

#### **Touro Scholar**

Lander College for Women - The Anna Ruth and Mark Hasten School Publications and Research

Lander College for Women - The Anna Ruth and Mark Hasten School

2014

## An Unusual Occurrence of Arthrophycus Alleghaniensis(?) on the Shawangunk Ridge, Lower Mid-Hudson Valley, New York

Howard R. Feldman Touro College, howard.feldman@touro.edu

**Alexander Bartholomew** 

Beryl Kahn

Follow this and additional works at: https://touroscholar.touro.edu/lcw\_pubs



Part of the Paleontology Commons

#### **Recommended Citation**

Feldman, H. R., Bartholomew, A., & Kahn, B. (2014). An unusual occurrence of Arthrophycus alleghaniensis(?) on the Shawangunk Ridge, lower mid-Hudson Valley, New York. Geological Society of America Abstracts with Programs, 46(2), 81.

This Abstract is brought to you for free and open access by the Lander College for Women - The Anna Ruth and Mark Hasten School at Touro Scholar. It has been accepted for inclusion in Lander College for Women - The Anna Ruth and Mark Hasten School Publications and Research by an authorized administrator of Touro Scholar. For more information, please contact touro.scholar@touro.edu.

### Northeastern Section - 49th Annual Meeting (23-25 March)

Paper No. 3

Presentation Time: 8:00 AM-12:00 PM

# AN UNUSUAL OCCURRENCE OF ARTHROPHYCUS ALLEGHANIENSIS(?) ON THE SHAWANGUNK RIDGE, LOWER MID-HUDSON VALLEY, NEW YORK

**FELDMAN, Howard R.**, Biology Department, Touro College, 227 W. 60th Street, New York, NY 10023, BARTHOLOMEW, Alexander J., Geological Sciences, SUNY College at New Paltz, New Paltz, NY 12561 and KAHN, Beryl, Division of Paleontology (Invertebrates), American Museum of Natural History, 79th Street at Central Park West, New York, NY 10024, feldspar4@optonline.net

The Shawangunk Formation is a medial Silurian conglomerate that crops out from near Rosendale, south through Wurtsboro, New York, High Point State Park and the Delaware Water Gap in New Jersey, and at Lehigh Gap, Pennsylvania after which it continues into Maryland and Virginia. The formation overall is interpreted to primarily represent a braided stream environment with flowage from mountains to the east that arose during the Taconic Orogeny into a basin toward the west. The trace fossil Arthrophycus was found in the upper-middle part of the formation on the Shawangunk Ridge at Mohonk, near New Paltz, New York. Arthrophycus is normally found on the bottom of beds, however these specimens occur in place on the top of a bed. The trace consists of simple burrows lacking in ornamentation and medial ridge due to weathering; the cross sectional outline is not preserved. Arthrophycus is extremely rare in the Shawangunk Formation, with the only previous know occurrence of the trace reported in a single reference from 1928. While it is possible that the trace maker was terrigenous, the depositional environment of these traces was likely estuarine. Sea level rise or tidal ebbs and flows would have enabled marine burrowers to form traces in the conglomerate which, in these beds, is sandier with no large pebbles. This is supported by the occurrence of eurypterids in the formation that were euryhaline and lived in a wide range of salinities.

Session No. 39--Booth# 9

Paleontology / Paleoclimatology / Paleoceanography / Paleoecology (Posters)

#### Monday, 24 March 2014: 8:00 AM-12:00 PM

#### Freedom Hall A (Lancaster Marriott at Penn Square)

Geological Society of America Abstracts with Programs. Vol. 46, No. 2, p.81

© Copyright 2014 The Geological Society of America (GSA), all rights reserved. Permission is hereby granted to the author(s) of this abstract to reproduce and distribute it freely, for noncommercial purposes. Permission is hereby granted to any individual scientist to download a single copy of this electronic file and reproduce up to 20 paper copies for noncommercial purposes advancing science and education, including classroom use, providing all reproductions include the complete content shown here, including the author information. All other forms of reproduction and/or transmittal are prohibited without written permission from GSA Copyright Permissions.