

The rediscovery of the Spiny-cheek crayfish (*Faxonius limosus*) in the middle and upper Susquehanna River Basin in Pennsylvania.

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The first state-wide survey of crayfishes in Pennsylvania was completed in 1905 by Dr. Ortmann of the Carnegie Museum of Natural History. One species, the Spiny-cheek crayfish (*Faxonius limosus*), was determined to be endemic to the Delaware, Susquehanna, and Potomac River Basins of Pennsylvania. Since the Ortmann survey in 1905, additional surveys have returned with other species. Due to landscape alteration (urbanization and agriculture) and the presence of invasive crayfish, the current distribution and conservation status of *F. limosus* is unknown. We have completed surveys at both historic records and new sites through the upper portion of the Susquehanna River Basin. Each site was standardized with a sampling effort of ten seine hauls distributed to target all available habitats. All crayfish collected were identified to species and curated into the West Liberty University Astacology Collection. A qualitative habitat evaluation index score (QHEI) was generated at every site and water quality data was collected using a YSI Pro 1030 data sonde. Thus far, 312 sites have been surveyed. Unexpectedly, we did find *F. limosus* in the Lackawanna River, a tributary of the upper Susquehanna River. All other historic sites returned either invasive *F. rusticus* or native *F. obscurus*. The absence of *F. limosus* at historic locations indicates a decline in range, which likely warrants state-level protection for this species.