



**Department of Geology and  
Environmental Science  
Hartwick College  
and  
Department of Earth Sciences  
State University of New York College  
at Oneonta  
Oneonta, New York**

**New York State  
GEOLOGICAL ASSOCIATION  
*Field Trip Guidebook***

**75<sup>th</sup> ANNUAL MEETING  
SEPTEMBER 12-14, 2003**

# **NEW YORK STATE GEOLOGICAL ASSOCIATION**

**75<sup>th</sup> Annual Meeting**

**September 12-14, 2003**

**Eric Lee Johnson, Editor**

## **FIELD TRIP GUIDEBOOK**

**HOSTED BY:**

**Geology and Environmental Science Department  
Hartwick College  
Oneonta, New York  
13820  
and**

**Department of Earth Sciences  
State University of New York  
College at Oneonta  
Oneonta, New York  
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## DEDICATION

This guidebook is dedicated to all of those who helped make this meeting possible. Special thanks are given to Dr. Jim Ebert at SUNY Oneonta for his tireless efforts in making the arrangements for the meeting, and to Dr. Harrison Schmitt for coming and helping us celebrate NYSGA's 75<sup>th</sup> anniversary. Finally, this meeting would not have been possible without the dedication and hard work of all of the field trip leaders who have spent countless hours both in the field and at the keyboard constructing the fabulous array of trips presented on the following pages.

*The tops of mountains are among the unfinished parts of the globe, whither it is a slight insult to the gods to climb and pry into their secrets, and try their effect on our humanity. Only daring and insolent ones, perchance, go there.*

*Henry David Thoreau*

*Cover photo: Overlooking the Hudson Valley at the Mountain House site: North Lake, Catskill Park.*

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## ***Preface and Acknowledgements***

It is a great pleasure to welcome you to the 75<sup>th</sup> annual meeting of the NYSGA. Hartwick College and the State University of New York College at Oneonta are this year's host institutions and we hope that you take some time to visit both schools a tour our respective Geology Departments.

This year's field trips cover a broad array of topics and regions and will take you from the depths of caves to the tops of Catskill and Adirondack peaks. The range of topics is certainly varied including the fields of metamorphic and igneous petrology, structural geology, sedimentology, hydrology and paleontology.

In honor of the 75<sup>th</sup> anniversary of NYSGA, we are fortunate to have Dr. Harrison Schmitt as our keynote speaker. Having walked on the moon, Dr. Schmitt brings a very unique perspective on geology and we look forward to hearing his address. It is fitting that a lunar geologist present at NYSGA, since both the moon and the State of New York have one thing in common; terrific exposures of anorthosite.

NYSGA meetings are unique and refreshing in that they focus on learning about geology by going out into the field and seeing it first hand. Because of this focus, NYSGA depends on the many individuals who have dedicated themselves to planning and running field excursions. Their tireless efforts are what make NYSGA meetings so enjoyable and valuable. I thank all of the authors and trip/workshop leaders, for their hard work.

I would also like to thank Dr. Jim Ebert for arranging the meeting (as well as being a trip leader and author of multiple field guides) and for his help in making this field guide a reality. Jim served as the field guide editor for the 1991 NYSGA meeting held in Oneonta, and his expertise, advice and calming influence helped me immensely. Thanks Jim.

In addition, I thank the staff at SUCO and Hartwick College for all of their help and technical support, and finally, I thank my students who make what I do so enjoyable.

Eric Lee Johnson, Chair  
Department of Geology and Environmental Science  
Hartwick College  
Oneonta, New York 13820



**HARTWICK**  
est. 1797

**Dr. Eric Lee Johnson**  
Field Guide Editor  
New York State Geological Association



**Dr. James Ebert**  
President 2003 Meeting  
New York State Geological Association