

CORRESPONDENCE

The Editor,
Journal of Glaciology

SIR,

Glacial lake drainage near Søndre Strømfjord, West Greenland

In their paper on a jökulhlaup from an ice-dammed lake at the margin of the inland ice near Søndre Strømfjord, West Greenland, Sugden and others (1985) suggested that the lake drains periodically, possibly most summers, and they provided evidence for such an event in 1968, 1983, and 1984. The lake also drained in 1974, and it may be of interest to record the following observations.

On 24 July 1974 the level of the lake (Fig. 1) was 25.6 m below the level of the highest shoreline marked by a 0.5 m high step on the hillside. Floating and grounded blocks of glacier ice were concentrated by the wind near the western edge of the lake and further icebergs lay stranded at heights up to 16 m above the lake shore (Fig. 1). As Sugden and others (1985) indicated, the level of the highest shoreline is controlled by a col on the west side of the lake basin. In 1974, there were silt cappings on bedrock surfaces on the floor of a channel through this col, indicating recent overspill of waters from the lake.

The ice margin abutting the lake was cliffed and cre-

vassed. It showed greatest disturbance towards the south side, suggesting a drainage tunnel in a similar location to that described by Sugden and others (1985). The lake probably drained several weeks before 24 July 1974, judging from the level of the water then compared with that immediately following the jökulhlaup in 1984.

While it is clear that the lake drains periodically, it is less certain that it does so annually, given the volume of water required to float the ice dam; a longer, possibly biennial cycle, seems more realistic. Also, the lake did not drain in 1985 (personal communication from D.E. Sugden).

*Nature Conservancy Council,
Northminster House,
Peterborough PE1 1UA,
England*

JOHN E. GORDON

21 April 1986

REFERENCE

Sugden, D.E., and others. 1985. A jökulhlaup near Søndre Strømfjord, West Greenland, and some effects on the ice-sheet margin, by D.E. Sugden, C.M. Clapperton, and P.G. Knight. *Journal of Glaciology*, Vol. 31, No. 109, p. 366-68.



Fig. 1. Ice-dammed lake at the margin of the inland ice near Søndre Strømfjord, West Greenland. Following lake drainage, stranded icebergs occur on the hillside between the lake shore and the col on the right that controls the level of the highest shoreline (24 July 1974).