PATRICIA THOMPSON$, STUART WELSH, and AUSTIN RIZZO, Division of Forestry and Natural Resources, West Virginia University, Morgantown, WV, 26506, U.S. Geological Survey, West Virginia Cooperative Fish and Wildlife Research Unit, West Virginia University Morgantown, WV 26506**. Substrate selection of sympatric sand darters from the Elk River, WV.**

Ammocrypta pellucida (Eastern Sand Darter) and A. clara (Western Sand Darter) are the only sympatric sister species of Ammocrypta, and the Elk River in West Virginia is one of the few remaining places where both species occur. They are slender, sand-dwelling fish that were once broadly distributed, but have since undergone range-wide population declines, presumably owing to habitat loss. Habitat use studies have been conducted for A. pellucida, but literature on A. clara remains sparse, and is an essential element for the conservation of the species. Substrate selection was evaluated by conducting 15 laboratory trials in four aquaria. Two aquaria contained six A. clara in each, while the other two held a combination of both species, three A. pellucida and three A. clara. The sand darters were given the choice to bury into five equally available and randomly positioned substrates: fine sand (0.12-0.25 mm), medium sand (0.25-0.5 mm), coarse sand (0.5-1.0 mm), very course sand (1.0-2.0 mm), and granule gravel (2.0-4.0 mm). Ammocrypta clara primarily buried in coarse (33 %) and medium sand (28 %), followed by fine (20 %) and very coarse (19 %) sand. Ammocrypta clara selected coarse and very coarse sand more frequently than A. pellucida, while A. pellucida selected fine and medium sand more often than A. clara. Our results indicate there are substrate selection differences between the two species, though further corroboration with field surveys is needed to elucidate the variation in habitat use.