

GeoConnections[©]

SPRING 2013 FIELD TRIP ANNOUNCEMENT

THE GLACIAL GEOLOGY OF THE CENTRAL CONNECTICUT VALLEY

April 20, 2013, Trip Leader, Janet Stone, USGS

From north to south, and east to west, all across the State of Connecticut, the Pleistocene glaciers left their indelible mark. Shaping the landscape, the great ice-sheets deposited an incredible variety of glacial deposits including the laminated clays of glacial Lake Hitchcock, thick banks of outwash sand and gravel, compact clay rich tills, and countless glacial boulders strewn across the countryside. Since the colonial times the people of Connecticut have been both challenged and enriched by the glacial landforms. Today, the glacial deposits of the Connecticut Valley are valuable natural resources used for concrete and asphalt aggregate, construction fill, clay resources, and groundwater aquifers.

Join us on Saturday April 20 (rain or shine) for a tour of the glacial geology of eastern Connecticut! We will meet at 8:30 am at Dinosaur State Park in Rocky Hill, Connecticut., and then proceed to stops in Rocky Hill, Glastonbury, Portland, and other nearby locales. With decades of experience mapping and analyzing the glacial deposits of Connecticut, USGS geologist Janet Stone will be sure to give us the "inside scoop"! Don't forget to join us for our post-trip BBQ at Dinosaur State Park!

For more information and to register, visit the GSC on-line at: geologicalsocietyofconnecticut.org
or email: gscinfo@geologicalsocietyofconnecticut.org



From the... Presidents Desk

The GSC Board of Directors held elections in January 2013. With the expiration of my term --four wonderful years of serving the Connecticut geological community--I passed the GSC presidential rock hammer to Ralph Lewis, former Connecticut State Geologist. Thanks to everyone who supported the GSC during its formative years! With a solid start, we are off to a bright future! I'm signing off as President, but will continue as an active member of the GSC Board of Directors!

~Janet R. Stone (President 2009-2012)

With the expiration of Janet's term --four successful years of serving the Connecticut geological community--the GSC shovel was passed to me! I'm honored to be elected President of the GSC for the next term.

Under Janet's leadership, the GSC Board of Directors was assembled, the Society was incorporated, the GSC By-laws and Constitution were drafted, and the annual program of a Fall meeting and Spring field trip were initiated. Thank you for your inspired service Janet!

In March 2012, the GSC was a sponsor of the Geological Society of America, Northeast Section meeting in Hartford. Our booth was a popular spot to meet and greet colleagues and friends.

The June 2012 spring field trip featured tours of the geology of several Connecticut vineyards (including Sharpe Hill and others). The well-attended field trip included wine tastings for the GSC geo-oenologists and many participants purchased delicious local wines directly from the vineyards! The trip was capped off by a nice feast at Dinosaur Park. A fine time was had by all!

On Friday November 16 the 2012 Annual Meeting was held at Eastern Connecticut State University. More than 75 members and guests enjoyed fine food, a great venue, and Janet Stone's interesting lecture on the glacial geology of Connecticut.

Be sure to join us for our 2013 spring field trip featuring the glacial geology of the central Connecticut Valley, presented by Past-president Janet Stone !

~Ralph Lewis

Annual Meeting Report:
The Geological Society of Connecticut
Annual Fall Meeting - November 16, 2012

We had an amazing fall meeting hosted by the Dept. of Environmental Earth Sciences at Eastern Connecticut State University! More than 75 members, students, and friends attended. Everyone enjoyed the great food and camaraderie!

Dean Carmen Cid of ECSU addressed the gathering and congratulated the GSC and its members for all the great energy and enthusiasm she saw at the meeting. Dr. Cid also encouraged the GSC members to look toward the future by thinking about innovative programs and initiatives that will promote the goals of the GSC. According to Dr. Cid, "The sky's the limit!"

The first Joe Webb Peoples Award was given to Dr. Jean Crespi of UConn for her tireless efforts coordinating the March 2012 Geological Society of America Northeastern Section meeting in Hartford. Thanks to Jean's work the NEGSA meeting was an one of the most well attended in years and an outstanding success. Congratulations, Jean!

Janet Stone of the USGS gave a fascinating talk on the glacial geology of Connecticut to a packed house. Her talk highlighted ongoing research into the Pleistocene geology of the state, and the many world class examples of glacial deposits. We are looking forward to the Spring 2013 glacial geology trip to sites in the central Connecticut Valley on Saturday April 20!

Look for a full meeting report and photos in our next issue of *GeoConnections*... - ed.

A few pics from the Fall 2012 meeting...



Ralph Lewis presenting the first Joe Webb Peoples Award!



A packed house for Janet Stone's fascinating presentation!

COMMITTEE REPORTS

**The clock is ticking...
 Our 2013 membership drive is underway!**

Help us reach our membership goal for 2013!

Your support allows us to continue bringing you exciting meetings and field trips!

Time to renew? Wish to join the GSC?

It only takes a minute. . .

using Paypal on the GSC website...

...you do not have to be a Paypal member to pay by credit card!

~ ed.



This Just In...

From the Communications Committee

Providing timely news about GSC events and activities, as well as articles on a wide range of topics of geological interest, our newsletter **GeoConnections: News and Views From the Geological Society of Connecticut** is published bi-annually in April and October. **GeoConnections** is available online at:

<http://www.geologicalsocietyofconnecticut.org/publications>

We welcome your short submissions of items of interest to our geoscience community, including research reports, announcements, professional development, college department profiles, photos, and more. We plan on adding many new features in the months to come!

Our web site continues as our main means of communicating with our members and the world at large, and we are looking at adding a secure area for members to share photos and information.

We request that you use our PayPal link on the web to pay for membership dues, meeting fees, and other items as they become available. You do not need to be a PayPal member to use this service.

~Peter LeTourneau

MEET THE BOARD OF DIRECTORS

Officers (2013)

President	Ralph Lewis
Vice President	Peter LeTourneau
Secretary	Camille Fontinella, Drew Hyatt
Treasurer	Margaret Thomas

Members-at-Large

Margaret Enkler
 Mark Lewis
 Fritz Moritz
 Janet Stone
 Mike Wizevich

HOW TO CONTACT US:

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Events Report

Rocking Hartford!

**The Connecticut Geological Society
at the
Geological Society of America
Northeastern Section Meeting**

The GSC was a proud sponsor of GSA's Northeastern Section 47th Annual Meeting, held 18-20 March 2012. Celebrating 200 years of northeastern geology, hundreds of geologists shared their knowledge and enthusiasm about the fascinating geology of New England and adjacent regions.

GSC volunteers at our booth greeted friends old and new and recruited a number of new members!

**3rd Annual GSC Fall Meeting
Yale University
Friday November 4, 2011**

Even the widespread power outages from the surprise Halloween snowstorm could not stop our intrepid members from attending the 3rd Annual GSC Fall Meeting held at Yale University!

More than 70 members and guests gathered with old friends and new in the Geoscience building and the Peabody Museum. A pre-meeting behind the scenes tour of the historic Peabody Museum gave our members a rarely-seen peek at the fossil treasures from the collection.

Dr. Derek Briggs, the keynote speaker, spoke on *Extraordinary Fossils: Windows on the History of Life on Earth*. His captivating lecture focused on the Pre-Cambrian fossils of the Burgess Shale--the early ancestors of all the major extant phyla.



***In the treasure chest!
Behind the scenes in the Peabody collections.***

GSC 2012 Spring Field Trip *Connecticut Terroir*



The geology and soils of vineyards in eastern Connecticut!

On Saturday June 16, 2012, Master vintner, Howard Bursen of Sharpe Hill Vineyards (Pomfret), and soil scientist Lisa Krall led our discussions on the effect of different terroirs (soil types and microclimates) on grape cultivation and wine making.

A great time was had by all and many enjoyed the post-trip BBQ and wine tasting! Thanks to all the organizers, presenters, and attendees for a GREAT trip!



Photos: Ralph Lewis

JUNE 2011 FIELD TRIP HIGHLIGHTS:

Our Spring 2011 Field Trip, ***Deciphering the past from the present: The Late Paleozoic tectonic evolution of eastern New England revealed in the metamorphic rocks of eastern Connecticut*** presented by **Dr. Robert Wintsch** of Indiana University was a great success. GSC members enjoyed touring the fascinating Paleozoic metamorphic rocks of eastern Connecticut with their friends and colleagues.

Dr. Wintsch showed the group how fine details in the structure and composition of the high-grade metamorphic rocks reveal clues to the tectonic evolution of the Appalachian terranes in eastern Connecticut.

GSC "on the rocks" in eastern Connecticut.



"Can anybody hear me? Bob entertaining the crowd."



"Hey you! Put your hands up and step away from the dike!"



"Man...these rocks really went through the wringer!"



RESEARCH CORNER

*Digging for Dinos...***Uncovering the Buried Trackway
at Dinosaur State Park**

by Meg Enkler

Environmental Education Coordinator
Dinosaur State Park

As most of you are probably already aware, the tracks on display at Dinosaur State Park represent only 25% of what is actually on site. Discovered over 45 years ago, the Rocky Hill site has over 2,000 dinosaur footprints. The tracks are almost all Eubrontes, which is the Connecticut State Fossil. They were left behind by a group of carnivorous dinosaurs in the early Jurassic Period. No skeletal material was found at the park but based on the size and shape of the tracks it is speculated that the track maker was similar to Arizona's *Dilophosaurus*. This dinosaur trackway is a registered National Natural Landmark. There are two distinct track areas— one with about 600 tracks and a second with 1,500. This larger track area was never covered by a building. When the park was opened to the public in 1968 the smaller area (now on display) was covered by the infamous “bubble building” until the present dome was built in 1977.



The first cut is the deepest...Beginning the buried trackway excavation.

The larger track area was reburied in 1976 after it started to show signs of deterioration. At present, visitors are only able to view a black and white photomosaic of the 1,500 tracks created by the Park's first Director Sid Quarrier. This is on display at the entrance to the main exhibit area. The surface was covered as a protective measure and has been hidden from view (and scientific) study since then. The protective cover consists of a

layer of plastic, covered by 2 inches of sprayed polystyrene foam, which was buried with 3 to 8 feet of fine-to medium-grained sand and a thin soil at the surface.

In a few short years we will celebrate the 50th anniversary of the discovery of the tracks. To mark this important milestone, a small group of us, led by Hugo Thomas, have been meeting to explore the possibility of uncovering the buried tracks and restoring them to public view by enclosing them in a building by August of 2016.



Pick and shovel work...carefully removing the granular fill.



A happy Dr. Steinen (watch the shovel on that foot, Randy!)

On November 14, 2011, a group of State Park Staff, members of the Scientific Advisory Board, former long-time Park Director Richard Krueger, and others gathered at the park to take a look at the long-buried trackway. The spot to begin digging was selected in consultation with Sid Quarrier. Staff from DEEP Support Services operated the backhoe.

RESEARCH CORNER...continued.

Our initial location was too wet to continue digging so we had to move uphill in search of an area that was drier. The final trench was 24 feet long. At the north end of the trench, the backhoe exposed the yellow foam. Digging with heavy equipment then stopped and we removed the foam and plastic sheeting with shovels and by hand.



Dr. Steinen and Central Conn. State student Chris LaBonte_ carefully uncovering the foam and plastic sheeting layer.

About 37 inches below the surface, a painted track emerged. Several of the pathways were painted (only the outline of the tracks) on the larger trackway in the early days of the Park. We proceeded to expose a small area above that track – another few feet. The consensus from all present was that the tracks were in excellent condition, virtually unchanged from the date of burial. Rich Krueger and Nick McDonald were able to determine exactly which track we had exposed by looking at the general location of the track, the unique paint job on this particular track and the absence of other tracks in the immediate area.



Success! Dr. Wizevich and Chris LaBonte uncover a track buried since 1976!



An uncovered track looks in fine shape. The track outline was painted in the early 1970's when the trackway was first exposed.

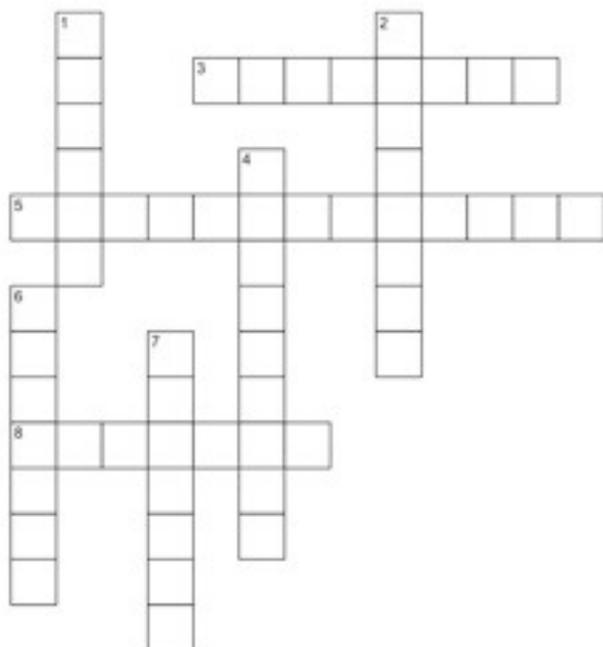
Once we were able to determine that the tracks were in excellent condition, the foam and plastic covering were replaced and the area was reburied to prevent any damage from the approaching winter. Our next step will be to investigate the cost of installing a building over this area. The priority will be to have a climate controlled area and a walkway allowing viewing by the public. We have considered pursuing a pre-fabricated building that could be erected quickly, both minimizing the time that the track area would be exposed to the weather and reducing construction costs. We will keep GSC members updated on any new developments on this exciting project.



Article author and Environmental Education Coordinator of Dinosaur State Park proudly showing off Connecticut's most unique buried treasure!

GSC PUZZLE PAGE

Connecticut Geology



ACROSS

- 3 You can't put your finger in this dike
- 5 The "Halloween" gneiss
- 8 _____ Hill Anticlinorium

DOWN

- 1 A very "noisy" place
- 2 This famous line is found in western Conn.
- 4 Not the chair, the lake named after this scientist
- 6 Apatosaurus lives here
- 7 Meriden's _____ Hills

Answers in the next issue of

GeoConnections

Calendar

April 20, 2013

GSC Spring Field Trip

The Glacial Geology of the central Connecticut Valley, presented by

Janet R. Stone, USGS

Please visit our web page for details and registration.

**GeoConnections
News and Views
from the
Geological Society of
Connecticut**

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