Sherman Falls
-Virtual Field Trip-

Carolyn Eyles & Susan Vajoczki

Prepared by
Zachary Windus
and Liz Kenny
Directions:
McMaster University to Sherman Falls

From McMaster University turn right onto Main Street West towards Ancaster. Follow Main Street West by turning left at the major intersection just past the Main West Mall (travelling straight will take you onto Osler Drive, Dundas). Main Street West becomes Wilson Street as you reach the bottom of the escarpment. Follow Wilson Street up the south mountain access. Turn right at Montgomery Street (very short street – not labeled on map). At the stop sign, turn right onto Old Dundas Road. Follow Old Dundas Road down the escarpment and go straight at the stop sign that leads to Lions Club Road. Park on the shoulder. There is a wider space further down the road where a school bus can turn around. The falls are located on the left hand side and are approximately 250 m from the road. The trails (marked with a Bruce Trail Marker) lead from the road (at the bridge) along either side of the Ancaster Creek to the walking bridge and the falls.
McMaster University to Sherman Falls

Route of Travel

Source Data: DMTI Spatial Inc.
McMaster University 2003
Highlighted formations are visible at this site.
Stratigraphy Exposed at Sherman Falls

- Lockport Formation
- Rochester Formation
- Irondequoit Formation
- Reynales Formation
- Thorold Formation
Upper Stratigraphy

- Lockport Fm (Ancaster Member)
- Lockport Fm (Gasport Member)
- Rochester Fm
- Irondequoit Fm
The Lockport Formation forms the upper part of the gorge at this site.
All around the gorge, the Rochester Shale has been undercut by erosion, leaving a noticeable contact between this formation and the overlying Lockport dolostone. This undercutting results in the collapse of the overlying material and gives the escarpment its steep face.
This massive unit of dolostone can be seen around the gorge. At this location, however, it is slightly more fractured and jointed than at other outcrops along the escarpment.

At the waterfall, the Irondequoit Fm forms the prominent ledge upon which the person is standing.
Reynales Formation

Interbedded dolostones and shales of the Reynales Formation are not well exposed at this site, as they are largely covered by talus.
Interbedded sandstone and shale of the Thorold Fm are well exposed at the waterfall, but are buried by talus around the rest of the gorge.
The Waterfall Exposure

Due to the steepness of the valley walls and the extent of talus coverage, most of the geological units in the gorge are difficult to see. However, immediately adjacent to the falls, the units are easily visible and identifiable.

The Irondequoit Formation at this site forms the main bench in the middle of the waterfall, with the units above it having been eroded back.
Broken debris of various sizes litters the bottom of the waterfall; here, a large piece of the Irondequoit dolostone sits where it has fallen, as the velocity and amount of flow of the stream are insufficient to move such a large piece of rock.
Unlike many other streams, the Ancaster Creek flows naturally through the gorge, unimpeded by any anthropogenic modifications such as weirs, gabions, or artificial channels.
While the stream is fairly shallow at most points, there are certain areas where it can become quite deep without warning.
The gorge at Sherman Falls is heavily vegetated and covered by a fairly thick canopy of trees.
Vegetation at Sherman Falls

Vegetation at Sherman Falls
Narrow, steep-walled gorge close to Sherman Falls.
Talus slopes covering most of the lower formations.

Irondequoit Fm

Talus
Other features of the gorge include J-shaped trees which grow on the sides of the valley and indicate active slope creep.
The valley floor is littered with plant and rockfall debris, making hiking difficult in some areas.
Looking towards the bridge and the falls.
Due to its accessibility and the presence of many geological and geomorphological features, Sherman Falls is a site that used extensively for field work.
Downstream of the falls, Ancaster Creek meanders through the gorge.