

The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

NOTE

TWO NEW LOCATIONS FOR THE VULNERABLE BLACK-NECKED CRANE *GRUS NIGRICOLLIS* (PRZHEVALSKY, 1876) (AVES: GRUIFORMES: GRUIDAE) IN ARUNACHAL PRADESH, INDIA

Rohan Krish Menzies, Megha Rao & Abhinav Kumar

26 August 2019 | Vol. 11 | No. 10 | Pages: 14381–14384

DOI: 10.11609/jott.5337.11.10.14381-14384



For Focus, Scope, Aims, Policies, and Guidelines visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-0>

For Article Submission Guidelines, visit <https://threatenedtaxa.org/index.php/JoTT/about/submissions#onlineSubmissions>

For Policies against Scientific Misconduct, visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-2>

For reprints, contact [<ravi@threatenedtaxa.org>](mailto:ravi@threatenedtaxa.org)

The opinions expressed by the authors do not reflect the views of the Journal of Threatened Taxa, Wildlife Information Liaison Development Society, Zoo Outreach Organization, or any of the partners. The journal, the publisher, the host, and the partners are not responsible for the accuracy of the political boundaries shown in the maps by the authors.

Partner



صندوق محمد بن زايد
للمحافظة على
الكائنات الحية

The Mohamed bin Zayed
SPECIES CONSERVATION FUND

Member



Publisher & Host



TWO NEW LOCATIONS FOR THE VULNERABLE BLACK-NECKED CRANE *GRUS NIGRICOLLIS* (PRZHEVALSKY, 1876) (AVES: GRUIFORMES: GRUIDAE) IN ARUNACHAL PRADESH, INDIA

Rohan Krish Menzies¹ , Megha Rao²  & Abhinav Kumar³ 

^{1,2} Nature Conservation Foundation, 1311, “Amritha”, 12th Main, Vijayanagar 1st Stage, Mysuru, Karnataka 570017, India.

³ Divisional Forest Officer, Along Forest Division, West Siang District, Arunachal Pradesh 791001, India.

¹ rohanmenzies@ncf-india.org (corresponding author),

² megha@ncf-india.org, ³ abhinavkumar623@gmail.com

Black-necked Cranes *Grus nigricollis* are a globally Vulnerable species which breed across the Qinghai-Tibetan Plateau to the Ladakh region of northern India and winter south in Bhutan and parts of western Arunachal Pradesh, India (Birdlife International 2017). It is estimated that there are around 10,000 individuals globally with a decreasing trend in populations (Birdlife International 2017). In India, this large bird has been previously sighted on numerous occasions in the Ladakh region in the western Himalaya and from three main valleys in the eastern Himalaya—the Zemithang Valley, Sangti Valley, and the Chug Valley, Arunachal Pradesh (Mazumdar & Samal 2012; Chandan et al. 2014; Mize

et al. 2018). Historically, the Black-necked Crane was sighted in the Apatani Valley, in the Subansiri region of central Arunachal Pradesh in 1979 (Chandan et al. 2014). It is thought that the population wintering in Subansiri was hunted out by the local communities. The species has also been reported from the high-altitude region of Sikkim, India, which is also part of the eastern Himalaya belt (Acharya & Vijayan 2010; Chandan et al. 2014) and from two sites in the Namdapha Tiger Reserve, the easternmost sightings for India (Srinivasan et al. 2010). Here we describe two new locations in Arunachal Pradesh for the Vulnerable Black-necked Crane: one being a potential wintering site and the other a stopover site on a possible flyway (Fig. 1).

Mechuka (1,829m; 28.58°N, 94.12°E) is located in the Shi Yomi District of Arunachal Pradesh and is nestled in between snow-capped mountains on three sides. Mechuka is about 28km (aerial distance) from the Chinese border and is located to the south of the Tibetan Plateau. The Yargyap Chu River flows through the town and there are large open spaces consisting of grassland, high altitude marshland and cultivated land which are well-suited for Black-necked Cranes. On 23 December 2017, an injured juvenile Black-necked



ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

PLATINUM
OPEN ACCESS



DOI: <https://doi.org/10.11609/jott.5337.11.10.14381-14384> | ZooBank: urn:lsid:zoobank.org:pub:E6E1F53A-7BA3-4BEE-BE0A-2200FED2ADD

Editor: K.S. Gopi Sundar, Nature Conservation Foundation, Mysuru, India.

Date of publication: 26 August 2019 (online & print)

Manuscript details: #5337 | Received 16 August 2019 | Finally accepted 20 August 2019

Citation: Menzies, R.K., M. Rao & A. Kumar (2019). Two new locations for the Vulnerable Black-necked Crane *Grus nigricollis* (Przhevalsky, 1876) (Aves: Gruiformes: Gruidae) in Arunachal Pradesh, India. *Journal of Threatened Taxa* 11(10): 14381–14384. <https://doi.org/10.11609/jott.5337.11.10.14381-14384>

Copyright: © Menzies et al 2019. Creative Commons Attribution 4.0 International License. JOTT allows unrestricted use, reproduction, and distribution of this article in any medium by adequate credit to the author(s) and the source of publication.

Funding: Wildlife Conservation Trust - India; Inlaks Ravi Sankaran Foundation; Rufford Small Grant for Nature Conservation.

Competing interests: The authors declare no competing interests.

Acknowledgements: We thank Rohit Naniwadekar for his guidance and support during this project and for providing comments on a previous version of this manuscript. We thank R. Raghunath for help with the map. We are grateful to Dorjee Khandu Thungon for providing us with information and photographs from Shergaon. We thank the Garung Thuk Organisation and the local community at Shergaon for their efforts in creating conservation awareness and protecting the Black-necked Cranes in Shergaon. We appreciate Mr. P.D. Sona for his efforts in trying to keep the juvenile crane alive in Mechuka and for alerting the authorities. We are grateful to Ms. Swetika Sachan for her efforts in reducing the levels of hunting in Mechuka. We thank the Arunachal Pradesh Forest Department for permitting us to work in these two locations. Finally, we thank the Wildlife Conservation Trust – India, the Ravi Sankaran Foundation, and the Rufford Small Grant for Nature Conservation for funding our work.



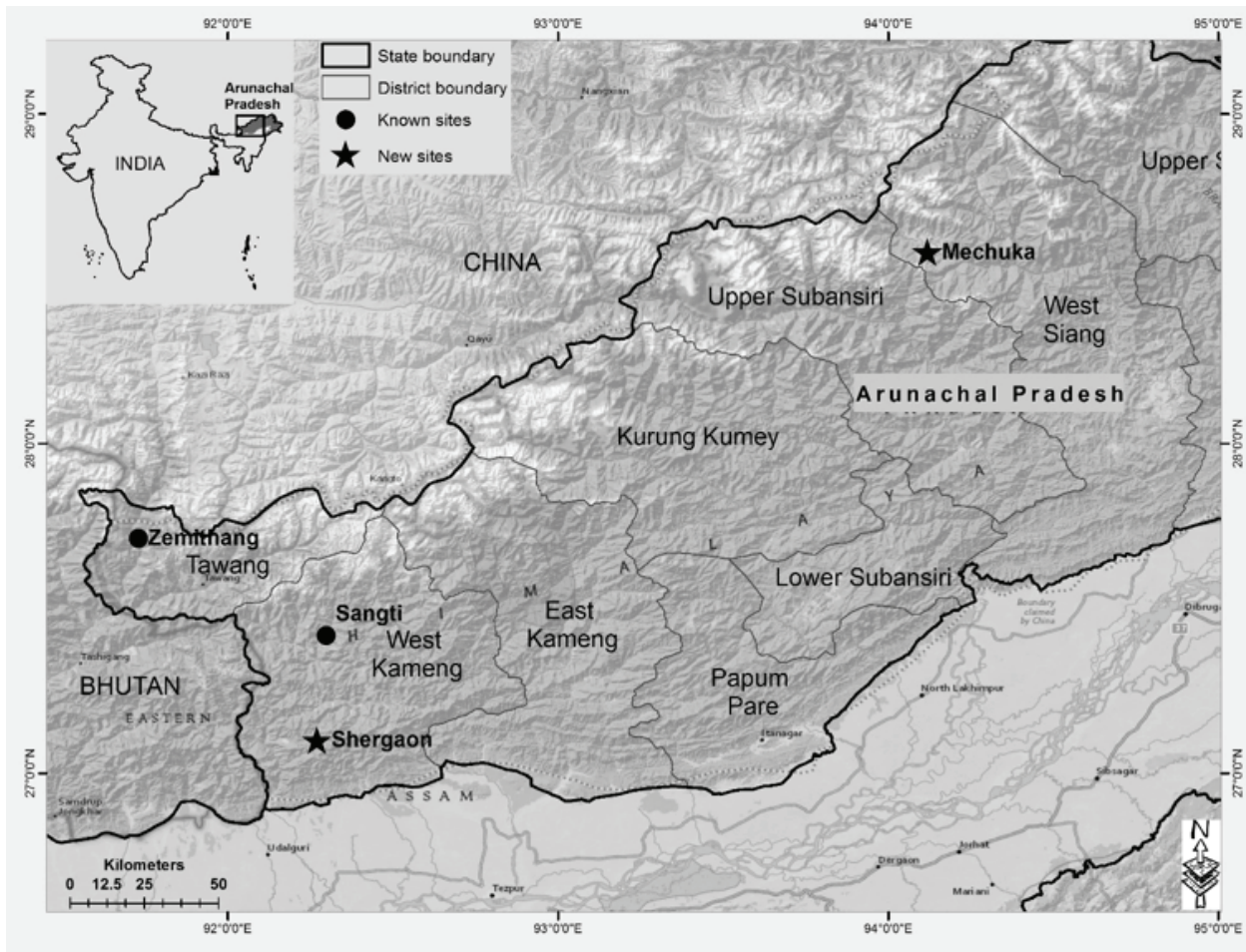


Figure 1. Key locations for Black-necked Cranes in Arunachal Pradesh, India. The black circles represent previous known records from the Zemithang and Sangti valleys. The black stars denote the new locations of Shergaon and Mechuka.

Crane landed on the property of a resident in Mechuka Town. The bird had suffered a bullet wound to its left leg as a result of a hunting attempt in or around the town. Presumably, the young bird's injury rendered it too weak since it needed to walk and feed (Image 1). The town lacks veterinary facilities, and although the family tried to keep the bird alive until help arrived from the closest city, it proved to be too late. The young crane succumbed to its injuries on the morning of 27 December 2017. Aware of the status of the Black-necked Crane, the forest department authorities in the district headquarters of Along, who were alerted by the locals of Mechuka, proceeded to conduct a reconnaissance survey of the Yargyap Chu River for the crane and other migratory birds. This survey resulted in locating nine potential stops for migratory birds along the river based on habitat suitability.

The town of Shergaon (2,000m; 27.10°N, 92.27°E) is situated in the West Kameng District of Arunachal

Pradesh which shares a border with Bhutan. One of the two well-known stopovers in Arunachal Pradesh, the Sangti Valley, is also located in this region, about 30km (aerial distance) away from Shergaon. Similar to Mechuka, this high-altitude site possesses several rivers and streams along with open habitat mixed with farmland. The residents of Shergaon are fascinated with birds and have, unique to Arunachal Pradesh, imposed a ban on bird hunting for the past 20 years. Shergaon predominantly consists of Buddhist Sherdukpen tribe, who look forward to the landing of the Black-necked Cranes once a year; however, in the last five years, the birds have only landed twice (Garung Thuk, pers. comm.). The birds reportedly stay for about a week usually at the end of December or the beginning of January (Image 2). Although the birds don't visit every year, they are welcomed and upon arrival, the village council informs the residents of Shergaon not to harm the Black-necked Cranes and reminds them that they



Image 1. A juvenile Black-necked Crane with a bullet wound on its right leg in Mechuka.

will be punished if they do so. The cranes that stopover at Shergaon are usually lone birds or sometimes in pairs. It is possible that the Black-necked Cranes traveling south from China stopover at the Zemithang Valley, the Sangti Valley (only 30km away), and finally Shergaon before entering Bhutan. Due to the short duration of their stopover, it is less likely that the birds wintering in Bhutan from the Shenzha region in China (Liu et al. 2012) are spilling over to eastern Arunachal Pradesh.

While both Mechuka and Shergaon appear to have similar habitats, well-suited for the Black-necked Crane, there are differing threats that might affect this threatened species in each location. In Mechuka, there has been an increase in tourism and subsequent development to accommodate tourists. The government aims to develop Mechuka as a hub for adventure tourism, which comes with its own share of problems. Commercial aviation services will soon commence in Mechuka and this could potentially result in an increased disturbance to the birds. Black-necked Cranes are sensitive to habitat alterations and it can cause behavioural changes in the birds (De-Jun et al. 2011). Based on the incident from Mechuka described here, hunting is likely to be a significant threat to the wintering birds visiting here. Although, most of the local community members are Buddhists belonging to the Memba tribe who revere the Black-necked Crane, there are some residents from other tribes who still



Image 2. An adult Black-necked Crane in Shergaon, photographed by a local resident on his phone on 4 January 2017 at 16.00h.

hunt the species. This cultural reverence of the Black-necked Crane also applies to the locals of Shergaon where the birds have the additional protection of the hunting ban. Although the brief stopover at Shergaon is made by only a few birds, the high levels of grazing and pesticide use could pose a major threat at a local scale (Birdlife International 2017). The proposed dams upstream of the rivers in both locations, however, could drastically alter the landscape downstream and hence influence the presence of the Black-necked Crane. The Monpa Tribe of Tawang District has long opposed the construction of dams on the Nyamjang Chhu River which would displace a 3-km stretch of the Black-necked Cranes wintering site (Lenin 2015). Due to the geographic position and the presence of suitable habitat in Arunachal Pradesh for the Black-necked Crane to winter, the state of Arunachal Pradesh can play a key role in the conservation of this species. Rigorous surveys and monitoring at both locations, along with educating the local communities about the importance of the species, would be extremely useful for the rare Black-necked Cranes in India and also to help understand the species from a global standpoint.

References

- Acharya, B.K. & L. Vijayan (2010). Status and distribution of endemic and threatened birds of the eastern Himalaya in Sikkim, India. *Journal of Threatened Taxa* 2(2): 685–689. <https://doi.org/10.11609/JoTT.o2257.685-9>
- Birdlife International (2017). *Grus nigricollis* (amended version of 2016 assessment). The IUCN Red List of Threatened Species 2017: e.T22692162A110659467. Downloaded on 11 August 2019. <https://doi.org/10.2305/IUCN.UK.2017-1.RLTS.T22692162A110659467.en>
- Chandan, P., A. Khan, J. Takpa & S.A. Hussain (2014). Status and distribution of Black-necked Crane (*Grus nigricollis*) in India. *Zoological Research* 35(S1): 39–50.

- De-Jun, K., Y. Xiao-Jun, L. Qiang, Z. Xing-Yao & Y. Jun-Xing (2011).** Winter habitat selection by the Vulnerable Black-necked Crane *Grus nigricollis* in Yunnan, China: implications for determining effective conservation actions. *Oryx* 45(2): 258–264. <https://doi.org/10.1017/S0030605310000888>
- Lenin, J. (2015).** Indigenous tribe opposes hydropower projects in the Tawang basin. *The Guardian*. August 22.
- Liu, Q., F. Li, P. Buzzard, F. Qian, F. Zhang, J. Zhao, J. Yang & X. Yang (2012).** Migration routes and new breeding areas of Black-necked Cranes. *The Wilson Journal of Ornithology* 124(4): 704–712. <https://doi.org/10.1676/1559-4491-124.4.704>
- Mazumdar, K. & P.K. Samal (2012).** Conservation, management and hunting of faunal resources among Monpas and Sherdukpens in Arunachal Pradesh, eastern Himalaya, pp. 91–103. In: Ramakrishnan, P.S., K.G. Saxena, K.S. Rao & G. Sharma(eds.). *Cultural Landscapes: The Basis for Linking Biodiversity Conservation with the Sustainable Development*. UNESCO, New Delhi, India.
- Mize, D., T. Tamir, T. Biju, J. Ngukir, A.T. Kimsing & R. Tapa (2018).** Review of Black-necked Crane *Grus nigricollis* in Arunachal Pradesh, north-east India, including a new wintering site. *Birding Asia* 30: 96–97.
- Srinivasan, U., S. Dalvi, R. Naniwadekar, M.O. Anand & A. Datta (2010).** The birds of Namdapha National Park and surrounding areas: recent significant records and a checklist of the species. *Forktail* 26: 92–116.





PLATINUM
OPEN ACCESS



The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) unless otherwise mentioned. JoTT allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

August 2019 | Vol. 11 | No. 10 | Pages: 14247–14390

Date of Publication: 26 August 2019 (Online & Print)

DOI: 10.11609/jott.2019.11.10.14247-14390

www.threatenedtaxa.org

Editorial

**Wildlife's Wonder Woman—Sally Raulston Walker
(12 October 1944–22 August 2019)**

– Sanjay Molur, Pp. 14247–14248

Communications

Species diversity and spatial distribution of amphibian fauna along the altitudinal gradients in Jigme Dorji National Park, western Bhutan

– Bal Krishna Koirala, Karma Cheda & Tshering Penjor, Pp. 14249–14258

The soft-release of captive-born Kaiser's Mountain Newt *Neurergus kaiseri* (Amphibia: Caudata) into a highland stream, western Iran

– Tayebe Salehi, Vahid Akmal & Mozafar Sharifi, Pp. 14259–14267

The status of waterbird populations of Chhaya Rann Wetland Complex in Porbandar, Gujarat, India

– Dhavalkumar Vargiya & Anita Chakraborty, Pp. 14268–14278

Diversity and temporal variation of the bird community in paddy fields of Kadharamangalam, Tamil Nadu, India

– Chaithra Shree Jayasimhan & Padmanabhan Pramod, Pp. 14279–14291

First videos of endemic Zanzibar Servaline Genet *Genetta servalina archeri*, African Palm Civet *Nandinia binotata* (Mammalia: Carnivora: Viverridae) and other small carnivores on Unguja Island, Tanzania

– Helle V. Goldman & Martin T. Walsh, Pp. 14292–14300

The identification of pika and hare through tricho-taxonomy (Mammalia: Lagomorpha)

– Manokaran Kamalakannan, Kailash Chandra, Joy Krishna De & Chinnadurai Venkatraman, Pp. 14301–14308

Palynological analysis of faecal matter in African Forest Elephants *Loxodonta cyclotis* (Mammalia: Proboscidea: Elephantidae) at Omo Forest Reserve, Nigeria

– Okwong John Walter, Olusola Helen Adekanmbi & Omonu Clifford, Pp. 14309–14317

Avitourism opportunities as a contribution to conservation and rural livelihoods in the Hindu Kush Himalaya - a field perspective

– Nishikant Gupta, Mark Everard, Ishaan Kochhar & Vinod Kumar Belwal, Pp. 14318–14327

Pollination in an endemic and threatened monoecious herb *Begonia satrapis* C.B. Clarke (Begoniaceae) in the eastern Himalaya, India

– Subhankar Gurung, Aditya Pradhan & Arun Chettri, Pp. 14328–14333

Multivariate analysis of elements from the microhabitats of selected plateaus in the Western Ghats, Maharashtra, India

– Priti Vinayak Aphale, Dhananjay C. Meshram, Dyanesh M. Mahajan, Prasad Anil Kulkarni & Shraddha Prasad Kulkarni, Pp. 14334–14348

Partner



صندوق محمد بن زايد
للمحافظة على
الحيوانات المهددة
بالانقراض

The Mohamed bin Zayed
SPECIES CONSERVATION FUND

Member



Short Communications

Diversity of butterflies of the Shettihalli Wildlife Sanctuary, Shivamogga District, Karnataka, India

– M.N. Harisha, Harish Prakash, B.B. Hosetti & Vijaya Kumara, Pp. 14349–14357

First record of two rare brachyuran crabs: *Drachiella morum* Alcock, 1896 and *Quadrella maculosa* Alcock, 1898 along the Tamil Nadu coast, India

– Chinnathambi Viswanathan, Sampath Goutham, Vijay Kumar Deepak Samuel, Pandian Krishnan, Ramachandran Purvaja & Ramachandran Ramesh, Pp. 14358–14362

Records of the Marbled Cat *Pardofelis marmorata* and the Asiatic Golden Cat *Catopuma temminckii* (Mammalia: Carnivora: Felidae) from the community forests surrounding the Dzükou Valley in Nagaland, India

– Bhavendu Joshi, Biang La Nam Syiem, Rokohebi Kuotsu, Arjun Menon, Jayanta Gogoi, Varun Rshav Goswami & Divya Vasudev, Pp. 14363–14367

Rediscovery of *Calanthe davidii* (Orchidaceae) after 11 decades in the western Himalaya, India

– Ashutosh Sharma, Nidhan Singh & Pankaj Kumar, Pp. 14368–14372

Notes

Range extension of the Gooty Tarantula *Poecilotheria metallica* (Araneae: Theraphosidae) in the Eastern Ghats of Tamil Nadu, India

– Kothandapani Raman, Sivangnanaboopathidoss Vimalraj, Bawa Mothilal Krishnakumar, Natesan Balachandran & Abhishek Tomar, Pp. 14373–14376

Some recent evidence of the presence of the Critically Endangered *Gyps* vulture populations in northern Shan State, Myanmar

– Sai Sein Lin Oo, Nang Lao Kham, Kyaw Myo Naing & Swen C. Renner, Pp. 14377–14380

Two new locations for the Vulnerable Black-necked Crane *Grus nigricollis* (Przhevalsky, 1876) (Aves: Gruiformes: Gruidae) in Arunachal Pradesh, India

– Rohan Krish Menzies, Megha Rao & Abhinav Kumar, Pp. 14381–14384

***Aquilaria malaccensis* (Malvales: Thymelaeaceae): a new host plant record for *Deudorix epijarbas cinnabarus* (Lepidoptera: Lycaenidae) in Malaysia**

– Kah Hoo Lau & Su Ping Ong, Pp. 14385–14387

Rediscovery of Nilgiri Mallow *Abutilon neelgerrense* var. *fischeri* T.K. Paul & M.P. Nayar (Malvaceae) after a century from southern India

– Varsha Vilasrao Nimbalkar, Arun Prasanth Ravichandran & Milind Madhav Sardesai, Pp. 14388–14390

Publisher & Host

