Report on three new harrier roosts in Bustard Sanctuary, Maharashtra

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Information about the communal roost sites of the migratory harriers in India is scanty and only six communal roosts of harriers are described from India (Verma, 2007). We hereby describe three new communal roosts of harries from the Bustard Sanctuary in Solapur district of Maharashtra. The geographical location of 18°21'00"N this sanctuary is 75°11'38"E. The sanctuary has tropical grassland type of vegetation and is the home for many threatened species like the Great Indian Bustard Ardeotis nigriceps and the occasional records of the Lesser Florican Sypheotides indica. It is also recognised as an Important Bird Area (IBA IN-MH-06) (Islam and Rahmani, 2004). Besides the Great Indian Bustard, the sanctuary also hosts Indian or Grey Wolf Canis lupus (Kumar and Rahmani 1997) and the Blackbuck Antilope cervicapra besides Indian Fox Vulpes bengalensis and Golden Jackal Canis aureus.

One of the authors (BM) kept regular note of the numbers of roosting harriers whenever he visited the three roosting sites described here. The three roosting sites are:

1. Mardi 100 Hectare:

This site is near to the Range Forest office at Nannaj village. There is a small tower and a permanent hide for monitoring the movements of wild animals and birds in the surrounding plots of grasslands. This site holds an approximate population of 26 to 28 harriers during the winter months. On 3rd march 2011, we counted a total of 22 harriers arriving to the area and then roosting on the ground from 1745pm to 1830pm. From the photographs taken on

the evening, we identified three species of harriers, i.e., Montagu's Harrier *Circus pygargus*, Pied Harrier *Circus melanoleucos* and Pallid Harrier *Circus macrourus* (a threatened species) among the harriers arriving and hovering over the roosting site. Some of them perched on big rocks and preened before retiring to the grass cover. However, it was difficult to count the harriers species-wise. During the winter monitoring of harriers from 2006 to 2010, BM counted 26 to 65 harriers at this roosting site (see table below).

Year	No. of Harriers sighted in Winter
2006	40-42
2007	40-42
2008	40-42
2009	60-65
2010	26-28
March 2011	22

2. Dreamland or 50 Hectare:

This area of the sanctuary regularly holds a roosting population of 40 to 42 harriers of the three species during the winter. The site was monitored by BM since 2009. In December 2009 around 30-32 harriers were sighted here and in 2010 40-43 harriers were sighted during the same period.

3. Wadala-Mahurchi Aai-Farid Baba Area:

This area has a temple over a hillock and a *durgah* nearby. The temple gives a bird's eye view of the surrounding grasslands. Since 2004, this area holds a roosting population of 50 to 60 harriers during the winter. However, in December, 2006 a

record number of 140-145 harriers were seen roosting at this site (BM). On 2nd March 2011, however RK saw only four harriers arriving and roosting in tall grass in this area from 1800 to 1900 hrs. The harriers avoided the regular roosting location as the grass was burnt here and instead preferred to roost in a nearby good patch of tall grass.

According to Verma (2007) the major communal roosting sites of harriers in India are Velavadar National Park, Gujarat (the world's largest Harrier roost, 3000 birds), Rollapadu Wildlife Sanctuary and ICRISAT, Andhra Pradesh (300 -1000 birds) (Rahmani and Manakadan, 1986), Keoladeo National Park, and Tal Chapper Wildlife Sanctuary in Rajasthan (100 – 200 birds) and Bangalore in Karnataka (100 – 150 birds). Verma (2005) estimated the maximum population of roosting harriers at Akola, Maharashtra, India to be ca. 200 and 72 harriers during February 2003 and October 2004. Verma (2003) reported around 170 harriers at a roost in Keoladeo National Park, Rajasthan. Ganesh and Kanniah (2000) reported a peak roost of over 200 harriers of Circus species during monitoring of harriers from 1986 to 1994 near Secunderabad, Andhra Pradesh. India.

The communal roost sites are critical resources for harrier survival as they spend considerable time here. These communal roosting sites are usually tall grasslands where they get concealment and protection from both predators and cold weather. Harriers generally start congregating at these sites about half an hour or so prior to sunset. They spend time pre-roosting in open ground close to their roost site engaging themselves in resting, preening and vocalizing. This is probably done to attract more harriers to increase the flock size. Just after sunset an intensive inspection is carried out of the grassland their roost site and within half an hour they settle down for roosting. Hence the record

of these three new harrier roosting sites from Maharashtra is important.

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