

ARCH NOTES

JULY/AUGUST 1980

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Newsletter of

The Ontario Archaeological Society (Inc.)

O.A.S. Forthcoming Meatings - Toronto

At the McLaughlir Planetarium, Royal Ontario Museum, Queen's Park, Toronto, starting at 8 p.m.

Wednesday, September 17th

Dr. Marti Latta, President of the O.A.S. Sheaker:

"Controlling the Heights - Occupations of the Oak Topic:

Ridges Moraine'

Wednesday, October 15th

Dr. Jock McAndrews Speaker:

"Ontario Forests and Prehistory - A Miscellany" Tepic:

Wednesday, November 19th

Speaker: Dr. Conrad Heidenreich

"Location and Movement of Native Groups in the Great Topic:

Lakes Area During the 17th Century"

Wednesday, December 17th

MEMBERS' NIGHT

Films and Slides

Speakers for 1981 will include:

Dr. Walter Kenyon: Burial Mounds

Archaeology and Enthnography of the Crane Indians - Northwest Ontario Ed Rogers:

Dr. Pill Noble: The Neutral Site at St. Catharines

Dr. Dick Johnston

Roberta O'Brien

SYMPOSIUM NEWS

A Symposium preregistration form is enclosed with this Arch Notes issue. For extra copies, contact the office at 223-2752 or 103 Anndale Drive, Willowdale, Ont. M2N 2X3. Also available are prepaid registration cards for the City Centre Holiday Irn, London.

NEWS FROM THE LONDON CHAPTER, O.A.S.

Symposium '80

The details of the Symposium as it now stands are contained in the pre-registration form included with this issue of Arch Notes. Despite the fact that it is still three months away, it is already generating considerable interest. We have received quite a number of requests for pre-registration kits from both Canada and the U.S. Since this is the first year that the Symposium has been held outside Toronto with its well-established clientele, publicity and promotion has been foremost in our plans. By drawing heavily on local people with historical interests and participants from the United States, we could see an exciting change in the nature of the Symposium. Although at this point predictions are difficult, the response we have received puts a sellout within the realm of possibility. O.A.S. members would be well advised to get their pre-registrations in early to secure a place at the Symposium. The publicity campaign will only stop if we do make a sellout. All pre-registrations are taken on a first-come, first-served basis.

The next barrage of publicity will be aimed directly at local historical societies. This will be via a direct mailing to them emphasizing the historical archaeology sessions and the importance of archaeology to the discipline of history. After this, the next target will be local high school history departments. It is hoped we can line up a fair number of participants from this source. Also, in the fall we will be contacting universities throughout the region to get groups of students organized to attend. The student accommodation should be a valuable aid here.

All in all, the Symposium is shaping up to be a rather exciting event, and it may never be the same again.

Fall Dig

To fill in the time before the Symposium, we are planning a fall dig during the weekends of September 20th and 27th. This is on a small historic site from the early nineteenth century, near Delaware. Anyone wishing to participate should contact either of the following:

Jim Keron - (519)285-2379 (home) (519)673-6138 (office)

Bill Fox - (519)433-8401

Picnic

Despite threatening skies and occasional drizzle which more than

once threatened to wash it out, the London Chapter picnic held June 14th was the most successful yet, drawing participants from as far as Kitchener and Hamilton. The hit of the day was Charlie Nixon's artillery, consisting of two atl-atls, darts and arrows. Stew Leslie took an early lead in the competition with his first throw that cleared the fence and landed forty feet into the next yard. Unfortunately he could not duplicate the effort. Next flash in the pan was Jim Keron who was first to hit the target (a large cardboard box) but the shot was disqualified since it was the blunt end of the dart which hit the target, not the pointy end. Bill Fox seemed to lose interest in the atl-atl this year. Perhaps the cardboard box did not present the same challenge as he had last year while hunting rabbits in the brush with atl-atl and dart tipped with a fluted point from the chipping demonstration. Overall best shot was generally agreed to be Rob Pihl: he might make a living as a hunter while the rest of us would be restricted to horticulture.

As Charlie has not yet made a bow (he will not use steel tools) we borrowed one from a neighbour to try out his arrows. These proved far more devastating in the hands of amateurs than was the atl-atl. The box was soon riddled. Best shot went to Charlie himself who hit dead centre. This event was a test by Charlie of his hafting and fletching techniques. All held tight except one point which was broken and another almost lost in the grass.

Other demonstrations included the ever popular flint chipping by Bill Fox and Charlie Nixon's bow and drill fire-making kit.

The barbecued pig (sometimes referred to as the pig cremation demonstration) turned out well despite the fire going out once. The corn soup, prepared from an Oneida recipe and Oneida corn by Bill Fox was excellent and the rest of the salads brought along by the participants combined for a great meal. In the end the corn soup was dumped into the fire for later experimental excavation, the midden removed for the garbage collector and the pig interred in an extended position with its head facing west.

Jim Keron

* * * * * HISTORICAL ARCHAEOLOGICAL OPPORTUNITY

A six week excavation will begin September 13th, with work days Thursday through Monday, at the site of the Yeigh Pottery at Burford, Ontario, just west of Brantford on Hwy. 53.

Interested volunteers are required. Cost of gas will be reimbursed for carpools, and lunch will be provided.

Contact Rita Michael: 6-210 Aberdeen Ave., Hamilton, Ontario or call (416)524-1384 after August 30th.

RARE ARCHAEOLOGICAL FIND MADE IN CHAPLEAU DISTRICT

by Thor Conway

Last year, a team of archaeologists from the regional archaeology office in Sault Ste. Marie discovered an important prehistoric campsite on Wenebegon Lake. At first, the Pike Island site appeared to be a typical Indian camping spot with the usual artifacts.

The site was carefully mapped and excavated using mason's trowels, screens, and other archaeological tools to remove the thin layer of soil. The dig was important for two reasons. First, the Pike Island site was being destroyed through recent human activity. In fact, a commercial fly-in fishing operation had illegally used this island as a regular commercial campsite. The combined effects of rooting stones out for fire circles, foot traffic, garbage and latrine pits, and stripped vegetation caused the mantle of soil to erode and wash into the lake. In a few more years there would not have been an archaeological site to find; only a bare dome of rock.

The 1979 dig was concentrated on areas most affected by modern use and we estimate that half of the site was salvaged. The second reason for the dig's importance only came to light during the past winter as we studied the artifacts and wrote up a report on Pike Island.

During the field work, we unearthed the standard assortment of Indian artifacts - bits of broken cooking pots, numerous flint flakes left from making stone tools, a couple of arrowheads and fragments of ancient Indian pipes. This collection represents the only items that were not destroyed by the highly acidic soils of the Canadian Shield forest.

The biggest thrill in archaeology is the moment of discovery. That joy is not confined to the outdoors, although you never forget the feeling when you find an arrowhead on the sandy shore of some northern lake, or when you unearth a long buried artifact after hours of digging.

While writing up the analysis of the artifacts, I was stumped in a search for an arrowhead comparable to the long, off-white point found at Pike Island. I turned the stone projectile over and over trying to remember similar examples from northeastern Ontario without success.

The time-worn saying, 'when in doubt, ask", proved to be fruitful. We mailed the Pike Island arrowhead to the provincial archaeo-logist's office in Thunder Bay. He too was unable to recognize the style of arrowhead or the distinctive raw material, until

an archaeologist from Quebec visited his lab. Upon seeing the point, the Quebec archaeologist immediately identified the stone tool as Rama quartzite. The nearest outcrops of this stone are in western Quebec, near James Bay.

Western Quebec is a long way from Chapleau district and how a tool flaked from Rama quartzite ended up on Wenebegon Lake remains a mystery. Did some Cree hunter wander south deep into Ojibwa territory hundreds of years ago? Or was the reverse true? Until we conduct further archaeological work in the height of the land zone, we will not know whether the artifact represents a chance occurance or regular trade and visits between distant areas.

There is another mystery at Wenebegon Lake. As we washed and catalogued the pieces of fired clay vessels, we discovered that the decorated sherds represented more than the standard Indian cooking pots. Many of the small sherds were portions of prehistoric pipes. Such pipes, which were used in ceremonies and rituals, are rare finds in northern Ontario. By carefully studying the decorative motifs, we separated six pipes from the handful of pottery. This high incidence of ceremonial objects is also difficult to explain at present.

Was Pike Island more than a seasonal fishing site? Perhaps a conjurer's island? We don't know now, but we plan to salvage the remainder of the site this year.

The discoveries made at Pike Island demonstrate the importance of rescue archaeology. Any unassessed site, including a seemingly common site like this, holds great potential and merits attention. Archaeologists, like many tellers of fishing stories, tend to concentrate on the 'big ones'. What else are we missing? I think that the tiny Pike Island site might surprise us again.



Wenebegon Lake Arrowhead

BOOK REVIEW - - - -

Archaeological Perspectives on Ethnicity in America Afro-American and Asian American Culture History. Edited by Robert 1. Schuyler, Baywood Monographs in Archaeology, Baywood Publishing Company, New York, 1930. 143 pp., figures, bibliography, soft cover.

The culture history of American minority groups has been a neglected area of American archaeology and this monograph may well make a useful contribution to this field. The articles in this volume are by numerous authors and are all quite concise, containing accounts of several ongoing and previously unpublished projects in American ethnicity.

Part One represents the results of excavations at several Black American sites including the African Meeting House at Bostor, Massachusetts, a 19th century oystering village at Sandy Ground, New York and the Black urban community at Weeksville, New York. In the Weeksville report, the authors provide an analysis of the ceramic groups uncovered at the site and organize them into four chronological periods. The identification of African cultural traits in the archaeological record is discussed in a paper on the ceramic and faunal remains at Plack Lucy's Garden, Andover, Massachusetts, and an interesting review by Leland Ferguson considers the existence of possible Africarisms in Colono-Indian pottery.

Part Two looks at features of the Chinese culture in America and points out some of the similarities and differences between it and the Afro-American culture. Some specifically Chinese aspects of archaeological remains are discussed, such as the occurrence of Opium Pipes on the U.S. West Coast and Chinese ceramic vessels from Ventura, California. Both parts include annotated bibliographies which would probably be useful for background information and further study.

The final section considers the broader cuestion of ethnic identification in archaeology and cultural anthropology, and briefly comments on the use of documents, material evidence and cultural patterns in studying ethnicity. Taken altogether, the assorted articles in this volume give an interesting and varied insight into some current work in American ethnicity and nighlight a new sphere of archaeology where much more meaningful research still remains to be done.

Brett Walwyn

LOST MEMBER

STEPHEN MONCTON - Your Ontario Archaeology has been returned to us from your last known address marked LNKNOWN. Please contact with your new address. Telephone 223-2752

APPROACHES TO ALGONQUIAN ARCHAEOLOGY

UNIVERSITY OF CALGARY

14-16 NOVEMBER 1980

There is still time to submit a paper to us or to one of the chairmen or chairwomen listed below.

Deadline for paper titles is 1 April, 1980; for abstracts 1 September, 1980.

Paper presentation will be limited to approximately twenty minutes (about fifteen typed double-spaced pages).

Our guest speaker at the banquet is Mr. Jackson Beardy, well-known Ojibway artist.

SESSION TITLES

Selkirk Ceramics
Mr. G. Dickson
Manitoba Museum of Man
and Nature
Winnipeg, Manitoba R3B ON2

Algonquian Art and Artists
Dr. T. Brasser
Canadian Ethnology Service
National Museum of Man
Ottawa, Ontario KIA OM8

Western Algonquian Archaeology
Dr. A. Buchner
Dept. of Anthropology
University of Winnipeg
Winnipeg, Manitoba R3B 2E9

Algonquians in the Fur Trade
Dr. A. Ray
Dept. of Geography
York University
Downsview, Ontario M3J 1P9

Ethnology
Dr. E. Rogers
Royal Ontario Museum
Toronto, Ontario M5S 2C6

M. Hanna B. Kooyman M. Guibord Algonquian Linguistics
Dr. M. Haas
Dept. of Linguistics
University of California
Berkeley, Ca. 94720

Problems and Methods in Ethnic Identification of Archaeological Materials
Dr. J.V. Wright

Archaeological Survey of Canada National Museum of Man Ottawa Ontario KIA OM8

Ethnohistory
Mr. J. Fromhold
Alberta Vocational Centre
Box 417
Lac La Biche, Alta. TOA 200

Eastern Algonquian Archaeology
Dr. G. Tasse
Laboratoire d'Archaeologie
University de Quebec a
Montreal
Montreal, Quebec H3C 3P8

Conference Committee Dept. of Archaeology University of Calgary Calgary, Alberta T2N 1N4

D.A.S. SAINTE MARIE I AND II BUS TRIP

The day began cool and unfortunately became colder. When we arrived at Cedar Point with a slight detour, we found that Mother Nature was shaking her tea cup, and this led to us finding out that some 0.A.S. members are definitely not seamen, several remained behind in the bus.

The trip to Christian Island was a delightful, bouncy ride in a 65 foot tug with a 320 horsepower diesel engine (we were fortunate enough to have the skipper show it to us).

At the island we saw the outline of the fort. Peter Carruthers spoke to us on the limited archaeology he was able to do. The band would only allow a central trench to be dug.

Dean Knight spoke of the digging of some ossuaries there.

Peter Carruthers was sure that, given the opportunity, there was much more information to be gained by digging the fort completely, and also that because the village site was never found, there are many unanswered questions.

We made the trip back to the mainland and the grateful warmth of the bus and wended our way down to Ste. Marie I.

At Ste. Marie I we were met by our guide, Awenda, a young lady of Huron and Franch descent. She guided us around the grounds with an explanation of the buildings. (The most welcomes ones being those with fires as we could not seem to escape the biting cold.)

We would personally like to congratulate Awenda on the courage she showed by explaining the pain she personally felt of her Huron descendancy and our modern way of life. She also explained how, through study, she was learning to be proud of her heritage although she has a long way to go. We wish her and all young native people a great deal of luck, they have much to be proud of.

All on the tour should thank the young people who portrayed the Fathers, the doctor, the donnes and our guide for freezing to death (so it seemed) to give us their talks.

We also hope that we did not spoil Master Carruthers (9 months old) and our youngest guest too much.

Margaret and Jim Brennan.

* * * * *

O.A.S. LITHIC WORKSHOP - 1980

After attending Bill Fox's lithic workshop, I have a greater respect for stone toolmaking. I have never done lithic analysis, so Bill's workshop offered an excellent opportunity to learn new skills and improve my knowledge. I was not alone: eleven other novice flintknappers came to London June 28 and 29 for the workshop: Jean Blane, George Connoy, William Donaldson, Charles Nixon, William Fox, Janice Hamalainen, Dr. Irmgard Jamnik, Norma Knowlton, John MacDonald, Dr. Kenneth Ockenden, and Dr. Peter Reid. We watched in amazement as Bill took a piece of rough chert and detached beautiful flakes with a hammerstone.

The two-day workshop consisted of two parts. Day one was an introduction to lithics - the identification of chert types, chert acquisition strategies, knapping techniques, and a knapping practice session. Bill provided different types of chert and some obsidian. We therefore learned by experience the joys and frustrations of working chert and obsidian.

While some people only attended the first day of the workshop, day two consisted of visits to the quarry-workshops at Kettle Point and Slack-Caswell. Bill also took several detours and pointed to numerous local archaeological sites.

The visits to Kettle Point and Hagersville chert quarries were both interesting and rewarding. We managed to gather chert specimens from both quarries and also found raw clay at Kettle Point. (The clay will be useful for the ceramics workshop later this summer.)

Whenever I find stone tools at an archaeological site, or in a museum display, two thoughts will come to mind. On one hand, the stone tools will remind me of the long distances Indians had to travel to find good quality stone; on the other hand, the tender palms of hands, broken fingernails, and bruised thighs as the Indians used their hands and legs to prepare their tools.

I am sure that I speak for the other members of the workshop in thanking Bill for an exciting week-end - the workshop, outdoor barbecue (Bill's an excellent cook), and arranging accommodations for the visitors from Toronto.

Lowa Katz

O.A.S. CERAMICS WORKSHOP

Success depends on the right combination of factors - the type of workshop, the skill of the instructor, the nature and experience of the participants, etc. The one day O.A.S. Ceramics Workshop was, regrettably, too short to cover the wealth of material presented.

On Saturday, July 26th, Dr. Martha Latta conducted the U.A.S. Ceramics Workshop at Scarborough College. The workshop consisted of two parts. Part 1 was a discussion of ceramics, while Part 2 allowed participants an opportunity to fire their homemade clay artifacts.

Part I was divided into four topics of discussion: material, technology, values, and chronology. Materials included a discussion of the origin and composition of clays. Technology outlined various methods of prepariny the raw clay up to firing and glazing. Values referred to the influence of cultural ideals on objects (that is, attributes reflected through cecorations). And, in chrolologies, we discussed typologies. The discussion was greatly supplemented by a thick book of photocopied articles which the participants purchased and two films which were presented. The films were "Maria of the Pueblos" and "Ladi Kwali, Abuja", which presented different methods of making clay pots.

In Part 2, the participants fired their clay pots, dishes, figurines, etc. Jr. Crture: 217, to raired. imagine the frustration as eleven adults stood around a six-foot high fire in the rain as some clay objects exploded. We could relate our experience to similar problems which the Indians must have encountered.

The workshop greatly benefitted from the experience of the participants: Margaret Ann Clark, Janet Cooper, Tim Kenyon, Jim Keron, Norma Knowlton, Ella Kruse, Stuart Leslie, Charles Nixon, Jill Robertson, and the writer, Lova Katz. Tim was especially interesting as he described some of his own experiments in ceramics and we were all very impressed by the beautiful clay pots which he fired. Unfortunately, Stuart's Mayan water god (Did he cause the rain?) want to pieces during the firing. The worksh p therefore became more intimate than academic. And, when you love a subject, learning becomes more meaningful.

We can al' thank Martha Latta for providing the members of the workshop with a day we will not easily forget.

Approach REPORT ON THE CERAMIC WORKSHOP - July 26th 1980 - at Scarborough College

Ten people spent the morning going over various aspects of pottery making, focussing on materials (clay, temper, water, etc.) and technology (selection, construction, firing of a linese topics were investigated in detail and depth with the

nis 1 bressing bound volume formed a treatise on the some available elsewhere and alone worth the price of act also included extensive bibliographies and excerpts from ethnohistoric and archaeological literature which placed our ceramic interest in an Ontario Iroquois perspective.

We then proceeded - in theory - to manufacture a pot, going through all the stages of selection of materials, preparing the components, forming the jot by different techniques, glazing, accorating and firing. We saw slides of last year's firing and the results of an experimental winter firing which confirmed that winter is not the season for it.

Because of rain we did not lunch by the fire as planned, but lit it soon after in a light drizzle, placing some 30 pieces brought for firing by various people. Tim Kenyon's beautiful pots and Stew Leslie's pipe and Chac-mool statuette drew acclaim for artistic skill. The Chac-mool, made only last night and still damp, came closest to total disintegration. The pipe, made earlier, survived superbly. The fired items were of clays from kettle Point, Grand River and near Collingwood (Nottawasaga Red Clay), the last appearing perhaps to be the best clay, a high percentage of items made from it surviving, and especially those previously bisque-fired. These were mainly part of a Petun Studies Group experiment being conducted by Ella Kruse. Some items came out of the fire successfully, only to spall when hit by rain while still hot.

During the heavier rain showers we returned indoors for films, and so no time was lost. We left, some of us with pots, some with already-made potsherds, clutching our voluminous handout, very satisfied with the day and the information gained. Even the misinformation, inevitably circulated on such an occasion, and even concealed in the handout itself to keep us alert, is remembered - for example that the reason a "pinch-pot" is so named is because you keep it under the bed for use in a pinch.

"Potty" LOG LIST OF VOLUNTEERS FOR EXCAVATION AND FIELDWORK

August 1980

A list of twelve volunteers was published in the last issue of Arch Notes and a further three are now listed. Licencees in need of volunteer assistance are asked to contact the Volunteers directly.

- Nadine Mayers, 2432 Carlanne Place, Mississauga L5C 3H7 276-2700 (daytime). Available part time and full time for a week. No experience.
- Klaus Rossler, 19 Captain Rolph Blvd, Markham 294-0546 (residence); 245-3163 (daytime); available weekends; has own transportation.
- 3. R. Anne Smith, 301 Glencairn Ave., Toronto M5N 1T8 485-8049 (caytime); Trent University graduate; overseas experience.

LIST OF PERSONS LICENSED BY THE MINISTRY OF CULTURE AND RECREATION TO CONCUCT ARCHAEOLOGY IN ONFACIO

In addition to the licences listed below, a number of licences from previous years have been renexed and are currently in force.

te are indebted to the Minister of Culture and Respection, The Hon. Reuban Baetz, for the following:

ifc∈nso No.	Licensee	Project Title
80-F-0370	Peter L. Storck	Archaeological Survey and field work in the Counties of Grey, Simcoe, Durham and York.
89-F-0371	Oscar Mailory	Archieological survey of the proposed TransCanada Pivelines Transmission loop.
80-F-0372	Matthew Hill	Archaeologi al field school and excavation of Lot 27 of Beasley's Upper Block in the Regional Muni- cipality of Waterlog
80-F-3373	Wm. B. Fix	Investigation of prehistoric remains in Erapidord Township in the County of Brant.
80-1-2374	Donald Brown	Fort Rouille Project.
80-F-0375	Sally Devidson & Rik Kristjansson	Archaeological survey in assessment of potent 1 impacts on archaeological heritage associated with proposed corridors of rold intended to link Highway 403 and the Queen Elizab th May, and on proposed airpart sites.
80-F-0275	Christopher Ell's	Archaeological survey and field work on properties in Caradoc Township, Middlesex County
39-F-0377	Dr. Wm. D. Fin to an	Archaeological survey and field work on properties in Wentworth County.
80-F-0378	Gary A.M. Foster	Archaeological survey and field work on properties in the Wolfe Creek and McGregor Creek Drainages.
80-F-0379	Juliet K.A. Garfit	Archaeological survey, surface collection and testing on properties along late Pleistocene shorelines in Lambton County.

80-F-0380	Barry Greco	Archaeological survey, surface collection and testing on properties in Huron County.
80-F-0381	James B. Jamieson	Archaeological excavation on the "Cleary" and "27/VII" Sites.
80-F-0382	Rita Michael	Archaeological excavation on the Jacob Yeigh and Samuel Humberstone Potteries.
80-F-0383	Brian L. Molyneaux	Preparation of a precise record of sites on Cuttle Lake and Crowrock Inlet in Rainy River District and Lower Manitou Narrows, Painted Rock Island and Dryberry Lake in Kenora District.
80-F-0384	Robert J. Pearce	Archaeological excavation on the Lawson Site
80-F-0385	Dana R. Poulton	Archaeological survey, surface collection and limited excavation on properties within the Catfish Creek Drainage in Malahide, South Dorchester, Yarmouth and Bayham Townships in Elgin County.
80-F-0386	David G. Smith	Archaeological excavations at the Messenger Site.
80-F-0387	Marianne Stopp	Archaeological survey and field work on the Baumann Site and the Goss Site both in Medonte Township in Simcoe County.
80-F-0388	Mark C. Warrack	Archaeological excavation at the Navy and Military Establishments.
80-F-0389	Ron Williamson	Archaeological survey and field work on properties in Caradoc Township, Middlesex County.
80-F-0390	Dr. Peter Reid	Archaeological survey on the Cherry Lane Site and other sites in the vicinity.
80-F-0391	Robert H. Pihl	Archaeological field work on properties within the Counties of Huron, Perth, Oxford, Brant, Elgin, Middlesex, Lambton and Kent, and the Regional Municipality of Hamilton-Wentworth, Niagara and Haldimand-Norfolk.

80-F-0392	Stephen J. Buneta	Documentation of construction techniques, record artifacts and structural details to excavate extant remains and to monitor disturbance of the Hope Island Wreck.
80-F-0393	Paul A. Lennox	Archaeological survey and field work on certain Highway Corridors within Essex County, Regional Municipality of Waterloo, Dufferin County, Bruce County and Brant County.
80-F-0394	Wm. A. Fox	Conservation licence for the Southwestern Region.
80-F-0395	Phillip J. Wright	Conservation licence for the Eastern Region.
80-F-0396	Roberta M. O'Brien	Conservation licence for the South Central Region.
80-F-0397	LaVergne Butcher	Archaeological survey and field work on lands adjacent to the Townships of Flamborough, Puslinch, Vaughan, Markham, East and West Gwillimbury, Uxbridge, Brock, Regional Munici- palities of Halton and Westworth.
80-F-0398	David K. Ricdle	Archaeological survey on the margins and environs of Attawapiskat Lake, District of Kenora, West Patricia Portion.
80-F-0399	Robert G. Mayer	Archaeological survey at the Van Egmond Site.
80-F-0400	Helen G. Arm- strong	Archaeological field work at the Nathaniel Scharf Homestead in the Regional Municipality of Ottawa- Carleton.
80-F-0401	James S. Hamilton	Archaeological field work at the Scott Site in the Township of Ear Falls, District of Kenora.
80-F-0402	Mary T. Ambrose	Archaeological field work on the North Pickering Development Project properties, in the Regional Munici- pality of Durham.

30-F-0403	Nicholas Adams	Archaeological survey and field work on the Onakawana to Sudbury Hydro Corridor and Nagagami Lake and associated river systems.
80-F-0404	Marjorie M. Jordan	Archaeological field work on the shorelines of Lake Abitibi in the Administrative District of Cochrane.
80-F-0405	Shan Walshe	Archaeological field work at Ouetico Provincial Park, Ontario
80-F-0406	John C. Redmond	Archaeological field work within the Regional Municipality of Waterloo and the Townships of Puslinch, Guelph, Erin, Eramosa, Pilkington and West Garafraxa.
80-F-0407	Dean H. Knight	Archaeological field work on the TransCanada Pipeline Corridor.
80-F-0408	Grace Rajnovich	Archaeological field work on all Crown Lands in the Fort Frances District and that part of Atikokan District between Quetico Provincial Park and the eastern boundary of Fort Frances District.
80-F-0409	William Ross	Archaeological field work on the shorelines and environs of Whitewater Lake, Smoothrock Lake, and Wabakimi Lake in the District of Thunder Bay.
80-F-0410	Sheryl A. Srith	Archaeological field work in Sand- banks Provincial Park, Prince Edward County, and Outlet Reach Provincial Park, Prince Edward County.
80-F-0411	Robert H. Pinl	Archaeological field work on the Cutler Site in Pinery Provincial Park.
80-F-0412	Gordon C. Dibb	Archaeological excavation at the Deavitt Site and survey along former Lake Algonquin shorelines in the Townships of East Gwillimbury and Georgina in the Regional Municipality of York.
80-F-0413A	Matthew H. Hill	Archaeological field work on the Village of New Aberdeen, in the Regional Municipality of Waterloo.

80-F-0413	Michael Verbrugge	Documentation, recording and identification of wreck on the bottom of Lake Erie.
80-F-0414	Stephen Strudwick	Archaeological field work on lands adjacent to Highway 33, Highway 62 and Highway 509.
80-F-0415	Mark C. Lavoie	Archaeological field work in and around the Bethune-Thompson House in the Village of Williamstown, Charlotteburg Township, Glengary County.
80-F-0416	Christopher C. Hanks	Archaeological field work along the Spanish River and its tribu- taries.
80-F-0417	Harry F. Drabik	Archaeological field work in that part of the District of Thunder Bay east of Quetico Provincial Park.
80-F-0418	Sally Davidson & Rik Kristjans- son	Archaeological field work on lands adjacent to the Oueen Elizabeth Way corridor between Hamilton and Burlington, in the Regional Municipality of Halton.
80-F-0419	Douglas C. Carey	Archaeological field work on properties throughout Kent and Essex Counties.
80-F-0420	Mervin O. Ahrens	Shoreline survey of rapids and waterfalls of the main water arteries east and north of Fort Frances.
80-F-0421	Morris Brizinski	Archaeological field work on lands traversing Townships in the District of Nipissing and the Counties of McNab and Renfrew.
80-F-0422	Kenneth T. Buchanan & Margaret Bertulli	Archaeological field work on lands traversing Townships in the Districts of Sudbury and Manitoulin.
80-F-0423	Peter J. Carruthers	Archaeological field work and survey throughout the Districts of Thunder Bay, Algoma, Sudbury, Parry Sound and Nipissing.

80-F-0424	William Core	Archaeological field work on lands in the vicinity of Blackwell, Sarnia Township, Lambton County.
80-F-0425	Hugh Daechsel	Archaeological field work throughout the drainage basin of the South Nation River.
80-F-0426	Helen E. Devereux	Conservation Licence for Northeastern Ontario.
80-F-0427	Charles Garrad	Archaeological field work throughout the Townships of Collingwood in Grey County, Mulmur in Dufferin County and Nottawasaga in Simcoe County, and on the Connor-Rolling site, Nottawasaga Township, Simcoe County.
80-F-0428	Ian T. Kenyon	Archaeological field work throughout the Regional Municipality of Niagara and in the Township of Glanbrook in the Regional Municipality of Hamilton-Wentworth; the Maitland River drainage system in Huron County; the Sydenhem River drainage system in the Gores of Chatham and Camden in Kent County, and in the Townships of Dawn, Brook and Euphemia in Lambton County.
80-F-0429	Richard Leuger	Archaeological field work on and around Hudson's Bay Company Staff House on Moose Factory Island.
80-F-0430	James G. Lockhard	Underwater remains in the Niagara River Offshore from Navy Hall near Fort George in the Town of Niagara on the Lake, in the Regional Munici- pality of Niagara.
80-F-0431	Kenneth A. Oldridge	Archaeological field work on the Heenan Bridge Site, Sherbourne Town- ship, Haliburton County.

LETTERS

Dr. Martha Latta 100 Northwood Drive Willowdale, Ontario

Dear Martha,

May I extend my thanks to you, the Executive and members of the Ontario Archaeological Society for the medal and also for the summary of my archaeological work. It was a most delightful surprise and extremely thoughtful of you to make a special excursion to my home for the presentation.

I have always felt that meeting and working with so many fine and interesting people over the years, making innumerable good friends and contributing to the knowledge of primitive man was rewarding in itself, but the receipt of this lovely tribute was an additional and thrilling pleasure.

Thank you,

Most sincerely,

Frank Ridley 289 Burnhamthorpe Road Islington, Ontario

CORRECTION

Due to a typing error, incorrect dates were listed for creamware in Table 3 of the article "The Application of South's Mean Ceramic Formula to Ontario Historic Sites" in the May/June issue of ARCH NOTES. The creamware dates should be 1796-1820 with a medium date of 1808.

* * *

John Jouppien

Presentation to Charles Gerrad

The occasion of Chas's fifteeth winthday in early June (a Geminian, of course!) provided an opportunity for some of his friends and colleagues to get together and present him with Theaites 72-volume cities of The Jesuit Relations.

We can now be assured that both prime source and pure sauce will be available from Chas.

MUK

NASA RADAR EXPERIMENT DISCOVERS MAYAN CANALS

Extensive Maya-built irrigation canals hidden for more than 1,000 years beneath dense rain forest in Guatemala have been revealed by a new radar system developed by the Jet Propulsion Laboratory, Pasadena, California, for NASA.

The radar's unveiling of the ancient canal systems, dug by the Maya between 250 BC and 900 AD in Guatemala and the neighbouring country of Belize, may answer a question that has long puzzled archaeologists: How did the Maya, whose population numbered between 2 and 3 million citizens, feed their people?

The canals were recently found in images taken during an early test (1977-78) of the new radar from an aircraft over the cloud-covered jungles of Guatemala and Belize - once the centre of the Maya empire.

The new radar (called SAR for Synthetic Aperture Radar) can penetrate clouds and provides higher resolution for comparable antenna size than other radars. It has been developed by NASA and the military.

Archaeologists and anthropologists have evidence of the Maya's huge cities, their government and justice system, their religions, mathematic and astronomical sciences. But no one has ever been able to find where they grew enough food to support such an enormous civilization, set in a land characterized by either arid and mountainous territory or swampy jungles - settings where crops are difficult to grow.

The question of where and how much food the Maya cultivated remained a my stery until the radar provided a clue.

Because this tropical region is cloud-covered most of the time, sharp aerial photographs of the area are virtually impossible to obtain. The ability of the radar to penetrate cloud cover, however, enabled researchers to produce clear pictures of the varying layers of the foliage. Measurement variations of the height of the layers, called canopy, were detected by the radar and allowed scientists to determine land formations beneath the foliage.

Recently, Richard E.W. Adams, professor of archaeology at the University of Cambridge, England, was provided radar images which mapped a stretch of Guatemalan and Belize tropical jungle of about 80,000 square kilometers (50,000 square miles). The mapping of the area was performed under the direction of senior radar scientist Walter E. Brown of JPL.

While checking the radar data for evidence of ancient settlements or roadways. Adams was surprised to find unnaturally uniform grid patterns - which looked to be canal systems - emerging from the swampy rain forest surface.

"I could see little lines, most of them looking like ladders or lattices, connecting with larger waterways," said Adams. The grid patterns, if they indeed represented extensive irrigation canals, would provide scientists with an important piece of the puzzle in reconstructing Maya civilization.

Scientists have long wondered how such a large civilization grew enough crops to sustain its population, since little evidence could be found that the Maya used intensive agriculture. Intensive agriculture means that crops are rotated on the same land, season after season, to get the maximum yield of crops from a minimum of soil, as opposed to extensive agriculture, or "slash and burn" farming, where fields must lay dormant for several seasons to replenish exhausted soil.

"We've never before been able to reconstruct convincingly an economic base for the Maya," said Adams. "In other words, how did they feed all these masses of people all the time?"

But the lattice-like grid unveiled by the radar, if found to be as extensive as indicated on the radar imagery, would prove to Adams that the Maya had used nearly all of the flooded and swampy zones in the Guatemalan and Belize lowlands for raised field cultivation.

That evidence, in turn, would show for the first time that the Maya were forced by population pressure to use a sophisticated intensive agriculture system to support the millions living in and around their cities.

Such canal systems for raised field cultivation are known to have been used on a small scale by the Aztecs in Mexico and by the Maya in Belize, but archaeologists never suspected that this kind of intensive agriculture was used as extensively as suggested by the radar.

The canals, measuring about one-half a meter deep and one to three meters wide, were dug with handcrafted stone blades, mattocks and hoes to drain water away from the swampy rain forests to make small square plots of dry land where crops could be grown.

Archaeologists believe the Maya used such farming techniques to grow maize, their principle food, and cacao, from which modern chocolate is made. Cacao was cultivated by the Maya for food and for money, since ancient Mesoamerican civilizations used cacao beans for currency.

The wealth of the Maya might be partly explained if they used intensive agriculture to grow large quantities of cacao, which was commonly traded with other Central American civilizations for obsidian (for making tools) and salt from northern Yucatan.

Adams, with fellow archaeologist Dr. T. Patrick Culbert of the University of Arizona, set out for the Guatemalan and Belize rain forests on February 14, 1980, to see if they could find on the ground what the radar had seen from an altitude of 28,000 feet.

Working with other archaeologists in the area, the two scientists compared the grid patterns found in the radar data with local topographical maps, soil maps and aerial photos, and first confirmed that the lattice patterns recorded by the radar appeared where known canals existed.

Then travelling by car and dugout canoes, Adams and Culbert spent several days during the month-long investigation pushing through the rain forest, navigating in and out of alligator-infested waterways, searching for and finding the narrow ditches outlining the plots of land where the Maya grew their crops -proving that the radar had detected unknown canal systems.

What they found near the Pasion River, for example, were small streams flowing into the river at regular intervals, along with the remnants of small canals frequently leading from lagoons at right angles into the river.

At some points in their journey, the archaeologists were forced to abandon their boats because of shallow water, and proceed on foot, following several "machete men" who chopped a path through the dense vegetation as the scientists walked along the river bank in search of more canals.

Adjacent to the canals they found the plots of land, (sometimes submerged) now covered with reeds and thick foliage, that had been used as cultivation sites by the Maya. According to Adams, the archaeologists found enough evidence to believe that "as much as a third of those particular grid patterns (as seen by the radar) are ancient canals." He estimates that up to 14,000 sq. km. (11,185 sq. mi.) of canal systems may lay beneath the rain forests of Guatemala alone.

Adams said the next step in determining how extensive the canals are, is to use the radar to produce imagery with evern higher resolution in future flights over the area. The previous resolution was set at 1:250,000 to distinguish objects and patterns as small as 15 metres square.

A higher resolution of 1:50,000 would show patterns as small as 3 metres square in more detail.

Then, following radar mapping surveys, sites will be selected for archaeological excavations, which will determine whether Maya artifacts like stone tools or structural remains still exist after centuries of flooding. The digging in the area revealed by the radar, said Adams, has just begun.

The radar survey of Guatemala and Belize was a joint endeavour by JPL and NASA's Ames Research Center, Mountain View, Calif. The concept of using radar images for archaeological research was suggested by Dr. Bruce Dahlin, professor of archaeology at the Catholic University of America in Washington, D.C. The expedition was funded by the Lende Foundation of San Antonio, Texas.

NASA Washington, D.C.

* * * * *

TEN NEW DIGS OPEN IN ISRAEL

If you're at least 18, and canable of doing strenuous work in hot weather, the Israeli Government Tourist Office has a healthy way for you to spend your summer vacation. Ten new archaeological sites will be opened this summer in Israel, where young people can work with professional archaeologists, uncovering the antiquities of ancient Near Eastern civilization.

A few of the excavation sites are the biblical section of Jerusalem, the Gaza Shore, Tel Michal, on the Mediterranean Coast at Herzliya, and Merhiv Ayalon, halfway between Tel Aviv and Jerusalem.

Cost ranges from \$12 per day to \$560 for a $6\frac{1}{2}$ week trip. Participants pay for their own fares to and from Israel and are responsible for all arrangements and accommodations that are not connected with the dig.

For more information, write to the Israel Government Tourist Office, 102 Bloor St. W., Toronto, Ontario M5S 1M8. Telephone: (416)964-3784

* * * * *

EASTFIELD VILLAGE announces the Fourth Annual WORKSHOPS of Historical Preservation and American Trades - 1980

Eastfield Village is a study collection of architectural and cultural artifacts comprising 23 appropriately outfitted and furnished structures of the period 1787 - 1840. The Village is the creation of Donald G. Carpenter, who dismantled the buildings at their original sites, moved them to Eastfield, and re-erected them there. Among the shops, houses, and outbuildings in the collection are tinner, blacksmith, printing and woodworking shops; a workman's dwelling house; a tavern; and a doctor's office.

Eastfield Village is dedicated to Historic Preservation and to the Historical American Trades. All workshops employ traditional methods and traditional tools, and all Eastfield's resources are available to workshop participants. Since it is not open to the public, Eastfield provides an intrusion-free atmosphere for study and work. The workshops go far beyond verbal discourse, affording participants a rare opportunity to acquire practical, hands-on experience invaluable in the restoration and reproduction of period structures.

Whereas previous workshops at Eastfield were primarily concerned with reproduction of period structures in toto, 1980's workshops will emphasize repairing, restoring, preserving and reproducing the structural and architectural features of late 18th and early 19th century buildings. Eastfield's workshops are indispensible to the professional craftsman concerned with employing accurate and appropriate preservation techniques. They could also prove invaluable to the homeowner or for museum personnel who must be able to make informed judgments about exactly what work is necessary and what to expect from their workmen. Eastfield's workshops offer the opportunity to practice many of the skills associated with the preservation and restoration of period structures - including constructing a building frame, planing a moulding, mixing lime mortar, cutting shingles, and splicing beams. Discussions will also address the compatibility of modern materials with traditional ones and the sensitive integration of 20th century necessities and details with historic fabric and design.

Lodging: For the adventurous, one of the most intriguing facets of Eastfield's workshops is the experience of living in the Village during the workshop. Eastfield's tavern is available free of charge for those willing to experience early 19th century living. The only requirement is that each person choosing to stay at the tavern supply 10 white candles. Cooking is done in the tavern kitchen fireplace and oven. Food is each student's own responsibility. However, most students bring enough food to last through lunch the first day of class, after which everyone generally pools resources, and large meals are communally prepared in the tavern. Rope beds with straw and feather ticks

are available. Bedding is the responsibility of each student. There is a large pond for washing and swimming.

For those preferring other accommodations, the following facilities are within one-half hour's drive of Eastfield: Crooked Lake Hotel (the nearest, about a 10 minute drive), Crooked Lake, N.Y. 12018 (518)674-8947 Holiday Inn, 6th Ave. and Fulton St., Troy, N.Y. 12180 (518)272-3210 Mount Vernon Hotel, Routes 9 and 20, East Greenbush, N.Y. 12061 (518)477-9352

Eastfield Village is located in southern Rensselaer County, near the Massachusetts border. Exact directions will be mailed with confirmation of registration.

About Eastfield's Instructors

Mr. William McMillen: As supervisor or restoration at Richmondtown Restoration, Staten Island, New York, for the past eighteen years, Mr. McMillen has been instrumental in restoring many of Richmondtown's structures, including the famed Lake-Tyson House. In addition to his architectural abilities, he is a skilled woodworker and an accomplished tinner.

Mr. Charles Hartwell: A locksmith turned tinner, Mr. Hartwell is now probably one of the most accomplished tinners in this country. He plies his trade at Hancock Shaker Village, Hancock, Mass., in summer, and at Pioneer Arizona Foundation, Pheonix, Ariz., winters.

Mr. Donald G. Carpenter: The founder of Eastfield Village, Mr. Carpenter has personally dismantled, moved, and re-erected the structures comprising the Village. He is, in addition, a knowledgeable and avid practitioner of many historical trades, including tinning, weaving, blacksmithing, and woodworking. He also serves in a consultant capacity for museums, schools and private restoration efforts.

Remaining Workshops for 1980

Tinsmithing II - September 8 - 12 (5 days) An advanced course for tinners with previous experience and a basic knowledge of construction methods. Participants will learn the complicated construction techniques utilized in the fabrication of crooked spout coffee pots, roasting kitchens, etc. and will be encouraged to produce several tinware items of advanced design. Discussions of tinware's various styles and periods will include the detection of fakes.

Instructor: Charles Hartwell

Fee: \$135 Limit: 8 students

Housewrighting III - Fireplace Building. August 11 - 13 (3 days) A survey of fireplace styles from 1780 - 1840; in-depth information on their construction, restoration, and reproduction; and an intensive lecture on period masonry techniques precedes a tour of local fireplaces. Students will then work in pairs and build complete fireplaces.

Instructors: William McMillen & Donald Carpenter

Fee: \$70

Limit: 15 students

Housewrighting IV - Brick Oven Building. August 14 - 16 (3 days) A detailed lecture on the masonry and construction techniques of late 18th and early 19th century brick ovens will precede a guided inspection of existing period ovens. Working in groups of three, participants will then build complete ovens.

Instructors: William McMillen & Donald Carpenter

Fee: \$70

Limit: 15 students

Tinsmithing I - August 18 - 22 (5 days)

An introduction to the art of tinning designed to provide a basic working knowledge of late 18th and early 19th century tinning tools, construction techniques, and pattern layout, together with a history of American tinning. Students will produce a minimum of 8 pieces of tinware using patterns from Eastfield's collection.

N.B. This workshop will be held ONLY if that held on lane 2 - 6 is oversubscribed.

Registration Information

Registration is on a first-come, first-served basis. Deadline for registration is two weeks prior to the workshop commencement date. No refunds will be given after the deadline date.

Special Workshops - Interested groups and historical organizations may contract to have special workshops for their own members.

STUDENTS ARE ENCOURAGED TO BRING THEIR OWN TOOLS.

Classes will be held from 9:30 a.m. to noon and from 1 p.m. to 4 p.m.

Telephone: (518)766-2422

O.A.S. CHAPTERS

LONDON CHAPTER

Executive: President: James Keron (519)285-2379

> Vice-President: Robert Pihl Treasurer: George Connov Secretary: Charlie Nixon KEWA - Editor: Bill Fox

Usually at 8:00 p.m. on the second Thursday of each month, Meetings:

excluding June, July and August, in Room 128, Somerville House, University of Western Ontario, London.

Chapter Fees: Individual \$4, Family \$6, Institutional \$10.

OTTAWA CHAPTER

Newsletter:

Executive: President: Clyde C. Kennedy (613)237-3270

Vice-President: Sue Johnston

Secretary/Treasurer: Bill MacLennan

Newsletter: THE OTTAWA ARCHAEOLOGIST - Editor: Clyde C. Kennedy Meetings: Usually at 8:00 p.m. on the second Wednesday of each

month, excluding June, July and August, in the Victoria

Memorial Building, Metcalfe & McLeod, Ottawa

Chapter Fees: Individual \$5, Family \$8, Student \$3.

SIMCOE COUNTY CHAPTER

Executive: President: Jamie Hunter (705)526-7683

> Vice-President: Jim Harris Treasurer: Gary Shill Secretary: David Brister

REDE - Editor: Jim Harris Newsletter:

Meetings: Usually at 8:00 p.m. on the second Wednesday of each

month, excluding June, July and August. Details: Jamie

Hunter (705)526-7683

Chapter Fees: Individual \$5

THUNDER BAY CHAPTER

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Vice-President: David Riddle

Secretary/Treasurer: Michael McLeod WANIKAN - Editor: Elinor Barr Newsletter:

Meetings: Usually at 8:00 p.m. on the last Wednesday of each month,

excluding June, July and August, in The Aesthetics

Lounge, Lakehead University, Thunder Bay.

Chapter Fees: Individual \$2

WINDSOR CHAPTER

Executive: President: Ted Trusevich (519)255-6907

Vice-President: Kirk Walstedt Secretary/Treasurer: Peter Reid

Newsletter: SQUIRREL COUNTY GAZETTE - Editor: Peter Reid

Usually at 7:30 p.m. on the second Tuesday of each month, Meetings:

excluding June, July and August, in the Windsor Public Library, 850 Oullette Avenue, Windsor

Chapter Fees: Individual S3.

The Ontario Archaeological Society (Inc.)

Box 241. Postal Station P.

Toronto, Ontario M5S 2S8

EXECUTIVE 1980

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Newsletter: ARCH NOTES

Meetings:

Usually at 8:00 p.m. on the third Wednesday of the month,

excluding June, July and August, in the McLaughlin Planetarium (Lecture Theatre), Royal Ontario Museum,

Queen's Park, Toronto.

Fees:

Individual \$8; Family \$10; Institutional \$20;

Life \$200. Chapter fees extra.

Members:

Approx. 500

O.A.S. ADMINISTRATOR & LIBRARIAN

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