
THE KILLIFISHES: AN ANNOTATED CHECK-LIST, SYNONYMY AND BIBLIOGRAPHY OF RECENT OVIPAROUS CYPRINODONTIFORM FISHES: THE KILLIFISH MASTER INDEX. 4th ed. Kenneth J. Lazara. 2000 [2001]. American Killifish Association, [Cincinnati, Ohio]. ISBN 0-9708487-0-6 (hardcover), ISBN 0-9708487-1-4

(softcover). xviii + 624 p. + 36 unnumbered p. of appendices. \$50 hardcover, \$40 soft cover. Copies available from Richard Martino, rmop@juno.com.—The American Killifish Association (AKA) is an aquarist organization dedicated to the care, maintenance, and breeding of oviparous fishes of the atherinomorph order Cyprinodontiformes. As in many other hobbyist fish groups, members of the AKA have formed strong, mutually beneficial ties with professional research scientists, exchanging information and specimens. This has resulted in an enduring interest in the scientific names applied to the oviparous killifishes, and the history of those names, compiled for the AKA in the Killifish Master Index (KMI). The first edition, published in 1975 as a 56-page pamphlet by Christopher Baker-Carr, was the first attempt since Garman (1895) to compile a list of the valid species of killifishes. The subsequent second through fourth editions, published in 1979, 1984, and 2000, have been compiled by Kenneth J. Lazara. This fourth edition of the KMI is an imposing tome, including an annotated checklist of genera and species, a bibliography, and a cross-referenced tabulation of valid names and their synonyms. Three appendices compiled by Baker-Carr, including a Ready Reference Guide to Names, complete the volume. In particular, the exhaustive species citations are invaluable as a source of a broad range of systematic and biological information on killifishes. Attesting to the worldwide popularity of oviparous killifishes, the AKA is remarkably not alone in this effort. Killi-data 2000 (Huber, 2000) is another comparable list of oviparous cyprinodontiforms, published by the Société Française d'Ichtyologie, Paris, available in French, English, German, and Spanish editions.

The interests of the AKA have always been in oviparous killifishes, once classified together in the family Cyprinodontidae, not in the viviparous cyprinodontiforms, once classified in the families Anablepidae, Jenynsiidae, Goodeidae, and Poeciliidae. A comprehensive phylogenetic systematic revision and reclassification of cyprinodontiform fishes by Parenti (1981), in conjunction with an analysis of phylogenetic relationships among atherinomorph fishes by Rosen and Parenti (1981), radically altered the classification of cyprinodontiform fishes, but not the interests of the AKA. For example, oviparous taxa in the family Poeciliidae, *sensu* Parenti (1981), such as the South American *Tomeurus gracilis* and the African lampeyes, are listed, but their close relatives, the viviparous poeciliids, such as guppies, platys, and swordtails, are not. That publications of hobbyist organizations

restrict their taxonomic coverage to the species that their members keep is their prerogative, but it limits the usefulness of the lists for broader comparative biological studies.

Although the higher classification of cyprinodontiforms of Parenti (1981) continues to be tested with additional data from molecules (Meyer and Lydeard, 1993; Murphy and Collier, 1997) and morphology (Costa, 1998), and some of these studies are summarized briefly (p. ix–xiv), the KMI focuses on information at the subspecies, species, and generic levels. Further, only names applied to the 700-plus currently recognized oviparous cyprinodontiform species and subspecies are listed. *Fundulus capensis*, for example, was described from South Africa and is apparently not an oviparous killifish, as are valid species in the genus *Fundulus* but is considered a (presumably) viviparous poeciliid. Neither the KMI nor Killi-data includes *F. capensis*, or at least I could not find it in the lists or the indices. The note that it is considered a poeciliid appears in William N. Eschmeyer's, California Academy of Sciences, online database, The Catalog of Fishes, available in April 2002 at <http://www.calacademy.org/research/ichthyology/catalog/fishcatsearch.html>.

Having a searchable electronic version of the KMI, Killi-data, or any other such catalogs, would make them much more useful and comparable. Links to information on viviparous cyprinodontiforms that could be provided online by other hobbyist groups, such as the American Livebearer Association, would complement that provided in the KMI. This desire to have online access to such catalogs and lists is widespread and growing. A searchable list of names appearing in the fourth edition of the KMI is maintained by another hobbyist group, the Arizona Rivulin Keepers, and was available online in April 2002 at <http://ark.killi.net/AList.htm>.

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