Rolling Rocks

Today’s Colloquium

Today’s colloquium will be given by Dr. Chris Reinhard from Georgia Tech. His talk starts at 3:30 pm in Braunstein 201 and is titled: “The evolution of Earth’s oxygen cycle: Cause and effect” There will be coffee and tea set up outside 201 Braunstein 10-15 minutes before the talk starts and refreshments in the Rug Room following talk.

Carl’s Blitzkrieg

Carl Brett spent three weeks of study of biostratigraphy, sequence and chemostratigraphy of Paleozoic rocks in Europe. On September 21-23 he attended a joint meeting of IGCP 596 (Climate Change and Biodiversity Patterns in the Mid-Paleozoic) and International Subcommission on Devonian Stratigraphy (SDS) held at the Royal Belgian Institute of Natural Sciences, Brussels. He presented a paper on "Revised Devonian Time-Scales and Evidence for Variable Eustatic, Climatic and Biotic Volatility" and co-chaired the annual meeting of SDS in which several important stage and system (Devonian-Carboniferous) boundaries and stratotypes were reconsidered. Carl and UC alumnus Dr. Jay Zambito (Wisconsin Geological Survey and member of SDS), also attended and contributed to both pre- and post-meeting field conferences in the Ardennes region of Belgium and the Rhenisch Massif in Germany, respectively. Major objectives of the meeting and field study included evidence of climatic change, sea level cyclicity and bioevents recorded in the strata of the south Laurussian (Avalonian) shelf and intrashelf basin. These provide an important comparison to the well-studied successions of the Appalachian Basin and comparative study of these basins and those of Morocco will form an important collaborative research agenda of US and German researchers in the next few years.

In addition, Carl met with UC alumnus Dr. David Ray to review new findings on the sequence and carbon isotope stratigraphy of the classic Silurian of Wales and the Welsh Borderland of England, including newly exposed quarry sections. This is part of ongoing cooperative research between Ray, Brett, UC alumnus Dr. Patrick McLaughlin (Indiana Geological Survey), and others. The new results provide new challenges in global correlation with these classic successions and suggest previously unsuspected regional tectonic overprint on eustatic patterns.

New Paper

Dylan and Jason just published a paper on their Andean glacial work. Nice paper guys. Check it out:

National Fossil Day Lecture!

Dead Shells Do Tell Tales: Evaluating Human Impacts Using the Youngest Fossil Record

Dr. Susan Kidwell
William Rainey Harper Professor at University of Chicago

Biologists and the public increasingly appreciate the many ways that humans interact with natural systems, mostly to the detriment of wild species and various ‘ecosystem services’. However, data are difficult to acquire for more than a few select species and for the past few decades, centuries, and millennia that are actually needed to recognize change, discriminate between natural and human drivers, and establish natural baseline conditions, all critical to ecological assessment and restoration. Death assemblages — the actively accumulating organic remains encountered in present-day seafloors and landscapes, as distinct from permanently buried fossil assemblages — are an under-exploited source of ecological historical information at precisely these scales. Field work, experiments, and statistical exploration of ‘live-dead agreement’ in modern environments, originally motivated to better understand the formation of ancient fossil assemblages, reveal that dead shell and bone assemblages in fully natural settings differ very little from the local living community. The small differences that exist arise from the natural time-averaging of many generations of shells or bones into a single, still-unburied assemblage – skeletal remains are faithful recorders. In modern-day study areas where living and dead are discordant, human modification of the living community is the cause: the composition of the living community has been shifted from its natural baseline, which the death assemblage remembers. Paleontologists are now testing this approach in a large range of settings to develop it as a new, standard method in the toolkit of conservation biologists and environmental managers.

When: 7:00pm, Wednesday October 14th
Where: Reakirt Theater, Cincinnati Museum Center
Special Lecture joint with History

“A Global Environmental History of the Industrial Revolution, 1780-1920”
Wed. Oct. 28th, 3pm
Annie Laws Room, Teachers College

“The Anthropocene: Are We There Yet?”
Thur. Oct. 29th, 12:30pm
McMicken 127

These lectures are free and open to the public.
Sponsored by the Taft Research Center,
Department of History, the History Club,
and Department of Geology.

Plus!
A Global Environmental History of the Industrial Revolution, 1780-1920: Work in Prospect
This lecture will present the subject of my next global environmental history, still in the exploratory stages. It proposes a view of the Industrial Revolution as a global rather than a British process, and as an ecological as well as an economic and social one, by focusing on a handful of raw materials essential to industrialization. These materials -- fuels, fibers, ores, lubricants -- all came from somewhere, and to sustain industrialization had to come in ever larger quantities. Extracting and harvesting these industrial 'ingredients' brought ecological changes on every inhabited continent and on the high seas.
{Wed, Oct 28, 3:00, McM 127}

Please keep sending me your news.

Cheers,

Lewis