

## THE YEAR OF LIVING DANGEROUSLY

Although perhaps best known as a title of a feature film, “the year of living dangerously” is certainly an apt description of the year 2020. Frozen at home, working via Zoom, waiting for things to return to normal, and wondering what that normal will look like.

### CALENDAR OF EVENTS 2021

**The Long-Term Consequences of Inequality: Views from Archaeology. Proposed session for the 27<sup>th</sup> Annual Meeting of the European Association of Archaeologists, Kiel, Germany, September 8–11**

CfAS is founded on a model of intense, face-to-face interaction. Working groups meet 3–4 times over the course of 2 years, with collaborators then returning to their institutions to work on particular aspects of the research problem with the results informing the next meeting. COVID-19 has thrown a wrench into this model. For the short term, this has meant putting most working groups on hold or, at best, working online just enough to keep projects alive. But the pandemic has also left us pondering the basic tenet underlying synthesis centers: Are face-to-face meetings imperative to advancing this type of research? What other mechanisms are there for collaborative scientific research? What is best accomplished in person and what can be done more effectively and efficiently online?

Not surprisingly, our working groups are out ahead of us. Some groups have used this time to prepare publications. Others have submitted grant proposals. Still others have experimented with collaborative research online. The working group synthesizing the effects of past human migrations on human security, for example, meets via Zoom every fortnight. For most of 2020, they worked through a series of case studies. In January 2021, they will hold a 3-day virtual workshop to define proxy variables that can be observed in the archaeological record of human securities for a larger synthetic study. The workshop will be followed by focused research of the collaborators, with hour-long fortnight virtual meetings, throughout 2021. The group plans to hold its next face-to-face workshop in Abidjan, Côte d'Ivoire, in January 2022. Although modifying the CfAS working group model was not the intent of the group, their continued online collaboration is helping us explore other approaches and platforms to meet our mission.

How to conduct collaborative research is one thing; what to conduct collaborative research on is quite another. During 2020, the CfAS board of directors established a “new initiatives” committee to develop research themes for future projects and workshops. The group proposed 11 themes in addition to the 3 that CfAS is already working on (see list, next page). The committee members further developed each theme with a brief description, research questions, and references. CfAS associates (300+) were then asked to fill out a questionnaire to evaluate the themes, rank their importance, and offer new ones. Fifty associates responded (16 percent) with rankings and suggestions for revisions to the original themes as well as offering another 15 themes. In light of this input, the committee is now revising the themes, which will be sent to CfAS partners to distribute to their members (ca. 14,000) for further discussion and input. Our goal is to establish a list of themes and research questions that can guide the development of collaborative synthetic projects by CfAS and archaeologists more generally.

The CfAS board also has been active. In September, the board agreed to a Memorandum of Understanding with the newly established Center for Collaborative Synthesis in Archaeology (CCSA) at the University of Colorado, Boulder. Scott Ortman, the Founding Director of CCSA, discusses the relationship between the two organizations later in this newsletter. With the CfAS-CCSA relationship established, the CfAS board has now turned its attention to adopting formal bylaws and policies, with the hope of having elections to a newly constituted board in the Spring of 2021.

## CfAS Partners

### Professional Organizations

- American Cultural Resources Organization (ACRA)
- Archaeology Division, American Anthropological Association (AAA-AD)
- Archaeological Institute of America (AIA)
- Chartered Institute for Archaeologists (CIfA)
- European Association of Archaeologists (EAA)
- International Council for Archaeozoology (ICAZ)
- International Scientific Committee on Archaeological Heritage Management (ICAHM)
- PanAfrican Archaeological Association (PAA)
- Society for American Archaeology (SAA)
- Society for Historical Archaeology (SHA)

### Cultural Heritage Firms

- Alpine Archaeology, Inc.
- Cultural Heritage Partners, PLLC
- Cultural Resource Analysts, Inc.
- Desert Archaeology, Inc.
- Far Western Anthropological Research Group
- Landward Research, Ltd.
- PaleoWest Archaeology
- Statistical Research, Inc.

### Cyberinfrastructure Providers

- Archaeological Data Service (ADS; University of York)
- ARIADNE
- IsoArch
- Network for Computational Modeling in Social & Ecological Sciences (CoMSES Net)
- OCHRE Data Services
- OpenContext
- The Digital Archaeological Record, Arizona State University Center for Digital Antiquity (tDAR)

### Academic Units

- Arizona State University Center for Archaeology & Society
- Capital Normal University Center for Public Archaeology (Beijing, China)
- Istanbul Technical University, Eurasia Institute of Earth Sciences, Department of Ecology and Evolution (Istanbul, Turkey)
- Macquarie University Center for Ancient Cultural Heritage & Environment (CACHE; Sydney, Australia)
- Heidelberg Academy of Sciences and Humanities, The Role of Culture in Early Expansions of Humans (ROCEEH)
- Santa Fe Institute (SFI)
- University at Buffalo Institute for European and Mediterranean Archaeology
- University of Arizona School of Anthropology
- University of California, Berkeley, Phoebe A. Hearst Museum of Anthropology
- University of California, Los Angeles, Cotsen Institute of Archaeology
- University of Colorado, Boulder, Department of Anthropology
- University of Michigan Museum of Anthropological Archaeology
- Washington State University Department of Anthropology

### Non-governmental Organizations

- Amerind Foundation
- Archaeology Southwest
- Center for American Archaeology
- Crow Canyon Archaeological Center
- The Field Museum
- Institute for Field Research (IFR)
- Integrated History & Future of People on Earth (IHOPE)
- Norwegian Institute for Cultural Heritage Research (NIKU)
- School for Advanced Research (SAR)
- Shiyani Research Institute (India)
- SRI Foundation
- Wenner-Gren Foundation for Anthropological Research

## INITIAL LIST OF CFAS THEMES

*Biodiversity*

*Coping with Natural Disasters*

*Fire Management*

*Slavery, Forced Labor, and Human Trafficking*

*Human Migration*

*Infectious Disease*

*Social Inequality*

*Demography*

*Climate Change*

*Archaeology of Genetic Identities and Ancient DNA*

*Colonialism*

*Town and Country/Urban and Rural*

In addition to Scott's discussion, this newsletter includes an update on the CfAS-sponsored People, Fire, and Pines working group by Evan Larson. First, however, we present another in our series of essays from a leading synthesizer of archaeological data. Michael Smith is well known for his work on the archaeology of central Mexico and more generally on urbanism. Below he provides a thought-provoking essay on the place of synthesis in comparative approaches in archaeology.

### SYNTHESIS AND COMPARISON IN ARCHAEOLOGY

*Michael E. Smith is a Professor in Arizona State University's (ASU) School of Human Evolution and Social Change and the Director of the ASU-managed Teotihuacan Research Laboratory*

Synthesis is a type of comparison. Most archaeologists—whether they work in North American anthropological archaeology, in Classics, or in disciplines like European prehistory—profess some interest in comparative analysis. But for many, the notion of archaeological comparisons does not rise to the level of synthesis. Synthesis is a comprehensive and time-consuming form of comparative work. It is easy to point out, for example, that architectural elements from the imperial capital were replicated in the provinces in both the Aztec and Inka Empires (Figures 1, 2). But it requires the more intensive work of synthesis to reveal that the mechanisms that account for this pattern were radically different in these two cases (see below).

In several recent papers I describe three broad reasons why archaeologists undertake comparisons: discovery, generalization, and causality (Smith 2018, 2020). (1) Discovery is the easiest and most common goal of comparison: archaeologists typically use comparison to improve understanding of their particular case; synthesis is rarely involved. (2) Generalization is more complicated, requiring careful attention to sampling (larger numbers of cases, selected in a manner to permit generalization); this gets us into the realm of synthesis. (3) As a reason for comparison, causality is the most difficult goal to achieve. Generalization and causality fit within the major archaeological definition of synthesis: "Accessing, analyzing, and comparing disparate data sets to produce explanations and insights about human behavior that could never emerge from the analysis of individual projects" (Altschul et al. 2017:11000).

**Table 1. Synthesis and types of comparison**

	Intensity of data analysis:		
	"As-Is" (little analysis)	Minor analysis	Major analysis
Large-N comparisons	Chandler and Fox (1978) city-size data	Many published journal articles	<b><i>SYNTHESIS (quantitative &amp; qualitative)</i></b>
Case study analyses	Most edited volumes	Smith (2003), <i>Political Landscape</i>	Trigger (2003) on <i>Early Civilizations</i>

Table 1 shows another way to examine the place of synthesis within archaeological comparative research. This is a rough scheme that simplifies a complicated topic. The vertical axis distinguishes large-N comparisons from case study research, and the horizontal axis shows the amount or intensity of data analysis. I offer this table to amend a statement by Altschul et al. (2018) that archaeological synthesis should be contrasted with “studying a single case or [analysis] from a single perspective” (p. 22). In my view, study of a single case should be contrasted with comparative methods, and synthesis should be reserved for a particularly intensive type of comparative analysis.

Case study analyses are the most common form of archaeological study. Most edited volumes in archaeology consist of a series of separate chapters that do not engage in common analysis; in fact, I would hesitate to label most archaeological edited volumes as comparative at all. Adam T. Smith’s book, *The Political Landscape* (Smith 2003) compares three cases, with a low level of analysis across cases. Bruce Trigger’s *Understanding Early Civilizations* (Trigger 2003) brings the sample size up to seven case studies, and he juxtaposes the cases in common analysis to a greater extent than does Smith.

For comparative studies with larger sample sizes, the lowest level is the compilation of data with little or no analysis. Tertius Chandler’s book, *Three Thousand Years of Urban Growth: An Historical Census* (Chandler and Fox 1978) is a notorious example. He combed archaeological and historical accounts and reported the size of early cities, but he conducted no historiographical analysis at all. Because his quality control was minimal, most of the data are highly unreliable (Smith 2016). Moving to the right in Table 1, intensive comparative archaeological analyses of larger samples are becoming more common in journals today, which is a very good sign. But to reach the plateau of productive synthesis requires considerable work in coding and analysis. Synthetic analysis can employ quantitative and statistical methods, semi-quantitative methods (e.g., Blanton and Fargher 2008), and even qualitative methods. The key is that multiple cases are being



Figure 1. Inca-style doorway at Huanuco Pampa. Photo by AgainErick, licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license. [https://commons.wikimedia.org/wiki/File:Hu%C3%A1nuco\\_Pampa\\_Archaeological\\_site\\_-\\_doorway.jpg](https://commons.wikimedia.org/wiki/File:Hu%C3%A1nuco_Pampa_Archaeological_site_-_doorway.jpg)

ysis. The Foundation's then-president, Sydel Silverman, attended the conference, where she enforced her own views that the goal of advanced seminars was the intellectual enrichment of individual attendees. As a consequence, the resulting edited volume (Alcock et al. 2001) fails to achieve a comparative end because the chapters do not speak to common questions.

While one contribution focused on the Inka empire and my own targeted the Aztec empire, we were prevented from putting these two cases into a common framework. It took me some dedicated comparative work—separate from the Wenner-Gren conference—to reveal why an apparently similar pattern (capital-based imperial architecture found in provincial areas) was generated by radically different political and economic processes. Away from the capital, Inka imperial architecture was built under imperial guidance in order to create a material statement of imperial might and control (Figure 1). In the Aztec case, however, a so-called imperial architectural form—the double-stair temple—in fact spread throughout central Mexico long before the formation of the Aztec Empire as a shared style adopted by independent interacting polities. When the rulers of the empire later built their main temple with two stairways, they revived an archaic form. Thus, the fact that a provincial temple in Teopanzolco (Figure 2) resembles the central Templo Mayor of Tenochtitlan tells us nothing about imperial control of this provincial area.

analyzed jointly to achieve results that cannot be obtained from individual studies—or even several case studies—alone.

Altschul et al. (2018) suggest that some edited volumes in archaeology can be considered examples of archaeological synthesis (p.21), but such cases are quite rare. In fact, they only occur when unusually strong editing is coupled with buy-in and extra work by the authors. Most edited volumes in archaeology, however, do not even qualify as “comparative” studies. Two edited volumes from advanced seminars I participated in illustrate some of the variation in this genre in relation to comparative analysis and synthesis.

In the first case, a conference on empires sponsored by the Wenner-Gren Foundation was deliberately set up to avoid explicit comparative anal-



Figure 2. Double-stair pyramid at Teopanzolco in Cuernavaca. Photo by Michael E. Smith

Shortly after the Wenner-Gren empires conference, I attended a conference on city-states funded by the Copenhagen Polis Centre. The organizer, Mogens H. Hansen, set up an explicitly comparative framework. He defined a concept he called “city-state culture” for landscapes that were politically fragmented but culturally unified. He insisted that each participant use his concepts and scheme in the papers, and the result was a true comparative study (Hansen 2000). Hansen undertook the task of synthesizing the cases with respect to history and theory in an introductory and a concluding chapter. Because of his work and guidance, the city-states conference—unlike the empires conference—greatly advanced the comparative understanding of its target institution.

Archaeologists employ many types of comparative analysis, and not all of them should be called “synthesis.” There is a continuum of intensity of comparative research (Table 1), and synthesis is best seen as occupying the most intensive end of that continuum. Many of us would like to do synthetic research with archaeological data, but intellectual and financial forces make that difficult. Synthesis and other kinds of comparative analysis were popular in the 1960s and 1970s, when the New Archaeology reigned. After that period, the rise of post-processualism in archaeology threw two strikes against synthesis. First, large numbers of archaeologists turned away from comparison to focus more intensively on descriptions of individual sites and cases. Second, many abandoned the rigors of a scientific epistemology to embrace an interpretivist approach to knowledge.

However, scientific epistemology and appreciation for the benefits of comparison are making comebacks. Nevertheless, even as the intellectual climate is now ripe for a flourishing of rigorous and productive syntheses in archaeology (Kintigh et al. 2014; Ortman 2019), financial factors make it difficult for individuals to find the time and resources to pursue this kind of research. This scientific vs. financial dilemma was one reason behind the establishment of the Coalition for Archaeological Synthesis, and, now, the new Center for Collaborative Synthesis in Archaeology. I am looking forward to seeing the expansion of archaeological synthesis as promoted by these new institutions, and its resulting benefits for our knowledge of the course of human activities and societies across deep time.

## References

- Alcock, Susan E., Terence N. D'Altroy, Kathleen D. Morrison, and Carla M. Sinopoli (editors)  
2001 *Empires: Perspectives from Archaeology and History*. Cambridge University Press, New York.
- Altschul, Jeffrey H., Keith W. Kintigh, Terry H. Klein, William H. Doelle, Kelley A. Hays-Gilpin, Sarah A. Herr, Timothy A. Kohler, Barbara J. Mills, Lindsay M. Montgomery, Margaret C. Nelson, Scott G. Ortman, John N. Parker, Matthew A. Peeples, and Jeremy A. Sabloff  
2017 Opinion: Fostering synthesis in archaeology to advance science and benefit society. *Proceedings of the National Academy of Sciences* 114 (42):10999–11002.
- 2018 Fostering Synthetic Collaborative Research in Archaeology. *Advances in Archaeological Practice* 6 (1):19–29.
- Blanton, Richard E., and Lane F. Fargher  
2008 *Collective Action in the Formation of Pre-Modern States*. Springer, New York.
- Chandler, Tertius and Gerald Fox  
1978 *Three Thousand Years of Urban Growth: An Historical Census*. 2nd ed. Academic Press, New York.

Hansen, Mogens Herman (editor)

2000 *A Comparative Study of Thirty City-State Cultures*. The Royal Danish Academy of Sciences and Letters, Copenhagen.

Kintigh, Keith W., Jeffrey H. Altschul, Mary C. Beaudry, Robert D. Drennan, Ann P. Kinzig, Timothy A. Kohler, W. Frederick Limp, Herbert D. G. Maschner, William K. Michener, Timothy R. Pauketat, Peter Peregrine, Jeremy A. Sabloff, Tony J. Wilkinson, Henry T. Wright, and Melinda A. Zeder

2014 Grand Challenges for Archaeology. *Proceedings of the National Academy of Sciences* 122:879–880.

Ortman, Scott G.

2019 A New Kind of Relevance for Archaeology. *Frontiers in Digital Humanities*, 6 (Special issue: Where do Cities Come From and Where are They Going to? Modelling Past and Present Agglomerations to Understand Urban Ways of Life): Article # 16. <https://www.frontiersin.org/articles/10.3389/fdigh.2019.00016/full>.

Smith, Adam T.

2003 *The Political Landscape: Constellations of Authority in Early Complex Polities*. University of California Press, Berkeley.

Smith, Michael E.

2016 Why Would a Journal Called 'Scientific Data' publish bad data? The Chandler/Modelski city-size problem. *Blog: Publishing Archaeology* (9 June, 2016). <http://publishingarchaeology.blogspot.com/2016/06/why-would-journal-called-scientific.html>.

2018 *The Importance of a Comparative Perspective in the Study of Ancient Economies*. Beiträge zur Wirtschaftsarchäologie. Habelt-Verlag, Bonn.

2020 Definitions and Comparisons in Urban Archaeology. *Journal of Urban Archaeology* 1:15–30.

Trigger, Bruce G.

2003 *Understanding Early Civilizations: A Comparative Study*. Cambridge University Press, New York.

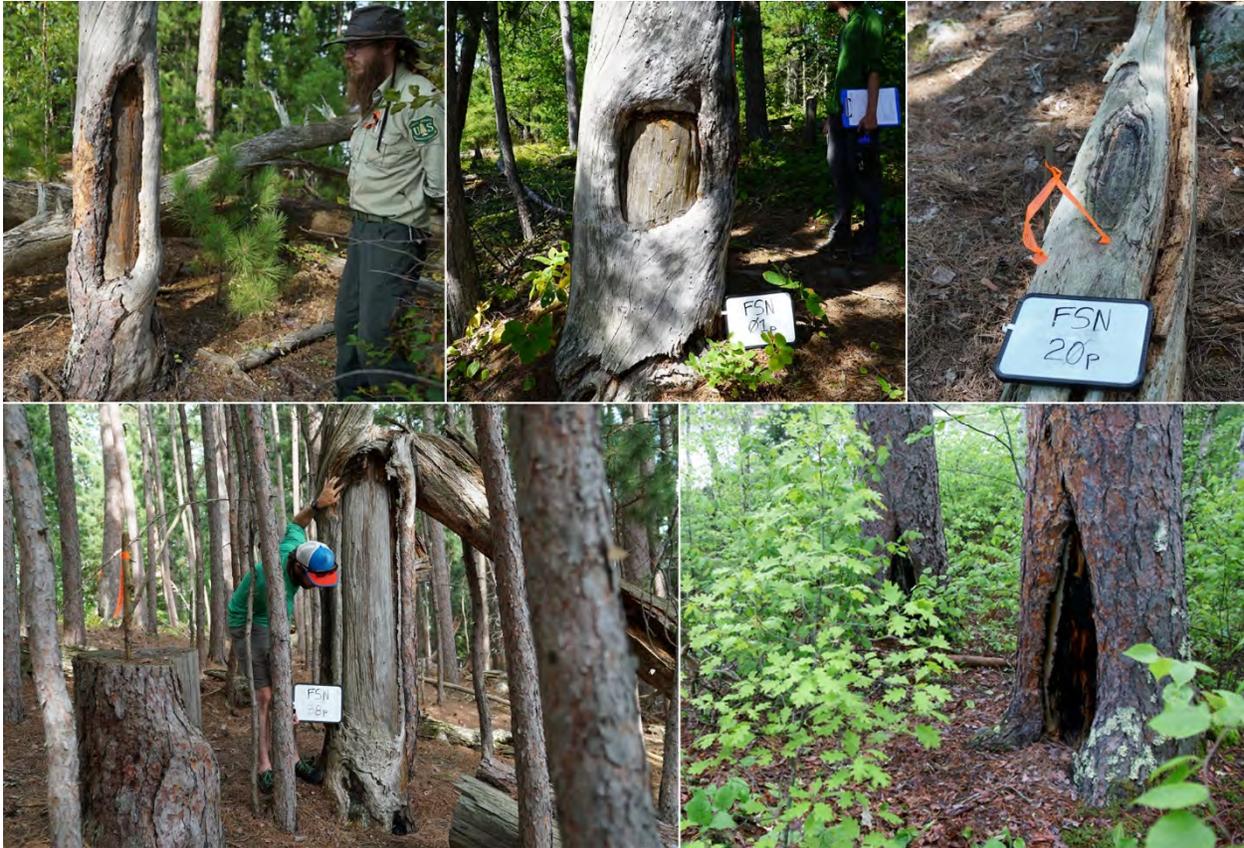
## EVERYONE TRUSTS THE TREES

*Evan Larson is a Professor in the Department of Geography, University of Wisconsin-Platteville and the Principal Investigator the People, Fire, and Pines Project*



*A massive and ancient red pine towers above encroaching hardwoods and carries within its rings a story of people and fire that resonates with lessons for fire management today.*

News stories about wildfires are among the few that have worked their way into the public consciousness in the time of COVID-19 and presidential elections. The headlines evoke images of western mountain slopes

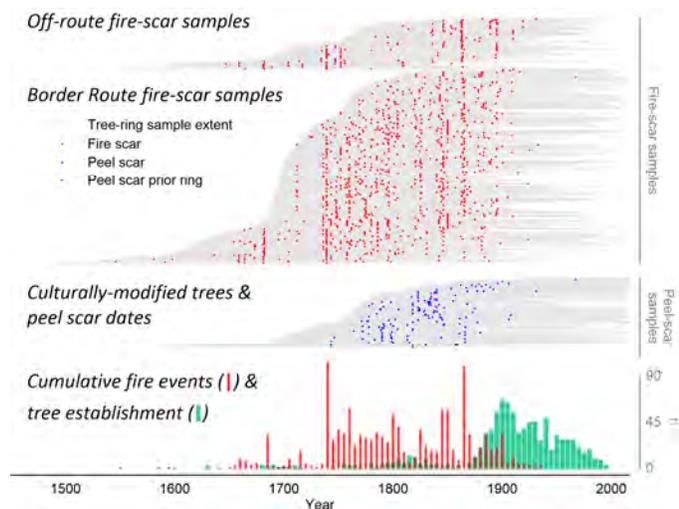


*This project is synthesizing tree-ring and archaeological records of fire and human land use to better understand the relationships between people and fire in the Great Lakes Region. The photos above (top row and bottom left) illustrate the diversity in shape of peel scars that were created for a variety of purposes including the collection of pitch. The lower right image depicts a fire-scarred red pine to show the contrasting morphology of the distinct injury types.*

in flame. The broad themes of these accounts are the same as in the past—fire suppression, fuel buildup, and climate change together drive catastrophic fires across record-setting extents causing massive economic losses and environmental degradation. Yet there is a different tone to some of the reporting this year. More attention is being paid to how we, as a society, may begin to move forward in healing both the land and our relationship to it. Increasingly, reporters are acknowledging the value of insights offered by those with access to Traditional Knowledge—people whose ancestors’ cultures and world views were shaped through a deep recognition of their place within the community of life, rather than apart from it. Mindsets steeped in Western science perspectives often struggle to be open to wisdom that requires reimagining the relationships among people, fire, and the land. A synthesis of archaeological and ethnographic insights can help inspire this opening of the mind. While fires burning through western forests have captured national attention, halfway across the continent a subtle transformation in perspective is occurring in the fire management communities of the Upper Great Lakes region. The People, Fire, and Pines working group supported by the Coalition for Archaeological Synthesis (CfAS) is one partnership encouraging this transformation.

The initial inspiration for the group can be traced to a short e-mail from Lee Johnson, Director of the Heritage Program for the Superior National Forest, to Evan Larson, at the time an Associate Professor of Geography at the University of Wisconsin-Platteville. The message was barely the length of a tweet but was the spark that set ideas swirling. “Kind of skimmed through this, but there might be funding here if we wanted to apply it to a [culturally-modified tree] working group for the Quetico-Superior area. Something to think about...” The first call for proposals from the newly created CfAS program was attached. The concept driving CfAS was inspirational and timely. It helped connect and interweave a number of synergistic efforts that sought to fundamentally reshape our understanding of the relationships among people, fire, and the land.

Larson, Lane Johnson, then with the USGS and now a Research Forester at the University of Minnesota Cloquet Forestry Center, and Kurt Kipfmüller, an Associate Professor of Geography at the University of Minnesota, had just completed a 5-year project funded by the National Science Foundation exploring the fire history of the Boundary Waters Canoe Area Wilderness (BWCAW) through analysis of scars recorded in the rings of remnant red pine stumps. The project started as an academic critique of the concept of Wilderness. However, recognition of a network of culturally-modified red pine trees laced among the waterways of the BWCAW led to the realization that these trees tell an important story about centuries of traditional human-landscape interaction. Early results of that work were qualitatively compelling, but presented a unique challenge using the tree-ring data to quantitatively demonstrate the impacts of humans on the configuration of the contemporary landscape—very few places in the study area could be viewed as controls lacking evidence of human impacts. In other words, it was hard to find places on the landscape where red pine and fire history occurred that did not also suggest some legacy of human influence.



*A graph portraying the fire history, peel tree, and forest age structure data developed for the BWCAW. The fire history data are arranged to emphasize areas of lesser human influence (Off-route) and greater human influence (Border Route), and clearly show a temporal alignment with peak fire activity and peel scar dates. The bottom graph shows the widespread establishment of trees following the reduction of traditional land-use due to state and federal policies meant to dislocate indigenous groups from their traditional lands and practices. To be clear, the decline in fire activity occurred decades prior to effective fire suppression. The tree establishment since that time has likely created denser stands of red pine than at any time in the past 500 years.*

As Larson, Johnson, and Kipfmüller worked to understand these data, they began sharing their preliminary results and in so doing formed new relationships that would prove formative for the project. Through a webinar facilitated by the Lake States Fire Science Consortium, Larson and Kipfmüller met Brian Jackson, a Biologist for Quetico Provincial Park (QPP). The conversation

quickly turned to expanding the fire history research into QPP, which adjoins the BWCAW along the US-Canada International Border, and to the possibility of using tree-ring data to inform a revision of the QPP fire management plan. The plan revision was slated to begin the following year and was directed to engage with the First Nations on whose lands the park existed, in particular the Lac La Croix First Nation whose ancestral lands spanned the park. A preliminary sampling of fire-scarred red pine across a bay from ancient pictographs further stimulated this collaboration and resulted in another individual and relationship entering the project. QPP had organized a shore lunch that included the research group as well as members of the Lac La Croix First Nation. At that lunch, conversation with Jessica Atatise, a young and respected member of the Lac La Croix First Nation who was actively gathering stories from her community's knowledge holders led to her staying on with the research group through the following days of fieldwork. Those key interactions began to shape interpretations of the tree-ring data to better hear the voices of the trees themselves in the data.



*A view of the water and lands of Lac La Croix along the Minnesota-Ontario international border. Tree-ring data document abundant fire-scars co-occurring with culturally-modified trees on the shorelines of this lake. Open stands of red pine on Lac La Croix are often described as the essence of wilderness by modern visitors, but likely reflect the legacy of the interactions of people and land that played out over centuries.*

Two hundred kilometers to the south, fire history sampling at the Cloquet Forestry Center (CFC), conducted by Larson and his students in close collaboration with Kyle Gill, forest manager at CFC, revealed a similar story of fire and pines. In a meeting to share the results of the work with members of the Fond du Lac Band of Lake Superior Chippewa, on whose land and reservation CFC exists, the need for the perspective of traditional knowledge was made clear. Upon hearing Larson's interpretation of the data, Jeff Savage, an elder, celebrated artist, and director of the Fond du Lac Museum and Cultural Center, leaned back and offered the formative words "You're just telling me what I already know." The message was clear. Jeff's story and knowledge became a part of the project.

The work in the BWCAW, QPP, and CFC all shared a focus, but had not been compared or contextualized by the rich history and meaning provided by Traditional Knowledge. In each case the scientific, numerical summaries of the tree-ring data rang hollow. The "mean fire return interval", often used to describe similar datasets, did not convey the *meaning* of what was emerging. Only a month after the meeting between Larson, Gill, and Savage, the University of Wisconsin-Platteville hosted Robin Kimmerer, as the keynote speaker for an Indigenous Peoples Day celebration. Kimmerer is a member of the Citizen Nation Potawatomi, Distinguished Teaching Professor at the State University of New York College of Environmental Science and Forestry, and author of



*CfAS enabled conversations that helped us learn from each other, from our elders, and from the trees themselves. The results have been profound and personal and are helping to shape dialogue among fire managers and landowners that will advance advocacy for the proactive use of prescribed fire in forests stewardship before catastrophe, to enable mindful and reciprocal stewardship of our relationships with the community of life around us.*

**Evan Larson – Principal Investigator**

the critically-acclaimed Braiding Sweetgrass. A day of conversation between Kimmerer and Larson concluded with a discussion on the voice of trees that offered the clarity needed to weave all of this work together.

“Kind of skimmed through this. . . . Something to think about” wrote Lee Johnson in what at the time was an unrelated email, 10 days after Kimmerer’s visit to Platteville. A proposal to bring these many stories together grew out of those words. The resulting People, Fire, and Pines working group has now held two of three meetings. The first, graciously hosted by the Cloquet Forestry Center and held beneath the singing limbs of ancient and fire-scarred red pines, connected the group members and began the work of building understanding, transformation, and healing among the participants in ways that enabled the stories of the project to emerge collaboratively. Each member of the group generously contributed their wisdom and perspectives through shared space, meals, and site visits that provided tangible links to the thoughts and emotions of each. These interactions moved understanding of the tree-ring record into a more profound and cultural place. Two separate presentations to members of the Fond du Lac Band of Lake Superior Chippewa and Bois Forte Band of Chippewa, followed by hosted meals, began the long work of building the relationships necessary to translate the implications of this work into policy and active stewardship, while clearly illustrating the importance of heart in sharing this story.

The second workshop took place on the Lac La Croix First Nation Reserve. It brought in the additional voices, perspectives, and insights of Melonee Montano, member of the Red Cliff Band of Lake Superior Chippewa and Traditional Ecological Knowledge Outreach Specialist for the Great Lakes Indian Fish and Wildlife Commission, and Damon Panek, member of the White Earth Nation and Ojibwe Cultural Specialist for Apostle Islands National Lakeshore. Days were spent learning from the deep kindness, wisdom, and generosity of members of the Lac La Croix First Nation. The group visited sites in QPP that evoked stories, some through the presence of fire-scarred and culturally-modified trees, others through spiritual significance and emotional connections to history and trauma. Shared meals and games helped build a sense of community, and through all of this the group members learned to *listen*. Meals were shared, and evenings saw community build through shared meals and traditional games. Profound lessons of truth and complexity further shaped the story emerging from the working group’s efforts.

The third workshop, among so many other activities, was postponed due to COVID-19 and will take place in the next year to bring the CfAS-funded project to a close, though the ripples inspired by the project will continue to spread and grow. In particular, in both of the first two workshops, the story of people and fire, made tangible in the rings of trees, offered a foundation on which to build relationships and to move toward openness and trust more rapidly than could have otherwise been expected. The common language of tree rings helped to open dialogue where words alone would have struggled, and is key to the success of the project.

The relationships and understanding cultivated through CfAS support fundamentally shaped the perspective, questions, and intent guiding the efforts of the People, Fire, and Pines working group. It enabled conversations among the group members that catalyzed existing synergy and gave heart and meaning to what had previously been numbers describing historical fire regimes. Interactions among the group members and communities connected to the work intimately shaped the language we use and our approach to working with each other. It helped us to realize our role as translators, of helping people *remember* stories, some of which have been forgotten by people but carried on by trees. In doing so, CfAS enabled conversations that helped us learn from each other, from our elders, and from the trees themselves. The results have been profound and personal and are helping to shape dialogue among fire managers and landowners that will advance advocacy for the proactive use of prescribed fire in forests stewardship before catastrophe, to enable mindful and reciprocal stewardship of our relationships with the community of life around us.



*The People, Fire, and Pines working group of the Coalition for Archaeological Synthesis. Shown from left to right are (back) Kyle Gill, Jeff Savage, Kurt Kipfmüller, Brian Jackson, Lane Johnson, (front) Jessica Atatise, Lee Johnson, Robin Kimmerer, and Evan Larson. The group is gathered around a 250-year-old red pine, growing at the University of Minnesota Cloquet Forestry Center and on a site included in plans for the collaborative, cultural act of prescribed fire.*

Perhaps most profound has been the reshaping of the questions that first inspired the tree-ring work in the BWCAW. An interest in critiquing the idea of Wilderness as a western construct was transformed in perspective and understanding. It is no longer a question of “if” people and the land are connected through the process, spirit, and agency of fire. We are so clearly woven into the fabric of this land that in many cases the legacies of people are indistinguishable from what is considered natural. A flight over QPP provided new perspective on the thin line of ecologically-imperiled red pine woodlands edging some lakes and peninsulas. Without fire, those pines would not, and will not, exist. Our fates are intertwined—people, fire, and pines. This is true based on the tree-ring fire scar record, but also the stories of the People, the shapes of the trees, and the voices of the pines as the wind shifts to the East. As Western forest fires rage, there exists an opportunity to gather in a circle, to learn from the lessons of the past, made clearer through the synthesis of tree rings, archaeology, and Traditional Knowledge, and walk forward in a good way. Drawing from the wisdom of ancestors, channeled through the words of Kimmerer, red pine shares a fate akin to sweetgrass, in that “if we use a plant respectfully, it will stay with us and flourish. If we ignore it, it will go away.”

Please see the following resources if you would like to learn more about the activities of the People, Fire, and Pines working group:

#### *Publications*

Larson, E. R., L. B. Johnson, T. C. Wilding, K. M. Hildebrandt, K. F. Kipfmueller, and L. R. Johnson  
2019 Faces in the wilderness: A new network of crossdated culturally-modified red pine in the Boundary Waters Canoe Area Wilderness of northern Minnesota, USA. *Human Ecology* 47(5), 747–764. <https://link.springer.com/article/10.1007/s10745-019-00109-4>

Larson, E. R., K. F. Kipfmueller, and L. B. Johnson  
2020 People, fire, and pine: Linking human agency and landscape in the Boundary Waters Canoe Area Wilderness and beyond. *Annals of the American Association of Geographers* 1–25. <https://www.tandfonline.com/doi/full/10.1080/24694452.2020.1768042>

Colombaroli, D., et al.

2019 Diverse knowledge informing fire policy and biodiversity conservation. Royal Holloway University of London, London, United Kingdom. <http://pastglobal-changes.org/products/pages-outreach/12993-diversek-policy-brief>

#### *Media*

The Camp 8 Stand: The Story of the Cloquet Forestry Center’s Old-Growth Red Pines, a story map by Clare Boerigter, University of Minnesota MFA graduate student. Story map <https://storymaps.arcgis.com/stories/508bd54562634e3c8a6bde95713db11a>; a Webcast featuring the author presenting the work is available: [https://www.youtube.com/watch?v=kNm6\\_U5HISw](https://www.youtube.com/watch?v=kNm6_U5HISw)

Rethinking the Human Footprint, by Patrick Shea, University of Montana Natural Resource Journalism graduate student. Published by Native News Online; <https://nativenewsonline.net/sovereignty/rethinking-the-human-footprint>

A Century of Vegetation Change: University of Minnesota Cloquet Forestry Center 1914 – 2014, by Quincy Williams, UW-Platteville Geography major. <http://z.umn.edu/CFC1914>

#### *Recorded Lectures*

Lane Johnson. 2020. Prescribed fire: Forest history & today's implementation. An interactive workshop hosted by Dovetail Partners and in collaboration with the University of Minnesota Cloquet Forestry Center and USDA Forest Service. <https://www.youtube.com/watch?v=cdcRRDO39Jc&t=536s>

Evan R. Larson. 2020. History as guide in approaching a reciprocal relationship with fire and forests of the Upper Great Lakes Region. Fire in Minnesota Ecosystems Workshop, January 29–30, University of Minnesota Cloquet Forestry Center. <https://go.uwplatt.edu/x2n9mffv>

#### *Outreach & Citizen Science*

Citizen Science Fire Scar Survey for your Mobile Device Survey123 Ap, developed in collaboration with the USDA Forest Service Superior National Forest and Eastern Regional Office. <https://arcg.is/LSzba>

#### *Management Actions*

Daniel Godwin, Dave Lasky, Matt Graeve, Lane B. Johnson, Kyle G Gill, Paul Priestly, Mike Lynch University of Minnesota Cloquet Forestry Center Programmatic Burn Plan 2020. Experimental Forests Technical Note No. 4. Available: <https://conservancy.umn.edu/handle/11299/216903>

Quetico Provincial Park Fire Plan revision (in progress)

## **NOTES FROM THE CENTER**

*Scott Ortman, Director, Center for Collaborative Synthesis in Archaeology*

I'm delighted to announce that the Center for Collaborative Synthesis in Archaeology (CCSA) was formally established by the University of Colorado Boulder in August; that its status as a partner organization to CfAS has been formalized through a Memorandum of Understanding signed by the Provost of the University and co-Presidents of CfAS; and that I will have the honor and privilege of helping CfAS achieve its mission and vision as the inaugural director of CCSA. It will take a little while for us to get up and running, especially given the pandemic, but I wanted to take this opportunity to share a few thoughts on what I hope CCSA will become, and what I hope it will accomplish.



### New research center will collaborate with international coalition to advance synthesis in archaeology

Sept. 29, 2020

The University of Colorado Boulder and the SRI Foundation will jointly establish a **Center for Collaborative Synthesis in Archaeology (CCSA)** to advance “scientific understandings of the human past and solutions to contemporary social challenges.”

First and foremost, I want CCSA to work for you, the associates and partners of CfAS. I recognize that CfAS’ vision can only be achieved through a broad community pulling together. So, CCSA will need to invest in community-building, including an online space where people can share information; in-person events where collaborators can meet and new ideas hatched; and mechanisms for promoting results of our work beyond archaeology. CCSA will not be a University of Colorado thing, an American thing, or even an Archaeology thing. It will be a “use archaeology to benefit society” thing.

Second, I want CCSA to directly help CfAS associates and partners accomplish projects that use synthesis to advance knowledge and benefit society. So far, this has primarily involved help with grant proposals for research teams with specific projects, but over time CCSA will need to come to control its own resources so that we can allocate them to projects and teams that we ourselves think are worth supporting. We will also need to develop data management systems so that our work can be cumulative. I already have a few ideas about how to get there, but I will welcome your ideas too.

Third, I want the work that is accomplished by CfAS associates and partners to matter, and not just among archaeologists. This means we will need to define problems for which a uniformitarian approach applies, such that our questions, and answers, concern social processes that work the same way regardless of how or when they are studied. In other words, it’s not about the past, it’s about the process! And I mean for real, in the sense that people involved in decisions regarding what people should do today and tomorrow will take our results seriously. The first step in getting there is convincing other social scientists of this, and the best way to do that is for archaeologists to get involved in answering *their* questions. So, CCSA will need to build bridges between researchers who are working on the same problems in archaeology and in related social sciences and help them to integrate their efforts.

These are big goals, and they will not happen overnight. But I am excited to get started and welcome your ideas and suggestions. Feel free to write me at [scott.ortman@colorado.edu](mailto:scott.ortman@colorado.edu).

### Status of CfAS/CCSA Projects and Proposals

Name	Project/ Proposal	Principal Investigator(s)	Status
ArchaeoEcology	CfAS-funded Project	Stefani Crabtree (USU)	<ol style="list-style-type: none"> <li>1. Two meetings held; one more to complete project; delayed due to COVID-19</li> <li>2. Multiple publications submitted</li> <li>3. End date pending</li> </ol>
People, Fire, and Pines in the Border Lakes Region, US and Canada	CfAS-funded Project	Evan Larson (UW, Platteville)	<ol style="list-style-type: none"> <li>1. Two meetings held; one more to complete project; delayed due to COVID-19</li> <li>2. Paper published in <i>Annals of the American Association of Geographers</i></li> <li>3. Fire management policy and public products underway</li> <li>4. End date pending</li> </ol>
Climate-Related Migration among Contemporary Indigenous Peoples of Central Asia	Proposal to the National Geographic Society	Scott Ortman (CCSA), Mark Aldenderfer (UC, Merced), and Jeff Altschul (SRI Foundation)	Pending-submitted October 2020
Leveraging Archaeology for Migrations of the Present	Proposal to US NSF/SBE-UKRI	Scott Ortman (CCSA), Penny Bickle (UYork), Ian Armit (UYork), Elena Isayev (UExeter), Beth Scaffidi (UC Merced)	Pending-submitted September 2020
Modelling a collaborative archaeological synthesis of human migration for a long-term, global perspective.	Proposal to Wenner-Gren	Corey Ragsdale (SIU, Edwardsville) and Timpoko Kienon-Kabore (Félix Houphouët-Boigny University)	Pending-submitted December 2020
Wealth Creation and Division: A Holocene History	Proposal to NSF Archaeology Program	Scott Ortman (CCSA), Tim Kohler (WSU), and Amy Bogaard (Oxford)	Pending-submitted September 2020

## WHAT WE'RE LISTENING TO, READING, AND WATCHING

In this newsletter we've added new sections on books, videos, and podcasts to our "reading" lists. As always, we'd love to hear from you so that we can share your suggestions with the CfAS community.

### Books

*The Warmth of Other Suns: The Epic Story of America's Great Migration* and *Caste: The Origins of Our Discontent*, by Isabel Wilkerson. Random House.

*Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies*, by Geoffrey West. Penguin Press.

*The Past is a Foreign Country—Revisited*, by David Lowenthal. Cambridge University Press

### Technical Studies

The low-density urban systems of the Classic Period Maya and Izapa: Insights from settlement scaling theory, by Michael E. Smith, Scott G. Ortman, José Lobo, Claire E. Ebert, Amy E. Thompson, Keith M. Prufer, Rodrigo Liendo Stuardo, and Robert M. Rosenswig, *Latin American Antiquity*, <https://doi.org/10.1017/laq.2020.80>

The IPCC: A primer for archaeologists, by Timothy A. Kohler and Marcy Rockman, *American Antiquity*, <https://www.cambridge.org/core/journals/american-antiquity/article/ipcc-a-primer-for-archaeologists/F701E510E540B73D9E05B25F13ECD4C5>

Fire mosaics and habitat choice in nomadic foragers, by Rebecca Bliege Bird, Chloe McGuire, Douglas W. Bird, Michael H. Price, David Zeanah, and Dale G. Nimmo, *Proceedings of the National Academy of Sciences*, <https://doi.org/10.1073/pnas.1921709117>

Archaeology and two pandemics and Teranga Aesthetic, by Ibrahima Thiaw, *African Archaeological Review*, <https://doi.org/10.1007/s10437-020-09403-9>

### Public Opinion

How archaeologists are using deep learning to dig deeper, by Zach Zorich, *The New York Times*, <https://www.nytimes.com/2020/11/24/science/artificial-intelligence-archaeology-cnn.html?smid=em-share>

Wildfire archaeology and the burning America West, by Stephen Nash, *Sapiens*, <https://www.sapiens.org/column/curiosities/wildfire-archaeology/>

The art of holding on, letting go and learning to golf, by Sarah Parcak, *The New York Times*, <https://www.nytimes.com/2020/10/27/opinion/learning-to-golf.html>

Scientists don't share their findings for fun – they want their research to make a difference, by John Besley, *The Conversation*, <https://theconversation.com/scientists-dont-share-their-findings-for-fun-they-want-their-research-to-make-a-difference-146267>

The Amazon has seen our future, a *New York Times* series, <https://www.nytimes.com/interactive/2020/10/02/opinion/amazon-rainforest-future.html>

The skeletons at the lake, by Douglas Preston, *The New Yorker* (December 7, 2020)

#### Podcasts and Videos

Using the past as a bridge to the future, by Jeff Altschul, Lecture for the Arizona Archaeological and Historical Society, <https://www.youtube.com/watch?v=8k6V8Q5YI6c&t=4s>

Archaeological synthesis and settlement scaling theory, by Scott Ortman, *Complexity* (podcast of the Santa Fe Institute), <https://complexity.simplecast.com/episodes/47>

Food webs & ArchaeoEcology, by Jennifer Dunne, *Complexity* (podcast of the Santa Fe Institute), <https://complexity.simplecast.com/episodes/5>



I want the work that is accomplished by CfAS affiliates and partners to matter, and not just among archaeologists. This means we will need to define problems for which a uniformitarian approach applies, such that our questions, and answers, concern social processes that work the same way regardless of how or when they are studied. In other words, it's not about the past, it's about the process! And I mean for real, in the sense that people involved in decisions regarding what people should do today and tomorrow will take our results seriously.

Scott Ortman – Director, Center for Collaborative Synthesis in Archaeology



# Coalition for Archaeological Synthesis



---

*Fostering Synthesis in Archaeology to  
Expand Knowledge and Benefit Society*

---

## Officers and Contact Information

Jeffrey H. Altschul, Co-President, [jhaltschul@canelogroup.net](mailto:jhaltschul@canelogroup.net)

Keith W. Kintigh, Co-President, [kintigh@asu.edu](mailto:kintigh@asu.edu)

Christine Szuter, Treasurer

Sarah Miller, Secretary

Terry Klein, CfAS Administrator, [tklein@srifoundation.org](mailto:tklein@srifoundation.org)

[www.archsynth.org](http://www.archsynth.org)

333 Rio Rancho Drive, Suite 103, Rio Rancho, New Mexico 87124  
505-892-5587

The Synthetic Report is produced with the assistance of Statistical Research, Inc.