DM coding of artifacts offers an exciting alternative to the practice of writing catalogue numbers on artifacts. These tiny codes can be placed in an unobtrusive location on the artifact surface, and thanks to the acrylic adhesive used, all traces of the label can be completely removed (see images, page 2). The code itself can be used to convey a range of information through alphanumeric coding and links to database management systems. DM coding of artifacts has the potential to revolutionize field-to-shelf tracking of artifacts, speeding the process of data input and retrieval, alleviating transcription issues related to human error, minimizing damage to artifacts, and automating collections tracking and management.

Sustainable Archaeology will be represented at the SAA annual conference in Hawaii by Dr. Rhonda Bathurst and Kira Westby in a poster session focusing on archaeological collections management. The poster focuses on SA’s collections management system, which incorporates 2D barcoding of artifacts. Adapted from work by Spanish archaeologists at the Universitat Autònoma de Barcelona (UAB), (see Martinez-Moreno et al., 2011) barcoding of artifacts is one aspect of SA’s broader inventory management system (see page 2 article).

To DM code artifacts, SA has worked with Brady Canada to develop a custom die-cut polypropylene label that is 4mm x 5mm in size. The label material is archival quality, and is backed with an acrylic adhesive. To both protect the artifact surface and to adhere the DM code to the label, Paraloid B-72 archival acrylic adhesive will be applied in a “sandwich” method below and over the tiny label. DM codes will also be included on bag labels for batched materials. The DM code itself contains a 10 digit catalogue number that is used by SA to identify individuals artifacts and bags of batched artifacts. These codes are generated and tracked by the Sustainable Archaeology database, and allow artifacts to be “tied” to a specific storage box. The DM codes can be read using a barcode scanner, or a smart phone. Scanning the DM code will “open” the record in the database for that specific artifact, allowing immediate access to data about that artifact.

Sustainable Archaeology at the SAAs

Sustainable Archaeology: In Pictures

In January, the SA: Western microCT scanner was used to non-destructively study charcoal remains. The scanned charcoal was analyzed and identified by Ontario archaeobotanist Rudy Fecteau. Using the microCT allowed for the charred remains to be digitally "split" in order to examine internal structures while preserving the original specimen for future analysis.

In February, SA: Western visited our partner facility Sustainable Archaeology: McMaster in Hamilton, ON. From left to right: Kira Westby (SA: Western); Dr. Aubrey Cannon, (Project PI for McMaster) and Meghan Burchell of SA: McMaster; Dr. Rhonda Bathurst and Dr. Neal Ferris (Project PI for Western) of SA: Western.
Sustainable Archaeology is preparing to conduct Alpha tests of Informational Platform components in April. The tests will focus primarily on the collections management aspects of the database, including the intake and processing of collections.

The collections management aspect of the database incorporates a combined RFID and 2D barcoding system that enables tracking and identification of individual boxes of archaeological material. Passive RFID tags affixed to individual boxes are “read” by RFID readers located at doorways within the Sustainable Archaeology facilities at Western and McMaster, creating entry/exit portals that track the movement of boxes. 2D barcoding is used to identify individual repository shelf locations, allowing boxes to be “tied” to their shelf address.

2D barcoding will also be used to identify artifacts held within the storage boxes. Data matrix (DM) codes printed on archival tags using a thermal transfer printer are placed within artifact bags, identifying individual and batched artifacts by a newly generated catalogue number assigned by SA. Existing catalogue numbers will be recorded in the database for reference to original reports and catalogues associated with the collection. Individual artifacts will also be tagged with their catalogue numbers, using tiny 3.5mm x 3.5mm DM codes. The DM codes are printed on an archival polyethylene material using a thermal transfer printer, and affixed using Paraloid (Acryloid) B-72, an archival standard acrylic resin (See page 1 of this newsletter for more information on artifact DM coding).

The process of transferring a collection to a Sustainable Archaeology facility will form a second area of focus for the Alpha test. The process of receiving a collection, including procedures for incorporating boxes into the collections management system upon their arrival at the facility will be a vital aspect of the day-to-day use of the database by facility staff.

Through the database SA staff will set up and process transfers, generate and print RFID tags for boxes, assign shelf locations, assign artifact catalogue numbers, and generate and print bag labels.

Alpha testing will bring together several pieces of an inventory management system that has, until now, existed largely in the imagination of Sustainable Archaeology staff. Alpha will also incorporate testing of anticipated workflow scenarios and collections management policy that have not yet been extensively tested and reviewed in terms of “on the ground” effectiveness and utility.

Between the two facilities at Western and McMaster, over 86,000+ boxes of material will eventually be incorporated into the database. The collections management aspect of the database is therefore a vital component of the larger Informational Platform that, when complete, will enable direct researcher access to the collections held at the Western and McMaster facilities.
**Western Graduate Research Scholarships (WGRS)**

Western Graduate Research Scholarships support full time graduate students at Western who are enrolled in Category I programs. The value of the WGRS varies by program and/or by student. Students must be registered full-time and meet the graduate program conditions for progression towards the degree.

For more information about the grant, visit the Western Graduate and Post Doctoral Studies Funding Opportunities web page.

**International Collaborative Research Grants**

Supports international research collaborations between two or more qualified scholars, where the principal investigators bring different and complementary perspectives, knowledge, and/or skills to the project. The grants are for a maximum of $30,000 for the research project. Principal Investigators must hold a doctorate or equivalent in anthropology or a related discipline.

**Application Deadline:** June 1 (for applicants requesting funding starting in January through June of the following year).

For more information, email internationalprograms@wennergren.org or visit www.wennergren.org/programs/international-collaborative-research-grants

**Wenner-Gren Foundation**

A variety of the Foundation’s grants support students enrolled in doctoral programs leading to a Ph.D. (or equivalent), including grants for dissertation research.

For more information, contact the Foundation: 70 Park Avenue South, 8th Floor New York, NY 10016 USA  
Phone: 212.683.5000  
Email: inquiries@wennergren.org  
Website: www.wennergren.org/programs/

**The Leakey Foundation Research Grants**

The Foundation funds research related specifically to human origins, including paleoanthropology, primate behavior, & studies of modern hunter-gatherer groups.

Research Grants to doctoral student are in the $3,000-$13,500 range; larger grants, especially to senior scientists and post-doctoral students, may be funded up to $22,000. No citizenship restrictions. Research grants are awarded twice annually

**Application Deadline:** July 15

For more information on the grant, deadlines, and the application process, visit www.leakeyfoundation.org/grants/
Sustainable Archaeology’s Mission Statement

Sustainable Archaeology is dedicated to advancing a transformative practice of archaeology that integrates the many forms of the discipline – commercial, academic, avocational – by consolidating the extensively recovered archaeological record from a region of the world and converting that material and contextual data into broadly accessible and integrated digital information. This compiled and converted record will allow for ongoing and innovative research advancing the knowledge, conception, appreciation, and engagement of this compiled and rich archaeological heritage left by the countless previous generations of those who loved, lived, and died in this place, by all those today who draw awareness, meaning, value, and identity from this human heritage.

Upcoming Events, Conferences, and Workshops

Events


Western University Department of Anthropology Graduate Research Seminar Series, Friday, April 5th, 2:30pm, Social Sciences 2257 anthropology.uwo.ca/speakers

Conferences

American Association of Physical Anthropologists Annual Meeting, April 9-13, Knoxville, Tennessee. meeting.physanth.org/local-arrangements/2013


Theoretical Archaeology Group (TAG) USA Conference: “Vision”, May 9-11, University of Chicago, Chicago, Illinois. tag2013.uchicago.edu/index.html

American Society for American Archaeology Annual Meeting, April 3-7, Honolulu, Hawaii. www.saa.org

Follow the conference in real time on Twitter: @SAAorg and #SAA2013

Ontario Heritage Conference: “Exploring the Past to Advance the Future”, June 7-9, Midland Cultural Centre, Huronia, Ontario. ontario-heritageconference.ca

Canadian Society for Digital Humanities Annual Meeting: “@ the Edge”, June 3-5, Victoria, British Columbia. csdh-schn.org/2012/11/16/cfp2013

Call for Papers


Call for papers or abstracts: deadline: April 10th, 2013.