

**CURRICULUM VITAE**  
**Carlos E. Cordova, Ph.D.**

**Academic degrees**

University of Texas at Austin	Geography	Ph.D. 1997
National Autonomous Univ. of Mexico (UNAM)	Geography	M.A. 1991
National Autonomous Univ. of Mexico (UNAM)	Geography	B.A. 1988

**Appointments**

2011-	Full Professor, Oklahoma State University - Geography
2003-2011	Associate Professor, Oklahoma State University - Geography
1997-2003	Assistant Professor, Oklahoma State University - Geography
1996-1997	Environmental research associate. Mariah Associates Inc., Austin, Texas.
1992-1997	Teaching and Research Assistant University of Texas at Austin -Geography
1988-1991	Lecturer and research lab staff. National School of Anthropology and History (ENAH), Mexico City.

**Research fields, topics, and areas**

**Fields:** Geoarchaeology, Quaternary Paleocology (pollen and phytoliths), Geomorphology, and Soils.

**Topics:** Past climates and past ecosystems; environmental change; landscape transformation; humans and environment through time

**Areas:** Middle East, Black Sea Region, Eurasia, Mexico, North American Great Plains, Southern Africa.

**Courses taught on a regular basis**

GEOG 1114 Intro to Physical Geography, GEOG 4023 Geography of Arid Lands, GEOG 4053 Biogeography, GEOG 4063/5063 Geoarchaeology and Environmental History, GEOG 4073/5073 Climate Change: Past, Present, and Future

**Refereed Publications**

**Books**

**Cordova, C.E.** 2018. *Geoarchaeology: The Human-Environmental Approach*. London: I.B. Tauris.

**Cordova, C.E.** 2016. *Crimea and the Black Sea: An Environmental History*. London: I.B. Tauris.

**Cordova, C.E.** 2007. *Millennial landscape in Jordan: Geoarchaeology and cultural ecology*. Tucson: University of Arizona Press.

**Articles in journals and chapters in edited volumes**

Ames, C.J., Gliganic, L., **Cordova, C.E.**, Boyd, K., Jones, B.G., Maher, L. and Collins, B.R., 2020. Chronostratigraphy, Site Formation, and Palaeoenvironmental Context of Late Pleistocene and Holocene Occupations at Grassridge Rock Shelter (Eastern Cape, South Africa). *Open Quaternary* 6(1): 1-19

- Cordova, C.E.** and Johnson, W.C., 2019. An 18 ka to present pollen-and phytolith-based vegetation reconstruction from Hall's Cave, south-central Texas, USA. *Quaternary Research* 92(2): 497-518.
- Cordova, C.E.**, Kirsten, K., Scott, L. Meadows, M. and Lucke, A. 2019. Multi-proxy evidence of late-Holocene paleoenvironmental change at Princessvlei, South Africa: The effects of fire, herbivores, and humans. *Quaternary Science Review*. 221: 105896.
- Cordova, C.E.**, Kirstn, K., Scott, L. Meadows, M. and Lucke, A. 2019. Multi-proxy evidence of late-Holocene paleoenvironmental change at Princessvlei, South Africa: The effects of fire, herbivores, and humans. *Quaternary Science Review*. In Press.
- Frederick, C.D. and **Cordova, C.E.**, 2018. Prehispanic and colonial landscape change and fluvial dynamics in the Chalco Region, Mexico. *Geomorphology* 331: 107-126.
- Pokines, J.T., Lister, A.M., Ames, C.J., Nowell, A. and **Cordova, C.E.**, 2018. Faunal remains from recent excavations at Shishan Marsh 1 (SM1), a Late Lower Paleolithic open-air site in the Azraq Basin, Jordan. *Quaternary Research*, published online doi:10.1017/qua.2018.113
- Marinova, E., Harrison, S.P., Bragg, F., Connor, S., Laet, V., Leroy, S.A., Mudie, P., Atanassova, J., Bozilova, E., Caner, H. **Cordova, C.** et al., 2018. Pollen-derived biomes in the Eastern Mediterranean–Black Sea–Caspian-Corridor. *Journal of Biogeography* 45: 484-489
- Cordova, C.E.** 2017. Prehispanic and Colonial flood plain destabilization in the Texcoco Region and the Lower Teotihuacan Valley, Mexico. *Geoarchaeology: An International Journal* 62, 74-89.
- Cordova, C.E.**, Scott, L., Chase, B.M. and Chevalier, M., 2017. Late Pleistocene-Holocene vegetation and climate change in the Middle Kalahari, Lake Ngami, Botswana. *Quaternary Science Reviews* 171: 199-215.
- Cordova, C.** and Avery, G., 2017. African savanna elephants and their vegetation associations in the Cape Region, South Africa: Opal phytoliths from dental calculus on prehistoric, historic and reserve elephants. *Quaternary International*, 443: 189-211.
- Marinova, E., Harrison, S.P., Bragg, F., Connor, S., Laet, V., Leroy, S.A., Mudie, P., Atanassova, J., Bozilova, E., Caner, H. **Cordova, C.** et al., 2017. Pollen-derived biomes in the Eastern Mediterranean–Black Sea–Caspian-Corridor. *Journal of Biogeography* 45: 484-489

- Cordova, C.E.**, 2016. The Mediterraneanization of Crimea. Physical and cultural processes in landscape transformation. *Méditerranée: Journal of Mediterranean geography* 126: 25-36.
- Henry, D.O., **Cordova, C.E.**, Portillo, M., Albert, R.M., DeWitt, R. and Emery-Barbier, A., 2017. Blame it on the goats? Desertification in the Near East during the Holocene. *The Holocene* 27: 625-537.
- Cordova, C.E.**, and C.J.H. Ames. 2017. Quaternary sediments and soils of Jordan: Palaeoclimatic and Geoarchaeological Implications. In Quaternary of the Levant, Y. Enzel and O. Bar-Yosef (eds.), 531-538. Cambridge, UK: Cambridge University Press.
- Scott, L., Rossouw, L., **Cordova, C.** and Risberg, J., 2016. Palaeoenvironmental context of coprolites and plant microfossils from Unit II. Azokh 1. In *Azokh Cave and the Transcaucasian Corridor* (pp. 287-295). Springer International Publishing.
- Nowell, A, Walker, C. **Cordova, C.E.**, Ames, C.J.H., Pokines, J.T., Stueber, D., DeWitt, R., and Al-Souliman, A.S.A. 2016. Middle Pleistocene subsistence in the Azraq Oasis, Jordan: Protein residue and other proxies. *Journal of Archaeological Science* 73, pp.36-44.
- Pasturel, M., Alexandre, A., Novello A, Dièye,A.M., Wélé, A., Paradis, L. **Cordova, C.** and C Hély. C. 2016. Grass physiognomy traits variation in African herbaceous biomes. *Biotropica* 0(0): 1-10 DOI: 10.1111/btp.12282
- Cordova, C.E.** and Porter, J.C., 2015. The 1930s Dust Bowl: Geoarchaeological lessons from a 20<sup>th</sup> century environmental crisis. *The Holocene* 25: 1707-1720.
- Pasturel, M., Alexandre, A., Novello A, Dièye,A.M., Wélé, A., Paradis, L. **Cordova, C.** and C Hély. C. 2016. Grass physiognomy traits variation in African herbaceous biomes. *Biotropica* 0(0): 1-10 DOI: 10.1111/btp.12282
- Ames, C.J.H, and **Cordova, C.E.** 2015. Middle and Late Pleistocene landscape evolution at the Druze Marsh Site in northeast Jordan: Implications for population continuity and hominin dispersal. *Geoarchaeology: An International Journal* 30: 307-329.
- Ames, C.J.H., Nowell, A., **Cordova, C.E.**, Pokines, J.T., and Bisson, M.S. 2014. Paleoenvironmental change and settlement dynamics in the Druze Marsh: Results of recent excavation at an open-air Paleolithic site. *Quaternary International* 331: 60-73.
- Cordova, C.E.** 2013. C<sub>3</sub> Poaceae and Restionaceae phytoliths as potential proxies for reconstructing winter rainfall in South Africa. *Quaternary International* 287: 121-180.
- Ames, C.J.H., Nowell, A., **Cordova, C.E.**, Pokines, J.T., and Bisson, M.S. 2013 (in press). Paleoenvironmental change and settlement dynamics in the Druze Marsh: Results of recent excavation at an open-air Paleolithic site. *Quaternary International*. DOI number: <http://dx.doi.org/10.1016/j.quaint.2013.04.016>

- Cordova, C.E.**, Chase, B.M., Smith, G.F. 2013 Comment on “Burrough, S.E., Breman, E., and Dodd, C., 2012. Can phytoliths provide an insight into past vegetation of the Middle Kalahari paleolakes during the late Quaternary? *Journal of Arid Environments* 82,156–164”, *Journal of Arid Environments* 92: 113-116.
- Cordova, C.E.**, Nowell, A., Bisson, M., Ames, C.J.H. Pokines, J., Chang, M., al-Nahar, M. 2013. Interglacial and glacial desert refugia and the Middle Paleolithic of the Azraq Oasis, Jordan. *Quaternary International* 300:94-110
- Cordova, C.E.**, Nowell, A., Bisson, M., and Ames, C. Kalchgruber, R., 2011. Geomorphological and soil stratigraphic patterns associated with the Middle Paleolithic on the Madaba Plateau, Jordan: The case of the Ma'in Site Complex. *Journal of the Israel Prehistoric Society* 41: 5-36
- Pokines, J. T., A. Nowell, M. S. Bisson, **C. E. Cordova** & C. J. H. Ames. 2011. The functioning of a natural faunal trap in a semi-arid environment: Preliminary investigations of WZM-1, a limestone sinkhole site near Wadi Zarqa Ma'in, Hashemite Kingdom of Jordan. *Journal of Taphonomy* 92: 89-115.
- Cordova, C.E.**, Gerasimenko, N., and Kliukin, A.A., 2011. Late Pleistocene and Holocene paleoenvironments of Crimea: pollen, soils, geomorphology, and geoarchaeology. *In Geology and Geoarchaeology of the Black Sea Region: Beyond the Flood Hypothesis*, Buynevich, I, Yanko-Hombach, V., Gilbert, A., and Martin., R.E. (eds.), 133-164, Geological Society of America, Special Paper 473, Boulder, CO; Geological Society of America.
- Cordova, C.E.**, Johnson, W.C., Mandel, R., and Palmer, M., 2011. Opal phytoliths, carbon stable isotopes, and other microfossils from soils and paleosols of the south-central Great Plains, USA. *Catena* 85: 87-108.
- Santos, J.A., Cunha, L.J., **Cordova.C.**, Wiles, G., 2010. Late Holocene glacial chronology of College Fjord, South-Central Alaska. *Polar Geography* 33(3-4):101-114.
- Cordova, C.E.** and Scott, L. 2010. The potential of Poaceae, Cyperaceae, and Restionaceae phytoliths to reflect past environmental conditions in South Africa. *Palaeoecology of Africa* 30, 107-133. Volume edited by Jürgen Runge.
- Cordova, C.E.**, 2010. Palynology of anthropicized landscapes in Jordan: A survey of modern and fossil records of *Quercus*, *Pistacia* and *Olea* pollen. In *Archaeology of Anthropogenic Environments* (Center for Archaeological Investigations, Occasional Paper No. 37), ed. Rebecca Dean, 95-121. Carbondale: Southern Illinois University.
- Cordova, C.E.**, and Agenbroad, L., 2009, Opal phytoliths from teeth calculus in the mammoths of the Hot Springs Site, South Dakota, *Current Research in the Pleistocene* 26, 145-147.
- Cordova, C.E.**, S. Harrison, P. Mudie, S. Leroy and N. Ortiz. 2009. Pollen, plant macrofossil and charcoal records for paleovegetation reconstruction in the

- Mediterranean-Black Sea Corridor since the Last Glacial Maximum. *Quaternary International* 197, 12-26.
- Santos, J. and **Cordova, C.E.** 2009. Little Ice Age glacial morphology and sedimentology of Portage Glacier, south-central Alaska. *Finisterra* 87, 95-108.
- Cordova, C.E.** 2008. Floodplain degradation and settlement history in Wadi al-Wala and Wadi ash-Shallalah, Jordan. *Geomorphology* 101: 443-457.
- Butzer, K.W., J. T. Abbott, C.D. Frederick, P.H. Lehman, **C.E. Cordova**, and J.F. Oswald. 2008. Soil-geomorphology and "wet" cycles in the Holocene record of North-Central Mexico. *Geomorphology* 101: 237-277.
- M. J. Power, J. Marlon, N. Ortiz, P. J. Bartlein, S. P. Harrison, F. E. Mayle, A. Ballouche, R. H. W. Bradshaw, C. Carcaillet, **C. Cordova**, and others. 2008. Changes in fire regimes since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data. *Climate Dynamics* 30: 887-907.
- Cordova, C.E.**, and W. Johnson. 2007. Paleobiomes and Paleopastures: A reconstruction of interactions of vegetation, climate, grazing and fire in South-Central North America since the Last Glacial Maximum. *Current Research in the Pleistocene* 24: 196-198.
- Bisson, M., A. Nowell, **C.E. Cordova**, R. Kalchgruber, and Maysoon Nahar. 2007. Human evolution at the crossroads: An archaeological survey in Northwest Jordan. *Near Eastern Archaeology* 69 (2): 73-85.
- Cordova, C.E.** 2007. Holocene Mediterraneanization of the Southern Crimean vegetation: paleoecological records, regional climate change, and possible non-climatic influences. In *The Black Sea Flood Question: Changes in Coastline, Climate, and Human Settlement*, V. Yanko-Hombach, A.S. Gilbert, N. Panin, and P.M. Dolukhanov (eds.), 319-344. Dordrecht: Kluwer Academic Publishers.
- Cordova, C.E.** and P.H. Lehman. 2005. Holocene environmental change in Southwestern Crimea (Ukraine) in pollen and soil records. *The Holocene* 15: 263-277.
- Cordova C.E.**, J.C. Porter, K. Lepper, R. Kalchgruber, and G. Scott, 2005. Sand dune morphology and stability along a bioclimatic gradient in north-central and northwestern Oklahoma. *Great Plains Research* 15 (2): 227-250.
- Cordova, C.E.**, C. Foley, A. Nowell, and M. Bisson. 2005. Landforms, sediments, soil development and prehistoric site settings in the Madaba-Dhiban Plateau, Jordan. *Geoarchaeology* 20: 29-56.
- Cordova, C.E.**, and P. Lehman. 2003. Archaeopalynology of synanthropic vegetation in the *chora* of Chersonesos, Crimea, Ukraine. *Journal of Archaeological Science* 30: 1483-1501.
- Henry, D.O., **C. Cordova**, J. J. White, R. M. Dean, J. E. Beaver, H. Ekstrom, S. Kadowaki, J. McCorriston, A. Nowell, and L. Scott-Cummins. 2003. The Early

- Neolithic Site of Ayn Abū Nukhayla, Southern Jordan. *Bulletin of the American Schools of Oriental Research* 330: 1-30.
- Cordova, C.E.**, A. Rybak and P. Lehman. 2001. Vegetation Patterns and Conservation Issues in Southern Crimea., *Post-Soviet Geography and Economics* 42(5) 49-72.
- Cordova, C.E.**, 2000. Geomorphological Evidence of Intense Prehistoric Soil Erosion in the Highlands of Central Jordan. *Physical Geography* 21(6): 538-567.
- Cordova, C.E.**, 1999. Landscape Transformation in the Mediterranean-Steppe Transition Zone of Jordan: A Geoarchaeological Approach. *The Arab World Geographer* 2 (3): 182-201.
- Cordova, C.E.** and J. Parsons. 1997. Geoarchaeology of an Aztec Dispersed Village. *Geoarchaeology* 12 (3): 177-210.
- Martin Del Pozzo, A.L., **C.E. Cordova**, and J. López. 1997. "Volcanic Impact on the Southern basin of Mexico during the Holocene. *Quaternary International* 43-44 (1):181-190.
- Cordova, C.E.**, Martin del Pozo, A.L. and López-Camacho, J. 1994. Paleolandforms and Volcanic Impact on the Environment of Prehistoric Cuicuilco, Southern Mexico City." *Journal of Archaeological Science* 21, 586 – 596.
- Cordova, C.E.** and A. Vazquez. 1991. El ciclo agrícola anual en la Cuenca Media del Balsas [The annual agricultural cycle in the Middle Balsas Basin] *Geografía y Desarrollo*, 2 (3): 23-29.

Updated: May 1, 2020