Siberian Crane Leucogeranus leucogeranus numbers on the increase at Muraviovka Park, Far East Russia

Article *in* BirdingAsia · July 2016

CITATIONS
3

READS
338

2 authors:

Martin Suanjak
Umweltbundesamt, Austria
6 PUBLICATIONS **9** CITATIONS
SEE PROFILE

Wieland Heim
Carl von Ossietzky University of Oldenburg
116 PUBLICATIONS **828** CITATIONS
SEE PROFILE

NOTEBOOK

Siberian Crane *Leucogeranus leucogeranus* numbers on the increase at Muraviovka Park, Far East Russia

MARTIN SUANJAK & WIELAND HEIM

The Critically Endangered Siberian Crane *Leucogeranus leucogeranus* population numbers about 3,800–4,000 individuals (BirdLife International 2016). The vast majority of these form the Eastern Flyway population that breeds in Yakutia, eastern Siberia, and winters at Poyang Lake, Jiangxi province, China (Tamm 2015); this population is now believed to be stable (Harris & Mirande 2013). The migration route passes through the Amur region, as shown by satellite-tracked birds (Kanai *et al*. 2002), with the majority of sightings coming from wetlands along the Zeya River, a northern tributary of the Amur (Andronov & Parilov 2009). There were no verified records of Siberian Crane at Muraviovka Park, Far East Russia (Heim & Smirenski 2013, Heim *et al*. 2015) prior to 2001, despite regular visits and intensive crane monitoring activities by S. M. Smirenski during the 1990s (Nosatchenko & Smirenski 2007, Smirenski 2008). In May 2001 a six-strong flock was seen, followed by a flock of 24 in May 2007. The largest flock to date was found on 8 May 2008, when at least 70 Siberian Cranes were seen (Smirenski 2008). In the same year, it was found that conditions at roosting sites in north-east China, not far from Muraviovka Park, were very suitable for this species (Jiang *et al*. 2015).

Plate 1. Juvenile Siberian Crane *Leucogeranus leucogeranus*, Muraviovka Park, Far East Russia, 5 October 2013.

STEVE KLASAN

In 2013, Siberian Cranes were seen at Muraviovka Park during autumn migration for the first time. A family of three birds stayed from 5–6 October, after which 20 individuals (19 adults, one juvenile) were seen on 24 October and 25 (22 adults, three juveniles) were seen on 25 October (Table 1). One adult was seen on 18–19 September 2014, associating with White-naped Cranes *Antigone vipio*. Autumn 2015 was exceptional, with at least 65 different birds seen on five days between 9 September and 4 October (Table 1), about 1.6% of the estimated global population (BirdLife International 2016). The

Table 1. Records of Siberian Cranes at Muraviovka Park, 2001–2015.

Date	Number	Source/Observer(s)
May 2001	6 immatures	Smirenski (2008)
May 2007	24	Smirenski (2008)
8 May 2008	48 adults, 22 immatures	Smirenski (2008)
9 May 2009	12	Stein (2011)
5–6 October 2013	2 adults, 1 juvenile	S. Klasan, B. Jahnke, P. Fetting
24 October 2013	19 adults, 1 juvenile	S. Klasan, B. Jahnke
25 October 2013	22 adults, 3 juveniles	S. Klasan, B. Jahnke
18–19 September 2014	1 adult	W. Heim, A. Heim, F. Böhm, U. Schuster
9 September 2015	2 adults	S. M. Smirenski *et al.*
29 September–1 October 2015	Total of 48 adults and 12 juveniles	C. Weinrich, S. Wolf, M. Sander, N. Schäfer, D. Trense, M. Suanjak
4 October 2015	2 adults, 1 juvenile	M. Suanjak

STEVE KLASAN

Plate 2. Two adult Siberian Cranes, Muraviovka Park, 5 October 2013.

Plate 3. Families of Siberian Cranes roosting at Muraviovka Park, September 2015.

MARTIN SUANJAK

largest flock (30 adults, three juveniles) was seen in flight at 10h35 on 30 September, circling northwest of the park headquarters to gain height and clearly struggling against a Beaufort scale force 4 southerly wind; they remained in view until 11h35 when they were lost in the distance to the west, following the Amur River southwards, and they did not return that evening.

When resting, the Siberian Cranes often stand some distance away from other crane species, and spend much time preening. However, to date no ringed birds have been found.

A similar pattern of a growing number of observations of Siberian Cranes over the last 15 years has also been noted in Dauria (Transbaikalia—to the east of Lake Baikal) during May–August, comprising non-breeding birds, many less than three years old (Goroshko & Balzhimayeva 2014).

Extreme and extensive flooding which affected huge areas of wetlands in the Amur River basin during summer 2013, for the first time since the 1980s (Sokolova 2015), may explain the high numbers of Siberian Cranes in the following years: the species is very dependent on aquatic plants (Wu *et al*. 2009), which may have been scarce in the Muraviovka Park area in the years preceding the flood. Only rarely do Siberian Cranes feed in wet meadows (Jia *et al*. 2013) or hunt for fish (Degtyaryev 2013). However, the years 2007−2009, when Siberian Cranes were also seen several times at Muraviovka Park, were rather dry (Sokolova 2015). Why they were noted only during spring migration between 2001 and 2009 but only during autumn migration since 2013 remains unknown—although cranes migrate much more quickly in spring and birds might have been overlooked (Smirenski 2008).

These observations indicate the potential importance of Muraviovka Park as a roosting site for the Critically Endangered Siberian Crane in addition to Hooded Cranes *Grus monacha* (up to 1,031 individuals in autumn 2015) and White-naped Cranes (up to 654 individuals in autumn 2015), as well as the small breeding populations of Red-crowned *G. japonensis* and White-naped Cranes (Heim & Smirenski 2013).

Acknowledgements

This study was supported by grants from the Förderkreis Allgemeine Naturkunde (Biologie) e.V., the Deutsche Ornithologen-Gesellschaft e.V. and the Oriental Bird Club. Many thanks to Sergei M. Smirenski, Svetlana Yakovenko and everybody at Muraviovka Park for supporting the Amur Bird Project. We also thank all volunteers who took part in the surveys between 2011 and 2015, and special thanks to Steve Klasan for his images.

References

Andronov, V. A. & Parilov, M. P. (2009) Siberian Crane *Grus leucogeranus*. In Amur Red Data Book. Downloaded from: http://redbook-amur.ru/5-53.php on 19/01/2016. (In Russian.)

BirdLife International (2016) Species factsheet: *Leucogeranus leucogeranus*. Downloaded from http://www.birdlife.org on 08/04/2016.

Degtyaryev, V. G., Sleptsov, S. M. & Pshennikov, A. E. (2013) [Piscivory in eastern population of Siberian Crane (*Grus leucogeranus*).] *Zoologichesky Zhurnal* 92(5): 588. (In Russian.)

Goroshko, O. & Balzhimayeva, S. (2014) Siberian Crane sightings in Dauria, Russia. *Siberian Crane Flyway News* 13: 4.

Harris, J. & Mirande, C. (2013) A global overview of cranes: status, threats and conservation priorities. *Chinese Birds* 4: 189–209.

Heim, W. & Smirenski, S. M. (2013) The Amur bird project at Muraviovka Park in Far East Russia. *BirdingASIA* 19: 31–33.

Heim, W., Eidam, F. & Smirenski, S. M. (2015) New breeding records of Little Grebe *Tachybaptus ruficollis* and Common Moorhen *Gallinula chloropus* at the northern limit of their Asian range. *BirdingASIA* 23: 60–62.

Jia Y., Jiao S., Zhang Y., Zhou Y., Lei G. & Liu G. (2013) Diet shift and its impact on foraging behavior of Siberian Crane (*Grus leucogeranus*) in Poyang Lake. *PLoS ONE* 8(6): e65843. http://doi:10.1371/journal.pone.0065843.

Jiang H., He C., Sheng L., Tang Z., Wen Y., Yan T. & Zou C. (2015) Hydrological modelling for Siberian Crane *Grus leucogeranus* stopover sites in northeast China. *PloS ONE* 10(4): e0122687. http://doi.org/10.1371/journal.pone.0122687.

Kanai, Y., Ueta, M., Germogenov, N., Nagendran, M., Mita, N. & Higuchi, H. (2002) Migration routes and important resting areas of Siberian cranes (*Grus leucogeranus*) between northeastern Siberia and China as revealed by satellite tracking. *Biol. Conserv.* 106: 339–346.

Nosatchenko, G. V. & Smirenski, S. M. (2007) The structure and distribution of crane roosting sites in Muraviovka Park for sustainable land use. *Eurasian J. For. Res.* 10(1): 139–143.

Smirenski, S. M. (2008) A snow-white flock. Downloaded from http://www.muraviovkapark.ru/engDiaryBirds11.html on 17/12/2015.

Sokolova, G. V. (2015) Analyzing the Amur River water regime for the period preceding the catastrophic flood in 2013. *Russ. Meteorol. and Hydrol.* 40: 477–479.

Stein, A. C. (2011) Ornithological observations within Muraviovka Park zakaznik during 2009 and 2010. *Amurian Zool. J.* 3: 78–85.

Tamm, J. (2015) Breeding Siberian Crane *Leucogeranus leucogeranus* and Yellow-billed Loon *Gavia adamsii* in northern Yakutia, Russia. *BirdingASIA* 23: 47–53.

Wu G., de Leeuw, J., Skidmore, A. K., Prins, H. H. T., Best, E. P. H. & Liu Y. (2009) Will the Three Gorges Dam affect the underwater light climate of *Vallisneria spiralis* L. and food habitat of Siberian Crane in Poyang Lake? *Hydrobiologia* 623: 213–222.

Martin SUANJAK
Wolfganggasse 36/12–13, 1120 Vienna, Austria
Email: martin.suanjak@gmx.at

Wieland HEIM
Amur Bird Project, Roseggerstraße 14
14471 Potsdam, Germany
Email: amurbirding@gmx.de