

# **Rainbow-Cutthroat trout hybrids in Alberta: a study of diet composition and ontogeny**

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## POSTER

A detailed understanding of the relationships between introduced rainbow trout, rainbow-cutthroat hybrids and pure strains of Westslope cutthroat trout (*Oncorhynchus clarki lewisi*) in Alberta is lacking, but it is known that non-native trout species and hybrids out-compete cutthroat trout. The dietary habits of Alberta populations of the Westslope cutthroat trout, rainbow trout and rainbow-cutthroat hybrids have received no attention to date, so it was the goal of this study to add a preliminary description of trout diet from one Alberta stream to begin to fill this gap. The percent composition of their diet will be determined for each age group, and this will be compared to the frequency of occurrence of food items measured from benthic kick samples. Percent occurrence of prey items will be calculated based on a proportion of numbers of taxonomic groups. In order to analyze the potential ontogenetic shift in diet, proportional similarity index will be calculated. Preliminary evidence suggests that the diets contain a more diverse number of invertebrate taxa, with diptera, ephemeroptera, and plecoptera representing the largest portion of the diets. This analysis is currently ongoing, but will provide the basis for a more comprehensive study of five additional streams which will in turn aid our understanding of resource partitioning between these trout species.