A guide to the Amphibians of Kubah National Park and the Matang Range

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THE INSTITUTE OF BIODIVERSITY AND ENVIRONMENTAL CONSERVATION, within Universiti Malaysia Sarawak, was set up in 1994 as one of the founding institutions within the university, with the purpose of promoting research in two niche areas: tropical biodiversity and environmental conservation. Its teaching and research programmes are structured at the masters, doctoral and postdoctoral levels.

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by

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Universität Hamburg

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Introduction

The nearest mountain range to the city of Kuching, Sarawak’s capital city, is the Matang Range. Situated about 22 kilometres to the north-west of the city, this long but low (its summit, Gunung Serapi, is just 911 metres above sea level) range shows fine representations of tropical lowland and kerangas (Bornean heath) forests. Two protected areas exist in this range, the Kubah National Park (‘Kubah’ meaning dome, roughly the distinctive shape of this mountain, in the Malay vernacular) and the Matang Wildlife Centre.

Matang range is the primary catchment area for Sungei Rayu, and consists of sand and mud deposited alluvium, along steep terrain, with streams and drains on the flanks. The foothills have been largely cleared of vegetation, with villages and agricultural areas, the zone with natural forests entirely within the two protected areas that lie between 20–777 metres above sea level. A series of forest trails within the two parks make exploration of its flora and fauna easy.

A race to document and learn about the amphibians of Range is held annually, on the last weekend of April. In 2015, the Fourth International Bornean Frog Race will be held on 25 April, and will attract biologists, naturalists, and private citizens from all over the state, and internationally. The event will include talks, a workshop on frog photography, an exhibition highlighting the use of frogs and their images in many products we use in our everyday life, and a Race to photograph the amphibian diversity of Kubah National Park.
ABOUT THIS WORK. This guide book introduces participants of the Race and other visitors to the Park and Wildlife Centre to the amphibian fauna of the Range. It is based on our research on the amphibians spanning over 15 years. It lists all species of amphibians, including frogs and caecilians, currently known from the Matang Range, and for every species, we provide a colour photograph to aid in their easy identification. Images are not to scale. Further information on the amphibian fauna can be found in the references below.


1. *Ansonia leptopus* ( Günther, 1872)  
   - Brown Slender Toad

2. *Ansonia longidigita* Inger, 1960  
   - Long-fingered Slender Toad

3. *Ansonia minuta* Inger, 1960  
   - Minute Slender Frog

4. *Ansonia spinulifer* ( Mocquard, 1890)  
   - Spiny Slender Frog
<table>
<thead>
<tr>
<th>No.</th>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Species Notes</th>
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<tr>
<td>5</td>
<td>Common Asian Toad</td>
<td><em>Duttaphrynus melanostictus</em> (Schneider, 1799)</td>
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<td>6</td>
<td>Crested Toad</td>
<td><em>Ingerophrynus divergens</em> (Peters, 1871)</td>
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<td>7</td>
<td>Brown Tree Toad</td>
<td><em>Pedostibes hosii</em> (Boulenger, 1892)</td>
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<td>8</td>
<td>Günther’s Dwarf Toad</td>
<td><em>Pelophrynes guentheri</em> (Boulenger, 1890)</td>
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<tr>
<td>9</td>
<td>Short-legged Dwarf Toad</td>
<td><em>Pelophrynes signata</em> (Boulenger, 1895)</td>
<td></td>
</tr>
</tbody>
</table>
**Family BUFONIDAE**

10. *Phrynoides asper* (Gravenhorst, 1829)  
River Toad

11. *Phrynoides juxtaspera* (Inger, 1964)  
Giant River Toad

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**Family CERATOBATRACHIDAE**

*Ingerana sariba* (Shelford, 1905)  
Saribau Frog
Family **Dicroglossidae**

1. *Fejervarya limnocharis* (Gravenhorst, 1829)  
   Grass Frog
2. *Limnonectes conspicillatus* (Günther, 1872)  
   Broad-headed Frog
3. *Limnonectes kuhlii* (Tschudi, 1838)  
   Kuhl’s Creek Frog
4. *Limnonectes leporinus* Anderson, 1923  
   Giant River Frog
5. *Limnonectes malesianus* (Kiew, 1984)  
   Malaysian River Frog
Family **Dicroglossidae**

6. *Limnonectes palavanensis* (Boulenger, 1894)  
   - Smooth guardian Frog

   - Masked Frog

   - Wrinkled Frog

9. *Occidozyga galuensis* (Boulenger, 1896)  
   - Seed Frog

10. *Occidozyga laevis* ( Günther, 1858)  
    - Yellow-bellied Puddle Frog
Family *Megophryidae*  

1. *Leptobrachella mjobergi* Smith, 1925  
   Mjöberg’s Dwarf Frog

2. *Leptobrachium abbotti* (Cochran, 1926)  
   Lowland Litter Frog

   Inger’s Litter Frog

4. *Leptolalax gracilis* (Günther, 1872)  
   Sarawak Slender Litter Frog

5. *Megophrys nasuta* (Schlegel, 1858)  
   Bornean Horned Frog
Family MICROHYLIDAE

1. *Calluella brooksii* (Boulenger, 1904)
   - Brookes’ Burrowing Frog

2. *Calluella capsia* Das, Pui, Hsu, Hertwig & Haas, 2014
   - Red Hot Chilli Pepper Frog

3. *Kalophrynus heterochirus* Boulenger, 1900
   - Variable Sticky Frog

4. *Kalophrynus pleurostigma* Tschudi, 1838
   - Red-sided Sticky Frog
Family **MICROHYLIDAE**

5. *Metaphrynella sundana* (Peters, 1867)  
   *LC* Bornean Tree Hole Frog

6. *Microhyla nepenthicola* Das & Haas, 2010  
   *NE* Kubah Narrow-mouthed Frog

   *NE* Bornean Narrow-mouthed Frog

8. *Microhyla* sp.  
   *LC* Narrow-mouthed Frog

9. *Chaperina fusca* (Mocquard, 1892)  
   *LC* Saffron-bellied Frog
Family **Ranidae**

1. *Hylarana baramica* (Boettger, 1901) - Brown Marsh Frog
2. *Hylarana erythraea* (Schlegel, 1937) - Green Paddy Frog
3. *Hylarana glandulosa* (Boulenger, 1882) - Rough-sided Frog
5. *Hylarana luctuosa* (Peters, 1871) - Mahogany Frog
Family **Ranidae**

6. *Hylarana picturata* (Boulenger, 1920) | Spotted Stream Frog
8. *Hylarana signata* (Günther, 1872) | Striped Stream Frog
9. *Meristogenys jerboa* (Günther, 1874) | Matang Torrent Frog
10. *Staurois guttatus* (Günther, 1858) | Black-spotted Rock Frog
<table>
<thead>
<tr>
<th>Family</th>
<th>RHACOPHORIDAE</th>
<th>Tree Frogs</th>
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<tr>
<td>1</td>
<td><em>Feihyla kajau</em> (Dring, 1984)</td>
<td>White-eared Tree Frog</td>
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<td>2</td>
<td><em>Kurixalus appendiculatus</em> (Günther, 1859)</td>
<td>Frilled Tree Frog</td>
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<td>3</td>
<td><em>Nyctixalus pictus</em> (Peters, 1871)</td>
<td>Cinnamon Tree Frog</td>
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<td>4</td>
<td><em>Philautus kakipanjang</em> Dehling &amp; Dehling, 2013</td>
<td>Long-legged Bush Frog</td>
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<td>5</td>
<td><em>Philautus tectus</em> Dring, 1987</td>
<td>Obscure Bush Frog</td>
</tr>
</tbody>
</table>
Family **RHACOPHORIDAE**

6 File-eared Tree Frog
   *Polypedates otilophus* (Boulenger, 1893)

7 Collett’s Tree Frog
   *Polypedates colletti* (Boulenger, 1890)

8 Bornean Smaller Gliding Frog
   *Rhacophorus borneensis* Matsui, Shimada, Sudin, 2013

9 Blue-spotted Tree Frog
   *Rhacophorus cyanopunctatus* Manthey & Steiof, 1998

10 Jade Tree Frog
   *Rhacophorus dulitensis* Boulenger, 1892
**Family Rhacophoridae**

11 Matang Bush Frog
   *Philautus davidlabangi* Matsui, 2009

12 Kerangas Bush Frog
   *Philautus kerangae* Dring, 1987

13 Peter’s Bush Frog
   *Philautus petersi* (Boulenger, 1900)

14 Four-lined Tree Frog
   *Polypedates leucomystax* (Gravenhorst, 1829)

15 Dark-eared Tree Frog
   *Polypedates macrotis* (Boulenger, 1891)
Family RHACOPHORIDAE

16  *Rhacophorus gadingensis* Das & Haas, 2005
   - Gunung Gading Tree Frog

17  *Rhacophorus nigropalmatus* Boulenger, 1895
   - Wallace’s Flying Frog

18  *Rhacophorus pardalis* Günther, 1859
   - Harlequin Tree Frog
Family **Ichthyophiidae**

1. *Ichthyophis asplenius* (Taylor, 1965)  
   Broad-striped Caecilian

2. *Ichthyophis biangularis* Taylor, 1965  
   Angular Caecilian
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