

STUART WELSH, and ZACHARY LOUGHMAN, Division of Forestry and Natural Resources, West Virginia University, Morgantown, WV, 26506, Department of Natural Sciences and Mathematics. **Use of an eel pass by virile crayfish on the lower Shenandoah River.**

Fish passage facilities for reservoir dams have been used to restore habitat connectivity within riverine networks by allowing upstream passage for native species. These facilities may also support the spread of invasive species, an unintended consequence and potential downside of upstream passage structures. We documented dam passage of the invasive virile crayfish (*Orconectes virilis*) at fish ladders designed for upstream passage of American eels (*Anguilla rostrata*) in the Shenandoah River drainage. Ladder use and upstream passage of 11 virile crayfish occurred from 2007–2014 during periods of low river discharge ( $<30 \text{ m}^3\text{s}^{-1}$ ) and within a wide range of water temperatures from 9.0–28.6 °C. Virile crayfish that used the eel ladders were large adults with a mean carapace length and width of 48.0 mm and 24.1 mm, respectively. Our data demonstrated the use of a species-specific fish ladder by a non-target species, which has conservation and management implications for the spread of aquatic invasive species and upstream passage facilities.