# NYSGA GUIDEBOOK DATABASE AVAILABLE AS AN EXCEL SPREADSHEET

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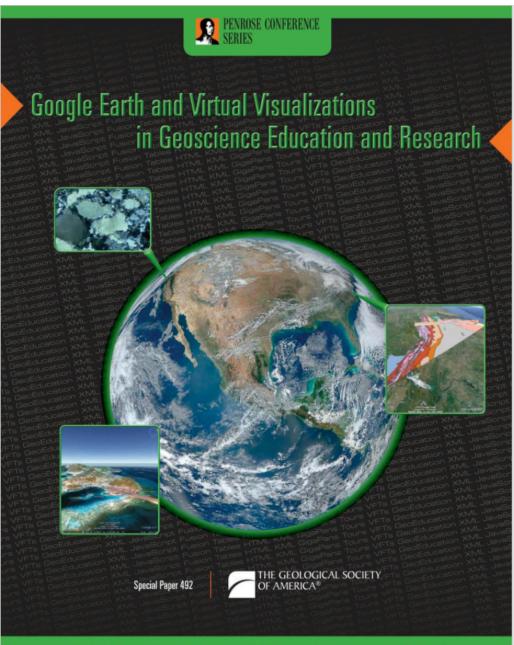


61 years of evolving thoughts ...about the same rocks

Complete instructions, useful for other Field Trip Guidebooks, can be found in GSA Special Paper 492:

Google Earth and Virtual Visualizations in Geoscience Education and Research

Whitmeyer, Bailey, DePaor and Ornduff, eds. 2012



Turn right at sign for Mohawk Campsites 300 yards before TeePee; bear right at Y.

48.1 STOP #1: The Cherry Valley Limestone outcrops for several hundred feet along the roadside and is one of the most extensive outcrops available for study. This location was chosen as the type section for the study conducted during the summer of 1968. The contact between the Cherry Valley and the Union Springs member below is gradational over a distance of 0.2 feet. The lowermost portion of the Cherry Valley contains abundant brachiopods and ammonoids. It is a medium grained dark gray skeletal limestone separated from the middle beds by a thin zone of Aulopora. The central unit is a nodular bed composed of medium grained limestone interbedded with argillaceous layers. The limestones, up to 0.6 feet thick, are broken into nodules; a case of sedimentary boudinage. The central unit is only slightly fossiliferous. The zone above the central unit is similar to the basal unit in that it contains a thin zone of Aulopora which separates it from the massive bed above. The uppermost unit of the Cherry Valley is a massive medium to coarse grained limestone with abundant orthocone rautiloids and brachiopeds. The brachiopods found in the permost layers vary from those found in the basal layers. The Cherry alley is gradational with the shales above which are extremely tossiliforous with brachiopods and bryozoans.



# John Cottrell 1972 Trip G

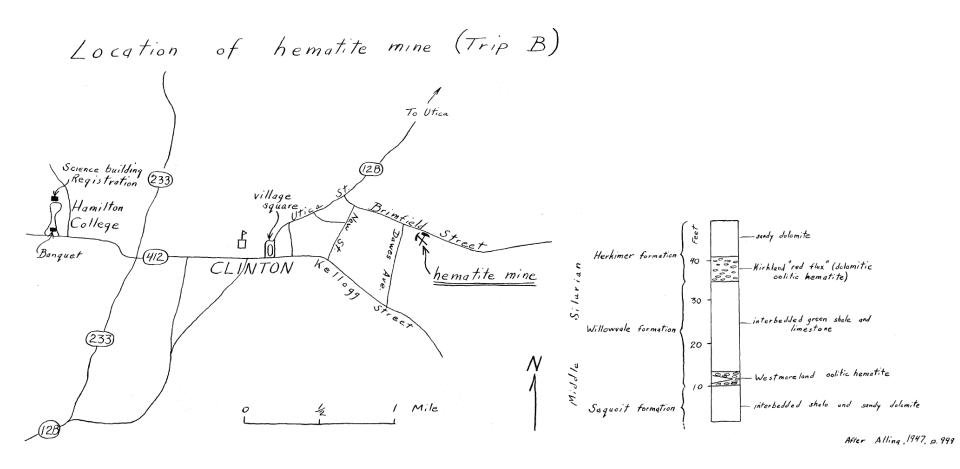
Stop #3. Lower to Middle Devonian airfall tephra beds, U.S. Rte. 20 cuts, near Cherry Valley, NY. (between ca. 42.821797°, -74.731025° to ca. 42.822202°, -74.723747°)

Roadcuts on the south side of Rte. 20 east of Rte. 166 expose a long, nearly continuous section of the Lower Devonian Kalkberg, Oriskany, Esopus and Schoharie formations, and the Middle Devonian Onondaga Formation. Additional outcrops to the east expose the Union Springs and Oatka Creek formations (Marcellus subgroup of Ver Straeten 2007b). See Figure 13 for more details.

Charles VerStraeten Gordon Baird Paul Karabinos Scott Samson Carlton E. Brett

2012 Trip A7

47.9



1960 Trip B went underground in the Clinton Metallic Paint Co. mine. The mine closed in 1963.

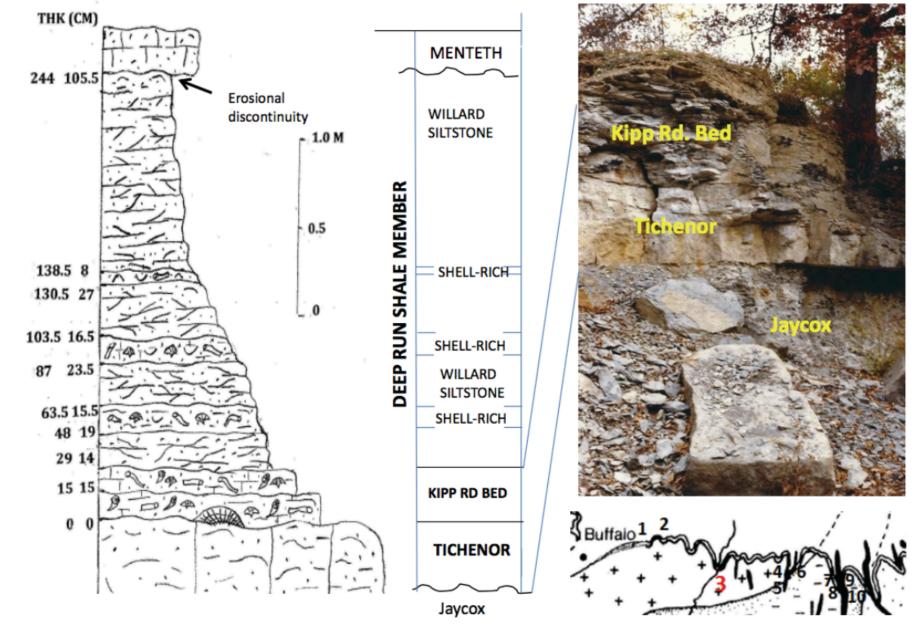
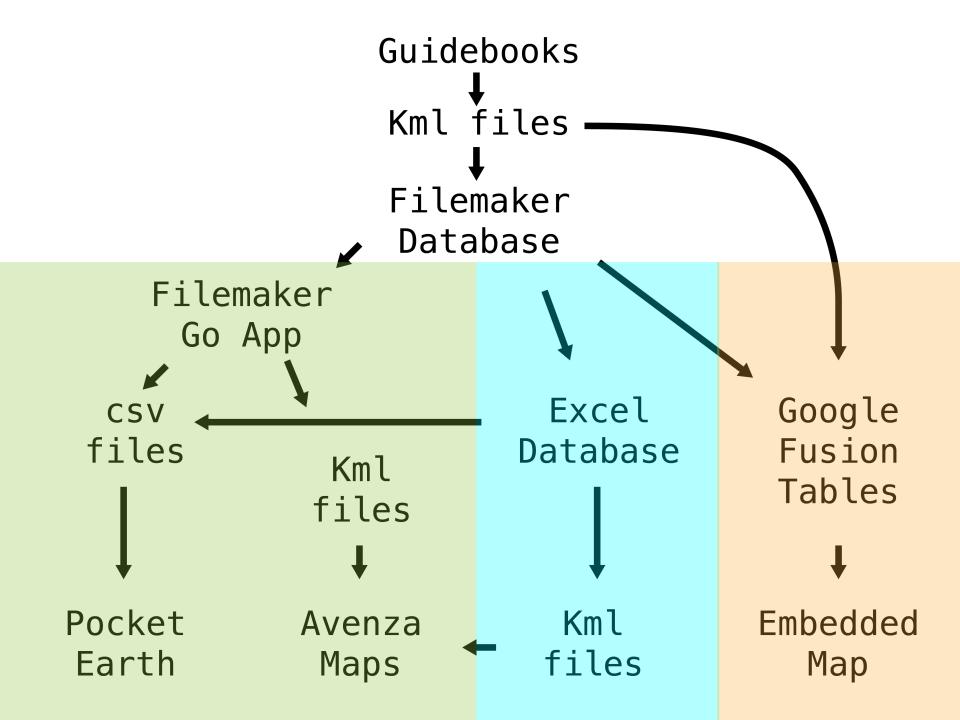


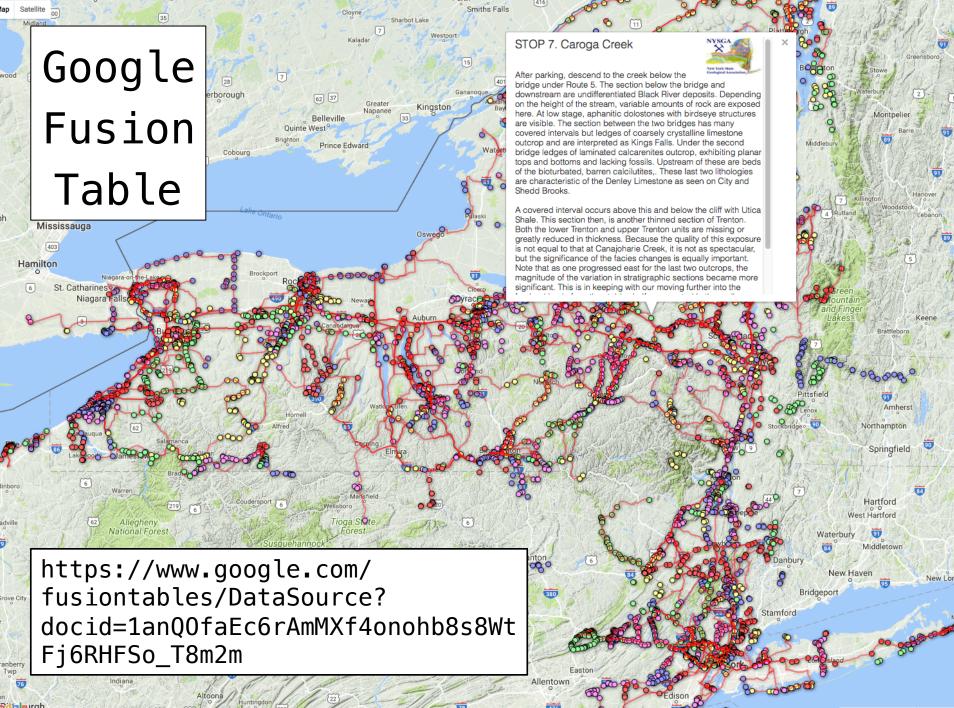
Figure 3. Generalized stratigraphic column of the Deep Run Shale Member at Jaycox Creek, Genesee River Valley.

Mayer, Baird and Brett, Trips A1 and B1, 2017



8 years of work, so far:

46 Guidebooks (1956 – 2001) 491 Paths (routes taken) 7,932 Placemarks 2,897 Stops 5,035 Views (180,517 lines of code and text)



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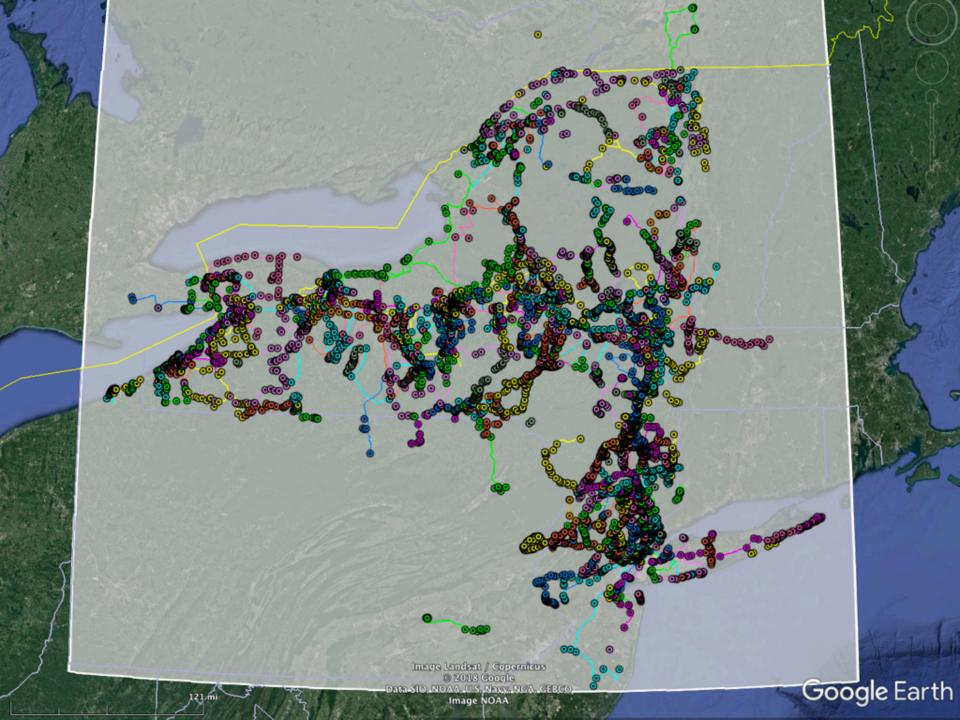
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shoretace sequence. The 2nd shoretace sequence displays planer laminated beds typical of the shoreface sequence but more noticeably contains a large olistrolith of sandstone surround by a debris flow indicative of a syndepositional mass flow. The top of the 2nd shoreface sequence occurs near the main falls. This sandstone displays small dunes (amplitude- ˜ 0.5m, wavelength ˜ 2.0 m) with symmetrical ripples. The 3rd sandstone sequence forms the upper part of the cascade; the most noticeable feature is the transgressive lag that caps the falls. This lag deposit contains large clasts of white, cloudy guartz as well as numerous brachiopod shell fragments and large red silt clasts. The underlying sandstone contains <i>Rhizocorallium, Arenicolites</ i> and <i>Thalassinoides</i>, typical of a <i>Glossifungites</i> firmground. Overlying the 3rd shoreface sequence is the thick interbedded sequence that separates the lower sandstone packet from the upper sandstone packet (Fig. 6B,C).

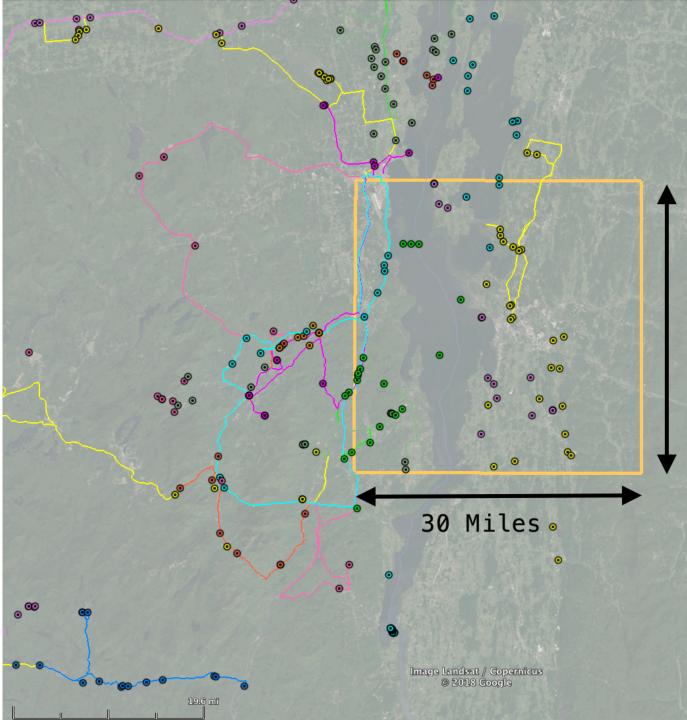
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Below the waterfall, the vertical and overhanging outcrop on the east side of the creek displays a characteristic of FIDs. Some of the N-striking fractures exhibit small stratigraphic throw (on the order of a few cm). These step faults may be a small scale example of the step faults that are

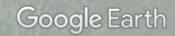
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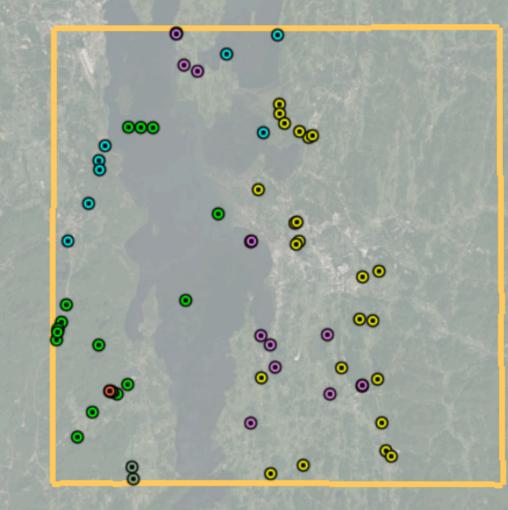
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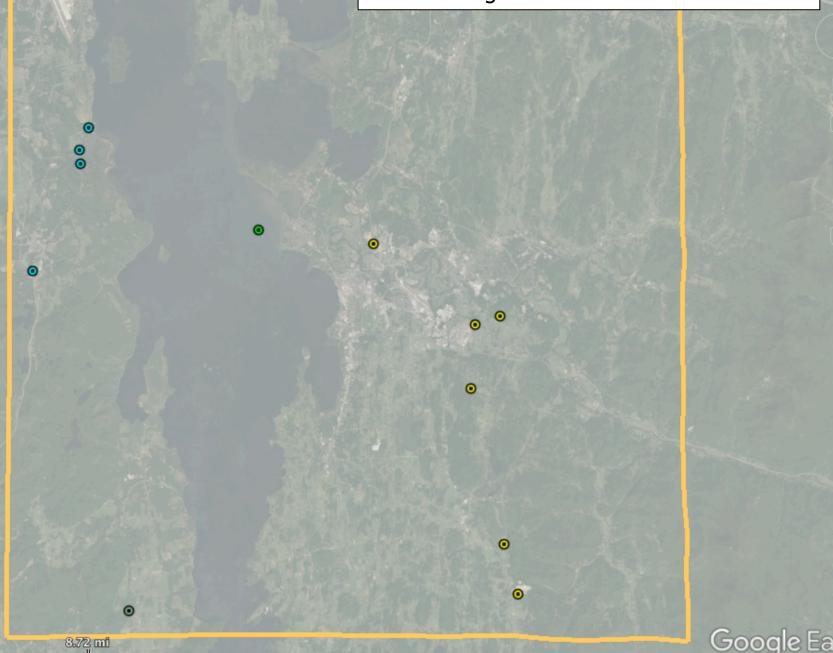
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 and 1 percent clay. The mean grain size is 2 phi, the standard deviation just over 1 phi. Note the absence of an
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  <name><![CDATA[STOP 2. Lake New York beach-spit and delta (No.2, Figs. 1 and 2)]]></name>
  <description><![CDATA[Gravel pits are in beach material; slightly lower bench to west is composed of deltaic
 sand which correlates with No.4, Figures 1 and 2.<br /><br />])</description>
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All the placemarks from the database that fall within a 30 mile square, centered on Burlington.

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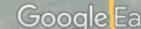
### STOP 3. Dunham subtidal and platform margin facies.



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Pull off about 100 yards beyond the speed limit sign on this long roadcut. At the base of this outcrop (west end) there are good exposures of the subtidal facies of the Dunham with the characteristic mottled texture, thought to be produced by burrowing. Burrow mottles are irregular in shape, 1 to 8 cm in diameter, and lack sand. The segregation of siliciclastic material is one property that implies bioturbation produced this mottled texture. Between the white burrows the red matrix is very clay and sandrich, and Stone and Dennis (1964) attribute this color variation to differing concentrations of trace metals. Specimens of *Salterella conulata* (Mehrtens and Gregory, 1983) were found in this facies. The platform margin facies is exposed on the east end of the same outcrop. This facies is composed of chaotically bedded, laterally discontinuous horizons of breccia in a sandrich dolomite matrix. Clast composition is highly variable, and includes chert pebbles, sandstones, sandy-dolostones, and dolomitic sandstones. Breccia beds are structureless and very poorly sorted. Graded beds of sandstone are also present.

> Charlotte J. Mehrtens NYSGA 1988 Trip A4 Stop 3.00



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44.65631978	-7	3.3370172	<placemark id="2.00"> <styleurl>#msn_VioletUrl&gt; <name><![CDATA[STOP 2. Lessor 's Quarry]]></name></styleurl></placemark>			
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			Limestone. The quarry contains some of the fir evidence of pressure so in western Vermont. The cleavage (S <sub>1which is discontinuous a wavy, is a classical press solution feature with we developed selvedges the truncate fossils and offs bedding. A small anticlin</sub>	olution ne b>), and sure vell nat set		

#### STOP 2. Lessor 's Quarry



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This quarry is located in the fossiliferous Glens Falls Limestone. The quarry contains some of the finest evidence of pressure solution in western

Vermont. The cleavage (S<sub>1</sub>), which is discontinuous and wavy, is a classical pressure solution feature with well developed selvedges that truncate fossils and offset bedding. A small anticline at the south \_edge of the quarry contains adjustment faults at its hinge that end along cleavage zones with thick clay selvedges.

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The major structures in the quarry are bedding-plane thrust faults. These faults are marked by calcite layers with west-trending slickenlines and a fault - zone cleavage (St).

Near the larger faults the S<sub>1</sub> cleavage is rotated (Sr) toward the plane of the fault. Note that both St and Sr dip gently to the east and indicate that movement on the bedding faults was to the west. The St cleavage forms as a result of simple shear on the faults. The anticline along the south wall and edge of the quarry is formed from a small duplex. Unfortunately, the best evidence for this duplex has been excavated.

On the northeast side of the quarry (fig. 6) a syncline and an associated blind, synformal thrust fault are truncated by the major thrust fault that is continuous across the north wall of the quarry. The origin of this structure is not clear, but it is thought to be associated with a duplex or ramp below the level of the quarry floor.

Rolfe S. Stanley NYSGA 1988 Trip A3 Stop 2.00



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#### 1987 New Paltz

#### 1988 Plattsburgh

	Entire Guidebook	All				
	Table of Contents					
	A1 - Aspects of the Glacial Geology of Keene and Lower Ausable Valleys, Northeastern Adirondack Mountains, New York	A1				
	A2 - Geology and Petrology of Mounts Johnson & StHilaire, Monteregian Hills Petrographic Province	A2				
(	A3 - Foreland Deformation as Seen in Western Vermont					
	A4 - The Cambrian Platform and Platform Margin in Northwestern Vermont	A4				
1000	A5 - Grenville Calc-Silicate, Anorthosite, Gabbro, and Iron-Rich Syenitic Rocks From the Northeastern Adirondacks					
1988	A6 - Metasedimentary and Metavolcanic Rocks of the Ausable Syncline,					
lattsburg	hNortheastern Adirondacks	A6				
	A7 - Iron Industry of the Eastern Adirondack Region	A7				
	B1a - Late Wisconsinan Lacustrine and Marine Environments in the Champlain Lowland, New York and Vermont	B1a				
	B1b - Late Quaternary Glacial to Marine Successions in the Central St. Lawrence Lowland	B1				
	B2 - Dikes of the Northeast Adirondack Region - Introduction to their Distribution, Orientation, Mineralogy, Chronology, Magnetism, Chemistry, and Mystery	B2				
	B3 - Middle Ordovician Stratigraphy and Sedimentology - Southern Lake Champlain Valley					
	B4 - Geology of the Wiusboro Wollastonite Mine	B4				

#### 1989 Middletown Orange County Community College

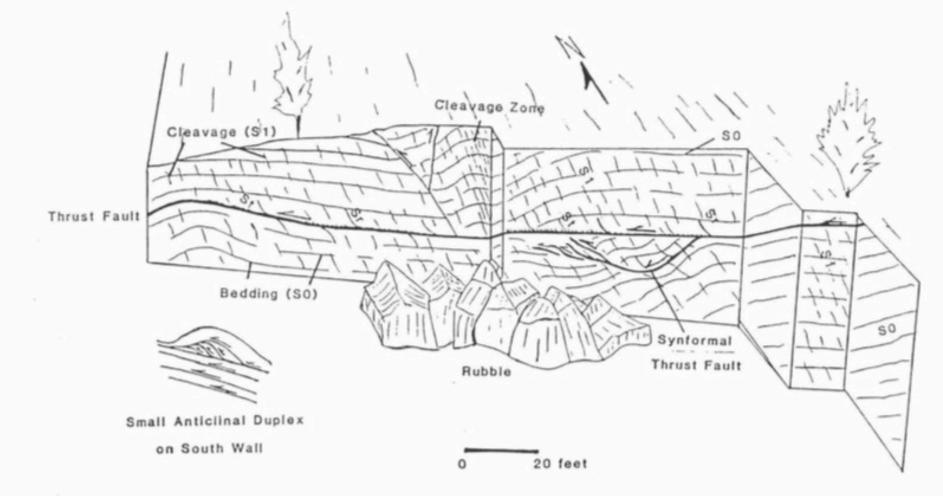
#### 1968 Flushing

#### 1969 Plattsburgh

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	Table of Contents	]				
	A- Sedimentary Characteristics and Tectonic Deformation of Ordovician Shales NW VT	A				
	B- Recent Sedimentation and Water Properites, Lake Champlain					
	C- Bedrock Geology of the southern Portion of the Hinesburg Synclinorium					
1969	D- The Late Pleistocene of the Champlain Valley, VT					
Plattsburgh	E- Stratigraphy of the Shazy Group (Mid Ordovician) in the Northern Champlain Valley	E				
	F- The Paleoecology of Chazyan (Lower Middle Ordovician) Reefs or Mounds	F				
	G- Surficial Geology and Geomorphology of Whiteface Mountain and Keene Valley	G				
	H- Meta-Anorthosite of the Jay-Whiteface Nappe, NE Adirondacks, NY	Н				
	I- Deglacial History of the Lake Champlain-Lake George Lowland	1				
	J- Surficial Geology of the International Lead Company McIntyre Development at Tahawas, NY	J				

#### 1970 Cortland

1971 Potsdam



Stanley (1987)

#### THRUST FAULTS AND RELATED STRUCTURES

AT

LESSOR'S QUARRY, SOUTH HERO ISLAND, VERMONT

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http://ottohmuller.com/nysga2ge/Trips1956-1997.html

Guidebook Chapters from 1998-Onward

http://ottohmuller.com/nysga2ge/Trips1998-Onward.html

Excel Database and support files:

http://ottohmuller.com/nysga2ge/ExcelDatabase.html

Special thanks to Alexander Bartholomew of SUNY, New Paltz, for scanning many of the Guidebooks!