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**ANNOTATED CHECKLISTS OF FISHES**

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**Family Percopsidae Agassiz 1850**

trout perches and sand rollers

By

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A small family belonging to the Percopsiformes and containing two extant species. Body terete (*Percopsis omiscomaycus*) or deep (*P. transmontana*). Mouth subterminal; snout rounded, overhanging. One row of preopercular-mandibular and premaxillary-suborbital “cavernous spaces” on each side of head. Small adipose fin between dorsal and caudal fins. Single dorsal fin with 2 spines and 9–11 rays. Anal fin with 1–2 spines and 6–7 rays. Dorsal and anal spines weak in *P. omiscomaycus* (1 anal spine), robust in *P. transmontana* (2 anal spines). Pectoral fins with 12–15 rays. Pelvic fins with a splint and 8–9 rays. Caudal fin forked. Scales ctenoid. Lateral line complete or nearly so, straight, 43–60 scales. Branchiostegal rays 5–7 (usually 6). Pyloric caeca in two rows of about 6 per side (10–14) in *P. omiscomaycus*. Swim bladder present, simple. Vertebrae 33–36. Body somewhat translucent in life, base color tan to olive, with dark spots and blotches of pigment on dorsal half of body in *P. omiscomaycus*; *P. transmontana* with small, scattered, brown blotches, mostly on dorsal half of body, a row of larger blotches along lateral line, and rows of “dashes” in fin membranes of caudal fin, other median fins with pigment. Drawings and comparisons of *P. omiscomaycus* and *P. transmontana* appeared in Eigenmann (1894:116, Pl. 6 [ref. 20228]), and the same drawings appeared later in Jordan and Evermann (1900: Pls. 121 (fig. 329) and 122 (fig. 330) [ref. 2446]). Only two species are recognized as valid in one genus, although a taxonomic evaluation has never been published for either *P. omiscomaycus* or the genus *Columbia*. Total length usually less than 152 mm (6 in). Spawning occurs in late spring and summer. *Percopsis omiscomaycus* may be an important forage fish for some species of game fish. (Sources: Scott 1967 [ref. 22185], McAllister 1968 [ref. 26854], Smith 1985 [ref. 22186], Mecklenburg et al. 2002 [ref. 25968].)

Two to four fossil genera (*Amphiplaga*, *Erismatopterus*, *Lateopisciculus*, *Massamorichthys*) have been included in the Percopsidae (Rosen and Patterson 1969 [ref. 27330], Murray and Wilson 1999 [ref. 27269]). The Percopsidae has been considered closely related to either the Amblyopsidae or the Aphredoderidae (Rosen 1962 [ref. 5403], Rosen and Patterson 1969 [ref. 27330], Patterson 1981 [ref. 27325], Rosen 1985 [ref. 27270], Patterson and Rosen 1989 [ref. 27307], Murray and Wilson 1999 [ref. 27269]). The family name was used first by Agassiz (1850:286 [ref. 66]), who spelled it Percopsides.

**Genus *Percopsis* Agassiz 1849**

*Percopsis* Agassiz 1849:81 [ref. 65]. Type species *Percopsis pellucida* Thompson 1850. Type by subsequent monotypy.

*Salmoperca* Thompson 1853:33 [ref. 27411]. Type species *Percopsis pellucida* Thompson 1850. Type by monotypy.

*Columbia* Eigenmann 1892:234 [ref. 1213]. Type species *Columbia transmontana* Eigenmann & Eigenmann 1892. Type by monotypy.

*Columatilla* Whitley 1940:243 [ref. 4660]. Type species *Columbia transmontana* Eigenmann & Eigenmann 1892. Type by being a replacement name.

REMARKS: The description of *Percopsis* also appeared in Agassiz 1850:284–286 [ref. 66] and Agassiz 1850:125–126 [ref. 27415]. The type species of *Percopsis* has been considered to be *Percopsis guttatus* Agassiz 1850; however, Thompson’s description of *Percopsis pellucida* predates Agassiz’s name by one to two months. Therefore, *Percopsis pellucida* Thompson 1850 is the correct type species of the genus *Percopsis*.

*Salmoperca* Thompson 1853 is an unneeded new name for *Percopsis* Agassiz 1849 and appeared as a nomen nudum in Thompson (1850 [ref. 4392]). No description was given for *Salmoperca* in Thompson (1850 [ref. 4392]), and the generic name was not combined with a species name in the original description of *Percopsis pellucida*. Thompson probably submitted his description and drawing to David Humphreys Storer with the name *Salmoperca*, but the published combination is what must be considered. Thompson (1842 [ref. 17908]) did not include a description of the species because he had only one specimen at that time (Thompson 1850 [ref. 4392], 1853 [ref. 27411]).

The name *Columatilla* Whitley 1940 was a replacement name for *Columbia* Eigenmann 1892, but it was unneeded; the genus of mollusk is spelled *Colombia* Rang 1834 and may be a nomen nudum itself (Rang 1834:217 [ref. 27385]).

***Percopsis omiscomaycus* (Walbaum 1792)**

*Salmo omiscomaycus* Walbaum (ex Pennant) 1792:65 [ref. 4572] (Albany R., Hudson Bay, Canada). No types known.

*Percopsis pellucida* Thompson 1850:164 [ref. 4392] (Lake Champlain; Winooski R. at Burlington, Vermont, U.S.A.). Syntypes: (6–8) whereabouts unknown.

*Percopsis guttatus* Agassiz 1850:286, Pl. 1 (figs. 1–2) [ref. 66] (Sault Sainte Marie at Michipicotin, and Fort William, Lake Superior, U.S.A. and Canada). Syntypes: MCZ 6863 (95), 6866 (82), 21649 (172), 26727 (5), 34839 (6) [no specific localities].

*Percopsis hammondii* Gill 1864:151 [ref. 1698] (Kansas, U.S.A.). Holotype (unique): ANSP (whereabouts unknown).

DISTRIBUTION: North America: Alaska, through much of Canada, and northcentral and northeastern United States.

REMARKS: Kendall (1911 [ref. 27384]) published a synonymy of this species, pointing out that Walbaum’s name was the senior available name. Oddly, Pennant’s name, *Omisco Maycus*, a binominal that appeared in *Arctic Zoology* (vol. 1; Pennant 1784:192 (CXCII) [ref. 18530]), has never been considered an available binominal. The name *omiscomaycus* is a noun in apposition.

The original description of *Percopsis pellucida* was based on 6–8 specimens: 1 collected in 1841, 2–3 collected in 1847, and 3–4 collected in 1849. The specimen in MCZ 1520 (Burlington, 1847, Agassiz) might have been the first specimen Thompson collected in 1841 because he “submitted the above mentioned specimen to his [Agassiz’s] inspection ...” in 1847 when Agassiz was in Burlington; the specimen (MCZ 1520) was loaned to the Boston Society of Natural History and presumably has been lost.

The description of *Percopsis guttatus* also appeared in Agassiz (1850:126 [ref. 27415]).

The type of *Percopsis hammondii* could not be located but at one time was in the ANSP collection according to the original description. A collection of either 120 or 123 fish specimens from the Kansas Territory was given to ANSP by Dr. W. A. Hammond in 1857 according to the report of the curators in Proc. Acad. Nat. Sci. Phila. v. 9, page 226 and list of donations to the museum on pages vi–vii of the same volume. Presumably the holotype of *P. hammondii* was among the specimens donated in 1857.

***Percopsis transmontana* (Eigenmann & Eigenmann 1892)**

*Columbia transmontana* Eigenmann & Eigenmann in Eigenmann 1892:234 [ref. 1213] (mouth of Umatilla R., Umatilla Co., Oregon, U.S.A.). Lectotype: USNM 125635.

DISTRIBUTION: Western North America: Columbia River drainage of Oregon, Washington, and Idaho, U.S.A.

REMARKS: Over 100 specimens were collected by Eigenmann at the type locality; paralectotypes are present in several museums (most in BMNH and CAS). The lectotype was established (as figured specimen referred to by “drawing ... from the type”) in caption to Pl. 122 (fig. 330) in Jordan and Evermann (1900:3259 [ref. 2446]), and the lectotype is identified by a drawing of the specimen at USNM and by its total length. The drawing on Pl. 122 in Jordan and Evermann (1900 [ref. 2446]) is identical to the drawing that appeared earlier in Eigenmann (1894:Pl. 6 [ref. 20228]), but the lectotype was not designated in the 1894 publication.

**Summary Lists**

**Genus-Group Names of Family Percopsidae**

*Columatilla* Whitley 1940 = *Percopsis* Agassiz 1849

*Columbia* Eigenmann 1892 = *Percopsis* Agassiz 1849

*Percopsis* Agassiz 1849 = *Percopsis* Agassiz 1849

*Salmoperca* Thompson 1853 = *Percopsis* Agassiz 1849

**Incertae Sedis Genus-Group Names**

None

**Unavailable Genus-Group Names**

None

**Species-Group Names of Family Percopsidae**

*guttatus*, *Percopsis* Agassiz 1850 = *Percopsis omiscomaycus* (Walbaum 1792)

*hammondii*, *Percopsis* Gill 1864 = *Percopsis omiscomaycus* (Walbaum 1792)

*omiscomaycus*, *Salmo* Walbaum 1792 = *Percopsis omiscomaycus* (Walbaum 1792)

*pellucida*, *Percopsis* Thompson 1850 = *Percopsis omiscomaycus* (Walbaum 1792)

*transmontana*, *Columbia* Eigenmann & Eigenmann 1892 = *Percopsis transmontana* (Eigenmann & Eigenmann 1892)

**Incertae Sedis Species-Group Names**

None

**Unavailable Species-Group Names**

*eoceta*, *Salmoperca* Thompson 1853:34 [ref. 27411]. Nomen nudum. A manuscript name that was changed later to *pellucida*. The combination *Salmoperca eoceta* was not explicitly used in this work, but it was implied. In the synonymy of *Percopsis omiscomaycus* (Walbaum 1792).

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