

# Notes from the field

## Sighting records of hornbills in western Brunei Darussalam

Bosco Pui Lok Chan

*Kadoorie Conservation China Department, Kadoorie Farm and Botanic Garden, Tai Po, Hong Kong SAR*

*Author email: boscof@kfbg.org*

The island of Borneo supports eight species of hornbills in the genera *Anorrhinus* (Bushy-crested hornbill *A. galeritus*), *Anthracoceros* (Oriental Pied hornbill *A. albirostris* and Black hornbill *A. malayanus*), *Berenicornis* (White-crowned hornbill *B. comatus*), *Buceros* (Rhinoceros hornbill *B. rhinoceros*), *Rhabdotorrhinus* (Wrinkled hornbill *R. corrugatus*), *Rhinoplax* (Helmeted hornbill *R. vigil*) and *Rhyticeros* (Wreathed hornbill *R. undulates*); all eight occur in Brunei Darussalam (hereinafter Brunei) at the north-western coast of Borneo (Phillips and Phillips 2011; Eaton et al. 2016).

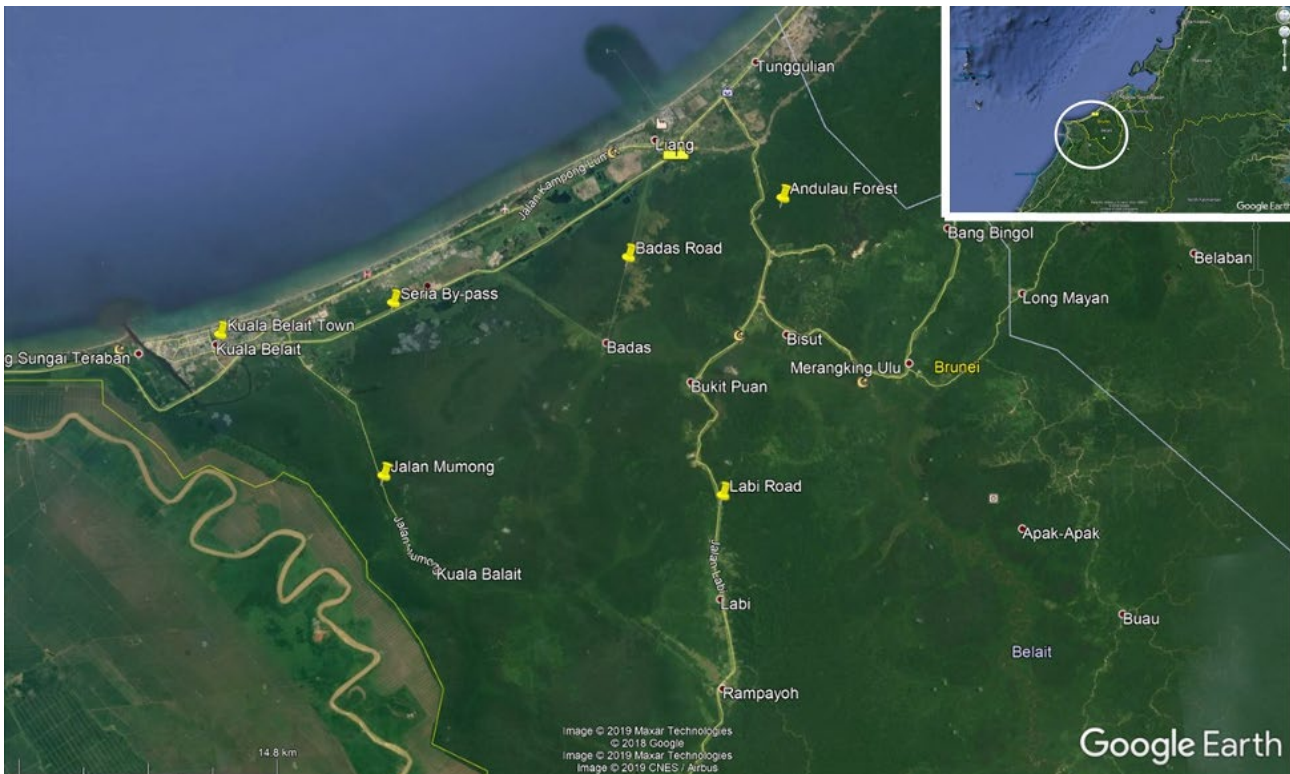
Seven of the eight Bornean hornbill species are considered threatened by the IUCN Red List of Threatened Species: Helmeted hornbill is listed as Critically Endangered; White-crowned and Wrinkled hornbills as Endangered; Black, Rhinoceros and Wreathed hornbills as Vulnerable; and Bushy-crested hornbill as Near Threatened (BirdLife International 2016, 2018a-g).

Brunei is a small, low-lying nation measuring 5,765 km<sup>2</sup> in size with about 60% of the country covered in old-growth forest. The author with friends visited the Belait District (hereinafter

Belait) of western Brunei for leisure birdwatching during 10 – 13 July 2018. Belait is bordered by Miri of the Malaysian state of Sarawak, and urban development is limited to a thin coastal strip; much of the remaining land is covered in vast tracts of unbroken, old-growth forests. Peat swamp forests dominate the lowlands around Kuala Balai and Badas areas, while hill dipterocarp forests cover the low hills around the Labi area up to Bukit Teraja.

We visited three major areas during our visit (Fig. 1); all site names mentioned can be found in Google Maps.

During our trip we had multiple records of five hornbill species, including Black hornbill (Fig. 2), Bushy-crested hornbill (Fig. 3), Oriental Pied hornbill (Fig. 4), Wreathed hornbill and Wrinkled hornbill (Fig. 5). See Appendix for details of our observations. Of these observations, the repeated sightings of the Endangered Wrinkled hornbill, especially the large flock at Jalan Mumong (known as KB Road amongst birders) of Kuala Balai area is of particular interest. Eaton et al (2016) reported the species' social behaviour as "*Pairs, occasionally small groups*



**Fig. 1.** Sites mentioned for hornbills observed in the Belait District, in Brunei Darussalam during 10 – 13 July 2018, Insert shows location of Belait District Brunei Darussalam.

(<10)", and the species is considered "always uncommon" restricted to Sundaic primary lowland forests (BirdLife International 2018e). Although we did not observe the globally threatened White-crowned hornbill, Rhinoceros hornbill or Helmeted hornbill during our visit, each site was visited briefly and only the periphery of these forest blocks were explored. In view of the expanse and excellent quality of Brunei's natural forests, this tiny nation may be a stronghold for these increasingly threatened hornbill species in addition to the obviously healthy population of Wrinkled hornbill.

## Acknowledgements

Data were collected together with Li Fei, Mak Chi-fung, Ma Ziyu and Michael Hui. Mak Chi-fung provided all photos.

## References

- BirdLife International 2016. *Anthracoceros albirostris*. *The IUCN Red List of Threatened Species 2016*: e.T22682437A92945575. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22682437A92945575.en>. Downloaded on 04 October 2019.
- 2018a. *Anorrhinus galeritus*. *The IUCN Red List of Threatened Species 2018*: e.T22682485A132382004. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682485A132382004.en>. Downloaded on 04 October 2019.
- 2018b. *Anthracoceros malayanus*. *The IUCN Red List of Threatened Species 2018*: e.T22682441A132372259. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682441A132372259.en>. Downloaded on 04 October 2019.
- 2018c. *Berenicornis comatus*. *The IUCN Red List of Threatened Species 2018*: e.T22682507A132272549. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682507A132272549.en>. Downloaded on 04 October 2019.
- 2018d. *Buceros rhinoceros*. *The IUCN Red List of Threatened Species 2018*: e.T22682450A132376232. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682450A132376232.en>. Downloaded on 04 October 2019.
- 2018e. *Rhabdotorrhinus corrugatus*. *The IUCN Red List of Threatened Species 2018*: e.T22682514A132244524.

<http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682514A132244524.en>. Downloaded on 04 October 2019.

2018f. *Rhinoplax vigil*. *The IUCN Red List of Threatened Species 2018*: e.T22682464A134206677. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682464A134206677.en>. Downloaded on 04 October 2019.

2018g. *Rhyticeros undulatus*. *The IUCN Red List of Threatened Species 2018*: e.T22682528A132400385.

<http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22682528A132400385.en>. Downloaded on 04 October 2019.

Eaton JA, van Balen B, Brickle NW, and Rheindt FE. 2016. *Birds of the Indonesian Archipelago - Greater Sundas and Wallacea*. Lynx Edicions: Barcelona.

Philipps Q and Phillips K 2011. *Phillips' field guide to the birds of Borneo. 2<sup>nd</sup> edition*. John Beaufoy Publishing: United Kingdom.

**Appendix 1.** Details of hornbill observations in the Belait District, Brunei during 10 – 13 July 2018. For site location see figure 1.

Species	Site (Date)	No.	Notes
Black hornbill <i>Anthracoseros malayanus</i>	Badas Road (11 Jul)	2	Single male in flight on two occasions in peat swamp forest
Bushy-crested hornbill <i>Anorrhinus galeritus</i>	Labi Road (13 Jul)	1	Male in flight near Tapang Lupak in hill dipterocarp forest
	Jalan Mumong (10,11, 13 Jul)	> 20	Seen numerous times by forest edge, in small groups
Oriental Pied hornbill <i>Anthracoseros albirostris</i>	Kuala Belait Town (10,11 Jul)	2	Pair perched on lamp post in busy built-up area
	Seria By-pass between Kuala Belait Town and Badas Road (11 Jul)	2	Flew cross a 4-lane highway
Wreathed hornbill <i>Rhyticeros undulates</i>	Labi Road (12 Jul)	2	Single males in flight near Mendaram Kechil and Lalak Lake National Park in hill dipterocarp forest
	Jalan Mumong (10 Jul)	24	Large flock flying high in the evening
	Jalan Mumong (11 Jul)	> 20	Observed in the morning, probably of the same group observed on 10 Jul
Wrinkled hornbill <i>Rhabdotorrhinus corrugatus</i>	Badas Road (11 Jul)	1	Flew across peat swamp forest
	Labi Road (12,13 Jul)	3	Singles in flight near Andulau Forest, Lalak Lake and Tapang Lupak in hill dipterocarp forest



**Fig. 2.** Male Black hornbill *Anthracoceros malayanus* at Badas Road, Belait District, Brunei Darussalam, 11 July 2018. Photo by Mak Chi-fung.



**Fig. 3.** Male Bushy-crested hornbill *Anorrhinus galeritus* at Labi Road, Belait District, Brunei Darussalam, 13 July 2018. Photo by Mak Chi-fung.



Fig. 4. Female Oriental Pied hornbill *Anthracoceros albirostris* at Kuala Belait Town, Belait District, Brunei Darussalam, 11 July 2018. Photo by Mak Chi-fung.

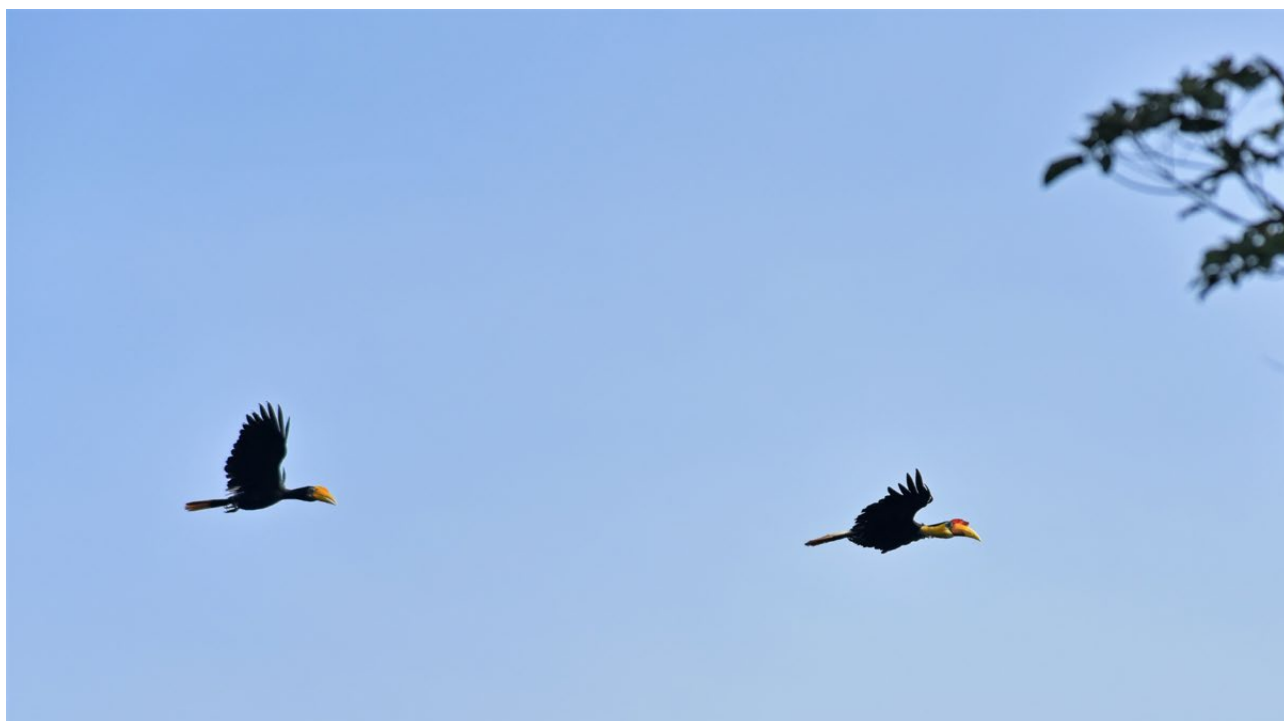


Fig. 5. A pair of Wrinkled hornbills *Rhabdotorrhinus corrugatus* at Jalan Mumong, Belait District, Brunei Darussalam, 10 July 2018. Photo by Mak Chi-fung.