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Designation of a neotype for the kyphosid fish *Kyphosus sectatrix* (Linnaeus, 1758)

CARTER R. GILBERT

Florida Museum of Natural History, University of Florida, Gainesville, FL 32611–7800. E-mail: carter_gilbert@cox.net

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Several major systematic papers have recently been published on the perciform fish family Kyphosidae. One is a world revision of the family by Knudsen and Clements (2013), based largely on information summarized from an unpublished molecular phylogenetic analysis, supplemented by meristic and morphometric data. The second, by Sakai and Nakabo (2014), is a review of the genus *Kyphosus* from the Atlantic and eastern Pacific oceans only, based solely on conventional morphological and meristic information. The two papers include disagreements regarding identifications of two jointly examined specimens, erroneous or misleading information relative to types and type terminology, and conflicting meristic data. All of these have important taxonomic and nomenclatural implications, especially as regards *Kyphosus sectatrix*. Finally, the two studies were conducted completely independent of one another, and this is reflected both in the treatment of species and in certain of the respective conclusions.

Also pertinent to the discussion is a third paper, involving the genus *Kyphosus* in the Mediterranean Sea (Mannino et al., 2015), the publication of which occurred just prior to submission of the present manuscript. That paper includes a critique of the two earlier papers and a review of the poorly known Mediterranean kyphosid fauna, which was found to include two (and possibly three) species. Species identifications were based on genetic information (mtDNA and RNA) generated from GenBank and recently collected tissue samples, supplemented by meristic and morphometric data from fresh and preserved specimens. These genetic data formed the basis for a phylogenetic tree centering on the Atlantic species of *Kyphosus* (Mannino et al., 2015: fig. 2), for which there had been differing taxonomic conclusions in the earlier papers by Knudsen and Clements (2013) and Sakai and Nakabo (2014). Information emanating from Mannino et al.'s tree (a) serves to reinforce the ideas of both groups of authors that the genus *Kyphosus* is more speciose in the Atlantic Ocean than previously believed, and (b) supports strongly the species arrangement proposed by Knudsen and Clements.

Central to this ongoing discussion is *Kyphosus sectatrix* (common name “Bermuda Chub”), which was originally described by Linnaeus (1758) as *Perca saltatrix*, and which was stated by him to have been based on the illustration of “*Perca sectatrix*” appearing in plate 8 (middle figure) of Catesby's (1743) seminal work on the biota of “Carolina, Florida and the Bahamas Islands.” Linnaeus (1766) later acknowledged his earlier spelling of the species name to have been a *lapsus calami* and should have conformed to Catesby's original spelling, and he accordingly modified the species name to *Perca sectatrix* (see Desoutter, 1973; 1990). Although the species name has occasionally been spelled *saltatrix*, based on strict interpretation of the principle of original orthography (i.e., original spelling) (ICZN Article 32.1) (see Page et al., 2013: 154, 226), spelling of the species name as *sectatrix* has been used in an overwhelming number of published works (see Knudsen and Clements, 2013: 54; Eschmeyer, 2015: on-line), in accordance with articles 32.5.1 (incorrect original spellings) and 33.2.2 (correction of an incorrect original spelling) of the International Code of Zoological Nomenclature.

A major point of agreement in all three papers is that *Kyphosus sectatrix*, as previously recognized, comprises two distinct but morphologically similar species, called *Kyphosus sectatrix* and *Kyphosus bigibbus* by Knudsen and Clements (2013) and Mannino et al. (2015), but accorded the respective names *Kyphosus atlanticus* (a presumed new species) and *Kyphosus bosquii* by Sakai and Nakabo (2014). All agreed that the two species have widely overlapping distributions in the Atlantic Ocean, but Knudsen and Clements (2013) further determined that their geographic ranges extended eastward into the western Pacific Ocean. The two species occur in Australia and New Zealand, with *K. sectatrix* ranging eastward across the Pacific Ocean at least to the Revillagigedo Islands, well off the American Pacific mainland (Knudsen and Clements, 2013: figs. 8, 18). This updated distributional information is especially noteworthy as regards *K. sectatrix*, since it (a) results in a vastly expanded range for the species, and (b) has critical implications for its nomenclature.