Across Atlantic Ice - The Origin of American Clovis Culture

By Dennis J. Stanford and Bruce A. Bradley

A Review by Rod Johnson

In 2002, the PBS NOVA series aired America’s Stone Age Explorers, where Dr. Dennis Stanford of the Smithsonian Institute presents his hypothesis that Arctic European hunters and gatherers may have made it to the Americas and influenced Clovis Technology.

This year Dr. Stanford and Dr. Bruce Bradley (University of Exeter, England) co-authored Across Atlantic Ice - The Origin of American Clovis Culture, in which they present and elaborate on what they term “The Solutrean Hypothesis”

The Solutrean Hypothesis is not new. For over a century a number of archaeologists have suggested that America's earliest immigrants might have come from Europe. Solutrean refers to an Upper Paleolithic culture in southwestern Europe, dating from around 21,000 to 17,000 years ago. This short-lived culture was characterized by finely crafted tools, such as slender, leaf-shaped blades and shouldered points, as well as ornaments, carvings, and cave paintings. Briefly stated, Stanford/Bradley’s revised theory says that Stone Age Europeans from the Iberian Peninsula crossed the ice to the Americas at the height of the Last Glacier Maxima (L.G.M.), roughly 19,000 years ago. They speculate that these people were highly adapted to a high arctic environment and had perfected waterproof, cold-weather tailored clothing (much like Alaskan Inuit culture). They also may have possessed the technology to transit the ice to the Americas, subsisting... continued on Page 7
Letter From The President

The letter from the President is intended as a vehicle to inform the general membership of The Minnesota Archaeological Society of recently transpired activities of the Board of Directors. The following is a brief recap of the events, discussions, and decisions of the past quarter.

Minnesota Archaeologist:
Over the past quarter the dominant discussions were centered on finances and cost control. Some guidelines have been put in place to manage the production of The Minnesota Archaeologist.

Budget Guidelines for MnArch are:
- Printing and mailing cost shall be held at a target maximum of $6000. If the cost estimate is to exceed $6,500 a full vote of approval from the Board of Directors will be required.
- The editors will attempt to keep issues to a reasonable length.
- Authors must pay for any CD supplements. Any exceptions will be subject to a full vote from the board.
- Color use will depend on estimates provided by bids associated with the printer.

The guidelines will be subject to periodic review, and modifications will be made as needed. However, all agreed that color covers and appropriate color figures and graphics are necessary to the quality of our journal.

Minnesota Archaeological Society Announcement Of Membership Fees Increase:
(Special Budget Review from the Treasurer)
Given the length of time that has passed since the Minnesota Archaeological Society membership fees were last increased and given the increase in publishing costs associated with Minnesota Archaeologist the MAS Board of Directors has approved an increase in some membership fees, taking effect as of January 1, 2013.

- Student, Senior, Sustaining and Benefactor membership fees will remain unchanged.
- Standard membership fees will be increased by $5 to $30 in the United States, to $40 in Canada.
- Household membership fees will be increased by $10 to $40 in the United States and to $50 in Canada.
- Institutional Membership fees will be increased by $20 to $60 in the United States and $70 in Canada.

The Board is eager to receive support and feedback from the membership on this topic. Feedback can be made via mail at Minnesota Archaeological Society, Fort Snelling History

Follow Up From Winter Newsletter:
In the Winter Newsletter I posted information and a reprint of a letter from the president of the Society for American Archaeology, Fred Lump, regarding two television shows that focus on the unethical excavation of our cultural resources, and a link to respond to the producers of these shows.

Although efforts were strong to stop production of these shows, the online petition received over 18,000 signatures and a similar petition receiving another 4,000. However the results of efforts appear to be somewhat negative with both shows airing. Check out the summer issue of American Archaeology (vol. 16 no.2) “Digging up America” for more details and network responses.

Rod Johnson
President Minnesota Archaeological Society

For comments or suggestions, send a letter to President: Minnesota Archaeological Society, Ft. Snelling Center, St. Paul, Minnesota 55111 or email rodjohn33@msn.com
Paleolithic cave art is an exceptional archive of early human symbolic behavior, but because obtaining reliable dates has been difficult, its chronology is still poorly understood after more than a century of study. We present uranium-series disequilibrium dates of calcite deposits overlying or underlying art found in 11 caves, including the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage sites of Altamira, El Castillo, and Tito Bustillo, Spain. The results demonstrate that the tradition of decorating caves extends back at least to the Early Aurignacian period, with minimum ages of 40.8 thousand years for a red disk, 37.3 thousand years for a hand stencil, and 35.6 thousand years for a claviform-like symbol. These minimum ages reveal either that cave art was a part of the cultural repertoire of the first anatomically modern humans in Europe or that perhaps Neandertals also engaged in painting caves.

The 2012 Annual Meeting was once again held at Sorin Hall on the campus of Hamline University in April. Michael Michlovic, professor of anthropology at Minnesota State University-Moorhead, delivered a talk of great local interest focusing on the 2012 Swift County survey, A Survey Archaeologist’s Perspective on Southwestern Minnesota History. Thirty-odd MAS members enjoyed a tasty Mayan end-of-times-themed banquet and an open wine bar before the meeting and President Rod Johnson’s call for election of board officers. This year’s slate brought forward the current board officers without change:

**President:** Rod Johnson  
**Vice President:** Pat Emerson  
**Secretary:** Deborah Schoenholz  
**Treasurer:** Paul Schoenholz

Following the meeting, Dr. Michlovic entertained and informed the group with a PowerPoint presentation of the Swift County survey, addressing some ideas about culture change, diffusion, and the beginnings of more settled life-ways in the later portion of the prehistoric period.
**Dates To Remember**

Experience the world oldest and most continually practiced craft as presented by Archaeologist and Expert Flint-knapper, Rod Johnson.

- July 7-10, 2012  
  Hairy Mosquito Knap-in, Milaca, MN
- August 11, 2012  
  Historic Trade Route Celebration, Outing, MN
- September 1, 2012  
  Welch Station, Welch Village, MN
- September 8–16, 2012  
  Minnesota Archaeology Week
- September 29, 2012  
  Archaeology Day, Kathio St. Park, Onamia, MN

**Historic Trade Route Commemoration August 11, 2012**

Members who will be in Northern Minnesota on August 11 should plan to visit the 2nd Annual Historic Trade Route Commemoration in the village of Outing, located on Highway 6, between Emily and Remer, about 40 miles northeast of Brainerd.

Outing is situated on the shores of Roosevelt Lake, one of the lakes traversed by Joseph Nicollet during his 1836 expedition to map the headwaters of the Mississippi River. The Historic Trade Route event commemorates that historic journey and celebrates the native cultures and ancient peoples of the region. The event will include artifact displays, flintknappers, birch bark canoe demonstrations, historic re-enactors, Ojibwe dancers, drummers and singers, craft demonstrations, canoe rides, kids’ activities, a silent auction, and more.

**Francois Brunia will canoe into Outing, MN on August 11, 2012**

Brunia, a large man reported to have been well over six foot tall, was an Ojibwe-French fur trapper, fur trader, and an interpreter for Frenchman Joseph Nicollet on the 1836 mapping expedition through Lakes Mitchel, Roosevelt, Thunder, Big Bass and on the Little Boy River into Leech Lake.

*Francois Brunia – aka Ray Nelson*, will arrive in the birch bark expedition at Outing about 10:00AM on August 11th. Visiting with event attendees, he will shed more light on the fur trade through 1836. At the HTR Commemoration in Outing on August 11th, Brunia will present his “Precious Box of Curiosities” that includes numerous tools of his trade.

**Minnesota Archaeology Week moves to September**

This year, Minnesota Archaeology Week will be held September 8th through September 16th. This marks a change from previous years, when it has occurred in the spring. The change is happening to take advantage of better weather, students returning to school and field schedules.

The schedule of events for this year’s MAW is currently being compiled. Look for it on the State Archaeologist’s web site later this summer: [http://www.osa.admin.state.mn.us/](http://www.osa.admin.state.mn.us/)
Historic Travel Route

Commemoration – Outing, MN
Sat - Aug 11, 2012  9AM – 4PM

Featuring Ojibwe Guide “Chagobe” and fur trader “Brunia” from Nicollet’s 1836 mapping expedition

Birch Bark Canoe Expedition - 10:00AM
“Paddle into the Past” canoe rides

Archeologists & the Story:
Local 2,000 year-old artifacts
Learn & “Ask an Archaeologist” bring-in your “findings”
Fur trader’s “box of curiosities”
Book signing, sales, kids activities
Black Ash basket arts

Silent auction: Noon to 2PM
Barbeque pork: Noon to 4PM

Demonstrations planned:
Native Youth dancers
Native Youth singers / drums
Flint knappers
Native Arts & Crafts
Black Ash Basket Making
Birch bark Arts and Crafts

Supported by: Roosevelt And Lawrence Area Lakes Association (RALALA); Outing Area Businesses; Outing Area Chamber of Commerce; Emily Outing 50 Lakes Lions; Outing Library; MN Historical Society; Mille Lacs Historical Museum; Ojibwe Bands of Mille Lacs, White Earth and Mille Lacs; Minnesota Archaeological Society; Cass County Historical Society; and the Archaeological Institute of America - and made possible by MN Legacy Grants to the Minnesota Historical Society, Minnesota Indian Affairs Council; Cuyuna Iron Range Heritage Network; & Coca Cola.
Minnesota Archaeological Society Receives Legacy Grant for Publication

MAS is delighted to announce that it has been awarded a 2013 Minnesota Historical and Cultural Heritage Grant through the Minnesota Historical Society for the publication of The Red Pipestone Quarry of Minnesota, Second Revised Edition. Under the direction of board member Deborah Schoenholz, MAS members Charles Bailey and his partner Alan Woolworth will produce this updated revision of one of our most popular past journals through Prairie Smoke Press, which they jointly own. The Red Pipestone Quarry of Minnesota (1983, Alan Woolworth) is a volume that has been out of print for many years, and we have received numerous requests for it that we have been unable to meet.

Prairie Smoke Press, St. Paul, owned and operated by Alan Woolworth and Charles Bailey, is an independent small publisher specializing in the anthropology and archaeology of the region and has produced The Minnesota Archaeologist journal for MAS for the last decade. New material to be included in this Pipestone reprint project includes a second introduction highlighting new material from author Alan Woolworth, “The Pipestone Petroglyphs” by Tom Thiessen and Charles R. Bailey from the 1999 International Rock Art Congress Proceedings, Vol. 1, and select material from the 2006 report for the National Park Service, “An Archaeological Inventory and Overview of Pipestone National Monument, Minnesota” by Thiessen, et al.

The new Pipestone volume will be produced as an Occasional Publication of the Minnesota Archaeological Society and should go to press in late 2013 or early 2014.

Featured Articles Coming in The Minnesota Archaeologist, 2012

For those of you interested in our coming publications, here is a partial list of articles in preparation for publication, featuring current activities and discoveries in archaeology, geology, and history throughout the state and the region.

“An Evaluation of Le Sueur’s Saltpeter Caves”
Greg Brick, University of Minnesota

“Grand Mound a National Historic Landmark: Minnesota Archaeology and the National Register of Historic Places in 2011”
David Mather, State Historic Preservation Office, Minnesota Historical Society

“Cultural Modification Attributes of Jasper Taconite and Knife Lake Siltstone Debitage”
Megan Stroh, University of Minnesota Duluth

“Upper Rice Lake (21CE04): A Multiple Component Woodland Site in Clearwater County, Minnesota”
Guy Gibbon (compiler), University of Minnesota

“Current Archaeological Investigations in Ontario:
The discovery and preliminary information regarding several Paleoindian sites east of Thunder Bay”
Dave Norris, Project Archaeologist Western Heritage

“An Introduction to the Paleoindian Projectile Point Assemblage Recovered from the Mackenzie 1 Site near Thunder Bay, Ontario”
Samantha Markham, Lakehead University

“2010 Archaeological Reconnaissance Survey of Olmsted County, Minnesota”
Constance Arzigian and Michael Kolb

“Swift County Archaeological Survey, 2010”
Michael G. Michlovic, George R. Holley and Rinita A. Dalan

“The Region 9 Survey: Points and Pits on the Lake Superior Shore”
Susan C. Mulbolland and Stephen L. Mulbolland

“A New Site and New Dates from the Red River Valley (21NR70)”
Patrick McLaughlin
on fish, seals, walrus, and arctic birds. The hypothesis also asserts that technology is often cumulative, with one technology evolving from a lesser technology, (e.g. microchip technology is based on transistor theory, and transistors are based on vacuum tube technology and so on). Therefore, since Solutrean stone tools show strong similarities to Clovis stone tool technology, one may have been the source of the other.

Recent archaeological investigations show that the Clovis sites east of the Mississippi are on average older and show a higher population density than in the West. This information would suggest an East to West migration. Physical evidence in support Stanford/Bradley’s hypothesis comes from a find in 2000, when the scallop trawler Cinmar dredged up a Solutrean style point along with mastodon remains 60 miles off shore and from a depth of 150 feet. Of course, this would have been dry land during the L.G.M. Carbon 14 dates taken from the associated bones came back at ~23,000 BP. This projectile point was of an American chert, but in 2004, another Solutrean-like point was found in Virginia, the material being of French origin. Stanford and Bradley also point to the discoveries at the Cactus Hill site near Richmond, Virginia, where projectile points also show lithic reduction technologies similar to Clovis with pre-Clovis dates.

Stanford and Bradley assert that this is only a hypothesis, but there is some significant evidence of pre-Clovis American visitation. They suggest that archaeological investigations should be considered.

I would not recommend this book to the casual reader. I found this book to be highly technical and deals (maybe too much) with lithic reduction technology and similarities between Solutrean and Clovis projectile points. Also, Stanford and Bradley do not address in much detail the Asian genetic evidence about the origins of Native Americans, nor do they hypothesize about what Solutrean/Clovis interactions may have been like or what happened to the Solutrean explorers.

Of course, any new theory has its critics. Clovis and Solutrean cultures are separated by 2,000 miles of Atlantic Ocean and 8,000 years of time. It could be that separate diverse people found the same solution for like problems. For a more detailed and critical review, see the journal American Archaeology 16:2, summer 2012.

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**Minnesota Archaeological Society Membership**

Those who receive this newsletter by snail mail can check their label, which has their latest update. Everyone else can check with me if there are questions. Anna Morrow, anmorrow@q.com or 612-922-7006

Costs are Individual $25.00, Senior or Student: $15.00, Household: $30.00, All Institutions: $40.00 US

**Newsletter:** Send your MAS news & notices to the Editor: Michael Brey, mike_2@mkbrey.com

[Visit our website](www.mnarchsociety.org)
• **Mas members who would like to put in some hands-on time have several opportunities.**

• **To get more information about these current projects, please contact the individuals listed.**

**Become a fan of MAS by joining us on Facebook.** You can submit photos of your collections, ask questions, or leave comments. This is a place to connect with others interested in Minnesota Archaeology. We hope to see you there! If you have questions please contact: Debbie Pommer at 651-430-0137 or pomme001@umn.edu

**Maritime Heritage Minnesota** has completed the Lake Minnetonka Survey 2 Report. With the completion of this project, Lake Minnetonka is the only body of water to be completely surveyed archaeologically. This project, and the Lake Minnetonka Survey 1 Project, were funded by two Minnesota Historical and Cultural Heritage Grants, part of the Clean Water, Land and Legacy Amendment. MHM thanks the People of Minnesota for funding these projects. The Report can be downloaded for free here: archive.org/details/LakeMinnetonkaSurvey2Report

**The Minnesota Archaeologist is available on CD.** These include Volumes 1-48 (1935-1989) & Occasional Publications. You will want to add this to your library. The cost is $100.00, which includes postage.

**Check the label on the outer envelope of this mailing to find the year of your membership status.** Please update your membership if it is not current. All the details can be found at www.mnarchsociety.org or contact Anna Morrow anmorrow@q.com  612-922-7006.