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Foraging Pteropus Medius at Urbanized Ntr Gardens Hyderabad

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ABSTRACT

Persistence of wildlife in urban environments may be linked to opportunism and a high degree of ecological and behavioural plasticity public interest in bats has vastly outstripped scientific research about them, presenting interesting challenges and opportunities for bat biologists. Bats are adaptive in nature and find refuge in old ruins, temples, and abandoned buildings; these structures are also being replaced or renovated and thereby bats are losing favourable places for roosting. Bats are particularly susceptible to anthropogenic changes because of their low reproductive rate, longevity, and high metabolic rates. Bats (order Chiroptera) include more than 120 species are found in India. Extant species, forming the second largest mammalian order, and are unique among mammals in their evolution of powered flight. Bats are particularly susceptible to these human-induced perturbations of habitats because of their distinct life history. Being a passionate naturalist, citizen, explorer, adventurer and a wildlife photographer an attempt has been made to study Bats and its activities like roosting and foraging at local recreation park. NTR Gardens at Hyderabad Telengana state India.

Keywords: Bats, Urbanisation, Parks in Hyderabad.

Urbanisation is said to cause ecological damage, posing significant threats to global biodiversity. Bats are a highly diverse groupof mammals that occur worldwide, and many species persist in cities. The fruit bats have large foraging range often ranging more than 50Km.The bats play a very important role in ecology by acting as seed dispersal's and insect control. The diet of the bats varies from fruits, flowers, nectar, insects, birds, fish and even small mammals. Bats usually consume almost one third their body weight of food. The megabats which are usually larger in size fee on fruits, flowers, pollen and nectar. Manyanimals, however, disappear from cities because they depend on habitat features that no longer exist (Gilbert 1989; McKinney 2002; Luniak 2004; Haupt et al. 2006;) Some species in urban areas also suffer from additional stress (Isaksson 2010), increased infection and parasitism rates (Giraudeau et al. 2014) and reductions in potential reproductive success (Chamberlain et al. 2009). Urbanisation can also trigger a change. in behaviour (Ditchkoff et al. 2006; Grimm et al. 2008).

Figure 1 Ferocious behaviour of Pteropus

Figure2 Abnormal Mating behaviourof Pteropus during day time

OBSERVATIONS

Hyderabad city is fully urbanized and provide a more thermally stable environment. The planting of attractive introduced and native plant species throughout the gardens in the city
also changed the resources available to fauna, for example by providing nectar or fruits throughout the year. Urbanisation results in extreme forms of land use alteration. (Shochat et al. 2006; Grimm et al. 2008). Anthropogenic changes in urban ecosystems typically occur at rates drastically faster than long-lived organisms are capable of adapting to, and thus disrupt ecological processes that historically governed community structure some wildlife species are able to adjust to a life in urban areas. Bats likely form the most diverse group of mammals remaining in urban areas (van der Ree and McCarthy 2005; Jung and Kalko 2011). Of the studies conducted in urban landscapes to date, many show that overall bat activityand speciesrichness are greatest in more natural areas, and decreases with increasing urban influence (Kurta and Teramino 1992; Walsh and Harris 1996; Gaisler et al. 1998; Legakis et al. 2000; Lesiński et al. 2000). However, certain bat species may better be able to adapt to urban landscapes (Avila-Flores and Fenton 2005; Duchamp and Swihart 2008).

Urbanisation can also trigger a change. in behaviour. Bats are known to be nocturnal animals which are active during night times but it was observed that bats in the recreational parks were active in day light. This may be adaptation to change in habitat and influence of urbanisation impact.

It was also observed that the studies conducted in urban landscapes gardens showed overall bat activity and species richness under urban influence. In the present study it was observed that bats were active

during day time and werehighlyroosted and foragingon Ficus religiosa and on Butea monospermiatreesofNTR gardens Hyderabad, Telangana state India. Many of them were ferocious, Exhibited breeding phenomena sexual activities mating during day time. It was also observed that, in general, habitat use of bats increased in gardens and lanbdscapes of Hyderabad. A high degree of urbanisation had a stronger positive effect on habitat use.

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