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Predation of the common house gecko *Hemidactylus frenatus* by the common myna *Acridotheres tristis* in an urban environment

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Abstract
This note reports on an observation made on the predation of an individual of *Hemidactylus frenatus* by the *Acridotheres tristis* in an urban environment in the National Capital Territory of Delhi. Documenting such small behavior and responses of the wild species would be of paramount importance in management and conservation of the native species in an urban ecosystem.

Keywords: *Acridotheres tristis*, predation, *Hemidactylus frenatus*, north India

Introduction
Acridotheres tristis (common myna) is an omnivorous and opportunistic bird species, which is native to central and southern Asia. It ranges from India, Afghanistan, Turkestan, Bangladesh, Sri Lanka as well as much of southern China and Indochina, and there are signs of spread into Iran and north into southern Russian states and former Soviet countries (Feare and Craig, 1998) [3]. Two subspecies of genus Acridotheres have been recognized, *viz*. *melanosternus*, which is endemic to southern India and Sri Lanka, and the *tristis*, which is known to have widespread distribution. This subspecies has also been introduced to many countries (South Pacific Islands, eastern Australia, New Zealand, Madagascar, United States (Florida), parts of South East Asia, southern Africa, etc.) (Kannan and James, 2001) [4], either intentionally for insect control, or accidentally from the pet trade (Long, 1981; Lever, 1987) [6, 5].
Common mynas are mainly ground feeders, walking and searching food on ground. It mainly feed on fruits, berries, grains, nectar, insects (mainly grasshoppers) and spiders. However, occasionally it also feeds on small reptiles and scavenges on the litter. The species is both individual and gregarious feeder (Sengupta, 1976) [7]. The species is highly capable to adapt to a wide array of habitats, ranging from forests, agricultural fields, coastal areas, wetlands& marsh lands, flood plains, grasslands, foothill dominant areas. Besides, as a *highly commensal species the bird lives in close association with human beings and found across the human habitation, roadside and urban parks as well*. Myna is commonest and most familiar bird in human habitations, one of two pair usually adopt a house or compound for their own and guard it against intrusion from others of their kind (Ali, 1941) [1].
Common myna is listed as Least Concern in IUCN Red List of Threatened Species. However, is protected under the Schedule IV of the Indian Wildlife (Protection) Act, 1972, which imposes penalty for any kind of violation of the law. In this note, we report on an observation made on the predation of an individual of *Hemidactylus frenatus* common house gecko by common myna in an urban environment in the National Capital Territory of Delhi.

Materials and Methods
Siri Fort Park is located in the heart of south Delhi 28°55′37.86″N, 77°22′77.50″E over an area of 1,61,874 Square meter. The park is a self-sustaining natural ecosystem, which gives a feel of wilderness in the heart of city. Some of the large old trees of the park witness our historical forest management and conservation initiatives undertaken in the past. Plant species in the area where the incident was observed include: *Cassia fistula* (Amaltas), *Ficus religiosa* (Pipal), *Ficus virens* (White Fig), *Ficus benghalensis* (Indian Banyan), *Bombax ceiba* (Semal), *Bauhinia variegata* (Kachnar), *Polyalthia longifolia* (Ashok), *Pithecellobium dulce* (Jungle Jalebi), *Alstonia scholaris* (Blackboard tree), *Mimusops elengi* (Maulsari), *Azadirachta indica* (Neem), *Dalbergia sissoo* (Indian Rosewood) and *Bambusa vulgaris* (Bamboo).

This note is an ecological observation has been made in Siri Fort Park while documenting the avifauna of the area. Geographical coordinates were recorded using a handheld GPS receiver (Garmin eTrex 30x) and photographs were taken using Canon EOS-700D camera. Field binoculars (Nikon Action Series, 10×50 CF) were also used for observing the bird maintaining a distance.

Plate 1: An individual of common myna INAN urban park in Delhi.

Plate 2: Common myna holding an individual of common house gecko

Results and Discussion

On 14 July 2021(10:40 h), while documenting the avifaunal species in Siri Fort Park, we came across a common myna, which was trying to chase and kill an individual of common house gecko on the ground. Considering that the species is a proficient scavenger bird, which feed on almost all types of food, including insects, fruits and vegetables, leftovers, and occasionally small reptiles, earthworms, small rodents and eggs, we were interested to observe and record the incident. Common myna was eager to kill the gecko, however, was a bit scared, since the gecko was running here and there to escape out from the spot. The bird was intermittently pecking the gecko with its beak, and used to return 2-3 steps backwards. In every attempt, the bird was trying to capture the head of the gecko. After quite a few minutes the moment came when the bird damaged the head of the gecko and almost killed it (Fig. 1 & 2). The incident continued for about 30-35 minutes, till the bird made the gecko either unconscious or dead. The bird than ate a little portion of the body part of the gecko. The whole event lasted for nearly 40 minutes, after which the bird flew away from the spot. We were surprised to note that bird had invested about half an hour in killing the gecko, however, had ate only a little portion including tail within only 4-5 minutes. After watching the entire incident, it was observed that the bird was more interested in killing the gecko rather than eating it.

Common mynas are known to hunt small lizards from the walls or trees by striking and throwing them down on the ground and killing them with their beak, before eating. On the other hand, the common house geckos are ectothermic and are least active during the cold months. Besides, the species performs thermoregulatory behavior during the winter, which sometimes leads to the cause of their death. A study carried out on the food habits of common myna in different parts of Gangetic plains in West Bengal along with some observations made in Sydney, revealed that the principal food of the common myna is insects, and supplemented by fruits and flower nectar in some season of the year, however, the species rarely may feed on house rat (*Rattus* spp.), and reptile species (Sengupta, 1976) [7].

The Sirifort Park is one of the most diverse urban parks in the National Capital Territory of Delhi, which forms an important repository of herpetofauna as well as bird's fauna. Documenting such behavior and responses of animals, underpinning the species' functional role in maintaining ecosystem and biological diversity, especially in context of changing climatic conditions, would thus contributes towards the natural history and management of native species in an urban environment.

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