

Habit and Habitat of Squirrels in Bangladesh

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Abstract: To fulfill our interest, we tried our best to observe the current status of squirrels in Bangladesh. In Bangladesh there are generally 8 species of squirrels which are different in size, color but same in food habit are found. From them, we observed that Pallas's Squirrel (*Callosciurus erythraeus*), Irrawady Squirrel (*Callosciurus pygerythrus*), Three Stripped Palm Squirrel (*Funambulus palmarum*) and Five striped Palm Squirrel (*Funambulus pennantii*) are widely distributed. A large number of variations were observed during winter and summer as we preferred these 2 seasons for our field study. All of them are frugivorous and sometimes feed on grass flowers too. Sometimes taking Insects as food fulfill the necessity of protein.

Keywords: Squirrels, habit, habitat, status, Bangladesh.

1. INTRODUCTION

Bangladesh is a country in South Asia. It is bordered by India to its west, north and east; Burma to its southeast and separated from Nepal and Bhutan by the Chicken's Neck corridor. To its south, it faces the Bay of Bengal. As a result of its position a huge variety can be seen in the wildlife of Bangladesh. There is also a wide variety of animal diversity to be found also. Bangladesh is enriched with 89 mammals. Of which 3 are critically endangered, 12 are endangered, 16 are vulnerable, and 4 are near-threatened. From all, Squirrels are members of the family Sciuridae, consisting of small or medium-size rodents. The family includes tree squirrels, ground squirrels, chipmunks, marmots (including woodchucks), flying squirrels, and prairie dogs. Squirrels have short forelimbs and their toes bear sharp claws, which assist climbing in arboreal species. Their long hind limbs provide the propulsion necessary for leaping. Flying squirrels have a furry membrane (the patagium) along each side of the body, running from the hind limb to the forelimb, where it is attached to the wrist. By extending their limbs, these animals greatly increase the surface area of their body and are able to glide from tree to tree in a controlled manner, by using their tail as a rudder. These small medium sized mammals also play an important role in pollination and eating insects they save our forests too. There is a variation in their distribution. In Bangladesh they can be found on mixed evergreen forests, East of Jamuna, Sundarbans, West of Jamuna, Chittagong, and Chittagong Hill Tracts. It's a great shock that their number has been decreasing day by day because of deforestation and carelessness of the local people.

2. METHODS AND MATERIALS

High quality binocular was used to watch Squirrels carefully. Canon 600D with Canon EF-s 55-250mm f/4-5.6 IS II lens was used to take some photographs.

3. RESULTS AND DISCUSSIONS

Genus: *Callosciurus*

Species: *Callosciurus erythraeus* (Pallas's Squirrel):

Medium sized mammal which is recognized by red belly, olive brown upper parts and banded tail. Tail bushy and longer than length of head-body. Widely distributed in forest area of Bangladesh and valuable for the ecosystem roles especially as seed dispersers of tree species. We observed numerous and also its number is increasing gradually.

Species: *Callosciurus pygerythrus* (Irrawady Squirrel):

Irrawady squirrels are widely distributed in Bangladesh but globally it is vulnerable. This *Callosciurus pygerythrus* was found in both ground and tree. This diurnal, arboreal animal is dorsally brown with grey white belly, rufous tinge at base of limbs and we found numerous in Sundarbans, Barisal, East of Jamuna , Chittagong. During summer they were numerous but in winter they were observed between 12:30- 3:30 p.m. In summer and in the winter wet season, a pale buff patch was seen on the hips but this faded when the winter coat appeared.



Genus: *Funambulus*:

Species: *Funambulus palmarum* (Three Striped Palm Squirrel):

The palm squirrel is about the size of a large chipmunk, with a bushy tail slightly shorter than its body. The back is a grizzled, gray-brown color with three conspicuous white stripes which run from head to tail. The two outer stripes run from the forelegs to the hind legs only. It has a creamy-white belly and a tail covered with interspersed, long, black and white hair. The ears are small and triangular. Juvenile squirrels have significantly lighter coloration, which gets progressively darker as they age. Albinism is rare, but exists in this species.



Species: *Funambulus pennabtii* (Five Stripped Palm Squirrel):

This is almost same in size, color showing one difference for five stripes. It is found on the northern side of Jamuna. We also observed a large number of these two during summer whether they were little amount in winter from 12:30 to 3:00 pm.



Genus: *Dremomys*:

Species: *Dremomys lokriah* (Orange Bellied Himalayan Squirrel):

The most interesting chunky bodied one is 200 mm with head to body length and 220 mm tail. It has dark rufous brown speckled with yellowish brown color on dorsal and bright orange color on ventral side. This was the most common in Sherpur district and Northern side. But our observation proved that now the number is downlisted since it is found in India and this species are going from vulnerable to threatened. We observed only three in Summer and one in winter in Lawachara Uddyan.

Species: *Ratufa bicolor* (Black Giant Squirrel):

The Black Giant Squirrel or Malayan Giant Squirrel (*Ratufa bicolor*) is remarkable largest tree squirrel in Bangladesh. It's body length varies from 35-58 cm, tail up to 60 cm long and black, bushy tail is deep brown to black with a light buff colored belly. This is also diurnal and arboreal but sometimes climbs down from the forest canopy to feed on the ground. And that time these are fallen of victim by tribal people. It's really shocking that we identified only one during summer on 12 June, 2014 at 3 p.m.

Other two species of squirrels *Petaurista magnificus* (Hodgson's giant flying squirrel) and *Petaurista petaurista* (The red giant flying squirrel) are listed in *The IUCN Red List of Threatened Species* as threatened species. So we didn't observe those species.

4. CONCLUSION

Squirrels can be seen in all type of forests of our country and even around human habitat. Irrawaddy squirrels are the most common in our country. Black Giant Squirrel is found in evergreen forests of our country. This tree living squirrel is habitually coy. Orange Bellied Himalayan Squirrel is found in forests of Sylhet and Chittagong Hill Tracts. Squirrels are important wildlife. They have environmental and economical importance. They play an important role in the food chain. Moreover, they help to create natural forests by spreading seeds. Sometimes tribal people of Bangladesh consume them. Awareness should be created to conserve them. If we could ensure their natural habitat, then their population will be increased.

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REFERENCES

- [1] Encyclopedia of Flora and fauna of Bangladesh (Mammals), Vol: 27, Asiatic Society of Bangladesh,
- [2] http://en.wikipedia.org/wiki/Wildlife_of_Bangladesh.
- [3] http://en.wikipedia.org/wiki/Indian_palm_squirrel.
- [4] http://en.wikipedia.org/wiki/Northern_palm_squirrel.
- [5] http://en.wikipedia.org/wiki/Black_giant_squirrel.
- [6] <http://en.wikipedia.org/wiki/Bangladesh>.
- [7] <http://www.iucnredlist.org>.