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# A monospecific colony of Cattle Egret *Bubulcus ibis* in agricultural landscape of central Uttar Pradesh, India

Rajneesh Dwevedi, Aniket Kumar, Mahendiran Mylswamy

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## Introduction

The Cattle Egret *Bubulcus ibis* is widely distributed across the world. It is found all over India, from coastal areas up to 1500 m asl (Ali & Ripley 1968). It is also a species that is rapidly expanding its range across the globe (Lowe-McConnell 1967; Ali & Ripley 1968; Jenni 1969; Arendt & Arendt 1988; Si Bachir *et al.* 2011).

The breeding biology of the Cattle Egret has been studied in detail across the globe (Jeni 1969; Dusi & Dusi 1970; Siegfried 1972; McKilligan 1997; Parejo *et al.* 2001), and in India (Hilaluddin *et al.* 2003; Patankar *et al.* 2007; Joshi & Shrivastava 2012; Kour & Sahi 2013). It is known to nest in, both, monospecific- (Samraoui *et al.* 2007; Si Bachir 2008), and in mixed colonies (Dusi & Dusi 1970; Ranglack *et al.* 1991; Hilaluddin *et al.* 2003). A colony of Cattle Egrets may have from a few dozens, to thousands, of nests at once (Siegfried 1972; Fujioka 1985; Hilaluddin *et al.* 2006; Kour & Sahi 2013). This species has been well documented to be nesting in variety of nesting substrate and landscape (Hilaluddin *et al.* 2006; Parkes *et al.* 2012; Kour & Sahi 2013). This study describes a large monospecific colony of Cattle Egrets found in Aladapur village, Barabanki District, Uttar Pradesh.

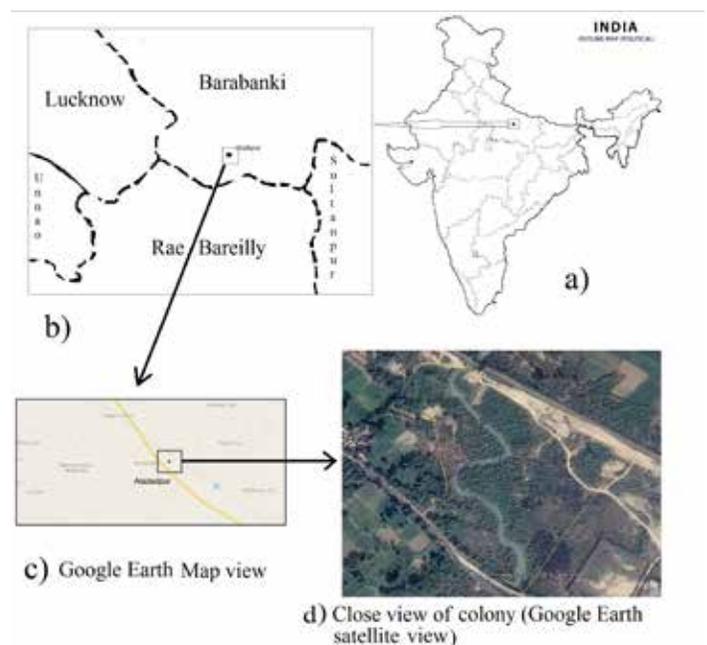


Fig. 1. Location of Cattle Egret colony

★ Map not to scale



139. Cattle Egret colony in Aladapur, Barabanki in 2014.

Aladapur village (26.66°N, 81.29°E; 104 m asl) is in Barabanki District, central Uttar Pradesh (UP) (Fig 1a). Barabanki is located 40 km east of UP's capital city, Lucknow (Fig 1b, 1c). The climate here is humid sub-tropical, as the region lies in the great plains of the Ganges and its tributaries. Aladapur receives most of its rainfall during the monsoon (~1000 mm per annum). This region is dominated by agricultural landscape and human settlements. A small canal also passes through the area draining 4 Km. away in river Gomti, a tributary river of the Ganges. The colony area (area within the yellow polygon in Fig.1d) lies between a railway line and national highway. This route is one of the busiest as it connects the two major cities of Lucknow and Varanasi. Hence, the disturbance is very high due to the traffic movement.

We monitored the Cattle Egret colony from a vantage point, from April to June 2014, and took photographs to assist us for reference and monitoring of nests. We counted the numbers of nests, and of adult Cattle Egrets. An active nest was confirmed as such, if it contained an egg.

We spotted this colony while on a random road survey in April 2014. We had never seen this colony earlier, despite visiting the area often, in the past few years.

Most of the Cattle Egret nests were on mesquite bushes *Prosopis juliflora*, and few on date palm *Phoenix dactylifera*. However, the plants were not surrounded by water, as noted for other colonies by Dwevedi *et al.* (2014), and Subramanya (1996).

At this colony we counted a maximum of 436 nests [139]. However, this number may be an underestimate, as we could have missed some nests because of the dense mesquite. We did not observe nesting of any other colonial species here. Hence, the colony was monospecific. However we recorded a few adult Little Egret *Egretta garzetta*, and Black-crowned Night Heron *Nycticorax nycticorax*. Presence of foraging individuals of other colonial waterbirds, like Asian Openbill Stork *Anastomus oscitans*, Black-headed Ibis *Threkiornis melanocephalus*, and Little Cormorant *Microcarbo niger* have been recorded in the nearby region in the past decade (*pers. obsv.*, of authors). We resurveyed the colony between April and June 2015, but did not find even a single nest of another colony nesting species.

The central UP landscape is dominated by agriculture, and the association between Cattle Egrets and agricultural landscape is well known (Siegfried 1971; Czech & Parson 2002). Hence, there is a possibility of more such colonies existing in the region.

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