*) Rødstjert Was seen fairly often from 9 April but never in large numbers. We searched in vain for the subspecies samamisicus HABLIZI.

Nightingale (Luscinia megarhynchos) Sydlig Nattergal

Speyer saw and heard the first 8-10 in Pahlavi on 29 April.

Robin (Erithacus rubecula) Rødhals Winter visitors were fairly common up to 5 April.

Cetti's Warbler (Cettia cetti) Cettisanger One singing bird was heard at Gulega on 15 and 20 April. Apparently scarce in the lowland, but not uncommon in the mountains.

Moustached Warbler (Lusciniola melanopogon) Tamarisksanger

Fairly common in the reeds of Gulega. Two birds caught in the garden on 16 April suggested migration.

Great Reed Warbler (Acrocephalus arundinaceus) Drosselrørsanger

One recorded by Speyer on 10 May.

Blackcap (Sylvia atricapilla) Munk.

It was fairly common from 31 March. On 15 April it was exceptionally abundant in the bushes at Gulega.

Whitethroat (Sylvia communis) Tornsanger This species was fairly common from 13 April and subsequently. Schüz (1959) did not see any before 27 April. In spite of carefull look-out we never found a single Lesser Whitethroat (Sylvia curruca), which was extremely common in 1956 from 10 April (Schüz 1959). They may, perhaps, have passed later in the season, though Speyer did not find them either.

#### Ménétries' Warbler (Sylvia mystacea)

This Warbler arrived rather late in 1967; we saw the first in the dunes on 1 April (Schüz: 20 March), and singing males were observed from 4 April, but the migration lasted at least two weeks longer.

Willow Warbler (Phylloscopus trochilus) Løvsanger

The first appeared on 10 April, and soon it was a common bird.

Chiffchaff (*Phylloscopus collybita*) Gransanger Present and not uncommon by our arrival, and a few were still there on 20 April.

Goldcrest (Regulus regulus) Fuglekonge Seen occasionally in the garden and the vicinity, the last one as late as 19 April; obviously the climate was still too rough for it in the mountains, where it is a breeding bird.

Collared Flycatcher (Ficedula albicollis)
Hvidhalset Fluesnapper

We saw a single male of the subspecies semitorquata on 10 April at Gulega.

Red-breasted Flycatcher (Ficedula parva) Lille Fluesnapper

The first male with beautiful red throat was seen in the garden on 13 April, and from now on it was not uncommon; the first grey-throated on 20 April.

Dunnock (Prunella modularis) Brunelle A fairly common winter visitor until 6 April.

Tawny Pipit (Anthus campestris) Markpiber In 1963 we saw the first on 31 March (Schüz: 1 April, but in 1967 we did not find any before 14 April, when 1+4 were seen on the beach.

Tree Pipit (Anthus trivialis) Skovpiber The first was heard on 2 April, and subsequently passage migrants were seen regularly but never in large numbers.

Meadow Pipit (Anthus pratensis) Engpiber A rather scarce bird from our arrival until 15 April. Only few migrants noted, some passage had possibly taken place before 25 March.

Red-throated Pipit ( $Anthus\ cervinus$ ) Rødstrubet Piber

The first appeared on 15 April, and real migration started 20 and 21 April, so we did not witness the climax.

Water Pipit (Anthus spinoletta) Bjergpiber Seen regularly but in very small numbers until 16 April, most of them seemed to be passage migrants. Breeds in the mountains.

White Wagtail (*Motacilla alba*) Hvid Vipstjert A common passage migrant and probably winter visitor, though far outnumbered by *M. flava*. Very few seen after mid-April.

Grey Wagtail (Motacilla cinerea) Bjergvipstjert Recorded several times in the lowland, and a few migrants seen, the majority probably winter visitors from the mountains.

Yellow Wagtail (Motacilla flava) Gul Vipstjert The Swallow and the Yellow Wagtail are the two predominant passerine migrants, both often occuring in hundreds and sometimes in thousands. The first M. flava feldegg Michahelles were already present on our arrival, but real passage did not start before 4 April. The first M. flava beema Sykes were noted 5 April. On the 10th we studied some flocks consisting of 40 % flava, 40 % lutea Gmelin, 10 % feldegg, 5 % beema, and 5 % thunbergi Billerg. Hundreds were moving northwest on 20 April, and probably we did not watch the bulk of migrants, which normally comes at the end of April (Schütz 1959).

Citril Wagtail (Motacilla citreola) Citronvipstjert

A flock observed by Speyer near the Tis-rud estuary in mid-April 1966.

Great Grey Shrike (*Lanius excubitor*) Stor Tornskade One seen by Speyer on 8 May. Lesser Grey Shrike (*Lanius minor*) Rosenbrystet Tornskade Speyer found it common on 11 May.

Red-backed Shrike (Lanius collurio)
Rødrygget Tornskade
Two males and one female seen by Speyer on
10 May.

Starling (Sturnus vulgaris) Stær The majority of winter visitors and passage migrants had gone before our arrival, but small flocks were still moving until 15 April.

Rose-coloured Starling (Sturnus roseus)
Rosenstær
Several flocks of 20-40 observed by Speyer on 9

May.

Greenfinch (Carduelis chloris) Grønirisk

Greenfinch (Carduelis chloris) Grønirisk According to Woosnam (Witherby 1910) and Schüz (1959) a rare bird in the lowland, but we found it fairly common, even on migration, though numbers were never very large.

Goldfinch (Carduelis carduelis) Stillits
A common migrant during the whole period.

Siskin (Carduelis spinus) Gronsisken Never with certainty observed by Schüz (1959), but we often saw small parties (max. 13) until 10 April, proably due to severe weather conditions in the mountains, where it breeds.

Linnet (Carduelis cannabina) Tornirisk A fairly common passage migrant during the first three weeks, but never in large numbers.

Chaffinch (Fringilla coelebs) Bogfinke
The large numbers seen by SCHÜZ (1959) in
March 1956 and by us (Nielsen & Speyer, 1967)
in late March 1963 were not seen in 1967;
apparently the greater part had left before our
arrival, and we only saw small numbers.

Brambling (Fringilla montifringilla) Kvækerfinke

A few were frequently recorded among Chaffinches. A flock of 10 on 15 April was rather late.

Corn Bunting (*Emberiza calandra*) Bomlærke Migrants were seen regularly but in very small numbers during the whole period.

Yellowhammer (Emberiza citrinella) Gulspurv Recorded in small numbers during the first two weeks, much fewer than expected. An unidentified migrating bunting in the dunes was probably a Rock Bunting (Emberiza cia).

Reed Bunting (Emberiza schoeniclus) Rørspurv Migrants were scarce, but foraging birds were common in the reeds of Gulega. The problem of subspecies is complicated and impossible to solve in the field.

House Sparrow (Passer domesticus) Gråspurv Sparrows proved a very great proportion of the migrating passerines, much greater than seen in Europe, once 1200 in a day. All three species were represented, but P. domesticus formed about 75 % of the total. Migrating flocks could be watched all the day, even late in the afternoon, and hundreds per hour was not unusual. They apparently moved on a very narrow front and kept strictly to the dunes.

Spanish Sparrow (Passer hispaniolensis) Spansk Spurv

It was difficult to get an idea of the accurate number of  $P.\ hispaniolensis$ , since it most often mixed with  $P.\ domesticus$ ,  $10^{\ 0/0}$  of the total may be a conservative estimate. We sometimes found pure hispaniolensis-flocks resting in bushes behind the dunes (max. 200), but migrating flocks were mixed with  $P.\ domesticus$ , and the voice characters were no use for identification.

Tree Sparrow (Passer montanus) Skovspurv  $10-15~^{0}/_{0}$  of all sparrows were P. montanus. Migrants never mixed with the other two species, the flocks being closer and faster, and they were not difficult to detect.

#### DISCUSSION

In the following discussion it should be noted that our results are based on four weeks' field work only, so they must be regarded with some reservation. It is not unlikely to believe, however, that the peculiarities are due to the very special geographical position of Gilan (with mountains on two sides and sea on the other two) in combination with the changeable spring weather, rather than insufficient observations.

The material will be discussed as follows:

- 1. The departure of winter visitors.
- 2. The arrival of passage migrants and/or breeding birds.
- 3. The occurrence of *Charadrius asiaticus* and other waders.
- 4. Migration routes. The possibility of a high-altitude sea-crossing of land birds under certain favourable conditions.

ad 1. Many winter visitors had gone before our arrival, e.g. most ducks, doves, Rooks, thrushes, finches etc. The last thrushes (*Turdus iliacus* and *T. philomelos*) were heard on 7 April at night.

Other winter visitors were departing shortly after our arrival, thus the passage of Cormorants was very strong at the end of March and ended by 3 April. The larger gulls (*Larus ichthyaëtus*, *L. argentatus subspp.*, *L. fuscus*, *L. canus*) departed during the end of March and the first 10 days of April.

All these dates of departing winter visitors are well in accordance with previous investigations, and thus the migration of winter visitors seems to have been unaffected by the late spring.

ad 2. The same cannot be said about the arriving migrants. A great number of species were seen much later than expected, probably owing to the very rough weather at the end of March and the beginning of April. Some of these late arrivals – all common or conspicuous birds and therefore impossible to overlook – are listed below. The figures in brackets indicate approximately how many days earlier they could be expected according to previous observers.

Ciconia ciconia 6 April (15)
Grus grus 20 April (20)
Oenanthe oenanthe 9 April (10)
Oenanthe hispanica 13 April (10)
Sylvia mystacea 1 April (10)
Ficedula albicollis 10 April (10)
Ficedula parva 13 April (5)
Anthus campestris 14 April (15)

In this respect it is worth noticing that we in spite of persistent and careful look-out never saw or heard a single Lesser Whitethroat (Sylvia curruca), a species which Schüz found common from 10 April and Buxton (1921) even from 25 March. This total absence is hard to explain, and the more so considering the fact that we found the normally later arriving Whitethroat (Sylvia communis) fairly common from 13 April, a species which Schüz did not meet with before 27 April.

But Sylvia communis was not the only one to cause confusion regarding migration times. Even in this very late spring we recorded a number of species appearing earlier than expected according to previous observations. These species are listed below, the figures in brackets indicating approximately how many days later they were supposed to arrive.

Circus pygargus 17 April (5)
Falco subbuteo 7 April (5)
Numenius phaeopus 9 April (10)
Limosa lapponica 19 April (10)
Phalaropus lobatus 4 April (10)
Chlidonias hybrida 19 April (15)
Riparia riparia 9 April (10)
Sylvia communis 13 April (10)

These early dates are puzzling. During the unsettled weather period in March — April we sometimes witnessed sudden clearings with very fine visibility in the mountains, and such clearings might allow migrants, that had already reached the southern side of the Elburz Mountains, to make a sudden advance, but this is probably only part of the explanation.

ad 3. Charadrius asiaticus has so far been very scarcely recorded in northern Iran, so the large numbers in 1967 are interesting, though perhaps not surprising considering the breeding range, which lies east and north of the Caspian Sea.

The migration of this plover is not too well elucidated. From its wintering grounds in East Africa it probably goes west of Gilan, and according to Russian authorities it possibly crosses the Caspian Sea in the Baku area. To quote KOZLOVA (1961), who writes about the migration of *Charadrius asiaticus* in the southwest Caspian (in translation):

»The migration routes of the Caspian Plover go through Somalia, Arabia, Syria and Iraq. Most probably they also go through Iran, but evidence of this in the literature is failing. Only Buxton obtained a pair on 1 May at Enseli (= Pahlavi) in the south Caspian, and he stated that it was his only observation of the species. It may be that the plovers accomplish this part of their journey at a very great height without settling to rest and in that way escape notice. Migration directions within the Sovjet Union are not well known and apparently not constant. RADDE observed the spring migration of this plover near Lenkoran in 1866 and 1880. The latter year Caspian Plovers occured in very large numbers, in four days he collected 150 specimens. LOUDON spent several springs in Lenkoran but saw these birds only in March 1911. TUGARINOV did not at all meet with the Caspian Plover in this area in 1937, though he especially studied wader migration«.

Consequently it seems that the Caspian Plover is an irregular passage migrant in the southwest Caspian, some years completely absent, and some years occuring in large numbers. The many negative observations in this corner of the Caspian Sea support the Russian theory of a non-stop flight from Iraq to the breeding grounds. It is possible that the birds will normally not settle, unless they are forced down by rough weather. From Iraq they will have to cross a large area of mountains, where thunderstorms and heavy precipitation are frequent on that time of the year. Many of

the Caspian Plovers we saw on the beach were obviously very tired, and they may have had troubles during their flight over the mountains.

Bad weather may also account for the occurence of other waders, such as Charadrius hiaticula (tundrae?) Xenus cinereus, Calidris minuta, and Calidris alba, all of which have hitherto been recorded very rarely or not at all in Gilan, and it is natural to suppose that under settled weather conditions a lot of waders pass Gilan at great heights without coming down to rest.

ad 4. Apart from herons, ducks, and waders (see p. 52 – 55) the great majority of diurnal migrants was seen moving along the coast towards NW, the coast acting as a guide line. It has previously been pointed out (Schüz 1959, Passburg 1959, Nielsen & Speyer 1967) that the isthmus west of Pahlavi is ideal for watching this coasting movement, the concentration of birds sometimes being considerable.

We had not quite the same impression in 1967. The birds sometimes moved on a very broad front, the lake obviously not being an obstacle of importance. Although the concentration seemed to be greatest at the coast, it was not always possible to survey all the passage from the dunes. For studies on concentrated guide line migration the west coast somewhere south of the Iranian-Russian border would be recommendable, as the lowland here is only about two miles wide (fig. 1).

As mentioned above the spring weather in Gilan is very unsettled. On fine days we expected to watch a large coasting of land birds, but this was not always the case. Sometimes, when conditions seemed the most favourable, we were surprised at the low number of migrants.

The 20th April possibly gave the answer to that question. From our observation post in the dunes at Gulega we watched a great number of birds coming in from the sea, some of them so high that they

were difficult to detect with binoculars, and many were discovered by mere chance. These migrants are listed in table 1, and the direction is illustrated in fig. 3. The birds must have left the coast somewhere further east, and they must have been flying so high that they have been invisible from the ground. It is worth noticing that among them were very typical land birds, e.g. storks, eagles and buzzards. It also deserves notice that the wind, though east by us at Gulega, was *south* in the Sefied-rud valley at the same time.

We have no reason to believe that this sea crossing was unique. Birds following the Sefid-rud valley and leaving the coast at 2.000 or 3.000 meters will have no difficulty in seing the coast in Russian Aserbaidjan. It is probable, therefore, that a high-altitude sea crossing of land birds, as illustrated in fig. 4, regularly takes place on sunny days with fine visibility.

Radar studies in the Sefid-rud estuary might confirm this theory.

To summarize, the main features of the spring migration 1967 in Gilan were:

- 1) The departure of wintering aquatic birds, such as ducks and gulls, did not seem to have been affected by a period of very bad weather in late March and early April. The scarcity of certain early migrants, e.g. Rooks, larks, finches etc., suggested a large departure of these species earlier in March, when the weather had undoubtedly been better.
- The migration of raptors was larger and more varied than expected.
- 3) Many wader species were resting on the beach, apart from plovers they were few in number.
- 4) The diurnal migration of passerines was dominated by Swallows and Yellow Wagtails, and to a lesser extent by Sparrows.

- 5) Some confusion concerning the arrival of passage migrants was noted, some species occurring later and some earlier than expected.
  - 6) The diurnal migration of land birds

most often followed the coast towards NW. Various indications suggested a high-altitude sea crossing on certain days with fine visibility. On such days Gilan is in a sort of vacuum with very few birds to be seen.

#### FIELD NOTES

The avifauna of the south Caspian region is chiefly west palearctic and on the whole well known to a European observer, and only a few species raise identification problems. However, some of the raptors and waders are rarely seen in Europe, so a few brief field notes might be useful.

#### Eagles:

In northern Iran it is possible to see all five palearctic Aquila-eagles, and the possibilities of comparisons are excellent. We saw the Golden Eagle (Aquila chrysaëtos) in the mountains, where it breeds.

All Imperial Eagles (Aquila heliaca) were immature birds, most of them in a pied transition plumage, probably 3-5 years old. It is a large eagle, almost as large as chrysaëtos. The wings are rather square-cut and carried flat. The head is well protruded, more than in the other Aquila-eagles but less than in the White-tailed Eagle (Haliaëtus albicilla).

We saw 19 Steppe Eagles (Aquila rapax), 14 of which were young birds. The young Steppe Eagle is unmistakable, with very characteristic black, white and grey wing patterns (fig. 5). The adult is plain dark brown but may be identified on its flight silhouette. It is more slender and elegant than the Imperial Eagle, the wings look longer and slimmer, they are carried flat but not so stiff; the tail is more ample; the head protrudes less.

The two Spotted Eagles both have curved wings. The Greater Spotted Eagle (Aquila clanga) looks very dark, almost black; it is very broad-winged and has a fairly short tail; it is a rather clumsy eagle.

The Lesser Spotted Eagle (Aquila pomarina) is more well-proportioned with more slender wings and tail; it is brown, never black. For more detailed information on the identification of eagles see Christensen et al. (1968).

#### Harriers:

All four European harriers occur in Gilan, so the possibilities of field studies are perfect. The adult female Pallid Harrier (Circus macrourus) is often considered impossible to identify in the field, but we found it rather easy when not too far away. It has more pointed wings and is more slender than the female Hen Harrier (Circus cyaneus), and thus more resembling the female Montagu's Harrier (Circus pygargus); the secondaries are of a blackishbrown colour, much darker and more extended than in the female cyaneus (fig. 6). The young female has the same dark secondaries, but it is plain red-brown (without streaks) on the underside. This red unstreaked underside is also found in the young pygargus, which has not, however, the dark secondaries. So the female macrourus and female pygargus are much alike in both ages, except for the secondaries. The female cyaneus is a heavier bird than both macrourus and pygargus.

#### Plovers:

The two plovers Greater Sand Plover (Charadrius leschenaultii) and Caspian Plover (Charadrius asiaticus) are long-legged and large as a Dotterel (Eudromias morinellus). They are very different in breeding

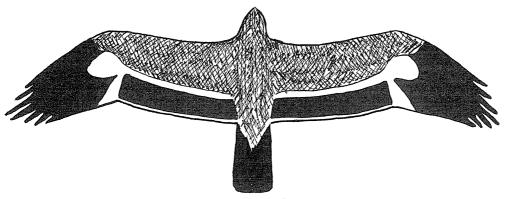


Fig. 5. One of the young Steppe Eagles (Aquila rapax) seen at Gulega, April 20. Note the characteristic wing patterns.

Fig. 5. En af de unge Steppeørne (Aquila rapax) ved Gulega den 20. april. Bemærk det karakteristiske vingemønster.

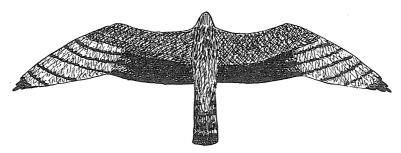


Fig. 6. Adult female Pallid Harrier (Circus macrourus). Note the very dark secondaries.

Fig. 6. Steppehøg (Circus macrourus), gammel hun. Bemærk de mørke armsvingfjer.

plumage and will not be confused, not even the females.

The male *leschenaultii* has a rusty breast band, which is rather diffuse, often extending down the flanks. On the head it has black markings on forehead, brow and earcoverts. The back is grey-brown but not quite plain, the feather edges having a cinnamon tinge. The female is very light, without breast band and without black head markings.

The male asiaticus is one of the most beautiful palearctic waders. It has a clearcut oxblood-coloured breast band, ending below in a narrow black band. Throat and face are white, and there are no black head markings. The back is completely plain and delicate grey-brown. The female has a grey breast band and on the whole more subdued colours.

We never heard the voice of leschenaultii, but asiaticus was heard several times. The solitary asiaticus uttered a short and distinct but soft »tyk tyk tyk«, repeated 3–4 times. When the birds gathered in flocks we noted a quite different voice, a chirping or twitter, not unlike that uttered by a flock of Linnets (Carduelis cannabina). This twitter was very characteristic and far-reaching; we once discovered a migrating flock by this Linnet-like voice, and it may be diagnostic even at night.

#### DANSK RESUMÉ

Yderligere forårsiagttagelser af fuglelivet i Gilan, Nord-Iran.

Materialet til denne artikel er indsamlet i foråret 1967 i den nordiranske provins Gilan, hvor forf. tillige med hr. H-J. Speyer og hr. O. Geertz-Hansen opholdt sig fra den 24. marts til den 21. april. Allerede ved et 3-dages besøg i marts 1963 havde vi fået et indtryk af fuglerigdommen ved søen Mordab, som ligger ganske nær Det Kaspiske Hav, kun adskilt herfra af en smal landtange, og vi beskrev kort vore iagttagelser (Nielsen & Speyer 1967).

GEERTZ-HANSEN og forf. var endnu engang inviteret til en måneds ophold af SPEYER, som på denne tid boede i Ghazian, den østlige bydel af Bandar Pahlavi. Huset lå kun 50 m fra havet, og fra det flade tag havde man en glimrende udsigt over stranden og havet.

Ligesom i 1963 blev vi meget elskværdigt modtaget af hr. M. Dadaschi, på hvis ejendom Gulega vi havde iagttaget fuglelivet i 1963, og hvor vi også denne gang tilbragte megen tid. Gulega ligger, hvor landtangen mellem søen og havet er smallest (ca. 1 km), og stedet er velegnet, bl.a. fordi man her kan forvente en stor koncentration af trækkende fugle.

Foruden Ghazian og Gulega observeredes på kysten fra omkring 10 km øst for Ghazian til floden Mullah-rud (fig. 1). Kun enkelte gange var vi længere inde i landet, den meste tid tilbragtes ved selve kysten.

På grund af den begrænsede tid, vi havde til rådighed, besluttede vi at koncentrere vor opmærksomhed om de trækkende fugle, så der vil i nærværende afhandling kun kunne findes få oplysninger om ynglefuglene.

Kendskabet til Gilans (og hele det sydkaspiske områdes) fugleliv skyldes først og fremmest Schüz (1959), som foruden meget grundige litteraturstudier selv har gjort iagttagelser igennem tre forårsmåneder i 1956, og han kommer også ind på trækproblemer. Vore iagttagelser viste sig i nogen grad at være afvigende herfra, men herom senere. Foruden Schüz har området været besøgt af bl.a. Buxton (1921), Passburg (1959) og Woosnam (Witherby, 1910), hos hvilke man kan finde visse oplysninger om trækket.

#### Vejret:

Foråret 1967 var i Gilan meget sent, fugtigt og koldt. Vinden kom som regel fra retninger mellem NW og NE, for det meste var den ikke særlig stærk, kun én gang (29. marts) var styrken 6-7 Beaufort.

Det regnede hyppigt og rigeligt. Den 29. marts regnede det konstant i 24 timer, og vi fik over 100 mm regn. Men det må bemærkes, at Gilan er det fugtigste område af Iran, med en årlig nedbørsmængde på 1470 mm, så vi kunne ikke forvente det meget anderledes.

Temperaturerne var i slutningen af marts og begyndelsen af april meget lave; den 29. marts viste termometeret 3° C om natten og 5° C ved middagstid. De følgende dage var meget kolde, og før midten af april kom temperaturen sjældent over 10° C. Rigtigt varmt forårsvejr (19°C) kom først den 20. april, dagen før hjemrejsen.

#### Trækkets forløb:

Borttrækket af overvintrende Skarver (*Phalacro-corax carbo*), ænder og måger foregik i slutningen af marts og begyndelsen af april. Mange Skarver og ænder var utvivlsomt trukket nordpå inden vor ankomst.

Trækket af landfugle blev i høj grad generet af det kolde og våde forår, og det startede faktisk ikke før 2.–3. april, i begyndelsen domineret af Råger (Corvus frugileus) og spurve. 6. og 7. april var to fine dage, især for rovfugle, Landsvaler (Hirundo rustica) og Gule Vipstjerter (Motacilla flava). En anden fin dag var den 20.april, og den 21. viste tegn på lignende kvaliteter.

Størstedelen af fulgene fulgte kysten mod NW. Undtagelser var mange hejrer, ænderne og nogle vadere; disse vil blive omtalt senere. Fuglene kom ofte på en bred front, og koncentrationen på tangen var ikke altid så tydelig; af og til fløj fuglene langt ud over søen.

Særlig interessant var trækket den 20. april, da mindst 80 % af fuglene ved Gulega kom ind fra NE, heriblandt både Storke (*Ciconia spp.*), rovfugle og småfugle (fig. 3 og tabel 1). Vinden ved Gulega var E, men senere erfarede vi, at der hele dagen havde været en stærk sydlig vind syd for Rasht, så det er tænkeligt, at mange fugle er blevet drevet ud over havet længere østpå.

Flyvehøjden denne dag var fantastisk, 1.000 m for nogle af rovfuglene er måske for forsigtigt anslået. Alle rovfuglene kom i langsom glideflugt (hvorved de hele tiden tabte højde), og dette indebærer, at de må have været endnu højere oppe ude over havet.

Sådanne store højder observeredes flere gange. Vi så engang to Fiskehejre (Ardea cinerea) i ca. 3.000 m, og Sølvhejre (Egretta alba) og Silkehejre (Egretta garzetta) blev set i højder mellem 1.000 og 2.000 m. Sommetider fløj de trækkende småfugle så højt, at det var umuligt at tælle endsige bestemme dem.

Vi rejste for tidligt til at opleve trækket af Turtelduer (Streptopelia turtur), Biædere (Merops apiaster), Ellekrager (Coracias garrulus), mange af sangerne samt tornskaderne. En del af disse blev dog senere set af Speyer.

#### Hejrer:

Hejrene udgjorde en iøjnefaldende del af trækket. De fleste kom efter den 14. april, og flg. fem arter var repræsenteret: Fiskehejre, Purpurhejre (Ardea purpurea), Sølvhejre, Silkehejre og Nathejre (Nycticorax nycticorax). De viste en tydelig tendens til at forlade kysten, som det ses af fig. 2. Fiskehejre, Purpurhejre og Nathejre sås for det meste sidst på eftermiddagen og ved solnedgang; de to første hørtes også om natten.

#### Ænder:

Som ventet var de fleste ænder forsvundet da vi ankom. Alligevel så vi en del flokke af svømmeænder trække i nordlig retning indtil medio april. Arterne var Krikand (Anas crecca), Atlingand (Anas querquedula), Spidsand (Anas acuta) og Skeand (Anas clypeata). De fløj meget højt over land, men når de nåede havet, fortsatte de ganske lavt over havoverfladen, som regel stik nord.

#### Rovfugle:

Den store rigdom på trækkende rovfugle er vist i tabel 2. Sammenligner man med europiske forhold, indtager ørne og kærhøge en fremtrædende plads. De fleste rovfugle – 72 % – sås på tre dage, 6., 7. og 20. april, og de sås ofte i løbet af nogle få timer hver dag. Især ørnene kom ofte med en overraskende pludselighed. Således passerede de syv Kejserørne (Aquila heliaca) den 7. april på et kvarter, og sytten Steppeørne (Aquila rapax) den 20. april kom i løbet af 10 miniutter. Den 6. april talte vi femten Store Skrigeørne (Aquila clanga), en Lille Skrigeørn (Aquila pomarina) og seks Havørne (Haliaëtus albicilla) på en time.

Antallet af Musvåger (Buteo buteo) var ikke stort sammenlignet med nordeuropæiske forhold. De trækkende våger syntes alle at tilhøre racen vulpinus Gloger; nogle af dem havde en svag lighed med Ørnevåger (Buteo rufinus), men denne art så vi ikke nord for bjergene.

Sort Glente (*Milvus migrans*) var langt den talrigste rovfugl, både som trækfugl og som ynglefugl. Trækket var til tider meget kraftigt (tabel 2).

Det anselige kærhøgetræk var domineret af Steppehøg (Circus macrourus). Det var vort indtryk, at størstedelen af de ubestemte kærhøge var Steppehøge. Den første Hedehøg (Circus pygargus) viste sig den 17. april; trækket af denne art formodes at kulminere omkring 1. maj.

Vi iagttog syv arter af falke. De to Tårnfalke (Falco tinnunculus og Falco naumanni) var som ventet de talrigste. Rastende Vandrefalke (Falco peregrinus) og Dværgfalke (Falco columbarius) sås ret ofte; en gang så vi en han af den meget smukke stepperace pallidus Sushkin (= christia-

ni-ludovici Kleinschmidt af Dværgfalken. De to Aftenfalke (Falco vespertinus) den 21. april var tilsyneladende et par. Endnu en Aftenfalk blev set den 30. april af Speyer.

#### Vadefugle:

Ialt 29 arter iagttoges. Nogle få trak langs kysten og nogle få forlod kysten i nordlig retning, men langt de fleste vadere blev set rastende på selve stranden. Også på den oversvømmede flyveplads ved Ghazian kunne man finde vadere, og enkelte arter kunne ses ved Lake Mordab og på rismarkerne.

Forekomsten af Kaspisk Præstekrave (Charadrius asiaticus) fortjener særlig omtale. Den første han sås på stranden den 4. april. Første hun viste sig den 9. april. Tre dage senere så vi 5  $\stackrel{?}{\circ}$   $\stackrel{?}{\circ}$  2  $\stackrel{?}{\circ}$  på den oversvømmede flyveplads, næste dag 1  $\stackrel{?}{\circ}$  1  $\stackrel{?}{\circ}$  på stranden. Den 14. april talte vi omkring 400 på stranden mellem Pahlavi og Tisrud (25 km), men herefter fandtes kun ret få. Disse iagttagelser er interessante, da arten ikke tidliger er rapporteret fra Gilan i mere end nogle få eksemplarer. Forekomsten diskuteres på side 66.

#### Spurvefugle:

Bortset fra den 20. april fulgte alle trækkende spurvefugle kysten mod NW. Koncentrationen på tangen var ikke altid særlig tydelig, visse arter, f.eks. Landsvale, kom ofte på en bred front. Kun spurvene holdt sig altid helt ude ved klitterne.

Størsteparten af Sanglærker (Alauda arvensis), Råger og Stære (Sturnus vulgaris) havde tilsyneladende forladt området før vor ankomst, og disse arter blev set i mindre tal end ventet. De dominerende arter i vor periode var Landsvale, Gul Vipstjert og de tre spurve. Grønirisk (Carduelis chloris), Stillits (Carduelis carduelis) og Tornirisk (Carduelis cannabina) var mindre talrige end ventet.

Den systematiske liste indeholder alle fugle, set i Gilan i tiden 24. marts til 21. april. Også en del af Speyers notater indtil slutningen af maj er med. Listen findes på p. 56 – 65, de danske navne er vedføjet.

#### Diskussion:

1) Borttrækket af overvintrende vandfugle, som f.eks. Skarver, ænder og måger, syntes at være upåvirket af det ugunstige forårsvejr. De fleste ænder var taget af sted, da vi ankom, og Skarver og måger forsvandt i slutningen af marts og begyndelsen af april.

Derimod var trækket af landfugle stærkt generet af vejret. Det var især tydeligt for de sydfra kommende fugle, af hvilke en række arter kom betydeligt senere end ventet. Det bør nævnes, at vi aldrig så en eneste Gærdesanger (Sylvia curruca), en art der ellers skulle kunne forventes allerede fra begyndelse af april. Derimod kom Tornsangeren (Sylvia communis) så tidligt som den 13. april.

Men også andre arter ankom – trods det sene forår – tidligere end ventet, nemlig Hedehøg (Circus pygargus), Lærkefalk (Falco subbuteo), Småspove (Numenius phaeopus), Lille Kobbersneppe (Limosa lapponica), Odinshane (Phalaropus lobatus), Hvidskægget Terne (Chlidonias hybrida) og Digesvale (Riparia riparia). Hvad grunden til disse tidlige ankomster nu end kan være, så kan det konstateres, at foråret 1967 bragte en hel del forvirring m.h.t. vore forestillinger om fuglenes ankomsttider i Gilan.

- 2) Kaspisk Præstekrave (Charadrius asiaticus) er hidtil kun truffet yderst fåtalligt i Gilan. Det ser ud til, at denne arts forårstræk foregår meget hurtigt. Russiske kilder angiver om dens forekomst i Lenkoran-området (lige nord for den iransk-russiske grænse), at den i visse år kan træffes i store mængder, men at den i andre år mangler totalt. Den overvintrer i Østafrika og forekommer om foråret i Iraq i stort tal, og det ser ud til, at den visse år foretager flyvningen fra Iraq til ynglepladserne øst for Det Kaspiske Hav i ét stræk. Det er tænkeligt, at fuglene kun mellemlander i det sydvestlige hjørne af det Kaspiske Hav, hvis de bliver tvunget ned af dårligt vejr. Mange af de fugle, vi så, viste påfaldende tegn på træthed. Denne forklaring gælder måske også for nogle andre vadere, vi iagttog, men som hidtil har været ukendte eller meget sjældne i Gilan.
- 3) Som tidligere nævnt fulgte de fleste trækfugle kysten mod nordvest. Selvom koncentrationen normalt var stærkest ved kysten, var det tydeligt, at nogle arter kom på en meget bred front, og for at kunne studere et virkelig koncentreret ledelinietræk må man nok flytte iagttagelserne til kysten lidt nord for 38° N, hvor lavlandet kun er 2–3 km bredt.

At vejret i slutningen af marts og begyndelsen af april var meget ustadigt, er tidligere omtalt. Når det af og til klarede op og blev smukt solskin, hvilket kunne ske ret pludseligt, ventede vi at se et stort træk af fugle, men flere gange blev vi skuffet. Trækbilledet den 20. april gav måske svaret på dette problem. Mindst 80 % af fuglene kom denne dag ind fra havet fra nordøst, og de var alle fantastisk højt oppe; vi bedømte nogle af rovfuglene til at være mindst 1.000 m oppe. Det er indlysende, at disse fugle, der kom ind ved Gulega, og iblandt hvilke der var typiske landfugle som storke, ørne og våger, må have forladt kysten længere østpå, og da rovfuglene kom i langsom glideflugt (hvorved de hele tiden taber højde), er det også givet, at de må have

været oppe i meget store højder, da de forlod kysten, formentlig har de været usynlige fra jorden. Det er derfor sandsynligt, at trækket på dage med meget fint vejr foregår i så store højder, at det ikke kan observeres fra jorden. Fugle der forlader kysten ved Sefid-rud flodens udløb i 2.000 eller 3.000 m højde, vil sagtens kunne se bjergene i russisk Aserbaidjan, og der er næppe tvivl om, at mange trækfugle simpelt hen skærer hele det sydvestlige hjørne af Det Kaspiske Hav, hvorved Gilan kommer til at ligge i en slags vacuum (jvf. vadefuglene). Radarundersøgelser i det østlige Gilan ville sikkert kunne bekræfte denne teori.

#### Feltkendetegn:

Der gøres i artiklen kort rede for feltkendetegnene for ørne, kærhøge og de to store præstekraver. M.h.t. ørne henvises til Christensen et al. (1968). Hos kærhøgene regnes hunnen af Steppehøgen (Circus macrourus) ofte for umulig at kende fra de andre kærhøgehunner. Det viste sig dog, at den ikke var så svær, idet den på selv ret store afstande viste sine sortbrune armsvingfjer, et kendetegn der klart adskilte den fra de andre kærhøgehunner. Steppehøgens hun er desuden mere spidsvinget og lettere bygget end hunnen af Blå Kærhøg (Circus cyaneus). Den unge hun af Steppehøgen har ustribet rødbrun underside ligesom den unge hun af Hedehøgen( Circus pygargus), men Steppehøgens mørke armsvingfjer er igen afgørende kendetegn. Helt unge hanner af alle tre arter ligner hunner.

Ørkenpræstekrave (Charadrius leschenaultii) og Kaspisk Præstekrave (Charadrius asiaticus) er begge større end Stor Præstekrave (Charidrius hiaticula), de er på størrelse med Pomeransfuglen (Eudromias morinellus). I sommerdragt er de meget forskellige, ikke engang hunnerne vil kunne forveksles. Ørkenpræstekravens han har et bredt rustrødt brystbånd, som er ret diffust og ofte strækker sig ned ad kropssiderne. På hovedet findes sorte tegninger på panden samt over og bag øjet. Hunnen har intet brystbånd og ingen sorte tegninger på hovedet og er i det hele taget meget lys.

Hannen af den Kaspiske Præstekrave hører til de smukkeste palæarktiske vadefugle. Den har et bredt okseblodsfarvet brystbånd, som mod bugen afgrænses af et smalt sort bånd. Ansigtet er hvidt, og hovedet er uden sorte tegninger. Hunnen har et gråt brystbånd og i det hele taget mere afdæmpede farver.

Vi hørte ikke Ørkenpræstekravens stemme, hvorimod den Kaspiske Præstekrave hørtes flere gange: Den enlige fugl udstødte et kort »tyk tyk tyk«. Fra en flok hørtes derimod en helt anden stemme, nærmest en konstant kvidren, der kan sammenlignes med den kvidren, man kan høre

fra en flok Tornirisker (Carduelis cannabina). Denne stemme var meget karakteristisk og kunne bruges til artsbestemmelse af en flyvende flok vadefugle.

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