

A REPORT ON ANALYSES OF PERIPHYTON
COLLECTIONS FROM THE NORTH FORK AND THE
MIDDLE FORK OF THE FLATHEAD RIVER

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Abstract

Phycoperiphyton from natural substrates was collected in March 1976 at three stations on the North Fork and one station on the Middle Fork of the Flathead River. Microscopic analysis of the four collections revealed 7 genera of non-diatom algae and 28 genera of diatoms encompassing 85 separate diatom taxa. The composition and structure of algal associations in the two streams indicate that these waters were cool, circumneutral, lightly mineralized, well oxygenated, and relatively unpolluted with either nutrients or silt. Low diatom diversity values and sparse diatom growth suggest a relatively austere environment for diatoms. The uppermost North Fork site at the Canadian border was floristically the most distinct of the four sites, suggesting perhaps that it was the most pristine site in terms of water quality. An expanded baseline inventory and monitoring program is recommended.