Pakistan J. Zool., vol. 44(6), pp. 1462-1464, 2012

First Record of Tibetan Lark (*Melanocorypha maxima*) in Pakistan

Waseem Ahmad Khan,¹* Babar Khan² and Shahid Iqbal¹

¹Pakistan Wildlife Foundation, Balochistan Plaza, Fazlul Haq Road, Blue Area, Islamabad ²WWF Pakistan, Jutial, Gilgit, Pakistan

> Abstract.- A 2-week long avian survey in Shimshal valley in Khunjerab National Park was conducted during July 2009 to establish the baseline about the existence, distribution and current status of different bird species. All the potential habitats were visited and 48 avian species belonging to 9 orders and 24 families were recorded. While observing the avian species in the area, a flock of eight Tibetan larks (Melanocorypha maxima) was surprisingly observed which makes the first record of Tibetan lark not only in Shimshal valley but also in the country, thus extending the distribution range of the species further westwards along the Karakorum mountain ranges and adding to the avian fauna of the country.

Key words: Khunjerab National Park, Pakistan Wildlife Foundation, Shimshal, Tibetan Lark, WWF Pakistan

The study area is a part of the Khunjerab National Park (KNP) which includes three main valleys; Khunjerab, Ghujerab and Shimshal. Khunjerab valley starts from Sost village and ends at the Khunjerab pass on Pak-China border. The Ghujerab valley which forms the main tributary of Khunjerab River provides a link between the valleys of Khunjerab and Shimshal. Shimshal valley, located in the Karakorum Mountain Ranges, starts at Shimshal village (N 36° 26' 16.5 E 75° 19' 05.8) and ends at Shimshal-Pamir Lakes about 48 km from Pak-China border (N 36° 26' 26.8 E 75° 40' 53.4). The valley is around 50 km long and covers different habitat types with different elevations ranging from 3,078 m above sea level at Shimshal village to 4,731 m at Shimshal-Pamir Lake. The Lake is around 275 km from Gilgit city and the road conditions up to the lake include; 170 km *i.e.* up to the Passu is Karakorum Highway (KKH) metalled road, from Passu to Shimshal village around 55 km is jeep-able while from Shimshal village to the Shimshal Lake around 50 km is the pony track. It takes around 8 hours from Gilgit to reach Shimshal village while from Shimshal village to Shimshal village while from Shimshal village to Shimshal village to Shimshal village while from Shimshal village to Shimshal village to Shimshal-Pamir Lake, it is very tough, dangerous and tiresome track of around three days although the distance is just about 50 km.

Larks belong to order Passeriformes and family Alaudidae. There are overall 92 species of larks occurring worldwide (Wikipedia, 2010). Roberts (1991), Mirza (2007) and Grimmett et al. (2008) have described 17 lark species in Pakistan; all categorized as least concern by IUCN (2010). Tibetan lark (Melanocorypha maxima) has been reported from Bhutan, China and India (Wikipedia, 2010); whereas Grimmett et al. (2006) have reported it as a resident bird in Laddakh and Sikkim in India. Khan (2006) and Qureshi et al. (2011) reported 40 bird species from Shimshal including one lark species, horned lark (Eremophila alpestris). Ali and Ripley (1972) have reported 39 lark species from Indian sub-continent including India, Pakistan, Nepal, Sikkim, Bhutan and Ceylon and have described two sub-species of Tibetan lark, Melanocorypha maxima maxima (Sikkim long billed calandra lark) and Melanocorypha maxima holdereri (Ladakh long billed calandra lark). Melanocorypha maxima holdereri has been reported from Ladakh at an altitude of 4300 m whereas Melanocorypha maxima maxima has been reported from northern Sikkim and northern Bhutan in the Tibetan plateau above 3600 m. According to the available literature, Tibetan lark (Melanocorypha maxima) has never been reported from Pakistan.

Materials and methods

All the potential habitats were visited during dawn and dusk and most of the birds were identified without using binoculars. Tibetan lark was observed, first with naked eye by third author and later by first and second authors and then its morphology was studied by all using binoculars.

^{*} Corresponding author: <u>khanwa@hotmail.com</u>

Results and discussions Habitats

Shimshal valley is characterized by different habitat types including agricultural lands, dry and barren mountains, snow covered peaks, green slopes covered by small bushes, herbs and shrubs and alpine meadows. Plain areas near Shujerab Pass in the bottom of the valley have different small sized water ponds separated from the main stream. Shujerab pass is located at the top of the valley and from Shujerab pass onwards upto the Shimshal-Pamir Lake the area represents an alpine meadow which remains covered with snow around nine months in a year. July to September are the months when the white snow gets replaced by green grasses and biological activities are at the peak in the area. The peat area around the lake offers good breeding grounds for some passerine birds like horned lark. Tibetan lark was observed in this type of habitat.

Field observations

Overall 48 avian species belonging to 9 orders and 24 families were recorded during the survey with Tibetan lark recorded for the first time from the study area. A scattered flock of eight birds was observed near Gulchin Wash Top at 36° 28' 09.1 N 75° 38' 33.2 E and at an elevation of 4.623 m above sea level. Gulchin Wash Top is located near Shujerab Pass (N 36° 28' 19.5 E 75° 37' 51.6; elevation 4353 m) and about three km from Shimshal Lake (N 36° 26' 26.8 E 75° 40' 53.4; elevation 4731 m). Three field biologists observed the birds in a light snow fall near Gulchin Wash Top during their backward journey from Shimshal Lake on July 26, 2010 at 10:30 a.m. The birds were first observed by the third author and later confirmed by the first and second authors after consulting the Field Guide to the Birds of Indian Sub-continent (Grimmett et al., 2006). The birds were observed from a distance of around 30 to 40 m. Although the birds could not be trapped and photographed due to fall yet some of continuous snow their morphological characters were recorded. The size of the bird was roughly about the size of a common starling (Sturnus vulgaris). Dorsal body color was brownish with overall off-white ventral side including breast, belly and under-tail coverts. Beak was sharp, pointing and somewhat darker in color and two blackish lines were emerging towards breast from either shoulder but not joining together. Legs were also slightly dark in color. When the photographer tried to get closer to take some good quality photographs, the birds flew and landed around 60 m away. The photographer again tried to get closer but the birds flew away again and landed around 55 m away from us. This happened three times then the birds disappeared.



Fig. 1. Map of the study area: Shimshal Valley in Khunjerab National Park © WWF-Pakistan



Fig. 2. Distribution of Tibetan lark worldwide and in Pakistan (Grimmett, 2006).

Ecological linkages of Tibetan Lark

Along Shujerab Pass at an elevation 4,353 m, during a very short summer season (July to September), soft leaves and flowers of different species of grasses attract a number of insects including grasshoppers, crickets, beetles and their larvae which in turn are attractive to different birds like wagtails, redstarts and larks. Secondly, there are seven small and large sized enclosures (around 20 x 20 m^2 to $50 \text{ x} 50 \text{ m}^2$) built with stones for temporary stay during annual migration of locals both towards north in the start of summer and towards south during the start of winter. These enclosures are used by locals as a staging area for keeping thousands of yaks, sheep and goats for only a few days during migration. Following year after year migrations, the dung of yaks and droppings of sheep and goats have made a thick layer of organic matter over the soil around these enclosures which supports a number of insect species that might also be attractive for Tibetan lark in this area. Food is the basic habitat component and availability of a number of insect species in large numbers around these locations supports the existence of bird species.

Conclusion

Ali and Ripley (1972) have described the altitudinal range of *Melanocorypha maxima holdereri* between 4300 and 4600 m in Tibetan plateau and that of *Melanocorypha maxima maxima* above 3600 m in the Tibetan plateau. The species was recorded form the study area at an elevation of 4,623 m above sea level. Since detailed morphological characters of the species found in the study area could not be recorded, but based on the altitudinal range of the species in the adjoining areas in Tibetan plateau, it is presumed that the recorded species might be *Melanocorypha maxima holdereri*.

The occurrence of Tibetan lark in northern Pakistan not only adds to the avian fauna of the country but also extends its distribution range further westwards along Karakorum mountain ranges in Khunjerab National Park.

Acknowledgments

The study was sponsored by WWF-Pakistan under its Trans-Boundary Conservation Program with active participation of Forest and Wildlife Department of Gilgit-Baltistan. A number of local influential people, hunters and guides also facilitated and supported the survey team. The authors are grateful to WWF-Pakistan, officials of Forest & Wildlife Department of Gilgit-Baltistan and all those people who assisted and facilitated the survey team and sincerely acknowledge their assistance.

References

- Ali, S. and Ripley, S.D., 1972. Handbook of the Birds of India and Pakistan together with those of Nepal, Sikkim, Bhutan and Ceylon. Volume 5, Larks. Oxford University Press, Bombay. pp. 1-48.
- Grimmett, R., Roberts, T. and Inskipp, T., 2006. Birds of India. Christopher Helm, A & C Black Publishers Ltd. 38 Soho Square, London W1D 3HB, pp. 387.
- Grimmett, R., Roberts, T. and Inskipp, T., 2008. Birds of Pakistan. Christopher Helm, A & C Black Publishers Ltd. 38 Soho Square, London W1D 3HB, pp. 256.
- IUCN, 2010. *IUCN Red list of threatened species*. Version 2010.1. (<u>www.iucnredlist.org</u>) Downloaded on 29 May 2010.
- Khan, W.A., 2006. Wildlife survey of Khunjerab National Park, Northern Areas, Pakistan. WWF-Pakistan. Unpublished report. pp. 38.
- Mirza, Z.B., 2007. A field guide to birds of Pakistan, WWF Pakistan, PO Box 5180, Ferozepur Road, Lahore, Pakistan, pp. 366.
- Qureshi, R., Khan, W.A., Bhatti G.R., Khan, B., Iqbal, S., Ahmad, M.S., Abid, M. and Yaqub, A., 2011. *Pak. J. Bot.*, 43: 849-861.
- Roberts, T.J., 1991. *The birds of Pakistan* Vol. 1, Oxford University Press Karachi, Pakistan. pp. 617.
- Wikipedia, 2010. http://www.en.wikipedia.org/wiki/Lark (Downloaded March 02, 2010)

(Received 11 June 2010, revised 11 August 2011)