



AEA2023  
EEE

## Telling Environmental Archaeology Stories

Tarragona, 24-26 November 2023  
aea2023.icac.cat

43rd Conference of the  
Association for Environmental  
Archaeology (AEA)

Hosted by: **ICAC**  
Institut Català  
d'Arqueologia Clàssica



## PROGRAMME

### Friday 24th November

14:00-15:00 Registration

15:00-15:15 Welcome & opening of the conference: A. Livarda, M. Ferrer

15:15-15:45 Keynote: "Socio-environmental interactions and land-use change in the shaping of Cultural Landscapes: research in western Mediterranean littoral plains and mountain environments" (*Josep Maria Palet, ICAC*)

15:45-16:30 Keynote: "Narratives of environmental archaeology in Iberia: our stories with bones and seeds" (*Leonor Peña Chocarro & Marta Moreno García, CESH-CSIC*)

16:30-16:45 Discussion. Chairs: A. Livarda, L. Colominas

#### 16.45-17.00 Break

17.00-18.30

#### Session 1: Stories of changes in agricultural practices, human-animal interactions and diet – Chairs: P. Vandorpe & L. Strolin

1. Why change if everything is going fine? An environmental approach to the meso-neolithic transition in the Dnipro Rapids Region (Ukraine) (*O. Demchenko*)

2. Conservative, traditionalist, prudent? Discerning the attitudes of past agriculturists from stable isotope data - the A14 project, Cambridgeshire, UK. (*M. Wallace*)

3. Investigating dietary habits of the eastern Iberian Peninsula in the Roman period: Puig Castellar and Guissona during the 1st century BC to the 3rd century AD (*Th. Baniou, A. Suryanarayan, A. Livarda, J. Villanueva, N. Moraleda, N. Romani, E. Rodrigo*)

4. Narratives of ritual boars from Early Neolithic Asia (*P. Vaiglova, H. Kierdorf, C. Witzel, R. Joannes-Boyeau, P. Bangsgaard, L. Yeomans, T. Richter, H. Darabi*)

5. Pigs at the Frontier: Swifterbant and Middle Neolithic suids from Medel-De Roeskamp, The Netherlands (*P. Rowley-Conwy, K. Esser, T. ten Anscher*)

6. Exploring Biomes and Diet through white-tailed deer teeth (*M. F. Martínez-Polanco, F. Rivals*)

Discussion

#### 18.30-19.30 WINE RECEPTION

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### Saturday 25th November

8-8.30 registration

8.30-10.45

## **Session 2: Geoarchaeological histories, soil biographies and stone landscapes** –

*Chairs: A. Mayoral & M. Mateu*

1. The Mesolithic of the Stonehenge Environs: A SedaDNA Based Multiproxy Approach to Reconstructing the Pre-Neolithic Landscape History of the Avon Riverside (*S. M. Hudson, I. Alsos, C. French, D. Jacques, A. Köhler, B. Pears, R. Scaife, U. Werban, C. Zielhofer, A. G. Brown*)
2. A micro-contextual palaeoenvironmental study of the PPNA/B transition at Kharaysin, Jordan (*A. García-Suárez, J. Aranbarri, L. Gourichon, E. Iriarte, M. Portillo, J. J. Ibáñez, J. Muñiz*)
3. Combining terrestrial sedaDNA and sedimentological techniques to determine a late Holocene history of colluviation and land use across a chalkland dry valley in eastern Belgium (*B. Pears, A. Lang, D. Fallu, S. Hudson, K. van Oost, P. Zhao, P. Tarolli, S. Cucchiaro, K. Walsh, A. G. Brown*)
4. Geoarchaeological assessment of prehistoric burial grounds deepens our knowledge of human-environment relations - A case study of the Macchiabate necropolis in northern Calabria, Italy (*H. E. Bouter*)

### *Discussion*

5. Mediterranean Agricultural Terraces: Chronology, geoarchaeology and sedaDNA (*A. G. Brown, D. Fallu, A. Lang, K. Walsh, M. Alonso Eguiluz, R. M. Albert, I. Alsos*)
6. Geoarchaeology in a peri-urban environment: a soil micromorphological case study of the "Land of Aynadamar" in Nasrid Granada (Spain), the northern outskirts of the last Islamic town in Iberia (13th-16th centuries) (*R. Y. Banerjee, G. García-Contreras, M. García-García, L. Mattei, A. G. Pluskowski*)
7. A Geoarchaeological History of Pre-Modern Agricultural Terraces in Soave, Veneto: Construction, Use, and Impact (*D. Fallu, S. Cucchiaro, A. Lang, F. Ficetola, R. M. Albert, A. G. Brown*)
8. From geologies to biographies: exploring human/rocks entanglement in quarried landscapes (*C. Sciuto*)
9. A Prehistoric landscape and cursus monument at Drumadoon, Isle of Arran, Scotland (*N. Whitehouse, K. Brophy, E. Jenkins, D. Maričević, G. McGregor, L. McFadyen, M. Farrell, S. Elliot, P. Ascough, B. Pears, S. Hudson, A. G. Brown, H. Chapman*)

### *Discussion*

## **10.45-11.15 COFFEE BREAK**

11.15 -13.00:

**Session 3: Narratives of animal management through time** – *Chairs: L. Colominas & S. Stallibrass*

1. Livestock feeding practices in early pastoral nomadism: Dental Microwear Texture Analysis at two 7th millennium sites in the Syrian desert (*S. Jiménez-Manchón, L. Gourichon, J. J. Ibáñez, F. Abbès*)
2. Human-equin and landscape interactions at Can Roqueta (Sabadell, Barcelona): a multi-isotopic perspective (*S. Valenzuela-Lamas, S. Albizuri, M. Díaz Zorita-Bonilla, L. D. Pena, D. Bosch, M. E. Subirà, F. J. López-Cachero*)
3. Landscape exploitation and catchment areas from the buried community of the staggered turriform of Son Ferrer (Mallorca, Spain) (*L. Valenzuela-Suau, S. Valenzuela-Lamas, J. García Rosselló, P. Salvador Gómez-Grandoli, J. Nadal Lorenzo, M. Díaz-Zorita Bonilla, L. D. Pena González, A. Delgado, M. Calvo Trias*)

### *Discussion*

4. Unveiling sheep altitudinal movements in the northeastern Iberian Peninsula during the 3rd c. BC: insights from a multi-isotope approach (*C. Messana, C. Tornero, R. Madgwick, A. Lamb, J. Evans, L. Colominas*)

5. The dramatic death of a Ceretanian herd (3rd c. BC) (*O. Olesti Vila, M. Portillo, L. Colominas, C. Messana, J. Oller, J. Morera*)
6. Insights on fishing in the north-eastern Iberian Peninsula during Late Antiquity: a case study from Aiguafreda de Dalt (Aiguafreda, Montseny massif, Catalonia, 7th century) (*A. Brosa i Planella, A. Gallego-Valle, A. Garcia Molsosa, S. Riera Mora, M. Saña Seguí, A. Morales Muñiz*)
7. The (Re-)Invention of Livestock Breeding – Retelling the story of an ‘exclusively modern’ phenomenon (*F. Sadebeck*)

*Discussion*

### 13-14.30 LUNCH

14.30-16.30

**Session 4: Socio-environmental stories from the mountains to the sea** - *Chairs: S. Riera & A. Garcia-Molsosa.*

1. Beyond the palaeoenvironment: social landscapes in the highlands of the Central Pyrenees throughout the Holocene (*E. Gassiot Ballbé, I. Clemente Conte, S. Díaz Bonilla, D. Garcia Casas, L. Obea Gómez, J. Rey Lanaspá, D. Rodríguez Antón, G. Salvador Baiges*)
2. Discovering Landscape Archaeology. The Didactic Laboratory As A Tool For Outreach And Transfer Of Knowledge In Science And Research (*M. Flórez, J.-M. Palet, A. Carbonell, L. Colominas, A. Mayoral, V. Pescini, A. Gallego-Valle, T. Martínez, L. Coma*)
3. Spatial modelling of cropping systems. Evaluating the agricultural potential of the Central Pyrenees during the Neolithic period (*G. Salvador-Baiges, F. Antolín, E. Gassiot-Ballbé*)
4. Growing crops at high altitudes at mid-Holocene? Tracing human activities in Pyrenees range by microbotanical proxies (*D. Rodríguez Antón, J. Revelles, E. Gassiot*)

*Discussion*

5. A Historical Ecology of Apiculture in the Cherangani Hills, Elgeyo-Marakwet, Kenya (*B. Qihao Shen*)
6. Holocene alluvial dynamics and human settlement histories in the Xerolakkos catchment (Grevena, GR) (*G. Apostolou, A. Mayoral, K. Venieri, S. Dimaki, A. Garcia-Molsosa, M. Georgiadis, H. A. Orengo*)
7. Using the archaeoentomological approach to document interactions between man and his environment from the Neolithic to Antiquity (*L. Richelmi, F. Verdin, J.-B. Huchet*)

*Discussion*

### 16.30-17.00 COFFEE BREAK

16.30-17.30

#### **Poster Session**

1. Water condition of the Senne river in late medieval Brussels (Belgium) (*B. De Cupere, K. Lock*)
2. Plant Use and Processing in the Cerrado Biome (Central Brazil): New Insights from Phytoliths and Starch (*D. Dias Ortega, M. Madella, X. Suarez Villagran, C. Boyadjian, A. Strauss, J. Ruiz-Pérez, R. Oliveira, E. Nunes Chim, H. Straiato*)
3. Wood structures on the coastline of the Lido di Venezia (Italy): breakwater, pier...or? (*C. Campagnol, R. Deiana, A. Forti, S. Garavello, C. Lucarini, N. Martinelli, O. Pignatelli, P. Mozzi, C. Rossi, Z. Sharafi-Roumi, C. Stefani, A. Zandinella, S. Zampieri*)
4. Fuelling the city: an anthracological and dendro-anthracological approach to wood fuel consumption in Late Medieval and Modern Barcelona (*S. Bianco, E. Allué, L. Picornell-Gelabert, S. Riera Mora, C. Miró i Alaix*)

5. Landscape shaping by the earliest farming communities in the Barcelona Plain: The Cagalell marsh settlement area (*A. Pena Pérez, R. Julià Brugués, F. Mesquita-Joanes, X. Armengol, S. Riera Mora*)
6. Serbian Banat LBA communities: making the most of their landscape (*M. Estanqueiro*)
7. Human-induced deforestation of *Quercus ithaburensis*-*Pistacia* woodlands during the PPNA/B at Kharaysin, Jordan (*J. Aranbarri, E. Iriarte, J. J. Ibáñez, J. Ramón Muñiz*)
8. Preliminary results on the archaeobotanical records of the Iron Age settlement of L'Assut (Tivenys, Baix Ebre) (*L. Bricio, I. Cots, J. Diloli, R. Ferré, S. Sardà*)
9. Sitting by the fire. The challenges of building narratives from archaeological evidence about past firewood (*E. Allué, A. Robledo, C. Speciale, B. Mas, S. Bianco, T. Fernández-Iriarte, L. Picornell-Gelabert*)
10. The influence of dissolution on phytolith morphology and its significance for the quantification and interpretation of the micro(archaeo)botanical record (*N. C. Andriopoulou, G. E. Christidis*)
11. Mineralogical and chemical characterisation of historic mortar-based materials: the case of Cemetery of the Monastery of Pammegiston Taxiarchon in Boeotia, Greece (*G. Triantafyllou, N. C. Andriopoulou, M. Kostara*)
12. Landscape evolution of cultural sites with electrical resistivity tomography: the case of Phaistos, Crete, Greece (*N. Papadopoulos, D. Oikonomou, J. Bendle, G. Iliopoulos, M. Spiridakis, N. C. Andriopoulou*)
13. Science communication in public archaeology: results of an online survey (*R. Banerjea*)
14. Island stories: constraints and opportunities of wood exploitation on small insular environments during prehistory (*C. Speciale, E. Allué*)
15. Investigating the preservation of phytoliths on knapped stone tools. Preliminary results of an Experimental Archaeology pilot project (*N. C. Andriopoulou, C. Papoulia, J. C. Tactikos, N. Galanidou*)
16. Probabilities in unstable world - how to minimize subjectivity in archaeobotanical research - a case study from Zaborów near Warsaw (*E. Drogoz, A. Mueller-Bieniek*)
17. The same tree, the same gathering?: Exploring woody species selection from Late Holocene occupations in the central part of Argentina (*A. Robledo, C. Romanutti, A. Chavez*)
18. Confirming pitch production at the Madriu-Perafita-Claror Valley (Andorra): organic residue analysis of a Roman kiln (*A. Falcó, H. Orengo, J. M. Palet, A. Ejarque, I. Euba, A. Pecci*)
19. The palynological evidence from a Bronze Age burial in El Mirador cave (Atapuerca, Burgos) (*I. Expósito, E. Allué, J. M. Vergès*)
20. Archaeobotanical studies of slag-pit furnaces from the Roman Iron Age site at Zaborów near Warsaw (*A. Mueller-Bieniek, A. Cieśliński, E. Drogoz, M. Woźniak*)
21. What lithics can reveal: tracing the first human steps on the island of Lemnos (NE Aegean, Greece) (*Y. Agafonova, N. Efstratiou, P. Biagi, E. Starnini*)
22. Meat consumption in the site of Sant Esteve d'Olius (Solsonès, NE Spain) between the Iron Age and the High Middle Ages (*K. Cajtak, D. Asensio, R. Cardona, J. Morer de Llorens, J. Nadal, S. Valenzuela Lamas*)
23. On the arboreal flora of Mount Aragats in the past: anthracological materials from the high-mountainous dragon-stone site of Karmir Sar (Armenia) (*R. Hovsepyan, W. H. Schoch, P. Hnila, A. Gilibert, I. Gabrielyan, A. Bobokhyan*)
24. The luxurious lives of lords and ladies. Animal remains and their spatial distribution at Huis ter Kleef (c. 1250-1573 AD) (*L.M.A. van Hees, E. Esser, T. Hoogendijk, W. Van Neer, W. Wouters, J.T. Zeiler, W. Prummel*)
25. The Early Neolithic Swifterbant farmers of Medel-De Roeskamp (Nederland) (*E. Esser, L. van Hees, W. Van Neer, W. Wouters, T.J. ten Anscher, L.M. Kootker, J.T. Zeiler, and others*)
26. The first preliminary results of a taphonomic study of wild resources (*B. Garay-Palacios, M. Berihuete-Azorín, I. Esposito*)

17.30-18.45

**Session 5: Environmental Archaeology Storytelling** – Chairs: *E. Allue & F. Riso*

1. BE MY POV – The Life of a Researcher. Communicating a project in Archaeobotany to the public (*C. Speciale*)

2. The Late Chalcolithic vegetal fibres at Tell Yunatsite, Southern Bulgaria (*M. Andonova-Katsarski, Y. Katreva, K. Boyadziev, E. Marinova-Wolff, Y. Boyadziev*)

3. Pottery Use and Starchy Foods During the Shuangdun Culture (ca.7.3–6.8 Ka BP) in the Middle Catchment of the Huai River, China (*W. Li*)

4. Early Trypillian soils and the environmental logic towards the Eneolithic para-urbanization in the Central Ukraine (*D. Kiosak, Z. Matviishyna*)

5. Modern Experimental Cultivations and Charring Experiments of Barley; Methods, Preliminary Results, Challenges and Possibilities (*A. E.T. Kriti, A. Livarda, H. A. Orengo, E. Ninou, I. Mylonas*)

#### *Discussion*

6. The Roman Empire's western fringe through the lens of Archaeobotany: changes in landscape and agriculture and its relation with political and economic trends (*C. Magalhães, L. Seabra, J. Tereso*)

7. Investigating the emergence and development of urban centres in the Roman Empire through the trade of food plants (*P. Vandorpe, A. Livarda, H. A. Orengo, Th. Baniou, I. Berganzo, F. Riso*)

8. Howling at the moon: weaving native narratives, ecological concerns and zooarchaeological data (*J. Morris, J. Jones, D. Robinson*)

9. How well do you know your cow? (*S. Stallibrass*)

#### *Discussion*

18.45-20.00 AGM (AEA meeting for members)

**21.00 GALA DINNER (prior reservation required)**

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## **Sunday 26th November**

8.00-8.30 Registration - Opening

8.30-9.45

**Session 6: Exploring ancient agriculture and plant use** – Chairs: *N. Alonso & C. Diffey*

1. Multicropping Pattern Reveals Human Adaptation at the Wanbei Site (ca. 5.7–4.4 ka cal. BP) in the Middle and Lower Huai River Valley, China (*W. Tian, W. Luo, Y. Yang, H. Gan, Z. Cheng, Y. Sun, D. Zhang, L. Lin, J. Zhang*)

2. Harvesting the past: Uncovering Agricultural Knowledge at Bjerre, Thy (*F. Walker-Friedrichs*)

3. The role of archaeobotanical material in better understanding transitional periods: the case of Chalcolithic Cyprus (*K. Tsirtsis, G. Kasapidou, P. Koullouros, E. Margaritis*)

4. New crops arriving in the Western Catalan Plain (Catalonia, Spain): human mobility and the circulation of plants and food products from the origin of agriculture to medieval times (*N. Alonso, M. Tarongi*)

5. Cultivating the big islands of the Mediterranean: agriculture, farming and urbanization in Bronze Age Crete and Cyprus (*E. Margaritis, C. Henkel, K. Tsirtsis*)

6. How many pieces do we need to start the puzzle? Human-environment interaction in Serbia through The Middle Ages and plant macro remains (*A. Smuk*)

*Discussion*

9.45-10.50

**Session 7: Waterscapes tales** – Chairs: *G. Apostolou & R. Banerjee*

1. Taming the sea. A multi-proxy investigation of Mediterranean Stone Age aquatic technologies (*Chr. Papoulia*)
2. Vegetation dynamics and land-use history during the Holocene in Corsica. Regional trends and local landscapes in coastal wetlands through the application of the Landscape Reconstruction Algorithm (*J. Revelles, R. Fyfe, F. Di Rita, A. Currás, M. Ghilardi*)
3. A race to the sea? New geoarchaeological evidence to rethink the history of the ancient Abdera (Gr.) and its harbour (*A. Mayoral, A. Garcia-Molsosa, A. Ejarque, M. Georgiadis, C. Kallintzi, E. Kefalidou, G. Trasanis, N. Papadopoulos, G. Apostolou, V. Gaertner, H. A. Orengo, J.-M. Palet*)
4. Entangled in the water: geoarchaeology of Venice Lagoon during Roman times (*A. Bivolaru, D. Cottica, D. Calaan, C. Morhange*)

*Discussion*

**10.50-11.20 COFFEE BREAK**

11.20-12.30

**Session 8: From the woods to the garden: systems of plant resource management** –

*Chairs: V. Pescini & Ramón Buxó*

1. Exploring Human-Woodland Interactions in Hellenistic and early Roman Greece: Insights from Wood Charcoal Analysis in Ancient Corinth (*P. Koullouros, E. Margaritis, M. Madella, G. Sanders*)
2. Disentangling fuel use in ancient Iberian Csetania through integrated high-resolution approaches (Tarragona, Spain, 5th-3rd century BC) (*A. Gomar, M. Portillo, M. Mateu, V. Pescini, S. Vila, M. C. Belarte*)
3. Forestry practices and arboriculture at the Roman sites of Ileso and Vilauba (Catalonia, Spain) (*E. M. López Castillo, R. Piqué Huerta, O. López-Bultó, A. Berrocal Barberà, P. Castanyer, J. Pera, E. Rodrigo*)
4. Multidisciplinary bioarchaeology for the recovery of the vegetable garden of Pedralbes Monastery (Clear order, Barcelona) (*S. Riera, A. Castellano, J. Cruells, S. Bianco, J. Nadal, L. Lloveras, N. Alonso, M. Tarongi, V. Bros, A. Burget*)

*Discussion*

12.30-13:40

**Session 9: Bioarchaeological approaches to environmental and climate change** –

*Chairs: A. Kriti & H. Orengo*

1. A Late Pleistocene Eastern Mediterranean palaeoclimate record based on stable carbon isotopes ( $\Delta^{13}C$ ) of archaeological almond charcoal: new data from the Epipalaeolithic sequence of Ein Qashish South and el-Wad Terrace, northern Israel (*C. Belli, M. Weinstein-Evron, V. Caracuta, D. Nadel, R. Yeshurun, L. Regev, E. Boaretto, A. Yaroshevich*)
2. Paleoenvironmental reconstruction from archaeological pollen data: could AI tell stories about what the landscape looked like? (*E. Paperini, C. Sciuto, G. Gattiglia*)
3. Archaeobotany in an era of change and challenge: fruits of the past, seeds for the future (*M. Berihuete-Azorín, C. Kerfant, E. Allué, A. Burguet-Coca, F. Burjachs, I. Expósito, T. Fernández-Iriarte, B. Garay, J. Revelles, A. Robledo, D. Rodríguez-Antón, C. Speciale*)
4. Scaling up phytolith analysis using Artificial Intelligence; human-environment interactions during the Holocene in the Llanos de Moxos, Bolivia (*K. Dudgeon, B. Urbistondo Letamendia, U. Lombardo*)

*Discussion*

13.40-14.00 Closure (poster prize and farewell)

**14.00-15.30 LUNCH**

16.00 -18.00 Guided tour through Roman Tarragona (Optional. Prior registration required)