operations over organic soils (Remotec Application, Inc., 1982; Ulricksen, 1982). In these investigations, transects were conducted with either the 80 or the 120 MHz antenna mounted on or suspended from a helicopter. Remotec Applications reported that the antenna had to be maintained at an altitude of less than 2 m over the organics in order to have sufficient energy to penetrate the surface of the peat. At these altitudes, sufficient energy was available for the GPR to probe to depths of 4.8 m (the deepest point overflown). Generally, airborne profiles are less distinct, and are more strongly affected and cluttered by induced natural resonances and interference from commercial radio stations.

Ground penetrating radar technology provides an innovative approach to the investigation of Histosols. The results from initial investigations have demonstrated the potential for using GPR technology at all levels of Histosol assessments. It is most probable that more soil scientists will shortly become involved in using GPR technology to characterize Histosols throughout the United States.

References


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Cryic Aridisols on Outwash Fans and Fan Terraces in Idaho

Karl W. Hipple and Grant P. Butler

Aridisols have long been associated with great expanses of arid lands in the world. Commonly in the western United States, these soils occur in areas where soil temperature regimes are frigid or warmer. Soil Taxono-