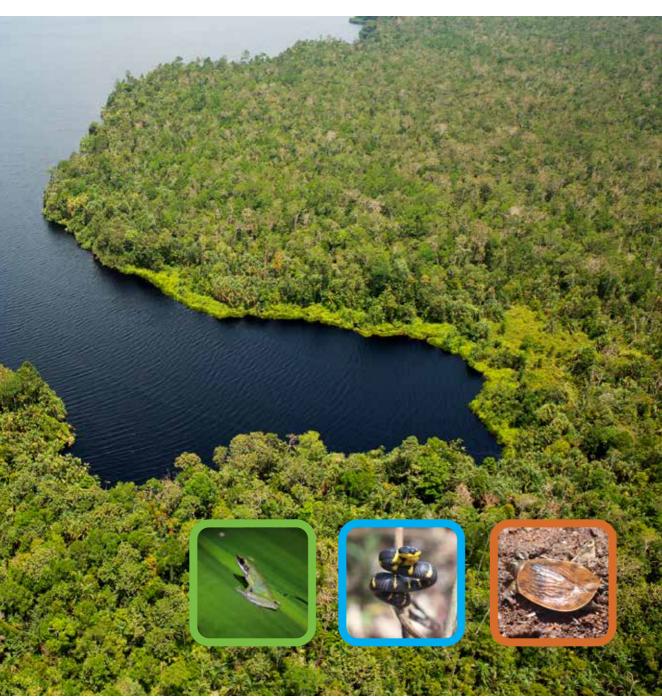


Amphibians and Reptiles of the Kampar Peninsula an Annotated checklist



RESTORASI EKOSISTEM RIAU (RER)

The Restorasi Ekosistem Riau (RER) is an ecosystem restoration programme that brings together private and public sectors to protect and restore ecologically important peatswamp forest areas on Indonesia's Kampar Peninsula, on the east coast of Sumatra.

Established by APRIL Group in 2013, the RER programme adopts an integrated landscape-level approach to protect, assess, restore and manage of 150,693 hectares of previously degraded peatlands as a unique, biodiverse restoration forest area. The overall objective of the programme is to restore the ecologically significant peatswamp forests and generate multiple ecosystem benefits through broad stakeholder and community collaboration.

Supported by long-term resources and expertise from partners Fauna & Flora International (FFI), Bidara, and APRIL Group, RER works with local communities to strengthen ongoing conservation initiatives on the Kampar Peninsula under 60-year ecosystem restoration licenses, granted by the Indonesian Ministry of Environment and Forestry.

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SUMMARY

Puff-faced Water Snake *(Homalopsis buccata)* Credit: Ganjar Cahyadi



Total Number of Amphibians	21
Total Number of Reptiles	80
Critically Endangered	2
Endangered	3
Vulnerable	4
Total Herpetofauna Species 1	01
Total Globally-threatened Species	9
Reptiles that are protected under Indonesian Law, comprising 4% of all amphibians and reptiles recorded on the Kampar Peninsula.	4

INTRODUCTION TO THE CHECKLIST

This annotated checklist is a record of the amphibian and reptile species that have been recorded within the Kampar Peninsula as of June 2020. It serves as a reference for information on the herpetofauna of the area, the habitats they have been recorded in, their abundance and their current conservation status globally and in Indonesia. It also serves as a basis for future updates on knowledge of amphibian and reptile species in the region.

The Kampar Peninsula peatland landscape contains one of the most extensive contiguous remaining lowland peatswamp forests on Sumatra. It is a diverse landscape, with land cover varying from peatswamp forest (riparian, mixed peatswamp and pole), to industrial-size plantations (oil palm, rubber and wood fiber), small-holder plantations, farmlands and human settlements. This diverse landscape provides habitats for a wide range of wildlife including a diverse assemblage of amphibian and reptile species.

Nomenclature and taxonomic arrangement

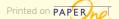
This checklist follows the IUCN redlist (www.iucnredlist.org) for scientific and English names. Indonesian names for all species follow Kamsi *et al.* (2017) for amphibians and lizards, Iskandar (2000) for turtles and crocodiles, and Marlon *et al.* (2014) for snakes.

Phylogenetic arrangement of the family and species are as follows: amphibians and lizards follow Amfibi & Reptil Kawasan Hutan Batang Toru (Kamsi *et al.* 2017), turtle and crocodiles follow Turtles and Crocodiles of Indonesia and Papua New Guinea with Notes on Types in Southeast Asia (Iskandar, 2000), snakes follow 107+ Ular Indonesia (Marlon *et al.*, 2014).

Coverage

This checklist covers the area referred to as the Kampar Peninsula, described in the section below, including the rivers that surround (and flow through) the Kampar Peninsula.

This inventory of species is confined largely to peatswamp forests and adjacent modified landscapes along the edges of the Peninsula that surround the intetior natural forest. This includes both fresh water and terrestrial habitats. The dryland forests to the west of the Peninsula are not included in this checklist.



Compilation

This checklist was compiled by Prayitno Goenarto and Muhammad Iqbal. The main sources of information on reptiles and amphibians are from biodiversity inventories conducted in partnership with Fauna & Flora International (FFI) Indonesia Programme, High Conservation Value (HCV) assessments conducted by Tropenbos Indonesia, APRIL commissioned surveys undertaken by Ganjar Cahyadi from the Museum Zoologi, Sekolah Ilmu dan Teknologi Hayati, Institut Teknologi Bandung, and a body of published, unpublished and anecdotal records from M. Iqbal and P. Goenarto.

Each species in this checklist has been reviewed for any revisions in its nomenclature, phylogeny and accuracy of the records for the Kampar Peninsula. Certain species have been excluded from the list where there is any uncertainty of their taxonomy and presence.



OVERVIEW OF THE KAMPAR PENINSULA

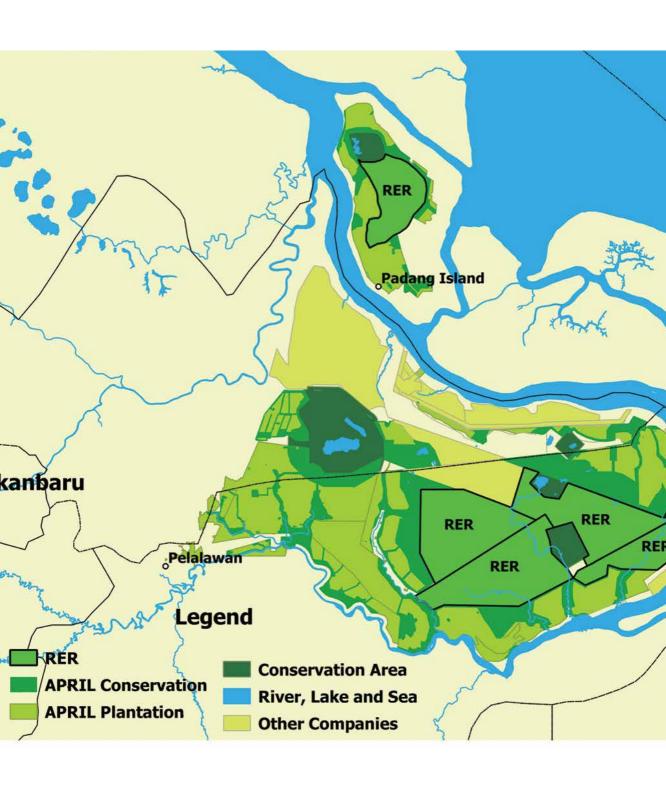
Physiographically, the Kampar Peninsula is coastal plain situated within the larger Central Sumatran basin and part of the Sundaic region of south-east Asia. The Peninsula is bordered to the south by the Kampar River and to the north by the Siak River and Selat Panjang in eastern Sumatra, Indonesia. Its western boundary is where the peat deposits end and mineral soils begin, and the land rises in elevation into the foothills of the Bukit Barisan mountain range. The city of Pekanbaru, Capital of Riau Province, is situated along this western boundary. To the east and north of the Peninsula are large islands, which are part of a fragmented coastal deltaic formation

The Kampar Peninsula is dominated by tropical peatswamp forest. The central core of this landscape is densely covered with natural forest (344,500 ha), and has two peat domes, the western dome being more prominent in size than the eastern dome. The peripherial edges of the Peninsula are all converted lands, comprising industrial tree plantations, oil palm plantations, communal farmlands and degraded natural forest.

Open water bodies are a prominent feature of the Kampar Peninsula. Collectively these are referred to as lakes, although not all fit into this definition. These water bodies vary in size seasonally with the narrow river channels turning into flood plains during the rainy seasons. A half century of human activity along the outflowing rivers have resulted in artificial clearings and human-made canals along the existing river channels. Many of these clearings are revegetated today, and not easily differentiable to the untrained eye.

The peatswamp forests of the Kampar Peninsula are not uniform. There are three distinctive forms, discernible by their structural and floristic composition, these include mixed peatswamp forest, pole forest and riparian forest. The higher peat dome plateau is dominated by short pole forest which transitions to tall pole forest at lower peat depths. On shallower peat, mixed peatswamp forest is dominant with riparian forest extending from river banks as far as the tidal flow extends.





Singapore

THE RESTORASI EKOSISTEM RIAU (RER) AREA

The RER area refers to the areas delineated as Ecosystem Restoration Concession (ERC) license. Four contiguous ecosystem restoration licenses are issued to the APRIL Group on the Kampar Peninsula. These licenses aim to return deforested and degraded production forest to their 'biological equilibrium'. This government regulation has created a management alternative to the conversion of forests to either timber plantations or agricultural use (oil palm plantation). APRIL received it's first ERC license in 2012.

The total RER area on the Kampar Peninsula is 130,095 ha, making it one of the largest intact peatswamp forest under license on Sumatra. The forest concessions within RER have experienced past commercial selective logging that did not adhere to sustainable forest management practices, excavation of drainage canals and human ignited fires and clearing. Much of this disturbance occurred between the 1980's until 2009. After 2013, land use change stabilized across the central peatswamp forested area of the Peninsula through the establishment of RER. This change in land tenure has seen illegal logging in the area halted and degraded forest areas progressively replanted with locally occurring native species. The peatswamp forest of the ERC's are also gradually being re-wetted through the closing of old drainage canals.



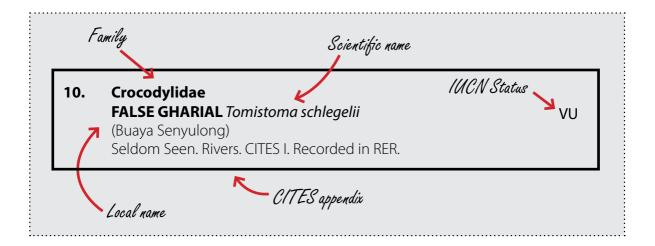
30 km



USING THIS CHECKLIST

PRESENTATION

The checklist is presented according to the sequence of families. Under each family, species recorded in Kampar Peninsula are listed in numbered sequence. The English name of the species is in **BOLD CAPITALS**, followed by its scientific name. Its Indonesian name is provided in brackets.



Each species is annotated for its known status and general habitat distribution on the Kampar Peninsula, including information on known uses of the species by locals in the area, its protected status in Indonesia, CITES status and specifically whether it has been recorded within RER.

To the right of each record the IUCN status is provided, limited to the three globally-threatened categories of Critically Endangered (CR), Endangered (EN), or Vulnerable (VU).



DESCRIBING TERMS USED IN THE ANNOTATIONS

Habitat Restrictions

Endemic	Refers to the geographical limitation of populations. Species can be regionally endemic	
	e.g. endemic to Southeast Asia or endemic to Greater Sundas, or island endemic.	
Widespread	Refers to the occurrence of a species across the Kampar Peninsula. Widespread species	
	occur in a variety of habitats.	



Abundance

Common	Refers to species that are relatively abundant and typically seen or heard in the	
	area. A species may be considered common in a particular habitat type, or across	
	several habitats.	
Uncommon	Refers to species that occur in lower densities, or are present naturally in low	
	abundance. The chances of encountering such species are therefore lower.	
	Some species may be considered common in specific habitats while also being	
	uncommon in other habitat types.	
Very uncommon	Refers to species that are known to be present but in very low numbers, and	
	therefore seldom recorded. Some species may be naturally very uncommon	
	while others have been reduced in number through anthropogenic factors,	
	such as hunting or trapping.	
Seldom Seen	Refers to species that are either very uncommon, or may be very cryptic in	
	behaviour and hence very seldom seen or heard.	



Distribution, Occurrence & Habitat Preference

Coastal	Denotes the zone where land meets water and primarily refers to the "marine/
	brackish" environment to the east of the Kampar Peninsula.
Mangroves	A characteristic forest type with specialist vegetation adapted to brackish
	conditions.
Forests	Land covered by different tree species of varying sizes with a layered canopy
	that creates an environment drastically different to open country. Forests in this
	publication do not refer only to peatswamp forests.
Peat swamp forest	Refers to the characteristic assemblage of vegetation that has evolved on
	peatlands. Peat swamp forests have been described as botanically distinctive and
	different on the different land masses of southeast Asia, with different formation
	patterns.
Forest edge	An ecotone where forest abruptly or gradually changes from forest to another
	land use type.
Riparian forest	Refers to the zone adjacent to rivers and other water channels, with a unique
	vegetation composition.
Rivers & waterways	Refers to flowing channels of water, some permanent, some seasonal. These
	include natural forest streams and canals.
Water bodies	A generic term referring to a variable range of freshwater lakes, varying in origin,
	size, depth and ecological character. Some are large (>50ha), others mid size
	1-2ha and others small. Some are clearly defined permanent lakes deep within
	the peatswamp forest, and others are indistinguishable from the rivers that flow
	through them, either naturally or as a result of clearance.
Plantations	Refers to tree plantations on the Kampar Peninsula, specifically Acacia crassicarpa
	plantations. For the purpose of this checklist, oil palm plantations are excluded.
Open Country	$Refers to a \ largely \ tree-less \ environment, either \ naturally \ occurring \ or \ caused \ by \ the$
	clearance of forest in the past. Trees are usually present, but not in groves or stands
	creating canopy-cover. Open country also describes multiple use environments
	such as scrubland, grassland, scattered trees, farms and even villages and roads.



Human Influence

Hunted	Denotes species which are known to be hunted for food or trade in meat or other animal
	parts. Hunting usually refers to killing the animal using guns, snares, other traps or hunting
	dogs.
Trapped	Differentiated from hunting where the objective is to capture the animal live. Trapping is
	almost always for pets or trade in live specimens. Live trapping for food is also common for
	species that may be sold live.



National Protection Status

The Republic of Indonesia lists its protected species of plants and animals in Ministerial Regulation No. 106/2018 Protected Plant and Animal Species. The Government regulation (Peraturan Menteri) lists four species of reptiles as protected in the country.

Global Conservation Status

IUCN Status refers to species conservation status issued by IUCN in their Red List data book. It is accessible at http://www.iucnredlist.org/. Below are the summaries.

CR	Critically endangered species are species with populations that have been reduced by
	90% or more within 10 years, or three generations, the reduction is clearly reversible
	and understood. Or population reduced by 80% or more and it is not adequately
	studied and poorly understood. Distribution area less than 100 km2 and severely
	fragmented or in decline. Species occupies an area less than 10 km2 which is severely
	fragmented or in decline. The number of mature individuals is less than 250.
EN	Endangered species are species where the population has been reduced by 70%
	or more within 10 years, or three generations, the reduction is clearly reversible
	and understood. Or if the population is reduced by 50% or more and it is not
	adequately studied and poorly understood. Distribution area of less than 5,000 km2
	and population is severely fragmented or in decline. Species occupy area less than
	500 km2 and is severely fragmented or in decline. Number of mature individuals is
	less than 2,500. Endangered species are predicted with a 20% chance of extinction
	within 20 years or five generation.
VU	Vulnerable species are species whose population has been reduced by 50% or
	more within 10 years, or three generations, the reduction is clearly reversible and
	understood. Or if the population is reduced by 30% or more and it is not adequately
	studied and poorly understood. Distribution area less than 20,000 km2 and severely
	fragmented or in decline, species occupy area less than 2,000 km2 and severely
	fragmented or in decline. Number of mature individuals is less than 1,000. Or if a
	limited distributed species' single population comprises of 1,000 mature individuals
	or within 20 km2. Vulnerable species are predicted 50% extinction within 10 years,
	or three generations.
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CITES Listing

CITES (Convention on the International Trade of Endangered Species) is an international agreement between countries that governs the international trade of wild animal and plant specimens. CITES Species refers to species that have been listed in CITES Appendices which are subject to CITES regulations. It is accessible at https://www.cites.org/eng. Below are the appendix definitions.

Appendix I	Species listed on Appendix I are those threatened with extinction. Trade in specimens	
	of these species is permitted only in exceptional circumstances. Import permit issued	
	by Management Authority of the state of import is required. Export and re-expor	
	permit by Management Authority of the state of export is required.	
Appendix II	Species listed on Appendix II are those not necessarily threatened with extinction, but	
	in which trade must be controlled in order to avoid utilization incompatible with their	
	survival. Import permit issued by Management Authority of the state of import is not	
	required. Export and re-export permit by Management Authority of the state of export	
	is required.	



AMPHIBIAN CHECKLIST



Cinnamon Frog (Nyctixalus pictus)
Credit: FFI-RER

Collet's Tree Frog (*Polypedates colletti*) Credit: FFI-RER





White Cheek Terrapin (Siebenrockiella crassicolis)
Credit: FFI-RER



Bufonidae

1 **COMMON SUNDA TOAD** Duttaphrynus melanostictus

(Kodok Puru Rumah)

Uncommon. Widespread. Found across different forest types. Present in plantations.

2 **INDONESIAN TOAD** *Ingerophrynus biporcatus*

(Kodok Puru Biasa)

Uncommon. Widespread. Found across different forest types. Present in plantations.

3 **CRESTED TOAD** Ingerophrynus divergens

(Kodok Puru Hutan)

Seldom Seen. Waterbodies and nearby forest.

4 **SWAMP TOAD** Ingerophrynus quadriporcatus

(Kodok Puru Rawa)

Common. Widespread. Waterbodies and nearby forest. Present in plantations. Recorded in RER.

5 **RIVER TOAD** Phrynoidis asper

(Kodok Puru Sungai)

Seldom Seen. Forest and rivers.

6 FALSE TOAD Pseudobufo subasper

_

Uncommon. Riparian forest. Common along waterbodies and waterways. Rather rare inland. Present in plantations. Recorded in RER.

Dicroglossidae

7 **CRAB-EATING FROG** Fejervarya cancrivora

(Katak Sawah)

Seldom Seen. Waterbodies and nearby forest. Present in plantations.

8 **GRASS FROG** Fejervarya limnocharis

(Katak Tegalan)

Uncommon. Near rivers and waterbodies. Recorded in RER.

9 **LESSER SWAMP FROG** *Limnonectes paramacrodon*

(Bangkong Rawa Kerdil)

Uncommon. Widespread. Rivers, waterbodies and nearby forest. Recorded in RER.

Microhylidae

10 **RED BELLIED FROG** Phrynella pulchra

(Katak Perut Merah)

Common. Forest. Recorded in RER.



Ranidae

11 **BROWN MARSH FROG** Hylarana baramica

(Kongkang Baram)

Common. Near rivers and waterbodies. Recorded in RER.

12 WHITE-LIPPED FROG Hylarana chalconota

(Kongkang Kolam)

Seldom Seen. Near rivers and waterbodies. Recorded in RER.

13 **GREEN PADDY FROG** Hylarana erythraea

(Kongkang Gading)

Very Uncommon. Riparian forest. Present in plantations. Recorded in RER.

14 **ROUGH-SIDED FROG** Hylarana glandulosa

(Kongkang Sisi Kasar)

Seldom Seen. Forest. Recorded in RER.

15 Hylarana parvaccola

(Kongkang Kecil)

Common. Widespread. Rivers, waterbodies and nearby forest. Recorded in RER.

16 Hylarana rawa

_

Common. Widespread. Rather inland, riparian nearby forest, forest. Endemic Sumatra, endemic peatswamp. Recorded in RER.

17 Hylarana sp. 1

-

Seldom Seen. Unidentified. Near waterbodies.

Rhacophoridae

18 **CINNAMON FROG** *Nyctixalus pictus*

(Katak Pohon Berbintik Putih)

Very Uncommon. Forest. Recorded in RER.

19 **COLLET'S TREE FROG** *Polypedates colletti*

(Katak Pohon Jam Pasir)

Common. Widespread. Rivers, waterbodies and nearby forest. Recorded in RER.

20 **FOUR-LINED TREE FROG** Polypedates leucomystax

(Katak Pohon Bergaris)

Seldom Seen. Forest and rivers. Present in plantations. Recorded in RER.

21 **DARK-EARED TREE FROG** *Polypedates macrotis*

(Katak Pohon Telinga Gelap)

Common. Forest. Near rivers and waterbodies. Recorded in RER.



REPTILE CHECKLIST



Dark-headed Cat Snake (*Boiga nigriceps*) Credit: RER/FFI

Cyrtodactylus sp. Credit: FFI-RER





Great Anglehead Lizard (Gonocephalus liogaster) Credit: FFI-RER



Crocodylidae

1	SALTWATER CROCODILE Crocodylus porosus		
	(Buaya Muara)		
	Seldom Seen. Along the Kampar River and upstream smaller rivers and waterbodies. CITES		
	II. Recorded in RER.		
2	FALSE GHARIAL Tomistoma schlegelii	VU	
	(Buaya Senyulong)		
	Seldom Seen. Rivers. CITES I. Recorded in RER.		
Γric	nychidae		
110	niyenidae		
3	COMMON SOFTSHELL TURTLE Amyda cartilaginea	VL	
	(Bulus)		
	Seldom Seen. Riparian forest. Present in plantations. Hunted for food. Accidental bycatch.		
	CITES II. Recorded in RER.		
4	GIANT SOFTSHELL TURTLE Pelochelys cantorii	EN	
	(Labi-labi Raksasa)		
	Seldom Seen. Rivers and waterbodies. CITES II		
5	Trionichidae sp.		
	- Seldom Seen. Rivers and waterbodies.		
Ged	pemydidae		
6	PAINTED TERRAPIN Batagur borneoensis	CR	
	(Beluku)		
	Seldom Seen. Forest and rivers. CITES II		
7	SOUTHEAST ASIAN BOX TURTLE Cuora amboinensis	EN	
	(Kuya Batok)		
	(Nuya batok)		

8 **ASIAN LEAF TURTLE** Cyclemys dentata

(Kura-kura Bergerigi)

Resident. Uncommon. Forests and plantations. Sometimes found under fruiting figs. Seen in quiet canals within mature plantations. Trapped for food. Protected under Indonesian law. CITES I. Recorded in RER.

9 **SPINY TURTLE** Heosemys spinosa

ΕN

(Kura-kura Duri)

Seldom Seen. Forest. Near rivers and waterbodies. Present in plantations. CITES II. Recorded in RER.



10	GREAT RIVER TERRAPIN Orlitia borneensis	CR
	(Bajuku)	
	Very Uncommon. Rivers and waterbodies. Hunted for food. Accidental bycatch. CITES II.	
	Recorded in RER.	
11	WHITE CHEEK TERRAPIN Siebenrockiella crassicollis	VU
	(Kura-kura Pipi Putih)	
	Seldom Seen. Rivers. Accidental bycatch. CITES II. Recorded in RER.	
Aga	midae	
12	LESSER AGAMID Aphaniotis fusca	
	(Bunglon Kerdil)	
	Common. Widespread. Riparian forest and along waterways. Recorded in RER.	
13	GREEN CRESTED LIZARD Bronchocela cristatella	
	(Bunglon Hijau)	
	Very Uncommon. Forest. Along waterways. Recorded in RER.	
14	FIVE-BANDED GLIDING LIZARD Draco quinquefasciatus	
	(Cicak Terbang Lima Garis)	
	Very Uncommon. Riparian forest. Recorded in RER.	
15	SUMATRA FLYING DRAGON Draco sumatranus	
	(Cicak Terbang Sumatera)	
	Very Uncommon. Forest. Recorded in RER.	
16	Draco sp.	VU
	-	
	Seldom Seen. Forest.	
17	GREAT ANGLEHEAD LIZARD Gonocephalus liogaster	
	(Bunglon Surai Terpotong)	
	Uncommon. Lowland forest species. Recorded in RER.	
Gek	konidae	
18	Cnemaspis sp.	
	- Seldom Seen. Unidentified. Arboreal. Recorded in RER.	
19	MARBLED BOW-FINGERED GECKO Cyrtodactylus marmoratus	
-	(Cicak Hutan Bertotol)	
	Seldom Seen. Forest.	
20	SINGAPORE BENT-TOED GECKO Cyrtodactylus majulah	
	-	
	Uncommon. Forest. Identified recently in 2019 based on collected specimen. Recorded in	

RER.

21 *Cyrtodactylus* sp.

_

Common. Forest. Recorded in RER.

22 **STUMP-TOED GECKO** Gehyra mutilata

-

Very Uncommon. Forest. Recorded in RER.

23 TOKAY GECKO Gekko gecko

(Tokek Rumah)

Seldom Seen. Forest. Arboreal. Present in plantations. CITES II

24 LARGE FOREST GECKO Gekko smithii

(Tokek Hutan)

Uncommon. Riparian forest. Recorded in RER.

25 Gekko sp.

-

Seldom Seen. Forest.

26 **SPINY-TAILED HOUSE GECKO** *Hemidactylus frenatus*

(Cicak Rumah Ekor Duri)

Uncommon. Forest. Present in plantations. Recorded in RER.

27 **ASIAN HOUSE GECKO** Hemidactylus platyurus

_

Seldom Seen. Forest.

28 YERCAUD SLENDER GECKO Hemiphyllodactylus typus

_

Seldom Seen. Forest. Recorded in RER.

29 KUHL'S GLIDING GECKO Ptychozoon kuhli

(Tokek Terbang)

Seldom Seen. Forest. Recorded in RER.

30 Ptychozoon sp.

_

Seldom Seen. Forest.

Lacertidae

31 **LONG TAILED LIZARD** *Takydromus sexlineatus*

(Bengkarung)

Seldom Seen. Open grassland on forest edge.



Scincidae

32 **OLIVE TREE SKINK** Dasia olivacea

(Kadal Pohon)

Seldom Seen. Forest. Recorded in RER.

33 **COMMON SUN SKINK** Eutropis multifasciata

(Kadal Biasa)

Common. Widespread. Found across different forest types. Recorded in RER.

34 ROUGH-SCALED BROWN SKINK Eutropis rudis

(Kadal Coklat Sisik Kasar)

Uncommon. Widespread. Found across different forest types. Present in plantations.

Recorded in RER.

35 **ROUGH-SCALED SKINK** Eutropis rugifera

(Kadal Sisik Kasar)

Uncommon. Forest. Recorded in RER.

36 Eutropis sp.

_

Seldom Seen. Forest.

37 **BOWRING'S SUPPLE SKINK** Lygosoma bowringii

-

Seldom Seen. Forest. Present in plantations.

Varanidae

38 **CLOUDED MONITOR** Varanus nebulosus

-

Seldom Seen. Forest. CITES I

39 HARLEQUIN MONITOR Varanus dumerilii

(Biawak Dumeril)

Very Uncommon. Forest. Near rivers and waterbodies. Hunted for food. CITES II. Recorded in RER.

40 **ROUGH NECKED MONITOR LIZARD** Varanus rudicollis

(Biawak Leher Kasar)

Very Uncommon. Forest. Hunted for food. CITES II. Recorded in RER.

41 **WATER MONITOR** *Varanus salvator*

(Biawak Biasa)

Seldom Seen. Forest and rivers. Present in plantations. Hunted for food. Accidental

bycatch. CITES II. Recorded in RER.



Xenopeltidae

42 **SUNBEAM SNAKE** *Xenopeltis unicolor*

(Ular Pelangi)

Very Uncommon. Forest. Accidental bycatch. Recorded in RER.

Pareatidae

43 **KEELED SLUG-EATING SNAKE** Pareas carinatus

(Ular Pemakan Siput)

Seldom Seen. Forest. Recorded in RER.

44 MALAYAN SLUG-EATING SNAKE Asthenodipsas malaccanus

.

Seldom Seen. Forest. Recorded in RER.

45 Aplopeltura boa

Very Uncommon. Forest. Arboreal. Recorded in RER.

Pythonidae

46 **RETICULATED PYTHON** *Malayopython reticulatus*

(Sanca Batik)

Uncommon. Forest and rivers. Present in plantations. Hunted for food and skin. Traded for collectors. Accidental bycatch. CITES II. Recorded in RER.

47 **RED SHORT-TAILED PYTHON** Python brongersmai

(Sanca Darah Sumatera)

Seldom Seen. Forest. Present in plantations. CITES II

Acrochordidae

48 **JAVAN WART SNAKE** Acrochordus javanicus

(Ular Karung)

Very Uncommon. Rivers. Present in plantations. Accidental bycatch. Recorded in RER.

Homalopsidae

49 **RAINBOW WATER SNAKE** Enhydris enhydris

(Ular Air Pelangi)

Seldom Seen. Rivers, waterbodies and nearby forest. Present in plantations.

50 **PUFF-FACED WATER SNAKE** Homalopsis buccata

(Ular Kadut Belang)

Uncommon. Rivers and waterbodies. Present in plantations. Accidental bycatch. Recorded in RER.



Colubridae

51	ORIENTAL WHIP SNAKE Ahaetulla prasina (Ular Pucuk)
	Very Uncommon. Riparian forest. Present in plantations. Recorded in RER.
52	GOLD-RINGED CAT SNAKE Boiga dendrophila
	(Ular Cincin Mas)
	Very Uncommon. Forest. Accidental bycatch. Recorded in RER.
53	WHITE-SPOTTED CAT SNAKE Boiga drapiezii
	(Ular Boiga Coklat)
	Very Uncommon. Forest. Recorded in RER.
54	JASPER CAT SNAKE Boiga jaspidea
	-
	Very Uncommon. Forest. Recorded in RER.
55	DARK-HEADED CAT SNAKE Boiga nigriceps
	(Ular Boiga Merah)
	Very Uncommon. Forest. Arboreal. Recorded in RER.
56	PARADISE TREE SNAKE Chrysopelea paradisi
	(Ular Terbang)
	Seldom Seen. Forest. Arboreal. Recorded in RER.
57	BLACK COPPER RAT SNAKE Coelognathus flavolineatus
	(Ular Kopi)
	Seldom Seen. Forest. Recorded in RER.
58	RADIATED RAT SNAKE Coelognathus radiatus
	(Ular Sapi Lanang)
	Seldom Seen. Lowland forest species also in disturbed forest. Present in plantations.
59	STRIPED BRONZEBACK SNAKE Dendrelaphis caudolineatus
	-
	Very Uncommon. Riparian forest. Present in plantations. Recorded in RER.
60	ELEGANT BRONZEBACK SNAKE Dendrelaphis formosus
	(Ular Tampar) Very Uncommon. Forest. Arboreal. Recorded in RER.
61	PAINTED BRONZEBACK SNAKE Dendrelaphis pictus
01	(Ular Tambang)
	Very Uncommon. Forest. Arboreal. Recorded in RER.
62	BROWN-SADDLED TREE SNAKE Dryocalamus subannulatus
02	-
	Very Uncommon. Forest. Arboreal. Recorded in RER.
63	SPOTTED GROUND SNAKE Gongylosoma baliodeirus
	Very Uncommon. Forest and rivers. Recorded in RER.



64 **DUSKY WOLF SNAKE** Lepturophis albofuscus Very Uncommon. Forest. Recorded in RER. 65 **SCARCE WOLF SNAKE** Lycodon effraenis Seldom Seen. Forest. Recorded in RER. **BANDED WOLF SNAKE** Lycodon subcinctus 66 Seldom Seen. Forest. Present in plantations. Recorded in RER. **INDOCHINESE RAT SNAKE** Ptyas korros 67 (Ular Koros) Seldom Seen. Forest. Present in plantations. 68 MALAYAN BROWN SNAKE Xenelaphis hexagonotus Very Uncommon. Forest and rivers. Recorded in RER.

Natricidae

69 BLUE-NECKED KEELBACK Rhabdophis rhodomelas
(Ular Picung Leher Biru)
Seldom Seen. Riparian forest. Recorded in RER.

70 ORANGE-LIPPED KEELBACK Rhabdophis flaviceps
Seldom Seen. Forest and rivers. Accidental bycatch. Recorded in RER.

71 RED-NECKED KEELBACK Rhabdophis subminiatus
Seldom Seen. Near rivers and waterbodies. Recorded in RER.

72 MALAYAN SPOTTED KEELBACK WATER SNAKE Xenochrophis maculatus
Seldom Seen. Lowland forest species. Present in plantations. Recorded in RER.

Lamprophiidae

PAINTED MOCK VIPER Psammodynastes pictus

Very Uncommon. Riparian forest. Recorded in RER.

74 COMMON MOCK VIPER Psammodynastes pulverulentus

Seldom Seen. Forest. Recorded in RER.



Viperidae

75 *Trimeresurus* sp. 1

-

Common. Unidentified. Forest. Possibly a new Trimeresurus viper species. Recorded in RER

76 Trimeresurus sp. 2

Seldom Seen. Forest.

77 **WAGLER KEELED PIT-VIPER** *Tropidolaemus wagleri*

(Ular Punai Wagleri)

Very Uncommon. Forest. Recorded in RER.

Elapidae

78 **RED-HEADED CRATE** Bungarus flaviceps

(Ular Kepala Merah)

Seldom Seen. Rivers. Recorded in RER.

79 **SUMATRAN COBRA** Naja sumatrana

(Ular Kobra Sumatera)

Very Uncommon. Widespread. Rivers, waterbodies and nearby forest. Present in plantations. CITES II. Recorded in RER.

80 KING COBRA Ophiophagus hannah

(Ular Anang)

Very Uncommon. Forest and rivers. Present in plantations. CITES II. Recorded in RER.

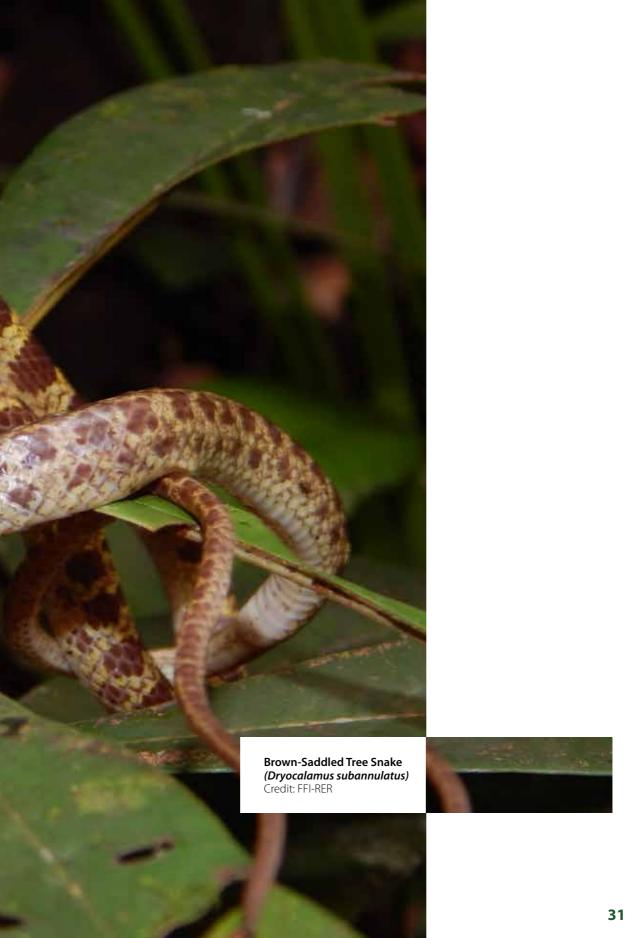








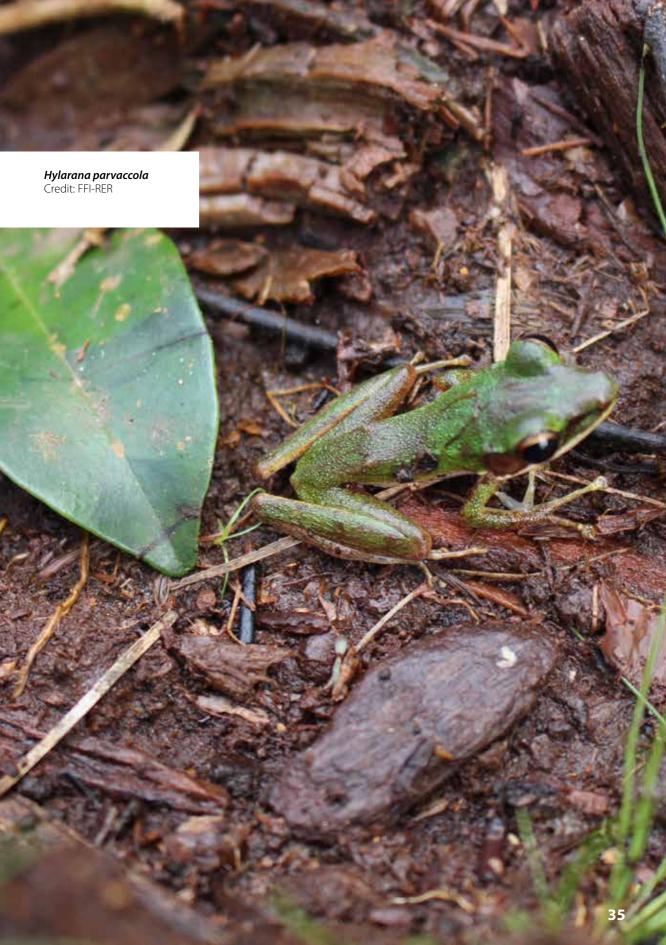
































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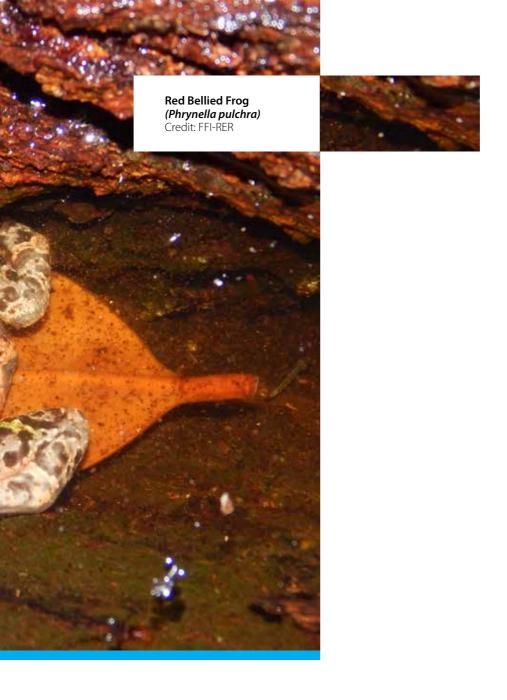
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RER Partners:



APRIL Group is the main partner of RER programme. The company is a leading producer of fibre, pulp, paper and viscose with plantations and manufacturing operations in Riau Province. At COP 21 in Paris in 2015, APRIL announced the programme's expansion to 150,000 ha and committed US\$100 million to support long term conservation and restoration initiatives, including RER, for a 10-year period. T The company provides financial support, leadership, operational resources and technical expertise to RER.



BIDARA is focused on community resources development. It is a non-political and non-governmental organization that works on strengthening social capital, initiative and self-reliant of rural communities in Indonesia. It gives RER advise on on the development of programmes to foster appropriate environmental management approaches and skill sets to support ecosystem restoration in communities surrounding RER concesssions.



Fauna & Flora International (FFI) is an international NGO established in 1903. Its mission is to conserve threatened species and ecosystems by using sustainable solutions that combine science and human needs. As RER's technical partner, FFI manages key elements of the project related to biodiversity, climate and communities.

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RER Partners:





