

Mussel memory: Digitization of the Unionida at the Buffalo Museum of Science

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With historic roots dating back to the mid-1800's, the Buffalo Society of Natural Sciences (BSNS) has had an eventful and rich journey into the present scientific era. The Conchology Collection is of notable historic significance because it is the oldest section of the Museum's research collections. Not only does the collection extensively document the Niagara River Region, but it also holds representatives from other parts of the U.S. and from around the world, spanning freshwater, marine, and terrestrial habitats. The most comprehensive publication of this collection is *The Mollusca of the Niagara Frontier Region and Adjacent Territory* published in 1948, by Imogene C. Strickler Robertson and Clifford L. Blakeslee. Shortly after the publication of this resource, conchology fell out of Buffalo's popular culture, and the collection has remained hidden. The recent resurgence of the city of Buffalo, NY has prompted ecological efforts that will be directly enhanced by better access to this collection, especially because both endangered and extinct unionid species are well represented. Supported by IMLS Museums for America funding, the Buffalo Museum of Science has sought to re-curate and digitize the Conchology Collection, starting with the order Unionida, while increasing the current care and management of this historic material. The collection holds over 2,200 lots, containing over 6,000 individual dry specimens across the families Hyriidae, Iridinidae, Margaritiferidae, Mycetopodidae, and Unionidae, including a number of Type specimens. Efforts to re-curate, photograph, and digitize this collection to reflect advancements in archival practices and unionid taxonomy are nearing completion, and they will produce a usable collection catalog accessible through aggregators such as iDigBio and GBIF. Improved accessibility to this collection will support current scientific inquiry pertaining to these important organisms. Additionally, the Museum has begun a science studio expansion to highlight freshwater mussels, promoting public awareness of their ecological and evolutionary importance as well as their conservation challenges as one of the most imperiled organisms of North America.

