
MACROINVERTEBRATE COMMUNITY ASSEMBLAGE FROM CANYON FERRY TO GREAT FALLS ALONG THE MISSOURI RIVER

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The Missouri River represents a major resource for the state of Montana, both environmentally and economically. Understanding macroinvertebrate community assemblage provides insight into food web structure, helping to construct a biological foundation from

which water quality can be monitored now and in the future. A comprehensive description of macroinvertebrate assemblage between Canyon Ferry Dam and the mouth of the Sun River near Great Falls also serves as a marker for comparison of biologically similar reaches. In order to examine macroinvertebrate community structure between these locations, we used samples previously collected by Montana Fish, Wildlife, and Parks for a walleye larval study. After fish larvae were removed from samples, we sorted the macroinvertebrates as well as casings from debris and daphnia. Debris and daphnia were dried and weighed to obtain a comparative biomass, and macroinvertebrates were sorted and identified to the lowest taxonomic level (order or family, species dependent). They were also sorted into functional feeding groups for further analysis of community structure between these locations. Daphniidae were determined to be predominant in Canyon Ferry, Hauser, and Holter samples, while Ephemerellidae and Baetidae were also very common across all sample locations.