

Similarly, we discriminated between adults and juveniles in 16 of the 123 departing flocks of White-naped Cranes observed. Flock size of those we could age ranged from 1 to 7 (mean  $4 \pm 2$ ) individuals. On 17 September five juveniles were counted in four flocks totalling 15 individuals. On 18 September 10 juveniles were counted in seven flocks totalling 23 birds. On 21 September five juveniles were counted among 15 birds in three different flocks. On 24 September two flocks consisted of six adults and five juveniles. Thus approximately 40% of all individual White-naped Cranes were juveniles.

#### Mixed-species pairs

Mixed pairs of Hooded and Eurasian Cranes have been noted since 1865 (reviewed in Johnsgard 1983) and are now seen annually in Japan (Brazil 2009). On 17 September we identified two mixed pairs involving these two species. Each pair had one hybrid offspring.

#### Injured birds

We observed several cranes with injuries during the autumn migration. On each observation morning a White-naped Crane was seen with an injured leg that drooped below the body as it flew. In October, after the majority of the cranes had continued south, a White-naped Crane that remained in the agricultural fields was missing a portion of its left leg (several inches above the foot). The bird was present for roughly a week but its eventual fate remains unknown. Lastly, a Red-crowned Crane was discovered near the reserve in late November; it was unable to fly, for unknown reasons, and was eventually captured and brought to a rehabilitation centre.

#### Discussion

At least 9% of the world's Hooded Cranes and at least 4% of the world's White-naped Cranes utilise Muraviovka *zakaznik* on an annual basis during their autumn migration. The *zakaznik* serves as an ideal location to count individuals accurately as well as to obtain a crude estimate of the demographics of the migrating cranes. Direkciya, the provincial governmental game and conservation department, has recently begun to realise the importance of this reserve for migrating cranes. Although the organisation monitors the cranes' arrival each autumn, no rigorous methodology for counting or assessing the cranes has been implemented. Our paper aims not only to provide current information about the demography and size of crane populations that use Muraviovka *zakaznik* but also to highlight a potential methodology for conducting these surveys in the future.

Our observations also suggested that 25% of Hooded Cranes and 40% of White-naped Cranes were juveniles, a higher success

rate, at least for the 2009 breeding season, than has been found in Sandhill Cranes, in which the percentage of juveniles was 9.5–24% (Ballard *et al.* 1999). For future studies, it would be useful to compare the observations made at migration stops such as Muraviovka *zakaznik* to observations made once the population has settled in their wintering grounds.

#### Acknowledgements

The data would not have been possible to collect without the early morning efforts of S. Smirenski and Robert Pudwill. S. Smirenski provided the design for efficiently counting the cranes. The International Crane Foundation, Eliza Close, and the Wildlife World Zoo of Litchfield Park, Arizona, provided financial contributions towards our efforts in Amur Oblast. George Archibald and Jim Harris provided immense help in regards to professional encouragement. M. Kolodina and S. Smirenski were gracious enough to provide us a room in their house during the observation period. Victoria Kalinina was always willing to assist in translating and finding Russian literature. N. Kazakchinskaya provided the meteorological data. Two anonymous referees provided valuable comments.

#### References

- BirdLife International (2008) *Grus monacha*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.1. <www.iucnredlist.org>. Downloaded on 05 September 2011.
- BirdLife International (2008) *Grus vipio*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.1. <www.iucnredlist.org>. Downloaded on 05 September 2011.
- Ballard, B. M., Thompson, J. E., Merindo, M. D., Ray, J. D., Roberson, J. A. & Tacha, T. C. (1999) Demographics of the Gulf Coast subpopulation of mid-continent Sandhill Cranes. *Proc. Ann. Conf. Southeast Assoc. Fish & Wildl. Agencies* 53: 449–463.
- Brazil, M. (2009) *Birds of East Asia: China, Taiwan, Korea, Japan, and Russia*. Princeton: Princeton University Press.
- Dingle, H. (1996) *Migration, the biology of life on the move*. Oxford: Oxford University Press.
- Johnsgard, P. (1983) *Cranes of the world*. Bloomington: Indiana University Press.
- Smith, N. G. (1980) Hawk and vulture migrations in the Neotropics. Pp.51–65 in A. Keast & E. S. Morton, eds. *Migrant birds in the neotropics*. Washington, D.C.: Smithsonian Institution.

**Adam C. STEIN**, Monteverde Institute, Monteverde, Puntarenas, Costa Rica. Email: acstein@mvinstitute.org

**Galina NOSACHENKO**, Oksky Reserve, Ryazan, Ryazan Oblast, Russian Federation. Email: gnosachenko@rambler.ru

## Woolly-necked Stork *Ciconia episcopus* at Napahai wetland, Yunnan, China

JAMES W. BURNHAM & ERIC M. WOOD

The Woolly-necked Stork *Ciconia episcopus* is a wading bird species of Least Concern (IUCN 2011). It ranges over tropical Africa, India, Sri Lanka and South-East Asia, and primarily feeds on fish, amphibians, reptiles and invertebrates. Although the population is stable throughout its range (IUCN 2011), the Asian population potentially merits management attention owing to land-use pressures affecting suitable marsh and wetland habitat.

Napahai wetland, covering c.660 km<sup>2</sup>, is located on the Zhongdian Plateau within China's Three Parallel Rivers World Natural Heritage region in north-western Yunnan province (27.879°N 99.638°E) at an elevation of 3,790 m. Located next to Xianggelila (Zhongdian), Napahai is important to a variety of migratory waterbirds. Large numbers of wintering Bar-headed

Geese *Anser indicus* and Black-necked Crane *Grus nigricollis* led to its designation in 1985 as a national nature reserve; some 90% of the crane's central population are estimated to use Napahai as wintering habitat (Li & Yang 2005, Liu *et al.* 2010). The wetland cycles between summer high water, driven by monsoonal rain and snow melt from surrounding mountains, and winter low water when a mosaic of wetland and agricultural areas are available for wintering waterbird use. Typically, wintering waterbirds roost in the shallow waters of Napahai and forage in surrounding wetlands or agricultural fields that surround the perimeter of the wetland (Kong *et al.* 2011).

At 13h30 on 11 June 2011 we detected a Woolly-necked Stork *Ciconia episcopus* at the north end of Napahai wetland. JWB has

ongoing research at Napahai and at Poyang Lake and is familiar with Chinese waterbirds. We viewed the bird through 8.5×42 binoculars for five minutes. It was loosely associating with a dispersed group of five Black Storks *C. nigra* and two Black-necked Cranes, and was foraging along the flooded edge of Napahai wetland with its head extended forward, close to the ground. It was a similar size to the Black Storks and had a black cap, solid white nape and neck, black plumage with purplish tones, large bill and white undertail-coverts. These are all standard field marks for this species.

This observation came one day after the bird was documented by Han *et al.* (2011). Colleagues at the Kunming Institute of Zoology (KIZ) were notified of the bird's presence and they, in turn, monitored the Woolly-necked Stork while it was at Napahai. Field reports indicate that the bird was present in the Napahai wetland from June to September of 2011 and was last seen on 28 September 2011 (Wu Heqi pers. comm.).

The historic status of the Woolly-necked in China is unclear. Han *et al.* (2011) suggest the 2011 Napahai bird is the first record for China, but S. Chan (*in litt.* 2012) reports that a museum specimen at KIZ derives from an individual on display at the Kunming Zoo in the 1960s. The origin of that bird is unknown, but transportation and political considerations at that time suggest that it is likely to have been caught in China. The 2011 bird at Napahai thus seems likely to be the second for China. Robson (2008) lists the species as a 'rare to locally fairly common resident' in North Myanmar, adjacent to Yunnan, so it is perhaps surprising that there have not been more prior records. Future observers at Napahai and other wetlands in Yunnan should be aware of the potential for the presence of the Woolly-necked Stork and other species that occur in neighbouring countries but are not regularly recorded in China.

### Acknowledgements

This sighting would not have been possible without support by the National Science Foundation under Grant No. DGE-0549369 IGERT: Training Program

on Biodiversity Conservation and Sustainable Development in Southwest China at the University of Wisconsin-Madison. Dr. Wu Heqi at KIZ was helpful in providing information regarding the stork's duration of stay at Napahai. Simba Chan kindly indicated the existence of the specimen in KIZ.

### References

- Han L.-X., Han B., Den Z.-W., Yu H.-Z. & Zhao J.-L. (2011) Woolly-necked stork, a new bird record of China. *Zoological Research* 32: 575–576. (In Chinese with English abstract.)
- IUCN (2011) *IUCN Red List of threatened species*. Version 2011.2. <www.iucnredlist.org>. Downloaded on 13 January 2012.
- Kong D.-J., Yang X.-J., Liu Q., Zhong X.-Y. & Yang J.-X. (2011) Winter habitat selection by the vulnerable Black-necked Crane *Grus nigricollis* in Yunnan, China: implications for determining effective conservation actions. *Oryx* 45: 258–264.
- Li F. & Yang F. (2005) [Distribution and population of Black-necked Cranes on the Yunnan-Guizhou Plateau.] Pp. 29–43 in Wang Qi-Shan and Li Fengshan, eds. *Crane research in China*. Kunming: Yunnan Nationalities Publishing House. (In Chinese.)
- Liu Q., Yang J.-X., Yang X.-J., Zhao J.-L. & Yu H.-Z. (2010) Foraging habitats and utilization distributions of Black-necked Cranes wintering at the Napahai Wetland, China. *J. Field Orn.* 81: 21–30.
- Robson, C. (2008) *A field guide to the birds of South-East Asia*. London: New Holland.

**James W. BURNHAM**, Department of Forest and Wildlife Ecology, University of Wisconsin-Madison, 1630 Linden Drive, Madison, Wisconsin 53706, USA; and International Crane Foundation, E-11376 Shady Lane Road, P.O. Box 447, Baraboo, Wisconsin 53913, USA. Email: burnham@wisc.edu

**Eric M. WOOD**, Department of Forest and Wildlife Ecology, University of Wisconsin-Madison, 1630 Linden Drive, Madison, Wisconsin 53706, USA. Email: emwood@wisc.edu

## First records of Javan Munia *Lonchura leucogastroides* in Peninsular Malaysia

TIM ROBINSON

The Javan Munia *Lonchura leucogastroides* is an estrildid finch native to the Indonesian Islands of Java, Bali and Lombok. It is also established in southern Sumatra, where it was probably introduced (MacKinnon & Phillips 1993, Wells 2009), and in Singapore where it was introduced around 1922. By the 1980s it had become the commonest estrildid finch in Singapore (Lever 1987) but its numbers have declined in recent years (Wells 2009), and the species is now considered uncommon there. Despite the narrowness (approximately 1 km) of the strait separating Singapore from Malaysia's southern state of Johor, the only published record of this species in Peninsular Malaysia is of a single bird in a Johor Bahru park in April 2003 that was considered to be an escapee (mentioned in Wells 2009). This paper discusses recent observations of Javan Munias in Johor that suggest that the species is now a breeding resident there.

At 09h00 on 21 July 2011, three adult and two immature Javan Munias were observed at Sungai Tiram, Johor (1°37'03"N 103°47'29"E), where they were seen perching on and moving in and out of tall (>1 m) grass stems. The white bellies of the birds drew my attention, as did the black throat and vent on the adult birds. Their rump and tail were dark in colour, distinguishing them from White-bellied Munia *L. leucogastra*, which has an olive-yellow tail fringe. These birds were seen again in the same location on 22 July 2011 at 07h50, where they were observed for over 10 minutes at a distance of 7 m. When disturbed, they would move a short

distance and resume foraging amongst the grass stems. These birds were present at the same site on 11 August and 6 October 2011, by which time the two juvenile birds had developed adult plumage.

Following discussions with the local birding community, Paul Wu, a member of the Malaysian Nature Society, provided photographs of this species that he had taken in April and May 2009 at a Temple near Kulai, some 30 km west of the Sungai Tiram site. He estimated there were three to four pairs of birds nesting in potted plants around the temple, and had photographed one bird carrying nesting material.

In some Asian countries, estrildid finches are traded as prayer birds; this often involves transfer of birds from their point of capture to another location where they are released into the wild as part of religious rituals (Severinghaus & Chi 1999). In Malaysia, estrildid finches are the most commonly traded prayer birds, and are both imported from Indonesia (Shepherd 2006) and netted from native stocks for trade at local bird markets. On 7 October 2011, during a search of the local bird market near the Sungai Tiram site, I found three captive Javan Munias for sale, together with 62 other estrildid finches. The trader stated that the birds had been trapped on the eastern reaches of Sungai Tiram, and that his shop had been selling Javan Munias irregularly for at least ten years. Following this development, between 7 and 16 October 2011, all bird markets that could be located in Johor south of 2°N were surveyed (n=10). During this survey, an additional five Javan Munias were discovered for sale