

**Book Review: *The World of the Amphibians* by B. F. Sergeev.
Mir Publishers, Moscow. 188 pages. 11 color photographs. 6.50 rupees.**

**Reviewed by:
Indraneil Das
Madras Crocodile Bank Trust
Vadanemmel, Perur Post
Mahabalipuram Road
Madras - 603 104
India**

Literature on the world's amphibian species is voluminous, and startling revelations about their biology are being learnt. A popular review was thus called for.

Dr. B. F. Sergeev, who works on evolutionary and ecological physiology of several taxonomic groups, from sea anemones to chimpanzees, has provided one, which is written in a language easily understood by lay persons, for whom the book is intended. However, it is clear that professional herpetologists will also read and benefit from the present volume, for it is a useful summary of much of what is known of the natural history of amphibians of the world. Translated from the original 1983 Russian edition by Dr. M. Rosenberg, this is yet another excellent production of Mir Publishers, Moscow - handy, printed on good quality paper, with several good color photographs, and most important of all, within the means of even school children.

The book is divided into 10 unequal chapters, dealing with, but not confined to general morphology (happily without beating the subject to death, as in most similar works), evolution, physiological ecology, adaptations to avoid predation and for obtaining food, breeding biology, status and conservation, and captive breeding. Sixteen pages are devoted to the description, distribution, and brief biology of nine species of salamanders, toads, and frogs considered to be threatened in the Soviet Union.

It is clear that Sergeev has carefully reviewed the world's literature on the group, and has put together some most interesting facts that will make frog-watchers of many of the book's lay readers. I reproduce a few of them here:

- good singing frogs are quite expensive in the markets of Tokyo.
- the European common toad (*Bufo bufo*) can live for 36 years.
- the Burmese toad (*Megophrys* [= *Brachytarsophrys carinensis*]) attacks its enemies bravely, and during the attack period is very excited, but if this makes no impression it is ready to run away.

- the common European frog (*Rana temporaria*) hears best at 15°C, while the red-bellied toad (*Bombina bombina*) finds it better between 16-22°C.

- the male of Darwin's frog (*Rhinoderma darwini*) picks up the eggs after they are laid by the female, and keeps them in his vocal sac.

The 11 color photographs in the book depict, for some reason, only European and Australian species of frogs and toads, with the exception of the now very widespread marine toad (*Bufo marinus*). Color reproduction is good, but the photographs are rather unevenly distributed. The book has an unattractive front cover, depicting a poorly designed frog cartoon.

The only questionable statement I could find in the book is the captive breeding of the Indian bull frog (*Rana tigerina*) and green frog (*Rana hexadactyla*) for food. Since no references are given, the source of the above information is unknown. The book is generally free from typos, except for spellings of several scientific names (e.g., *Mycrohyla*, p. 90; *Inchyophis*, p. 147; and *Rana tigerinum*, p. 186). In addition, several scientific names have been broken up. There are no references in the text, probably because the author chose not to clutter the text, which he wrote with lay people in mind. However, a reading list could have been provided for those seriously hooked on frogs and their allies after reading the present work. Another flaw with this book, as in all other publications in biology of Mir Publishers that I have seen, is the absence of an index. A glossary of technical terms used without explanation in the text could have been another useful feature in the book. Perhaps the second edition could include all these suggestions, plus an attractive color cover showing a real frog.

I recommend this book for everyone who enjoys good natural history, and especially to those interested in 'starting off' in amphibian biology. And at less than the equivalent of 50 cents, this book can be described as a 'steal.'