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newsletter published by  
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126 Willowdale Avenue, Willowdale, Ontario, M2N 4Y2  

Date of Issue: February 1988
World-renowned archeologist and University of Toronto Professor William Nathanial (Bill) Irving died on Nov. 25, 1987, following a six-month illness. Mr. Irving was born in Toronto and spent his early childhood in the Lawrence Park area before moving to the United States in 1937. He attended high school in Alabama, college in Maine and the University of Alaska, Harvard University and University of Wisconsin.

Mr. Irving, whose parents were Americans, served with the U.S. infantry in Japan in 1946 and 1947.

After receiving his doctorate from Wisconsin, Mr. Irving returned to Canada in 1964 where he was hired as an archeologist with the National Museum of Man in Ottawa. During his time in Ottawa, Mr. Irving also taught at Carleton University.

He was offered a teaching position at the University of Toronto in 1969, where he remained until his death.

Specializing in Indian and Eskimo cultures of the Yukon, Mr. Irving published many articles throughout his career. Among them was a May, 1981, paper in the Journal Arctic claiming that the first humans in North America arrived 150,000 years ago - some 135,000 years earlier than generally believed.

Mr. Irving based his theory on some rare tools and broken animal bones he discovered along the Old Crow River in the Yukon. Old Crow, Canada's most northerly Indian settlement, is a small village of about 250 people where Mr. Irving spent 17 straight summers.

"He had a very special relationship with the residents there. He truly loved that place," said his wife, Lila Lewis, a local watercolor artist.

"He had virtually no interests outside of his work," she said. "He spent his summers in field work and most of his trips had to do with work rather than vacations.

"But he was very fond of sports and was a good skier and runner," she added.

Besides his wife, Mr. Irving leaves his daughter Rebecca, and sons David and William.

From The Toronto Star, 28/11/87
PRESIDENT’S COMMUNIQUE

By Christine Caropppo

Good News! After many years of discussion, negotiations and searching the O.A.S. has achieved a long-standing goal. We have a new office! We just this month located office and library space in a building in North York and should have everything set up and running by the middle of February. We will be having an Open House on Saturday, Feb. 20, 1988 from 3:00 to 6:00 p.m. with modest refreshments being served. Please consider this your invitation and come out and have a look around. Our new address and telephone number are: 126 Willowdale Ave., Willowdale, ON, M2N 4Y2, (416) 730-0797. We are located on the second floor of the building which is within walking distance from the Sheppard Ave. subway station and is also served by two bus routes from that station.

At the Annual Business Meeting in October last year our new schedule of fees for 1988 was voted on and passed. Please be aware that Society fees are as follows for 1988: individual $20, family $25, life $320. We decided to waive an increase in institutional fees until the end of this year as several of our institutional members had not renewed citing lack of publications. We hope to bring these members back into the fold when we send out OA 46 and 47 which we hope will be in your hands by the next issue of Arch Notes. If you find a renewal notice in this issue please respond ASAP as this will be the last issue of Arch Notes you will receive otherwise.

The election of officers for the Society is complete. I would like to announce that Bob Burgar has been returned to office and I’m pleased to welcome Laurie Jackson as our new Director. I want to thank the other two candidates who ran for the post of Director, Ann Balmer and Lise Ferguson. Knowing the work ahead for Bob and Laurie I’m not sure whether congratulations are in order rather than condolences for Ann and Lise! But seriously, I really am pleased to note the interest taken in the running of the Society that this last election points out. First, the fact that there was an election indicates that there are members out there willing and eager to serve the Society on the Executive. Second was the overwhelming response by the membership in ballot returns. The average membership response in past elections has been about 5%, this time it was a remarkable 20%! Well done!

We wish retiring Director Norma Knowlton well with her studies at Trent, and we thank her and all the retiring 1987 Chapter Officers for a job well done.

Other news...The trip to Belize, Guatemala and Mexico is doing well and members slated to go are eagerly awaiting the departure date and filling in the time meanwhile with such preparatory activities as getting their typhoid shots and shopping at Tilley Endurables for expedition shorts and other gear. The O.A.S. member’s pins are selling extremely well, rivalled only by the interest in our shortly-to-be-published AARO Index compiled by Charles Garrad and offered to members free of charge as our way of celebrating the centenary of government support of archaeological research in the province of Ontario. We received a grant of $15,000 in support of Passport to the Past from the Ministry of Culture and Communications and we are grateful. Unfortunately, our application for an endowment grant in support of Ontario Archaeology has hit a snag but it will be resubmitted for the 1988 government budget year.

Let me take this opportunity to remind you that we have fallen seriously behind in our traditional
publishing schedule of two OA's per year. OA 46, the next issue due out, is actually the second issue for 1986. OA 47 should follow soon after. Authors, please submit papers for editorial review and reviewers please respond as quickly as possible when your services are called upon by our editor, Dr. Peter Reid. The O.A.S.'s reputation rests largely with its publications. You must not let us down but instead help us through this difficult time by submitting manuscripts and reviewing those sent to you as quickly as possible.

There are two final items I would like to mention. First, we have been advised that the Ministry is planning to ask us to provide all our services in French as well as in English. It is already a matter of policy that we will publish articles in French provided that the author furnishes us with an abstract in English as well as in French. I am curious to know to what extent the membership desires that our services be provided in French before committing the O.A.S. to a very expensive undertaking. Please respond if you would like O.A.S. services in French.

Late last year the O.A.S. was asked by the Save the Rouge Valley organization to write in support of their position with Scarborough City Council that 5000 acres of land in northeast Scarborough on the Rouge River not be sold for development but that it be used as park land. We wholeheartedly supported this option as we were aware that this parcel of land contains not only areas of significant natural heritage but also many archaeological sites. It seemed prudent to us to support the argument for retaining these lands in their present state for the recreational use of the millions of people who live in Ontario's largest urban centre, an area currently under tremendous development pressure. This option would, we hope, provide for the opportunity to study these sites without the pressure of bulldozers looming on the horizon as is often the case nowadays in salvage archaeology. Scarborough Council voted in favour of the option we supported but the ball is now in the Ontario government's court. Premier David Peterson has indicated that he feels that the land should be used for much-needed low income housing. While we have no quarrel with the need for affordable housing, sources indicate that only 25% of the 5000 acres would actually be used for this kind of development in the government's plan. The rest would be sold to developers for so-called "executive" homes on the prime ravine lands. If you feel strongly about preserving this area for future generations to study and enjoy, please send a short letter stating your concern to: The Hon. David Peterson, Office of the Premier, Rm 281, Legislative Buildings, Queens park, ON, M7A 1A1. Just a few of your letters could make all the difference in the government's decision in this matter. Thanks.

Passport To The Past
The Second Year

With the arrival of the new year, Passport became the sole responsibility of our Society; however, it was passed on with a generous $15,000.00 operating grant from the Ministry of Culture and Communications - our thanks to The Honourable Lily Oddie Munro!

Passport to the Past has grown slowly but steadily since its inception in February 1987, so that there are now over forty members. Three flyers describing both field and laboratory opportunities have been mailed to members, who also had access to a toll-free telephone number for information on Passport agency activities. This latter service has been terminated for the present in order to assess its utility. We have received excellent cooperation from a variety of Universities, museums,
consultants and M.C.C. field offices across Ontario, in providing a wide variety of opportunities for Passport members to participate actively in archaeological projects.

This year we will begin to offer workshops designed specially for program members. The first, a flint-knapping workshop, is being held in January and others will follow on a monthly basis, including such activities as artifact illustration and identification. Special field trips are also planned and we will be investigating volunteer fieldwork opportunities outside of Ontario.

Needless to say, we have great expectations for Passport to the Past and look forward to its continued growth in 1988.

* * * * *

MAP OF LOCATION OF O.A.S. OFFICE

Twelve minutes walk east of Sheppard TTC station or by #98 bus to door or #85 bus to Willowdale Avenue corner

126 Willowdale Avenue, Willowdale, ON M2N 4Y2
Telephone (416)730-0797
Please visit the NEW O.A.S. offices

Meet your Executive
Browse the library
See where it all happens

AT 126 Willowdale Avenue, Willowdale, Ontario
(416) 730-0797

3:00 - 6:00 pm on Saturday, February 20, 1988

ONTARIO'S HERITAGE: TAKE IT TO HEART
Ontario Heritage Week February 15-21, 1988
On October 30, 1987 after 30 weeks of excavations, the first phase of the Fort York Archaeology Programme was completed. The work focused on the still-standing 1815 brick officers’ barracks, prior to the building’s modernization, stabilization, restoration and exhibition improvement. The research objectives of this phase of the programme were to provide architectural details in the basement and outside perimeter of the officers’ barracks in order to help restore the building to its c. 1838-1841 configuration. However, the programme was equally concerned with architectural and social details pertaining to the building and its occupants’ history from its initial construction to its final configuration as a museum in 1934.

In addition, 12 m.sq were examined in the centre of the fort in the area of the 1800-1813 lieutenant-governor’s residence, and 12 m.sq were exposed in the southwest bastion at the location of an 1813-c.1841 barracks/canteen and overlying 1861-c.1900 gun platform. These smaller excavations assessed the archaeological potential and stratigraphy of the western half of the fort. In so doing, long term stabilization and site improvement programmes will be aware of the impact of any below-grade disturbances on the architectural resources of the property, and will provide guidelines concerning time requirements for careful archaeology excavation in these areas of the fort.

The entire basement of the officers’ barracks was excavated by natural levels and features to a depth of 45 cm. The re-interpretation of the basement, based on archaeological evidence, demonstrates a series of superimposed floors, walls, drains and catch basins. The 1815-1828 wooden floor level has artifacts and faunal remains relating to its uses as a kitchen. C. 1827-1828 the outside area was adjacent to the east side of the building was filled. Over 35,000 artifacts (ceramics, glass, buttons, coins, pins, military equipment and fauna) dating to the period c. 1800-1828 came from this deposit. In 1829, a wine cellar was constructed in the basement, one of the two basement fireplaces was closed, a stone and brick box drain was built and a 1.5 m basement door was cut through the east wall. At this time, the existing kitchen wing was constructed. A brick drain leading to this wing provided evidence for a sink to be placed in the new restoration. Artifacts from the basement for the period c. 1829-1839 consisted primarily of wine bottle fragments but also some ceramics, including three reconstructible Spode ironstone vessels, possibly from a regimental mess service. Additional floor levels, drains, catch basins, walls and associated artifacts date to the periods c. 1840-1862, c. 1862-1870, c. 1870-1892 and c. 1892-1909. The assemblage from the basement radically changed after 1870, at which time the families of newly arrived Canadian garrison, who used the buildings as married quarters, were reflected in large numbers of new ceramic and glass types, along with the presence of toys.

The testing in the centre of the fort showed evidence of clearly stratified, relatively unmixed deposits for 1.2 m. A burn layer, tentatively identified to the original 1793 land clearing of the site, promises the potential for finding undisturbed, prehistoric materials on the property. Although no structural evidence for the lieutenant-governor’s residence was found (a post-excavation resistivity survey of the area by the Physics Department of the University of Toronto shows interesting anomalies),
Fort York...
c. 1839 - c. 1861

c. 1862 - c. 1870
A thick midden layer was exposed. This layer had a wide variety of pre-1813 ceramics glass, small items and a diverse faunal assemblage which included a high percentage of wild fauna. Overlying deposits date to c. 1813-1820 and c. 1820-1860. The tests in the south-west bastion revealed deposits dating to pre-1813, the north stone footings and possible porch of the c. 1813-1841 structure, the overlying 1861 gun platform and a cobbled path to the guns, and 1870-1909 period refuse layers.

Phase II of the programme, which is now underway, consists of the further washing, sorting, labelling and identification of the 80,000 artifacts. In addition, over 2,000 photographs, 150 maps and drawings, and 800 pages of field notes will be catalogued and studied.

Phases III and IV which will be carried out from January 2nd to May 27th, 1988, are the analysis of the structural and artifactural data, and the production of detailed reports to meet the requirements of our provincial archaeology licence, to provide details for the restoration of the officers' barracks, and to present recommendations covering the archaeological potential of Historic Fort York.

The Toronto Historical Board has been awarded an archaeology research grant of $10,000 by the Ontario Heritage Foundation, for the purchase of computer equipment to be used for a detailed statistical analysis of the materials from the south-west bastion. This project, to be completed by March 31, 1988, will test the new computer data entry and retrieval format which ultimately will be applied to the entire archaeology collection: i) for the 1987-1988 materials, ii) for the artifacts from the excavations conducted 1973-1975, and iii) for future archaeology programmes at the fort.

A permanent display of the archaeology at Fort York will be opened in May 1988. However, this display will be expandable for it is hoped that the 1987-1988 project will be but the first of a multi-year programme at the fort, as an integral part of the stabilization, restoration, renovation and interpretation work to be conducted at Historic Fort York over the next few years.

The 1987-1988 Fort York Archaeology Programme would like to acknowledge the dedication of the archaeology staff during Phase I of the project.

Archaeology Director: Dr. Donald Brown
Assistant Archaeology Director: Catherine Webb
Catalogue/Material Culturalist: Richard Gerrard
Field Crew: Frank Dieterman, Jayne Fry, Mary-Cate Garden, Nicholas January, Andrew Murray, Susan Neale, David Spittal.

The Toronto Historical Board project is a component of the City of Toronto's ongoing commitment to preserving and promoting Toronto's heritage resources. Funding is provided by the Ontario Ministry of Citizenship and Communications' Community Facilities Improvement Grant and by the City of Toronto.

ARCH NOTES

The views expressed in this publication do not necessarily represent the views of the Editor or of the ONTARIO ARCHAEOLOGICAL SOCIETY.
In keeping with the world’s fascination for year end statistics, the Archaeology Unit would like to present its version of the year in perspective.

Licences

In 1987, a total of 125 licences were issued to conduct archaeological activities in Ontario. That represents a 12.5% increase from 1986’s total of 111. The figure below shows the distribution of licences by type. Comparing 1986 to 1987, it is interesting to note that survey and excavation licences remained constant while all other types increased.

Figure 1 - Distribution of Licence Types 1986 and 1987

<table>
<thead>
<tr>
<th>Licence Type</th>
<th>1986</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Consulting</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Field Schools</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Underwater</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Survey/Test Excavation</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Excavations</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>111</td>
<td>125</td>
</tr>
</tbody>
</table>

Figure 2 presents a historical perspective on the number of licences issued since the program began in 1975. In the first year, 78 licences were issued to 55 individuals. With the exception of 4 field schools, all licences were issued for specific survey or excavation projects. The first few years were variable, however, since the 1980’s consistent growth has prevailed.

Figure 2 - Number of Licences Issued 1975 - 1987

<table>
<thead>
<tr>
<th>Year</th>
<th>Licences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>125</td>
</tr>
<tr>
<td>1986</td>
<td>111</td>
</tr>
</tbody>
</table>

This contrasts significantly to Northern Ontario, where 99% of the sites were registered by survey and conservation activities. Two timber management studies conducted by MCC staff in Kenora resulted in the registration of 107 or 65% of the sites in Northern Ontario for this year.

The above paints two very different pictures of archaeology in Ontario. In southern Ontario, most new information is being generated by consulting archaeology. In northern Ontario, survey and conservation activities by MCC staff and a few active individuals generate the largest majority of sites.

In 1988 staff plan to computerize the licence files. It will be interesting to conduct an in-depth analysis of licence activity such as the number of active licences and the number of sites produced by the different licence types.

Site Registration

Figure 3 gives a very graphic picture of site registration activity in Ontario.

Considering that 77% of all licences issued are for work in Southern Ontario, it is not surprising to find that 78% of the sites registered in Ontario were from the south. Looking at the statistics in a different light however, of the 575 sites registered in southern climates, 84% were registered by consultants and only a small number of consultants at that. In the Golden Horseshoe area, 99% of the sites were registered by consultants. Two archaeological master plans in Scarborough and Vaughan and active subdivision review, are largely responsible.

The above paints two very different pictures of archaeology in Ontario. In southern Ontario, most new information is being generated by consulting archaeology. In northern Ontario, survey and conservation activities by MCC staff and a few active individuals generate the largest majority of sites.
**Figure 3 - Year End Site Totals**

<table>
<thead>
<tr>
<th>Borden Block</th>
<th>1986</th>
<th>% of Total</th>
<th>1987</th>
<th>% of Total</th>
<th>General Geographic Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>214</td>
<td>30</td>
<td>362</td>
<td>49</td>
<td>Golden Horseshoe</td>
</tr>
<tr>
<td>AH</td>
<td>162</td>
<td>23</td>
<td>165</td>
<td>22</td>
<td>Southwestern Ontario</td>
</tr>
<tr>
<td>BF</td>
<td>1</td>
<td>-</td>
<td>8</td>
<td>1</td>
<td>East of Gananoque</td>
</tr>
<tr>
<td>BG</td>
<td>51</td>
<td>7</td>
<td>21</td>
<td>3</td>
<td>Southcentral</td>
</tr>
<tr>
<td>BH</td>
<td>19</td>
<td>3</td>
<td>17</td>
<td>2</td>
<td>Bruce Peninsula and Area</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>446</strong></td>
<td><strong>63%</strong></td>
<td><strong>575</strong></td>
<td><strong>78%</strong></td>
</tr>
<tr>
<td>CG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CH</td>
<td>19</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>Northeastern Ontario</td>
</tr>
<tr>
<td>DH</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>CI</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>DI</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>DJ</td>
<td>157</td>
<td>22</td>
<td>21</td>
<td>3</td>
<td>Northcentral Ontario</td>
</tr>
<tr>
<td>EJ</td>
<td>15</td>
<td>2</td>
<td>13</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>FJ</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>DK</td>
<td>37</td>
<td>5</td>
<td>118</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>EK</td>
<td>16</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>259</strong></td>
<td><strong>37%</strong></td>
<td><strong>164</strong></td>
<td><strong>22%</strong></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>705</td>
<td>739</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The actual number of sites registered in 1987 are up marginally from 1986. This represents a moderation of growth rates from the two years previous. Figure 4 illustrates the tremendous growth in sites being registered in the past four years.

Figure 4 - Site Registration 1984-1987

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Sites</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>356</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>474</td>
<td>33%</td>
</tr>
<tr>
<td>1986</td>
<td>706</td>
<td>48%</td>
</tr>
<tr>
<td>1987</td>
<td>739</td>
<td>5%</td>
</tr>
</tbody>
</table>

The Ministry database will be getting a big boost this year with the addition of a contract staff person in January to help with the backlog and editing of data. Hopefully next year, we will be able to present an analysis of the site types being registered and by who. Oh the wonders of a computer!

Ontario Heritage Foundation Grants

In October 1987, the OHF announced that funds had been made available to consider grant applications for research. (This was in addition to the student dissertation program which selected several candidates in the spring of 1987.) The response to the competition was overwhelming. The Archaeology Committee reviewed a total of 49 applications. There were many worthwhile applications which made the committee’s task a difficult one. The Committee expressed disappointment, however, with some applicants whose otherwise excellent proposals could not be considered since the applicant was outstanding in overdue licence/grant reports. The following is a list of the successful applicants for 1987.

Ontario Heritage Foundation Grants 1987-1988

General

Patrick Julig, Analysis of Archaic Lithic Collections from Lakehead Region - $9,621.60
Rosemary Vyvyan, The Man on the Bicycle: The Biography of Archaeologist Andrew F. Hunter- $775.00
Irene Ockendon, Analysis of Floral Remains from the Christianson Site - $5,746.00
Gary Heathcote, Osteological and Archaeological Analyses of the Harvey Graham Site Collections - $14,650.00
Charles Garrad, AARO Research Guide- $8,300.00
Gary Crawford, Wallace Site Collections Analysis - $10,000.00
Toronto Historical Board, Analysis of Fort York Collections - $10,000.00
Robert Pearce, Matthews Woods Project - $8,410.00
Richard Granly, Craniometry of the Orchard Ossuary - $2,000.00
Laurie Jackson, Rice Lake Cervid Fossil Site Investigations- $17,650.00
Gordon Dibb, Dear Collection Curation Project - $19,980.00
U of T (Dr. Patty Stewart & Andrew) J.C.B. Grant Skeletal Collection - $30,000.00
Beverly Smith, Analysis of Faunal Remains from Providence Bay-$8,360.00
TOTAL - $145,457.60

Student Dissertation Grants

Diana Lynne Gordon, Models of Prehistoric Hunter-Gatherer Settlement Patterns Lake Temagami- $5,000.00
June D. Morton, Isotopic Palaeodit Studies of Pot Sherds - $13,250.00
Heather Henderson, The Stickler Farm Project: Refuse Patterns in a 19th Century Rural Site - $10,760.00
Rick Sutton, The Late Iroquoian Occupation of South Central Ontario- $1,592.00
Peter Timmins, Analysis of the Calvert Site, Phase 2 - $6,908.00
TOTAL - $37,510.00
In the 1985, a 3 year funding program was announced by the Ministry to assist in the development of cultural facilities at the community level. Archaeological projects were given special funding in two categories. Municipalities and organizations are eligible for funding to carry out long range planning for the development of archaeological facilities by providing for the identification and evaluation of archaeological resources and for studying the feasibility of developing a facility. Funding is also available for the development of archaeological interpretive units intended to increase public appreciation.

The following is a list of the projects approved under this program.

**Ministry of Culture and Communications Community Facility Improvement Program 1985-1988**

**Grants for Archaeological Projects**

**1985-1986**

- **Museum of Indian Archaeology, Keffer Site** - $240,000.00
- **Thunder Bay Museum, Facility** - $27,392.85
- **Cataraqui Arch. Research Found, Fort Frontenac** - $218,817.00
- **Toronto Board of Education, Resource Centre** - $241,758.19
- **Rainy River Band, Conservation of Manitou Mounds** - $161,000.00
- **Heritage Barrie, Molson Site** - $60,086.25
- **Toronto Historical Board, Dome Stadium Site** - $100,000.00

**TOTAL** - $1,079,924.20

**1986-1987**

- **Halton Region Conservation Auth., Crawford Lake** - $250,000.00
- **Town of Vaughan, Master Plan** - $60,000.00
- **Welland Canal Preservation Assoc., Facility** - $99,049.00
- **Regional Municipality of Waterloo, Master Plan** - $150,000.00
- **Town of Richmond Hill, Master Plan** - $60,000.00
- **Metro Toronto and Region Conservation Authority, Master Plan** - $315,588.00
- **Toronto Historical Board, Fort York Facility** - $120,000.00
- **Town of Smith Falls, Rideau Canal Facility** - $33,750.00
- **Heritage Merrickville, Maynard Site Facility** - $159,129.00
- **Rainy River Band, Manitou Master Plan** - $84,113.00
- **Cataraqui Arch. Research Found., Resource Centre** - $214,174.00
- **Oneida of Thames Band, Facility** - $214,174.00
- **Marine Museum of Great Lakes, Shipwreck Info System** - $116,500.00

**TOTAL** - $1,691,170.00

**1987-1988 (Approved to Date)**

- **City of Kingston, Master Plan** - $200,000.00
- **Toronto Historical Board, Spadina Facility** - $106,178.00
- **City of Scarborough, Master Plan** - $68,552.00
- **Beausoleil Band, Christian Island Plan** - $240,000.00
- **Museum of Indian Archaeology, Pond Mills Facility** - $104,052.00

**TOTAL** - $718,782.00

**GRAND TOTAL** - $3,489,876.20

Licences and April 1, 1988

If you would like to have a licence to conduct archaeology this summer, please mail or present your applications before April 1, 1988. The Archaeology Committee meets only one during the summer at its annual colloquium. Licences for the fall season are considered at this time. Please remember that you have up to one year after the expiry date of a licence to submit your reports. In other words, if all of your reports are in for licences from 1986 or earlier, you are eligible for a licence in 1988.
Mapping Canada's Prehistory

J. V. Wright, F.R.S.C.

Most syntheses involving history in North America begin with the European explorations of the sixteenth and seventeenth centuries and ignore the twelve thousand years of history of the native peoples as deciphered by archaeology. The Historical Atlas of Canada is a notable exception to the rule and should contribute to a heartening trend away from what can only be called an ethnocentric perception of history.

Fourteen of the seventy maps in volume I of the atlas are dedicated to the prehistory of Canada. These map titles are as follows: The Fluted Point People, 9500-8200 BC; Southern Ontario, 8600 BC; The Plano People, 8500 BC-6000 BC; four cultural sequence maps covering 8000 BC to 4000 BC, 4000 BC to 1000 BC, 1000 BC to AD 500, and AD 500 to European Contact; Peopling the Arctic; The Coast Tsimshian, ca 1750; Bison Hunters of the Plains; Iroquoian Agricultural Settlement; Prehistoric Trade; Cosmology; and Population and Subsistence, Early 17th Century. It was decided from the beginning that the prehistory maps should be as broad as possible in geographical scope. As a result, nine of the fourteen are national in coverage. The remaining five focus upon selected aspects of prehistory within major environmental zones.

Most of the maps were initially drafted by officers of the Archaeological Survey of Canada, Canadian Museum of Civilization, formerly the National Museum of Man. There were three practical reasons for such centralization. First, it allowed rapid consultation among nine archaeologists and one physical anthropologist whose collective expertise covered the entire country. Second, it assisted in the performance of my task as the member of the editorial board of volume I with specific responsibility for prehistory. And third, since the contents of the maps were to be based upon very broad consultation with archaeologists across the country, it was a practical procedure for a centralized group of scholars first to produce relatively detailed draft maps which could then be distributed for comment. By having such maps, other archaeologists could more readily focus upon those facets most pertinent to the purpose of each map. Unfortunately, the ideal of broad consultation was partially confounded by a stringent schedule, the vagaries of individual map production, and certain technical difficulties encountered at the Archaeological Survey of Canada with producing large numbers of legible draft maps for distribution. The four chronology maps and the trade and cosmology maps, however, were widely distributed and received excellent constructive comment from a large segment of the profession. The remaining maps, of necessity, were subjected to more limited peer review.

With the return of the reviewed draft maps, the next stage in the operation was to incorporate the pertinent content changes into more polished maps. In addition to such changes, these maps had to be drafted in sufficient detail to minimize the possibility of misinterpretation by the cartographers at the University of Toronto. Also included with the maps were short texts and captions and a series of line-drawings of characteristic artifacts and/or features to be used as illustrative vignettes for the specific archaeological cultural representations on the maps. The resulting cartographic whiteprints were then distributed to members of the editorial board of volume I, consisting of geographers, historians, and anthropologists. In addition to this broadly based
review, the whiteprints were also sent to selected scholars for further comment. All of the maps passed through a number of whiteprint stages as the cartography and the text for each map were progressively consolidated and refined. The end of this lengthy procedure was approached with the final scribing of the maps, including the making of colour separations.

A number of difficult problems had to be resolved early in the process of drafting maps on various aspects of the prehistory of Canada. First, it was necessary to agree upon archaeological cultural constructs across Canada that were approximately equivalent in terms of archaeological taxonomy. (The word "culture," of course, is used in an anthropological rather than aesthetic sense.) These constructs, such as Laurentian Archaic relative to Maritime Archaic or Shield Archaic, for example, were based upon all data pertinent to prehistoric technology, subsistence, settlement pattern, and cosmology. While each cultural construct possesses considerable internal variety, each is still a coherent and separable entity relative to neighbouring contemporaneous constructs. It is recognized that such constructs represent an unknown number of independent societies which were nevertheless, societies sharing a broad cultural pattern distinguishable from other cultural patterns. Not all constructs are of equal conviction, mainly because of the variable nature of the archaeological data. Within the constraints of the atlas format, however, these cultural constructs represent the best prehistoric cultural reconstruction that can be offered at this time. Archaeology is seriously hampered by the nature of its data and by the related necessity to systematize prehistory before the information required for the task is available. And, since the archaeological record is never complete, the process of taxonomic refinement is continuous. It is to be hoped that future modifications to the majority of the archaeological cultural constructs used in this atlas will be changes of degree rather than of kind. That such archaeological constructs are not simply abstract organizational devices required for the purposes of classification is suggested by their correlation with distinct native cultures and languages during the historic period. Indeed, the single most striking result to come from this archaeological-cartographical synthesis has been the demonstration of a close correlation among environmental zones, archaeological cultural constructs, and ethnographic culture areas.

A second difficult problem was to establish time-periods, beginning with 8000 BC. The final sequence of 8000 BC to 4000 BC, 4000 BC to 1000 BC, 1000 BC to AD 500, and AD 500 to European contact, was based upon the nature of the record of prehistory across Canada, and thus, on occasion, is at odds with regional chronological periods. There were only limited problems with the earliest period of 10,000 BC to 8000 BC. At the other end, the term European Contact was used as a terminal marker rather than an absolute date, since such contact ranged from the late fifteenth century in the Gulf of St. Lawrence to the twentieth century for parts of the Northwest Territories and the Yukon Territory.

Third, through trial and error and innumerable discarded draft maps, we had to learn how much information could be included on a map without obscuring the basic message. The predominantly national scope of the maps made this a formidable task. Certainly a more regional approach in mapping the country's prehistory would have been simpler, but it would have resulted in even more incomplete coverage of the subject matter, given the limited number of maps available.
Fourth, problems of where and how to integrate certain bodies of information had to be resolved, given the need always to accommodate the dimension of time in addition to that of space. The palaeo-environmental data and the contemporaneity of major cultural constructs, such as Plano and Early Archaic, were particularly troublesome.

Fifth, there was the difficult task of achieving accurate renditions of the technical archaeological nuances in both English and French. This problem was exacerbated by the terse captions and texts. My colleague at the Archaeological Survey of Canada, Dr. Roger Marois, applied his considerable skills to the problem, to ensure that both language versions were equivalent in meaning.

Sixth, the prolonged editorial procedure, involving many drafts and opinions of scholars from a number of disciplines, in combination with the space constraints of the atlas, required curtailment of the archaeologists' tendency to qualify their statements. Indeed, there was a continuous debate between the non-archaeologists and the archaeologists, with the former requesting explicit statements and the latter, in lieu of qualifications, insisting that statements be as general as possible.

Seventh, and despite the concerted efforts of all, it is apparent that symbols and other configurations on maps have a perverse habit of shifting location. A constant editorial eye was required to catch ever-wandering minutiae.

And, finally, given the data-base, it was necessary to proceed on the sensible assumption that all syntheses are by their very nature premature and that future refinements to the current presentation are both inevitable and desirable.

In addition to the maps, I was required to provide text for an essay on the prehistory of Canada to be included in the introduction to the atlas. Originally limited to five thousand words, the essay went through a number of drafts before reaching its current size of seven thousand words, or, put another way, one word for each 1.7 years of prehistory.

But the prehistory of Canada cannot be adequately portrayed in fourteen maps and a brief essay. The atlas is a very distilled digest of information drawn from a number of disciplines. Information pertaining to one of these disciplines, archaeology, will now be available in outline form to a wide range of scholars. And with this information available in a major reference work for the first time, archaeology's potential to contribute to the scholarly considerations of other disciplines such as history, geography, biology, and geology is markedly increased. This, of course, is a major purpose of a multi-disciplinary atlas. But readers requiring the details upon which the generalizations are based will have to refer to the technical literature for the details and analytical procedures. Inevitably, the personal preferences or biases of authors will be reflected in the maps and texts, albeit ameliorated by broadly based consultation with the profession. Such a factor cannot be avoided in any synthesis and is particularly exacerbated by the distilled nature of an atlas.

In summary, the prehistory maps and texts in volume I of the Historical Atlas of Canada will provide people with a very general outline of the prehistory of Canada as well as some appreciation of the kinds of information archaeology is capable of extracting from its data. Educational benefits will accrue to students, the public, and the international community, and it is
anticipated that this segment of the
atlas will make people more aware of
the accomplishments of the ancestors
of the native peoples of Canada.
Finally, the mapping of prehistory on
such a scale and format has never
been attempted anywhere else in the
world, and perhaps the Canadian
experience will stimulate and assist
similar efforts in other countries.
Until such syntheses are attempted,
as incomplete and equivocal as their
data-base may be, archaeology will
retain an essentially parochial
character. Such a limited use of the
discipline’s potential, in my
opinion, serves neither archaeology
nor society.

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CULTURE AND COMMUNICATIONS

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LEADING SCIENTIST APPOINTED TO MUSEUM

Dr. George MacDonald, Director of the
Canadian Museum of Civilization,
announced the appointment of Dr.
William E. Taylor as Senior Scientist
- Archaeology to the Museum. Dr.
Taylor joined the CMC on 4 January
1988 after the completion of his
two-year mandate as President of the
Social Sciences and Humanities
Research Council. From 1967 to 1983
he served as Director of the National
Museum of Man (now the Canadian
Museum of Civilization).

Dr. Taylor’s area of expertise is
Arctic Archaeology. He will
undertake field work during the
summer of 1988 on Victoria Island,
Northwest Territories. His research
will focus on the origins and the
development of modern Inuit culture,
the eastward migration of the Palaeo-
Eskimo and the cultural variations of
the Dorset Eskimo.

One hundred monographs, articles and
papers testify to Dr. Taylor’s vast
contribution to the fields of
archaeology and anthropology. He has
served on numerous national and
international, professional and
scientific, organizations and
received many honours such as the
Queen’s Silver Jubilee Medal, the
Centenary Medal of the Royal Society
of Canada, the Bicentennial Medal of
the Society of Antiquaries of
Scotland and the Society for American
Archaeology’s Fiftieth Anniversary
award for outstanding contributions
to American archaeology. He was also
awarded an honorary LLD by the
University of Calgary in 1975, and a
DLit (honoris causa) by Memorial
University of Newfoundland in 1982.

Dr. Taylor can be reached through the
Archaeological Survey of Canada at
(819)994-6113.

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LETTERS TO THE EDITOR

Dear Editor:

Antichita - Aegean Argosy '88

The Peloponnesian Argosy '87 was an unqualified success! For July, 1988, my wife, Libby, and I have planned an equally interesting and enjoyable 14 day cruise along the southwestern coast of Turkey, starting from Samos and ending in Rhodes. The fascinating archaeology and history of this enchanting part of the Aegean will be combined with "la dolce vita" of cruising the Mediterranean on one's own yacht, the M/S Castor.

The carefully planned program, which runs from July 1 - 20, 1988, also offers time in Athens and on Samos before the cruise and on Rhodes and Athens afterwards. A detailed itinerary of the Argosy is available upon request. Please write or call us if you have any questions concerning any aspect of the program.

We urge you to make your plans quickly as only 18 individuals will have the privilege of sharing this unusual adventure with us.

If you cannot join us this coming summer please think seriously about the following summer when we plan to circumnavigate the island of Crete. This trip is tentatively set for late June and early July, 1989.

Sincerely yours,
David W. Rupp, P.O.Box 156, St. Catharines, Ontario L2R 6S4

* * * *

Dear Sir:

I am writing to the O.A.S. office in order to offer my "Passport to the Past" validation for volunteers who helped excavate the Allan Site (AFX-50) during the summer of 1985. As director/licensee of that project, I would have never been able to gather adequate data for my MA studies (Trent U.) without them.

The Allan Site is a prehistoric chert quarry workshop site (Haldimand/Bois Blanc chert) near Cayuga, Ontario. Under license number 85-07, scores of volunteers assisted in the excavation over a 4 month period. Full appreciation can never be fully extended for these peoples' efforts as they "clawed" through chert flakes and clay. A list below names most of the volunteers, and confirmation with my ministry report should validate their identity: Fred and Allan Moerschfelder, Alfred Peart, Jim and Sue Pengelly, Nate and Chris Yeoman, Betty Hoskins, Sam Lazickas, Walter Bruechert, Dean Knight, Sally Cameron, Mark Hone, Larry Park, Gary Mursssey, Bruce Duncan, Rick McCleary, Wendy Claus, Jan Robertson, Bill Parkins, Ian Brindle, David Faux, Peter Maclean, and Chris Ellis. Also in attendance were the infamous crew of Bill and Jamie Fox, Ian Kenyon, Christine Dodd-Poulton, Judith Stewart, Kurt Gough, and Annie Quesnel from the London MCC office (1985).

In view of my current absence from Ontario, I hereby authorize the O.A.S. office to stamp the "Passports" of any of the above volunteers.

Yours truly,
L. R. (Bud) Parker, 622 W. 70th Ave.,
Vancouver, B. C. V6P 2X1

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THE PLANNING ACT AND HERITAGE RESOURCE MANAGEMENT: BUILDING FOR THE FUTURE ON THE FOUNDATIONS OF THE PAST

by Robert G. Mayer

(Presented at The Assessment Survey and Reporting Guidelines Conference, Ontario Ministry of Culture and Communications, November 28 and 29, 1987, Toronto, Ontario)

Introduction

If planning is about the management of change, then Ontario faces a tremendous challenge. Building and redevelopment are constantly encountered in our cities and towns. Urban growth, highway construction, new electricity transmission lines, resource extraction, and other developments continue space in the countryside. While these changes promise many things of present value, they often threaten to disrupt or destroy our heritage - not only in areas of natural beauty and wildlife, but also in distinctive man-made landscapes, fine buildings, and archaeological resources. If our cultural heritage is to be treated with respect, and if it is to be of practical use in our daily lives, we must plan for conservation. (Weiler 1984:1)

The Planning Act 1983 (sections 2[b] and 50 [4a]) establishes "the protection of features of significant natural, architectural, historical or archaeological interest" as a matter of provincial concern. As such, this explicit concern should be addressed in one form or another by all planning agencies within Ontario. While the Minister of Municipal Affairs shares the direct responsibility of safeguarding this interest at the provincial level with the Minister of Culture and Communications, the permissive nature of the Act allows each individual municipality to determine its own role in compliance at the local level. This laisse faire approach has caused some confusion for land development proponents, environmental engineers, planners, Local Architectural Conservation Advisory Committees plus municipal and regional councils when dealing with heritage issues as part of a regular procedure within the established approvals process.

Various mechanisms contained in the Planning Act plus other related provincial legislation and their guidelines are intended to encourage and facilitate heritage conservation. Loopholes and gaps, however, in province-wide application of overlapping responsibilities illustrate a need for amendments to existing policies or at least further clarification of policy intent versus the letter of the law minimum requirements in order to avoid recurring problems in implementation of these mechanisms.

Some Problems and Possible Solutions

... the system of planning now reflects the ideologies of a governing elite, of which planners in practice are a part, and serves their interests, rather than reflecting the aspirations and ideals which planners so frequently commit to paper for discussion. (McAuslan 1980:263)

Despite what is stated in Section 2 of the Planning Act, much of the crucial planning that affects matters of provincial interest in larger municipalities such as the protection of heritage features, in actual practice, does not directly involve the Minister of Municipal Affairs nor the performance of the office's official duties. Section 50 (4a), which involves the effect of development deals solely with subdivision plan approval, is not easily applied in already developed...
<table>
<thead>
<tr>
<th>Question</th>
<th>New Brunswick</th>
<th>Newfoundland</th>
<th>Nova Scotia</th>
<th>Prince Edward Island</th>
<th>Quebec</th>
<th>Ontario</th>
<th>Manitoba</th>
<th>Saskatchewan</th>
<th>Alberta</th>
<th>British Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are clear criteria given for the definition of Heritage Property?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Must notice be given of impending demolition of unregistered Heritage Property?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Is Government under any obligation to attempt to protect unregistered Heritage Property?</td>
<td>Yes</td>
<td>Unclear</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Can demolition of unclassified building be delayed pending study?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Can definitive protection against demolition be given to a building (abort or appropriation)?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Is radius around monument protected?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Can governmental decisions on designation be appealed to higher authority by statute?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Is the definitive preservation of districts specifically foreseen?</td>
<td>Yes</td>
<td>Unclear</td>
<td>Law Protects &quot;Areas&quot;</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Can maintenance of Heritage Property be enforced by the Province?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Can Heritage Sites be inspected?</td>
<td>Yes</td>
<td>No</td>
<td>Archeological Sites Only</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>During Week Only</td>
<td>Unclear</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Does government have right of first refusal on sale of Heritage Buildings?</td>
<td>Not Discussed</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No &quot;Objects&quot; Only</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Can Heritage Properties be exempted from building code?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Can illegally altered Heritage Buildings be restored at owner's expense?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Not applicable</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>What is the maximum penalty for offence?</td>
<td>$10,000 plus 3 months</td>
<td>$10,000</td>
<td>Not applicable</td>
<td>$100 plus 30 days</td>
<td>$50,000 plus 6 months plus damages</td>
<td>$50,000 plus 1 year plus damages</td>
<td>$2,000 plus 6 months</td>
<td></td>
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</tr>
</tbody>
</table>

*The law empowers protection of "sites", which can be as large as a district.

Figure 1
(adapted from Denhez 1978:80,81)
the planning act ...

the planning act ...

The Ministry of Culture and Communications' Advisory Notes on Heritage Conservation and Municipal Planning indicates that the word "heritage" is not defined in any Government of Ontario legislation (Cuming 1985:2). This includes the obvious choices of the Ontario Heritage Act (1974), the Niagara Escarpment Planning and Development Act (1973), the Municipal Act (1980), the Ministry of Citizenship and Culture Act (1982), and the Planning Act (1983). Although the various main components of heritage - nature, architecture, history and archaeology - are frequently mentioned by name in these Acts, only under the general interpretation of the term "environment" in the Environmental Assessment Act (1975) does one find a subsection (Iciii and iv) into which heritage can be logically included by inference for a definition. In this single instance, environment and heritage can be described as:

- the social, economic, and cultural conditions that influence the life of many or a community; and
- any building, machine, or other device or thing made by man.

It is difficult to distinguish between built environment and natural environment since there is no clean cut boundary between these two separate heritage categories. Through general practice and accepted convention, however, man-made heritage includes a variety of features that are broadly classed into: buildings and structures; landscaping and planting; areas, districts and precincts; ruins; and subterranean remains or underwater objects of historical, architectural or archaeological interest (Cuming 1985:2). Much confusion and embarrassment from predictable and avoidable situations would be avoided having a basic description of what heritage entails included in the appropriate sections of all relevant legislation along with definitions of essential heritage terminology.

Even with operational definitions in place, there is a problem in having heritage protection measures applied uniformly across the province. Allen Tyyska, Head of the Archaeology Unit, Heritage Branch, Ministry of Culture and Communications, has indicated that Ontario protects archaeological remains through an environmental impact mitigation approach on public sector projects but:

...there are hesitancies in applying regulation to the private sector. So, while the Planning Act requires some measures of regard for the impact new development might have on archaeological remains, there has been no policy statement that would bring all municipalities and the entire building industry under a set of stringent regulations. Instead, [Ministry] Regional Archaeologists have worked municipality by municipality to develop local policies putting the Planning Act into practice. (Tyyska 1986:6)

It is explained that this approach "has probably retarded for the government a capacity to influence the value and quality of archaeological work done in the province (Tyyska 1986:7). A negative result of this 'checker board' effect is that private heritage consultants have some difficulty explaining to clients why a development project in one region must have an assessment performed either prior to draft plan approval or as a condition of a development agreement while an identical project in a neighbouring
<table>
<thead>
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<th>Heritage Legislation for Municipalities (July 1, '78)</th>
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<tbody>
<tr>
<td>Province</td>
</tr>
<tr>
<td>Heritage conservation an obligatory part of municipal planning?</td>
</tr>
<tr>
<td>Is municipality required to file environmental impact assessment on demolition of heritage?</td>
</tr>
<tr>
<td>Can municipality give permanent protection to buildings?</td>
</tr>
<tr>
<td>Can municipality give temporary protection to buildings?</td>
</tr>
<tr>
<td>Can municipality regulate</td>
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<tr>
<td>Built and Height</td>
</tr>
<tr>
<td>Design</td>
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<tr>
<td>Use</td>
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<tr>
<td>Set-back</td>
</tr>
<tr>
<td>Signs</td>
</tr>
<tr>
<td>Can municipality accept or reject applications for construction on heritage sites on a discretionary basis</td>
</tr>
<tr>
<td>Can municipality enforce maintenance of dwellings?</td>
</tr>
<tr>
<td>a) of dwelling interiors</td>
</tr>
<tr>
<td>b) of dwelling exteriors</td>
</tr>
<tr>
<td>c) of non-residential interiors</td>
</tr>
<tr>
<td>d) of non-residential exteriors</td>
</tr>
<tr>
<td>Can municipality compel</td>
</tr>
<tr>
<td>a) protection of trees</td>
</tr>
<tr>
<td>b) landscaping</td>
</tr>
<tr>
<td>Can illegally altered building be restored at owner's expense?</td>
</tr>
<tr>
<td>Usual maximum penalty for offences</td>
</tr>
</tbody>
</table>

Figure 2
(adapted from Denbez 1978:106,107)
Some development proponents routinely include heritage assessments in their proposal documents whether they are required or not. The majority, however, have an understandable reluctance to commission initial assessments of their property at their own expense or to provide match funding for mitigations of significant sites plus subsequent analysis of cultural material and settlement pattern data on a cost sharing basis with the province. It is a tenet of any legislation that all rules, regulations and statutes are for everyone (unless cabinet exemption is granted) and must be applied fairly. If it is important to preserve and promote heritage, then it should be done uniformly at the same time and not just here and there whenever it is convenient.

In comparing Ontario’s heritage legislation with that of other provinces (Figure 1), a number of key problematic points for planning purposes are evident:

* there are no clear criteria given for the definition of Heritage Property;
* notice is not mandatory for impending demolition of unregistered Heritage Property;
* maintenance of Heritage Property cannot be enforced by the Province; and
* Heritage Properties cannot be exempted from building codes.

On the other hand, the Province of Ontario can:

* be sometimes obligated to attempt to protect unregistered Heritage Property;
* delay demolition of unclassified buildings pending study;
* give definitive protection on archaeological sites against demolition;
* inspect heritage sites;
* have an illegally altered heritage building restored at the owner’s expense; and
* impose a maximum penalty for offenses of up to $10,000 plus one year in jail.

Prosecution under the Ontario Heritage Act is rare but a recent precedent-setting court case resulted in fines of $7,000 each for two individuals and a fine of $700 plus two years probation and 800 hours of community service for a third. All three were convicted of looting an archaeological site (Fox 1985). The Minister of Culture and Communications has the authority to issue a stop work order whenever a significant heritage property is threatened. While this measure is usually reserved as a last resort, it has been implemented with increasing regularity over the past few years.

In comparing Ontario’s municipal heritage legislation with that of other provinces (Figure 2), three weaknesses within the planning process are apparent:

* heritage conservation is not an obligatory part of municipal planning;
* municipalities are not yet obligated to file an environmental impact statement on demolition of heritage structures; and
* municipalities cannot give permanent protection to buildings.

Among other matters, however, each municipality can:

* give temporary protection to buildings;
* regulate bulk, height, design, use, set-back and signs;
* accept or reject applications for construction on heritage sites on a discretionary basis;
* enforce maintenance of dwelling and non-residential interiors and exteriors;
* compel protection of trees and landscaping;
* restore an illegally altered
Saving historic sites

Time is running out for about a dozen historic buildings in Toronto threatened by the wrecker's ball. Among them is the 40-year-old University Theatre on Bloor St. W., home to the annual Festival of Festivals and one of the last of Toronto's grand old movie theatres.

Another is the landmark Toronto Stock Exchange building on Bay St., considered one of the finest examples of Art Deco architecture on the continent. The fate of the 50-year-old building, with its enormous 76-foot frieze, has remained uncertain since the new exchange building opened nearby in 1983.

Toronto Mayor Art Eggleton has vowed to "do as much as it takes" to save the theatre, but, under Ontario's toothless Heritage Act, the most the city can do right now is stall demolition for 270 days (in the theatre's case, that's until November.) In the meantime, the city can try to entice the owners into building around or above the old structures, in exchange for extra development rights.

City officials want to go one important step further and require that developers first have a building permit — and city council-approved development plans — for historic sites before any demolition takes place. That way old buildings won't continue to be torn down and left as virtual parking lots while the land escalates in value or developers debate, sometimes for years, what to do with the site.

Under proposed amendments to the City of Toronto Act, city council could wield a crucial big stick: If the new-development isn't substantially completed within two years, the owners could be fined up to $1 million.

Municipal Affairs Minister Bernard Grandmaitre has blocked provincial approval of those needed controls, arguing that the $1 million penalty is too severe. But that may be what's most needed to protect the estimated 2,500 buildings of historic value in Toronto that, like the University Theatre and the Toronto Stock Exchange, could eventually be lost forever.
building at the owner's expense; and impose variable penalties for offenses.

The Ontario government empowers its municipalities to give some protection to heritage sites but the province itself protects only archaeological ruins. Any other kind of historic site can be protected only by municipalities. Furthermore, the protection granted by a municipality to a threatened structure can almost never exceed 270 days; after that delay expires, the building can be demolished whether the municipality likes it or not. Consequently, in order to gain indefinite protection to a building, it would be necessary a) to expropriate it, b) to reach an agreement with the proprietor, or c) turn it into an archaeological site by blowing it up. (Denhez 1978:108).

Prevention of the virtually unrestrained demolition of heritage buildings is one of the major problems facing conservation groups today in all urban centres. A recent editorial statement from the Toronto Star succinctly focuses upon the issue in describing the Ontario Heritage Act as "toothless" and praises Toronto municipal officials' efforts to preserve the city's significant heritage structures. Recently approved amendments to the City of Toronto Act require that developers first have a building permit - the city council approved development plans for historic sites before any demolition takes place. That way old buildings won't continue to be torn down and left as virtual parking lots while the land escalates in value or developers debate, sometimes for years, what to do with the site.

[In addition,] ... if the new development isn't substantially completed within two years, the owners could be fined up to $1 million dollars. (Toronto Star, April 6, 1987)

The Ministry of Municipal Affairs Minister for some time blocked provincial approval of these "needed controls" arguing that the $1 million penalty is too severe. While this may or may not be the case, it is vital for the province to support and not hinder municipal efforts to preserve non-renewable heritage features in all of their various forms before they are all destroyed.

Special interest groups and community associations in their appeals to the Ontario Municipal Board (O.M.B.) have always argued that significant heritage components be conserved for the benefit of present and future generations. A London Free Press article (Figure 4) describing a recent O.M.B. hearing quotes a lawyer representing the community group as stating that "the archaeological importance of the findings may be such that they're significant enough to be preserved rather than removed". The Minister of Culture and Communications felt otherwise and significantly funded a salvage project even before the O.M.B. finished its deliberations and submitted its ruling in favor of development. Although the community group's goal was not achieved, it has established a precedent in presenting an archaeological issue for others to follow.

The development industry, as everyone knows, is in the construction business and not in heritage resource management. It must conduct its affairs within stringent time constraints in order to make a profit. Heritage concerns are frequently linked with the "not in my backyard syndrome" ploys intended to delay or prevent construction. This is indeed unfortunate since these types of hurdles or arguments have never been particularly difficult to overcome in the past especially given the chronic shortage of housing in
Pond Mills property may be Indian site

By Bill Eluchok
London Free Press

Various remnants of what are understood to be ancient Indian artifacts found on a wooded piece of land immediately north of the two Pond Mills ponds in south London may be evidence of a major archaeological find in Ontario.

That's the guarded message that has been conveyed to a two-member Ontario Municipal Board (OMB) panel in the last two days, in London to hear an appeal of a rezoning bylaw that allows construction of homes on part of the land.

So far, details have been withheld from the board and the public.

The land is owned by Matthews Group Ltd., a London-based developer hoping to build townhouses and single-family homes on part of the 2.1-hectare (5.3-acre) property at Glenroy and Pond View roads. The OMB must resolve the disputed rezoning issue before construction can proceed.

Lawyer George Plaxton, who is representing Matthews at the hearing (which was adjourned Tuesday to May 19), says the findings so far have been "significant." But that's as much as he will allow.

The UWO-affiliated Museum of Inuqulogy and the Royal Ontario Museum have been involved in studies of the site. The reports are under wraps. Not even the lawyer for the Pond Mills Community Association, which is appealing the zoning bylaw and trying to preserve the woodlot, has been able to see the studies.

Plaxton told the board Tuesday that the provincial citizenship and culture ministry is expected to announce this week whether it will provide money to assist with excavation of the site.

As many as 25 people were to have begun digging for a six-week period beginning April 13, but the hearing adjournment may delay the project, he acknowledged. "It's not certain if the dig will proceed now."

Also uncertain, he added, is whether Matthews itself will contribute financially to the project, particularly if the developer "can't build on the site."

Alan Patton, lawyer for the community group, said "we don't know the full contents of the archeological reports... we're only going on hearsay. But we understand that the findings are significant, in that it may be a burial ground or a small village."

The archeological importance of the findings may be such "that they're significant enough to be preserved rather than be removed," he said.

Figure 4

ARTIFACTS from A1

ARCH NOTES -28- Jan/Feb 1988
Ontario. It is a fundamental priority of the public and private sectors to provide people with adequate and affordable places to live. Most of the resulting environmental damage, including destruction of archaeological sites, must be accepted as part of the price society has to pay to accommodate an increasing population. Negative effects of construction can and usually are effectively mitigated by study teams and special consultants whenever it is deemed necessary or desirable.

This satirical cartoon (Figure 5) portrays an age old belief concerning citizen participation at public meetings that is still prevalent today in many municipal planning committee and council meetings. A background paper from the Ontario Planning Act Review Committee elaborates on this attitude problem by stating that many citizen concerns are not founded on rational argument and it would be unrealistic to assume that they can be allayed by a process that seeks to be rational. (John Bousfield Associates 1977:41)

The excavation of prehistoric sites is a sensitive subject for many archaeological practitioners and Native communities throughout Ontario (Jacobs 1986; Mayer and Antone 1986). Native organization and direction of their own projects with self-designed practical planning applications on reserve lands is a long awaited positive step that could be in jeopardy if their concerns about other land developments in surrounding communities are not addressed or negotiated in good faith most carefully. In fact, the lack of an agreement to entrench Native self-government rights into the Canadian Constitution at the First Ministers Conference held in Ottawa during March of this year has created an explosive atmosphere in which politically active Native groups and individuals may seek to frustrate 'the system' in any legal manner possible. Another planning problem results from having heritage concerns addressed all too frequently only at the late stages of the approvals process. While some Ministry of Culture and Communications heritage guidelines are available for municipal councillors, planners and engineers:

* Guidelines on the Man-Made Heritage Component of Environmental Assessments (Weiler 1980);
* Advisory Notes on Heritage Conservation and Municipal Planning (Cuming 1985)

the Ministry of Municipal Affairs planning guidelines seem to only superficially mention 'heritage' in passing or do not mention it at all:

* A Guide to the Planning Act, 1983 (Government of Ontario 1983b);
* An Introduction to Community Planning (Government of Ontario 1985a);
* A Subdivision Agreement for a Small Municipality (Government of Ontario 1985b); and

A staff member in the London regional office of the Ministry of Culture and Communications has stated that one of their office’s major problems is to implement policy co-ordinating heritage interests with the procedures of the Planning Act (Christine Dodd, pers. comm.). It appears that they must communicate their needs and requests for additional information to the Toronto office and not the local London office of the Ministry of Municipal Affairs. As a result, lengthy delays in receiving correspondence has...
Bobby Townsley sat down as soon as he was presented with evidence that his suggestion to the Town Council wouldn't be taken seriously.

Figure 5
allowed heritage conditions contained in development agreements for draft plan approvals rendered effectively null and void. Installation of hydro, sewer and water services plus landscaping grading and infilling often precede a stipulated heritage assessment being commissioned let alone being actually conducted. Even if an assessment recommends additional fieldwork, there frequently remains no time whatsoever to implement mitigation measures. A logical sequence in which development conditions are staged could be devised for general purposes and refined for individual problematic projects.

When development proponents, after years of pre-application and draft planning at substantial expense, are notified to submit a heritage assessment or to mitigate damage to a significant archaeological site, their response is understandably a mixture of surprise, shock, frustration and utter disdain. Nobody likes to be told what to do on their own land.

In an ideal situation, an individual has the right to do anything he chooses until those rights interfere with the rights of others. It is in this definition of boundaries of the free market that the conflict occurs. For that reason it is necessary to introduce certain standards into our society, even though they may be somewhat arbitrary, to bring some order to control of behavior. To some extent, all regulations represent an interference with the operation of a free market and individual rights. In a planning sense, regulations or standards take the form of official plans and zoning bylaws, but what is sought is a reasonable balance between the many forces operating in the planning area. (Smith and Bindhardt 1978:25)

Even the Ontario government, in preparing master plans for provincial parks is sometimes lax in considering heritage issues and site inventories in their studies. A survey of the available documents indicates that only fifteen out of fifty-three plans discuss heritage in one form or another.

One community planning approach that is gaining popularity among municipalities in southern Ontario and is even receiving enriched funding (up to 75%) from the Community Facility Improvement Program of the Ministry of Culture and Communications is the preparation of archaeological master plans (Poulton 1987; Janusas 1987) and special purpose development agreements covering large areas (Mclaughlin 1988; Kapches and McClelland 1987). These studies are conducted by licenced consultants or planning staff in a number of phases:

* background research to document known and potential sites necessary to formulate field survey strategy;
* construction of a predictive model for site distribution;
* field survey of high and medium potential zones;
* investigation of specific sites assigned levels of significance to warrant future mitigation if endangered by development or erosional factors; and
* establishing guidelines, policies and procedures for managing sensitive heritage issues and future assessments.

A basic planning tool is a map or schedule of the municipality at a convenient working scale (Figure 6). It should show the known and presumed locations of all registered archaeological and historical sites within the community. Along with other schedules showing areas of zoned future development, environmental data, geomorphology, hydrology, drainage characteristics, soils, physiography, wind patterns and demographic conditions, these documents give early warning to planners and developers of any
Figure 6
(adapted from Mayer, Pihl, Poulton and Associates Incorporated 1986)
concern that might have to be addressed at some point in the approvals process. Every municipality should consider preparing its own inventory of heritage resources and use it when appropriate to decide upon all of the merits and ramifications of a particular development application.

Conclusion

The choice of values is the heart of the planning process. (Reich 1966:1246)

There’s no greater expert than the people. They know what they want and have to fight for it. (R. Sankey as quoted in Quigley 1975:1)

The overall raison d'être of planning is to facilitate development in providing the means by which change is introduced into a society. In Ontario, this is done by ensuring the project conforms to the communities Official Plan and regulatory bylaws (or amendments thereof) and by also gathering sufficient information to allow a planning committee or municipal council to decide on appropriate conditions for inclusion into a development agreement. In some communities and regional municipalities, background information on land developments must contain an assessment of all known and potential heritage resources on the subject property (including extant built environment structures and archaeological sites) plus a statement on their significance and possible contributions towards the advancement of the social, economic and physical well-being of the community.

David Cuming (1985:2, 3) lists several ways in which heritage resources can be utilized to distinguish a community’s well-being. These include:

* fostering the objectives of science and education;
* promoting community and ethnic pride;
* contributing to tourism and recreation; and
* enhancing economic development.

In this regard, heritage publications on planning related topics and ‘how-to’ guides abound with case studies. Barry Cullingworth (1981) cites four recent examples of the benefits derived by Ontario communities undertaking heritage conservation projects (Rogers 1978; Williams 1978; Fraser 1979; Holdsworth 1980). Marc Denhez (1984) annotates the legal, financial and promotional aspects of Canada’s efforts to save its heritage sites. In addition, primers have been specifically prepared to demonstrate the many alternatives by which structurally sound and historically significant old buildings can be recycled into financially feasible and profitable ventures (Galt 1974; National Trust for Historic Preservation 1976). It is important to note that architectural preservation should be based upon multi-disciplinary research including archaeological mitigation in order to determine appropriate restoration measures.

We are all aware that the greatly maligned and verbally abused Ontario Heritage Act is under review. A more direct and accessible Act with enforceable policies can be anticipated if public, corporate and political support does not wane. It is, however, not just a matter of having more guidelines, regulations, and laws governing the subdivision and land development approvals process that will preserve heritage sites. A City of London Alderman once told me in regards to property suitable for development that “there are no absolute guarantees in life, if you want to save something - buy it.” This is not always possible nor practical. New and existing legislation must be more effectively utilized for conservation planning. Building a
broad base of community support with options for wide-scale public involvement and tax credit incentives for heritage property developers is viewed as a viable alternative to the confrontational positions now being adopted. This co-operative approach is most productive combined with:

* lobbying private members of the legislature, cabinet ministers and municipal councillors;
* soliciting informed media support to promote heritage projects;
* voicing heritage interests in community affairs at utility board and transportation hearings;
* attending public participation planning and rezoning meetings; and
* recognizing that not every heritage resource can be nor even should be conserved and that, for those to be saved, the financial burden must be borne.

As private citizens and members of a heritage minded community-at-large, we all have a right and a duty to express our views on heritage issues to our elected officials and appropriate levels of the provincial civil service. I encourage you to do so at every reasonable opportunity.

Heritage, in all of its various forms, is our last firm link with the past. Conservation of these limited and non-renewable resources will provide some necessary stability to our rapidly expanding and ever changing communities. One must know where one comes from in order to determine where one is going. When viewed from a long range planning perspective, heritage resource management can provide signposts and a rudder to help determine society’s future directions for the greater good of the community.

REFERENCES CITED

Cullingworth, J. Barry
1984 Canadian Planning and Public Participation. Land Policy Paper No. 4, Centre for

Cuming, David

Denhez, Marc
1984 Heritage Fights Back: Legal financial and promotional aspects of Canada’s efforts to save its architecture and historic sites. Fitzhenry & Whiteside, Toronto.

Fox, William A.

Fraser, M.
1979 Conserving Ontario’s Main Street. Ontario Heritage Foundation, Toronto.

Galt, G.

Government of Ontario
1983a The Planning Act. Queen's

Arch Notes
the planning act ...

Printer, Toronto.
1985a An Introduction to Community Planning. Research and Special Projects Branch, Ministry of Municipal Affairs, Toronto.

Holdsworth, D.

Jacobs, Dean

Janusas, Scarlett E. (ed.)

John Bousfield Associates

Mayer, Robert G. and A. Paul Antone
1986 Native Archaeology at the Oneida of the Thames Settlement. Paper presented at the Thirteenth Annual

Jan/Feb 1988

Symposium of the Ontario Archaeological Society 

Mayer, Pihi, Poulton and Associates Inc.
1986 Report on Phase 1 of an Archaeological Master Plan for the Town of Markham (3 vols.). On file with the Planning Department, Town of Vaughan, Maple.

McAuslan, P.

National Trust for Historic Preservation

Poulton, Dana R.

Quigley, M.
1971 Democracy is Us: Citizen Participation in Development in the City of Toronto. Ontario Department of Municipal Affairs, Toronto.

Reich, C. A.

Rodgers, W. R. (ed.)

Smith, B. E. and K. D. Bindhardt
1978 Ontario Municipal Board Reports, Volume 8. Queen's Printer, Toronto.

-35-

Arch Notes
Tyyska, Allen E.

Keiler, John

Williams, O. M. (ed.)

CORRECTIONS

AN87-6:40-42 - The OAS Annual Business Meeting

Paragraph 2, 2nd sentence should read: "She noted that the average attendance at these meetings is only 5%, therefore this small group makes the decisions for all members."

Paragraph 4, 9th sentence should read: "The Society now offers OAS pins for general members as well as a twenty-five year recognition pin program, eleven of which will be presented at the banquet along with a certificate."

Paragraph 5.1, last sentence should read: "He noted that new blood is needed and that he is giving a two-year notice as he will be resigning with his 100th issue."

Paragraph 5.3, should read: "Monographs in Ontario Archaeology ... ."

Paragraph 6, should end: "... and Toronto celebrated its 5th in 1987."

Paragraph 7, last sentence should read: "Ballots for a mail-in vote and platform statements from the candidates for the director's positions will be in Arch Notes."

McMASTER UNIVERSITY
ANNUAL SYMPOSIUM
CURRENT ARCHAEOLOGICAL RESEARCH IN THE PROVINCE OF ONTARIO
SATURDAY, FEBRUARY 13, 1988
9.00am to 5.00pm
in the Kenneth Taylor Hall, Room B135

Entrance: $8.00, Registration: 9.00am

Speakers include: Mima Kapches, Bill Finlayson, Bill Fitzgerald, Robert Pearce, Peter Timmins and many more...
BOOK REVIEW

THE LENAPE, ARCHAEOLOGY, HISTORY, AND ETHNOGRAPHY

By Herbert C. Kraft

Reviewed by Mima Kapches

I would like to draw to the attention of OAS members a book they might not be aware of. The Lenape was published in 1986, by the New Jersey Historical Society and is the result of many years of work by Herbert Kraft of the Museum at Seton Hall University in Newark, New Jersey. For over twenty years Kraft has researched the history and the prehistory of the native inhabitants of the Land of the Lenape, "Lenapehoking". The thoroughness and dedication of his research is apparent in this comprehensive book.

Lenapehoking covers the geographical area of New Jersey, eastern Pennsylvania and New York, and northern Delaware. In his treatment of the peoples of this area Kraft traces the native occupation data from Paleo-Indian times to the Late Woodland period. He uses archaeological reports from the area in question and beyond when needed to elucidate the status of knowledge for a particular time period. The review of archaeological literature for the mid-Atlantic states is particularly useful for those researchers not working in the area. The style of the book is not the usual archaeological site report format. Instead, it is written in the historical narrative style with endnotes providing additional details. The book is for the interested layman, and the dedicated avocational archaeologist. However, by using photographs and maps, coupled with the discussions in the references, it becomes a valuable text for professionals.

The final chapters of the book, following the chronological overview,

deal with specifics of the belief system of the Lenape, the timetable and the effects of European contact, and their migration from their homeland and eventual settlements elsewhere in the States and Canada. Kraft discusses the archaeological and historic evidence for these periods.

Many of the themes that Kraft discusses are familiar to Ontario archaeologists. His overviews of the different chronological periods draw upon data from the surrounding states and much of the discussions of lifeways would be appropriate for Ontario. His illustrations of artifact categories, especially in the Woodland and contact period, are of interest since some of them are similar to Ontario types.

Kraft writes in a sensible, and professional style. When discussing the Lenape of today Kraft is quite sensitive. This book is a must for archaeologists working in the northeastern United States as it provides a wealth of data on what must seem to be to us, at least from an Ontario perspective, a little known area.


Jan/Feb 1988
MITANNI AND ITS MAJOR PEACE ACCOMPLISHMENTS

By Richard Jarol

The ancient kingdom of Mitanni left a unique contribution to Near Eastern societies. This ranged from technologies to politics, but their most unusual legacy was in the realm of peace initiations. For almost 300 years (1370-1670 B.C.) Mitannian efforts towards peace were evident, making this one of the longest peaceful periods in history. Archaeologically, over 40 sites reveal Mitannian occupation, 15 of which have been excavated. All of the pertinent material was researched by the author and formulated for the first time into a comprehensive assessment of Mitannian archaeology.

The area occupied by this kingdom extended from the Taurus mountains in the west, eastward towards the Zagros mountains in Iran, and reached southward beyond the Orontes river. Ethnically, it was composed of Semitic Amorites, with almost half the population being Hurrian, a group without any known close relationships. The actual Mitannians were a small force of invaders who joined themselves to the Hurrians and created the kingdom of Mitanni.

As a historical overview, the initial Mitannian expansion was characterized by two innovations. They introduced the light chariot into warfare and the heavy batteringram to speed up siege operations. These two new techniques enabled them to quickly over-run vast areas of northern Mesopotamia. The Hurrian people gladly welcomed the new lords and entered their ranks in order to bring about this victory. Their identification with Mitanni was so complete that the language, religion and even the country was sometimes called Hurrian. The Mitannians provided the leadership and impetus for the Hurrian masses. This synchronization of the two groups provided each with what they needed. Peace loving, industrious Hurrians were injected with inspiration, while the warring, swift Mitannians noticeably moderated their own progress and started to channel their energy into more humanitarian affairs. The subsequent period is marked by the absence of military conflicts and by co-operation between regions and countries.

With regard to the Mitannian invasion, it is remarkable that most localities witnessed a non-violent overlap. For example, at Tell Brak, the key Mitannian site, the excavator M.E.L. Mallowan claims that the event occurred peacefully (Mallowan 1947:78). Evidently, even during the early days of the Mitannian kingdom, while they were over-running countries and possessed superior military techniques, force was used only when really necessary.

Secondly, they organized a kingdom which extended over great areas and having no further desire to conquer, they beat their "swords into plowshares and their spears into pruning-hooks." In contrast, the vast majority of ancient and medieval societies were accustomed to periodically go forth to enlarge their borders.

Thirdly, Mitanni maintained this peaceful attitude and commitment throughout its history, exercising it both at the local, regional and international levels.

RESULTS

Major changes are evident in many areas. Politically, the region formerly dominated by independent, self-sufficient city-states, which system tended to discourage trade and inventions, was replaced by a group of smaller countries and cities under a loose Mitannian overlordship. These former city-states were not free anymore to wage warfare at will, but had to check with the king of
Mitanni. Consequently, a great stabilization settled over these places.

It is generally believed that Egypt and Mitanni created peace and continued to promulgate it. Both countries did work hard for the preservation of peace, but for its birth and spread in northern Mesopotamia and Syria, Mitanni has to be credited. When one of the small vassals rebelled against Mitanni, he later sued for “peace like our ancestors had” (Smith 1949:17). According to this and other evidence, Mitanni established peace throughout the region, while Egypt under Tuthmoses I came as an aggressor, but later entered into peace, which was already in existence in Mitanni.

Open borders between neighbouring cities and countries had an immense effect on the rapid growth of trade. Many localities became important trade centres, receiving caravans loaded with produce, ordinary goods and even luxury items. In order to further peaceful overtures, a lively exchange of gifts occurred between Mitanni and Egypt.

Diplomacy was another significant feature which originated and developed as Egypt and Mitanni negotiated their international affairs.

Freedom of travel was also a consequence of open borders and a stable environment. A small group of people could now travel on business unmolested. Some classical examples are the journeys of Abraham, Jacob and Eliezar of the Old Testament.

Such movements of travellers brought about exchange of ideas, concepts, skills and technologies. Under these conditions religious practices spread rapidly. Epic literature like the story of Gilgamesh was passed on throughout Mitanni and freely to neighbouring countries. In order to communicate daily activities, writing became quite prolific. There was a demand by all levels of society to replace the cumbersome cuneiform system. This was accomplished when a far easier and more practical form of writing, the alphabetic system, was developed at this time in this area.

The majority of the people were involved in agriculture, and the prolonged peaceful era encouraged crop specialization and various experimentation, resulting in the achievement of above average harvests, when compared with other Near Eastern societies (Helbaek 1963:31).

Craftsmen also had more time to create new styles and motifs. Mitannian pottery is a highly elegant palace ware of outstanding quality. A black background serves as a vivid contrast for the beautiful white decoration, often employing new naturalistic designs.

These motifs are also seen on Mitannian cylinder seals, made by a new technique, using very fine drills and cutting discs, producing excellent results. These seals, as a result of heavy trade were scattered from Cyprus to Iran. For instance, in Palestine 50% of all seals during this period, were recognized as Mitannian (Parker 1949:1-43).

New technologies were developed in many fields. For example, in the glassmaking industry, we are confronted with a totally revolutionary development (Oppenheim 1970:83). Prior to Mitanni, natural coloured glass was mainly used in jewelry. Now an impressive line of core-formed bottles and vases originated in Mitanni and then spread into all other countries, especially Egypt. This glassmaking activity is one of the clear examples of what can be achieved in a peaceful environment.

Mitanni played a key role in the ancient Near East, which is being...
more and more recognized. Their peaceful genius superceded in importance all the other contributions.

REFERENCES

Helbaek, H.
1963 "Isin Larsan and Horian Food Remains at Tell Bazmosian in the Dokan Valley" in SUMER, 19, pp. 27-35.

Mallowan, M.E.L.
1947 "Excavations at Brak and Chagar Bazar" in IRAQ IX.

Oppenhein, A. Leo

Parker, Barbara
1949 "Cylinder Seals from Palestine" in IRAQ, pp.1-43.

Smith, Sidney

* * * *

Announcing The 1988 Ontario Archaeological Society Symposium

"Ontario Archaeologists Abroad"

October 22 & 23, 1988 at the Downtown YMCA, 20 Grosvenor St., Toronto (Yonge north of College)

Saturday's programme will focus on the experiences of archaeologists who are based in Ontario, but whose research interests take them outside the province to various parts of the world. Though work from many of the world's regions, including the Far East, Middle East, Mediterranean, and Central America, will be represented, the emphasis will be on the nature of archaeological approaches to common problems, and on parallels elsewhere to the native American/Contact experience.

CALL FOR PAPERS for the Sunday Morning OPEN SESSION

Please contact Robert Burgar, Dept. of New World Archaeology, Royal Ontario Museum (416) 586-5730. Programme Chair for this session.
The sun has yet to cut the chilly morning breeze or wash the color from the fields and sands of this Saharan oasis as 10 farmers, who otherwise surely would be with their crops, are helping to unearth a temple built during the Roman rule of Caesar Augustus.

Their neighbors are busy working the land with most of the same kind of tools as did peasants when the temple was built almost 2,000 years ago, according to the team of archeologists here directed by the Toronto-based Society for the Study of Egyptian Antiquities.

This oasis, on which the temple and at least 24 others have been found, is 300 kilometres west of Luxor, the Nile-valley city well known for its ancient Egyptian temples and tombs.

The Dakhleh Oasis Project, as the study is called, however, goes far beyond a search for beautiful artifacts. What brought the first settlers to this isolated oasis? How did they cope with the taxing environment and the limited resources? And how much was their development influenced by the more populated Nile valley? These are just some of the questions sparked by a five-year survey of the 3,000 square-kilometre, sausage-shaped oasis that ended in 1983 and also by the ongoing excavations since then.

Beyond their esthetic appeal, the elaborate hieroglyphics on the gateway of the temple to the Egyptian sun god of Asun, where the local men are hauling sand, will reveal important clues to the customs and beliefs of the people who lived here during the period of Roman rule.

While the beautiful inscriptions are important, "you can tell just as much from ugly ones," insists project field director Anthony Mills, explaining the importance of examining simple village sites as well as more glorious temples and tombs.

Dr. Mills is former assistant curator of the Egyptian department at the Royal Ontario Museum.

The campaign "enhanced the archeological gene pool," bringing a large number of scientists with a variety of backgrounds to Egypt where archeology traditionally has focused on the monuments and not social and environmental questions, Dr. Mills said.

The Dakhleh project is one of the most far-reaching in Egypt in that it is examining prehistorical sites as well as those from the pharaonic eras and the period of Roman rule. The team even includes an ethnographer who studies the current residents of the oasis.

"We did not want to go out there and just dig," explained Geoffrey Freeman, who is largely responsible for launching the study. "What I had seen of work in Egypt disturbed me. It all seemed to have a narrow focus," said Mr. Freeman, who is also chairman of the Egyptian antiquities society, which runs the project as a joint venture with the ROM.

"Egypt has not been examined in its paleolithic past. It's still only poorly known," said Maxine Kleindienst. She is a University of Toronto specialist in prehistoric hand tools. Along with Ian Brooks, a geomorphologist from York University, she is examining what the environment was like here more than 10,000 years ago and how those who lived here adapted. They know that at one time the environment more closely resembled that of the savanna and forests now in sub-Saharan Africa and that elephants and giraffes roamed the landscape. But they do not know if the first people to make tools learned to do so on their own or brought the skills from the south.
In the more recent prehistoric and ancient pharonic periods, Dr. Mills said, "We don't know if the culture connections will follow the Nile bridge or will follow the animals (from the south). We end up with a whole set of problems that force us to study the lithics," he added, referring to the stone blades and chips left when the tools were made.

The stone blades tell much about the sophistication of a culture's technical abilities and perhaps from where or how their skills were learned.

Ms Kleindeinst acknowledged that many of her questions are still unanswered. The team members will return for another three-month work season next month. The project has cost some $1.4-million since its inception and has been financed by the Social Science and Humanities Research Council as well as the ROM.

from The Globe & Mail Dec. 5, 1987

** * * *

SECRETs OF ANCIENT NUBIA UNCOVERED

A newly unearthed palace in northern Sudan will help Canadian archeologists uncover the key to the mysteries of the once-powerful Nubian empire and its links with the rest of the world.

"We have found something totally new and unique. There is no parallel to it in the Nubian Nile Valley," said Krzysztof Grzymski, assistant curator of the Royal Ontario Museum's Egyptian department who led the six members of the archeological team that uncovered the palace in October.

The $43,000 expedition from October to December was sponsored by the Social Sciences and Humanities Research Council of Canada and the ROM.

"This find will change the many misconceptions about Africa as an outcast continent," Professor Gryzmski said.

"It will change our views of the development of culture in the Nubian corridor and its ties to the Mediterranean world from the sixth to the fifteenth centuries. It will bring faraway Africa into the orbit of the Mediterranean."

The palace, measuring 30 by 20 metres, is part of a larger lost city buried under a site in the hamlet of Hambukol, between the third and fourth cataracts of the Nile River about 350 kilometres northwest of Khartoum.

"People say you can't find lost cities any more, but it's not true," said Prof. Gryzmski, who also teaches in the department of near-Eastern studies at the University of Toronto.

"Sudan has always been overlooked. There are hundreds of pyramids, temples, royal cemeteries and ordinary houses that nobody knows about.

"In some ways, this city is comparable to Pompeii because it's a complete buried city that is wholly preserved."

Nubia became a Christian empire in the sixth century when the Byzantine emperor Justinian sent missionaries to convert its citizens. It stayed a Christian nation until about the fourteenth century when it gradually began converting to Islam.

The finds in and around the palace indicate that the Nubians were a highly sophisticated and literate culture, and contacts with Greece, Turkey, Bulgaria, Armenia and even the Crusaders were likely, Prof. Gryzmski said.

Pottery decorated with colorful Christian motifs, "magic bowls"
inscribed with Greek names, glass vials, jar stoppers, leather bags and inscriptions on the walls were found in the palace. The three magic bowls found in the corners of the palace were probably put there to repel demons and evil spirits.

The architecture of the palace may be traced to outside influences such as those from Greece or Turkey, Prof. Gryzmski said. Sudan was the crossroads between the main cultural streams of Africa - the Mediterranean desert countries and the southern African kingdoms - through which trade caravans regularly passed.

"We are at the beginning of a major breakthrough," Prof. Gryzmski said.

"Because this work proves that a native culture existed in Africa that had its own writing system and an indigenous monumental architecture that included palaces and structured cities.

"Many people have no conception that such a rich black African culture exists."

Prof. Gryzmski hopes the site, which measures 400 by 300 metres, will also help in mapping out a cultural chronology of Nubian history from the little-known Meroitic culture (750 BC to AD 350) up to the demise of the Christian religion in Nubia.

From 1984 to 1986, the professor and his team identified 120 archeological sites along the Nile.

Two dozen artifacts from these sites are to be exhibited in the ROM's Nubian gallery, slated to open in 1990. Prof. Grzymbski believes that it will be the first Nubian gallery in North America.

Time may be running out for the researchers. "Many sites in the Sudan are endangered," Prof. Grzymbski said. "It's often a race between archeologists and agricultural development. The sites have good, organic soil so peasants often try to take over the sites for their farms."

from The Globe & Mail

Dec. 29, 1987

COMPUTERS AND ARCHAEOLOGY

The Gloucester (U.K.) Excavations Unit has been chosen to act as a 'guinea pig' for a new statistical and graphical computer software package being developed by staff of an Australian museum for use on archeological sites. The package is due for commercial release in 1988 but the software developer, Dr.Roger Cribb of the South Australian Museum, Adelaide, is hoping that the Gloucester archaeologists can help with the final development work by testing it in the field.

Malcolm Atkin (Assistant Archaeology Director) who is in charge of the Gloucester end of the project, explained the importance of the work. "We have been interested in developing computer applications in archaeology for quite a while now, and already use a computerised site recording system to speed up our work in the field and the post-excavation work. This new system will add 3D-graphical capabilities and improve our statistical handling of the material. We hope that it will make our reports more interesting and informative." The collaboration came about after Mr.Atkin saw an earlier version of the package being demonstrated at a conference this year, and contacted Dr Cribb to offer any assistance.

The Excavation Unit took delivery of its IBM XT286 computer in Spring 1987 and it has been running virtually non-stop ever since, logging the data from the recent excavations. Next year the Unit will collaborate with the County Archaeological Unit in computerising the Sites and Monuments
Record from Gloucester City, and also hopes to develop a mapping system for plotting archaeological levels across the City. "Both of these projects will be of enormous value to ourselves and also to the Planning Department and developers who will then be able to have a much better idea of where the critical archaeological areas are", commented Mr. Atkin.

Malcolm Watkins (Archaeology Director) is pleased with the way that the Unit is moving into this area of high technology. "All of these projects are aimed at making us more efficient and responsive", he said. "What we would like is for a sponsor to donate to us further IBM-compatible equipment to spread the work on our presently over loaded system.

from British Archaeology January/February 1988

*****
HERITAGE RESOURCES CENTRE
UNIVERSITY OF WATERLOO
Public Lecture and Professional Development Workshop
URBAN HERITAGE: PLANNING, PRESERVING AND MANAGING HISTORICAL AND ARCHAEOLOGICAL HERITAGE IN URBAN COMMUNITIES
March 3 and 4, 1988 at Siegfried Hall, St. Jerome's College, University of Waterloo

PURPOSE
To provide a forum for exchanging ideas and discussing the elements that contribute to the success of planning, preserving and managing urban heritage areas in Ontario. More specifically, to establish links among private and public sector interests in archaeological and historical aspects of urban heritage; to identify future research; and to promote continuing future exchanges.

PUBLIC LECTURE: Thursday, March 3, 1988, 4:00 - 6:00 p.m.
"National and International Perspectives on Preserving Urban Heritage"
-Jacques Dalibard, Executive Director, The Heritage Canada Foundation

PROFESSIONAL DEVELOPMENT WORKSHOP: Friday, March 4, 1988 ($20.00 registration fee)
Chairperson: Dorothy Duncan
Greg Baeker or Pam Craig: The Ontario Perspective
David Emberly: The Regional Perspective
Local Perspective
Panel 1: The Niagara-on-the-Lake Experience
Chairperson: Geoff Wall

Panel 2: The Cambridge Experience
Chairperson: Alison Jackson

*****
Ken Oldridge, President of the Grand River Waterloo Chapter, recently received an award from the Federal Minister of State for Youth, recognizing his active participation in the Summer Employment Program for Canadian Youth. The award was signed by Defence Minister Perrin Beatty, the local MP. Ken has successfully obtained funding for a number of archaeological projects, including an excavation in 1987 by McMaster University.

Thunder Bay Chapter Display

Thunder Bay Chapter invites everyone in Northern Ontario to visit the Inter-City Mall on Heritage Day to view the displays and exhibits of the participating local heritage organizations, including that of the Thunder Bay Chapter.

Niagara Chapter Speaker

Dr. Richard M. Gramly of the Buffalo Museum of Science will address the Niagara Chapter on the topic 'Paleo-Indian Sites in Eastern North America' on Friday, February 19 at 7:30 p.m. in Room H-313, Brock University. Admission is free to the public and all interested are invited. OAS members will be especially welcome.

The speaker in January was William Fitzgerald, whose subject was 'The McPherson Site'.

London Chapter Members' Night

The London Chapter's Members' Night will be held Thursday, February 11. Four Chapter members will speak for 15 minutes on a topic of their own choice.

The January 14 speaker was Ian Kenyon on the subject "Glass Beads: Temporal and Economic Indicators of Trade During the 17th Century in the Northeast."

Grand River-Waterloo Chapter Announces 1988 Program

The Grand River-Waterloo Chapter has published its program to May 1988. Meetings alternate between Guelph and Waterloo. Jan. 20: Christine Caroppo, "The State of Affairs in the Ontario Archaeological Society" (Guelph); Feb. 17: Charles Garrad, "Ekarenniondi: Beacon of the Dead and Roost of the Thunderbird" (Waterloo); Mar. 16: Dr. Gilbert Stelter, "Mighty Cities of the Mayans" (Guelph); April 20: Dr. Peter Ramsden, "Protohistoric Huron Sites in the Kwasartha Lakes Region" (Waterloo); May 18: Phillip Woodley, "A Preliminary Report on Late Archaic House Pattern Features at Thistle Hill, Mt. Hope" (Guelph); May 28 Chapter Picnic and Canoe Odyssey, Galt to Paris.

Ottawa Chapter Announces Seventh Annual Ottawa Valley Archaeological Symposium

The half-day Symposium will be held Saturday, March 19 in Room 2, Victoria Memorial Museum Building, Ottawa and continues with lunch at a popular restaurant. A call for papers is made. To respond, register and for further information, contact Marian Clark, Ottawa Chapter President at (613)236-8362. The charge including lunch will be $15, or without lunch $5.

U.K. Member Needs Ossuary Slides

U.K. member, Janet Cooper, needs to borrow some slides for a talk she has been asked to give to her district archaeological group on OSSUARY BURIAL AND THE HURON FEAST OF THE DEAD.

Here's your chance for international recognition ..... if you have any suitable slides you can spare for a few weeks please forward them to the

from the o a s office ...
Generous Volunteers Needed – Belize 1988

Two volunteers are needed for site survey and excavation in southern Belize, March, 1988. Must be in good health and willing to pay own airfare to participate in three weeks of work in the Belize cays. Hard work promised as well as one side trip to the major jungle site of Lubaantun.

Please contact: Dr. Heather McKillop
Northeastern Archaeological Associates
P.O. Box #493
Port Hope, Ontario
L1A 3Z4 (416) 342-3250

Employment 1988

Students interested in seasonal contract employment on archaeological resource assessment and excavation projects in Ontario are invited to submit their resumes along with a brief statement of career goals to:

Personnel Manager
Mayer, Pihl, Poulton and Associates Incorporated
134 Commissioners Road West
London, Ontario
N6J 1X8 (519) 668-2400

All replies will be held in confidence and answered promptly.
The Ontario Archaeological Society Inc.
126 Willowdale Avenue, Willowdale, Ontario, M2N 4Y2
(416) 730-0797

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<th>ASSETS</th>
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# Statement of Receipts and Expenditures for the Year Ended December 31, 1987

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**Treasurer:** M.W. KIREY

**Auditor:** I have examined the above Balance Sheet and the attached statement of receipts and expenditures together with the accounting records of The Ontario Archaeological Society Inc. In my opinion they show a true and fair view of the Society's affairs at December 31, 1987 and of the receipts and expenditures for the year ended December 31, 1987.

**G. Sutherland**
POTHUNTER CONVICTED IN U.S.A.

On November 18, 1987, Ralph Cortiana of Punkin Center, Arizona was convicted in U.S. District Court, Phoenix, of a felony violation of the Archaeological Resource Protection Act of 1979 (ARPA), specifically of sections 16 U.S.C. 470ee (b), (2), and (d), which concern illicit artifact trafficking. He was also found guilty of a felony violation of 18 U.S.C. 641, possession of stolen federal property. These convictions represent the first time a pothunter has been found guilty of felony ARPA and related violations in a jury trial anywhere in the United States.

Cortiana was charged with the unlawful removal, possession, and sale of a naturally mummified infant girl with extensive grave goods from a cave site in the Tonto National Forest (Tin Cave-AR-03-12-06-104). The infant was accompanied by an extraordinary array of offerings, notably including a complete open simple, Z twinned rabbit fur robe; a 2/2 twill plaited unfinished polychrome sash; a small, close-coiled two rod and bundle bunched foundation, non-interlocking stitch bowl; a wooden spatula or clay scoop; a wrapped bundle of cordage construction material; partially finished cordage (which was actually placed in the little girl's mouth); knotted fiber; fox and wolf pelts; and a pair of worn, plaited sandals that may have belonged to a parent or relative of the child. All of the foregoing items were encompassed or overlain by a sewn deerskin bag with the fur turned inward.

The bag was radiocarbon dated at the University of Pittsburgh Radiocarbon Lab at A.D. 600 ± 25 (Pitt-0056) rendering the mummy and its associated grave goods the only directly dated Hohokan remains from this portion of Arizona. J. M. Adovasio, Professor and Chairman, Department of Anthropology, University of Pittsburgh, and R. L. Andrews, Director, Perishables Analysis Facility, University of Pittsburgh, analyzed the grave goods associated with the mummy, and Adovasio provided expert witness testimony at the trial on the age and archaeological importance of the remains. Additional expert witness testimony was provided by J. Donahue, Professor of Anthropology, Geology and Planetary Science, University of Pittsburgh. Donahue and Gary Cooke, Director of the Archaeometry Facility, University of Pittsburgh, performed a series of x-ray diffraction and x-ray fluorescence analysis on soil samples from Tin Cave and on a sample taken from the mummy. This analysis demonstrated conclusively that the samples came from the same source. This is the first time that tests have been used and accepted in a court case of this type.

Of great significance in the Cortiana case was the fact that the presiding judge, the Honorable Charles L. Hardy, ruled that the defendant did not have to know he was on federal land for the felony violations. Previous cases of this type had often failed because other judges had interpreted ARPA as requiring prior knowledge. Cortiana was sentenced on January 1, 1988 and a series of other ARPA cases are now pending in the Phoenix District Court.

It is virtually certain that the successful prosecution of the Cortiana case will send the "appropriate message" to the pothunting community and the illicit antiquities dealers in Arizona and other parts of the Southwest and should help to stem the vandalism of archaeological sites on federal property.

from The University of Pittsburgh

* * * * *
GRAND RIVER/WATERLOO  
President: Ken Oldridge (519) 821-3112  
Vice-President: Marcia Redmond  
Treasurer: Marilyn Cornies-Milne  
Secretary: Lois McCulloch, 40 Woodside Road, Guelph, Ontario, N1G 2G9  
Newsletter: THE BIRDSTONE – Editor: John D. A. MacDonald  
Fees: Individual $6  
Meetings: Usually at 8.00pm on the 3rd Wednesday of the month, except June – August, at the Adult Recreation Centre, 185 King Street W., Waterloo.

LONDON  
President: Neal Ferris (519) 433-8401  
Vice-President: Linda Gibbs  
Treasurer: George Connoy  
Secretary: Megan Cook, 55 Centre Street, London, Ontario, N6J 1T4  
Newsletter: KEWA – Editor: Ian Kenyon  
Fees: Individual $12  
Meetings: Usually at 8.00pm on the 2nd Thursday of the month, except June – August, at the Museum of Indian Archaeology.

NIAGARA  
President: David Briggs (416) 358-3822  
Vice-Presidents: Ian Brindle, Anthony Sergenese  
Treas: Bernice Cardy  
Secretary: Sue Pengelly, 97 Delhi Street, Port Colborne, Ont. L3K 3L1  
Newsletter:   
Editor: Jon Jouppien  
Fees: Individual $6  
Meetings: Usually at 8.00pm on the 3rd Friday of the month at Room H313, Science Complex, Brock University, St. Catharines.

OTTAWA  
President: Marian Clark (613) 236-8362  
Vice-President: Helen Armstrong  
Treasurer: Jane Dale  
Secretary: Peggy Smyth, Box 4939, Station E, Ottawa, Ontario, K1S 5J1  
Newsletter: THE OTTAWA ARCHAEOLOGIST – Editor: Lorne Kuehn  
Fees: Individual $15  
Meetings: Usually at 8.00pm on the 2nd Wednesday of the month, except June – August, at the Victoria Memorial Building, Metcalfe & McLeod Streets, Ottawa.

THUNDER BAY  
President: Frances Duke (807) 683-5375  
Vice-President: George Holborne  
Treasurer:  
Secretary: 331 Hallam St., Thunder Bay, Ontario, P7A 1L9  
Newsletter: WANIKAN – Editor: A. Hinshelwood  
Fees: Individual $5  
Meetings: Usually at 8.00pm on the last Wednesday of the month, except June – August, at the National Exhibition Centre, Balmoral Ave., Thunder Bay.

TORONTO  
President: Dena Doroszenko (416) 537-6732  
Vice-President: Tony Stapells  
Treasurer: Mara Scomparin  
Secretary: Annie Gould, 74 Carsbrooke Rd., Etobicoke, Ontario, M9C 3C6  
Newsletter: PROFILE – Editor: Jane Sacchetti  
Fees: Individual $8  
Meetings: Usually at 8.00pm on the 3rd Wednesday of the month, except June – August, at Room 561A, Sidney Smith Hall, St. George Street, Toronto.

WINDSOR  
President: Rosemary Denunzio (519) 253-1977  
Vice-President:Robert Litster  
Treasurer: Norman Vincent  
Secretary: Garth Rumble, 454 Tecumseh Rd., R.R.1, Tecumseh, Ont., N8N 2L9  
Newsletter: SQUIRREL COUNTY GAZETTE – Editor: Peter Reid  
Fees: Individual $5  
Meetings: Usually at 7.30pm on the 2nd Tuesday of the month, except June – August, at Windsor Public Library, 850 Ouellette Avenue, Windsor.

* * * * *

Jan/Feb 1988  
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126 Willowdale Avenue, Willowdale, Ontario, M2N 4Y2
(416) 730-0797

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Mr. Charles Garrad
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Willowdale, Ontario
M2N 2X3
(416) 223-2752

PUBLICATIONS

Scientific Journal: ONTARIO ARCHAEOLOGY
Newsletter: ARCH NOTES
Monographs: MONOGRAPHS IN ONTARIO ARCHAEOLOGY

FEES

Individual: $20
Family: $25
Institutional: $30
Life: $320
Chapter Fees Extra