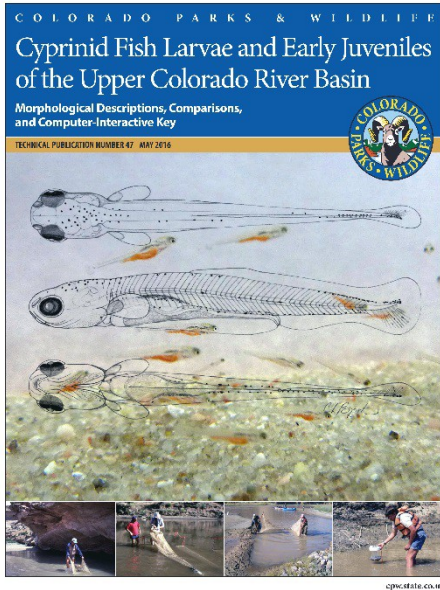


## New Larval Fish Guide

Snyder, D. E, S. C. Seal, J. A. Charles, and C. L. Bjork. 2016. **Cyprinid fish larvae and early juveniles of the Upper Colorado River Basin: morphological descriptions, comparisons, and computer-interactive key.** Colorado Parks and Wildlife Technical Publication 47.



This guide by the Colorado State University Larval Fish Laboratory (LFL) describes and facilitates identification of the larvae and early juveniles of 15 cyprinids in the Upper Colorado River Basin (UCRB), but should be useful wherever those fishes are found. Coverage includes the basin's three endangered cyprinids (Humpback Chub *Gila cypha*, Bonytail *G. elegans*, and Colorado Pikeminnow *Ptychocheilus lucius*), two remaining native cyprinids (Roundtail Chub *G. robusta* and Speckled Dace *Rhinichthys osculus*), and ten non-native cyprinids (Red Shiner *Cyprinella lutrensis*, Common Carp *Cyprinus carpio*, Utah Chub *G. atraria*, Brassy Minnow *Hybognathus hankinsoni*, Golden Shiner *Notemigonus crysoleucas*, Sand Shiner *Notropis stramineus*, Fathead Minnow *Pimephales promelas*, Longnose Dace *Rhinichthys cataractae*, Redside Shiner *Richardsonius balteatus*, and Creek Chub *Semotilus atromaculatus*).

Printed versions of the guide, which include a CD with the associated cyprinid and family-level computer-interactive keys, are available upon request from Colorado Parks and Wildlife (CPW Research Center Library, 317 W. Prospect St., Fort Collins, CO 80526; e-mail: [kay.knudsen@state.co.us](mailto:kay.knudsen@state.co.us); phone: 970-472-4353).

Digital (PDF) copies of the publication are available on the CPW and LFL websites, respectively at <http://cpw.state.co.us/learn/Pages/ResearchAquaticPublications.aspx> and <http://warnercnr.colostate.edu/lfl-downloadable-keys-guides-and-bibliography>. The keys can be downloaded also from the LFL website (select UCRB key to cyprinids and North America key to families); instructions for their installation and use are provided in the guide and "readme" files included with the keys.

Submitted by Darrel E. Snyder, Larval Fish Laboratory, Colorado State University, Fort Collins, CO 80523-1474 ([darrel.snyder@colostate.edu](mailto:darrel.snyder@colostate.edu)); September 2016.