

FutureGenerations

Graduate School

Applied Community
Change and Conservation

A NOTE ON DEMOISELLE CRANES (*ANTHROPOIDES VIRGO*) IN ASIA

Robert L. Fleming Jr.

February 2005

Occasional Papers of the Future Generations Graduate School explore community-based approaches to social development, health, nature conservation, peace building, and governance. Faculty, alumni, and partner organizations present their field studies and applied research.

www.future.org

A NOTE ON DEMOISELLE CRANES (*Anthropoides virgo*)

In ASIA

**Robert L. Fleming, Jr.
Future Generations
www.future.org**



A Demoiselle Crane at Keechan, Rajasthan, India, early on the morning of 15 Feb 2005.



**NOTES ON DEMOISELLE CRANES (*Anthropoides virgo*)
In ASIA**

Two adult Demoiselle Cranes, sleek gray birds with puffs of long, white feathers extending backwards from the sides of their black heads and loose, black feathers spilling over the upper breast, coaxed two surprisingly short-legged youngsters across the grassy plain. The brown-bodied hatchlings, with pale orange-tinged heads atop long necks, were easily able to keep up with their parents as the family moved past clumps of green iris leaves and mounds of grass-studded brown earth within sight of the nearby Mörön airport in north central Mongolia.



**A Demoiselle family near the Moron airport in central north Mongolia, 20
June 2005.**

As a zoologist-naturalist interested in learning about Asia's plant and animal life as well as the region's historical and cultural variations, I was pleased to be in the Mongolia with nine friends. On the twentieth of June 2005, after an overland journey from the south, and a look at Hovsgol Lake, we arrived at the Mörön airport to learn that our flight to Ulaanbaatar, the capital of the country, was delayed. This gave us a chance to eat our picnic dinner on the banks of the nearby Delger River, a tributary to the Selenge. Using our vehicles as windbreaks we consumed sandwiches while watching Sand Martins (*Riparia riparia*) hawking insects over the water and Common Terns (*Sterna hirundo*) fishing in slow moving water close to the river's edge. Later, as we walked back towards the terminal, we flushed the Demoiselle family.

This sight spoke volumes. Mongolians are famous for their hunting prowess and before traveling to Mongolia we had assumed that surviving cranes would be in the remote and nearly inaccessible strongholds of the east. We were wrong, or at least partly wrong, for his crane family lived in north central Mongolia in comparatively open terrain not far from the airport buildings and well within sight of humans bustling back and forth. Indeed,



A lone crane in a meadow at about 1830m/6000ft in the Shin Ider valley in

central Mongolia, 16 June 2005. The yellow *Ranunculus* Buttercups and blue *Myosotis* For-get-me-Nots indicate the valley floor is damp. The sight of a lone crane usually indicates that its mate is sitting on eggs.



Gers (yurts in Russian) are typical pastoralist residences in Mongolia. Owners may possess motorcycles, solar panels, satellite dishes, and guns. The de-horned yak in the foreground is often used to pull the wooden-wheeled cart lying between the yak and the ger.

during our 8-26 June travels in the central and western part of the country we found cranes in many areas despite the presence of occasional men riding past on

motorcycles with guns slung over their shoulders. To see cranes relatively widespread and tame was quite amazing and quite wonderful. Mongolians may be famous for their hunting skills, but their reverence for cranes, considered a symbol of good luck, is not well known. We did not visit the eastern part of the country but for a beautifully written account of that region and the cranes found there see chapter two of Peter Mattheissen's *Birds of Heaven*.

The Demoiselle Crane is the smallest of the world's fifteen crane species

and, after the Sandhill Crane of North America, is the most numerous. Six population divisions are recognized, with the Mongolian birds part of the Eastern Asia assemblage (see the International Crane Foundation web site). Most of the estimated 200,000 to 240,000 Demoiselles are spread across Eurasia with a small number, less than 50 birds, in the Atlas Mountains of northwest Africa. The Black Sea population of far west Asia winters in the Sudd and adjoining areas in northern equatorial Africa, while most central and east Asian birds winter in South Asia (see map on USGS web site).

We started our June excursion in the far south, in the Gobi and the Gobi Altai, but did not see cranes in the desert, for we skipped the several isolated lakes where cranes are known. Only when we journeyed to the north, reaching wetter terrain at central latitudes, did cranes appear and then we saw or heard birds in most areas of suitable habitat. And it was clear that most cranes were nesting for besides for the family near Mörön, we saw only single birds or pairs, some fling overhead and others feed on grassy slopes or along damp valley floors. While we did not locate nests, we read eggs are laid among pebbles often without much vegetative cover but usually fairly close to water (see Johnsgard, p. 101).

Outside of Sandhills (*Grus canadensis*) and Eurasian (*G. grus*) most cranes are not forest birds but Demoiselles occasionally resort to cover. Previously, on a September trip, we happened upon a family of two adults with two nearly full-grown young on the shores of Lake Hovsgol near Mongolia's northern border. As we approached these birds, we were surprised that they didn't fly or move farther up the lake's edge. Instead, they faded into the nearby forest, vanishing among the Siberian Larches.

Demoiselle young fledge in about ninety days after eggs are laid (see Hoyo, p. 84)⁴, and then the young remain with their parents for a long time, staying in a family party even when part of a large migratory or wintering flock. Autumn comes early to Mongolia and on 12 September 1998 we came upon an estimated 1,400 birds scattered in large aggregations across a broad valley about 62 kilometers west of Ulaanbaatar. Birds here were noisy and active, exhibiting migratory "restlessness", as they prepared for their upcoming journey.

Most cranes of northeast Asia, such as the White-naped and Siberian, migrate south into China for the winter, covering a relatively short and easy

distance. Not so the Demoiselle. The latter undertake an arduous route that heads southwest across the western Gobi and then over both the Tibetan Uplift and the Himalayan Mountains to wintering grounds in India. We know little about their journey across the Tibetan Uplift. Do they rest near the large lakes along the way, and if so, for how long? Or might they make most of this crossing in one long effort? Collared birds tracked by satellite will fill in this information in the future.

Whatever our uncertainties about the bird's route in Tibet, their track is well known once they reach the borders of Nepal and sweep south, passing over Lo Mantang, the capital of Mustang, in Vs of from 30 to an estimated 400 birds which then funnel down the Kali Gandaki Valley between the Himalayan giants of Annapurna and Dhaulagiri.

Their route across the Himalayas may seem straightforward but it isn't quite that easy as peaks here form the sides of a giant wind tunnel and birds arriving at this mountain barrier in the afternoon have to fight against strong headwinds that blow north towards the Tibetan uplands. In this battle, the winds usually win. On treks to the Kali Gandaki Valley, we have watched cranes struggle, flock after flock making some forward progress, only to eventually be blown backwards. Even when shifting back and forth across the valley, the birds are mostly unable to get through. When the birds give up, they turn around and are quickly whisked north, many landing on stony banks in a wide section of valley north of Kagbeni village to await the calming of the wind.



Demoiselles in the Kali Gandaki Valley, Nepal, passing south between Annapurna and Dhaulagiri. Note the rock and snow face mostly hidden in the clouds towards the lower right. October.

Before darkness falls, hundreds of birds may congregate on these flats and it is possible that some start south when the winds die in the night. Residents of Jomsom town, down the valley, report hearing cranes overhead in the wee hours. Without any substantiating evidence, we suspect that these night flying birds are likely those just arriving from Tibet, not those that have been resting north of Kagbeni. Whatever the case, once dawn arrives the resting birds seem in no hurry to depart, and we have observed them waiting until well after dawn before lifting off.

Even in the calm of a wind-less morning some birds, though, may have a problem on their passage between Annapurna and Dhaulagiri as Golden Eagles (*Aquila chrysaetos*) await. If a crane V is attacked it suddenly dissolves into a hodgepodge of small groups, presumably family parties, that zigzag back and forth as they plummet out of the sky in an attempt to discombobulate the raptor. As there are thousands of Demoiselles for every eagle, only a few cranes succumb, but the disruption to orderly flight is considerable. The eagle population of the Kali Gandaki Valley has not



Stony flats of the Kali Gandaki Valley where autumn migrating cranes may rest while waiting for the wind blowing northward from the main Himalayan spine to die down.

been assessed, but, given the infrequency of attacks, it is unlikely that eagle numbers are significantly augmented during October by birds moving over from Manang or other adjoining, crane-less mountain valleys.

The vast majority of cranes make it past the high mountains and it is a distinct thrill to stand near the town of Kalopani, at 4440m/8000ft, listening to the evocative cries of the birds as they pass by. Flocks are usually at least 610m/2000ft or more above a Kalopani observer and often much higher, sometimes so high that a V of 400 individuals can be located only by sweeping the sky with binoculars. To see these relatively fragile creatures, arriving from Mongolia and other northern points, passing in front of the dramatic ice slopes and stony cliffs of the nearby Nilgiri or Tukche peaks, is a sight never forgotten.

Once across the Himalayan barrier, the cranes begin to descend slowly but

as Nepal is so narrow at this point, few cranes land in the country; most continue on to north India. Even here the cranes do not linger long but push towards the southwest, overwintering, mostly, in the states of Gujerat and Rajasthan.



Demoiselles at about 0715 gathering for “breakfast” in Keechan, 15 Feb 2005.

In western India, many people are strong believers in the principle of *ahimsha*, the non-taking of life. Not only that, but feeding lesser beings also brings considerable merit and thus at the edge of many settlements in northern Gujerat and parts of Rajasthan, a village operated “bird feeder,” a circular cleared area on the ground near the community, is a common phenomenon. In the USA and the UK there are literally millions of people that cater to backyard birds but communities do not organize communal feeders as we see in India.

Keechan village, in Rajasthan, is the site of a remarkable avian event. Each winter evening, several hundred kilograms of grain is spread on the ground at the edge of the village in a compound ringed by a low enclosing

wall. The next morning thousands of cranes appear for “breakfast,” some perching patiently on the flats outside the enclosure, waiting for space at the “table.” During a visit to Keechan on 15 February 2005 we noted that cranes started to arrive at about 0700 and that the thousands of birds were mostly



Cranes in the Keechan compound, Rajasthan. 15 Feb 2005. Birds with only their backs showing are feeding.

gone by 0900, many retiring to rest in open terrain near the village. Then, late in the afternoon, they disperse widely to search for food in fallow fields or adjoining scrublands, often considerable distances from Keechan. We were told that until recently cranes were fed twice a day but as evening attendees declined, the feeding is now limited to the morning only.

Feeding cranes brings religious merit to the financiers of the grain supply as well as some economic benefit to “helpers” around the periphery of the enclosure and to the hospitality industry located, mostly, in the neighboring



Birds in the early afternoon resting near a “tank” at the edge of Keechan.

town of Phalodi. However, the idea of a communal feeder of this magnitude, could, with suitable publicity, be an important fundraiser. Communities need to develop local sources of revenue and in Keechan this could be the judicious use of the cranes. If fees were levied to witness this amazing phenomenon and the funds channeled into projects that benefit the whole community, religious merit would accumulate not only for feeding the cranes but also for doing something that benefits the human residents of the area. And, as a side benefit, the criticism of feeding so much grain to birds would be blunted.

The crane feeding by itself is perhaps not enough to draw many visitors, at least at this time, but should this event be widely publicized and merged with the lure of the culture and history of Rajasthan it could become part of a most attractive itinerary. Keechan and nearby Phalodi are between the highly publicized Rajasthani towns of Jodhpur and Jaisalmer and agencies could easily arrange a stop here. Overnighting in a heritage hotel or in a home stay framework would appeal to many and would allow visitors to be

on site in the morning in time to witness this world-class avian spectacle. Combining ecotourism sites such as Keechan, the antelope areas of the Bishnoi, and the Desert National Park with the wonderful temples and forts of Rajasthan would be a distinct winner.

Cranes remain in India into March and then populations decrease rapidly. Quite possibly some of the Gujerat and Rajasthan birds head northwest to breeding grounds in the Kalmyk area of northwest Asia while others, our Mörön birds included, begin their long journey northeast to Mongolia.

The Mongolia Demoiselles depend on four countries for their survival and fortunately the birds are not much hunted in any of these areas. A distinct problem facing all, though, is habitat change from increased farming of upland valleys in Mongolia, for example, to expanding settlements in the plains of India. But by being aware of the conditions needed for survival of these elegant birds and combining this with an awareness of the benefits that comes from protecting wildlife, the calls of Demoiselle Cranes may echo across the snowy slopes of the Himalayas for many generations to come.

My thanks to many friends who joined me on these journeys and for hospitality and trip arrangements in India to Raj and Diane Singh, Exotic Journeys in Delhi; in Mongolia to N. Tsogzolmaa, Nomadic Expeditions in Ulaanbaatar; in Nepal to Madhukar Yakhumba, Horizon Ventures in Kathmandu.

References:

Hoyo, Josep del et al. 1996. *Handbook of the Birds of the World*, Vol 3. 821pp. Lynx Editions, Barcelona.

International Crane Foundation, www.icf.org and www.savingcranes.org/species/demoiselle.cfm

Johnsgard, Paul A. 1983. *Cranes of the World*, Indiana University Press, Bloomington. xiii+ 257pp.

Mattheissen, Peter. 2001. *The Birds of Heaven*. North Point Press, New York. XV+349pp.

USGS: www.npwrc.usgs.gov/resource/birds/cranes/anthvirg