

# MONKTON FIELD PROBLEM

## GL201 - Fall 2000

### Materials

- 729 Instructions
- 443a Map of Monkton Quartzite
- 443b Snake Mountain section
- 445 Key for columnar section

### Purpose:

To define lithofacies in the Monkton Quartzite and to use them to interpret environments of deposition.

### Methods

You and a partner(s) will make a detailed columnar section of part of the Monkton exposed at Redstone quarry. The scale will be 1 meter = 10 cm (use graph paper part of handout). At the end of the field trip, put detailed columnar section in map drawer labeled GL 201 in BIH 419. During the week, make a composite section for the Redstone quarry from all the detailed sections. Do this on a single sheet of graph paper; the scale will be 2 meters = 1 inch. Before the report is due, get your own detailed section and put it or a copy in your report (check with field partner first!).

At French Farm, you will obtain information on the rock types and their thicknesses, from which you will draw a cross-section.

### Report

Introduction

Monkton Quartzite

Lithofacies:

describe each lithofacies (paragraph for each)

Localities: give thickness and lithofacies for each:

Redstone quarry, Burlington (note that neither bottom nor top of the Monkton is seen here)

French farm

Snake Mountain section (compiled from Rogers, '76 thesis)

Interpretation: give evidence and resulting interpretation:

environments of deposition

source area and facies (refer to diagram of facies)

geography - land-sea

## 2. Figures

- index map (mimeo) (443a)
- Redstone quarry - detailed columnar section (field notes)
- Redstone quarry - composite columnar section  
(make from all detailed columnar sections)  
(use lithologic symbols in column; use words in space to right; put in bar scale)
- French Farm cross-section
- photocopy of Janeann Rogers' section for Snake Mountain (443b)