

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

US Fish & Wildlife Publications

US Fish & Wildlife Service

1966

Review of Key to Parasites of Freshwater Fish of the U.S.S.R.

Glenn L. Hoffman

US Fish and Wildlife Service

Follow this and additional works at: <https://digitalcommons.unl.edu/usfwspubs>



Part of the [Aquaculture and Fisheries Commons](#)

Hoffman, Glenn L., "Review of Key to Parasites of Freshwater Fish of the U.S.S.R." (1966). *US Fish & Wildlife Publications*. 106.

<https://digitalcommons.unl.edu/usfwspubs/106>

This Article is brought to you for free and open access by the US Fish & Wildlife Service at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in US Fish & Wildlife Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

BOOK REVIEW . . .

Key to Parasites of Freshwater Fish of the U.S.S.R., by I. E. Bykhovskaya-Pavlovskaya, A. V. Gusev, M. N. Dubinina, N. A. Izyumova, T. S. Smirnova, I. L. Sokolovskaya, G. A. Shtein, S. S. Shul'man, V. M. Epshtein, L. F. Nagibina, E. V. Raikova, and Yu. A. Strelkov. Directed by B. E. Bykhovskii. Chief Editor: E. N. Pavlovskii. Office of Technical Services (TT64-11040), U. S. Department of Commerce, Washington, 1964. viii + 919 p., 1,627 illustrations. \$12.30.

This is a translation of the Russian book, *Opre-delitelny Parazitov Presnovodnykh Ryb SSSR*, by the above authors, Izdatel'stvo Akademii Nauk SSSR, Moscow-Leningrad, 1962. It is essentially a key to the identification of the species of parasites of the freshwater fishes of Russia including longer descriptions of the higher taxa.

It was not possible for the reviewer to read critically all 919 pages of this book, but since it is primarily a key he tried it out on a few selected species. In general, it is excellent and well illustrated; there are several confusing items, but because there are 1,211 species involved, it is to be expected that some do not key out easily.

There are no page references in the keys, which necessitates a search for the proper section; this is a common fault of keys. The figure numbers of the species, however, are in the proper places in the key.

The Platyhelminthes is set up to include the classes Monogeneoidea, Cestoidea, and Trematoda, whereas most Americans place the Monogenea in the Trematoda.

The strigeid metacercaria, *Posthodiplostomum cuticola*, keyed out well, but it was difficult to find the metacercarial section (p. 591) because it does not appear in the table of contents or the index. Metacercariae are mentioned in the key to the orders on p. 518, but the information is easily overlooked. The authors do not describe the larval genera (*Neascus*, *Diplostomulum*, *Tetracotyle*), but include them in family descriptions; there is no key to these families. Whether right or wrong, the

order Fasciolata is confusing and it was difficult to key out *Cryptocotyle concavum*, a heterophyid. On p. 610 are listed the metacercarial heterophyids, but the family description is that of the adult.

The beginner will have difficulty with larval tapeworms because the key consists of adult characters; there is no key to the plerocercoids.

Although the nematode *Spinitectus* is easily recognized because of its spines, these spectacular structures are not mentioned till the last key division. The nematode key leans heavily on structures which are not easily seen—phasmids, lateral and caudal glands. There is an unfortunate omission of "not" in 6(1) of the nematode key on p. 618. The classes Nematoda and Acanthocephala are included in the Nemathelminthes; most Americans consider these as separate phyla.

Neoechinorhynchus rutili keyed out easily, but the spiral rows of proboscis hooks must not be confused with the circular arrangement of the same hooks. There is no easily found information on larval Acanthocephala of fish in the book.

In the Copepoda, *Ergasilus* keyed out easily as did *Lernaea*, although the branched horns of the latter are not mentioned. Yamaguti's work is referred to without date, and not even the first volume (1953) of his *Systema Helminthum* is in the bibliography.

There is a list of Russian fishes and a very helpful host-parasite checklist; unfortunately, there is no index to the fish list and the genera and species are not in alphabetical order, making them difficult to find. The index is to the parasites only and the page numbers are those of the original text, not the translation.

Since this is the only English work dealing with all Russian freshwater fish parasites, it will be of great use to researchers and graduate students, and will help fish disease diagnosticians identify unusual genera and intercontinental species.