
DISTRIBUTION AND POPULATION STATUS OF MUSSELS IN EASTERN MONTANA: NEW FINDINGS AND UPDATES ON FIVE SPECIES EAST OF THE DIVIDE

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The first 2 yrs of the SWG state-wide mussel surveys focused on the western pearlshell, but we've also collected distributional and population data on five other mussel species

occurring in the state, two native—fatmucket (*Lampsilis siliquoidaea*) and giant floater (*Pyganodon grandis*)— and three introduced species (black sandshell, mapleleaf and creek heelsplitter). Eastern Mussel Surveys in 2008 and 2009 focused on the Missouri, Milk, Marias and Yellowstone River Watersheds. Survey reaches were chosen opportunistically based on accessibility, previous mussel sightings and suitable mussel habitat (depositional areas and gravel run/glides). Aquascopes were used for shallow water transects, while SCUBA was utilized for deeper water (>1 m). Mussel data recorded during transects were standardized by time (CPUE, man-hour) and distance (mussels per 50 m). Rivers with excellent populations of native mussels include the Missouri River between Fort Benton and Fort Peck, the Marias River above Lake Elwell and within 10 mi of the confluence. In the Yellowstone River Watershed, the Tongue and Bighorn Rivers reported viable fatmucket populations, while catch rates of the fatmucket on the Yellowstone mainstem were low (avg. ~1/hr compared to ~7 /hr in the Missouri). We documented the first records of the giant floater in the Yellowstone Basin at three tributary sites (O’Fallon, Little Porcupine, Tongue River), but no evidence of this species in the mainstem. The introduced mapleleaf (*Quadrula quadrula*) has high densities in the Tongue River, but was not found live in the mainstem Yellowstone. Further population analysis and state conservation rank status will also be presented.