

HOST FISHES FOR FOUR FEDERALLY ENDANGERED FRESHWATER MUSSELS (UNIONIDAE) IN THE APALACHICOLA-CHATTAHOOCHEE-FLINT BASIN

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ABSTRACT

We determined host use and glochidial metamorphosis success of four federally endangered mussel species from the Apalachicola-Chattahoochee-Flint River Basin. Fishes of 19-27 species in a total of 14 families were tested as potential hosts for each mussel species. Metamorphosis of *Pleurobema pyriforme* was observed only on six minnow species (Cyprinidae): *Cyprinella venusta*, *Nocomis leptcephalus*, *Notropis amplamala*, *N. lutipinnis*, *Pimephales promelas* and *Semotilus atromaculatus*, and metamorphosis success was >27% for all six species. Metamorphosis of *Medionidus penicillatus* was observed only on four darter species (Percidae): *Etheostoma inscriptum*, *E. swaini*, *Percina crypta*, and *P. nigrofasciata*, but metamorphosis success varied among species and was highest on *E. inscriptum* (40%) and *P. nigrofasciata* (39%). Metamorphosis of *Hamiota subangulata* was observed only on three species of black basses (Centrarchidae): *Micropterus cataractae*, *M. coosae*, and *M. salmoides*, and metamorphosis success was >78% on all three species. Metamorphosis of *Amblema neislerii* was observed on 23 species in seven families, indicating that this species is a host generalist, but metamorphosis success varied widely among species. These data augment existing host information for these species and provide a clearer picture of host breadth and the relative suitability of host species.

KEY WORDS *Amblema neislerii*, *Pleurobema pyriforme*, *Hamiota subangulata*, *Medionidus penicillatus*, life history, glochidia