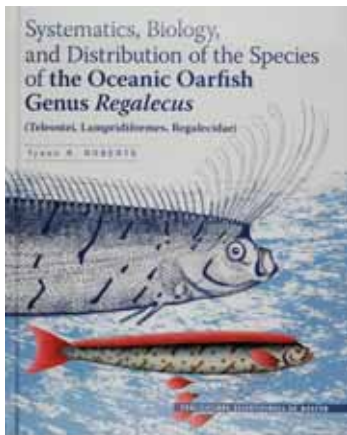


BOOK REVIEW



Systematics, Biology, and Distribution of the Species of the Oceanic Oarfish Genus *Regalecus* (Teleostei, Lampridiformes, Regalecidae). Tyson R. Roberts, 2012. Mémoires du Muséum national d'Histoire naturelle Tome 202. Publications Scientifiques Du Muséum, Paris, 268 pages. ISBN: 9782856536773. With a CD. [abstract in both

English and French, text in English]

This is a medium-sized 275 × 220 mm hard cover monograph, with an attractive cover of a line drawing and a colour painting of an oceanic oarfish on the front cover, and a photograph of the oarfish head on the back cover.

The oceanic oarfish is a little known fish, documented from few intact adult specimens and reliable sightings. They are characterised by elaborate red dorsal fin crests as much as 1 m high, and a ribbon-like body up to 8 m long. It is known and recorded from the Atlantic, Pacific and Indian Oceans. Due to their large size, usually found in a suspended vertically head-up position and propensity for self-amputation; this fish is an almost mythical animal fringing on cryptozoology, and has fascinated and terrified fisherfolk, sailors and scientists since the Middle-age. Many specimens are illustrated for

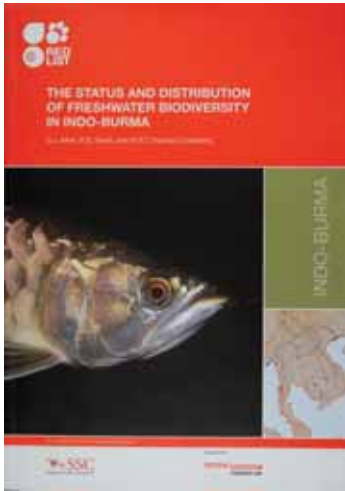
the first time, including illustrations of lithographic prints of oarfish from the 18th century to modern day photographs and line drawings of all available oarfish specimens, from larvae to adults and fragments (due to autotomy or self-amputation). There is no agreement currently on how many species of oarfish there are, generally thought to be one. But Roberts has demonstrated, with evidence, at least two species exist, with support from molecular data.

This monograph is divided into 10 main chapters covering: Introduction, Mythology and Folklore, Systemic Account, Morphology, Biology, Life History, Fossil Record and Geographical Distribution, Biogeography, Discussion, and Conclusion. It also lists the material examined from 57 collections and museums all around the world. It is obviously the cumulative effort of years of work, personal observations, compilation of scattered sightings, and represents a collation of various works and original thoughts.

This is a must-read for all fish enthusiasts and scientists, lovers of marine life and natural history buffs, of a curiosity of the natural world.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



The Status and Distribution of Freshwater Biodiversity in Indo-Burma. Compiled by D. J. Allen, K. G. Smith & W. R. T. Darwall, 2012. International Union for Conservation of Nature and Natural Resources (IUCN), Cambridge, UK and Fland, Switzerland, 268 pages. ISBN: 9782831714240. With a CD.

There are 8 main sections, covering: Executive Summary and Key Messages; Assessment Methodology; Status and Distribution of Freshwater Fishes of Indo-Burma; Status and Distribution of Freshwater Molluscs of Indo-Burma; Status and Distribution of Dragonflies and Damselflies of Indo-Burma; Freshwater Crabs of the Indo-Burma Hotspot: Diversity, Distribution, and Conservation; The Conservation of Aquatic and Wetland Plants in the Indo-Burma region; and Synthesis for all Taxa.

The information is compiled with contributions from over 100 regional and international scientists, experts and collaborators. It is richly illustrated with pictures of the region's flora and fauna, and habitats. It also includes box stories with specific habitats and organism groups.

This is a medium-sized 298 × 210 mm soft-cover publication, with a front cover showing a map with area of coverage, along with a photograph of the head of a *Scleropages formosus* (Asian arowana), an endangered freshwater fish.

This is a must-have for all field biologists, natural history buffs, and aquatic conservationists.

The Indo-Burma region is defined as Myanmar, Thailand, Lao PDR, Cambodia, and Vietnam. It covers major drainages and water bodies from Irrawady, Mekong, Chao Phraya, central Song Hong, Inlé Lake, and Tonlé Sap. This assessment covers more than 2,500 species of aquatic organisms and the full dataset and distribution files are available from the IUCN Red List website (www.iucnredlist.org).

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



Red Data Book of Freshwater Fishes in Taiwan. I-Shiung Chen, Chyng-Shyan Tzeng & Kwang-Tsao Shao, 2012. Edited by Cyng-Shyan Tzeng, I-Shiung Chen, Kwang-Tsao Shao & Chia-Jun Weng. Forestry Bureau, COA, Executive Yuan, 242 pages. ISBN: 9789860330748. [text in Chinese and English]

A total of 13 families are covered, viz. Anguillidae, Salmonidae, Cyprinidae, Cobitidae, Balitoridae, Bagridae, Amblycipitidae, Adrianichthyidae, Rhyacichthyidae, Eleotridae, Gobiidae, Osphronemidae, Channidae. A total of 52 species are covered in detail, of which 10 are with IUCN conservation listing; the rest with local conservation status.

Each species account is accompanied with several well-taken photographs depicting the taxon ex-situ, followed by habitat notes and photographs of the habitat. The text is mainly in Chinese, with a brief English summary of each fish species provided.

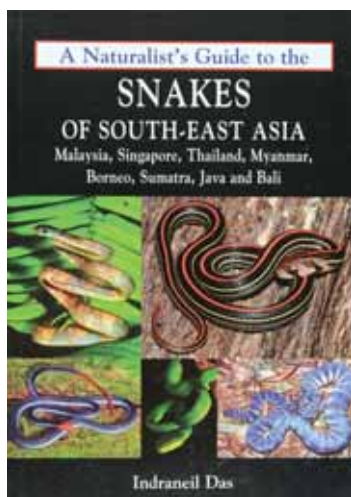
richly illustrated book, with an attractive matt black front cover showing title and a texturised head photograph of *Metzia mesembrinum* (Cyprinidae).

This is a must-read for all fish enthusiasts and scientists, and lovers of freshwater life.

This publication is divided into 3 main chapters, covering: Taiwanese Freshwater Fish Research and Biology; Red Data List Criteria; and Red Data List of Taiwanese Freshwater Fish.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



A Naturalist's Guide to the Snakes of South-East Asia. Malaysia, Singapore, Thailand, Myanmar, Borneo, Sumatra, Java and Bali. Indraneil Das, 2012. John Beaufoy Publishing Ltd., 160 pages. ISBN: 9781906780708.

This is a small-sized 180 × 128 mm soft-cover richly illustrated publication, with a front cover showing title and 5 snake photographs; back

cover with a summary and a snake photograph.

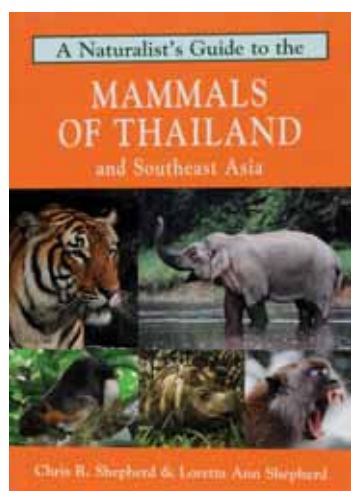
This pocket guide is divided into 10 chapters covering: Introduction, Snake Identification, Dealing with Snake Bites, About this Book, Glossary, Species Accounts and Photographs, Checklist of South-East Asian Snakes, Further Reading, Acknowledgements, and Index.

It deals with representatives of all snakes from the South-East Asian region, taxonomy updated to Dec.2011. The snakes are divided into 14 sections: wart snakes, giant blind snakes, pythons, 'typical' snakes, vipers & pit vipers, pipe snakes, cobras & kraits - coral & sea snakes, puff-faced water snakes, water snakes, lug-eating snakes, false cobras, blind snakes, strange-skinned snakes, and sunbeam snakes. A total of 240 snake species are covered, with well-taken in-situ and ex-situ colour photographs of each snake (some with 2 photographs) and a brief but succinct account. The colour photographs have been contributed from various sources and many individuals. The comprehensive checklist covers 409 snake species and lists the species distribution by country and provides the global conservation status as well.

This is a compact and richly illustrated guide suitable for the layperson, nature lover, snake-lover, and herpetologist alike.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



A Naturalist's Guide to the Mammals of Thailand and Southeast Asia. Chris R. Shepherd & Loretta Ann Shepherd, 2012. Asia Books Co., Ltd., 176 pages. ISBN: 9781906780715.

This is a small-sized 180 × 128 mm soft-cover richly illustrated publication, with a front cover showing title and 5 mammal photographs (tiger, elephant, macaque, rhinoceros and squirrel);

back cover with a summary and a civet photograph.

This pocket guide is divided into 12 chapters covering: Introduction, Using this Book, What's in a Name, Opportunities for Naturalists, Mammal Watching, Wildlife in Trouble, Glossary, Species Accounts and Photographs, Checklist of South-East Asian Mammals, Further Information and References, Acknowledgements, and Index.

It deals with a selection of 129 species from more than 800 mammals native to South-East Asia. The species accounts are brief but succinct. Each species is illustrated with 1 or 2 colour photographs. Most of the photographs are of wild mammals in their natural state, but some were taken in

captivity due to rarity of the animal. The colour photographs used have been contributed from various sources and many individuals. A number of the images used were taken with remote camera-traps by field researchers; and these camera-traps have become essential tools in the field of mammal research and conservation.

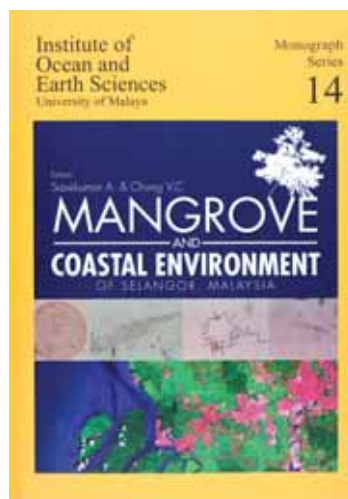
The species accounts are divided into 31 sections as follows: Pangolins; Moonrats and Gymnure; Treeshrews; Colugos; Bats; Lorises; Tarsiers; Monkeys; Gibbons; Great Apes; Dogs; Bears; Red Panda; Martens, Badgers and Stink-Badgers; Otters; Civets; Asian Linsangs; Mongooses; Cats; Whales and Dolphins; Dugong; Elephant; Tapir; Rhinoceroses; Pigs; Chevrotains; Deer; Cattle, Buffalo, Goats and Sheep; Squirrels; Rats and Mice; and Porcupines.

The checklist is comprehensive and covers 750 terrestrial and 32 marine mammals. The terrestrial mammals have distribution information by country and global conservation status; whereas the marine mammals are with global conservation status only.

This is a compact and richly illustrated guide suitable for the layperson, nature lover, mammal lover and scientist alike.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



Mangrove and Coastal Environment of Selangor, Malaysia.

A. Sasekumar & V. C. Chong (editors), 2012. Institute of Ocean and Earth Sciences, University of Malaya, Monograph series 14, 290 pages. ISBN: 9789670380100.

This is a medium-sized 254 × 178 mm soft-cover monograph, containing 20 scientific articles covering 4 main sections on Physical Environment,

Intertidal Habitats, Open Waters and Estuaries, and Resource Valuation. The articles have been contributed by 30 research scientists mainly from Malaysia and internationally as well.

Physical Environment – This section covers physical features and hydrography; geology; and the estuarine environment.

Intertidal Habitats – This section covers vegetation, forestry and conservation of Selangor mangrove forests; phytobenthos in a low shore mangrove forest; marine wood borers on the West coast of Peninsular Malaysia; polychaete reefs of Jeram, Selangor; Macrobenthos of mangrove forests in Selangor; distribution of mudskippers on the Selangor coast; ecology and evolution of mudskippers and oxudercine gobies; mammals and birds in coastal swamps; and monitoring the fireflies of the Selangor River.

Open Waters and Estuaries – This section covers microbial ecology of Port Klang waters; phytoplankton; seaweeds on fish cages at Pulau Ketam; ecology of fish and shrimp communities; larval distribution of two anchova species in Kuala Selangor estuary; and pollution.

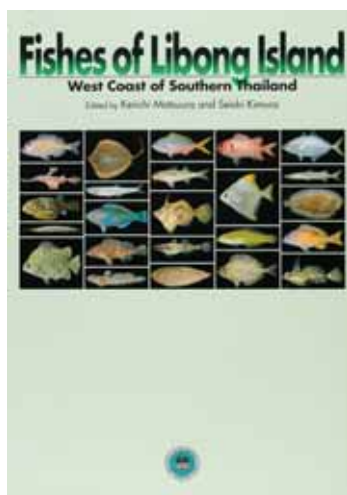
Resource Valuation – This section covers resource valuation of Kuala Selangor mangrove forest; and economic value of coastal resources in the Straits of Malacca.

All in all, this is a timely compilation of scientific articles on a fast disappearing habitat in Southeast Asia: Mangroves. It highlights the diversity of organisms living in this land meets the sea environment, the critical roles performed by the various organisms, man's exploitation of mangrove products, and mangrove's beneficial ecological role(s).

A must-have reference for mangrove and coastal environmentalists and scientists, and the layperson who wants to learn more about the natural environment.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



The following 3 books are from a similar series of 5 volumes. The second of the series titled “Fishes of Bitung, northern tip of Sulawesi” was covered in RBZ 53(2), 2005 (the first title on the fishes of Lombok was not reviewed).

Fishes of Libong Island, West Coast of Southern Thailand. Keiichi Matsuura & Seishi Kimura (editors), 2005. Ocean Research Institute, University of Tokyo, Tokyo, v + 78 pages.

This is a medium-sized 258 × 183 mm soft-cover publication, with a front cover of a collage of colour photographs of 24 marine fish species from Libong Island. This publication is co-authored by 6 marine fish scientists from Japan and Thailand. Libong Island is located off the west coast of southern Thailand, in the Isthmus of Kra.

This volume covers 46 families and 125 species. It is richly illustrated with colour photographs of freshly dead or preserved fish specimens. Each family has a brief introduction, followed by species account (ala FAO guide series style), with a photograph of the species (some species with two photographs if

it is sexually dimorphic). This volume is the precursor to the next volume.

Fishes of Andaman Sea, West Coast of Southern Thailand. Seishi Kimura, Ukkrit Satapoomin & Keiichi Matsuura (editors), 2009. National Museum of Nature and Science, Tokyo, vi + 346 pages. ISBN: 9784878030260.

This is a medium-sized 258 × 183 mm soft-cover publication, with a front cover of a collage of colour photographs of 26 marine fish species from the Andaman Sea. This publication is co-authored by 8 marine fish scientists from Japan and Thailand. The Andaman Sea region is the western coast of southern Thailand, in the Isthmus of Kra.

This volume covers 106 families and 686 species. It is richly illustrated with colour photographs of freshly dead or preserved fish specimens, and even includes in-situ photographs of fish. Each family starts with a brief introduction, followed by a species account, with one or more photographs depicting the species (in-situ, freshly dead/preserved, male/female/juvenile stage).

Fishes of Terengganu, East Coast of Malay Peninsula, Malaysia. Mizuki Matsunuma, Hiroyuki Motomura, Keiichi Matsuura, Noor Azhar M. Shazili & Mohd. Azmi Ambak (editors), 2011. National Museum of Nature and Science, Universiti Malaysia Terengganu, Kagoshima University Museum, ix + 251 pages. ISBN: 9784878030369.

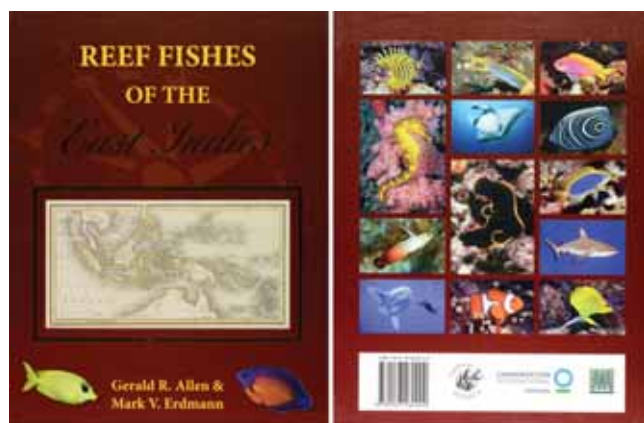
This is a medium-sized 258 × 183 mm soft-cover publication, with a front cover of a collage of colour photographs of 23 marine fish species from the South China Sea, off the eastern coast of Malay Peninsula. This publication is co-authored by 11 marine fish scientists from Japan and Malaysia.

This volume covers 108 families and 433 species. It is richly illustrated with colour photographs of freshly dead or preserved fish specimens, and even includes in-situ photographs of fish. Each family starts with a brief introduction, followed by a species account, with one or more photographs depicting the species (freshly dead/preserved, male/female/juvenile stage).

The above 3 volumes are invaluable guides to the marine and coastal fish in and around southern Thailand (Andaman Sea) and eastern coast of Malay Peninsula (South China Sea). They provide up to date information on the various fish species and are excellent field guides.

They are excellent aids to any fishery scientist, fish biologist, and nature lover.

Tan Heok Hui
 Department of Biological Sciences
 National University of Singapore
 Kent Ridge 119260
 Republic of Singapore



Reef Fishes of the East Indies. Gerald R. Allen & Mark V. Erdmann, 2012. Volumes I–III. Tropical Reef Research, Perth Australia. Volume I, xiv + 424 pages. ISBN: 9780987260017. Volume II, pages 425–826. ISBN: 9780987260024. Volume III, pages 827–1292. ISBN: 9780987260031. Set of volumes I–III, xiv + 1292 pages. ISBN: 9780987260000.

This is a set of three large-sized 286 × 221 mm hard cover tomes, brown coloured volume I, blue coloured volume II, and green coloured volume III; the set coming with a handsome brown coloured hard cover book box. The production of this set is mainly funded by Conservation International Indonesia.

This set of excellent volumes cover a wide geographic area from Andaman & Nicobar Islands, Myanmar, Thailand, Singapore, Indonesia, East Timor, Malaysia, Brunei Darussalam, Philippines, Papua New Guinea, Solomon Islands, and Christmas Island. Covering 2631 species of marine fishes from 120 families, the coverage surpassing the Coral Triangle. The coverage is restricted to shallow reefs, up to dive-able depths of 60 to 80 m. The series is lavishly

illustrated with mainly in-situ colour photographs, freshly dead or preserved specimens, and some line drawings of elusive species. Each species account is accompanied by one or more photographs of the species in question. This is the cumulative work of more than 50 years by both authors.

Volume I covers the following chapters, viz. Introduction, The East Indian Region, Zoogeography, Biology of Reef Fishes, How to Use This Book, External Features of Fishes. And the fish chapters: Sharks – Selachii with 8 families; Rays – Batoidea with 5 families; and Bony Fishes – Teleostei with 50 families.

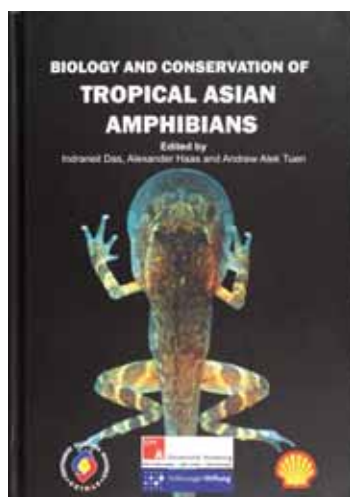
Volume II covers Bony Fishes – Teleostei with 32 families.

Volume III covers Bony Fishes – Teleostei with the remaining 25 families. Appendix I with descriptions of 25 new species ranging from Scorpaenidae (1 species), Serranidae (1 species), Pseudochromidae (1 species), Apogonidae (1 species), Nemipteridae (1 species), Chaetodontidae (1 species), Pomacentridae (3 species), Labridae (3 species), Pinguipedidae (2 species), Trichonodotidae (1 species), Gobiesocidae (2 species), Gobiidae (6 species) and Ptereleotridae (2 species). Appendix II with Addendum of 14 more species discovered after the book had been finalised. Other chapters covered include: Glossary, References, Index of Common Names, and Index of Scientific Names.

This is an extremely valuable addition to any lover of marine life. The photographs alone are well worth the rather hefty price, especially when many of them were photographed in-situ, a major accomplishment for the authors. A definite must have for all aficionados of sealife, fish-lovers and ichthyologists.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



**B i o l o g y a n d
Conservation of Tropical
Asian Amphibians.**
Indraneil Das, Alexander
Haas & Andrew Alek
Tuen (editors), 2011.
Institute of Biodiversity
and Environmental
Conservation, Universiti
Malaysia Sarawak,
v + 170 pages. ISBN:
9 7 8 9 6 7 5 4 1 8 2 0 4
(hardcover), ISBN:
9 7 8 9 6 7 5 4 1 8 2 1 1
(paperback).

This is a small-sized 250 × 174 mm hard cover publication, with a matt black front cover of a dorsal view of a metamorphosing tadpole of *Ansonia hanitschi* at the four limb stage but still retaining a sucker-like mouth; a back cover of a *Phrynoidis aspera* in-situ sitting on a rock in the middle of a fast flowing stream.

This publication is a collection of 10 reviewed papers and abstracts of keynote papers, oral presentations and posters resulting from a regional conference on the “Biology of the Amphibians in the Sunda Region, Southeast Asia”, conducted from 28 Sep. to 1 Oct.2009, in the Universiti Malaysia Sarawak campus grounds.

This volume of proceedings is divided into 2 main sections, Reviewed Papers and Conference Matter.

Reviewed Papers, they cover the following:

- Herpetofauna diversity of Karimata Island, Indonesia;
- Scientific results of the Volkswagen Stiftung Bornean amphibian biodiversity project;
- Diversity, biogeography and conservation of Philippine amphibians;
- Beyond taxonomy: radiotelemetry of the giant river frog *Limnonectes leporinus* in the Ulu Temburong National Park, Brunei Darussalam;

- Biogeography and conservation of the amphibian fauna of Langkawi Geopark;
- Frog-hopping islands: a study on the patterns in anuran distribution and species co-occurrence in the Nicobar Islands;
- Genetic divergence and evolutionary relationships in *Fejervarya cancrivora* from Indonesia and other Asian countries inferred from allozyme, mtDNA sequence analyses, morphological observation and crossing experiment;
- Preliminary report on effects of check dams on amphibian assemblage along the stream in a deciduous forest, Nan Province, Thailand;
- Ancient polymorphism within *Hylarana signata* (Amphibia: Anura: Ranidae) lineages of west (Peninsular) and east (Sarawak, Borneo) Malaysia;
- Breeding, natural history and diversity research: *ex situ* and *in situ* Asian amphibian projects of the Cologne Zoo and the Institute of Ecology and Biological Resources.

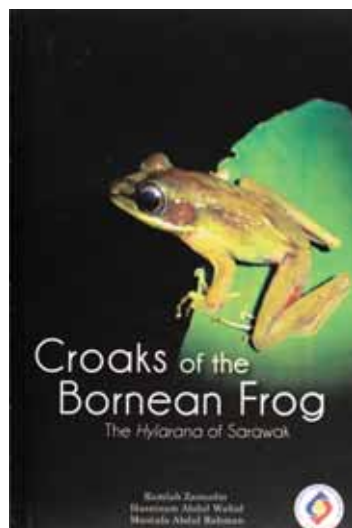
These papers cover exciting results of projects from around Southeast Asia, ranging from taxonomical to ecological projects using morphological, observational and molecular tools.

Conference Matter, the conference programme, abstracts of keynote papers (2), oral presentations (26), and posters (7) are listed; discussion and resolutions; list of 44 registered regional and international participants; and list of 14 reviewers.

I would definitely recommend this to any budding herpetologist, student or nature-lover to learn more about the amphibians of Southeast Asia.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



Croaks of the Bornean Frog. The *Hylarana* of Sarawak. Ramlah Zainudin, Hasnizam Abdul Wahid & Mustafa Abdul Rahman, 2011. UNIMAS publisher, Universiti Malaysia Sarawak, 78 pages. ISBN: 9789675527135. With a CD.

This is a small-sized 216 × 139 mm soft-cover publication, with a matt black front cover with a photograph of a *Hylarana* perched on a

leaf. Enclosed within the back cover is a CD with sound recordings of *Hylarana* frogs.

This book introduces students and specialist readers to the various aspects and calls of *Hylarana* frogs in Sarawak. Of the 10 available *Hylarana* species in Sarawak, this book and CD contains the calls of 6 species – *H. baramica*, *H. glandulosa*, *H. luctosa*, *H. nicobarensis*, *H. picturata* and *H. signata*.

This book is divided into 4 main chapters covering Introduction, Croaking ability of frogs, Species account, and Conservation issues. The introduction covers the definition of frogs and the various habitats that they are located in, accompanied with relevant habitat photographs. The chapter on how frogs croak depicts dissected throat regions to reveal the mechanism behind the sound production. The species account provides colour photographs of the various species encountered. This is followed by the advertisement call signatures depicted by sonograms and oscillograms.

This is an interesting publication showing the local efforts to educate the public on frog calls. However, the value of this publication is detracted by distorted photographs of the frogs, probably brought about by not restricting the aspect ratio when enlarging or cropping of the images.

An interesting introduction to frog calls for amateurs, students and nature-lovers.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



Buku Panduan Kehidupan Liar Haiwan Akuatik di Tasek Merimbun. A Guide Book of Wild Aquatic Fauna of Tasek Merimbun. Zohrah Hj Sulaiman & Hj Ramlee Hj Shahdan, 2007. Brunei Museums Department, xx + 55 pages. ISBN: 9991730273. [text in Malay and English]

This is a compact 233 × 157 mm hard cover publication, with a front cover showing a typical wetland habitat in Tasek Merimbun; the back cover is illustrated with paintings of 4 freshwater fishes common to Tasek Merimbun.

The first print was in 2005 and this review is based on the second print with revised content in 2007. This is a bilingual publication, with both Malay and English text side-by-side, as this is meant for local educational and layperson use in Brunei.

Tasek Merimbun is a black water lake located in the Tutong District, about 24 km from Tutong Town, and covers about 2 km². It is a tourist attraction spot, and has been listed as ASEAN Natural Heritage Site since 1984. This lake has been developed by the Brunei government as the Tasek Merimbun Heritage Park and is used for recreational, educational, research and conservation purposes. There is a fishery based Dusun community subsisting in nearby rivers; and the lake is home to freshwater crocodiles.

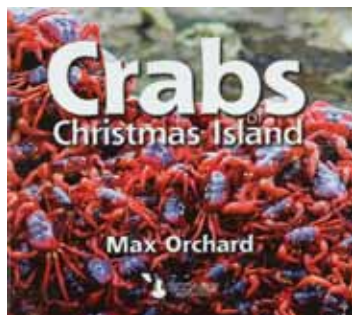
This compact guide lists the following aquatic fauna from pages 14 to 35, covering 49 freshwater fish species from 15 families, 3 freshwater shrimp species from 1 family, 1 freshwater crab species from 1 family, and 1 crocodile species from 1 family. From pages 36 to 46, there are colour plates of the various aquatic fauna, mainly depicted as colour paintings, line drawings and photographs. The majority of the artwork have had been skillfully painted by a professional artist, who had illustrated for earlier books of natural history in Brunei.

At the time of publication, the book was mostly updated in terms of taxonomy. However, there are two obvious errors, i.e., *Megalops cyprinoides* is listed under Cyprinidae (Cypriniformes) when it should be under Megalopidae (Elopiformes); *Hemirhamphodon pogonognathus* is not known to occur in Brunei, the correct identity should be *H. kuekenthali*. The listing of fish species is by family name in alphabetical order.

Nonetheless, the authors should be commended for their effort. It is a must have for fish-lovers, students, and scientists alike.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore



Crabs of Christmas Island. Max Orchard, 2012. Christmas Island Natural History Association, 287 pages. ISBN: 9780646576428.

Christmas Island in the Indian Ocean is renowned for its land crabs. Its annual migration of the Red Land

Crab (*Gecarcoidea natalis*) has been described by Sir David Attenborough as one of the 10 greatest natural wonders on Earth. It goes without saying it's a crab-researcher's paradise! This new book on the crabs of Christmas Island was written by recently retired chief game warden Max Orchard, who spent many years of his tenure on the island trying to conserve the land crabs of the island. It goes without saying that he has grown to love his crabs, and the layout and writing style of the book clearly reflects his passion for his charges.

Before anything else is said, it must be stated that this review is a very biased one – Max Orchard is a cherished friend who persuaded, encouraged and helped the writer and his colleagues do work on the crabs of Christmas Island; renewing research ties the Raffles Museum has had with this island that go back some 70 years! He has helped carcinology push the frontiers of what we know about crabs in this remarkable island, and in return, we have been happy to help him write this important book to bring the crabs to an even larger audience! We have even contributed a historical chapter discussing crab research on the island, and the many people who have contributed over the years (Ng & Davie, 2012)!

The book—it is a wonderful tome—a noteworthy successor to Christmas Crabs by John Hicks, Holger Rumpff and Hugh Yorston (1984), filled with hundreds of fantastic photographs of crabs of all sorts! Many are of species that have rarely or never been figured in colour before (e.g., *Ocypode kuhli*). More significantly, it contains a great deal of information about the animals, many from his own personal experience and knowledge that cannot be found in books or publications elsewhere. Unlike Hicks et al.'s (1984) book, this one expands its scope and includes even some interesting marine species!

A total of 38 species are treated at length, the bulk of them been terrestrial crabs. It also includes two cavernicolous species of *Orcovita* (one of which is named after Orchard and his wife) recently discovered from anchialine caves on the island (Davie & Ng, 2012), a “freshwater crab” found in small tidal streams around the island (*Ptychognathus pusillus*), a mainly marine species with freshwater tendencies (*Varuna litterata*) as well as one large intertidal porcelain crab (*Petrolisthes lamarckii*). Newly named terrestrial species like *Discoplax celeste* and *Labuanium vitatum* (see Ng & Davie, 2011, 2012a) are discussed, and two, *Discoplax rotundum* and *Ocypode sinensis*, represent the first records of these species from Christmas Island! It goes without saying that two species “hog the limelight” – the Robber Crab (*Birgus latro*) and the Red Land Crab (*Gecarcoidea natalis*). Orchard's accounts of their life and times make compelling reading. His discussion of the large number of robber crabs killed by errant drivers and the substantial threat posed by the invasive yellow crazy ants to these two species (and all the other land crabs) on the other hand, make for a very depressing tale. It can only be hoped that good science and sound management together with a good dose of human wisdom, will ensure these wonderful crabs can survive into the far future.

The book also gives detailed accounts of ongoing research being undertaken by his many colleagues. Orchard documents that the still unpublished results by Joelle Lai (National University of Singapore) and Shih Hsi-Te (National Chung Hsing University, Taiwan) that what has been called Purple Land Crab (*Gecarcoidea lalandii*) is actually two species, with *G. humei*, a long synonymised name, actually a good species. The excellent photographs leave little doubt of their separate identities. It of course begs the question why all three *Gecarcoidea* species are on one island and why only one, the Red Land Crab (*Gecarcoidea natalis*) dominates. Similarly well illustrated are the two kinds of the Horned-eye Ghost Crab (*Ocypode ceratophthalma*) that live on the island. Long regarded as two colour forms (one white and one green), they actually represent two distinct species, work now being undertaken by Peter Davie (Queensland Museum, Australia) and Shih. Also treated through excellent photographs is the orange form of what has long been called “*Discoplax hirtipes*” on the island. While the famous Blue Land Crab was recently named *Discoplax celeste* (see Ng & Davie, 2012a), the orange form is still under study by Shih and Lai. Similarly well documented is the well known

Yellow-Eyed Crab, which has been named as *Chiromantes garfunkel* by Davie & Ng (2013).

“Crabs of Christmas Island” is a book natural historian and nature lover will love to have on his shelves. For carcinologists, it is a “must-have”!

LITERATURE CITED

Davie, P. J. F. & P. K. L. Ng, 2012. Two new species of *Orcovita* (Crustacea: Decapoda: Brachyura: Varunidae) from anchialine caves on Christmas Island, eastern Indian Ocean. *Raffles Bulletin of Zoology*, **60**: 57–70.

Davie, P. J. F. & P. K. L. Ng, 2013. A review of *Chiromantes obtusifrons* (Dana, 1851) (Decapoda: Brachyura: Sesarmidae), with descriptions of four new sister-species from Christmas Island (Indian Ocean), Guam and Taiwan. *Zootaxa*, **3609**(1): 1–25.

Hicks, J., H. Rumpff & H. Yorkston, 1984. *Christmas Crabs*. Christmas Island Natural History Association, second edition 1990. 81 pp.

Ng, P. K. L. & P. J. F. Davie, 2011. *Labuanium vitatum* (Crustacea: Decapoda: Brachyura: Sesarmidae), a new Indo-West Pacific species of arboreal crab. *Zootaxa*, **2889**: 35–48.

Ng, P. K. L. & P. J. F. Davie, 2012a. The Blue Crab of Christmas Island, *Discoplax celeste*, new species (Crustacea: Decapoda: Brachyura: Gecarcinidae). *Raffles Bulletin of Zoology*, **60**: 89–100.

Ng, P. K. L. & P. J. F. Davie, 2012b. Christmas Island – a very crabby history. In: Orchard, M. (ed.), *Crabs of Christmas Island*. Christmas Island Natural History Association. Pp. 8–19.

Peter K. L. Ng

Tropical Marine Science Institute
National University of Singapore
Kent Ridge 119260
Republic of Singapore



Ikan-ikan di Hutan Rawa Gambut Merang-Kepayang dan Sekitarnya [English translation: Fishes in Peat Swamp Forest of Merang-Kepayang and surroundings]. Muhammad Iqbal, 2011. Merang REDD Pilot Project, Palembang, vi + 92 pages. ISBN: 9786029949216. [text in Bahasa Indonesia]

This is a small-sized 213 × 146 mm hard cover

guide book, with an attractive cover of a habitat shot of a peat swamp and insets of four typical Sumatran peat swamp fish species (*Trigonopoma gracile*, *Sphaerichthys osphromenoides*, *Eirmotus furvus* and *Kryptopterus macrocephalus*). This publication is supported mainly by Merang REDD Pilot Project scheme.

This publication is entirely in Bahasa Indonesia, but it contains hard to come by information on peat swamp fishes of Central Sumatra. The scientific names are all listed and it provides good baseline information.

This book covers 24 families and 57 species of freshwater fish known from the Merang-Kepayang watershed in South

Sumatra Province. This area covers lowland peat swamp forests and this is a pilot project initiated by REDD. The species taxonomy is updated (contributions from regional and international scientists, author of this review included) but some family names were not updated, e.g. Belontiidae and Luciocephalidae still separate from Osphronemidae.

The introductory chapters cover the basics of fish anatomy and identification, followed by area of research, survey sites, fishing techniques and local fisheries. A checklist is provided, followed by the species accounts. These accounts provide the common name, brief information on the species, one or more colour photographs showing the fish live in captivity, freshly dead or preserved. Most of the photographs were taken by the author and colleagues, but some were sourced from internet resources.

Despite its shortcomings, this is a commendable and timely piece of work. It is an informative resource for fish workers of this region, providing difficult to find data on peat swamp fishes of Sumatra.

Tan Heok Hui

Department of Biological Sciences
National University of Singapore
Kent Ridge 119260
Republic of Singapore