CLAIRE E. EBERT

Center for Comparative Archaeology
Department of Anthropology, University of Pittsburgh
3302 Wesley Posvar Hall, Pittsburgh, PA 15260
Email: cce8@pitt.edu

EDUCATION

Ph.D., Anthropology, The Pennsylvania State University, 2017. M.A., Anthropology, The Pennsylvania State University, 2013. B.A., Anthropology, University of New Mexico, 2010.

ACADEMIC APPOINTMENTS

2017-current Visiting Scholar, Center for Comparative Archaeology, Department of Anthropology,

University of Pittsburgh.

2016-2017 Instructor, Department of Anthropology, Penn State University.

Relevant Affiliations

2017-current Member, Climate and Global Change Research Center, University of Pittsburgh.

RESEARCH INTERESTS

Development of social complexity, human-environment interaction, transition from foraging to farming, origins of agriculture, Archaic and Formative period Mesoamerica, Mesolithic and Neolithic Europe, household and settlement archaeology, radiocarbon dating, stable isotope geochemistry, geochemical sourcing analyses, paleoclimate reconstruction, GIS and remote sensing.

LIST OF PUBLICATIONS

Peer-Reviewed Publications

- n.d. **Ebert, C. E.**, J. A. Hoggarth, B. J. Culleton, J. J. Awe, and D. J. Kennett. The role of diet in resilience and vulnerability to climate change: Radiocarbon and stable isotope evidence from the ancient Maya community at Cahal Pech, Belize. *Current Anthropology*. (In Revision)
- n.d. Helmke, C., **C. E. Ebert**, J. J. Awe, and J. A. Hoggarth. The lay of the land: A political geography of an ancient Maya kingdom in west-central Belize. *Contributions in New World Archaeology*. (In Review)
- n.d. Walden, J., C. E. Ebert, J. A. Hoggarth, S. Montgomery, and J. J. Awe. Modeling variability in Classic Maya intermediate elite political strategies through multivariate analysis of settlement patterns. *Journal of Anthropological Archaeology*. (In Review)
- 2017 **Ebert, C. E.**, N. Peniche May, B. J. Culleton, J. J. Awe, and D. J. Kennett. Regional response to drought during the formation and decline of Preclassic Maya societies. *Quaternary Science Reviews* 173: 211-235.
- 2017 Prufer, K. M., A. E. Thompson, C. R. Meredith, B. J. Culleton, J. M. Jordan, C. E. Ebert, B. Winterhalder, and D. J. Kennett. The Classic Period Maya transition from an ideal free to an ideal

- despotic settlement system at the polity of Uxbenká. *Journal of Anthropological Archaeology* 45: 53-68.
- 2016 **Ebert, C. E.**, B. J. Culleton, J. J. Awe, and D. J. Kennett. AMS ¹⁴C dating of Preclassic to Classic Period household construction in the ancient Maya community of Cahal Pech, Belize. *Radiocarbon* 58: 69-87.
- 2016 **Ebert, C. E.**, J. A. Hoggarth, and J. J. Awe. Integrating quantitative LiDAR analysis and settlement survey in the Belize River Valley. *Advances in Archaeological Practice* 4: 284-300.
- 2016 Hoggarth, J. A., S. F. M. Breitenbach, B. J. Culleton, C. E. Ebert, M. A. Masson, and D. J. Kennett. The political collapse of Chichén Itzá in cultural and climatic context. *Global and Planetary Change* 138: 25-42.
- 2015 **Ebert, C. E.**, M. Dennison, K. G. Hirth, S. B. McClure, and D. J. Kennett. Formative Period obsidian exchange along the Pacific Coast of Mesoamerica. *Archaeometry* 57(S1): 54-73.
- **Ebert, C. E.**, K. M. Prufer, M. J. Macri, B. Winterhalder, and D. J. Kennett. Terminal long count dates and the disintegration of Classic Period Maya polities. *Ancient Mesoamerica* 25: 337-356.
- 2014 Smith, C. B., **C. E. Ebert**, and D. J. Kennett. Human ecology of shellfish exploitation at a prehistoric fishing-farming village on the Pacific Coast of Mexico. *Journal of Island and Coastal Archaeology* 9: 183-202.
- 2012 Kennett, D. J., S. F. M. Breitenbach, V. Aquino, Y. Asmerom, J. Awe, J. Baldini, P. Bartlein, B. J. Culleton, C. Ebert, C. Jazwa, M. J. Macri, N. Marwan, V. Polyak, K. M. Prufer, H. E. Ridley, H. Sodemann, B. Winterhalder, and G. H. Haug. Development and disintegration of Maya political systems in response to climate change. *Science* 338: 788-791.

Book Chapters and Conference Proceedings

- n.d. Hoggarth, J. A., C. Freiwald, **C. E. Ebert**, C. Helmke, J. J. Awe, K. Green, P. Powess, and A. H. McKeown. As the baktun turned: Reconstructing Classic to Postclassic population dynamics in the Belize River Valley. In *Identity, power, and politics: 3000 years of war and peace in the Maya lowlands*, edited by G. Braswell and V. Aquino. Routledge Archaeology of the Ancient Americas. Routledge, New York. (In Review)
- n.d. Peniche May, N. J. J. Awe, and **C. E. Ebert**. El intercambio en las sociedades mayas del preclasico medio: El caso de Cahal Pech en el Valle de Belice. In *Acta del Simposio de Cultura Maya Ichkaantijoo 2017 en INAH-Yucatán*, edited by A. Góngora Salas. (In Review)
- Wallgrün J. O., J. Huang, J. Zhao, **C. Ebert**, P. Roddy, J. Awe, T. Murtha, and A. Klippel. Immersive technologies and experiences for archaeological site exploration and analysis. In *Proceedings of workshops and posters at the 13th International Conference on Spatial Information Theory (COSIT 2017)*, edited by P. Fogliaroni, A. Ballatore, and E. Clementini, pp. 307-314. Lecture Notes in Geoinformation and Cartography. Springer, Cham, Switzerland.
- 2015 Awe, J. J., C. E. Ebert, and J. A. Hoggarth. Three k'atuns of pioneering settlement research: Preliminary results of LiDAR survey in the Belize River Valley. In *Breaking barriers: Proceedings of the 47th annual Chacmool Archaeological Conference*, edited by Robyn Crook, Kim Edwards, and Colleen Hughes, pp. 57-75. University of Calgary, Calgary, Alberta.

Peer-edited Publications

- 2018 **Ebert, C. E.** and J. J. Awe. Reconstructing ancient Maya household economies in the Belize River Valley. *Research Reports in Belizean Archaeology* Vol. 15. (In Review)
- Awe, J. J., C. E. Ebert, C. Freiwald, and K. Green. The dead do tell tales: Unravelling the case of Cahal Pech's John or Jane Doe. *Research Reports in Belizean Archaeology* 14: 213-225.
- 2016 **Ebert, C. E.**, J. A. Hoggarth, and J. J. Awe. Classic Period Maya water management and ecological adaptation in the Belize River Valley. *Research Reports in Belizean Archaeology* 13: 109-119.
- Thompson, A. E., C. E. Ebert, and K. M. Prufer. Shifting dynamics and use of space at Uxbenká. *Research Reports in Belizean Archaeology* 10: 253-268.
- 2012 **Ebert, C. E.,** K. M. Prufer, and D. J. Kennett. Maya monuments and spatial statistics: A GIS-based examination of the Terminal Classic Period Maya collapse. *Research Reports in Belizean Archaeology* 9: 91-105.

Edited Monographs

- The Belize Valley Archaeological Reconnaissance Project: A Report of the 2017 Field Season, edited by C. E. Ebert, J. A. Hoggarth, C. C. Burke, and J. J. Awe. Department of Anthropology, Northern Arizona University, Flagstaff; Institute of Archaeology, Baylor University, Waco. (In Prep.)
- 2017 *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2016 Field Season*, edited by **C. E. Ebert**, C. C. Burke, J. J. Awe, and J. A. Hoggarth. Institute of Archaeology, Baylor University, Waco; Department of Anthropology, Northern Arizona University, Flagstaff.

Selected Technical Reports

- 2018 **Ebert, C. E.** Preclassic plaza investigations at Cahal Pech, Belize: Results of the 2017 Excavations in Plaza B. In *The Belize Valley Archaeological Reconnaissance Project: A report of the 2017 field season*, edited by C. E. Ebert, J. A. Hoggarth, C. C. Burke, and J. J. Awe. Department of Anthropology, Northern Arizona University, Flagstaff; Institute of Archaeology, Baylor University, Waco.
- 2016 **Ebert, C. E.,** and S. Fox. The 2015 settlement excavations at Cahal Pech, Belize: Continued research at Tzutziiy K'in, the Zopilote Group, and the Martinez Group. In *The Belize Valley Archaeological Reconnaissance Project: A report of the 2015 field season*, edited by J. A. Hoggarth and J. J. Awe, pp. 80-112. Institute of Archaeology, Baylor University, Waco, TX.
- 2015 **Ebert, C. E.** Lidar mapping and settlement survey at Cahal Pech, Belize. In *The Belize Valley Archaeological Reconnaissance Project: A report of the 2014 field season*, edited by J. A. Hoggarth and J. J. Awe, pp. 138-167. Belize Institute of Archaeology, National Institute of Culture and History, Belmopan.
- 2015 **Ebert, C. E.** Chemical characterization of obsidian artifacts from Cahal Pech and Lower Dover, Belize. In *The Belize Valley Archaeological Reconnaissance Project: A report of the 2014 field season*, edited by J. A. Hoggarth and J. J. Awe, pp. 210-221. Belize Institute of Archaeology, National Institute of Culture and History, Belmopan.
- 2013 **Ebert, C. E.**, and T. Dennehy. Preliminary investigations at Tzutziiy K'in. In *The Belize Valley Archaeological Reconnaissance Project: A report of the 2012 field season*, edited by J. A. Hoggarth, R. Ishihara-Brito, and J. J. Awe, pp. 185-209. Belize Institute of Archaeology, National Institute of Culture and History, Belmopan.

2010 **Ebert, C.**, L. Richards, C. Mustain, V. Aquino, W. Trask, L. Noldner, and K. M. Prufer. Excavations in Group D. In *The Uxbenká Archaeological Project: Report of the 2009 field season*, edited by K. M. Prufer, pp. 104-126. Belize Institute of Archaeology, National Institute of Culture and History, Belmopan.

RESEARCH SUPPORT

- 2018 National Science Foundation SBE Postdoctoral Research Fellowship (In Review, \$138,000; co-PI J. Awe, NAU)
- 2018 Rust Family Foundation Archaeology Grant: *The cultural and climatic context of the transition from foraging to farming in the Belize River Valley* (\$6,500; co-PIs J. Awe and C. Burke, NAU)
- 2017 Penn State Global Programs Graduate Travel Grant (\$750)
- 2016 University of Missouri Research Reactor (MURR): NSF Subsidy Program for ceramic compositional analyses from Cahal Pech, Belize
- 2015 Penn State Department of Anthropology Hill Fellowship (\$5,000)
- National Science Foundation Doctoral Dissertation Improvement Grant: *Maya households and the origins in inequality* (\$29,737; co-PI D. Kennett, Penn State)
- 2014 DigitalGlobe Foundation Imagery Grant
- 2014 Penn State Department of Anthropology Hill Fellowship (\$3,300)
- 2014 South-Central Conference on Mesoamerica Student Scholarship (\$100)
- 2013 Latin American Studies Research Award, Penn State (\$450)
- 2012 National Science Foundation Graduate Research Fellowship (\$96,000 stipend, \$30,000 tuition)
- 2009 Undergraduate Honors Scholarship, UNM (\$250)
- 2009 National Science Foundation Research Experience for Undergraduates Award (\$5,975; PI K. Prufer, UNM)

FELOWSHIPS AND AWARDS

- 2017 Lombra Graduate Student Award in Excellence in Social Sciences Research (Penn State; \$1,000)
- 2016 William T. Sanders Graduate Award in Anthropology (Penn State; \$1,000)
- 2016 Delbert and Marie Welch Dissertation Research Award (Penn State; \$2,000)
- 2016 EMBeRS (Employing Model-Based Reasoning in Socio-Environmental Synthesis) Summer Fellow (NSF-funded interdisciplinary training program through University of Texas-El Paso)
- 2012 Fred Matson Archaeological Institute of America Fellow (Penn State)
- 2009 Barbara MacCaulley Scholarship Undergraduate Award in Archaeology (UNM; \$500)

SELECTED PROFESIONAL PRESENTATIONS (*Invited)

- 2019* McClure, S., E. Podrug, E. Zavodny, C. Ebert, N. Triozzi, M. Welker, J. Jovic, K. Reed, and D. Kennett. "Having herds in Mediterranean environments: the example of Neolithic Dalmatia." Paper to be presented at the Joint Annual Meeting of the Archaeological Institute of America (AIA) and the Society for Classical Studies (SCS), San Diego, CA.
- 2018 **Ebert, C.**, J. Hoggarth, and J. Awe. "The climatic and environmental context for the formation and decline of Maya societies in the Belize River Valley." Paper presented at the 16th Annual Meeting of the Belize Archaeology and Anthropology Symposium. San Ignacio, Cayo, Belize.
- 2018* **Ebert, C.**, J. Hoggarth. K. Green, C. Freiwald, A. McKeown, J. Awe, and D. Kennett. "The stable isotope ecology of agriculture in the eastern Maya lowlands from the Preclassic through

- Colonial periods." Paper to be presented at the 83rd annual meeting of the Society for American Archaeology, Washington, DC.
- 2018 **Ebert, C.**, N. Peniche May, J. Hoggarth, and J. Awe. "A High-Resolution AMS ¹⁴C Chronology for the Formation and Resilience of Preclassic Period Society at the Maya Community of Cahal Pech, Belize." Posted to be presented at the 42nd International Symposium on Archaeometry, Merida, Mexico.
- 2018* Huang, J., **C. Ebert**, J. Wallgrün, J. Zhao, P. Roddy, A. Nasr, J. Awe, and A. Klippel. "Immersive augmented and virtual reality for archeological site exploration and analysis." Poster to be presented at the 83rd annual meeting of the Society for American Archaeology, Washington, DC.
- Huang, J., J. Wallgrün, C. Ebert, J. Zhao, J. Awe, and A. Klippel. "Immersive Experiences and Archaeology Workbenches with Digital Heritage Data." Paper presented at the Computer Applications and Quantitative Methods in Archaeology (CAA) Conference, University of Tübingen, Germany.
- 2018* McClure, S., C. Ebert, E. Podrug, and D. Kennett. "Identifying animal management practices using oxygen isotopes in Neolithic Croatia." Paper to be presented at the 83rd annual meeting of the Society for American Archaeology, Washington, DC.
- Qiu, Y., J. Hoggarth, **C. Ebert**, and J. Walden. "Identifying patterns of ceramic compositional variability from residential contexts in three Late Classic Maya polities." Poster to be presented at the 83rd annual meeting of the Society for American Archaeology, Washington, DC.
- 2018 Triozzi, N., S. McClure, E. Prodrug, C. Ebert, and D. Kennett. "A computational method for modeling transhumance patterns among Neolithic farmers in Dalmatia, Croatia." Paper to be presented at the 24th annual meeting of the European Association of Archaeologists, Barcelona, Spain.
- Walden, J., C. Ebert, J. Hoggarth, and J. Awe. 201 "Old problems, new approaches: Examining diversity in Classic Maya settlement systems to illuminate the political landscape of the Belize River Valley." Paper presented at the 16th Annual Meeting of the Belize Archaeology and Anthropology Symposium. San Ignacio, Cayo, Belize.
- 2017 **Ebert, C. E.** and J. J. Awe. "Maya household economies and the origins of inequality at Cahal Pech, Belize." Paper presented at the 15th Annual Meeting of the Belize Archaeology and Anthropology Symposium. San Ignacio, Cayo, Belize.
- 2017* **Ebert, C.**, J. Hoggarth, B. Culleton, J. Awe, and D. Kennett. "A Bayesian model-based comparison of radiocarbon chronologies for the earliest complex societies in the Maya Lowlands." Paper presented at the 82nd annual meeting of the Society for American Archaeology, Vancouver, BC.
- 2017* Peniche May, N., J. Awe, and **C. Ebert.** "El intercambio en las sociedades Mayas del preclasico medio: El caso de Cahal Pech en el Valle de Belice." Paper presented at the Simposio de Cultura Maya Ichkaantijoo 2017 en INAH-Yucatán, Merida, Mexico.
- Wallgrün, J., A. Klippel, J. Huang, J. Zhao, C. Ebert, P. Roddy, and J. Awe. "Immersive Technologies and Experiences for Archaeological Site Exploration and Analysis." Paper presented at the 13th International Conference on Spatial Information Theory, L'Aquila, Italy.
- 2016* **Ebert, C. E.** "Climate change and the resilience of Preclassic Period Maya society at Cahal Pech, Belize." Paper presented at the 10th Annual Maya at the Playa Conference. Palm Coast, FL.

- 2016* **Ebert, C.**, N. Peniche May, B. Culleton, J. Awe, and D. Kennett. "Timing the development of household complexity at Cahal Pech, Belize." Paper presented at the 81st annual meeting of the Society for American Archaeology, Orlando, FL.
- 2015 **Ebert, C.**, R. George, J. Hoggarth, R. Guerra, and J. Awe. "Preclassic to Postclassic Period Obsidian Exchange and Regional Interaction in the Belize River Valley." Poster presented at the 80th annual meeting of the Society for American Archaeology, San Francisco, CA.
- 2015 **Ebert, C.**, J. Hoggarth, and J. Awe. "Prehistoric water management in the Belize River Valley: LiDAR mapping and survey of the ditched field system at Baking Pot, Belize." Paper presented at the 13th Annual Meeting of the Belize Archaeology and Anthropology Symposium. San Ignacio, Cayo, Belize.
- 2015* Helmke, C., C. Ebert, J. Awe, and J. Hoggarth. "The Lay of the Land: Mapping an Ancient Maya Kingdom in West-Central Belize." Paper presented at the 20th European Maya Conference, University of Bonn, Bonn, Germany.
- 2014* Awe, J., C. Ebert, and J. Hoggarth. "Three Katuns of Pioneering Maya Settlement Research: Preliminary Results of Lidar Survey in the Belize River Valley." Paper presented at the 2014 Chacmool Conference, University of Calgary, Calgary.
- 2014 **Ebert, C. E.** and J. J. Awe. "Integrating airborne LiDAR and settlement survey at Cahal Pech, Belize." Paper presented at the 5th annual South-Central Conference on Mesoamerica, Tulane University, New Orleans, LA.
- 2014 **Ebert, C.**, D. Kennett, J. Awe. "Excavations at Tzutziiy K'in: Preclassic settlement and Classic development at an ancient Maya household group". Poster presented at the 79th annual meeting of the Society for American Archaeology, Austin, TX.
- 2012 **Ebert, C.**, K. Prufer, and D. Kennett. "A Terminal Classic elite Maya settlement group at Uxbenká, Belize." Poster presented at the 77th annual meeting of the Society for American Archaeology, Memphis, TN.
- 2011* **Ebert, C.**, K. Prufer, and D. Kennett. "Terminal long count dates and the disintegration of Classic Period Maya polities." Paper presented at the 76th annual meeting of the Society for American Archaeology, Sacramento, CA.

TEACHING EXPERIENCE

List of Courses Taught (*Online)

Radiocarbon Chronology Building in Comparative Archaeology (Graduate seminar), Instructor of Record, University of Pittsburgh, Fall 2017, Spring 2018

Field Methods in Archaeology: Investigating Maya Civilization in Belize, Central America, Assistant Instructor, Northern Arizona University, Summer 2015, 2017

*North American Indians, Instructor of Record, Penn State, Spring 2017

*North American Archaeology, Instructor of Record, Penn State, Fall 2016

World Archaeology, Teaching Assistant and Lab Instructor, University of Oregon, Fall 2011

Short Courses Taught

Introduction to Bayesian Radiocarbon Chronology Modeling. Workshop at the Department of Anthropology, The Pennsylvania State University, Winter 2017.

Mentorship & Other Teaching Activities

2015-2017	M.A. Thesis Mentor, Penn State Department of Anthropology. Advised a Penn State Master's student on thesis research based on technical and pXRF analysis of Maya obsidian artifacts from western Belize.
2015	M.A. Thesis Mentor, Belize Valley Archaeological Reconnaissance (BVAR) Project. Advised a Northern Arizona University Master's student on thesis research based on analysis of ceramics from Cahal Pech, Belize.
2012-2015	Field School Supervisor, Belize Valley Archaeological Reconnaissance (BVAR) Project (San Ignacio, Belize).
2011-2017	Laboratory Instructor, Human Paleoecology and Isotope Geochemistry Laboratory, Department of Anthropology, Penn State.

ARCHAEOLOGICAL FIELD & LABORATORY EXPERIENCE

2016-current	Assistant Director, Belize Valley Archaeological Reconnaissance (BVAR) Project, Belize. PIs: J. Awe (Northern Arizona University) and J. Hoggarth (Baylor University).
2016-current	Project Member, <i>Cultural and Biological Approaches to Domestic Animal Management in Neolithic Dalmatia</i> . PIs: S. McClure (Penn State), E. Prodrug (Šibenik City Museum, Croatia), and D. Kennett (Penn State). Funded by NSF (BCS-1430823).
2015-current	Project Member, <i>Maya Burial Project</i> . PIs: D. Kennett, J. Hoggarth, and B. Culleton. Funded by Penn State Dept. of Anthropology and Baylor Dept. of Anthropology.
2011-2017	Lab Group Member, Human Paleoecology and Isotope Geochemistry Laboratory, Dept. of Anthropology, Penn State.
2015-2017	Research Assistant, <i>Examining the Disintegration of Maya Polities and Demographic Decline in the Central Maya Lowlands</i> . PIs: D. Kennett (Penn State), J. Hoggarth (Baylor University), and B. Culleton (Penn State). Funded by NSF (BCS-1460369).
2014	Field Archaeologist, Palenque Pool Project (Chiapas, Mexico), PI: K. French (Penn State). Funded by the National Geographic Society/Waitt Foundation.
2013-2014	Research Assistant, Land, Water, and Territory: A 3,000-year Study of Niche Construction and Cultural Evolution in the Tikal National Park, Guatemala. PI: T. Murtha (Penn State). Funded by NSF (CNH-1211809).
2012-2015	Field School Supervisor, Belize Valley Archaeological Reconnaissance Project, Belize. PI: J. Awe (Northern Arizona University, Belize Institute of Archaeology).
2008-2011	Research Assistant and Project Member, Uxbenká Archaeological Project, Toledo District, Belize. PIs: K. Prufer (U. New Mexico) and D. Kennett (Penn State).
2008-2011	Archaeological Field Technician. Ebert & Associates, Inc., Albuquerque, New Mexico.

INVITED PUBLIC TALKS

- 2017 "Regional response to drought during the formation and decline of Preclassic Maya societies." Paleotopics Lecture Series, Climate and Global Change Center, Department of Geology and Environmental Science, University of Pittsburgh. December 8, 2017.
- 2017 "Dating the rise and fall of the earliest complex societies in the Maya lowlands." Archaeological Gems of Pittsburgh: Arkhaios Film Festival and Conference. October 28, 2017.
- 2017 "Resilience and vulnerability to climate change in early agricultural communities." Department of Anthropology, University of Pittsburgh. October 13, 2017.
- 2017 "Diet, drought, and the development of complex societies in the Maya lowlands." Department of Anthropology, Northern Arizona University. September 27, 2017.
- 2016 "From Cunil ceramics to complexity: The origins of Preclassic period Maya society at Cahal Pech, Belize." Pre-Columbian Society, University of Pennsylvania Anthropology and Archaeology Museum. March 12, 2016.

SERVICE

2018	Discussant, Society for American Archaeology Forum on Women's Participation in the
	Field (sponsored by the Current Status of Women in Archaeology Committee)
2018	Book Reviewer for Journal of California and Great Basin Anthropology
2017-present	Committee Member, Society for American Archaeology Committee on the Americas
2017-2018	Reviewer for Canadian Slavonic Papers
2017	Reviewer for Latin American Antiquity
2016	Reviewer for Journal of Field Archaeology
2016	Judge for Penn State 31st Annual Graduate Research Exhibition
2015-2017	Committee Member, Penn State Department of Anthropology Colloquium Committee
2012-2013	Penn State Anthropology Grad Student Association Film Festival Committee Chair
2009-2010	University of New Mexico Undergraduate Anthropology Society President

PROFESSIONAL MEMBERSHIP

Archaeological Institute of America Register of Professional Archaeologists Society for American Archaeology Society for Archaeological Sciences