# DATA POST-RECOVERY

By Sarah Herr (Desert Archaeology)

Delivered by Gerry Wait (Triskelion Heritage)

# IS CRM READY FOR SYNTHESIS?

# The Premise

The Coalition for Archaeological Synthesis (the "Coalition") was formed to promote and facilitate archaeological synthesis. It proposes that synthesis should be a far more mainstream part of our practice, with the goal of contributing to a public good through policy, education, or economic engagement.

Are CRM firms ready to participate in these relationships?

What are the barriers? What are the possibilities?

# Google forms

## About CRM and Archaeological Synthesis

What does 'synthesis' mean to you/your company?

Your answer

Pragmatically, how does your company approach synthetic research? ( Do you have research databases? Are your databases or spreadsheets unique to each project or project director? Do you have a comparative database? Is your project data easy to reuse? Where is it archived, if at all?)

Your answer

How often do you reuse data? From your own/company projects? Held in museums and archives?

Your answer

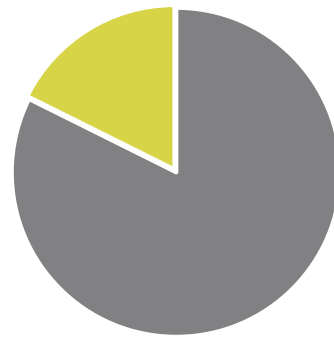Are you willing to share data you have collected as part of synthetic efforts?

Your answer

What types of findings warrant synthetic research?

# Participants

- Gerry Wait (Triskelion Heritage)
- Kimball Banks (Metcalf Archaeological Associates)
- Ellen Chapman (William and Mary alumni)
- Thomas Emerson (Illinois State Survey)
- Doug Harro (Paleo Analytics, LLC)
- Joe Joseph (New South Associates)
- Ben Marwick (University of Washington)
- Myles Miller (Versar Group)
- Lyle Torp (The Ottery Group)
- Stephen Wagner (Bison Historical Research Associates)
- Michael Diehl, James Heidke, Mary Ownby (Desert Archaeology)
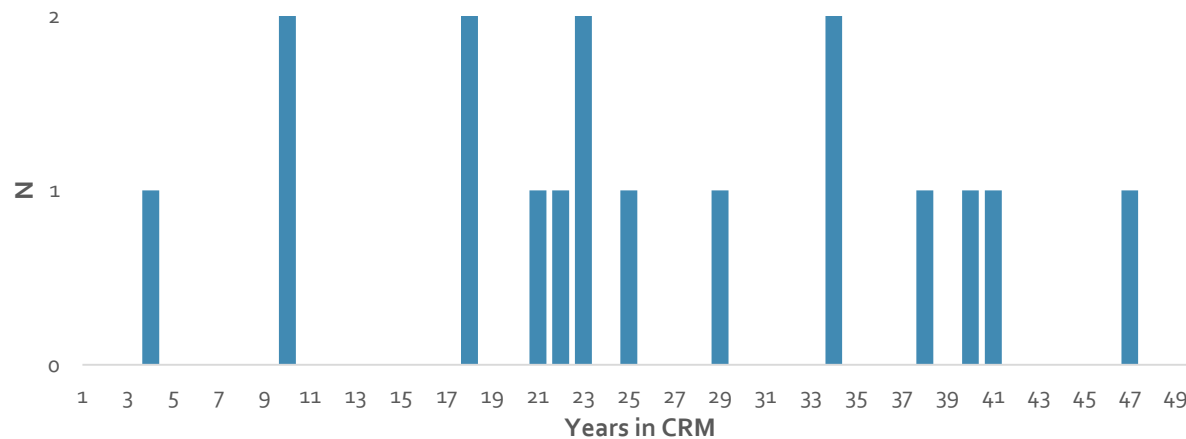- 4 anonymous (4 companies)

# Sample population (N=17)

**Gender**



■ Male  ■ Female

**Experience**



**Titles**

Alumna

Associate Professor

Director

Director of Administration

Director of Operations - Regional Office

Director of Research and Standards

Director of Strategic Development

Lithic Analyst

Managing Director

Principal Investigator

Principal Investigator / Office Manager

Project Archaeologist

Research Ceramicist

Research Petrographer

Senior Project Director

State Archaeologist, Director

Vice-President/Project Administrator

- "Addressing questions of social justice, social identity, human adaptation, migration, warfare, urbanism, and so forth requires that we both produce relevant knowledge and actively work to have it inform public policy. To better accomplish these objectives, we need to move beyond the who, what, where, and when of the past and improve our ability to answer the how and the why of the past—to transform our extensive and detailed descriptions of the archaeological record into a deeper, explanatory knowledge about the past."

# Grand Challenges

25 process-focused topics organized into 5 general synthetic themes

(1) emergence, communities, and complexity
(2) resilience, persistence, transformation, and collapse
(3) movement, mobility, and migration
(4) cognition, behavior, and identity
(5) human-environment interactions

Cited by 80

Access

## Grand Challenges for Archaeology

Keith W. Kintigh [a1], Jeffrey H. Altschul [a2], Mary C. Beaudry [a3], Robert D. Drennan [a4] ...

Abstract

This article represents a systematic effort to answer the question, What are archaeology's most important scientific challenges? Starting with a crowd-sourced query directed broadly to the professional community of archaeologists, the authors augmented, prioritized, and refined the responses during a two-day workshop focused specifically on this question. The resulting 25 "grand challenges" focus on dynamic cultural processes and the operation of coupled human and natural systems. We organize these challenges into five topics: (1) emergence, communities, and complexity; (2) resilience, persistence, transformation, and collapse; (3) movement, mobility, and migration; (4) cognition, behavior, and identity; and (5) human-environment interactions. A discussion and a brief list of references accompany each question. An important goal in identifying these challenges is to inform decisions on infrastructure investments for archaeology. Our premise is that the highest priority investments should enable us to address the most important questions. Addressing many of these challenges will require both sophisticated modeling and large-scale synthetic research that are only now becoming possible. Although new archaeological fieldwork will be essential, the greatest pay off will derive from investments that provide sophisticated research access to the explosion in systematically collected archaeological data that has occurred over the last several decades.

Resumen

Este artículo representa un esfuerzo sistemático para responder a la pregunta: ¿Cuáles son los retos científicos más importantes de la arqueología? A partir de una consulta masiva dirigida ampliamente a la comunidad profesional de arqueólogos, los autores aumentaron, priorizaron y refinaron las respuestas que surgieron de esta encuesta, durante un taller de dos días el cual se centro específicamente en esta cuestión. Los 25 grandes retos que emergen, se centran en los procesos culturales dinámicos y en el funcionamiento de los sistemas humanos y naturales en su conjunto. Para presentarlos aquí, organizamos estos desafíos en cinco temas: (1) surgimiento, comunidades y complejidad; (2) resiliencia, persistencia, transformatión y colapso; (3) movimiento, movilidady migración; (4) conocimiento, comportamiento e identidad; e (5) interacciones humano-medioambiente. Cada pregunta va acompañada de una discusión y una breve lista de referencias. Un objetivo importante en la identificatión de estos retos es el de informar las decisiones sobre las inversiones en infraestructura para la arqueología. Nuestra premisa es que las mayores inversiones prioritarias deben ser aquellas que nos permitan abordar las cuestiones mas importantes. Responder a muchos de estos desafíos requerird adoptar tanto la elaboración de modelos sofisticados, como investigaciones a gran escala sintetizadoras que apenas ahora estdn siendo posibles. Aunque sera fundamental llevar a cabo nuevos trabajos de campo arqueológicos, la mayor recompensa se derivard de las inversiones que proporcionen a las investigaciones sofisticadas acceso a la multitud de los datos arqueológicos recolectados sistemáticamente que se ha producido en las últimas décadas.
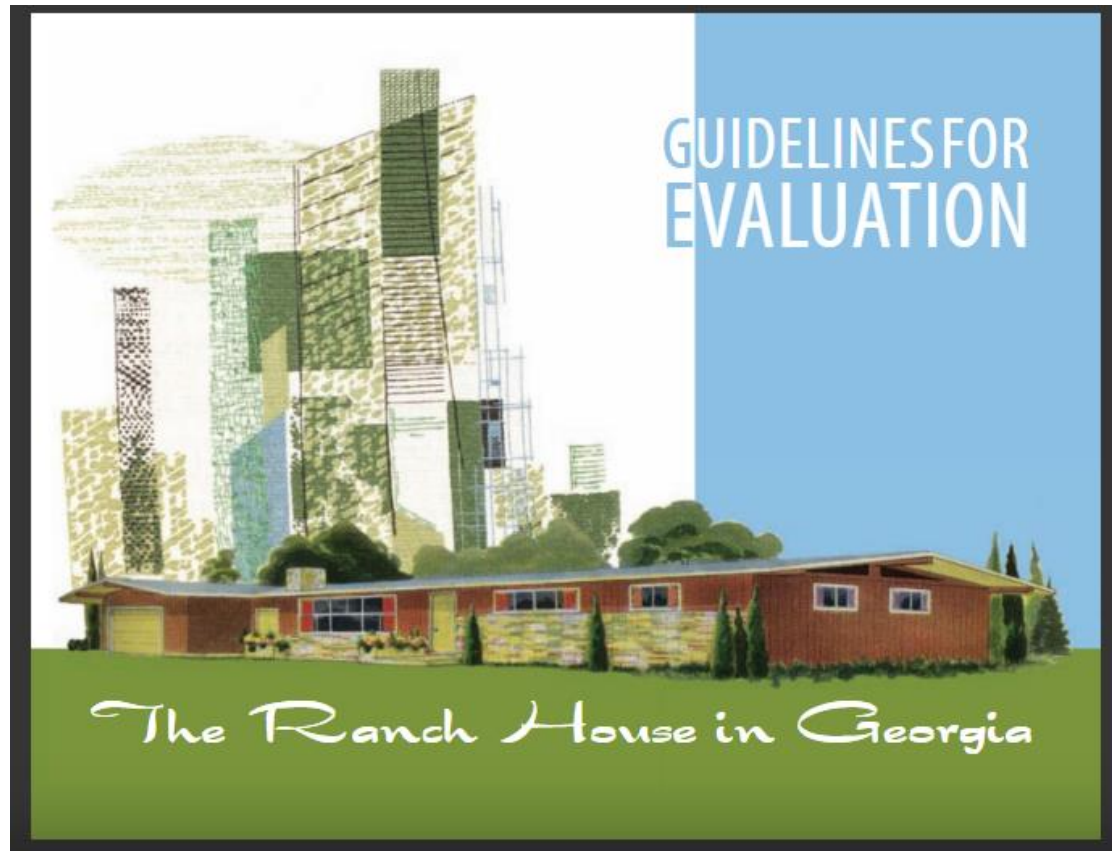
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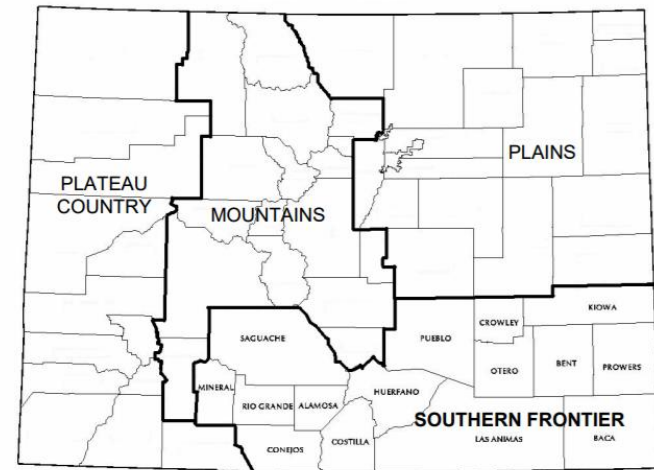
# CRM Research Strengths

- Landscapes and settlements through time
  - -plantation landscapes, fortification networks, military battlefields, trails, infrastructure
  - - peripheral, low-density, highly variable, or discontiguous manifestations

- movement, mobility, and migration

- human-environment interactions
  - Including geoarchaeological approaches

- rare  and unique sites and artifacts

- technological change through time

- provenance studies

- preservation planning

- methodological refinements

- large-scale data management

Topics in orange are those also identified in the Grand Challenges

# Context studies



GUIDELINES FOR EVALUATION

The Ranch House in Georgia



COLORADO
SOUTHERN FRONTIER
HISTORIC CONTEXT

PLATEAU COUNTRY

MOUNTAINS

PLAINS

SOUTHERN FRONTIER
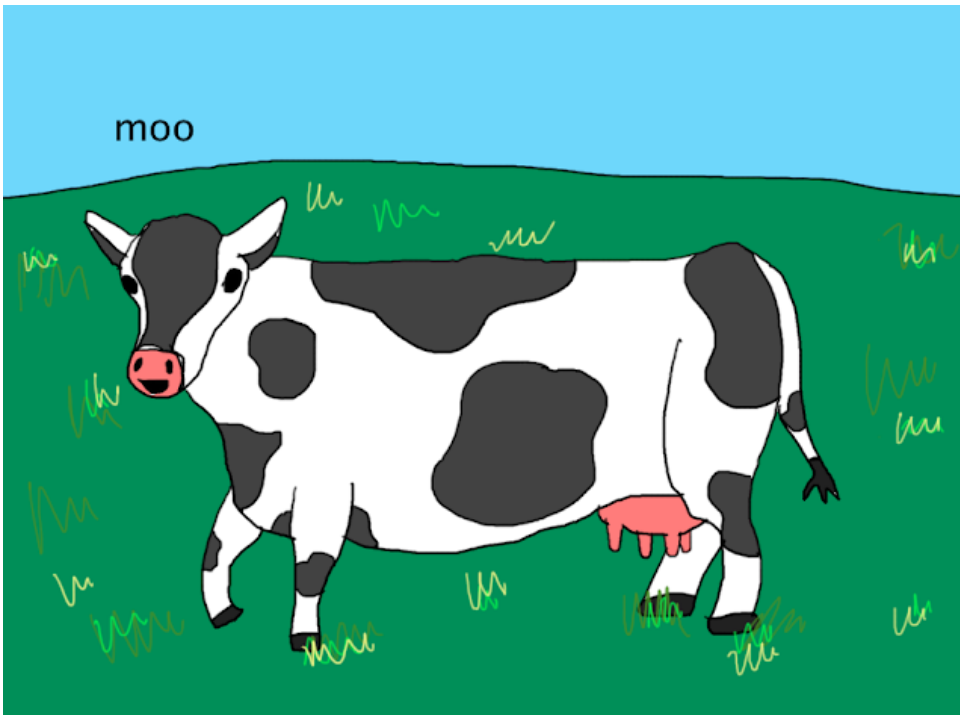
## Organizational challenges to Synthesis

For this grand synthesis to move forward, the academic side needs to consider the following:

**Consultation.**

**Inclusion.**

**Acknowledgment.**

(Myles Miller)

moo

Creator of a "bovifact"

"Many archaeology studies still use tool classes like "edge modified piece" that carry an ambiguous cultural association.  They don't want to go out on a limb call it *used*. Basically, they are admitting that they don't know whether a particular object is an artifact, a tool, or a bovifact" (Douglas Harro)

# United States:
# National Historic Preservation Act

(4) the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans

## Section 1 (16 U.S.C. 470)

(a) This Act may be cited as the "National Historic Preservation Act."

(b) The Congress finds and declares that-

(1) the spirit and direction of the Nation are founded upon and reflected in its historic heritage;

(2) the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people;

(3) historic properties significant to the Nation's heritage are being lost or substantially altered, often inadvertently, with increasing frequency;

(4) the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans;

(5) in the face of ever-increasing extensions of urban centers, highways, and residential, commercial, and industrial developments, the present governmental and nongovernmental historic preservation programs and activities are inadequate to insure future generations a genuine opportunity to appreciate and enjoy the rich heritage of our Nation;

(6) the increased knowledge of our historic resources, the establishment of better means of identifying and administering them, and the encouragement of their preservation will improve the planning and execution of federal and federally assisted projects and will assist economic growth and development; and

(7) although the major burdens of historic preservation have been borne and major efforts initiated by private agencies and individuals, and both should continue to play a vital role, it is nevertheless necessary and appropriate for the Federal Government to accelerate its historic preservation programs and activities, to give maximum encouragement to agencies and individuals undertaking preservation by private means, and to assist State and local governments and the National Trust for Historic Preservation in the United States to expand and accelerate their historic preservation programs and activities.

# Including CRM

Academic

Theoretical Synthesis

Grand Challenges

Investigator-initiated

Research Design

Top-down questions

Research question drives fieldwork

Peer review

Data with researchers or archive

Communication

CRM

Regional synthesis

Context Studies

Developer-initiated

Treatment Plan

Bottom-up research

Fieldwork location drives research question

Agency review and consultation

Data in agency office

Integrating Synthesis into the Structure of CRM

"Grand Challenge"

Context Study

Treatment Plan/ Research Design

Project Methods

Targeted Data Collection and Analysis

Project Results