

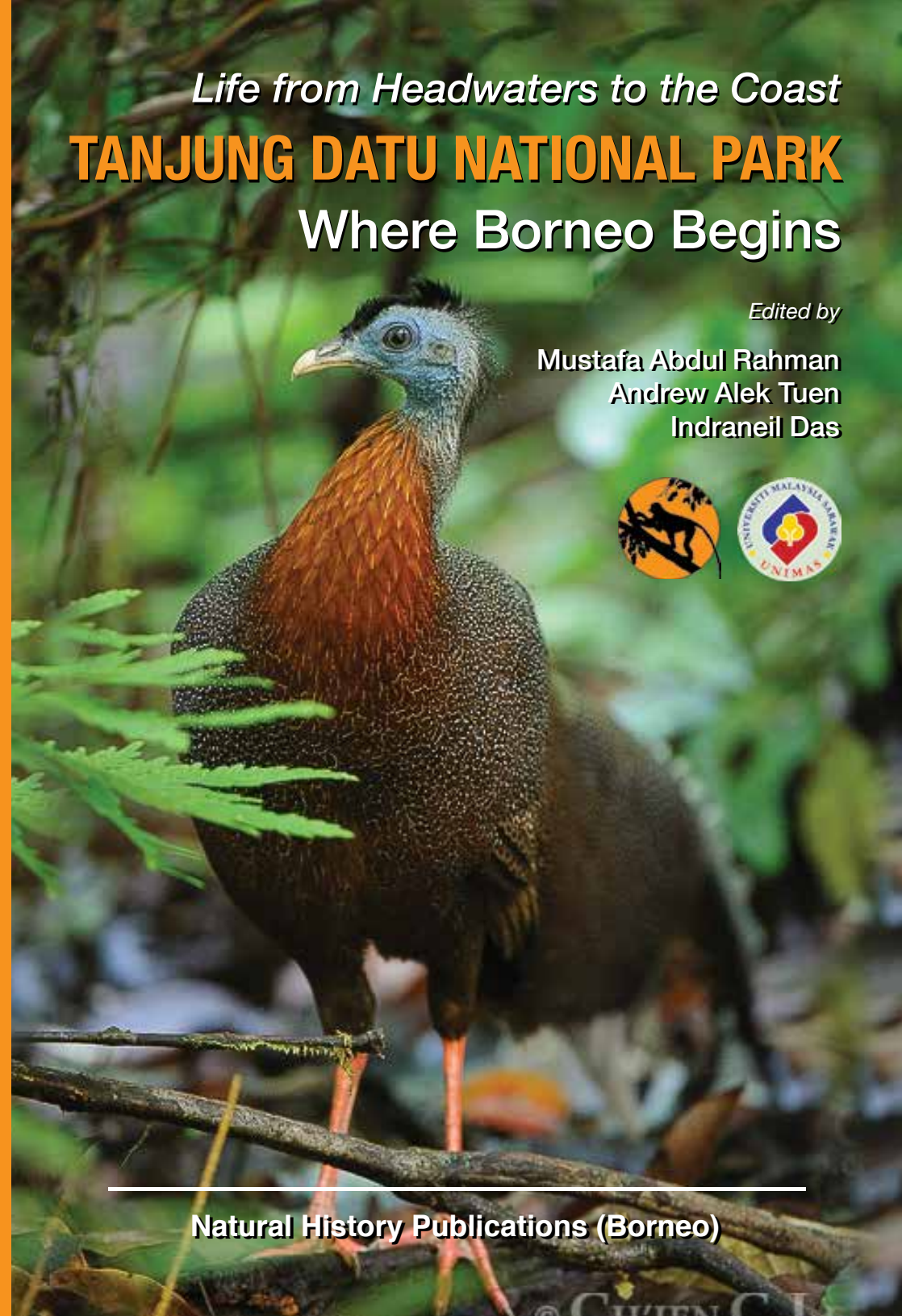
TANJUNG DATU NATIONAL PARK — Where Borneo Begins

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# Life from Headwaters to the Coast TANJUNG DATU NATIONAL PARK Where Borneo Begins

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## The Herpetofauna

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A total of 43 herpetofaunal species were recorded from two weeks of sampling from Tanjung Datu National Park. These include 22 species of amphibians and 21 species of reptiles, including three species of sea turtles- the Green, Hawksbill and Olive Ridley Turtle, the last-mentioned recorded by the Parks personnel.

The rarely encountered Bornean Flying Frog was found breeding at a pig-wallow, at an elevation of *ca.* 200 m asl. A female Horned Flying Lizard was encountered off the trail, in the act of depositing three eggs. A specimen of Warty Gecko, generally thought to be a human-commensal, was collected from *ca.* 4 m up on a branch within a hill dipterocarp forest. A species of Dwarf Toad was found associated with vegetation of a hill stream. Congeneric species are endotrophic and consequently, their distribution tends not to be linked to lotic habitats. Human commensals among the herpetofauna include the Four-lined Tree Frog, and the Common Asian Gecko, both species found close to areas with anthropogenic disturbance. The short hill streams showed a marked gradation in its herpetofaunal community, from a species-poor assemblage near the mouth, comprising saline resistant species (such as the Dog-faced Water Snake and the Crab-eating Frog). Further, the accessibility of



**Figs. 1 & 2.** A Bornean endemic, Inger's Bow-fingered Gecko (*Cyrtodactylus pubisulcus*), feeding on a forest cockroach.



**Fig. 3** (left). The spectacular Bornean Horned Frog (*Megophrys nasuta*), sitting on the forest floor and waiting for unsuspecting prey. **Fig. 4** (right). The Western Torrent Frog, *Meristogenys jerboa* in amplexus, showing the much smaller male grasping the female with its forelimbs.



**Figs. 5–7.** A pretty and elusive Bornean Flying Frog (*Rhacophorus borneensis*) which was found breeding at a pig wallow within a hill dipterocarp forest. Shown in these images is an adult and a tadpole.



**Fig. 8** (left). A Bornean endemic, the tiny Rough-sided Dwarf Litter Frog (*Leptobrachella* aff. *parva*) was found abundantly along the streams, making its presence noticed with its loud and high-pitched buzzing calls. **Fig. 9** (right). Another Bornean endemic, the Sarawak Slender Litter Frog (*Leptolalax gracilis*), disgnosable by its pale upper arm and bicoloured iris.



**Fig. 10** (left). The Peat Swamp Frog (*Limnonectes malesianus*), a large and sometimes commercially exploited species. **Fig. 11** (right). The Lowland Dwarf Toad (*Pelophryne* sp.) is a small-sized toad with snout-vent length less than 20 mm. Remarkably, all individuals were found on vegetation along a stream bank, up to 2 m above ground. Other members of the species are independent of surface-flowing waters, choosing to lay eggs that produce non-feeding tadpoles in tree holes.



**Fig. 12** (left). The Dark-eared Tree Frog (*Polypedates macrotis*), a common member of the lowland forests of Sundaland. **Fig. 13** (right). The Black-spotted Rock Frog (*Staurois guttatus*), an endemic of Borneo, that uses foot-flagging to communicate amongst themselves in their rocky stream habitats.

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**Fig. 14** (left). The Obscure Bush Frog (*Philautus tectus*). This Bornean frog shows direct development, with eggs producing little frogs, bypassing the free-swimming tadpole stage. **Fig. 15** (right). The Marbled Bent-toed Gecko (*Cyrtodactylus* cf. *quadrivirgatus*), clinging to a low sapling and showing a hunting posture, all ready to seize prey.



**Fig. 16** (left). The Kendall's Day Gecko (*Cnemaspis kendallii*). The genus is unusual amongst members of the family in being active by day, and shows rounded pupils. **Fig. 17** (right). The Shrub Lizard (*Phoxophrys* aff. *nigrilabris*).

the breeding ground of the Bornean Flying Frog, located within a pig wallow will allow ecotourists to visit the site and view this spectacular member of the Bornean frog fauna.

Fresh sea turtle tracks were found on the white sandy beaches of the Park, and a Green Turtle was observed nesting, highlighting its clean beaches that are one of the few remaining nesting grounds for two species of marine turtles in Sarawak. The relatively intact lowland forests that back the beach is shown here to support a great diversity of amphibians and reptiles.

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### Checklist of Amphibians

Family	Scientific Names	Common Names
Bufonidae	<i>Ansonia spinulife</i>	Spiny Slender Toad
	<i>Ingerophrynus divergens</i>	Crested Toad
	<i>Pelophryne</i> sp.	Dwarf Toad
Dicroglossidae	<i>Fejervarya cancrivora</i>	Crab-eating Frog
	<i>Limnonectes kuhlii</i>	Kuhl's Creek Frog
	<i>Limnonectes malesianus</i>	Peat Swamp Frog
	<i>Limnonectes paramacrodon</i>	Lesser Swamp Frog
Megophryidae	<i>Leptobranchella</i> aff. <i>parva</i>	Rough-sided Dwarf Litter Frog
	<i>Leptobranchium abbotti</i>	Lowland Litter Frog
	<i>Leptotalax gracilis</i>	Sarawak Slender Litter Frog
	<i>Megophrys nasuta</i>	Bornean Horned Frog
Microhylidae	<i>Kalophrynus</i> sp.	Sticky Frog
Ranidae	<i>Hylarana raniceps</i>	White-lipped Frog
	<i>Staurois guttatus</i>	Black-spotted Rock Frog
	<i>Meristogenys jerboa</i>	Matang Torrent Frog
Rhacophoridae	<i>Kurixalus appendiculatus</i>	Frilled Tree Frog
	<i>Philautus tectus</i>	Obscure Bush Frog
	<i>Philautus kakipanjang</i>	Long-legged Bush Frog
	<i>Polypedates leucomystax</i>	Four-lined Tree Frog
	<i>Polypedates macrotis</i>	Dark-eared Tree Frog
	<i>Polypedates otilopus</i>	File-eared Tree Frog
	<i>Rhacophorus borneensis</i>	Bornean Flying Frog

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### Checklist of Reptiles

Family	Scientific Names	Common Names
Agamidae	<i>Draco cornutus</i>	Horned Flying Lizard
	<i>Phoxophrys</i> cf. <i>nigrilabris</i>	Black-lipped Shrub Lizard
Gekkonidae	<i>Cnemaspis kendallii</i>	Kendall's Day Gecko
	<i>Cyrtodactylus consobrinus</i>	Peters' Bent-toed Gecko
	<i>Cyrtodactylus pubisulcus</i>	Grooved Bent-toed Gecko
	<i>Cyrtodactylus</i> cf. <i>quadrivirgatus</i>	Four-striped Bent-toed Gecko
	<i>Gekko monarchus</i>	Warty House Gecko
	<i>Gekko smithii</i>	Smith's Giant Gecko
	<i>Hemidactylus frenatus</i>	Asian House Gecko
	<i>Ptychozoon kuhlii</i>	Kuhl's Gliding Gecko
Scincidae	<i>Eutropis multifasciata</i>	Common Sun Skink
	<i>Eutropis rudis</i>	Black-banded Ground Skink
	<i>Tropidophorus brookei</i>	Brooke's Water Skink
Varanidae	<i>Varanus salvator</i>	Water Monitor Lizard
Colubridae	<i>Boiga drapiezii</i>	White-spotted Cat Snake
	<i>Dendrelaphis caudolineatus</i>	Stripe-tailed Bronzeback Tree Snake
Homalopsidae	<i>Cerberus rynchops</i>	Dog-faced Water Snake
Cheloniidae	<i>Chelonia mydas</i>	Green Turtle
	<i>Eretmochelys imbricata</i>	Hawksbill Sea Turtle
	<i>Lepidochelys olivacea</i>	Olive Ridley Sea Turtle
Trionychidae	<i>Dogania subplana</i>	Malayan Softshell Turtle