

Your abstract submission has been received

Print this page

You have submitted the following abstract to GSA Annual Meeting in Seattle, Washington, USA - 2017. Receipt of this notice does not guarantee that your submission was complete or free of errors.

PRELIMINARY RESULTS FROM POLLEN AND FUNGAL SPORES IN HOLOCENE TERRACE DEPOSITS: EVIDENCE FOR ECOSYSTEM CHANGE FOLLOWING THE MEDIEVAL WARM PERIOD

NUÑEZ OTAÑO, Noelia B.¹, **MARRINER, Emma C.**², GARDNER, Kristina F.², DI PASQUO, Mercedes M.³, BIANCHINOTTI, M. Virginia⁴ and O'KEEFE, Jennifer M.K.⁵, (1)Facultad de Ciencia y Tecnología (FCyT), Universidad Autónoma de Entre Ríos (UADER), Km 10,5, RP11, Oro Verde, 3100, Argentina; Department of Earth and Space Sciences, Morehead State University, 150 University Blvd., Morehead, KY 40351, (2)Department of Earth and Space Sciences, Morehead State University, 150 University Blvd., Morehead, KY 40351, (3)Laboratorio de Palinología y Paleobotánica, CICYTTP-CONICET, Dr. Matteri y España s/n, Diamante, E3105BWA, Argentina, (4)CERZOS-UNS, CONICET-CCT Bahía Blanca, Camino La Carrindanga km 7, Bahía Blanca, Buenos Aires, B8000FWB, Argentina, (5)Department of Earth and Space Sciences, Morehead State University, 404-A Lappin Hall, Morehead, KY 40351, ecmarriner@moreheadstate.edu

Paleoecological information about the 600-year span from the end of the Warm Period, through the Little Ice Age, into the modern period is scarce in the central Appalachians and no comparison exists with similar settings in the southern hemisphere. Existing studies on plant distributions, often used in paleoecological and paleoclimatic reconstructions are, however, incomplete. Fungi are important drivers of carbon cycling and can be significant ecological indicators because a correlation exists between fungal community richness and the local flora, as well as with temperature, moisture, and topography. Worldwide their study is an increasingly important component of paleoecological studies. We present the preliminary results of the first comparative study of fungal palynomorphs recovered from similar latitudes in the southern and northern hemisphere: the eastern Entre Ríos province in Argentina and eastern Kentucky in the United States. While climatically similar, the two settings do contain different plant groups, and likewise somewhat different fungal spectra were recovered. Of note, several taxa that occur in Argentina do not occur in the Kentucky samples, including *Potamomyces* spp.; likewise, the fern and lycophyte flora recovered from Entre Ríos is more varied than that recovered in Kentucky. Previous work in eastern Kentucky has indicated that significant environmental changes are correlative to major historical land-use changes during this period; this is again observed at new sites to the southeast of the original study. Fungi from these sites indicate a rich and varied community of mycorrhizae, saprophytes, and parasites, including taxa routinely used to estimate presence/absence of vertebrate taxa. Variations in fungal taxa present track with land-cover changes.

Abstract ID#:

302975

Password:

819940

Meeting:

GSA Annual Meeting in Seattle, Washington, USA - 2017

Session Type:

Topical Sessions

Primary Selection:

T68. Proxy Approaches to Determine Forest Structure in Deep Time: What Have We Learned?

Final Session Number:**Abstract Title:**

PRELIMINARY RESULTS FROM POLLEN AND FUNGAL SPORES IN HOLOCENE TERRACE DEPOSITS: EVIDENCE FOR ECOSYSTEM CHANGE FOLLOWING THE MEDIEVAL WARM PERIOD

Preferred Presentation Format:

Poster

Discipline Categories:

Paleontology, Paleoecology/Taphonomy Geomicrobiology Quaternary Geology

Abstract Submission Fee:

Paid (gsa-2017AM-2819-5490-0970-6282)

Noelia B. Nuñez Otaño
Universidad Autónoma de Entre Ríos (UADER)
Km 10,5, RP11
Facultad de Ciencia y Tecnología (FCyT)
Oro Verde, 3100
Argentina

Phone Number: 606 783 2349

Morehead State University
150 University Blvd.
Department of Earth and Space Sciences
Morehead, KY 40351

Phone Number: 606 783 2349

Email: noeliabnunez@gmail.com

Student? N

Presenting Author

Emma C. Marriner
Morehead State University
150 University Blvd.
Department of Earth and Space Sciences
Morehead, KY 40351

Phone Number: 6067832381

Email: ecmarriner@moreheadstate.edu

Student? Y

Kristina F. Gardner
Morehead State University
150 University Blvd.
Department of Earth and Space Sciences
Morehead, KY 40351

Phone Number: 6067832381

Email: kfrank@moreheadstate.edu

Student? Y

Mercedes M. di Pasquo
CICYTTP-CONICET
Dr. Matteri y España s/n
Laboratorio de Palinoestratigrafía y Paleobotánica
Diamante, E3105BWA

Argentina

Phone Number: 03434983366

Email: medipa@cicyttp.org.ar

Student? N

M. Virginia Bianchinotti

Camino La Carrindanga km 7

Bahía Blanca

CERZOS-UNS, CONICET-CCT Bahía Blanca

Buenos Aries, B8000FWB

Argentina

Phone Number: (0291) 4523947

Email: vbianchi@uns.edu.ar

Student? N

Jennifer M.K. O'Keefe

Morehead State University

404-A Lappin Hall

Department of Earth and Space Sciences

Morehead, KY 40351

Phone Number: 606-783-2349

Email: j.okeefe@moreheadstate.edu

Alternate Email: PalynologyLexington@gmail.com

Student? N

If necessary, you can make changes to your abstract submission until Tuesday, 1 August 2017.

- To access your submission in the future, use the direct link to your abstract submission from one of the automatic confirmation emails that were sent to you during the submission.
- Or point your browser to </gsa/reminder.cgi> to have that URL mailed to you again. Your username/password are 302975/819940.

Any changes that you make will be reflected instantly in what is seen by the reviewers. You DO NOT need to go through all of the submission steps in order to change one thing. If you want to change the title, for example, just click "Title" in the abstract control panel and submit the new title.

When you have completed your submission, you may close this browser window.

[Tell us what you think of the abstract submission process](#)

[Home Page](#)