Order CYPRINIFORMES (part 16 of 16)

Family LEUCISCIDAE Minnows (part 2 of 2)
Subfamily Laviniinae Western Chubs
14 genera/subgenera · 64 species/subspecies

Acrocheilus Agassiz 1855
acro, sharp; cheilus, lip, referring to chisel-shaped mouth

Acrocheilus alutaceus Agassiz & Pickering 1855
leathery, referring to brownish coloration

Chrosomus Rafinesque 1820
chroma, color; soma, body, referring to vibrant coloration of C. erythrogaster

Subgenus Chrosomus

Chrosomus cumberlandensis (Starnes & Starnes 1978)
-ensis, suffix denoting place: Cumberland River drainage (North Carolina and South Carolina, USA), where it is endemic

Chrosomus eos Cope 1862
dawn, probably referring to bright-red belly

Chrosomus erythrogaster (Rafinesque 1820)
erthro, red; gaster, belly, referring to bright ventral coloration

Chrosomus oreas Cope 1868
of the mountains, referring to occurrence in montane and upland regions

Chrosomus saylori (Skelton 2001)
in honor of Charles F. Saylor (b. 1948), Tennessee Valley Authority ichthyologist, part of crew that first collected this species, for contributions to the knowledge of southeastern USA fishes

Chrosomus tennesseensis (Starnes & Jenkins 1988)
-ensis, suffix denoting place: Tennessee River drainage, USA

Subgenus Pfrille Jordan 1924
German name for Phoxinus phoxinus, genus of which previously included Chrosomus

Chrosomus neogaeus (Cope 1867)
neo, new; gaia, world, being a New World version of the Old World Phoxinus phoxinus

Eremichthys Hubbs & Miller 1948
eremia, desert, referring to habitat in northwest Nevada, USA; ichthys, fish

Eremichthys acros Hubbs & Miller 1948
acer, sharp; or, mouth, referring to the sharp-edged sheath on jaws

Evarra Woolman 1894
Mexican forename that achieved some level of fame in an 1890 verse by Rudyard Kipling, “Evarra and His Gods,” which drew upon an Indian tradition of producing idols from oddly shaped stones, trees and other objects into “gods” that are recognizably in the image of the maker, who, in the verse, is named Evarra, a “maker of gods in lands beyond the sea” (Woolman did not explain his selection of the Evarra epithet; perhaps he simply gave a nice-sounding Mexican name to a uniquely Mexican fish)

Evarra bustamantei Navarro 1955
in honor of Miguel Bustamante y Septien (1790-1844), first Mexican to scientifically describe a Mexican fish, the goodeid Cyprinus (= Girardinichthys) viviparus, in 1837

Evarra eigenmanni Woolman 1894
in honor of ichthyologist Carl H. Eigenmann (1863-1927)

Evarra tlahuacensis Meek 1902
-ensis, suffix denoting place: Tláhuac, near type locality at Chalco Lake in the Valley of Mexico
Gila Baird & Girard 1853
allusion not explained, presumably referring to Gila River of Arizona and western New Mexico (USA), but Baird & Girard
said the three taxa they included in the genus were all from the Zuni River of New Mexico; perhaps the authors believed
the Zuni was part of the nearby but separate Gila basin, or selected Gila (reportedly derived from a Spanish contraction
of Hah-qua-h-sa-el, a Yuma Indian word meaning “running water which is salty”) as nothing more than a locally flavored
name from the American Southwest

Gila atraria (Girard 1856)
blackish, referring to color of sides and back

Gila brevicauda Norris, Fischer & Minckley 2003
brevi-, short; cauda, tail, referring to unusually abbreviated tail

Gila conspersa Garman 1881
to sprinkle, referring to brown spots on scales

Gila coriacea (Hubbs & Miller 1948)
leathery, referring to how small, deeply embedded scales give its skin a “distinctly leathery texture” (formerly in the
monotypic genus Moapa, referring to Moapa River, Nevada, USA, where it is endemic [moapa is Paiute Indian word
for muddy])

Gila crassicauda (Baird & Girard 1854)
crassus, fat; cauda, tail, referring to “largely developed” caudal peduncle compared to narrow caudal peduncle of
Lavinia exilicauda

Gila cypha Miller 1946
humpbacked, referring to large scaleless hump on large adults

Gila ditaenia Miller 1945
di-, two; taenia, band, referring to black bands above and below lateral line

Gila elegans Baird & Girard 1853
elegant, referring to slender elegance of thin caudal peduncle

Gila eremica DeMarais 1991
of the desert, referring to its habitat

Gila jordani Tanner 1953
in honor of David Starr Jordan (1851-1931), “a great ichthyologist and educator, which is but a small way to show
my appreciation for his and Mrs. Jordan’s many kindnesses to me while I was a student at Stanford University”

Gila minacae Meek 1902
of Miñaca, Río Yaqui basin, Chihuahua, México, type locality

Gila modesta (Garman 1881)
modestly colored compared to G. nigrescens

Gila nigrescens (Girard 1856)
blackish, referring to “crowded” black dots on scales and/or “almost black” color of back and sides

Gila orcuttii (Eigenmann & Eigenmann 1890)
in honor of naturalist Charles Russell Orcutt (1864-1929), who collected type using a blanket as a seine
**Gila pandora** (Cope 1872)
etymology not explained; Cope was unsure of the “truer affinities” of the species and mentions several genera to which it may belong, so perhaps its taxonomic ambiguity was a Pandora’s box, i.e., a source of troubles for Cope (Mark Sabaj Pérez, pers. comm.); another possibility: since Cope invested in mines, perhaps he named this fish for the Pandora mine and subsequent mining town (ca. 1875) just east of Telluride, Colorado, 225 km away from type locality in Costilla County, Colorado.

**Gila pulchra** (Girard 1856)
beautiful, referring to “brilliant” coloration of males (reddish or blackish brown above, golden yellow below)

**Gila purpurea** (Girard 1856)
purple, referring to purplish black color of back and sides

**Gila robusta** Baird & Girard 1853
stout, body “very much swollen anteriorly”

**Gila seminuda** Cope & Yarrow 1875
semi-, half; nudus, naked, referring to absence of ventral scales

**Hesperoleucus** Snyder 1913
hesperus, western, probably referring to distribution in California, USA, on the western side of North America; leukiskos, Greek word for chub, i.e., a western chub

**Hesperoleucus mitrulus** Snyder 1913
turban, allusion not explained, possibly referring to its convex scales, which can be said to resemble a turban

**Hesperoleucus parvipinnis** Snyder 1913
parvus, short; pinnis, fin, referring to short, rounded fins

**Hesperoleucus symmetricus symmetricus** (Baird & Girard 1854)
referring to symmetrical caudal fin, compared to asymmetrical caudal fin of *Pogonichthys*

**Hesperoleucus symmetricus serpentinus** Baumsteiger & Moyle 2019
serpentine, referring to the serpentine rocks through which small creeks in the Red Hills region of Tuolumne County, California, USA (where this subspecies is endemic) flow

**Hesperoleucus venustus venustus** Snyder 1913
attractive, allusion not explained, perhaps referring to its “trim and well proportioned” body

**Hesperoleucus venustus navarroensis** Snyder 1913
-ensis, suffix denoting place: Navarro River, California, USA, type locality (also occurs in Russian River)

**Hesperoleucus venustus subditus** Snyder 1913
subdued, allusion not explained; perhaps Snyder thought its more robust body and shorter fins had a more subdued beauty compared to the “trim and well proportioned” nominate form

**Klamathella** Miller 1945
-ella, a diminutive, named after Klamath River system (southern Oregon and northern California, USA), where *K. coerulea* is abundant (previously treated as a subgenus of *Gila*)

**Klamathella coerulea** (Girard 1856)
blue (apparent misspelling of *caerulea*), “the upper regions a greyish azur[c]”

**Lavinia** Girard 1854
classical feminine name, presumably chosen because Girard liked the sound of it

**Lavinia exilicauda** exilicauda Baird & Girard 1854
exilis, slender; cauda, tail, referring to narrow caudal peduncle compared to thick caudal peduncle of *L. (=Gila) crassicauda*

**Lavinia exilicauda chi** Hopkirk 1973
Pomo Indian name for this minnow in northern California, USA

**Lavinia exilicauda harengus** Girard 1856
herring, allusion not explained; since Girard’s specimens were missing scales, he may have been referring to a herring’s proclivity to shed scales when handled

**Mylopharodon** Ayres 1855
mylo, grinding; pharynx, throat;odon, teeth, referring to molariform pharyngeal teeth

**Mylopharodon conocephalus** (Baird & Girard 1854)
conus, cone; cephalus, head, referring to its rounded shape

**Orthodon** Girard 1856
orthos, straight; don, teeth, referring to knife-like teeth
Orthodon microlepidotus (Ayres 1854)
micro-, small; lepidotus, scaled, referring to smaller scales compared to Pogonichthys macrolepidotus

Ptychocheilus Agassiz 1855
psycho-, folded; cheilus, lip, referring to skin fold behind jaws

Ptychocheilus grandis (Ayres 1854)
large, up to 1.4 m in length

Ptychocheilus lucius Girard 1856
pike, referring to pike-like shape

Ptychocheilus oregonensis (Richardson 1836)
-ensis, suffix denoting place: Oregon, USA (the territory, not the state; type locality is probably Fort Vancouver, Washington)

Ptychocheilus umpquae Snyder 1908
of the Umpqua River and its tributaries, Oregon, USA, where it is endemic

Relictus Hubbs & Miller 1972
a relict fish, left behind when pluvial waters dried up

Relictus solitarius Hubbs & Miller 1972
alone, being the only fish in any of the lake basins in which it occurs

Siphateles Cope 1883
siphon, tube; ateles, imperfect, referring to “undeveloped” lateral line of S. viitatus (=juvenile S. bicolor)

Siphateles alvordensis (Hubbs & Miller 1972)
-ensis, suffix denoting place: Alvord River basin of Oregon and Nevada, USA, where it is endemic

Siphateles bicolor bicolor (Girard 1856)
two-colored, referring to darker coloration above, white or silvery below

Siphateles bicolor columbianus (Snyder 1908)
-canus, belonging to: Columbia River, Oregon, USA, which at one time was connected to the Harney basin, where it is endemic

Siphateles bicolor euchila (Hubbs & Miller 1972)
eu-, good or well; chila, lip, referring to large mouth and fleshy lips

Siphateles bicolor eurysoma (Williams & Bond 1981)
eury, wide; soma, body, referring to wide head and body

Siphateles bicolor isolata (Hubbs & Miller 1972)
isolated, i.e., confined to Warm Springs Marsh, Elko County, Nevada, USA

Siphateles bicolor mohavensis Snyder 1918
-mahavensis, suffix denoting place: Mojave River basin, California, USA, where it is endemic

Siphateles bicolor newarkensis (Hubbs & Miller 1972)
-newarkensis, suffix denoting place: Newark Valley and pluvial Lake Newark, Nevada, USA, where it is endemic

Siphateles bicolor obesa (Girard 1856)
plump, referring to chubby form of some specimens

Siphateles bicolor oregonensis (Snyder 1908)
-ensis, suffix denoting place: Oregon, USA, where it is endemic to the Albert Lake basin

Siphateles bicolor pectinifer (Snyder 1917)
comb-like, referring to gill rakers, which are finer and more numerous compared to S. b. obesa

Siphateles bicolor snyderi (Miller 1973)
in honor of John Otterbein Snyder (1867-1943), pioneer ichthyologist of the American West

Siphateles bicolor thalassinus (Cope 1883)
sea-green, referring to “light, translucent green” coloration when “fresh”

Siphateles bicolor vaccaceps (Bills & Bond 1980)
vacca, cow; ceps, head, referring to Cow Head Basin, California and Nevada, USA, where it is endemic

Siphateles boraxobius (Williams & Bond 1980)
-ius, adjectival suffix: referring to Borax Lake, Oregon, USA, where it is endemic; bios, life, i.e., living in borax
Subfamily Plagopterinae Creek Chubs
7 genera · 18 species/subspecies

**Couesius** Jordan 1878
in honor of surgeon-ornithologist Elliot Coues (1842-1899, pronounced “cows”), who collected type

**Couesius plumbeus** (Agassiz 1850)
lead-colored, referring to body coloration

**Hemitremia** Cope 1870
hemi-, half; tremia, aperture, referring to incomplete lateral line

**Hemitremia flammea** (Jordan & Gilbert 1878)
flaming, referring to bright-red breeding colors

**Lepidomeda** Cope 1874
like the genus *Meda*, but lepid, scaled

**Lepidomeda albivallis** Miller & Hubbs 1960
albus, white; vallis, valley, referring to White River Valley, Nevada, USA, where it is endemic

**Lepidomeda aliciae** (Jouy 1881)
in honor of Jouy’s wife, Alice (1853-1880), who accompanied her husband on his collecting expeditions in China, Japan, Korea, México, and western USA (where this species was collected in Utah)

**Lepidomeda altivelis** Miller & Hubbs 1960
altus, high; velum, sail, referring to large dorsal fin

**Lepidomeda copei** (Jordan & Gilbert 1881)
in honor of zoologist-paleontologist Edward Drinker Cope (1840-1897), who described dozens of North American minnows

**Lepidomeda mollispinis** Miller & Hubbs 1960
mollis, soft; spinis, spine, referring to soft-tipped main dorsal spine

**Lepidomeda mollispinis pratensis** Miller & Hubbs 1960
-pratensis, suffix denoting place: pratum, meadow, referring to meadowlands of Big Spring, Nevada, USA, where it is endemic

**Lepidomeda vittata** Cope 1874
striped, referring to lateral and dorsal bands

**Margariscus** Cockerell 1909
iscus, a diminutive: margarita, presumably referring to its sometimes pearly scales

**Margariscus margarita** margarita (Cope 1867)
pearl, presumably referring to its sometimes pearly scales

**Margariscus margarita koelzi** (Hubbs & Lagler 1949)
in honor of fisheries biologist Walter Koelz (1895-1989), for his contribution to the ichthyology of Isle Royale, Michigan, USA, where it is endemic

**Margariscus nachtriebi** (Cox 1896)
in honor of Henry F. Nachtrieb (1859-1942), state zoologist of Minnesota, USA, where Mille Lacs Lake, type locality, is situated

**Meda** Girard 1856
a classical name, presumably chosen because Girard like the sound of it

**Meda fulgida** Girard 1856
shining, referring to bluish silver sides

**Plagopterus** Cope 1874
plago, wound; pterus, fin, referring to spinose armature of dorsal fin

**Plagopterus argentissimus** Cope 1874
most silvery, referring to coloration

**Semotilus** Rafinesque 1820
marked, referring to spot on dorsal fin of *S. atromaculatus*

**Semotilus atromaculatus** (Mitchill 1818)
atro, black; maculatus, spotted, referring to prominent spot on dorsal fin

**Semotilus corporalis** (Mitchill 1817)
of the body, perhaps referring to chubby physique
**Semotilus lumbee** Snelson & Suttkus 1978
referring to Lumbee Indians who inhabited Lumber River system in North Carolina, USA, type locality

**Semotilus thoreauianus** Jordan 1877
-thoreau, belonging to: author and philosopher Henry David Thoreau (1817-1862), “an excellent ichthiologist, one of the first to say a good word for the study of Cyprinidae” (in 1842, Thoreau wrote: “I am the wiser in respect to all knowledge, and the better qualified for all fortunes, for knowing that there is a minnow in the brook.”)

Subfamily Pogonichthyinae American Minnows
39 genera/subgenera - 296 species/subspecies

**Agosia** Girard 1856
a Native American word, chosen presumably because Girard liked the sound of it

**Agosia chrysogaster** Girard 1856
chryso, yellow; gaster, belly, referring to light-yellow bellies of males

**Alburnops** Girard 1856
ops, appearance, referring to “striking external resemblance” of its members to minnows Girard had placed in the European genus *Alburnus* (Leuciscinae)

**Alburnops asperifrons** (Suttkus & Raney 1955)
asper, rough; frons, face or forehead, referring to tuberculate snout

**Alburnops baileyi** (Suttkus & Raney 1955)
in honor of Reeve M. Bailey (1911-2011), then Curator of Fishes, Museum of Zoology, University of Michigan, for contributions to the knowledge of North American freshwater fishes and for helping the authors in their studies

**Alburnops bairdi** (Hubbs & Ortenburger 1929)
in honor of Spencer Fullerton Baird (1823-1887), “an early student of the fishes of the southwest, and one of the outstanding figures in American zoology”

**Alburnops blennius** Girard 1856
blenny-like, presumably referring to convex profile (“snout most prominently rounded”)

**Alburnops buccula** (Cross 1953)
diminutive of bucca, mouth, i.e., little mouth, referring to size compared to closely related *A. bairdi*

**Alburnops candidus** (Suttkus 1980)
shining white, referring to white sides

**Alburnops chalybaeus** (Cope 1867)
steel-colored, referring to dark lateral stripe

**Alburnops edwardraneyi** (Suttkus & Cremmer 1968)
in honor of ichthyologist Edward C. Raney (1909-1984), Cornell University, for his contributions to North American ichthyology and “his guidance and imparted enthusiasm toward a multitude of students”

**Alburnops hypsilepis** (Suttkus & Raney 1955)
hypsi-, high; lepis, scale, referring to elevated anterior lateral line scales

**Alburnops petersoni** (Fowler 1942)
in honor of C. Bernard Peterson (1906-1963), Fowler’s editor at the Academy of Natural Sciences of Philadelphia, who helped collect type

**Alburnops potteri** (Hubbs & Bonham 1951)
in honor of George E. Potter (1898-1962), Agricultural and Mechanical College of Texas, who collected type and sent them to Hubbs for study

**Alburnops shumardi** Girard 1856
in honor of geologist and surgeon George C. Shumard (1823-1867), who collected type

**Alburnops texanus** (Girard 1856)
Texan, referring to type localities in Rio Salado and Turkey Creek, both in Texas, USA

**Alburnops xaenocephalus** (Jordan 1877)
xaeno, to scratch; cephalus, head, referring to head tubercles of breeding males

**Algansea** Girard 1856
a Native American word, chosen presumably because Girard liked the sound of it

**Algansea amecae** Pérez-Rodríguez, Pérez-Ponce de León, Domínguez-Domínguez & Doadrio 2009
of Río Ameca basin, Jalisco, México, type locality

**Algansea aphanea** Barbour & Miller 1978
concealed, referring to hidden differences between it and other *Algansea*
**Algansea avia** Barbour & Miller 1978  
remote, being the most western *Algansea*

**Algansea barbata** Álvarez & Cortés 1964  
barbled (only *Algansea* known at time of description to possess barbels)

**Algansea lacustris** Steindachner 1895  
lacustrine (belonging to a lake), referring to distribution in Lake Pátzcuaro, Michoacán, México

**Algansea monticola monticola** Barbour & Contreras-Balderas 1968  
of the mountains, referring to “rugged nature” of the area in which it occurs

  **Algansea monticola archidon** Barbour & Miller 1978  
archidi, petty position, referring to its subspecific status

**Algansea popoche** (Jordan & Snyder 1899)  
Mexican name for this minnow

**Algansea tincella** (Valenciennes 1844)  
diminutive of *Tinca* (Tincidae), i.e., like a small tench

**Aztecula** Jordan & Evermann 1898  
~ula, diminutive ending: in remembrance of the Aztec culture that dominated 15th-century central México, referring to where *A. sallaei* occurs

  **Aztecula calientis** (Jordan & Snyder 1899)  
-calientes, genitive singular of: Aquascalientes, México, type locality

  **Aztecula sallaei** (Günther 1868)  
patronym not identified but probably in honor of Auguste Sallé (1820-1896), French traveler and entomologist, who supplied Mexican fishes to the British Museum

**Campostoma** Agassiz 1855  
campo, curved; *stoma*, mouth, referring to U-shaped mouth

  **Campostoma anomalum anomalum** (Rafinesque 1820)  
anomalous, differing from all other Ohio minnows by its “unequal bilobed tail” (not different or abnormal appearance of ridge on lower jaw, as reported by some authorities)

  **Campostoma anomalum michauxi** Fowler 1945  
in honor of French botanist André Michaux (1746-1802), “probably the first naturalist to explore the region of the upper Catawba watershed”

**Campostoma oligolepis** Hubbs & Greene 1935  
oligo-, few; *lepis*, scales, referring to larger and therefore fewer scales compared to *C. anomalum*

**Campostoma ornatum** Girard 1856  
ornate, referring to ornamental coloration of breeding males

**Campostoma pauciradii** Burr & Cashner 1983  
paucus, few, referring to low number of gill rakers (*radii*) on first arch

**Campostoma pullum** (Agassiz 1854)  
young animal, referring to small size compared to similar European minnows (*Chondrostoma*)

**Clinostomus** Girard 1856  
clino, inclined; *stoma*, mouth, referring to its oblique shape

  **Clinostomus elongatus** (Kirtland 1841)  
elongated, referring to streamlined shape of body

**Clinostomus funduloides funduloides** Girard 1856  
-funduloides, having the form of: referring to superficial resemblance to topminnows (Cyprinodontiformes: Fundulidae, *Fundulus*)

  **Clinostomus funduloides estor** (Jordan & Brayton 1878)  
eater, referring to its considerably large mouth

**Codoma** Girard 1856  
a Native American word, chosen presumably because Girard liked the sound of it

  **Codoma ornata** Girard 1856  
adorned, referring to “rich and profuse” coloration of breeding males

**Cyprinella** Girard 1856  
diminutive of *cypris*, carp, i.e., a small carp or minnow
Cyprinella alvarezdelvillari Contreras-Balderas & Lozano-Vilano 1994
in honor of José Alvarez del Villar (1903-1986), “founder of modern Mexican ichthyology”

Cyprinella analostana Girard 1859
-analostan, belonging to: Analostan (now Theodore Roosevelt) Island, Potomac River, Washington, D.C., USA, type locality

Cyprinella bocagrande (Chernoff & Miller 1982)
boca, Spanish for mouth; grande, Spanish for large, referring to long upper jaw

Cyprinella caerulea (Jordan 1877)
blue, referring to bright steel-blue coloration

Cyprinella callisema (Jordan 1877)
calli-, beautiful; sema, sign, referring to extremely high dorsal fin of breeding males

Cyprinella callistia (Jordan 1877)
calli-, beautiful; histia, sail, referring to iridescent dorsal fin of breeding males

Cyprinella callitaenia (Bailey & Gibbs 1956)
calli-, beautiful; taenia, band, referring to lateral blue stripe

Cyprinella camura (Jordan & Meek 1884)
turned inward, referring to blunt snout

Cyprinella chloristia (Jordan & Brayton 1878)
chloros, green; histia, sail, referring to green dorsal fin

Cyprinella formosa (Girard 1856)
beautiful, referring to breeding coloration

Cyprinella galactura (Cope 1868)
galactos, milk; oura, tailed, referring to two clear-to-white areas on caudal fin base

Cyprinella garmani (Jordan 1885)
in honor of Harvard ichthyologist-herpetologist Samuel Garman (1843-1927)

Cyprinella gibbsi (Howell & Williams 1971)
in honor of ichthyologist Robert H. Gibbs, Jr. (1929-1988), U.S. National Museum, for his contributions to the knowledge of Cyprinella

Cyprinella labrosa (Cope 1870)
thick-lipped, referring to its “prominent” lips

Cyprinella leedsi (Fowler 1942)
in honor of the late Arthur N. Leeds (1870-1939), botanist, Academy of Natural Sciences of Philadelphia, “who had been much attracted to the charm of the Ohoopée” River, Georgia, USA (type locality), and who was present when type was collected

Cyprinella lepida Girard 1856
scaled, referring to larger scales compared to any known congener at the time

Cyprinella lutrensis lutrensis (Baird & Girard 1853)
-ensis, suffix denoting place: lutra, otter, referring to Otter Creek, Oklahoma (erroneously reported as Arkansas), USA, type locality

Cyprinella lutrensis blairi Hubbs 1940
in honor of zoologist W. Frank Blair (1912-1985), University of Texas at Austin, who helped collect type

Cyprinella lutrensis forlonensis Meek 1904
-ensis, suffix denoting place: Río Forlon, Tamaulipas, México, where it is endemic

Cyprinella nivea (Cope 1870)
snow, referring to white fins of breeding males

Cyprinella panarcys (Hubbs & Miller 1978)
pan, all, arcys, net, referring to net-like pattern of scales

Cyprinella proserpina (Girard 1856)
latinization of Persephone, queen of the infernal regions, referring to Devils River, Texas, USA, type locality

Cyprinella pyrrhomelas (Cope 1870)
pyrrhos, flame; melas, black, referring to red-black caudal fin of breeding males

Cyprinella rutila (Girard 1856)
reddish yellow, referring to golden sides and abdomen
Cyprinella spiloptera (Cope 1867)
spilos, spot, pterus, fin, referring to black spot on dorsal fin

Cyprinella trichrostia (Jordan & Gilbert 1878)
trí-, three; chros, color, hixton, sail, referring to black-red-white tail of nuptial males

Cyprinella venusta venusta Girard 1856
attractive, perhaps referring to “gracefully compressed” profile

Cyprinella venusta cercostigma Cope 1868
kertos, tail; stigma, spot; referring to spot at base of caudal fin

Cyprinella venusta stigmatura (Jordan 1877)
stigma, spot; oura, tailed, referring to spot at base of caudal fin

Cyprinella whipplei Girard 1856
in honor of Lieut. Amiel Weeks Whipple (1818-1863), military engineer and surveyor, who led boundary survey team that collected type

Cyprinella xaenura (Jordan 1877)
xaina, scratch; oura, tailed, presumably referring to large tubercles on caudal peduncle

Cyprinella xanthicara (Minckley & Lytle 1969)
xanthos, yellow; kara, head, referring to color of breeding males

Cyprinella zanema (Jordan & Brayton 1878)
za, very; nemus, thread, referring to “extremely long [barbels], probably longer than in any other of our Cyprinoids”

Dionda Girard 1856
a Native American word, presumably chosen because Girard liked the sound of it [description does not support supposition that name derives from the Greek Dione, mother of Venus, as reported in some references]

Dionda argentosa Girard 1856
silvery, referring to color of sides and abdomen

Dionda diaboli Hubbs & Brown 1957
of the devil, referring to Devils River, Texas, USA, type locality

Dionda episcopa Girard 1856
pope, referring to United States Army officer John Pope (1822-1892), who led party that collected type

Dionda flavipinnis (Cope 1880)
flavus, yellow; pinnis, fins, referring to “generally pale yellow” fins

Dionda melanops Girard 1856
melanos, black; ops, appearance, its blackish dorsal region and black spots on sides and abdomen “giving the whole fish a dark appearance”

Dionda nigrotaeniata (Cope 1880)
nigro, black; taeniata, striped, referring to blacker lateral band compared to D. flavipinnis

Dionda serena Girard 1856
fair, possibly referring to fairer complexion (light brown vs. blackish brown) compared to D. episcopa

Dionda texensis Girard 1856
-texis, suffix denoting place: Texas, USA, referring to type locality in Nueces River

Ericymba Cope 1865
eri-, very; cymba, cavity, referring to externally visible mucous channels on interopercle, suborbital and dentary bones

Ericymba amplamala (Pera & Armbruster 2006)
ampla, enlarged; mala, jaw, referring to long jaw and expanded infraorbital and preoperculomandibular canals

Ericymba buccata Cope 1865
bucca, cavity or cheek, referring to mucous channels (cavities) and where they occur (cheek)

Erimystax Jordan 1882
eri-, very, mystax, moustached, referring to barbels

Erimystax cahni (Hubbs & Crowe 1956)
in honor of biologist Alvin R. Cahn (1892-1971), who collected type
**Erimystax dissimilis** (Kirtland 1841)
not similar, i.e., to other shiners in *Luxilus*, genus in which it was described

**Erimystax harryi** (Hubbs & Crowe 1956)
in honor of George V. Harry (d. 1979), one of Hubbs’ graduate students, for his extensive survey of Missouri, USA, fishes (he also helped collect type)

**Erimystax insignis insignis** (Hubbs & Crowe 1956)
conspicuous, referring to blotches on sides

- **Erimystax insignis eristigma** (Hubbs & Crowe 1956)
- *er*-i-, very; *stigma*, mark, referring to blotches on sides

**Erimystax x-punctatus x-punctatus** (Hubbs & Crowe 1956)
spotted, referring to x-shaped spots along body

- **Erimystax x-punctatus trautmani** (Hubbs & Crowe 1956)
in honor of Milton B. T rautman (1899-1991), Ohio State University, for his “his life-long thorough investigation of the fishes of Ohio”

**Exoglossum** Rafinesque 1818
- *ex*-i-, outside; *glossa*, tongue, referring to bony tongue-like extension of lower jaw

- **Exoglossum laurae** (Hubbs 1931)
in honor of Hubbs’ wife, Laura (1893-1988)

- **Exoglossum maxillingua** (Lesueur 1817)
- *maxilla*, jawbone; *lingua*, tongue, referring to bony tongue-like extension of lower jaw

**Graodus** Günther 1868
- *gra*-, etymology not explained, possibly *graos*, old woman; *odus*, tooth, i.e., “old lady teeth,” presumably referring to “quite rudimental” pharyngeal teeth of *G. nigrotaeniatus* (=*boucardi*), “replaced by a somewhat uneven ridge of bone” [italics in original]; Jordan (1879) believes these teeth “have been lost, either by natural shedding or through the softening due to long preservation in spirits”

- **Graodus boucardi** (Günther 1868)
in honor of ornithologist Alphonse Boucard (1839-1905), who collected type

- **Graodus cumingii** (Günther 1868)
in honor of amateur conchologist Hugh Cuming (1791-1865), whose natural history collection (sold to the Natural History Museum in 1866) contained type

- **Graodus moralesi** (de Buen 1956)
in honor of water resource engineer Salvador Morales, who helped collect type

**Hudsonius** Girard 1856
named for type species *Clupea hudsonia*, referring to its type locality, Hudson River, New York, USA (not tautonymous because Girard unnecessarily renamed *H. hudsonia* as *H. fluviatilis*)

- **Hudsonius altipinnis** (Cope 1870)
- *altus*, high; *pinna*, fin, referring to “much elevated” dorsal fin compared to other minnows Cope grouped with this species

- **Hudsonius cumingsae** (Myers 1925)
in honor of Mrs. J. H. Cummings (1885-?), amateur naturalist, for her “investigation of the Wilmington [North Carolina, USA] fauna and flora” (she and her husband also hosted Myers in their houseboat during his North Carolina field work)

- **Hudsonius hudsonius** (Clinton 1824)
- *-ius*, adjectival suffix: Hudson River, New York, USA, type locality

**Hybognathus** Agassiz 1855
*hybos*, hump; *gnathus*, jaw, referring to slight protrusion of lower jaw

- **Hybognathus amarus** (Girard 1856)
bitter, allusion not evident, perhaps referring to brackish lagoon type locality

- **Hybognathus argyritis** Girard 1856
silvery, probably referring to its color

- **Hybognathus hankinsoni** Hubbs 1929
in honor of zoologist Thomas Leroy Hankinson (1876-1935), University of North Dakota, who conducted an early survey of fishes from that state
Hybognathus hayi Jordan 1885
in honor of paleontologist-zoologist Oliver P. Hay (1846-1930), Field Museum of Natural History, who collected type

Hybognathus nuchalis Agassiz 1855
nuchal, referring to dark dorsal stripe that begins at nape

Hybognathus placitus Girard 1856
pleasing, allusion not evident, perhaps referring to ventral coloration (“metallic white or yellow”)

Hybognathus regius Girard 1856
royal, a “large and beautiful species, the largest [member of genus] that has, so far, come to our knowledge, some of the specimens measuring seven inches in length”

Hybopsis Agassiz 1854
epy, hump; ops, face or appearance, probably referring to “obtuse prominent snout” of H. gracilis (=amblops)

Hybopsis amblops (Rafinesque 1820)
ambly, blunt; ops, face or appearance, referring to “round” snout

Hybopsis amnis (Hubbs & Greene 1951)
river, referring to its typical habitat

Hybopsis hypsinotus (Cope 1870)
hypselos, high; notos, back, referring to strongly arched back

Hybopsis lineapunctata Clemmer & Suttkus 1971
linea, line, referring to lateral stripe; punctata, spotted, referring to spot on tail

Hybopsis rubrifrons (Jordan 1877)
rubrum, red; frons, forehead, referring to rosy-red color of anterior portion of body of breeding males

Hybopsis winchelli Girard 1856
in honor of geologist-paleontologist Alexander Winchell (1824-1891), University of Michigan, who collected type

Iotichthys Jordan & Evermann 1896
no, smallest letter of Greek alphabet, referring to small size (to 6.4 cm); ichthys, fish

Iotichthys phlegethontis (Cope 1874)
phlegethon, blazing, probably referring to red-gold color of breeding males

Luxilus Rafinesque 1820
lux, light, connoting the American vernacular shiner; -illus, diminutive suffix, i.e., a small, shiny fish

Luxilus albeolus (Jordan 1889)
whitish, the sides and fins a “pure silvery white”

Luxilus cardinalis (Mayden 1988)
red, referring to red fins of breeding males

Luxilus cerasinus (Cope 1868)
cherry red, referring to body color of breeding males

Luxilus chrysocephalus chrysocephalus Rafinesque 1820
chrysta, golden; cephalus, head, referring to “gilt” head

Luxilus chrysocephalus isolepis (Hubbs & Brown 1927)
io, equal; lepis, scales, presumably referring to less variation in number of predorsal scales (12-15) compared to L. c. chrysocephalus (14-29)

Luxilus coccogenis (Cope 1868)
coccom, berry; geneion, cheek, referring to red mark on side of head

Luxilus cornutus cornutus (Mitchill 1817)
horned, referring to head tubercles of breeding males

Luxilus cornutus frontalis (Agassiz 1850)
-frontalis, pertaining to: front or forehead, probably referring to tubercles of breeding males (“Small circular shields with depressed surface, surmounted with very small conical and acute points, cover the surface of the head”)

Luxilus pilsbryi (Fowler 1904)
in honor of invertebrate zoologist Henry A. Pilsbry (1862-1957), who collected type

Luxilus zonatus (Agassiz 1863)
banded, referring to black lateral band on males

Luxiluszonistius Jordan 1880
zonatus, banded; histion, sail, referring to band on dorsal fin
Lythrurus Jordan 1876
lythrum, gore; oura, tailed, referring to blood-red caudal fin often seen on males

Lythrurus alegnotus (Snelson 1972)
a-, without; legnotos, colored border, referring to absence of black marginal bands on fins

Lythrurus ardens (Cope 1868)
ardent, referring to bright colors of breeding males

Lythrurus atrapiculus (Snelson 1972)
astra, black; piculus, apex, referring to black tip at top (apex) of dorsal fin

Lythrurus bellus (Hay 1881)
beautiful, referring to vivid coloration: orange fins, jet-black tips of fins, and “almost flame-color” of lower part of body in living specimens

Lythrurus fasciolaris (Gilbert 1891)
with narrow bands, referring to 5-8 dark, steel-blue, vertical bars on breeding males

Lythrurus fumeus (Evermann 1892)
smoky, referring to dusky coloration

Lythrurus lirus (Jordan 1877)
lily white, referring to pallid coloration

Lythrurus matutinus (Cope 1870)
of the morning, or rosy, referring to “rufous” muzzle and chin

Lythrurus roseipinnis (Hay 1885)
rhoeus, rosy; pinnis, fins, referring to pale to bright red fins of breeding males

Lythrurus snelsoni (Robison 1985)
in honor of ichthyologist Franklin F. Snelson, Jr. (b. 1943), Florida Museum of Natural History, for “outstanding contributions” to the knowledge of Lythrurus

Lythrurus umbratilis umbratilis (Girard 1856)
shady, “backs, sides and fins as if shaded”

Lythrurus umbratilis cyanocephalus (Copeland 1877)
cyano, blue; cephalus, head, top of head being a “bright glaucous blue” in living specimens

Macrhybopsis Cockerell & Allison 1909
macro-, long, being a more elongate form of Hybopsis

Macrhybopsis aestivalis (Girard 1856)
of the summer, allusion not explained, possibly referring to later or longer spawning season compared to Gobio vernalis (of the spring, = M. storeriana) described in same paper

Macrhybopsis australis (Hubbs & Ortenburger 1929)
southern, probably referring to more southerly distribution compared to M. tetranema

Macrhybopsis boschungi Gilbert & Mayden 2017
in honor of the late Herbert T. Boschung (1925-2015), University of Alabama, for his many contributions to southeastern (USA) ichthyology in general and the state of Alabama in particular, including co-authorship of Fishes of Alabama (2004)

Macrhybopsis etnieri Gilbert & Mayden 2017
in honor of David A. Etnier (b. 1937), University of Tennessee, for his many contributions to southeastern (USA) ichthyology and aquatic biology, including co-authorship of the “definitive” book on the fishes of Tennessee (1993)

Macrhybopsis gelida (Girard 1856)
frozen or stiff, allusion not explained nor evident

Macrhybopsis hyostoma (Gilbert 1884)
hyo-, hog; stoma, mouth, referring to underlying position of mouth relative to projecting snout

Macrhybopsis marconis (Jordan & Gilbert 1886)
-ri, genitive singular of: San Marcos River, Texas, USA, type locality

Macrhybopsis meeki (Jordan & Evermann 1896)
in honor of ichthyologist Seth Eugene Meek (1859-1914), then at the University of Arkansas, who helped collect type

Macrhybopsis pallida Gilbert & Mayden 2017
referring to its generally pallid body pigmentation
Macrhybopsis storeriana (Kirtland 1845)
a, belonging to: David H. Storer (1804-1891), author of first synopsis of North American fishes (1846)

Macrhybopsis tetranema (Gilbert 1886)
tetra, four; nema, thread, referring to its four thread-like barbels

Macrhybopsis tomelleri Gilbert & Mayden 2017
in honor of biological illustrator Joseph R. Tomelleri (b. 1958) of Leawood, Kansas (USA), whose “unsurpassed and meticulously rendered color illustrations of North American freshwater fishes have graced the pages of numerous scientific publications” (including description of this cyprinid) and books (e.g., *Fishes of Alabama* [2004])

Miniellus Jordan 1882
etymology not explained but almost certainly -iellus, a diminutive, i.e., a small minnow (or “minnie” in American vernacular), described as “small, plain” fishes, the “smallest and most insignificant of American Cyprinidae” [date of authorship often incorrectly given as 1888; not to be confused with *Minnilus* Rafinesque 1820, a junior synonym of *Notropis*]

Miniellus heterodon (Cope 1865) hetero, different;odon, tooth, referring to variations in dentition, with features at times characteristic of *Alburnops* (original genus) and other times representative of *Cyprinella*

Miniellus procone (Cope 1865) Prokne, from Greek mythology, whom the gods transformed into a swallow, alluding to its deeply forked tail

Miniellus stramineus stramineus (Cope 1865) straw-like, referring to its coloration

Miniellus stramineus missouriensis (Cope 1871) -ensis, suffix denoting place: Missouri River drainage and/or state of Missouri, USA, referring to type locality near St. Joseph

Miniellus topeka (Gilbert 1884) referring to Topeka, Kansas, USA, type locality

Mylocheilus Agassiz 1855
mylo, grinder; cheilus, lip, referring to bony sheath around lips

Mylocheilus caurinus (Richardson 1836) northwestern, from caurus, northwest wind, referring to distribution in Pacific Northwest (Washington, USA, type locality)

Nocomis Girard 1856
a Native American word, presumably chosen because Girard like the sound of it [Nookomis is the name of a grandmother in traditional stories among the indigenous Ojibwe people of North America and was made famous in Longfellow's 1855 epic poem “The Song of Hiawatha,” in which a major female character named Nokomis falls from the moon]

Nocomis asper Lachner & Jenkins 1971 rough, referring to tubercles on scales on breeding males

Nocomis biguttatus (Kirtland 1841) bi-, two; guttatus, spotted, probably referring to red spot on each side of head on breeding males

Nocomis effusus Lachner & Jenkins 1967 effusive, referring to numerous breeding tubercles on body and head

Nocomis leptocephalus leptocephalus (Girard 1856) lepto, small or slender; cephalus, head, referring to smaller head compared to *Ceratichthys* (=*Hybopsis*) amblops

**Nocomis leptocephalus bellicus** Girard 1856
war-like, referring to Black Warrior River, Alabama, USA, type locality

**Nocomis leptocranium interocularis** Lachner & Wiley 1971
*inter*, between; *ocular*, eyes, referring to location of tubercles on head

**Nocomis micropogon** (Cope 1865)
*micro*-, small; *pogon*, beard, referring to very small barbels on holotype (which was later discovered to be a *Luxilus cornutus* × *N. micropogon* hybrid; name validated by substituting holotype with a neotype)

**Nocomis platyrhynchus** Lachner & Jenkins 1971
*platy*, wide; *rhynchus*, snout, referring to large gape width

**Nocomis raneyi** Lachner & Jenkins 1971
in honor of ichthyologist Edward C. Raney (1909-1984), Cornell University, “whose enthusiasm and guidance placed many American students on the professional pathway to ichthyology”

**Notropis Rafinesque 1818**
*note*, back; *tropis*, keeled, referring to ridged or keeled back, possibly due to shrinkage of the *N. atherinoides* specimen Rafinesque examined

**Subgenus Notropis**

**Notropis amabilis** (Girard 1856)
attractive, a “very slender and graceful species”

**Notropis amoens** (Abbott 1874)
pleasing, or “beautiful,” as Abbott described it

**Notropis ariomus** (Cope 1867)
*ari-* large; *omma*, eye, referring to its large eyes (largest in *Notropis*)

**Notropis atherinoides atherinoides** Rafinesque 1818
-oides, having the form of: a silverside (*atherina*)

**Notropis atherinoides acutus** (Lapham 1854)
sharp or pointed, referring to sharper snout compared to *N. a. atherinoides*

**Notropis buchanani** Meek 1896
in honor of John L. Buchanan (1831-1922), president of Arkansas Industrial University, where Meek was teaching

**Notropis cahabae** Mayden & Kuhajda 1989
of the Cahaba River, from a Choctaw word meaning “waters above,” referring to water from sky, mountain springs, or gift from above

**Notropis girardi** Hubbs & Ortenburger 1929
in honor of ichthyologist-herpetologist Charles Girard (1822-1895), who, with Spencer Fullerton Baird, “were among the first to make known the rich fish fauna of the [American] southwest”

**Notropis jemezanus** (Cope 1875)
-anus, belonging to: Jemez Mountains, New Mexico, USA, type locality

**Notropis leucidus** (Cope 1868)
*leucos*, white; *eidus*, form or resemblance, i.e., whitish, presumably referring to silver sides

**Notropis megalops** (Girard 1856)
*mega*-, large; *ops*, eye, referring to larger eye compared to *N. amabilis*

**Notropis micropteryx** (Cope 1868)
*micro*-, small; *pteryx*, fin, referring to smaller fins compared to *Alburnellus jaculus* (= *Notropis rubellus*)

**Notropis ozarcanus** Meek 1891
-anus, belonging to: the Ozarks, referring to distribution in the Ozark region above the Fall Line in the White and Black River systems, Missouri and Arkansas, USA

**Notropis percobromus** (Cope 1871)
*perco*, percoid; *bromus*, a forage grass, allusion not evident but here is a guess: since Cope’s specimens were collected with sunfishes and darters, maybe he thought this small minnow was “percoid forage” (Mark Sabaj Pérez, pers. comm.)

**Notropis perpallidus** Hubbs & Black 1940
*per*, all over; *pallid*, pale, referring to its “extreme pallor”

**Notropis rubellus** (Agassiz 1850)
reddish, referring to color around jaws of males
Notropis spectrunculus (Cope 1868)
specca, spot; trunculus, stem, referring to spot at end of caudal peduncle

Notropis stibius Jordan 1877
shining, referring to lateral silver stripe

Notropis suttkusi Humphries & Cashner 1994
in honor of Tulane University biologist Royal D. Suttkus (1929-2009), for his “outstanding contributions to North American ichthyology and cyprinid systematics during a long and productive career”

Notropis volucellus (Cope 1865)
diminutive of volucer, flying or swift, probably referring to its “elongate fins, especially the dorsal”

Notropis wickliffi Trautman 1931
in honor of Trautman’s “loyal friend,” Edward L. Wickliff (1893-1975), “who has done much in carrying on and furthering ichthyological research in Ohio”

Subgenus Hydrophlox Jordan 1878
hydro, water; phlox, flame, referring to red or orange colors of breeding males

Notropis chiliticus (Cope 1870)
lipped, referring to vermilion lips (and snout) on males

Notropis chlorocephalus (Cope 1870)
chloros, green; cephalus, head, referring to head coloration of breeding males

Notropis chrosomus (Jordan 1877)
chroma, color; soma, body, referring to overall vibrant coloration

Notropis lutipinnis (Jordan & Brayton 1878)
luteus, yellow; pinnis, fin, referring to color of fins on breeding males

Notropis rubricroceus (Cope 1868)
ruber, red; croceus, saffron, referring to dominant colors of body and fins, respectively, of breeding males

Incertae sedis

Notropis aguirrepequenoi Contreras-Balderas & Rivera-Teillery 1973
in honor of biologist Eduardo Aguirre Pequeño (1904-1988), founder of Escuela de Ciencias Biológicas, Universidad Autónoma de Nuevo León, Monterrey, for his teachings and guidance

Notropis albizonatus Warren & Burr 1994
albus, white; zonatus, banded, referring to white band above lateral line

Notropis alborus Hubbs & Raney 1947
albus, white; oris, mouth, referring to unpigmented lips and mouth

Notropis amecae Chernoff & Miller 1986
of Río Ameca, Jalisco, México, type locality

Notropis ammophilus Suttkus & Boschung 1990
ammos, sand; philo, to love, referring to preferred habitat

Notropis anogenus Forbes 1885
ano-, without; genys, chin, referring to small upturned mouth

Notropis atrocudalis Evermann 1892
ater, black; cauda, tail, referring to black spot on tail

Notropis aulidion Chernoff & Miller 1986
aulos, tube or pipe; -idion, a diminutive suffix, referring to short infraorbital canal

Notropis bifrenatus (Cope 1867)
br-, two, frenatus, bridled, referring to black bars across snout

Notropis boops Gilbert 1884
bo, ox; ops, eye, referring to large eyes

Notropis braytoni Jordan & Evermann 1896
in honor of physician-naturalist Alembert Winthrop Brayton (1848-1926), “with pleasant memories of our explorations in Georgia and the Carolinas” in the 1870s

Notropis calabazas Lyons & Mercado-Silva 2004
referring to Río Calabazas, San Luis Potosí, México, where it is endemic

Notropis chihuahua Woolman 1892
referring to Chihuahua, México, type locality (also occurs in Texas and Durango)
Notropis dorsalis dorsalis (Agassiz 1854)
of the back, referring to narrow black band that extends from neck to caudal fin base along the dorsal surface

Notropis dorsalis keimi Fowler 1909
in honor of Fowler’s friend, Thomas D. Keim (1879-1968), who helped collect type and other fishes for the Academy of Natural Sciences of Philadelphia

Notropis grandis Domínguez-Domínguez, Pérez-Rodríguez, Escalera-Vázquez & Doadrio 2010
large, referring to its larger size relative to other members of the N. calientis complex

Notropis greenei Hubbs & Ortenburger 1929
in honor of Hubbs’ student C. Willard Greene (1901-?), “who is now engaged in making an ichthyological survey of Wisconsin”

Notropis heterolepis heterolepis Eigenmann & Eigenmann 1893
heteros, different; lepis, scales, presumably referring to scale variation (scales along median line with a deep notch near middle of posterior margin; scales above lateral band dotted with black; dorsal scales with dark markings)

Notropis heterolepis regalis Hubbs & Lagler 1949
royal, referring to both large size (up to 81 mm SL) and occurrence on Isle Royale, Michigan, USA

Notropis longirostris (Hay 1881)
longus, long; rostris, nose, referring to long, rounded snout

Notropis maculatus (Hay 1881)
spotted, referring to large caudal spot

Notropis marhabatiensis Domínguez-Domínguez, Pérez-Rodríguez, Escalera-Vázquez & Doadrio 2010
-ensis, suffix denoting place: Marhabatio, Michoacan, México, type locality

Notropis mekistochochas Snelson 1971
mekisto, longest; chochas, intestine, referring to elongate, convoluted intestine, an adaptation to its herbivorous diet

Notropis melanostomus Bortone 1989
melanos, black; stomus, mouth, referring to color of floor of mouth

Notropis nazas Meek 1904
referring to headwaters of the Río Nazas, Durango, México, type locality

Notropis nubilus (Forbes 1878)
dusky, referring to body color

Notropis orca Woolman 1894
killer whale, referring to its resemblance to the head of a dolphin

Notropis ortenburgeri Hubbs 1927
in honor of Hubbs’ student Arthur I. Ortenburger (1898-1961), “who is initiating an Oklahoma Fish Survey”

Notropis oxyrhynchus Hubbs & Bonham 1951
oxys, sharp; rhynchus, snout, referring to sharp muzzle

Notropis photogenis (Cope 1865)
photo-, light; genis, cheek, referring to its “bright silvery” sides, “especially brilliant” on the operculum

Notropis rafinesquei Suttkus 1991
in honor of “one of our early American naturalists,” Constantine Samuel Rafinesque (1783-1840)

Notropis rupestris Page 1987
living among rocks, referring to bedrock pool habitat

Notropis sabinae Jordan & Gilbert 1886
of the Sabine River, Texas, USA, type locality

Notropis saladonis Hubbs & Hubbs 1958
-eri, genitive singular of: Río Salado basin (Nuevo León and Coahuila, México), where it was endemic (now likely extinct)

Notropis scabriceps (Cope 1868)
scaber, rough; cepts, head, referring to abrasive tubercles on heads of breeding males

Notropis scepticus (Jordan & Gilbert 1883)
observant, referring to its large eyes

Notropis semperasper Gilbert 1961
semper, always; asper, rough, referring to tubercles on young-of-the-year and juveniles, and to retention of tubercles on adults not just during breeding season but throughout year
**Notropis simus simus** (Cope 1875)
blunt-nosed, referring to blunt snout

**Notropis simus pecosensis** Gilbert & Chernoff 1982
-enis, suffix denoting place: Pecos River, New Mexico, USA, where it is endemic

**Notropis telescopus** (Cope 1868)
far seeing, referring to its large eyes

**Notropis tropicus** Hubbs & Miller 1975
tropical, being one of the southernmost species in the family (occurring in the Río Pánuco basin of México)

**Notropis uranoscopus** Suttkus 1959
urano, sky; scopus, watcher, referring to its skyward (upturned) eyes

**Opsopoeodus** Hay 1881
opsopoeos, to feed daintily; odus, tooth, referring to “thoroughness with which the food is prepared by the numerous serrated pharyngeal teeth”

**Opsopoeodus emiliae emiliae** Hay 1881
in honor of Hay’s wife, Emily (1849-1931)

**Opsopoeodus emiliae peninsularis** (Gilbert & Bailey 1972)
referring to distribution in peninsular Florida, USA

**Oregonichthys** Hubbs 1929
ichthys, fish, of Oregon, USA, where *O. crameri* is endemic

**Oregonichthys crameri** (Snyder 1908)
in honor of Stanford University biologist Frank Cramer (1861-1948), who helped collect type

**Oregonichthys kalawatseti** Markle, Pearsons & Bills 1999
“Oregon [USA] once had a remarkable diversity of native peoples with more native languages than all of Europe. The Kalawatset, a tidewater Umpqua people . . . , were part of this lost human diversity and serve to forewarn of a parallel decline in diversity of Oregon’s native freshwater fishes.”

**Phenacobius** Cope 1867
phenax, imposter; bios, life; i.e., looks like an herbivore and superficially like a sucker (Catostomidae: *Catostomus*) but is neither

**Phenacobius catostomus** Jordan 1877
cato, low; stoma, mouth, referring to downward pointing mouth and superficial resemblance to suckers (Catostomidae: *Catostomus*)

**Phenacobius crassilabrum** Minckley & Craddock 1962
crassus, fat; labrum, lip, referring to large, fleshy lips

**Phenacobius mirabilis** (Girard 1856)
strange; Girard said it belonged to the “most curious genus” of American minnows, *Exoglossum*

**Phenacobius teretulus** Cope 1867
referring to terete body form

**Phenacobius uranops** Cope 1867
urano-, sky; ops, eye, referring to upward-pointing eyes

**Pimephales** Rafinesque 1820
pimele, fat, cephalis, head, the head of *P. promelas* being “soft and fat all over,” a clear reference to fleshy growth on nape of breeding males [Rafinesque twice incorrectly translated name as “Flat-head” in description of genus, possibly a typesetting error, but correctly translated it as “Fat-head” in description of *P. promelas*]

**Pimephales notatus** (Rafinesque 1820)
marked, probably referring to caudal fin spot

**Pimephales promelas promelas** Rafinesque 1820
pro-, in front of; melas, black; referring to black head of breeding males

**Pimephales promelas harveyensis** Hubbs & Lagler 1949
-enis, suffix denoting place: Harvey Lake on Lake Superior’s Isle Royale, Michigan, USA, where it is endemic

**Pimephales tenellus tenellus** (Girard 1856)
delicate, probably referring to more slender form compared to *Hyborhynchus perspicuus* (= *P. vigilax perspicuus*)

**Pimephales tenellus parviceps** (Hubbs & Black 1947)
parvus, small; cepis, head, presumably referring to shorter head compared to *P. t. tenellus*
**Pimephales vigilax vigilax** (Baird & Girard 1853)
alert or watchful, allusion not explained, perhaps referring to vigilance of nest-guarding males

**Pimephales vigilax perspicuus** (Girard 1856)
probably referring to perspicuous red and yellow colors

**Platygobio Gill 1863**
*platy*, broad, presumably referring to broad, depressed head; *gobio*, the similar-looking gudgeon of Europe

**Platygobio gracilis gracilis** (Richardson 1836)
slender, probably referring to rather elongate body

**Platygobio gracilis gulonellus** (Cope 1865)
diminutive of *gula*, throat, i.e., small throat, perhaps referring to “Breadth between eyes scarcely half length of cranium above” compared to *P. g. gracilis*

**Pogonichthys Girard 1854**
pogon, beard, referring to well-developed barbel; *ichthy*, fish, i.e., “bearded fish”

**Pogonichthys ciscooides** Hopkirk 1974
-oidea, having the form of: referring to similarity to a cisco (*Salmonidae: Coregonus*)

**Pogonichthys macrolepidotus** (Ayres 1854)
macro, large; *lepid*, scale, referring to larger scales compared to *Orthodon microlepidotus*

**Pteronotropis Fowler 1935**
*ptero-,* winged, i.e., *Notropis* species with enlarged dorsal fin on breeding males

**Pteronotropis euryzonus** (Suttkus 1955)
eury, broad; *zonus*, band, referring to broad lateral band

**Pteronotropis grandipinnis** (Jordan 1877)
grand, large; *pinnis*, fins, referring to enlarged dorsal fin of breeding males

**Pteronotropis harperi** (Fowler 1941)
in honor of naturalist Francis Harper (1886-1972), who collected type while retracing routes of 18th-century naturalists John and William Bartram

**Pteronotropis hubbsi** (Bailey & Robison 1978)
in honor of ichthyologist Carl L. Hubbs (1894-1979), “who has played a key role in the development of knowledge of *Notropis*”

**Pteronotropis hypselopterus** (Günther 1868)
hypselo, high; *pterus*, wing, referring to high dorsal fin of breeding males

**Pteronotropis merlini** (Suttkus & Mettee 2001)
in honor of Merlin G. Suttkus (1919-1986), who helped his brother Royal collect fishes

**Pteronotropis metallicus** (Jordan & Meek 1884)
referring to metallic dusky lateral band
Pteronotropis signipinnis (Bailey & Suttkus 1952)
signum, banner; pinnis, fins, referring to striking color of median fins

Pteronotropis stonei (Fowler 1921)
in honor of naturalist Wittmer Stone (1866-1939), who collected type

Pteronotropis welaka (Evermann & Kendall 1898)
referring to St. Johns River near Welaka, Florida, USA, type locality (welaka is Native American name for St. Johns River, meaning “chain-of-lakes”)

Rhinichthys Agassiz 1849
rhinos, nose, referring to prominent snout of R. atronatus (=atratulus); ichthys, fish

Rhinichthys atratulus (Hermann 1804)
dressed in black, referring to stripe on body and around snout

Rhinichthys cataractae cataractae (Valenciennes 1842)
of cataracts, referring to area around Niagara Falls, North America, type locality

Rhinichthys cataractae dulcis (Girard 1856)
sweet, referring to Sweetwater River, Wyoming, USA, type locality

Rhinichthys cataractae smithi Nichols 1916
in honor of archaeologist Harlan I. Smith (1872-1940), who collected type

Rhinichthys deaconi Miller 1984
in honor of James E. Deacon (1934-2015), University of Nevada, “whose concern about the conservation status of many fishes from the Southwest has aroused interest on their behalf and whose ecological studies have provided the necessary biological information needed to aid their survival”

Rhinichthys evermanni Snyder 1908
in honor of Barton Warren Evermann (1853-1932), who surveyed the Pacific Northwest fish fauna of North America and later served as chief scientist of the U.S. Bureau of Fisheries, which published Snyder’s paper

Rhinichthys falcatus (Eigenmann & Eigenmann 1893)
falcate or sickle-shaped, referring to large dorsal fin with prolonged anterior rays

Rhinichthys obtusus Agassiz 1854
blunt, referring to more blunt body compared to R. marmoratus (=cataractae)

Rhinichthys osculus osculus (Girard 1856)
diminutive of os, mouth, i.e., small mouthed, allusion not explained, perhaps referring to “rather small” mouth as described for Argyros (original genus, =Rhinichthys)

Rhinichthys osculus adobe (Jordan & Evermann 1891)
Spanish for clay, referring to its color (“grayish-olivaceous above”) and “the bottom it frequents”

Rhinichthys osculus carringtonii (Cope 1872)
in honor of Edward Campbell Carrington (1851-1917), U.S. government survey naturalist who collected type

Rhinichthys osculus klamathensis (Evermann & Meek 1898)
-ensis, suffix denoting place: Klamath River drainage, Oregon and California, USA, where it is endemic

Rhinichthys osculus lariversi Lugaski 1972
in honor of zoologist Ira La Rivers (1915-1977), University of Nevada, for his work on the fishes of Nevada

Rhinichthys osculus lethoporus Hubbs & Miller 1972
lethos, forgetful; porus, pore, referring to extreme reduction of lateral line

Rhinichthys osculus moapae Williams 1978
of the Moapa River, Nevada, USA, where it is endemic

Rhinichthys osculus nevadensis Gilbert 1893
-ensis, suffix denoting place: Nevada, USA, where it is endemic

Rhinichthys osculus nubilus (Girard 1856)
dusky, referring to blackish-brown color

Rhinichthys osculus oligoporus Hubbs & Miller 1972
oligo, few; porus, pore, referring to reduced lateral line

Rhinichthys osculus reliquus Hubbs & Miller 1972
relict, being the only surviving native fish in Grass Valley, Nevada, USA (until 1938, that is, when it was last collected)
Rhinichthys osculus robustus (Rutter 1903)
stout, referring to its “heavy” body

Rhinichthys osculus thermalis (Hubbs & Kuhne 1937)
Latin for hot spring, referring to Kendall Warm Spring, Wyoming, USA, where it is endemic

Rhinichthys osculus velifer Gilbert 1893
velum, sail; fero, to bear, probably referring to long pectoral fins, which overlap front of anal fin

Rhinichthys osculus yarrowi Jordan & Evermann 1891
in honor of surgeon-naturalist Henry C. Yarrow (1840-1929), for his work on the fishes of the Colorado River

Rhinichthys umatilla (Gilbert & Evermann 1894)
referring to Umatilla, Oregon, USA, type locality (also occurs in Idaho, Washington and British Columbia)

Richardsonius Girard 1856
-ius, pertaining to: surgeon-naturalist John Richardson (1787-1865), who described R. balteatus

Richardsonius balteatus balteatus (Richardson 1836)
girdled, possibly referring to “broad scarlet-red stripe” on breeding males

Richardsonius balteatus hydrophlox (Cope 1872)
hydro, water; phlox, flame, referring to brilliant breeding colors

Richardsonius egregius (Girard 1858)
exceptional, probably referring to its vivid coloration, being one of the most colorful fishes of the American West

Stypodon Garman 1881
stypo, stump; don, tooth, referring to snail-grinding teeth

Stypodon signifer Garman 1881
signum, mark; fero, to bear, perhaps referring to prominent lateral band

Tampichthys Schönhuth, Doadrio, Dominguez-Dominguez, Hillis & Mayden 2008
tamp, referring to Tampico Embayment drainage of México, where all species occur; ichthys, fish

Tampichthys catostomops (Hubbs & Miller 1977)
ops, appearance, resembling a sucker (Catostomidae: Catostomus)

Tampichthys dichroma (Hubbs & Miller 1977)
dichroma, color (sooty above, light below)

Tampichthys erimyzonops (Hubbs & Miller 1974)
ops, appearance, resembling, a young chubsucker (Catostomidae: Erimyzon)

Tampichthys ipni (Álvarez & Navarro 1953)
in honor of Instituto Politecnio Nacional (IPN), México, where the authors worked

Tampichthys mandibularis (Contreras-Balderas & Verduzco-Martínez 1977)
referring to long mandible, or jaw

Tampichthys rasconis (Jordan & Snyder 1899)
-itis, gentive singular of: Rascon, San Luis Potosí, México, type locality

Tiaroga Girard 1856
a Native American word, presumably chosen because Girard like the sound of it

Tiaroga cobitis Girard 1856
similar to European loaches ( Cobitis)

Yuriria Jordan & Evermann 1896
referring to Lake Yuriria in Guanajuato, México, where Y. alta is abundant

Yuriria alta (Jordan 1880)
high, referring to elevated back

Yuriria amatlana Domínguez-Domínguez, Pompa-Domínguez & Doadria 2007
-ana, belonging to: Amatlan de Cañas (a town), Nayarit, México, type locality

Yuriria chapalae (Jordan & Snyder 1899)
of Lago de Chapala, Jalisco, México, type locality