

Caribou-Poker Creeks Research Watershed

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The Caribou-Poker Creeks Research Watershed project is a multiagency hydrological and environmental effort in central subarctic Alaska.

Until the late 1960's, there had been little study of hydrological processes and parameters in the North American subarctic (defined here as the region of discontinuous permafrost). Basic hydrological and environmental data are sparse in comparison with more temperate climates (Feulner et al., 1971; Johnson and Hartman, 1969; Hare, 1971). The reasons for the scarcity of basic information (such as precipitation and runoff data for upland areas) include a low resident population, logistical problems of data acquisition, high costs of all operations in remote and often severe environments, and a lack (until recently) of obvious need for the information. Dingman's (1966, 1971) study of the 1.8 square kilometer Glenn Creek basin at Fox, Alaska, provided the earliest documented data on upland precipitation-runoff relations in subarctic Alaska and pointed out the need for longer term, comprehensive studies of catchments on the permafrost-dominated uplands.