

# Beauty of the Beast



A TRIBUTE TO BUCEROTIDS

# THOSE AMAZING HORNIBILLS

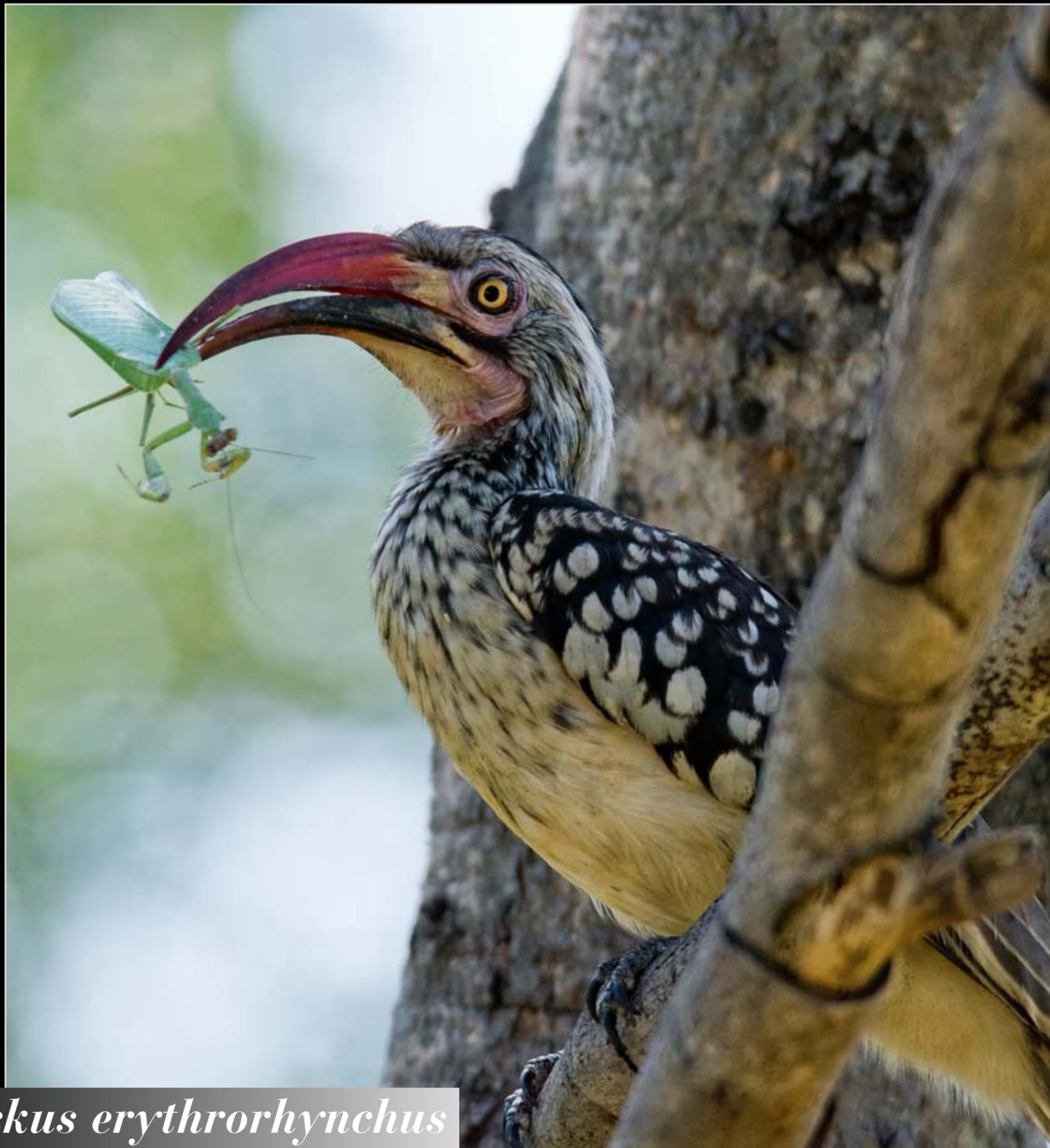
Big, boisterous and beautiful, Bucerotids from Asia and Africa are some of the world's showiest birds - and sadly some of the most severely endangered



*Bucorvus leadbeateri*

Southern Ground Hornbill *Bucorvus leadbeateri*, a large-sized South African ground-dwelling species. This is a male in breeding livery, possibly offering a piece of wood as a gift to a female nearby. On the opening spread, the most easily observed and photographed among Asian species - the beautiful Malabar Pied hornbill *Anthracoseros coronatus*.

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### *Tockus erythrorhynchus*

Red-billed hornbill *Tockus erythrorhynchus* - an African species, here preying on an unfortunate Leaf mantis.

Noisy, usually conspicuous and often exceptionally colorful, rather clumsy when perching on a high tree branch or on ambling the ground but absolutely unmistakable in their flap-and-glide flight and often frustratingly difficult to photograph properly in their forest habitat, hornbills certainly are amongst the tropical birds we cherish most. For those who have been many times to Borneo as we have, the distinctive faraway honking call of a Rhinoceros hornbill echoing across the forest canopy at dawn is a sound one cannot ever forget!

The hornbills - belonging to the family *Bucerotidae* - are found in tropical and subtropical Africa, Asia and Melanesia with a total of about 55 living species. Their distribution includes Sub-Saharan Africa and the Indian Subcontinent to the Philippines and the Solomon Islands, but no genus is found in both Africa and Asia. Most are arboreal birds, but the large ground hornbills belonging to the genus *Bucorvus*, as their name implies, are terrestrial birds of open savanna. Of the 24 species found in Africa, 13 are birds of the more open woodlands and savanna, and some occur even in highly arid environments; the remaining species are found in dense forests. Hornbills are diurnal, generally travelling in pairs or small family groups. Larger flocks sometimes form outside the breeding season - the largest assemblies of

hornbills form at some roosting sites, where as many as 2400 individual birds may be found.

Hornbills are omnivorous birds, eating fruit, insects and small animals including chicks, bats and small mammals. They cannot swallow food caught at the tip of the beak as their tongues are too short to manipulate it, so they toss it back to the throat with a jerk of the head. Typically, they are characterized by a long, down-curved bill which is frequently brightly colored and sometimes has a casque on the upper mandible. Both the common and the scientific name of the family refer in fact to the shape of the bill, "*buceros*" being "cow horn" in Greek. This huge bill is supported by powerful neck muscles as well as by two fused vertebrae and it is used in fighting, preening, constructing the nest, and obviously catching prey. A feature unique to the hornbills is however the casque, a hollow structure that runs along the upper mandible. In some species it is barely perceptible and appears to serve no function beyond reinforcing the bill. In other species it is quite large, is reinforced with bone, and has openings between the hollow centre, allowing it to serve as a resonator for calls. In the Helmeted hornbill the casque is not hollow but is filled with hornbill "ivory" and it is used as a battering ram in dramatic aerial jousts. Aerial casque-butting has also been reported in the Great hornbill.



## *Anthracoceros malayanus*

Black Hornbill *Anthracoceros malayanus*, female (background photo) and male (inset). Notice the marked sexual dimorphism shown by this species from Borneo, Indonesia, Malaysia, Singapore and Thailand. It is the major seed disperser for *Durio graveolens*, a species of durian.

Hornbills generally form monogamous pairs, and their reproductive behavior is equally fascinating. The female lays up to six white eggs in existing holes or crevices, either in trees or rocks; the cavities are usually natural, but some species may nest in the abandoned nests of woodpeckers and barbets. Nesting sites may be used in consecutive breeding seasons by the same pair. Before incubation, the females of all *Bucerotinae* - sometimes assisted by the male - begin to close the entrance to the nest cavity with a thick concrete-like wall made of mud, droppings and fruit pulp. When the female is ready to lay her eggs, the entrance is just large enough for her to enter the nest, and after she has done so, the remaining opening is also all but sealed shut. There is only one narrow aperture, big enough for the male to transfer food to the mother and eventually the chicks. The function of this behaviour is apparently related to protecting the nesting site from rival hornbills and arboreal predators in general. The sealing can be done in just a few hours; at most it takes a few days. Having sealed the nest it takes a further five days for the first egg to be laid. When the chicks and the female are too big to fit in the nest, the mother breaks out the nest and both parents feed the chicks.

Sadly, a number of species of hornbill, mostly insular species with small ranges with some of those illustrated in these pages - are currently severely threatened with extinction because of forest logging and unrestricted hunting. ●



*Anthracoceros coronatus*

Malabar Pied hornbill *Anthracoceros coronatus* - a relatively common but very beautiful species easily observed and photographed in Southern India and Sri Lanka. Notice the seed in the bill - this species is omnivorous, taking fruits, small mammals, birds, small reptiles, insects etc. Prey is killed and swallowed whole. Figs are an important food, contributing 60% of their diet from May to February.



*Buceros rhinoceros*



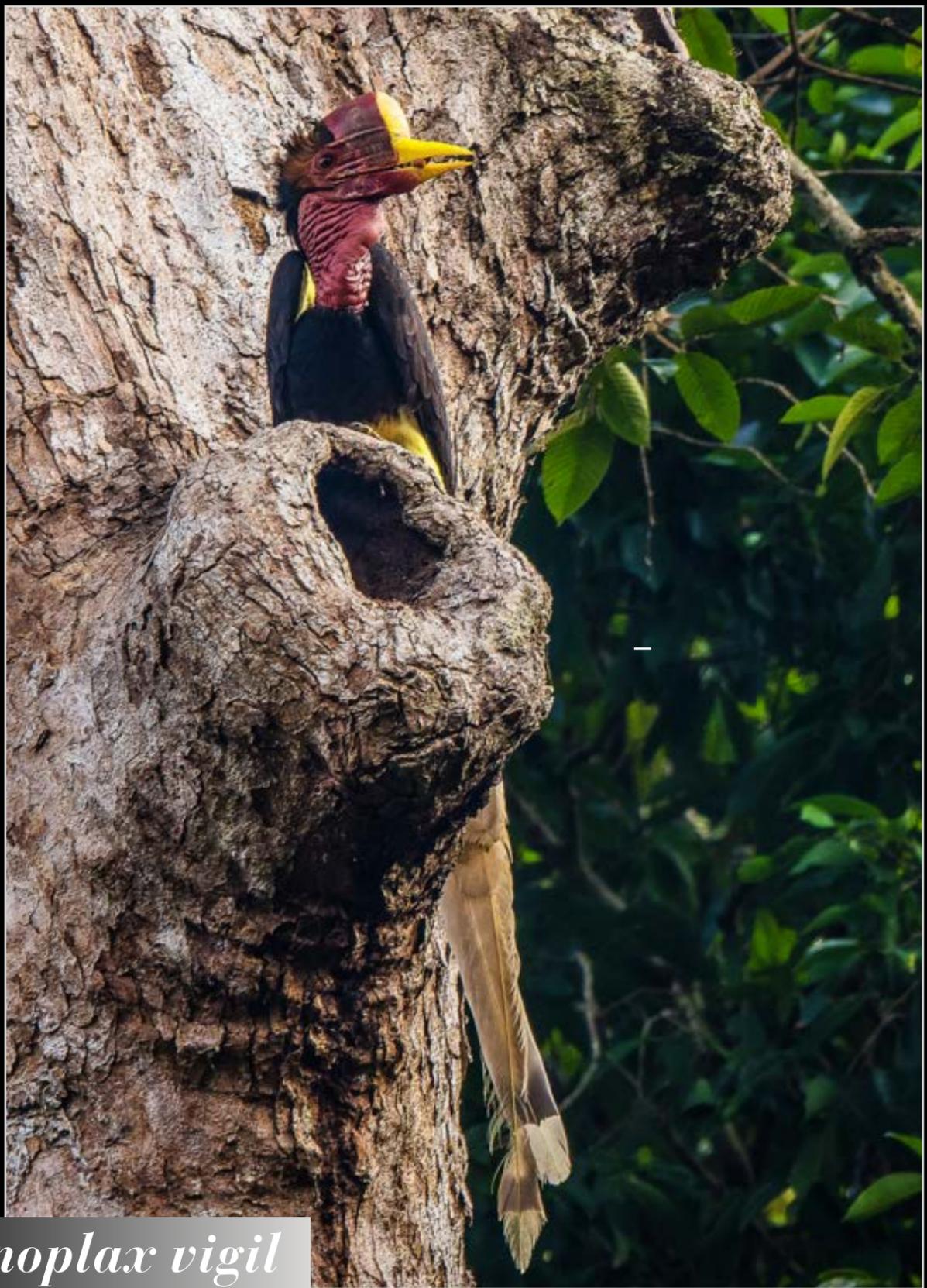
*Rhyticeros undulatus*

Rhinoceros Hornbill *Buceros rhinoceros*, female (above) and male offering fruit (inset). Right, Wreathed Hornbill *Rhyticeros undulatus* (image courtesy Bjorn Olesen). Both species are found in South Asia and despite their iconic status are very difficult to approach and photograph in the wild. Like other hornbill species, these are gravely threatened by deforestation and land grabbing.



*Buceros bicornis*

Great Hornbill *Buceros bicornis* in mid-flight. The Great Hornbill, also known as the Great Indian Hornbill or Great pied Hornbill, is one of the larger members of the hornbill family. It is found in the Indian subcontinent and Southeast Asia. Its impressive size and colour have made it important in many tribal cultures and rituals. The great hornbill is long-lived, living for nearly 50 years.



*Rhinoplax vigil*



*Anthracoceros albirostris*

Left, a rare portrait of the impressive, severely threatened and very uncommonly observed Helmeted Hornbill *Rhinoplax vigil* found in the Malay Peninsula, Sumatra and Borneo (image courtesy Bjorn Olesen); right, Oriental Pied Hornbill *Anthracoceros albirostris* from the Kinabatangan river, Borneo - the Indo-Malayan equivalent of the Malabar Pied Hornbill.



*Anthracoceros coronatus*

A beautiful Malabar Pied Hornbill *Anthracoceros coronatus* preying on a cicada it has just caught. Sri Lanka's Yala National Park and the region of the Western Ghats in Central and Southern India are some of the world's best places to admire and photograph this fascinating species, particularly during their breeding and nesting seasons from March to April.



Left, a pair of the spectacular and very shy Wrinkled Hornbill *Rhyticeros corrugatus* from Borneo; above, another splendid and rare portrait of a Helmeted Hornbill *Rhinoplax vigil* in the wild (image courtesy Bjorn Olesen).



The Bushy-crested Hornbill *Anorrhinus galeritus* is a rather nondescript and highly social species from Borneo and South-East Asia.



*Rhyticeros corrugatus*

A spectacular portrait of a stunning male Wrinkled Hornbill *Rhyticeros corrugatus* in mid-flight above the Kinabatangan river in Borneo. Inset, the strange-looking White-crowned hornbill *Berenicornis comatus* (image courtesy Bjorn Olesen), again from Borneo. The Kinabatangan area is one of the world's best spots to see several different species of hornbills.



*Tockus leucomelas*



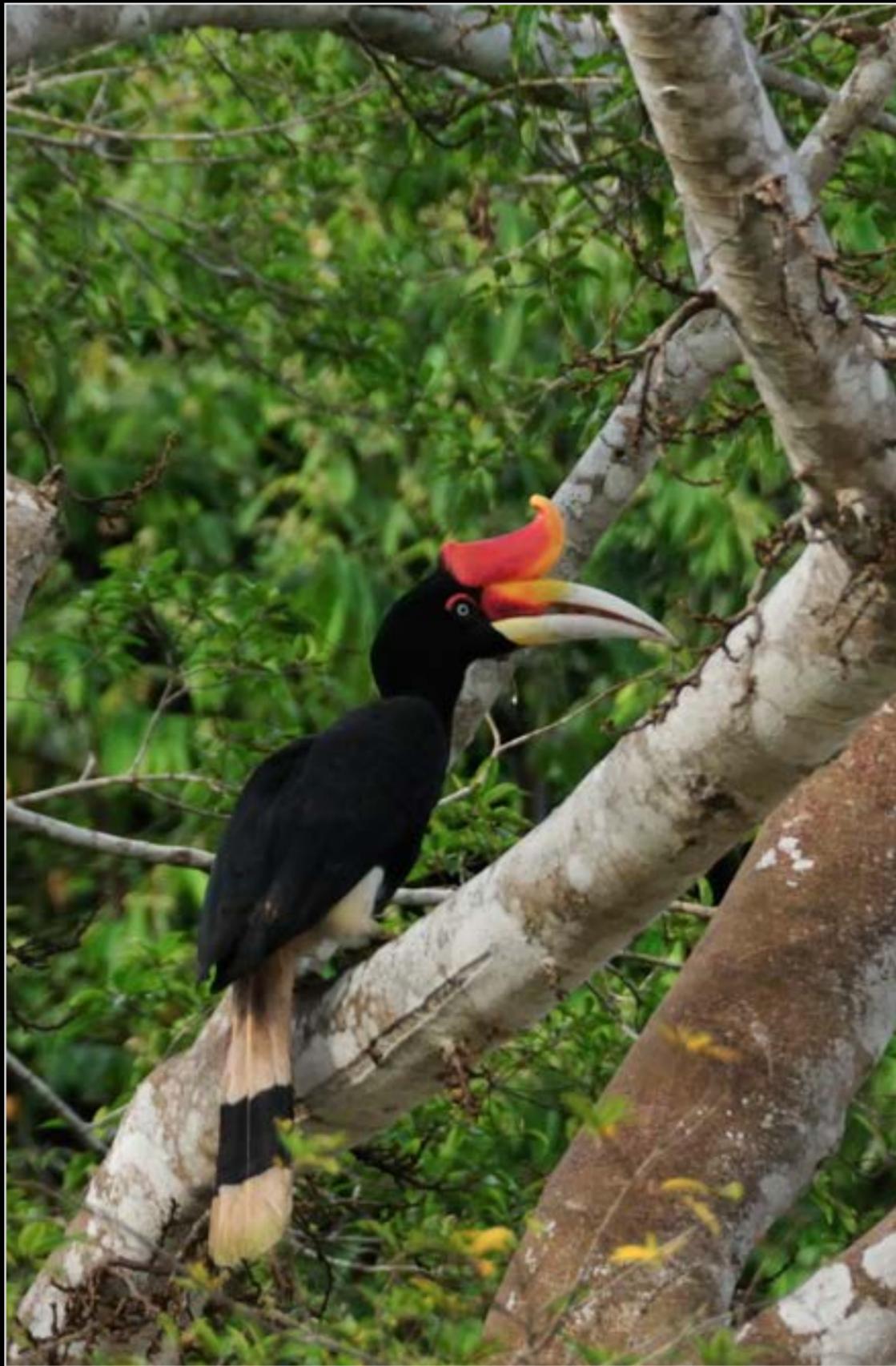
*Aceros nipalensis*

Left, Southern Yellow-billed Hornbill *Tockus leucomelas*, commonly known in Africa as the “flying banana” for obvious reasons. Right, the colorful Rufous-necked Hornbill *Aceros nipalensis* (image courtesy [Ajit Kumar Hota](#)), a species found in the Himalayan foothills from Bhutan, north-east India, Myanmar, southern Yunnan and south-east Tibet. Notice the fruit in the bill.



## *Anthracoceros coronatus*

A pair of Malabar Pied Hornbill *Anthracoceros coronatus* from Yala National Park, Sri Lanka - the male is on the left and it can be identified, as it often happens with hornbill species, by its dark red eye. Most hornbill species feature a very distinct sexual dimorphism, showing fascinating displays of affection for their partners and unique courting and nesting habits.



Left, Rhinoceros Hornbill *Buceros rhinoceros*, female; right, a rare portrait of the equally rare Sulawesi Dwarf Hornbill or Temminck's hornbill *Rhabdotorhinus exarhatus*, an Indonesian endemic (image courtesy Bjorn Olesen).



*Lophoceros nasutus*

A male African Grey Hornbill *Lophoceros nasutus* (right) offers a berry to his apparently uninterested female companion during a courtship and mating ritual, Masai Mara, Kenya. This is a widespread and common resident species in much of Sub-Saharan Africa, ranging into Arabia.