

Sighting of Demoiselle Cranes (*Grus virgo*) near Ramnagar Wetland, Bundi, Rajasthan



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Abstract

Wetlands play important role in maintaining avifaunal diversity as these cradles of biodiversity harbour many plant and animal species which work as life support system for numerous resident and migratory bird species. Many avian species rely on wetlands for food, shelter and breeding grounds. Demoiselle Cranes (*Grus virgo*) which are winter visitors to Indian subcontinent also use wetlands as shelter as these large birds often roost in shallow wetlands and marshes after feeding largely on shoots of wheat, gram and paddy in nearby cultivation, considerably damaging winter crop. Ramnagar wetland which is about 10 kilometres away from Bundi city, situated on Bundi-Bhilwara Road, is surrounded by many agricultural farms. In winter, farmers cultivate paddy and wheat in surrounding farms which extends favourable environment for migratory birds including Demoiselle Cranes. Present study deals with sighting of a large flock of Demoiselle Cranes around Ramnagar wetland near Bundi, Rajasthan.

Keywords: Demoiselle Cranes, Bundi, Rajasthan.

Introduction

Wetlands are defined as 'lands transitional between terrestrial and aquatic eco-systems where the water table is usually at or near the surface or the land is covered by shallow water. They are often described as "kidneys of the landscape" (Mitsch and Grosselink, 1986).

Review of Literature

The Ramsar Convention on Wetlands (Ramsar, Iran, 1971) takes a broad approach in determining the wetlands and defines wetlands as 'Areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh brackish or salt including areas of marine water the depth of which at low tide does not exceed six metres. Lakes and rivers are understood to be covered by the Ramsar definition of wetlands in their entirety, regardless of their depth.

Wetlands are of importance from ecological and economic point of view as they play many crucial roles by contributing to a healthy environment and thus their values are receiving due attention the world over. They perform numerous valuable functions such as recycle nutrients, purify water, attenuate floods, maintain stream flow, recharge ground water and also serve in providing drinking water, fish, fodder, fuel, wildlife habitat, control rate of runoff in urban area, buffer shoreline against erosion and recreation to the society (Prasad *et al.*, 2002). Wetlands are rightly considered cradles of biodiversity as they are life support system for a variety of plant and animal species including avifaunal diversity. Many fascinating resident and migratory avian species rely and depend on wetlands for food, shelter and breeding grounds. Present study deals with sighting and recording of Demoiselle crane (*Grus virgo*) in Rannagar wetland near Bundi.

Aim of the Study

1. Documentation of Demoiselle Crane (*Grus virgo*) near Ramnagar wetland, Bundi, Rajasthan.
2. To highlight need of conservation of habitat for Demoiselle Crane (*Grus virgo*).

Material and Method

1. The study was conducted near the Ramnagar wetland situated about 10 kilometers away from Bundi city on Bundi- Bhilwara Road.

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2. Survey and recording of the bird species was carried out in October, 2015. Observations of avifauna were made with the help of binoculars. Some photographs were taken with help of SLR camera.
3. The recorded bird species was identified with the help of various field guides and standard literature such as Ali (2002), Kazmierczak, (2000) and Manakadan *et al.* (2011) etc.

Result & Discussion

Demoiselle crane (*Grus virgo*), which is commonly known as *kurja*, is a winter visitor to Gujarat and Rajasthan. It is a large (about 95 cm) grey and black crane with long lower neck feathers and tertials. Head, neck and breast are black with grey crown, white ear tuft and blackish flight feathers. Immature birds lack elongated feathers and are greyer. Male and female are alike lacking sexual dimorphism (Grewal *et al.*, 2002). This is smallest among crane species of the world and is considered second most abundant crane of the world following Sandhill crane. Demoiselle Crane breeds across Europe and Asia. The East Asian population winters in India but rare visitors have been recorded in Japan (Meine & Archibald, 1996). In Rajasthan this crane mainly visits Khinchan village near Phalodi town of Jodhpur district which harbours over 20000 demoiselle cranes every year from August to as late as March of the following year. Yadav and Chauhan (2018) also reported sighting of the crane in Jhalawar forest division of Rajasthan. Though they are also sighted in other parts of Rajasthan as vagrant visitors, their presence in Ramnagar wetland near Bundi is uncommon. In Ramnagar wetland their stay is recorded for only few days but they visited the area in large congregation indicating that the area is considerably attracting this beautiful bird. However to make the area an attractive destination for the cranes the following conservational aspect need be worked upon.

1. The area is characterized by anthropogenic activities owing to intense farming activities in nearby farms and the human settlements.
2. The wetland itself is not perennial. The problem is further aggravated by siphoning of water from the wetland for irrigation in the adjoining farms.

Asian Resonance

3. Incidents of hunting and poaching can not be ruled out as the birds are exposed to danger from miscreants of nearby areas.
4. Traffic on the nearby road which is being upgraded as state highway is also cause of concern for the longer stay of the birds.
5. The stay of the birds caused considerable damage to paddy and wheat crops in the nearby farms hence they are not welcome by the farmers.

Keeping in mind the conservational aspect an action plan may be chalked out for regular and prolonged stay of this crane species in and around Ramnagar Wetland so that the tourism may get boost in Bundi.

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