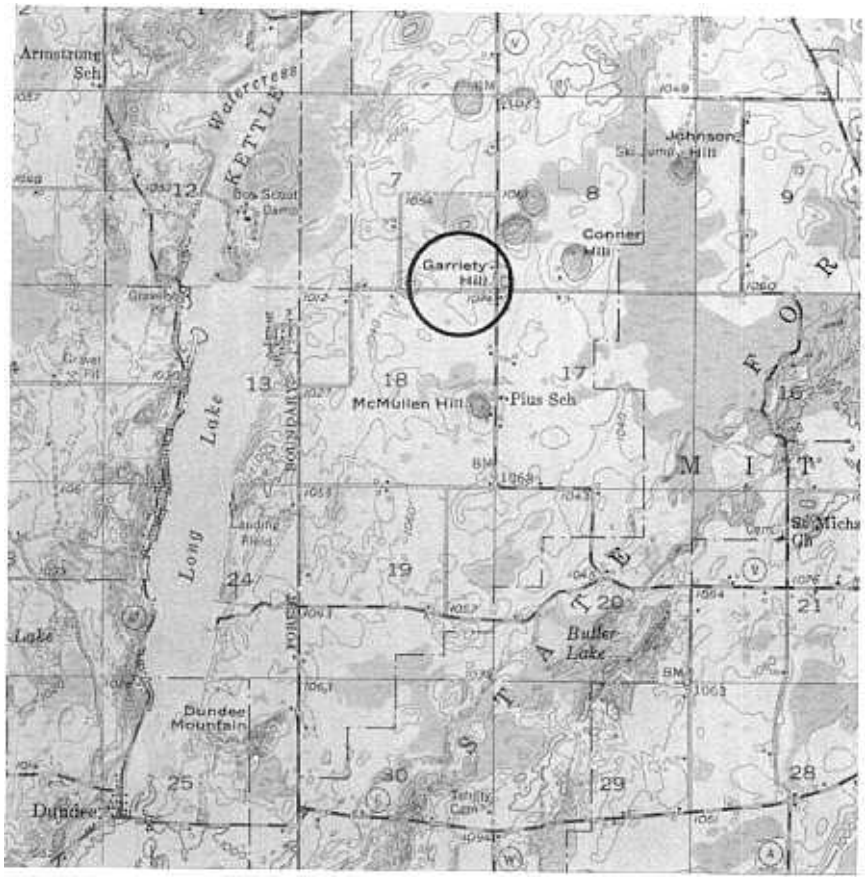
Title: Garriety Hill

Location: SW 1/4, Sec. 8, T. 14 N., R. 20 E., Kewaskum 15' Quadrangle, Sheboygan County. Park along E-W. road. Best exposure on south side of kame.



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Description: This is one of about a dozen excellent "moulin" kames in the central kettle moraine. Note the slope of the hill and the material in the exposure on the south side. Kames are composed of ice-contact stratified drift and this exposure is typical. The material shows some sorting (separation of different grain sizes) typical of water-laid sediment but much of the layering (bedding) is disturbed and tilted. There are also masses of poorly sorted till intermixed with the sorted debris. Most of the clasts (pebbles to boulders) are quite angular.

Significance: These materials tell us two things:

1. Because of the poor sorting and intermixed till, we know that the material was not carried by moving water very far. The angularity of the particles also suggests this.

2. The collapsed bedding is indicative of collapse after the sediment was deposited. The material was, therefore, deposited on or against glacial ice which later melted.

Depressions on the ice surface often form when the ice margin begins to retreat. When this occurs at crevasse intersections they form as near vertical shafts (moulins) which extend to the base of the ice. Differential melting then enlarges the depressions and because they are low, deposition of debris melting from the ice ocurs in them. After the surrounding ice has melted, the deposits form these hills called kames.

References: Alden, 1918; Black 1971, 1974