

# Farmers of the forests

With a number of threats looming, it is vital to document the hornbills' diversity and ecological requirements, writes **Aneeta Sundararaj**



*Wreathed Hornbill*



*Rhinoceros Hornbill*

**T**HE beautiful Belum-Temengor Forest Complex in Perak is one of the last refuges in Peninsular Malaysia for large mammals such as the Asian Elephant, Sumatran Rhinoceros, Malayan Sun Bear and Malayan Tiger, says Yeap Chin Aik, 36, Head of Conservation for the Malaysian Nature Society (MNS). The forest complex also showcases the world's largest seasonal congregations of hornbills that make daily evening pilgrimages to the roosting sites south of Temengor during certain times each year.

**"For many, the experience in the forest complex has been life-changing".**

*Maye Yap*

Describing this enigmatic bird, Yeap adds: "Hornbills are unique because they nest in tree holes. They cannot make these holes themselves and rely on 'excavators' like woodpeckers for this." They are also known as "farmers of the forests" because they play a crucial role in maintaining the forests' ecosystem. "They are what's called 'frugivorous', which means that hornbills feed on fruit like figs."

Through dispersal and germination of the seeds from the fruit, hornbills influence the survival rate of several tropical forests tree species and keep the forests as functional as possible.

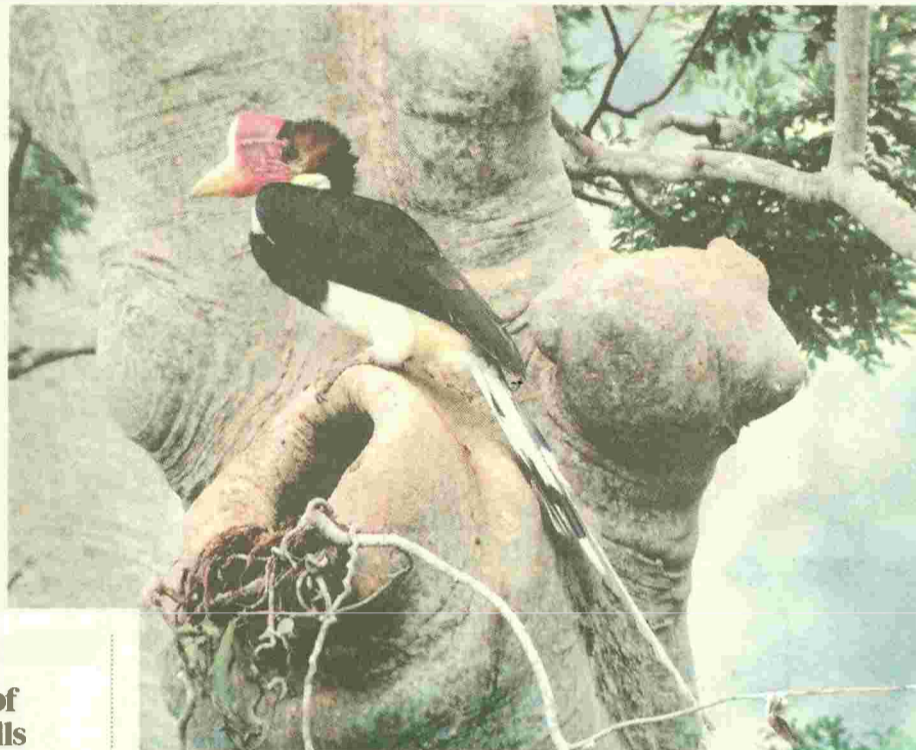
MNS conservation programme manager Maye Yap, 43, adds that: "Hornbills are very special. When you first go into the forest, it's very quiet. But when these hornbills begin to flap their wings, the sound can be very loud. During the local migration period, when they can be seen in the hundreds or thousands, the sound these hornbills make can be overwhelming and..." She pauses then adds: "It's magnificent."

A sad note enters the discussion when Yeap points out that these hornbills are under threat. "There are

(PICTURE BY KC LIM/LIM SWEE YIAN/MALAYSIAN NATURE SOCIETY)



(PICTURE BY LAURENCE POH/MALAYSIAN NATURE SOCIETY)



Helmeted Hornbill

(PICTURE BY MALAYSIAN NATURE SOCIETY)



Great Hornbill

(PICTURE BY MALAYSIAN NATURE SOCIETY)

**Types of hornbills**

GLOBALLY, there are 54 species of hornbills. Thirty-one are found in Asia and Malaysia supports 10 species, namely:

- Black Hornbills
- Oriental Pied Hornbills
- Bushy-crested Hornbills
- White-crowned Hornbills
- Wreathed Hornbills
- Wrinkled Hornbills
- Plain-pouched Hornbills
- Great Hornbills
- Rhinoceros Hornbills
- Helmeted Hornbills

generally three kinds of threat: loss of forests, degrading of forests and, being hunted. In Peninsular Malaysia, the hornbills face loss and degrading of the forests. In East Malaysia, they face all three," he says. The threat to the hornbills' habitat is mainly due to timber extraction. "Logging often targets the large, old trees, which are the prime nesting trees for hornbills."

"The problem," says Yeap, "is that no one champions these hornbills. In Europe, you'll probably find someone who's a specific programme called the

championing a snail. Here, without wealth of biodiversity and exotic wildlife like marble cats and clouded leopards, hardly any animals have someone to champion them."

Recognising such threats, MNS's conservation programme aims to document the hornbills' diversity and investigate their ecological and conservation needs in the forest complex. Since 2008, MNS has invited the public to support its work in monitoring these hornbills under

"Hornbill Volunteer Programme". During the programme, volunteers venture into the forests and live amongst the Orang Asli in their kampung.

There are two packages that volunteers can choose from: opt for the first package and you'll stay for three nights and four days in forest complex. The second package is a trip into the forest that lasts four nights and five days. "A huge part of the proceeds we receive from this programme go back to the Orang Asli people and the kampung," says Yap.

Keep in mind that for the duration of your stay in the forest, there'll be no water and no electricity. "This means that for many volunteers, who are 80 per cent urban folk, there's no Internet and no phone. By 7.30pm,

everything is quiet. And they have to do their washing in the river." Hardships aside, every day you're in the forest complex, you'll take part in the daily flight census of the hornbills (once in the morning and once in the late afternoon) and collect relevant data.

In the years since this programme started, data collected by MNS has provided much food for thought. For instance, the number of hornbills recorded fluctuates. "One year, we had thousands. The next year, barely 100. Then next year, the numbers were up again. Why is this so?" asks Yeap. "Maybe, it's because they're changing their flight plan. Or the trees are not fruiting."

Although no conclusions can yet be made, Yeap adds: "Having some data is better than having nothing."

The magnitude of the challenge in collecting data is further emphasised when Yeap explains that these forests are difficult terrain. "You can view the hornbills in flight about five minutes away from the kampung. If you want to see where they nest, you have to go further into the jungle and hike up a very steep gradient. Also, we rely on the Orang Asli when we're there and they are losing the knowledge that their ancestors had."

Notwithstanding the challenges and hardships inherent in this programme, the response of past volunteers has been encouraging. "For many, the experience in the forest

complex has been life-changing," says Yap. She shares some of the many comments MNS has received which range from, "... being disconnected from hand-

**Be a volunteer**

FANCY doing something different for the school holidays in August and September? If so, do become a volunteer for a programme run by the Malaysian Nature Society (MNS) aimed at conservation efforts for the globally threatened hornbills. This adventure will take you into the heart of the beautiful Belum-Temengor Forest Complex in Perak. **What:** MNS' Hornbill Volunteer Programme for 2012 **When:** Aug 3 to Sept 28

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phone, email and FB was actually quite therapeutic" to "the simplicity of life... and the sheer joy of beginning and ending each day with the counting of the Hornbills, observing their flight pattern and eating behaviour mid-air".

The last word lies with one volunteer whose words underscore the fact that if the current threats to conservation efforts are not addressed, the impact on the hornbill populations in the forest complex could be devastating and irrevocable: A greater awareness of our rich natural heritage, its vulnerability to human intrusion and the need to protect it.

Ultimately to see Temengor Forest Reserve declared a state park (and logging stopped, we saw barges ferrying logged timber a few times a day) and to have really eco-friendly tourism implemented (during our stay there we discovered that boat houses for tourists were lighting up fireworks, with carbide explosion for entertainment. The Orang Asli told us that this has been going on weekly for years). If possible, there should

also be exposure to schoolchildren to be involved some way in the programme. After all, they are our future.



Formation of Plain Pouched Hornbills

(PICTURE BY TAN CHIN TONG)