

# Sabah's hornbills cosy up in nest boxes

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PHOTOS By SANJITPAAL SINGH

THE future of Sabah's majestic hornbills looks to be poised on a path of recovery after increased sightings of a number of species breeding again in the wild – thanks to the artificial nest boxes developed through conservation efforts by HUTAN/KOCP and local folk.

With its brilliantly coloured casque and beak, hornbills such as the impressive Helmeted and Rhinoceros hornbills are iconic threatened species of Borneo whose numbers have fallen due to habitat loss caused by commercial logging, as well as poaching.

Restoring this iconic species to its former glory is the driving ambition of local volunteers of the staff of HUTAN/KOCP, a French-based conservation NGO which have played a crucial role in the survival of Sabah's majestic hornbills through years of research and conservation work in the Lower Kinabatangan.

The good news is that several species of hornbills have been spotted nesting in artificial bird boxes based on a successful design first developed by the HUTAN team, along with its key partners, the Sabah Wildlife Department (SWD), Chester Zoo, Beauval Zoo and Phoenix Zoo. This comes as a huge morale booster for Head of HUTAN's Wildlife Survey and Protection, Eddie Ahmad and his team.

"Seeing wild hornbills nesting at man-made bird boxes gives us hope for this iconic species," said Eddie, who described the successful '2013 nest box design' as the major breakthrough that puts the team on the right focus in efforts to implement an effective breeding programme for

hornbill species.

According to Eddie, hornbills are known to be very specific about nesting requirements, more so endangered species which prefer tree hollows and crevices that are reasonably spacious, comfortable and suited to its specific needs.

Each species has a different nest cavity preference and this means the nest boxes need to be carefully designed and installed, to meet the needs of different hornbill species. Certain species take to the boxes easily, such as Oriental Pieds but they are thriving here in the Kinabatangan, so the focus is on the more endangered hornbills.

And for this reason, designing the 'perfect nesting box' can be challenging, admitted Eddie, who noted the development of the successful artificial bird box was not without tedious trial and error and extensive research before getting the right design. It's more than just putting up a box in a tree.

For the hornbill conservation project, Eddie is in charge of nine officials in the HUTAN Wildlife Survey and Protection which have been carrying out extensive research, field studies on hornbills while working closely with Research Assistant, Ravinder Kaur who is an award-winning PhD student from University of Malaya, and her project partner and husband, Sanjitpaal Singh who is also a multiple award-winning professional wildlife photographer.

Recently one of the staff, Mahathir Ratag travelled to Thailand to attend an international training held by the well-established Thailand Hornbill Project, to learn new techniques and methods for hornbill conservation.

Ravinder has received government support for her research through the



A glimmer of hope for Sabah's majestic hornbills...A parent rhinoceros hornbill seen feeding its chick in one of the artificial nest boxes, developed by the team.

Ministry of Higher Education (MOHE), Fundamental Research Grant Scheme (FRGS), Borneo Conservation Trust (BCT) and the Conservation Leadership Programme (CLP).

"At HUTAN, we have about 40 people involved on various conservation projects. For the hornbill project, in the wildlife survey and protection, I lead nine people and we collaborate with university students such as Ravinder and Sanjit.

"To keep perfecting the prototype, research data collected from field studies on wild hornbills in their natural habitats in the Kinabatangan was crucial to understanding each species' specific requirements to design the nesting box," said Eddie.

Additionally, he noted local folks also play an important part in the development of the nesting box which includes Amidi Majinun, and Helson Hassan who meticulously handcrafted the wooden artificial nest boxes.

After five years' worth of research and development, he noted the successful prototype was created in 2012, and the team has not looked back ever since.

"Our prototype in 2012 was the design most favoured by many species from the common pied hornbills to the endangered rhinoceros hornbills which were spotted twice breeding last year at the areas where we installed the bird boxes, and they produced three rhino chicks!" he beamed.

Eddie said it was a huge relief for the team when rhinoceros hornbills started breeding in the artificial nest boxes, delighted that their efforts have started to bear fruit.

Building on this achievement, Eddie said the team hopes to repeat the success with a more difficult species, the endangered helmeted hornbill which has become increasingly rare in the area.

Developing nest boxes for helmeted hornbills proved to be challenging, noted Eddie, explaining the endemic rhinoplax vigil is a large bird with its own preferences different from other species.

"Due to its sheer size, helmeted

Based on field surveys, he stressed the once-plentiful species has become so rare that they are only heard and spotted occasionally.

In spite of the odds, the HUTAN team is determined to give the breeding pair a fighting chance, highlighted Eddie, who told the New Sabah Times that a new prototype was recently installed at a selected location where the pair was last seen.

"This week we are working with zoo keepers from three international zoos and we are hoping to find the right design from three prototypes," he said, adding that the successful design will be expanded and refined to make it better.

In total to date, Eddie noted the HUTAN team had installed 15 artificial nest boxes at various selected spots throughout the reserve, as well as conducting field studies to monitor hornbill populations in the wild.

However, he noted the success of wildlife conservation efforts could have not been made possible without the participation by the local community and



Eddie, who heads the HUTAN Wildlife Survey and Protection, is keen to see wild hornbills rebuild their numbers and return to the Kinabatangan.



Ravinder (pic) and her team play an important role in research as well as work on wild hornbill conservation in the Kinabatangan.

hornbills need larger trees with a protruding cavity; there isn't enough big trees left in the Kinabatangan, which is mostly secondary forest and smaller trees cannot support this species," lamented Eddie, adding most of the birds can be found at virgin rainforests which has more

large, tall trees like ones found in the Demarokot Forest Reserve.

In the Kinabatangan, Eddie pointed out that hornbills have long struggled with nest-hole crisis due to logging activities and land-clearing which has been blamed for the loss of habitats.



Helson, whose craftsmanship is one of the team's important assets in the development of the nesting box.

their support to ensure the survival of endemic wildlife, specially threatened species.

"Local folk have deeper knowledge and experience of the area; they provide useful information and assistance which proved extremely useful for our work and conservation efforts. Without their cooperation, it would be impossible to effectively monitor destructive human activities that could increase the risk of habitat loss which threatens many species of wildlife," added Eddie.

Additionally, he underlined it was important for the local community to be aware of their role in the survival of Sabah's invaluable

wildlife species – priceless natural assets which unlock manifold eco-tourism opportunities for local folk.

"Engaging the local community for conservation is also important to fight illegal logging and poaching activities, especially when local folk act as informants to alert wildlife rangers and authorities on harmful activities – this is very helpful for our work," said Eddie.

On the future of Sabah's endemic hornbills, Eddie expressed hope that the proud helmeted hornbills can again reclaim the skies over Kinabatangan as he fondly reminisced back in the 1980s, a time when their cries filled the atmosphere of the rainforest.



The helmeted hornbill, the next focus of HUTAN/KOCP Wildlife Survey and Protection team in developing a specific 'artificial nest box' for this endangered species.



The helmeted hornbill.