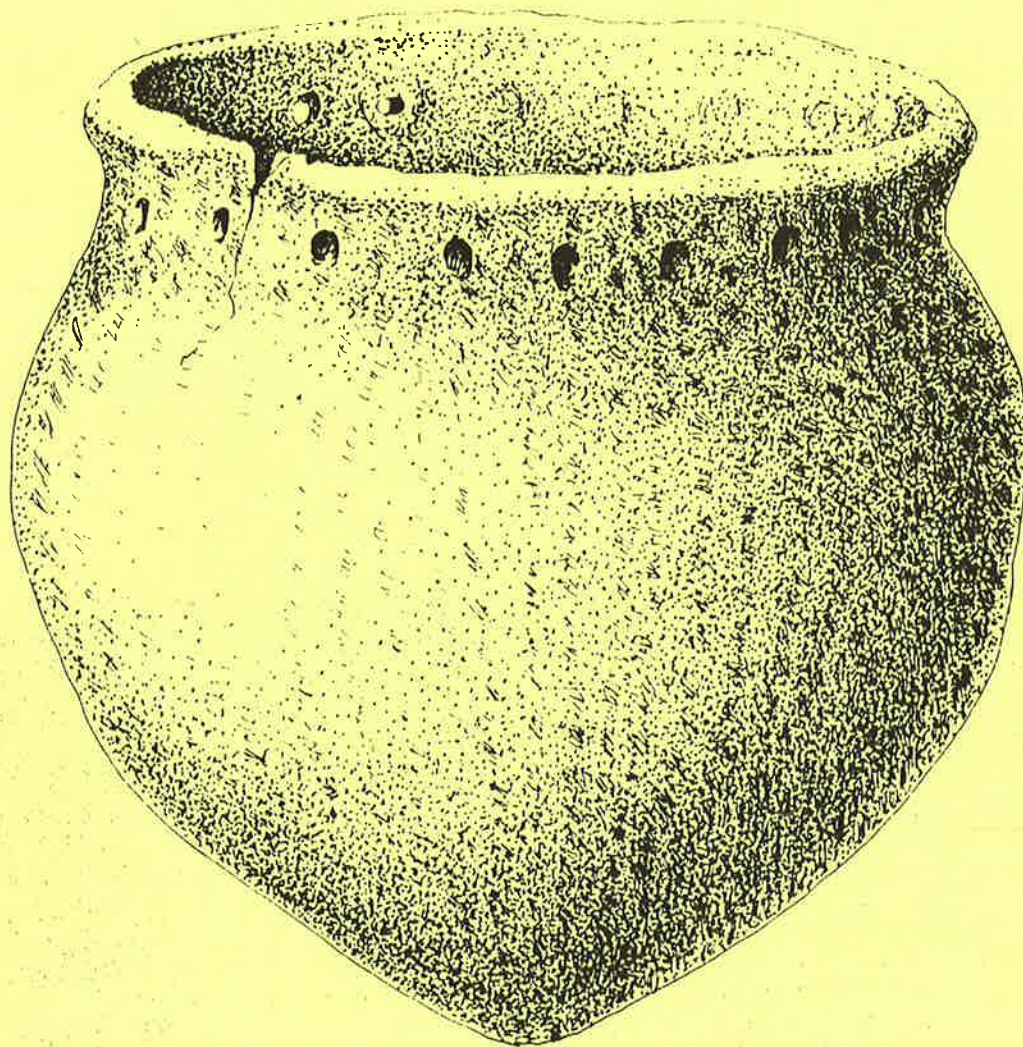


9th ANNUAL MEETING, 1976

**CANADIAN
ARCHAEOLOGICAL
ASSOCIATION
CANADIENNE
D'ARCHAEOLOGIE**



Programme & Abstracts

APRIL 29 - MAY 2 HOTEL FORT GARRY WINNIPEG

ABSTRACTS

Amsden, C.W., University of Manitoba

Camps and Sites in Settlement Pattern Reconstruction: The Nunamiut Case

As archaeologists have devoted increasing attention to settlement patterns of hunting peoples, one class of variables which seem to have been neglected concerns patterns of re-occupation of individual sites. This paper presents the results of an initial attempt to analyze site re-occupation patterns of one group--the Nunamiut Eskimos of northern Alaska. A total of 257 habitation camps (occupations) at 130 different sites are examined in relation to several environmental and temporal categories. These occupations span the period between 1898 and 1959 and were recorded through ethnographic techniques. Two questions are asked: What were the major factors influencing site re-occupation? In what ways, if any, would the archaeologist be misled in reconstructing this settlement system on the basis of site counts alone? The answers to these questions are considered in terms of their implications for archaeological settlement pattern analysis.

Arnold, C.D., University of Calgary

Implications of the "Sicco" Harpoon Head Type in Thule Culture

A recent examination of archaeological specimens excavated from the Thule Eskimo site at Naujan, Repulse Bay revealed the presence of several harpoon heads of the Sicco Open Socket type, a form not chosen by Mathiassen for illustration in his "Archaeology of the Central Eskimos." Recently acquired data pertaining to the distribution of this artifact type suggests that it was an integral part of at least one variant of the initial Thule expression in the Canadian Arctic. Following a discussion on the validity of typological analysis, a consideration of the variation expressed in this harpoon head type serves to pose several questions regarding the nature of the cultural base which figured in the early development of the Thule culture.

Arthurs, D., University of Manitoba

Manitou Mounds in Rainy River Prehistory--A Preliminary Interpretation

1975 saw the completion of a highly successful three-year archaeological survey, conducted by the Ontario Ministry of Culture and Recreation at Manitou Mounds Park Reserve, on the Rainy River in northwestern Ontario. A total of 30 habitation and special activity sites and six of the 17 prehistoric burial mounds now known in the area have been located, and intensive test excavations conducted in seven site areas. Preliminary results indicate that the sites were occupied seasonally over a period of perhaps 3000 years by a number of northern peoples, to take advantage of the varied natural resources peculiar to the Rainy River district, and the strategic location of the area with respect to major cross-continental trade routes, through prehistory and during the Fur Trade era.

Brink, J.W., University of Alberta

Archaeology and Pedology at the Smoky Site, Alberta

This paper deals with several types of analyses undertaken at an archaeological site in the eastern slopes near Grande Cache, Alberta. The aeolian soil is examined in terms of particle size, and rates of deposition and/or erosion as suggested by radiocarbon ages. The methods and results of two experiments are presented: one dealing with paleomagnetic sampling and analysis; the second with measuring the processes and effects of frost heaving. The applicability of these tests at other sites is discussed.

Buchner, A.P.

The Laurel Culture in Southeast Manitoba

The Laurel Culture is examined in terms of material culture, adaptive strategy, dating, origins and later developments. It is asserted the earliest ceramic-using peoples in southern Manitoba displayed an adaptive advantage over the indigenous Archaic inhabitants of this region in that the former utilized a more diffuse exploitation of their total environment. The appearance of Laurel Culture in southeast Manitoba corresponds with the onset of the sub-Atlantic Climatic Episode-- a time of relatively pronounced environmental changes. These are to some extent reflected in local faunal assemblages. The applicability of Stoltman's seriation of Laurel ceramic "types" to southeast Manitoba is discussed. The paper terminates with a case being made for cultural continuity between the Middle and Late Woodland cultures of this area insofar as this is relevant to the ethnic identity of the authors of Blackduck ceramics.

Burley, D.V., Simon Fraser University

Plowed Site Spatial Reconstructions: The Bartibog Site as an Example

In recent years, archaeologists have realized the value of analyzing the horizontal dimension in archaeological sites. That is, we now attempt to interpret site activity (settlement) patterning on the basis of artifact spatial associations on each of our occupation floors. Several analytic techniques, subsequently borrowed from quantitative plant ecology and geography, have been employed toward this end with relative success. However, the majority of applications thus far almost always have dealt with ideal data from undisturbed sites collected with exact provenience. Few have investigated the possibilities that spatial patterning may still be in existence within single component occupation floors following plowing. This paper reviews the problem by conducting a spatial analysis of materials excavated at the Bartibog site (CgDi 1), a late prehistoric component in northeastern New Brunswick. Several artifact class correlations are recognized and interpretations offered.

Byrne, W. J., Archaeological Survey of Alberta

The Archaeological Survey of Alberta

With the passage of the Alberta Heritage Act 1973, the province of Alberta changed from a province with little or no legislation relevant to archaeological resource management to one with a modern integrated legislative package concerned not only with archaeological protection but also with the promotion of archaeological investigation and documentation. This legislation has, in the intervening two years, been supplemented by amendments to the original Act which have served to strengthen its authority, and by the establishment of a provincial agency designed specifically to implement the provisions of the Act as they pertain to archaeology. At this time it is possible to review the activities of the Survey in its first two years, and to predict future activities and developments.

Campbell, N.R., University of Manitoba

Identification of Swan River Chert

A common lithic material found in archaeological deposits of west-central Manitoba is Swan River chert. The distribution of this variegated chert extends across Saskatchewan as far west as east-central Alberta. No bedrock outcrop is known as yet, but considerable quantities of this material are present as cobbles in the glacial tills of the region. The great variation in the colour and texture of Swan River chert is discontinuous, so that about 20 to 35 distinct varieties can be macroscopically discerned.

Several questions arise at this juncture. Do the 25 or so varieties represent different cherts with perhaps differences in flaking characteristics? If all varieties consist of only one chert type, a standardized description must be provided so that Swan River chert found within the region, more distantly, or in trading contexts can be readily identified. A standardized description would facilitate the determination of the full extent of its use through time and space.

Preliminary analysis of some 30 thin sections of Swan River chert indicates no congruence between macroscopic and microscopic appearance. Aside from minor variations, all but two of the Swan River chert varieties exhibited the same three crystal habits: (1) medium-grained, chalcedonic spherulites with flamboyant structure; (2) medium to large grained euhedral granoblastic quartz grains; (3) fine silt-sized anhedral quartz crystal aggregates. Varieties not exhibiting the trimodal crystal habit are not considered to be Swan River chert. Features pertaining to the genesis of this material remain contradictory.

Charlton, A., Archaeological Sites Advisory Board of British Columbia

Pipeline Archaeology in British Columbia: Problems in Procedures, Methods and Goals.

A natural gas pipeline proposal in the summer of 1974 marked the first time in a pipeline situation that archaeological values were fully addressed and considered as a separate component of the overall environmental assessment impact study. Experience on this project and others has led to a fuller understanding of the role of archaeology in pipeline and other transportation corridor situations. This paper summarizes those experiences and suggests alternative research strategies based upon a "site avoidance" or "preventative archaeology" philosophy. Problems concerned with description and evaluation of archaeology sites and mitigation procedures are also discussed.

Cing-Mars, J., University of Toronto

1974 B.C.

The paper will deal with some aspects of so-called "archaeological resource management" in relation to one's perception of archaeological research needs (with special emphasis on the non-urban or a-metropolitan spaces of the northwest).

A Research Programme on the Prehistory and Paleo-ecology of Northern Yukon

This paper will consist of a summary of the Northern Yukon Research Programme's approach to the study of aboriginal man's adaptation to the Late Pleistocene and recent eastern Beringian space. Some of the information (primarily archaeological) gathered in the course of this first year of the programme is discussed together with a number of emerging avenues of research.

Clark, D.W., Archaeological Survey of Canada

After British Mountain: An Appreciation of the Engigstciak Site

Although the Engigstciak site of northernmost Yukon territory, excavated 20 years ago, is best known for its purported early British Mountain phase, other collections from the site, particularly the Arctic Small Tool tradition and paleo-Eskimo components, which never have been fully described, potentially are among the most significant material recovered from the North American Arctic. Geographic parameters, together with the known early distribution of Eskimos, place this site at a determining position in a corridor between Alaska and the remainder of the Arctic area. In contrast to regions farther west and east, this corridor is an area of little latitudinal (insular-coastal-inland) depth possessing compressed ecological zones. Thus, it is aptly suited for examination under a migration hypothesis. The present paper is a progress report on a re-examination of collections from the Engigstciak site.

Conway, T., Ontario Ministry of Natural Resources

Heartland of the Ojibwa

Heartland of the Ojibwa is a study into Late Archaic, Middle and Late Woodland, and Early Historic period archaeology along the St. Mary's River corridor at Sault Ste. Marie, Ontario. General site survey, analysis of existing collections and site salvage projects are united to provide a cultural chronology for an important settlement centre.

Pointe Aux Pins--The First Shipyard on Lake Superior

Cartographic, archival and archaeological evidence is used to identify the site of De La Ronde's 1734 shipyard on the St. Mary's River. Alexander Henry and associates occupied the same site in the 1770's for ship building and construction of Ontario's first assaying furnace.

Stylistic Trends of Rock Art in Northeastern Ontario

This paper outlines three proposed stylistic regions for prehistoric rock art in the Shield. Newly recorded pictograph sites form the basis for a stylistic region centered in the Lake Temagami to Kirkland Lake area. The northeastern shore of Lake Superior and Missinaibi Lake areas are also suggested as regions with distinctive art trends. Temporal and spacial stylistic parameters provide a model to be tested in portions of the Canadian Shield.

Corenblum, S., Brandon, Manitoba.

The Effect of Grit Temper upon Native Manitoba Clay

This study was concerned with the effects of grit tempering upon the plasticity, texture, shrinkage and color of native southern Manitoba clay. Tempering material was obtained from friable granite collected from local archaeological sites. Clay tiles were formed with increasing amounts of temper (10% to 40%) and fired at a range of temperatures (500-900° C). An inverse relationship was observed between the amount of tempering used and the plasticity, malleability, and possible surface finishes. It was noted that the dried and fired clays showed little difference in shrinkage between tempered and untempered clay. Tempering materials are usually added to reduce shrinkage but too much tempering weakens the clay. Prehistoric pottery of this region is often heavily grit tempered and the percentage of tempering used is higher than necessary for the clay used. Thus grit tempered pottery may reflect a cultural trait rather than a functional trait.

Dawson, K.C.A., Lakehead University

Historic Populations of Northwestern Ontario

The paper examines the ethnohistoric references to the indigenous people resident in northwestern Ontario at the time of contact with particular reference to the question of the presence of Assiniboine. Early maps and records are reviewed and the results of the recent extensive archaeological records are introduced, concluding that the areas has seen an unbroken occupation by Algonkian speaking peoples with only transitory appearances of Assiniboines in the historic period.

Derry, D.E., University of Alberta

Two-Dimensional Scaling of Dissimilarity of Several "Denali Complex" Sites in Interior Alaska

This paper deals with the analysis of inter-assemblage variation among a series of sites in interior Alaska, all of which seem to contain certain "key" elements of the so-called "Denali Complex." Variability among the sites is discussed in light of the application of a Pythagorean scaling model to the data. It is suggested that the sites represent varying structural poses of a broad adaptive system. It is further suggested that the original definition of "Denali" is inadequate of several grounds and its continued use in interior Alaska has become counter-productive.

Donahue, P.F., Archaeological Survey of Alberta

Survey in Northern Alberta: 1975

During the 1975 field season two uplands and portions of three major rivers in northern Alberta were surveyed for the Archaeological Survey of Alberta. Site densities on the Caribou and Birch Mountain uplands differed markedly from each other as a probable result of their dissimilar environments. Comments regarding survey results, regional pre-history, site distribution analysis and future research are presented.

Finlayson, W.D., University of Western Ontario

On the Use of Computers in Processing Settlement Pattern Data from Iroquoian Sites

In 1975, salvage excavations were carried out at the Draper site, a 15th century Huron village site near Toronto, Ontario. This resulted in the investigation of more than five acres of the site. All settlement pattern data is being processed by computer. This paper summarizes the nature and potential of the computer-based system which has been developed.

Fitzhugh, W.W., Smithsonian Institution

A Maritime Archaic Cemetery at Rattlers Bight, Labrador

In 1974 and 1975 a Maritime Archaic cemetery was excavated at Rattlers Bight, Hamilton Inlet, Labrador. The burial site is associated with a large habitation settlement which has been excavated at the same location. Both date to the period ca 4000-3800 B.P. Excavation results include a tool assemblage similar to that obtained at the living site. Ritual specialization of grave goods is not indicated. Poor preservation of organic remains limits extensive comparison with Port-au-Choix, but preliminary conclusions suggest significant differences between Rattlers Bight and other Moorehead or Maritime Archaic cemetery complexes. Some of these differences indicate that regionalism in burial traditions cross-cuts certain long-range similarities in tool class types and burial form. Study of this variation should facilitate understanding of relationships between regional groups as well as providing insight into the role of burial customs in these societies.

Fladmark, K.R., Simon Fraser University

An Archaeological Survey of the Peace River Valley of British Columbia.

Archaeological surveying in the Peace River valley of British Columbia in the summers of 1974 and 1975 was funded by B.C. Hydro as part of an impact assessment program for proposed hydro-electric reservoirs. Over 300 sites have been recorded to date on the basis of both judgemental and probabilistic sampling procedures. Artifact typologies and geochronology indicate occupation of the area from at least 10-11,000 B.P. although no excavated sequences are yet established. Projectile point types frequently indicate close ties with the Northwestern and Central Plains. Of special interest was the relocation of a number of Northwest Company and Hudson's Bay fur trade forts, including the earliest such site on the mainland of British Columbia, established ca. 1794.

Fox, W.A., Regional Archaeologist, Ontario Ministry of Culture and Recreation

The Lakehead Complex--New Insights

During the 1975 field season, a short project was undertaken to test an hypothesis generated by earlier research. Survey of Knife Lake in Quetico Provincial Park produced evidence indicating Native quarrying of siltstones extending back to late PalaeoIndian times. Additional evidence from the boundary waters area to the east suggests contact between the Lakehead Complex and more southerly lithic industries.

Gordon, B.C., Archaeological Survey of Canada

Reindeer/Caribou Exploitation--A Comparison of Two Water Crossings

Reindeer or caribou are and were the most important resource base for the majority of northern hunting societies. A comparison is made between prehistoric and ethnohistoric water crossings belonging to the Barrenland Chipewyan. Herd accumulation, harvesting, and dispersal are discussed.

Hanna, Margaret, University of Manitoba

Ethics, Politics and Paleoanthropology

This paper will examine the concept of "ethics," "politics," and "paleoanthropology," and their relevance to the interaction of archaeologists, native people, and government officials in the realm of prehistoric population analysis. In particular, the loci of power and responsibility among these groups will be examined to determine where the conflicts have arisen and how they may be rectified.

Heintzelman, A., University of Manitoba

A Technique for Predicting Archaeological Resource Distribution and Density in Southeastern Manitoba: A Case Study in Research Planning Design

The following problem was undertaken in order to formulate a basis on which anyone could reasonably determine in advance of going into the field, the density and/or distribution of archaeological resources. Three basic assumptions were maintained, i.e., that prehistoric people were hunters and gatherers, band oriented and pedestrian. On this basis the reconstruction of settlement patterns were developed on the following criteria: (1) existing archaeology, ethnography and ethnology; (2) surficial and bedrock geology; (3) internal and external drainage; (4) soil patterns (5) paleo-botany, paleontology, and paleoclimatology; (6) physiographic landscape. The planning design takes into consideration both the stable and changing environmental situations and on this basis predicts "population density" or site numbers within major physiographic subdivisions (stratified universe). Using this model settlement pattern sampling technique it is recommended that the design theory be field tested and incorporated as an integral part into environmental impact assessments, if not a total impact study.

Helmer, J., University of Calgary

Points, People and Prehistory: A Preliminary Synthesis of Culture History in the North Central Interior of British Columbia

This paper will be concerned with the following: (1) a review and re-evaluation of the archaeological sequences from key sites in that area of British Columbia north of the town of Williams Lake and south of Prince George; (2) the definition of intra site similarities which may reflect cultural affinity; (3) the analysis of possible extra regional relationships; and (4) the integration of the above into a tentative model of the culture history of the north central interior. It is my contention that current correlations with the archaeological sequence from David Sanger's Lochmore/Nesikup locality in south central B.C. have resulted in a number of serious misconceptions concerning the role of the northern interior plateau in the course of B.C.'s prehistory. I intend to show that the known sequence in this area bears closer similarities to the sequence from northern B.C. and the southwest Yukon than to the one from the south. Taking this argument further I will posit that the earliest complexes in the north central interior represent the relatively late movement of ethnographically known Athabascan groups--specifically the Carrier and the Chilcotin--southward. Due to the preliminary nature of the data these arguments will necessarily be somewhat speculative. However, I suggest that they will serve the purpose of opening up new possibilities in the interpretation of Athabascan prehistory.

Hickey, C.G., University of Alberta

Site-Catchment Analysis and the Study of Modern Hunting and Trapping Camps in Western Alberta

In recent years, archaeologists have begun to stress the adaptive paradigm in the analysis of their data. This has led to the significant advances in the understanding of human prehistory. One approach which has been developed and which has generated some discussion is "site-catchment analysis." It is potentially a significant perspective, since it deals directly with the sets of variables with which contemporary archaeologists are concerned: technology, geography, and resource utilization. In this paper, the approach is analyzed with respect to its assumptions, and its utility is assessed against a body of information collected on modern campsites in the foothills of west-central Alberta. Some suggestions are presented regarding parameters to the approach.

Jamieson, S.M., Washington State University

Lithic Debris, Tools, and Behavioural Inference

Archaeologists have traditionally considered chipping debris to be relatively non-diagnostic of behavioural processes. Recent inferences based upon ethnographic and experimental observations have shown, however, that virtually all chipped stone products bear certain indicators which permit them to be identified with the manufacturing or reductive stage at which they were generated. Their method of production may be similarly determined and, in combination with data outlining sequence of manufacture, can provide knowledge of the reduction technology or technologies in use at any site where sample condition and size permits the detailed analysis outlined.

Kroker, S., University of Manitoba

Similarity is not Enough!

The systemic viewpoint presupposes isomorphic structure in all domains. Explicit delineation of any system in a symbolic calculus enables recognition and utilization of these isomorphisms. Application of a formalized model to an archaeological situation, with the explicit hypothesis of isomorphism, will allow deduction of hitherto unknown elements within that situation. Subsequent testing for the deduced elements either confirms or denies the hypothesis. This methodology can greatly reduce, if not eliminate the present reliance upon analogy in archaeological analyses.

Latta, M.A., University of Toronto

Evidence of Laterality in Prehistoric Ceramics

Studies of design motifs in prehistoric Iroquoian ceramics have consistently referred to the possibility of determining laterality from the direction of application or angle of construction. An extensive study of ceramic sherds from Simcoe County, Ontario, has yielded measurable frequencies of left and right-handed designs. These frequencies are then compared to the existing evidence for laterality among literate, non-literate, and non-human populations, and to evidence from other aspects of ceramic construction, including motor patterns of clay manipulation and cord-twisting. It is suggested that the frequencies of "left-handed" attributes within various populations and assemblages are very similar, and that these may, in fact, represent genetic or training sequences within prehistoric populations.

Lothson, G.A., University of Alaska

Some Thoughts on the Problems of Archaeological Survey and Testing in Arctic and Subarctic Regions (An example from the Trans-Alaska pipeline project)

The problems encountered when testing and surveying archeological areas in Arctic and subarctic regions are many and complex. Some of these are dependent upon the nature of the sites themselves, but more often than not they are reflective of past and present environmental conditions. Sampling and testing techniques are often at the mercy of climatic conditions which restrict and limit the effectiveness of the archaeologist. Solifluction, frost heaving, the geological-geomorphological setting, along with the dominant process in the Arctic, mass wasting, can create great difficulties for the archaeologist. Logistics, too, restrict the effectiveness of the archaeologist, as does the limited excavation season. The following discussion is an example of how these problems were met along the route of the trans-Alaska pipeline with some suggestions for further studies in Arctic and subarctic areas.

Loy, T.H., Archaeology Division, B.C. Provincial Museum

Pleiades Setting and Killer Whales: Archaeological Analogy?

An implicit assumption in the ethnographic literature from the Northwest Coast, that the only direction an Indian looked was down, is challenged by the finding of an iron killer whale effigy near Telegraph Creek, B.C. Archaeologists have for some time felt that one of the best sources for cultural reconstructive information lay within ethnographic data. It is now time for archaeologists to be brave and to suggest to our ethnologist brethren that they might not have cornered all the important information. One area lies within aboriginal astronomy--the pattern of perforations of the effigy and other, ecological data indicate that the constellation Pleiades was identified with the killer whale by the Tlingit.

Behind the Looking Glass, or Have I Got a Deal for You

Although the emphasis of Heritage Resource Management and Preservation has been upon archaeological site preservation, it is becoming clear that a major effort should be directed toward the preservation of artifacts as well. Recently, the inclusion of archaeological objects into the international art market, and the export restrictions of some countries has forced a price and demand spiral to grow out of proportion. Federal legislation now pending (Bill C-33) seeks to make some order out of the chaos, but fails at the most fundamental level--archaeological artifacts are deemed to have only a monetary value. This perspective will only encourage and increase the trade in artifacts accompanied by a tremendous potential loss of archaeological information. Suggested alternative include registration of all sales and control of those sales, not just export, and the substitution of the U.N. New Delhi resolution (1956) for those aspects of Bill C-33 that pertain to archaeological objects.

Magne, Martin, University of Toronto.

The Squire Site, Prince Edward County, Ontario

The Squire Site at present is known only as a collection of artifacts being held on display at the Ameliasburg Township Museum in Prince Edward County. The site was excavated in the early 1950's by an avid amateur archaeologist, Rev. B.P. Squire. The artifacts have been examined by professional archaeologists (see Emerson 1966; Ritchie 1949) in the course of other investigations of the area's prehistory; however none except Squire himself have reported upon the presence of the site. The information yield of Squire's reports, however, is very low since no stratigraphic control was maintained during the excavation, and the prime areas of concern were late prehistoric items and the migration of contact tribes north through the Trent Valley waterway. My analysis of the items at the Ameliasburg Museum revealed that there exists at least two cultural components at the site, the late prehistoric Iroquoian or Huron occupation, and a much earlier Archaic occupation identified on the basis of type artifacts closely resembling those of Ritchie's Brewerton Phase of the Laurentian Archaic Tradition. It is believed that careful, precise excavation of the site in areas which Squire left undisturbed would reveal the presence of a late prehistoric village overlaying at least one earlier settlement.

McAndrews, J.H., Royal Ontario Museum

Chronology and Environmental Reconstruction at the Brohm Palaeo-Indian Site

The Brohm site near Thunder Bay, Ontario, is situated on a beach formed by Glacial Lake Minong after the lowering of water from the Glacial Lake Beaver Bay level. When the beach was deposited it formed a basin enclosing Pass Lake. A sediment core lifted from Pass Lake was organic mud overlying inorganic sediment that was deposited when the Pass Lake basin was part of Lake Beaver Bay: the contact between the two sediment types marks the formation of the Lake Minong beach. Four radiocarbon dates at the contact range in age from 5,070 to 7,280 B.P. and they are significantly younger than the 9,500 B.P. date previously assigned to Lake Minong beach formation. Correlation of the pollen diagram constructed from the core with the radiocarbon dated diagram of Alfies Lake near Wawa indicates an age of about 9,500 B.P. Thus both geological and pollen analytical evidence lead to the rejection of the four radiocarbon dates on the Pass Lake core and the acceptance of the previously assigned age for the Lake Minong beach of 9,500 B.P., a maximum age for the occupation of the Brohm site.

The pollen assemblage during the time of Lake Minong is similar to the modern pollen assemblage and thus the vegetation of the presumed occupation period is inferred to be similar to the vegetation around Pass Lake today. However, during the mid-postglacial a southern-type white pine forest occupied the area.

McCartney, A.P., University of Arkansas

The Thule Archaeology Conservation Project: Initiation and Projected Program

The Thule Archaeology Conservation Project is designed to mitigate increased disturbance to Thule whale bone sites throughout the Northwest Territories. The whale bone carving market developed over the past decade largely by extracting raw material from Thule winter house ruins. While the market is currently depressed due to U.S. importation bans on whale products, there still exists a residual market within Canada and the potential for developing greater foreign markets. The project attempts to: (1) inventory Thule sites in the N.W.T. and evaluate their condition; (2) extract archaeological information from damaged and endangered sites, while simultaneously recycling whale bones to carvers as needed; (2) apply relevant research designs apropos to contemporary cultural historic, systemic, ecologic, and paleoclimatic scholarship to whale bone and related cultural resources; (4) provide Inuit and other northern residents with archaeological information feedback through school displays, educational software, and encouragement of museum development; and (5) instill a greater awareness of the value of preserving the prehistoric cultural heritage among N.W.T. residents, develop cooperation between archaeological endeavors and local and regional Inuit policies, and encourage involvement of Inuit in field and interpretative aspects of archaeology. The program is jointly sponsored by the Archaeological Survey of Canada and the Department of Indian and Northern Affairs, Ottawa, and is projected to continue for four years.

McGhee, R., Memorial University of Newfoundland

Parsimony isn't Everything: an Alternative View of Eskaleutian Linguistics and Prehistory

For the past quarter-century most prehistorians have considered the Arctic Small Tool tradition (Denbigh, Pre-Dorset, Dorset, etc.) to be the earliest archaeological complex which can be definitely ascribed to people who were racially and linguistically Eskimos. The present paper reviews the evidence for this identification and the archaeological problems which such an identification creates. It is suggested that our archaeological sequences make more sense if we assume that the AST people were not Eskimos, but had a Siberian Neolithic ancestry and may have spoken a language more closely related to the Chukotan family than to Eskaleut. The Eskimos may have developed their language and way of life on the Pacific coast of Alaska, only moving to the Bering Sea area some 2500 years ago, and to Arctic Canada within the past millennium.

McLeod, M., Lakehead University

Prehistoric Populations at the Western End of Lake Superior and Resulting Archaeological Problems

A study of the ethno-historic records indicates a very small yet very highly mobile population in this area. This paper proposes that at the time of recordings, although influenced by the fur trade and historic contacts these peoples because of the environmental limitations, were forced to carry on their marginal existence in a traditional manner. Namely: that they travelled great distances fairly frequently, most likely in single or small extended family units; that they did not have permanent villages but rather traditional locations or areas that they shared with several other families or extended families on a seasonal and sporadic basis. As a result of this high mobility by small groups and seasonal occupations one would expect to find (1) many small sites consisting of only a few tools, flakes or fragments of bone, with little or no pottery, which would serve to make temporal identification next to impossible; (2) the seasonal or sporadic occupations coupled with environmental considerations would result in sites that, although spanning several cultural traditions would have a limited, varied and often confusing deposition of cultural material reflecting the seasonal activities at that particular site.

Melbye, F.J., University of Toronto

Palaeodermography from the 17th Century in Southern Ontario

The "Feast of the Dead" ceremony with its associated ossuary burial provides a unique opportunity to study breeding populations. There are, however, several problems of interpretation. Appropriate corrections are suggested. When these adjustments are made, the results correspond fairly closely to some ethnohistoric estimations. Further, new data are generated on mortality profiles and life expectancy.

Meiklejohn, C., University of Winnipeg and A.J. Buchner, Memorial University of Newfoundland.

Cultural Alteration of Human Bone in a Manitoba Site

A partial child's burial from transitional Middle/Late Woodland levels of the Bjorklund site in the Whiteshell region of eastern Manitoba is reported. Some of the bones show either cultural alteration or use as cultural objects. Their importance will be discussed.

Mitchell, B.M., Deep River, Ontario

Obscure Testing Methods for Mixed Sites

This paper mentions the disadvantages of multi-component sites as found in central eastern Ontario and discusses some alternate manipulation of the field data. It is divided into two parts, the first of which describes the ramifications of uncautious surveys. Part two exemplifies extraction of unusual information using the CaGn-1 site as basic data supply. The paper is not a site report but covers some matters scheduled for the report proper.

Molto, J.E., Lakehead University

The Strategy of Discrete Non-Metrical Traits in Ontario Prehistory

This paper critically evaluates the role of discrete trait analysis in Iroquoian skeletal biology. Of special concern are issues that pertain to the observational level of the scientific method. Guidelines for future research are suggested.

Morland, R.E., Archaeological Survey of Canada, National Museum of Man.

On the Recognition of Cobble Tools

Recent finds of flaked pebbles and cobbles in central Yukon Territory provide a reminder of the importance of archaeological context in assessing the presumed remains of certain kinds of technological activities.

Nicks, T., University of Alberta

Migration Networks in a Northwestern Alberta Native Population

Band societies have predominated over the long course of human evolution, but the lack of written records for such societies has greatly hindered population studies. Biologists have resorted to simulation methods in the study of band populations and it is tempting to use their models in the analysis of archaeological sites. The existence of extensive fur trade, explorer, Church and Government documentation for a hunting and trapping population in northwestern Alberta presents a preliminary analysis of migration networks for this northern Alberta native population over the last 175 years.

Ossenberg, N.S., Queen's University

Reconstruction of Woodland-Historic Lineages for the Tribes of the Northern Plains; the Evidence of Discrete Cranial Traits

Genetics research on laboratory mice has shown that discrete traits of the skull are predominantly under genetic control. Moreover, analysis of Measures of Divergence (C.A.B. Smith) based on frequencies of the traits in human cranial samples of known relationship has revealed that within-group MD's are smaller than between-group at the .00001 level of significance. It is inferred therefore that these features yield valid taxonomical information that can be used in conjunction with other data to reconstruct affinities of extinct populations.

Measures of Divergence based on 24 discrete cranial traits in eight Woodland samples (AD 500-1700 approximately) from the northeastern Plains' periphery, and seven historic tribal samples from the northern Plains, suggest the following lineages: South Blackduck phase - Dakota Sioux, Arvilla phase - Cheyenne, and Manitoba phase - Assiniboin. Because of the rapid cultural change in the protohistoric and historic periods it is unlikely that such attributions could be traced on the basis of cultural evidence. Fortunately gene pools can in some circumstances remain stable, or at least more resistant to change, than material culture or even language. Herein lies the unique potential of skeletal analysis for ethnohistorical reconstruction.

Pokotylo, D., University of British Columbia

Archaeological Resource Inventories: Two Case Studies from the British Columbia Interior Plateau

The importance of systematic archaeological resource inventories in initial planning stages of land developments and in archaeological resource management is presented in the context of two studies in the British Columbia Interior Plateau. These projects comprise initial steps in a multi-stage resource management inventory. They provide general overviews of areas for the purpose of structuring future archaeological resource conservation and salvage measures. The major topics discussed are: (1) objectives of "overview" and (2) the use of probability techniques in achieving objectives.

Pollock, J.W., Ontario Ministry of Natural Resources, and D. MacLeod

Historic Archaeological Features Near Fort Severn, Ontario

The discovery and recording of important historic archaeological features upriver from the village of Fort Severn, Ontario, during August 1975 has raised a number of questions as to the ethnic affiliation or multiple ethnic affiliation of the remains. From the small surface collection taken from disturbed areas and the recordable features visible on the surface, one cannot make a positive ethnic identification. It is apparent however, that these features are of great significance regardless of ethnic origin and should be protected and preserved.

Ramsden, P., Wilfred Laurier University

A Hypothesis Concerning the Effects of Early European Trade upon the Ontario Iroquois

There is historical evidence that a trade between Indians and Europeans wherein beaver pelts were exchanged for European metal items was established in the Gulf of St. Lawrence area by about A.D. 1500. Archaeological evidence from south-central Ontario is interpreted to suggest that the predecessors of the Hurons were involved in this trade indirectly at that time, and that their involvement in it had significant effects on their socio-political structure and history.

Reeves, B., University of Calgary

Eastern Slope Heritage Resources and Land Use Practices

Historic and prehistoric sites in the Eastern Slopes of the Alberta Rocky Mountains are subject to varying land use pressures. These, depending upon the management unit in which the sites are situated (National Parks, Improvement Districts or Forest Reserves) have differentially impaired the resource since settlement and economic development of the area began in the 1880's.

The effect of these land use practices on the sites in these areas is discussed and compared between National Parks and provincial patented and Crown lands. Projecting current rates of site attrition and planned economic developments, the resource outside the National Parks will essentially be lost by the turn of the century.

Reid, C.S., Ontario Ministry of Culture and Recreation

Tentative Hypotheses on Lake of the Woods Cultural Continuities

Archaeological inventory on Lake of the Woods in the 1975 field season uncovered evidence of continuous occupation from the Palaeo-Indian period through the Archaic, Laurel, Blackduck, Selkirk, Early Contact, and French and English Fur Trade periods. Initial hypotheses generated from the study indicate that the strategic location of the lake--geographic and ecological--was a strong incentive for a major prehistoric population centre, and that this factor was reinforced by major sources of lithic raw materials and an abundant, varied subsistence base.

Preliminary analyses indicate the presence of Oxbow, McKean and Shield elements from the Archaic time period. Both early and Late Laurel components were uncovered and a number of sites possess possible transitional Laurel to Blackduck elements. Blackduck and Selkirk ceramics are associated on the same living floors on several sites, and in a number of cases single vessels possess a fusion of Blackduck and Selkirk attributes.

Samson, G., Université Laval

Ethnoarchaeology of the Mushuau Innuts at Indian House Lake, Nouveau-Québec

At Indian House Lake (Mushuau Nipi), archaeological surveys in 1973 and 1974 yielded 47 late historic sites. The sites containing about 714 habitation infrastructures were attributed to Algonkian Indians that occupied the area from at least 1839 to 1945. Artifacts consist mostly of European trade goods and organic remains such as bone and wood. Research objectives are threefold: (1) socio-territorial organization, (2) paleo-demography, and (3) architectural behaviour. Using the hypothetico-deductive approach, hypotheses and explanatory models were built by utilizing the ethnohistoric and ethnographic data pertaining either to the Mushuau Innuts or neighbouring bands. Our presentation is limited to preliminary discussion of objectives and results.

Saylor, B.J., University of Manitoba

The Fidler Mounds, Lockport, Manitoba--Population Characteristics and Pathologies

The Fidler Mounds (EaLf-3) were excavated in 1963 but not analyzed for publication until 12 years later. Twenty-one burials were recovered, comprising 49 individuals. The bulk of the individuals were middle-aged, and there was a preponderance of males. Besides arthritis and normal tooth wear pathologies included osteomyelitis, partial crippling, and frontal bone trauma, the latter found in females. This is only the second mound population to be analyzed, the first being the Montgomery collection studied by Cameron (1962). Associations point to a Laurel or Blackduck age.

Schledermann, P., University of Calgary

The "Baleen Period" of the Arctic Whale Hunting Tradition

The eastward expansion of the Arctic Whale Hunting tradition from the Bering Sea region is discussed in terms of two major movements. The first of these is related to the northeastern expansion of the Punuk phase, followed by a secondary eastward movement of the Birnirk/Thule phase. An early emphasis on hunting large baleen whales is clearly represented at a number of archaeological sites in the Canadian Arctic and Greenland. From the evidence presented it would appear that the cessation of baleen in the various midden deposits under discussion is related to climatic/ecological phenomena rather than to a cultural shift in economic values. It is further suggested that the separation of the Inupik/Yupik Eskimo language groups is related to the appearance of Asiatic Eskimo cultures in the Bering Sea region. These Asiatic Eskimo groups are seen as being primarily responsible for the eastward expansion of the Arctic Whale Hunting tradition.

Severs, P.D.S., University of Alberta

Continuity and Change in the Prehistory of the Queen Charlotte Islands:
Some Observations

The archaeological record of the Queen Charlotte Islands suggests a long and varied occupational history. In this paper evidence is examined for a continuity and change in technology and subsistence-settlement patterns during the prehistoric period, particularly from 5000 to 2000 B.P. Consideration is given to both social and environmental variables in the interpretation of coastal adaptations on the Islands through time.

Smith, S.A., University of Manitoba

The Recovery of Bioarchaeological Materials: Theory and Practice of Flotation

Both theoretical and practical aspects of flotation are discussed in terms of field and laboratory procedures. Special reference is made to archaeological examples of problems which are encountered in the recovery of bioarchaeological remains.

Snortland, J.S., University of Manitoba

A Preliminary Report of Age Determination of Archaeological Bison bison
by Dental Cementum Analysis

In mammals two layers of cementum per year are laid down around the roots of teeth. Dental cementum analysis of Bison bison fourth premolars from two archaeological sites was conducted in order to determine age at death and the season of death. Three different methods of sectioning of teeth used commonly by mammalogists were utilized and results were reported. Problems with each are considered, and it is concluded that paraplast embedded histological sectioning is thus far the most successful technique.

Turnbull, C., Historical Resources Administration, New Brunswick

A Mound from the Maritimes

The recent, as yet unfinished excavations of a burial mound in the Miramichi River basin, New Brunswick, firmly established the presence of a wide-spread Early Woodland Burial Tradition in the Maritimes. The Augustine Mound is a low, roughly circular mound covering at least 11 burial pits. The material recovered so far indicates that the Maritimes participated in a form of burial that spreads over much of eastern North America about 2,500 years ago. The Adena Burial Tradition, not to be confused with Adena as a cultural tradition in the Ohio Valley, brings together sites from Delaware to Nova Scotia to Ontario. But as yet there is no real understanding of the cultural practices that lie behind such widespread similarities.

Vyvan, R., University of Manitoba

A Study of the Discrete Traits of the Gray Site Crania

In this paper an analysis of the discrete traits of the Gray Site crania will be presented. In a discussion of the univariate and multivariate statistics used in the analysis the following will be explained: (1) any observed correlation of traits between the sexes; (2) any possible age dependence of traits; (3) any intercorrelations between traits. The results of these categories for the Gray Site will be compared with the results presented by Corruccini on two different racial samples.

Whelan, J.P., University of Manitoba

A Canadian Shield Pictograph Typology

During the past five years rock painting researchers concluded that a means of cataloguing and classifying rock paintings was necessary to help advance this field of study. Research at the University of Winnipeg has led to the development of a punch card code and art design for Canadian Shield rock paintings that may also be applicable to other forms of pictography within the region. This design went through many stages of development and many problems were encountered by the developers. It is seen as the basic step towards the establishment of a typology. Despite the problems a set of basic computer-oriented categories for the comparison and correlation of rock paintings has been developed.

Mammal Remains from Two San Francisco Bay Shellmounds

The mammal remains from two shellmounds on San Francisco Bay have been subjected to further analysis. Methods of counting numbers of individual animals are discussed and correction factors for non-recovered material are used. The numbers of animals per genus/species are determined as are their usable meat weights. Reference is made to possible hunting patterns and cultural preferences in regard to food animals are discussed. Some discussion concerning native population growth is also presented.

Wiersum, W.E., University of Alaska

A Statistical Analysis of Artifact Distributions to Derive Meaningful
Basic Analytical Units: An Example from Subarctic Alaska

The nature of the environmental and cultural depositional processes in the Subarctic and Arctic poses a wide range of analytical problems to northern researchers. The critical problem of defining basic analytical units within sites displaying "horizontal stratigraphy" is of paramount importance to contemporary archaeologists interested in testing hypotheses concerning the nature, range, and contemporaneity of within site and between site behaviour activity. Artifact distributional analysis and testing of flake cluster relationships on the material excavated at the Fish Creek Site (Paxon, Alaska) yielded interesting and suggestive results. The following discussion focusses on the forementioned problems within a theoretical and methodological framework.

Will, G., Simon Fraser University

Archaeological Site Files: Valid Research Tools

There is a great deal of useful and interesting data amassed on site survey forms. Unfortunately, these data are often neglected in favour of excavation data. I propose to demonstrate that site survey data can be a valuable supplement to excavation data, as well as providing the means by which intelligent rationale for excavation (problem orientation) can be developed. Survey has many advantages in regional archaeology, for example, much wider scope and greatly reduced costs. I propose to examine some of the implications, both practical and theoretical, of reconstructing prehistoric settlement patterns using site survey data from the southern Strait of Georgia region of British Columbia.

Wilson, P., Simon Fraser University.

Settlement Patterns in Carrier Territory: A Fish Story

Ethnohistorical records are used to reconstruct a fragmentary picture of Carrier settlement patterns, suggesting variation within a single exploitative and "cultural" area. The relationship between resource accessibility, population size, and settlement density are explored with reference to these patterns. Finally, new archaeological survey results from the area are considered and a speculative prehistoric settlement model is proposed.

Wright, J.V., National Museum of Man

The Transition from Laurel to Blackduck Ceramics in Northern Ontario

Archaeological evidence from Northern Ontario indicates that the Blackduck ceramic complex is a direct descendant from the earlier Laurel ceramic complex. Such a development is pertinent to continuity versus discontinuity hypotheses; contemporaneity versus non-contemporaneity hypotheses; and an Algonkian versus Siouian linguistic affiliation with Blackduck. It is suggested that the transition took place between approximately A.D. 600 and A.D. 800.