

Some observations on the Siberian Crane wintering at Fereidoonkenar, Iran

E. Vuosalo-Tavakoli

Abstract

Some observations on the small Siberian Crane (*Grus leucogeranus*) population wintering at Fereidoonkenar, Iran, are reported. During the last decade the number of birds has varied between 10 and 11 (probably up to 14 in 1988-89). This small flock is endangered due to local hunting activities.

Introduction

The number of this smallest and, therefore, most endangered population of Siberian Cranes (*Grus leucogeranus*) has remained almost stable for the last decade, although each year 2 juveniles have been observed (even 3 in 1988-89), indicating a loss on the still almost unknown migratory route to and from their winter habitat in Iran apart from the losses occurring in this habitat (2-3 in five years). Some observations made between 1984 and 1989 during the studies of the ecology of this endangered group of cranes in their winter habitat in Iran are described in this paper.

Methods

Observations made during frequent visits to the area at arrival and departure times were compared with the migratory behaviour of the species reported by Sauey (1985). Fieldwork at this site was rather difficult and sometimes impossible due to the prevailing local and revolutionary conditions as well as to the identity of the researcher (foreign-born female, though it would have been even harder for a native woman). Thus, a consistent methodology could not be applied and, therefore, the results are accidental.

Winter habitat at Fereidoonkenar

The wintering area of this Siberian Crane population is located in the Caspian lowlands (30 m below sea-level) of the Mazandaran province near the town of Fereidoonkenar, at 36°40'N, 52°60'E. A part of this area of about 100 ha is technically under the jurisdiction of the Department of Environment, with 50 ha declared a protected region, but in fact the farmers who own and cultivate the land have the control over their ricefields, which they have traditionally used for trapping wildfowl in the winter-flooded fields.

Migratory pattern and migration route

The first report on Siberian Cranes in this Caspian littoral area goes back to 1773 (C. Hablitzl) in the Gilan province, and some other reports date from the turn of the century and the 1920's when some birds were seen on the west side of the Caspian Sea in Gilan. The currently known population was first officially discovered further east in Mazandaran. However, these cranes have been known to the local farmer-trappers for at least 50 years or more, i.e. as far as the oldest farmers can remember.

Therefore, it has been assumed that the current population is a relic of a larger population that wintered in the western parts of the lowlands and, after some years, drifted eastwards to more suitable habitats like Fereidoonkenar. That population had apparently migrated to the north along the west side of the Caspian Sea with a traditional stop-over at the Astrakhan Reserve, where they are still found both in spring and fall though their breeding and summer resting places are still unknown. It is also not clear whether there is a mixing of the Indian and Iranian birds at Astrakhan.

The direction of departure of the Iranian birds was westwards the two times I observed them leaving (in 1985 and 1989). They may have continued their flight along the west side of the Caspian Sea to Astrakhan. Thus they would be following an ancient route to the nesting grounds. Even if their nesting grounds were in Siberia, the shorter and maybe even safer route would be along the east side of the Caspian Sea.

Migratory behaviour at Fereidoonkenar

The first observations verifying a protracted arrival pattern were made in the fall of 1987, when the first cranes had arrived on Oct. 8th and I observed two families on their respective territories on Oct. 14th. I did not see the whole flock until December, but they had probably arrived in November. In the fall of 1988, I observed the first two family groups on Oct. 28th on the same territories as in the fall before.

Roosting behaviour

One family had been observed arriving on Oct. 25th. On 3rd November I saw eight and on 12th November eleven cranes, which I considered to be the size of the whole flock for the rest of the season, although one was rumoured to have been killed by a young trapper. It had previously been reported to me how the cranes landed together at their arrival and stayed together for a few days. My first visits to the area (called "damgah") started in November, and it is true that, at the beginning of the season, the cranes tend to feed closer together even on the same territories while there is plenty of food. But the protracted arrival pattern also coincides with that of the Indian population. Therefore, it is apparent that the Siberian Cranes arrive in groups at their winter habitat, with probably the same birds arriving first each year, within two to three weeks from about mid-October to mid-November.

Departure, however, has been observed to happen both together and separately, but in the latter case definitely under disturbed conditions. In spring 1985, I observed the departure of the whole group of ten cranes on 5th March at 9:30 hours, on a cold (about 12°C) but sunny day. In the spring of 1987, they disappeared on almost the same date, on 4th March, after a severe storm and still in rainy weather.

However, in the springs of 1986, 1988 and 1989, the birds left separately and before the usual migration date due to disturbances in the area. In 1986, the weather was very warm in February and in the last week the farmers started tilling their fields and dredging a canal close to the crane territories.

In 1988, farmers began the hunting season on 20th February, driving all cranes but one couple away from the area. These two birds stayed in the nearby smaller "damgah" of Esbaran feeding until regular migration time. Then, missiles fell on Teheran on 29th February. The next day I still observed both of them feeding at 17:00 h in a pond, but only one was left on the next morning at 9:00 h. For the next two days I still found the widowed crane feeding alone. On 4th March it started circling at 10:00 h and left the area westwards.

Although cranes usually roost together, I suspected that they mostly roosted separately in the last 3 years. Last winter I saw all the crane groups separated, except two that moved together. It is from this count at night that I believe there were 14 birds in this wintering flock, i.e. three families, two couples and one lonely bird. During the day, however, I was not able to observe the 3 juveniles to verify the above count, but Mr Behrouzi-rad reported that he saw 3 juveniles together in February 1989. Thus, I believe that last season's flock comprised 14 birds, i.e. it was the largest in the last decade. Thus, though the birds usually roost in different territories, they gather before departure to leave together.

Conclusion

The migration pattern of this small flock of Siberian Cranes has been altered by disturbances during the last years. It is obviously necessary that plans to protect this population in Iran become a cooperative effort of all concerned people, including local residents and influential agencies. The publicity, however, could be counter-productive rather than helpful. Therefore, the education of the public and even of officials does not depend on the mere dissemination of information, but on testing the different attitudes of various groups and people first. The question is if cranes can survive until the conditions for their survival have been developed.

Table 1: Arrival and departure dates and numbers of individuals of the Siberian Crane flock wintering at Fereidoonkenar, Iran *

Year	Arrival date	Departure date	Total number of birds		Territorial families, groups and pairs
			fall	spring	
1977-78	-	-	14	11	-
1984-85	-	5th March	-	10	2,2,3,3 (or 2, 2,2,3,1)
1985-86	-	24-25th Feb.	11	11	2,2,3,3,1
1986-87	-	4th March	11	11	2,2,3,3,1
1987-88	8th Oct.- Nov.	20th Feb.- 4th March	11	10	2,2,3,3,1
1988-89	25th Oct.- 12th Nov.	1st March	11-14	11-14	2,2,3,3,1 (or 2,2,3,3,3,1)

* according to pers. comm. from Charmantal-e-Bakhtiary, B. Behrouzi-Rad, M. Ashtiany, and pers. obs.

References

- Birula, A. (1912): Contribution à la classification et à la distribution géographique dans la Perse. Par M.N.A. Zarudnyi en 1896, 1998, 1900-1901 et 1903-1904

Annuaire du Musée Zoologique de l'académie impériale des sciences de St. Petersburg, 17. No. 3-4

- Dementec, G.P. and R.N. Meklenburtsev (1951): Birds of the Soviet Union, v. 2, Moscow.

Israel Program for Scientific Translation, Jerusalem (1969)

- Gabriel, A. (1952): Die Erforschung Persiens. Verlag Adolf Holzhausen, Wien, 358 pp

- Sauey, R.T. (1985): The range, status, and winter ecology of the Siberian Crane *Grus leucogeranus*. PhD Thesis, Cornell University, 427 pp

- Vuosalo-Tavakoli, E. (1987): The Siberian Crane in Iran.

In: Proc. Int. Crane Workshop (Ed. J. Harris), Baraboo, WI, USA

- Vuosalo-Tavakoli, E. (1989): Current status of the Siberian Crane wintering in Iran.

Workshop for Crane and Wetland Research (21-24 January, 1989), Pune University, India