


THE HOOLLONGAPAR GIBBON SANCTUARY

PRIMATES PARADISE

Hidden among the sprawling tea estates in North-Eastern India, this remote and tiny patch of forest in Assam hides a veritable treasure of biodiversity

A close-up photograph of a young, light-colored macaque (Macaca arctoides) clinging to a tree branch. The monkey has large, dark eyes and is looking directly at the camera. It is surrounded by green leaves and branches, with some leaves showing signs of being eaten. The background is a soft-focus forest.

■ A baby Stump-tailed or Bear macaque *Macaca arctoides*, Hoollongapar Gibbon Wildlife Sanctuary (GWS), Assam, North-eastern India. On the opening spread, an adult male of the same species.



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Travelling to remote, exotic and relatively unknown locales can be somewhat problematic and often disappointing for several reasons, but occasionally it presents us with the unexpected gem, a total mind-blowing surprise - and this was the case. Who would have ever thought that a ridiculously small stretch of forest - less than 21 square kilometers! - tucked in a corner of the far North-East of India and surrounded on every side by an endless ocean of tea gardens - yes, pleasant to the eye, but a cruel reminder of the atrocious tree-felling perpetrated in the past by the British -

could make such an overwhelming impression on us? And yet - thanks to the foresight of our Indian friend, naturalist and wildlife photographer Yuwaraj Gurjar, who insisted on taking us there - the virtually unknown Hoollongapar Gibbon Sanctuary has not only left an indelebile mark on us, but has also provided a completely disproportioned amount of great moments and images in less than a week's stay. It may sound absurdly small - and it actually is - but it is the only Sanctuary in India with seven - yes, seven! - primate species, having quite possibly the highest primate

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Western hoolock gibbon
Hoolock hoolock,
adult male.

Capped langur ■
Presbytis pileatus.



biomass in India and one of the highest in the world. Not only it has a high density of the Hoolock gibbon, the only ape in India (roughly 100 individuals split in 26 families), but it is also one of the last strongholds of the endangered Stump-tailed macaque (230 individuals in 2 troops), of the threatened Assamese macaque (46 individuals in a single troop) and of the equally endangered Capped langur (160 individuals in 14 troops). The fact that it can only be explored on foot only adds to the excitement and to the apparently endless number of small species which can patiently searched for, found and photographed at ease: in its forest we have encountered and documented the fascinating Jumping Spider mimic Moth (see [our article here](#)), the mysterious Golden viper of Assam (see [our story here](#)) and the stunning Bird-poo Crab spider (see [here](#)), plus an overwhelming variety of Salticid Jumping spiders, many yet undescribed and a few of which can be seen gracing these pages. The Sanctuary trails are easily followed and very well maintained, but the presence of a rifle-armed warden is mandatory given the very real possibility of bumping into the irascible local elephants or even a leopard.

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The striking ■
 Curved spiny spider
Gasteracantha arcuata
 can be occasionally
 spotted in the
 undergrowth.

■ The Sanctuary's thick and stunningly beautiful evergreen forest can only be explored on foot.



A LITTLE BIT OF HISTORY

The Hoollongpar Gibbon Sanctuary, formerly known as the Gibbon Wildlife Sanctuary or Hollongpar Reserve Forest, is an isolated protected area of evergreen forest located in Assam, North-eastern India, which has miraculously survived the ravages of deforestation brought on by the British occupiers during the time of the Raj, the Colonial rule. As they were fond of doing in many other occupied territories, the British had no qualms whatsoever in exterminating enormous numbers of wild animals and chopping down endless expanses of pristine, untouched forest to transform undisturbed primeval habitats into tea plantations (also known as tea gardens or tea estates). Luckily - as in this case - a few patches here and there survived

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Northern pig-tailed macaque
Macaca leonina.





Left, a dominant male Stump-tailed or Bear macaque *Macaca arctoides*; right, two views of the endemic and rarely observed Red-headed trogon *Harpactes erythrocephalus*.





Western hoolock ■
gibbon Hoolock hoolock,
adult female with baby.

the axe first and the chainsaw later. The Hoollongapar Gibbon Sanctuary derives from a patch of forest once part of the Hollongapar Reserve Forest in the civil district of Jorhat. Set aside as a "Reserve Forest" on 27 August 1881, it was named after its dominant tree species, the Hollong *Dipterocarpus macrocarpus*. At the time, it was considered an "integral part" of the foothill forests of the Patkai mountain range. The Sanctuary was officially constituted and renamed in 1997. Although its absurdly tiny area is currently completely surrounded by tea gardens and a few small villages, it used to connect to a large forest tract that ran to the state of Nagaland. The protected area started with 206 ha (0.80 sq mi) and then shrank in 1896 as sections were de-reserved. As tea gardens began to emerge between 1880 and 1920, and villages were established during the 1960s to

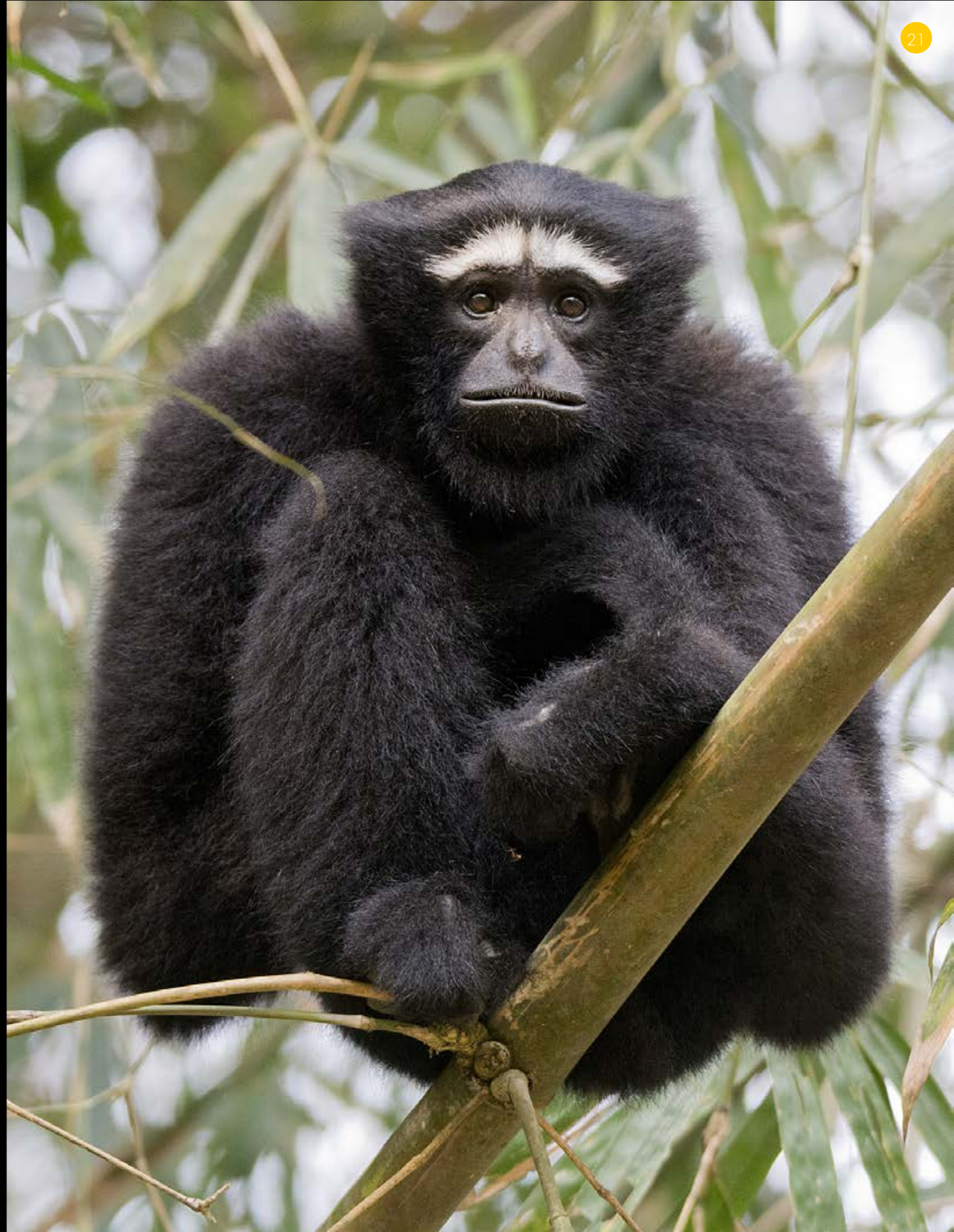
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Monkey-faced
Lynx Spider
Hamataliwa sp.,
family Oxyopidae.



■ Left, Capped langur *Presbytis pileatus* feeding on leaves; right, male Western hoolock gibbon Hoolock hoolock.





Stump-tailed █
or Bear macaque
Macaca arctoides.



Far left, a yet undescribed golden morph of the Northern tree pit-viper *Trimeresurus (Cryptelytrops) septentrionalis*; left, male Western hoolock gibbon *Hoolock hoolock*.

rehabilitate people from Majuli and adjoining areas who had lost their lands to floods, the forest became fragmented and the reserve became isolated from the foothills. In 1924, artificial regeneration was introduced in a long-sighted attempt to develop a well-stocked, even-aged forest. These plantations - along with the natural vegetation - subsequently created a forest stocked with a rich variety of flora and fauna. During the 1900s, forest areas were added to the reserve, eventually totaling 2,098.62 ha (8.1 sq mi) by 1997. However, the Sanctuary remains currently (and dangerously) fragmented into five distinct segments. On 30 July 1997, the sanctuary was finally constituted under the civil district of Jorhat and named the Gibbon Wildlife Sanctuary after the only apes found in India: the hoolock gibbons *Hoolock* sp. It is the only Sanctuary in India named after a gibbon due to its distinction for containing the densest gibbon populations in Assam. On 25 May 2004, the Assam Government renamed it as the Hoollongapar Gibbon Sanctuary. The Sanctuary officially now extends to the Dissoi Valley Reserve Forest, Dissoi Reserve Forest, and Tiru Hill Reserve Forest, which are used as dispersal areas for Indian elephants *Elephas maximus indicus* and other species. However, three extensive tea gardens that belong

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Baby Stump-tailed
or Bear macaque
Macaca arctoides.



Stump-tailed ■
or Bear macaque
Macaca arctoides.



■ Top left, Jumping spider, *Viciria* sp.; top right, unidentified Jumping spider; bottom right, Jumping spider, possibly *Pancorius* sp.; bottom left, Jumping spider *Hyllus keratodes*.

■ *Tiger day moth* *Dysphania*
cf. *militaris* trapped by *Giant*
orb weaver *Nephila pilipes*.





■ Stump-tailed
or Bear macaque
Macaca arctoides.

to the estates of Dissoi, Kothalguri and Hoolonguri span the distance between the Hoollongapar Gibbon Sanctuary and the nearest forests in Nagaland, the Dissoi Valley Reserve Forest, effectively sealing off the Sanctuary from any other protected area nearby.

AN EXTRAORDINARY BIODIVERSITY

Despite its ridiculously small size and virtually complete isolation, the Sanctuary boasts an extraordinary biodiversity and is home to the only ape in India, the Western hoolock gibbon *Hoolock hoolock*, as well as the only nocturnal primate found in the northeast Indian states, the Bengal slow loris *Nycticebus bengalensis* (which is the only primate species present here which we missed). Other primates include the Stump-tailed macaque *Macaca arctoides*, the Northern Pig-tailed macaque *Macaca leonina*, the Eastern Assamese macaque *Macaca assamensis assamensis*, the Rhesus macaque *Macaca mulatta* and the Capped langur *Presbytis pileatus*. Also found at the Sanctuary are Indian elephants, tigers *Panthera tigris* (not residents but rather the occasional stray), leopards *Panthera pardus*, jungle cats *Felis chaus*, wild boar *Sus scrofa*, three types of civet, four types of squirrel, and several other types of mammal. At least 219 species of bird and several species of snakes - including Banded Krait, Indian cobra, Tree Pit viper and Python - are known to live in the Park. Since the Sanctuary can

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Top left, unidentified ■
Jumping spider;
top right, Jumping spider
Portia fimbriata;
bottom right, Jumping spider
Thiania bhamoensis, male;
bottom left, unidentified
Jumping spider.

only be visited on foot, the cats are however very wary and very seldom encountered - while elephants can actually pose a risk.

A BEAUTIFUL TROPICAL EVERGREEN FOREST

Most of the vegetation within Hoollongapar Gibbon Sanctuary is evergreen in character and is composed of several canopy layers. The upper canopy consists mostly of *Dipterocarpus macrocarpus* rising 12 to 30 m (39 to 98 ft) and having straight trunks. Other species found in the top canopy include Sam *Artocarpus chaplasha*, Amari *Amoora wallichii*, Sopas *Mcheliai* spp., Bhelu *Tetramelis nudiflora*, Udal *Sterculia villosa* and Hingori *Castanopsis* spp.. Nahar *Mesua ferrea* dominates the middle canopy with its spreading crown, casting fairly heavy shade over a wide area. Other species that make up the middle canopy include Bandordima *Dysoxylum procerum*,

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Adult male ■
Western hoolock gibbon
Hoolock hoolock.



Stump-tailed
or Bear macaque
Macaca arctoides
during a grooming session.


Stump-tailed
or Bear macaques
Macaca arctoides are
exceptionally expressive.





■ Adult female Capped langur *Presbytis pileatus* with baby.



Left,  *Aphaena aurantia*
lantern bug, family
Fulgoridae; right,
Caterpillar of Blue
Tiger Moth
Dysphania percota,
with parasitic wasp
eggs.



Dhuna *Conarium resiniferum*,
 Bhomora *Terminalia belerica*, Ful
 Gomari *Gmelina* sp., Bonbogri
Pterospermum lanceafolium, Morhal
Vatica lanceafolia, Selleng *Sapium
 baccatum*, Sassi *Aqualari agolacha*,
 and Otenga *Dillenia indica*. A variety
 of thick evergreen shrubs and herbs
 make up the lower canopy and ground
 layers. The most common are Dolu
 bamboo *Teinosstachyum dullooa*,
 Bojal bamboo *Pseudostachyum
 polymorphum*, Jengu *Calamus erectus*,
 Jati bet *Calamus* spp., Houka bet
Calamus spp., Tora *Alpinia allughas*,
 Kaupat *Phrynium imbricatum*, and
 Sorat *Laportea crenulata*. The
 Hoollongapar Gibbon Sanctuary is
 scientifically classified as "Assam
 plains alluvial semi-evergreen forests"
 with some wet evergreen forest
 patches. It receives 249 cm (98 in) of
 rainfall on average per year. Situated
 at an altitude between 100 and 120 m
 (330 and 390 ft), the topography
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An adult female
 Western hoolock
 gibbon Hoolock
 hoolock swinging
 on tree tops.





Top left, unidentified Jumping spider; top right, Jumping spider Phintella cf. vittata, male. Bottom right, Jumping spider Hyllus sp; bottom left, unidentified Jumping spider.

Jumping spider
Hyllus cf giganteus,
family Salticidae,
possibly a new
undescribed species.



gently slopes downward from southeast to northwest. Furthermore, the Bhogdoi River creates a waterlogged region dominated by semi-hydrophytic plants along the border of the sanctuary, helping to create three distinct habitat zones or micro-ecosystems in the Park: the up-slope zone, the down-slope zone, and the flood-prone zone.

**PARADISE
THREATENED**

The habitat is threatened by illegal logging, encroachment of human settlements, and habitat fragmentation. The extreme isolation of the Sanctuary created by the numerous surrounding tea estates creates a geographic barrier for migrating animals. The growing populations of tea garden workers also threatens the habitat, since many people rely on the forest for

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Capped langur
Presbytis pileatus
favor the upper canopy
and are seldom
seen close.





Western hoolock gibbon *Hoolock hoolock*, adult male.



■ Left, exploring the Sanctuary's thick bamboo forest; right, Oriental garden lizard, Eastern garden lizard or Changeable lizard *Calotes versicolor*.

firewood, traditional medicine and food, with large quantities of leaves and grass being collected from the forests to feed cattle. During the rainy season, herbicides and pesticides from the tea gardens wash through the Sanctuary. The tea gardens are also used by elephants as a migration route to Nagaland, making them vulnerable to frequent poaching. Railway lines further divide the Park, stranding a single group of gibbons in the smaller fragment. Illegal logging and the encroachment by local people employed by the tea gardens have - here and there - also visibly degraded the habitat quality. Despite these problems - which could be solved relatively easily, but which risk to have tragic consequences if left ignored in the long term - the Hoollongapar Gibbon Wildlife Sanctuary is a travel destination the motivated wildlife photographer and nature lover cannot absolutely afford to miss. ●



■ Giant mygalomorph spider, family Nemesiidae, *Damarchilus* sp., possibly *D. rufus*, facing a hoverfly.






Left, Black giant squirrel or Malayan giant squirrel *Ratufa bicolor*. Right, White-rumped Shama *Copsychus malabaricus*.

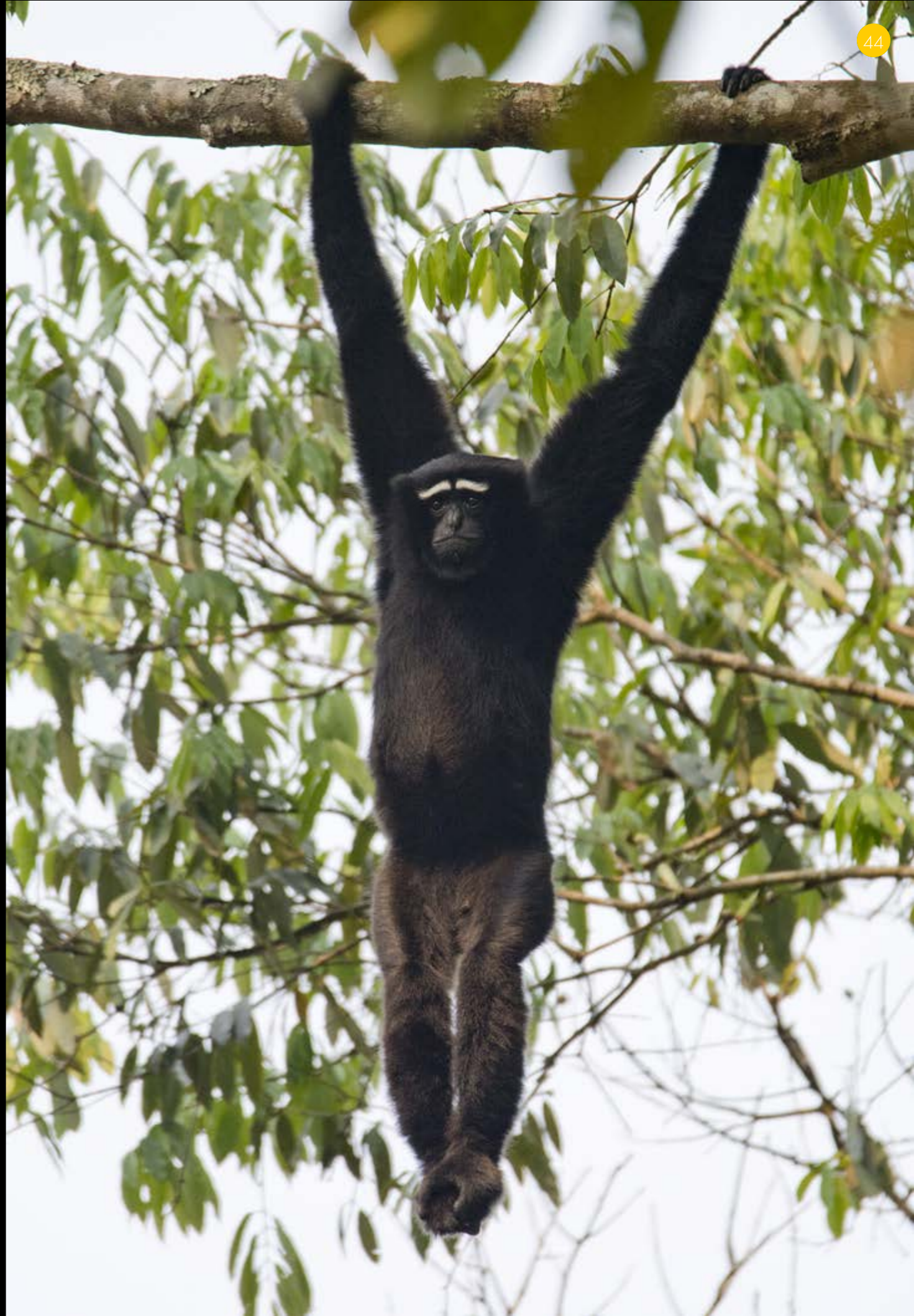





Blue whistling thrush 
Myophonus caeruleus.



■ Left, exploring the Sanctuary's forest with an armed Park warden; right, adult male Western hoolock gibbon Hoolock hoolock hanging from a branch in a typically relaxed pose.



A photograph of a Western hoolock gibbon adult female and her baby in a bamboo forest. The adult female is the central figure, sitting on a bamboo branch and looking towards the camera. She has a dark face with a white patch around her eyes and a white patch on her forehead. Her body is covered in greyish-brown fur. She is holding a bamboo branch with her right hand. The baby is sitting in front of her, also looking towards the camera. The background is filled with bamboo leaves and branches, creating a dense, green environment.

Western hoolock gibbon
Hoolock hoolock,
adult female
with baby.



■ *Western hoolock gibbon*
Hoolock hoolock, adult female swinging among the tree tops.



■ Left, a baby Stump-tailed or Bear macaque *Macaca arctoides* strikes an irreverent pose; right, adult male Western hoolock gibbon Hoolock hoolock.





Grasshopper nymph, ■ family Chorotypidae, a new undescribed species.



Male and female ■
Oriental pied hornbill
Anthracoceros albirostris.



Top left, Common birdwing *Troides helena*;
 top right, cryptic moth *Celenna festiviaria*;
 bottom right, Great Mormon *Papilio memnon*;
 bottom left, Red-spot Jezebel *Delias descombesi*.





Western hoolock gibbon ■
Hoolock hoolock,
adult male



Top left, Striped tree frog ■
Chiromantis vittatus;
top right, Common Indian
Toad *Duttaphrynus*
melanostictus; bottom left and
bottom right, Ground frog
Microhyla aff. *ornata*.





Vocalizing adult male of ■
Western hoolock gibbon
Hoolock hoolock.



Top left, undescribed new species of grasshopper, *Phaesticus* sp.; top right, Ledrinae nymph, family Cicadellidae; bottom right, undescribed new species of cryptic Shrimp katydid, subfamily Pseudophyllinae; bottom left, Owlfly larva, family Ascalaphidae.





Left, Curved spiny spider ■
Gasteracantha arcuata; right,
Green Huntsman spider *Olios*
cf *milleti*, family Sparassidae.





■ A male Ruby-cheeked sunbird *Anthreptes singalensis* feeding off an arboreal ant nest.



■ Left, tree orchids in bloom; right, Northern pig-tailed macaque *Macaca leonina*.





■ Left, baby Rhesus macaque *Macaca mulatta*; right, Assassin bug *Epidius* cf. *famulus*, family Reduviidae.



■ Left, Asian barred owlet
Glaucidium cuculoides;
right, giant mygalomorph
spider, family Nemesiidae,
Damarchilus sp.,
possibly *D. rufus*.





Left, portrait of an ■ adult male Western hoolock gibbon *Hoolock hoolock*; right, Stalk-eyed fly, family Diopsidae.

