Albion Falls
-Virtual Field Trip-

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McMaster University to Albion Falls

Route of Travel

Source Data: DMTI Spatial Inc.
McMaster University 2004
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 escarpment and turn left onto Rousseaux Street. This street becomes Mohawk Road and the Lincoln M. Alexander Parkway.
The 'LINC' to Albion Falls

Exit the Lincoln M. Alexander Parkway at Dartnall Road. Turn left (east) at the lights onto Stone Church Road. Follow Stone Church Road to Pritchard Road and turn left. At Mud Street turn left and follow a sharp curve past the top of Albion Falls. Turn right into the parking area approximately 100m from the bridge. Additional parking can be found next to the Old Mill Pond across the street.
Albion Falls
Features at this site...
Albion Falls...

- Red Hill Creek cascades over the Niagara Escarpment.
- An excellent location for stratigraphic logging of the Thorold through the Lockport Formations (Fm) near the falls and the Grimsby Fm approximately 500m downstream from the falls.
- Sedimentary structures (ripples, flute marks, cross-bedding, fossils) are observed near the falls. Soft sediment deformation features (flame structures, ball and pillow structures) are abundant within the Grimsby Fm downstream.
- During high water flow, the trail to the Grimsby Fm downstream may not be accessible.
Memorial – Albion Mills

Milling stone dedicated in recognition of the area’s early settlers. Located in the parking area North of the falls on Mud Street.
Albion Falls

Flows over the dolostone of the Lockport Fm.

Prominent ledge formed by the Irondequoit Fm.
Schematic Section of Albion Falls

Highlighted formations are visible at this site.

<table>
<thead>
<tr>
<th>FORMATION</th>
<th>ROCK TYPE</th>
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<tbody>
<tr>
<td>Lockport A</td>
<td>Dolostone Chert</td>
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<tr>
<td>Lockport G</td>
<td>Dolostone</td>
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<tr>
<td>Rochester</td>
<td>Shale (grey)</td>
<td></td>
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<tr>
<td>Irondequoit</td>
<td>Dolostone</td>
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<tr>
<td>Reynales</td>
<td>Dolostone</td>
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<tr>
<td>Thoroid</td>
<td>Sandstone and Shale (grey)</td>
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<tr>
<td>Grimsby</td>
<td>Shale (red)</td>
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<td>Siltstone</td>
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<td>Sandstone</td>
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<td>Cabot Head</td>
<td>Shale (grey)</td>
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<td>Limestone</td>
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<td>Manitoulin</td>
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<td>Whirlpool</td>
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<td>Queenston</td>
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Grimsby Formation

Irondequoit Formation

Reynales Formation

Thorold Formation

Grimsby Formation
Lockport Formation

Lockport Fm not well-exposed at this site due to vegetation cover.
Rochester Formation

Rochester shale beds are often poorly exposed.

Irondequoit Formation

Reynales Formation

1-1.5 m
Irondequoit Formation
Massive to crudely bedded dolostone with ‘vugs.’

Vugs – large pore spaces caused by volume changes during diagenesis (the process by which limestone is changed to dolostone).

Shell fragments within the Irondequoit Fm
Reynales Formation

Exposures on the north bank, downstream of the falls.

Contact between Reynales and Thorold Fms.

Lockport Fm
Irondequoit Fm
Reynales Fm
Thorold Fm

Exposures on the north bank, downstream of the falls.
Thorold Formation — Interbedded sandstone and shale

- Ripple structures (plan view)
- Wave rippled sandstone
Thorold Formation

Horizontally laminated sandstone interbedded with shale
Grimsby Formation

Contact between the Thorold and Grimsby Formations

Interbedded sandstone, siltstone, and shale

Flute mark on base of sandstone bed
Grimsby Formation

Wavy lamination and ripple cross lamination within Grimsby Fm.
Grimsby Formation

Loading structures at the base of the sandstone bed within the Grimsby Fm.

Sandstone ‘pseudonodules’ within shale
Ripple Structures

Ripples
Other sights...

Natural and unnatural debris at Albion Falls.
The area directly below the falls is littered with debris which has broken and fallen from the escarpment.
For Further Information…

For further information on the features that can be seen downstream of Albion Falls, please see the Red Hill Valley Virtual Field Trip.
Acknowledgements:

Maps Source Data: DMTI Spatial Inc.

Photographs by Ben Cowie, Luisa DaSilva, Liz Kenny, and Zachary Windus

Field assistance from Mark Francisco

Based on an earlier slide field trip prepared by Alvin Chan and Sandra Rolph