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Study of Electocutiion of Flying Fox / Megabat in Peshawar University, Kpk, Pakistan

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Abstracts

A study was done on death of flying fox (Pteropus Giganteus) due to electrocution. Survey was carried out in the month of October, 2019 in the Peshawar University and Pakistan Forest Institute, Peshawar. We have observed twenty (20)dead individuals of flying fox / megabats , the present study also show some conservation measurements to minimize mortality of flying fox the co-ordinates were taken in the observed site of electrocuted bat, high electrocution not only may contribute their population decline but also put their ecosystem service at risk.

Keywords: electrocution; bat; conservation; ecosystem service; powerlines.

1. Introduction

Bats having wide diversity in the the world, according to the IUCN 15% of bat species are threatened with extinction, 18% are listed as data deficient and 57% have unknown population trends They play role in the pest control [2], the flying fox is threatened by the habitat due to cutting of native trees for the construction of road and house [1] Agriculture development, industrial development and increased human population [3] major threats include electrocution. According to [2] occasionally bat survive in the electrocution when bats stretch their large wings between two power lines while hanging on power lines the circuit gets completed and electrocution occur . a study showed that bat having wingspan of less than one meters were not affected and their mortality rate is also vary between power lines types **.**

2. Materials and methods

The study area is situated in the north western Pakistan, regular two day survey conducted at Peshawar university and Pakistan forest institute Peshawar urbanized area, therein power lines were focused near trees ,roosting sites power lines supply energy to settlements because bats go for searching food at night and collision with power lines which are near of their roosting and foraging sites ,pictures were taken of electrocuted bat individuals and species identified . Bats where also sighted near on roosting tree through the direct roost count method.

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Table 1

S. NO	LATITUDE	LONGITUDE
01	34° 0'50.81"N	71°28'59.41"E
02	34° 0'50.38"N	71°28'59.34"E
03	34° 0'59.02"N	71°29'1.32"E
04	34° 1'0.52"N	71°29'8.43"E
05	34° 0'58.96"N	71°29'6.14"E
06	34° 1'3.47"N	71°29'8.04"E
07	34° 1'6.00"N	71°29'9.47"E
08	34° 1'15.84"N	71°29'12.23"E
09	34° 1'12.94"N	71°29'21.44"E
10	34° 0'53.01"N	71°29'3.37"E

Hanging bats on electric cables at peshawar university and pakistan forest institute peshawar

Figure 1

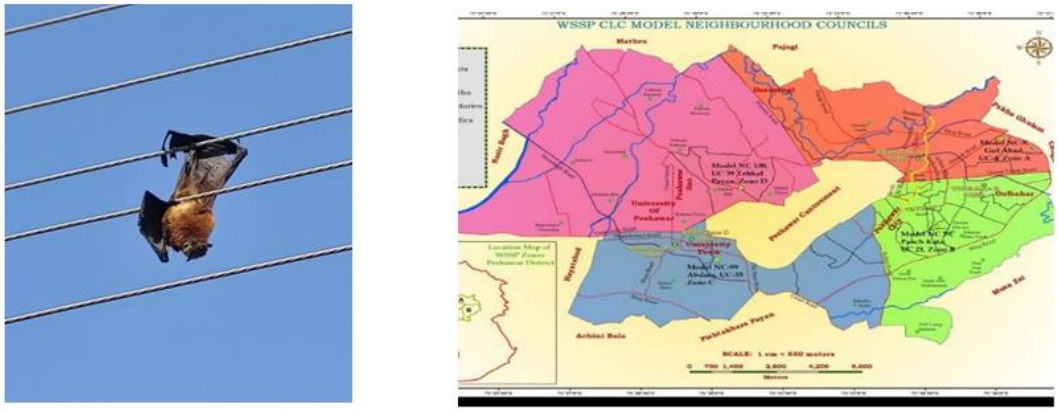

Figure 2

3. Result and discussion

Bats are essential contributors to our planet and sustain role in ecosystem. The Power lines near the bat habitats may be cover-up with plastic tubes or increase the distance between power lines to minimize mortality of flying fox ,insulation may be considered. The power lines are responsible for the death of many flying animals ,it is important that public may report each electrocution not only to remove dead animals but to alert wildlife concern department to see potential hotspots so they can improve infrastructures and prevent future death of our wildlife. Finally, further research is needed to assess the actual impact of electrocution in this and other species of large fruit bats.

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