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Namdapha Gliding Squirrel Biswamoyopterus biswasi is one of the Critically Endangered (Molur 2008) and endemic gliding squirrels found in India. It is thought to inhabit the Mesua ferrea jungles bordering the Noa-Dihing River of Namdapha National Park (NNP),

Arunachal Pradesh, India. During our survey on gliding squirrel diversity in NNP, we confirmed the presence of the Red Giant Gliding Squirrel Petaurista petaurista (RGGS) and Parti-colored Gliding Squirrel Hylopetes alboniger through spotlighting and a specimen of the Spotted Giant Gliding Squirrel Petaurista elegans collected from this region is preserved at ZSI, Kolkata (specimen named as P. sybilla, Collection No. NM/30). However, we did not encounter Namdapha Gliding Squirrel (NGS) during our multiple surveys (6 field sessions including 120 survey nights). Its discovery in the 1980s (Saha 1981; De et al. 2006) is the only time when the species was originally studied (dead specimen) after which it has neither been sighted nor documented. However, many tourists, forest department personnel and researchers claim the documentation of the species, but no published record is available on the sightings of the species elsewhere. Before the start of our initial survey on gliding squirrels of NNP, we tried to gather information on the possible distribution of NGS through forest personnel (rangers, forest watchers and guards). However, during our multiple surveys in NNP we recorded RGGS in those areas which are thought to be occupied by NGS according to the forest personnel.

WHY THE RED GIANT GLIDING SQUIRREL PETAURISTA PETAURISTA IS OFTEN MISTAKEN FOR THE NAMDAPHA GLIDING SQUIRREL BISWAMOYOPTERUS BISWASI (MAMMALIA: RODENTIA: SCIURIDAE) IN NAMDAPHA NATIONAL PARK, ARUNACHAL PRADESH, INDIA

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We interacted with many of the tourists (n=21), and researchers (n=9) who have visited NNP and from those interactions, we realised that the majority of them mistake RGGS as NGS. So, based on those interactions, we concluded many reasons behind the ignorance of people towards the identification of the species, some of which are listed below:

(i) S.S. Saha described the species NGS in the year 1981 and the data regarding the species pelage colour and original photographs of it are documented only in the paper published by the Bulletin of Zoological Survey of India which is not available online because the paper is often not in circulation (Image 1). Also, many other papers which provide the description of NGS are not often under circulation (Choudhury 2009). The holotype is preserved at ZSI, Kolkata; no other voucher specimens occur elsewhere (Image 2).

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- (ii) Many websites on the internet often mistakenly present RGGS as NGS even "Arkive" sections included other gliding squirrel (possibly Hodgson's Gliding Squirrel) stating it to be NGS, which was later removed (Arkive 2010).
- (iii) RGGS has nearly 5–10 subspecies and the variation of the pelage colour is observed (Corbet & Hill 1992; Yu 2002) this could be one of the reasons behind the incorrect identification of the species. Moreover, both NGS and RGGS share similar habitats in NNP.
- (iv) Endemism is the other reason behind the thought. As NGS is thought to be endemic to NNP in the state of Arunachal Pradesh, India (De et al. 2006) many

- people have a perception that the gliding squirrel found in NNP is NGS.
- (v) The Indian mammal field guide by Menon (2003, 2014) though provides a photographic plate showing the head portion of NGS, the poor picture quality could be a reason for wrong identification of the same.
- (vi) The specimen at Miao museum of Namdapha National Park cum Tiger Reserve holds a specimen of gliding squirrel named as NGS which actually is RGGS (Image 3). It was corrected as RGGS only in early 2012 after our suggestion.

Thus, we thought to provide important information regarding the morphological characters of NGS with



Image 1. [a,b,c] Showing the head, dorsal and ventral portion of Namdapha Gliding Squirrel *Biswamoyopterus biswasi* (© S.S. Saha) (Saha, 1981) (yellow circle showing the white coloured ear tufts in figure [a]); [d] Showing the picture of Red Giant Gliding Squirrel *Petaurista petaurista* (© C. Murali Krishna)

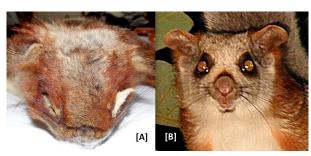


Image 2. Comparative account of the head portion (front side)
A - Namdapha Gliding Squirrel (photographed from ZSI, Kolkata);
B - Red Giant Gliding Squirrel (© C. Murali Krishna)



Image 3. Comparative account of head portion (sidewise). A - NGS (Yellow portion highlighting the ear tufts) (photographed from ZSI, Kolkata); B - RGGS (Photographed from NNP Museum at Miao).

Table 1. Comparison of morphological characteristics of Namdapha Gliding Squirrel and Red Giant Gliding Squirrel

	Morphological characters	Namdapha Gliding Squirrel Biswamoyopterus biswasi	Red Giant Gliding Squirrel Petaurista petaurista candidula *
1.	Total Body Length	1010mm	1150mm
2.	Head & Body	405mm	520mm
3.	Hind Foot	78mm	75–100 mm
4.	Tail	605mm	630mm
5.	Pelage Colour	Body above is morocco red grizzled with white	Body above is partially morocco red grizzled with white dominated by greyish and blackish
6.	Crown Colour	Grey hair tipped with red	White intermixed with black hair
7.	Tail colour	parti-coloured and beyond the inter-femoral membrane proximally pale smoky gray changing distally to vinaceous rufous and then to clove brown coloured near tip	Greyish beyond the inter-femoral membrane and then to black coloured near tip
8.	Facial markings	Red coloured circles around eyes and narrow black lines forming nasal bridge	Prominent Red coloured circles intermixed with black around eyes followed by black markings above the nose and below the chin.
9.	Patagium	Ventral side washed with faint orange-rufous	Ventral side with white hair
10.	Edges of Patagium	Red colour	Ashy colour
11.	Ear tufts	Distinct White ear tufts with silvery white margins on the posterior side but the anterior margins basally	No such ear tufts are present
12.	Ventral Body Colouration	White with hairs with pearly grey bases	Pure white coat

^{*}Of the 5-10 subspecies of Petaurista petaurista, P. p. candidula is the subspecies that is observed in Namdapha National Park.

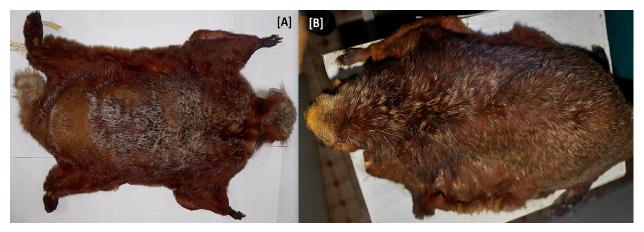


Image 4. Comparative account of dorsal portion. A - NGS (photographed from ZSI, Kolkata); B - RGGS (photographed from NNP Museum at Miao).

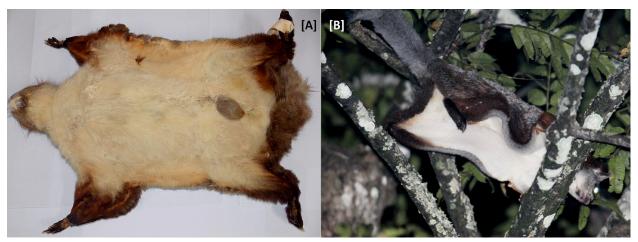


Image 5. Comparative account of ventral portion. A - NGS (Photographed from ZSI, Kolkata); B - RGGS (© Ranjan Kumar Das)

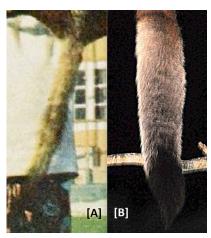


Image 6. Comparative account of tails. A - NGS (© S.S. Saha) (Saha, 1981); B - RGGS (© C. Murali Krishna)

photographs from published works, which will help in identification of the species (Images 4–6).

Morphological characteristics of Namdapha Gliding Squirrel *Biswamoyopterus biswasi* as described by Saha (1981), Choudhury (2009) and Thorington et al. (2012) are presented in Table 1.

Of the above mentioned characteristics, the presence of the white coloured ear tufts is the main differentiating character of NGS from RGGS, also, the adult individual of NGS is smaller in size when compared to RGGS (Total Body length: 1150mm).

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