



ROOSTING SITES RECORD OF *PTEROPUS GIGANTEUS* (BRUNNICH 1782) INDIAN FLYING FOX IN “URBAN AND RULERS” AREAS INHABITING IN DISTRICT HYDERABAD SINDH PAKISTAN

AFSHAN ASHFAQUE AHMED^{*}, NAEEM NAREJO¹, AYAZ HUSSAIN QADRI, KHALID HUSSAIN, SHABANA PARVEEN, SABINA SHAIKH, JAWERIA SHAIKH

Department of Zoology, University of Sindh Jamshoro, Pakistan.

¹Department of Fresh Water Biology, University of Sindh, Jamshoro, Pakistan.

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All authors contributed equally.

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ABSTRACT

This research article showed aimed to record some roosting sites of *Pteropus Giganteus* found in this district. *Pteropus Giganteus* (Brunnich 1782) are belongs to sub order of chiroptera (Megachiroptera). They are very big in size. During year of (2018) surveys were carried out from “May upto August”. Surveys were conducted from 05 areas of district Hyderabad included urban and ruler areas from urban sites (Pacca Qila, Station colony, American Coaters) ruler sites (Bhatti Goth, Goth Khan Shuro).. During survey 38 specimens comprising 18 males and 20 females were captured. This article revealed many roosting areas first time in district Hyderabad because it was first attempt on “Order Chiroptera” in district Hyderabad.

1. INTRODUCTION

Pteropus Giganteus (Brunnich 1782) Indian flying fox was known as Indian flying fox it was greater Indian bat, this species are included in flying foxes which is found in “South Asia”. It is recorded as largest bat in world weighting upto 1.6 kg (3.5 IB) ^(2, 3). It is also capable to transmit several diseases to human. Usually it is feed on ripe fruit as well as mangoes and bananas also known as fruit consumption ⁽¹⁾. *Pteropus Giganteus* sprit almost in sun-continent Asia they exist many countries including in parts of “South Asia” including (Bangladesh, Bhutan, India, China, Tibet, Maldives, Myanmar, Nepal, Pakistan and Srilanka). Roosts were usually seen on tall trees, temples, canopy trees ⁽⁴⁾. Largest aggregations of mammals are formed by bats it is known as non-humans aggregations, It's occupy in all types of corners and habitats of earth with exception of some that types of islands which known as remote islands and polar regions ⁽⁵⁾.

That types of bats which are seen usually in day time they present in day roosts on large groups all these bats are known as ‘camps’. They consist of several hundred individuals to several thousand individuals of *Pteropus Giganteus* (Brunnich 1782) Indian flying fox ⁽⁶⁾. These camps are usually found in close association with human settlements both in villages and cities. *Pteropus Giganteus* are animals of considerable ecological and economic importance and play a pivotal role in pollination and seed dispersal ^(7, 8).

2. MATERIALS AND METHODS

Various surveys were conducted in district Hyderabad during 2018 in month of (May up to August). In these surveys many specimens were collected from Order Chiroptera including Megachiroptera and Microchiroptera from all these specimens total 38 specimens comprising 18 males and 20 females were collected all are belongs to *Pteropus Giganteus* (Brunnich 1782) Indian flying fox. For collection direct method were used to

* Corresponding Author: afshankhanzai061@gmail.com

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capture specimens. In direct method only one method were used from various area of district Hyderabad with many field equipment's usually surveys were conducted in day time during study period. As field equipment's Firstly Binoculars were use during survey many sites were detected and marked as particular place of collection. After detecting particular areas fishing net were used to capture live specimens as well as butter flying net or bats capturing rod were also used to getting collection. For capturing during time of flight specimens were detected with help of Binoculars after or measured particular area place fishing capturing net with help of bamboos to collect some mega species during flight time as well as bat capturing rod or butterflies capturing net were used when specimens fly on low altitude of area.

3. RESULTS AND DISCUSSION

Study was carried out in 05 areas of district Hyderabad from May up to August in 2018. During this period 38 specimens comprising 18 males and 20 females were captured all of them belongs to (order chiroptera) sub order Mega chiroptera Family Pteropus and species is *Pteropus Giganteus* (Brunnich 1782) commonly this species is known as Indian flying fox usually it is found in India. Firstly they are record in district Hyderabad from 05 particular areas included 02 ruler and 03 urban sites in urban Pacca Qila, Station Colony, American Coaters and in ruler Bhatti Goth, Goth Khan Shuru were used for data collection From these sites almost roosts are seen usually upper sides of trees, trees stems, branches of trees they lives on high altitudes and they are not set permanent roost for living because they are live freely and going to hibernation condition in winter seasons it is also big reason to not set permanent roosting sites on permanent place. Figure no 01 showing ruler sites data collection of *Pteropus Giganteus* from sites Bhatti Goth and Goth Khan Shuru. Figure # 02 showing urban sites data collection from district Hyderabad including Pacca Qila, Station Colony and American Coaters. Table # 01 showing name of species which is *Pteropus Giganteus* and total collection of males of females comprising on 18 males and 20 females total amount of collection is 38. Table # 02 showing Total record of *Pteropus Giganteus* (Brunnich 1782) in Ruler and Urban areas of district Hyderabad from ruler and urban sites from district Hyderabad from ruler sites total 17 specimens were collected and from urban sites total 21 specimens were collected. Table # 03 Total record of *Pteropus Giganteus* (Brunnich 1782) in Ruler and Urban areas with particular names of areas of district Hyderabad from ruler sites 02 areas

were observed from Bhatti Goth total 07 specimens collected with comprising of 02 males and 05 females and other one in Goth Khan Shuru total 10 specimens comprising with 05 males and 05 females were collected from urban sites of district Hyderabad 03 areas were observed from Pacca Qila total 06 specimens were collected comprising with 03 males and 03 females another is Station Colony 07 specimens comprising with 04 males 03 females were collected and last one is American Coater total specimens were 08 collected with 04 males and 04 males. All species are presented with some changes in their forelimbs and sizes but colors are almost same in all specimens of *Pteropus Giganteus* because of their size these species are known as the biggest species which is record through-out the world.

4. CONCLUSION

Pteropus Giganteus found in this district. *Pteropus Giganteus* (Brunnich 1782) are belongs to sub order of chiroptera (Mega chiroptera). They are very big in size. During year of (2018) surveys were carried out from "May up to August". Surveys were conducted from 05 areas of district Hyderabad included urban and ruler areas from urban sites (Pacca Qila, Station colony, American Coaters) ruler sites (Bhatti Goth, Goth Khan Shuru). During survey 38 specimens comprising 18 males and 20 females were captured. This article revealed many roosting areas first time in district Hyderabad because it was first attempt on "Order Chiroptera" in district Hyderabad. These are very big is size that's why they are known as big bats or mega bats through-out the world.

5. CONFLICT OF INTEREST

All authors have declared that there is no conflict of interest regarding publication of this article.

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Table 1 Total record of *Pteropus Giganteus* (Brunnich 1782)

Name of Species	Males	Females
<i>Pteropus Giganteus</i>	18	20
Comprising	Males and Females	Total Specimens 38

This table is shown total record of collecting specimens comprising males and females and name of particular species. Firstly they were found in district Hyderabad.

Table 2 Total record of *Pteropus Giganteus* (Brunnich 1782) from urban and ruler sites from district Hyderabad

Total # specimens	Specimens from Ruler sites	Specimens of Urban sites
38	17	21
Comprising	07 Males 10 Females	11 Males 10 Females

This table is shows total record of collecting specimens from rulers and urban areas of district Hyderabad comprising with males and females.

Table 3 Total record of *Pteropus Giganteus* (Brunnich 1782) in Ruler and Urban areas with particular names of areas of district Hyderabad.

Areas of district Hyderabad	No of Specimens	Males	Females
Ruler Sites			
Bhatti Goth	07	03	05
Goth Khan Shuru	10	04	05
Urban Sites			
Pacca Qila	06	02	01
Station Colony	07	04	05
American Coaters	08	05	04
Total no of specimens	38	18	20

This table is shows total record of urban and ruler areas with particular names of areas of district Hyderabad with total specimens comprising with males and females.



A. Bhatti Goth

B. Goth Khan Shuru

Figure 1 Roosting side in ruler study side Goth Khan Shuru, Bhatti Goth, district Hyderabad.

Roosting sites record of Pteropus giganteus in District Hyderabad Sindh



Figure 02 Roosting side in urban study side Pacca Qila, Station Colony, American Coaters District Hyderabad along with laboratory examination