SMITH A HURON CHIEF'S HOUSE: ARTIFACT AND DISTRIBUTION ANALYSES

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ARE SETTLEMENT PATTERNS ENOUGH? THE RE-EVALUATION OF ASSUMPTIONS CONCERNING A HURON CHIEF'S HOUSE USING ASSEMBLAGE VARIATION AND ARTIFACT DISTRIBUTION ANALYSES

by

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ABSTRACT

Archaeological settlement data has been used to identify Huron chief's houses. Finlayson identified chief's houses (1985) at the Draper site, a 15th century Huron village in the Pickering Township. His interpretations were based on settlement characteristics such as being the longest and widest house, having the highest density of wall, sweatbath and interior house isolated post moulds, and having the greatest distance between hearths. This thesis analyzes two houses from the Draper site - one, based on the above criteria, a chief's house, and another a 'non-chief's' house. By examining the variation within and between the artifact assemblages and the distributions of artifacts through these two houses, another means of identifying a chief's house has been tested and the settlement pattern analyses tested.

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Ethnohistoric sources reveal that the Huron people recognized two kinds of headmen in a village. The first was a 'civil chief' who settled disputes, negotiated foreign treaties and arranged feasts, dances and games. The second was a 'war chief' who served only in times of unrest and was concerned exclusively with military affairs (Trigger, 1969:69).

It is generally accepted that a chief of a village was a person of high status. He was given special insignia of office and was identified with his predecessor, being symbolically raised from the grave during the investiture ceremony. His power lay in his ability to secure public support. He accomplished this, in part, by entertaining his followers with feasts and dances, and providing hospitality to visitors. It is generally believed that the chief's house was used as a communal dwelling where these events took place.

Archaeologically, it seems reasonable to expect that the artifact assemblage and its distribution through the chief's house should reflect the higher social status as well as the public function of this household. The archaeologist should expect a greater quantity of artifacts in general, and/or specific status-valued artifacts. Further, he/she should expect to find variation in the distribution of the internal features and associated artifacts of the chief's house in comparison to a "non-chief's" house within the village.

Social differentiation in Iroquoian sites has been defined through the analysis of archeological settlement data (Finlayson,1985). More specifically, this analysis focusses on the variation of house structure patterns. Characteristics such as longest house and greatest density of wall posts, internal house pits, hearths, and post moulds, have been interpreted as indicators of a chief's house. These interpretations are founded on the ethnohistoric accounts of *The Jesuit Relations* (Thwaites,1959:8:93; 10:181,233,251; 13:59; 15:173). In these records, the chief's house is described as the longest in the village and the location for all communal activities of the village as a whole.

It is my intent to test for socially significant artifact assemblage differentiation, and compare the results with the conclusions reached through settlement pattern analysis. I chose to examine two houses from the A.D. 1500 Huron Draper site (AlGt-2).

near Pickering, Ontario. My choice of houses is based on the settlement pattern
interpretations of House 12 and House 38. House 12 exhibits the characteristics traditionally assigned to a chief's house: it is one of the longest in the village and it yields a very high density of wall posts, as well as internal features and post moulds. House 38, on the other hand, is relatively short and yields a low density of posts and features. This provides an appropriate comparison of what traditionally has been labelled a chief's house and a "non-chief's" house. I intend to evaluate whether the existing classifications of these houses are justifiable.

This thesis deals exclusively with the analysis of individual dwellings. Trigger (1968) defines a three-level hierarchy of settlement analysis: individual dwelling, community, and zonal or regional patterning of communities. However, the focus of this research is justifiable since it is recognized that the Huron longhouse represented the socio-political and socio-economic nature of the Huron society (Hayden, 1977, 1982; Heidenreich,1971:123). Emerson (1961:62) described the longhouse as the

> ... key to an understanding of Iroquois culture. It was much more than just a dwelling place - it was the basis of the Iroquois philosophy of life - and the concept of the longhouse underlay every aspect of Iroquois social, political and military life.

Despite this, archeological interpretation of longhouses in Ontario is something of a novelty (Dodd,1984:182). Early excavations of habitation sites focussed on small areas of middens in order to retrieve a sample of artifacts that would enable the archaeologist to place the site in its appropriate cultural and chronological context (Trigger,1981:11). The longhouse remained a construct of ethnohistoric information. The following brief history of Ontario longhouse excavations will summarize the trend towards in-depth studies of the longhouse in Ontario.

THE DEVELOPMENT OF SETTLEMENT PATTERN STUDIES AND THE HISTORY OF LONGHOUSE EXCAVATION IN ONTARIO

In the late 1930's, J.H. Steward published two influential works that attempted to infer general developmental processes in the North American Southwest from prehistoric regional and community settlement patterns(1937,1938). A series of major

field programs, stimulated by the theories and conceptual interpretation that Steward presented, were to be used as models for future settlement pattern studies.

Notable among these field projects were the survey of the Lower Mississippi Alluvial Valley by Phillips et al. (1951) and the more influential Viru Valley survey by Willey (1953). Willey's Viru Valley project is regarded by many to have been the father of settlement archaeology, and marks the first field operation aimed explicitly at inferring cultural processes from the regional patterning of settlements. "This study is also significant in that it marked the first formal statement of the scope of prehistoric settlement pattern studies and their potential utility in archaeology"(Parsons,1972:128).

In Ontario archaeology, by the late 1940's and 1950's, some limited published reports yielded short and incomplete descriptions of longhouse structures. Jury (1948a and 1948b) presented simplistic descriptions of the houses found at the Flanagan and Crawford sites, as did Jury and Jury's 1955 report of the Saint Louis excavations, and Emerson's account of the McKenzie and Hardrock longhouses (1954). Kenyon's extensive excavation of the Miller site, which included six longhouses, also failed to pay due attention to the detailed analysis of the houses (1968). Although these descriptions lacked any extensive discussions of post moulds or internal arrangements of the houses, they nevertheless marked an initial step towards longhouse archaeology.

It is quite probable that these and other Ontario archaeologists were encouraged by the work of William Ritchie on New York State Iroquoian sites (1956). His work during the 1950's, on Iroquoian settlement patterns culminated with Ritchie and Funk's Aboriginal Settlement Patterns in the Northeast (1973). Although many of the interpretations presented in this publication were tentative, due to small areas of excavation or to the complexity of overlapping post mould patterns (Trigger, 1981: 12), Ritchie and Funk's work provided inspiration for Ontario longhouse excavation.

Yet another impetus for longhouse archaeology in Ontario came from the long-term project at the Cahigue site. Although never reported, the work there stimulated the many archaeologists who were trained at and supervised the excavations, to employ techniques and methods oriented more towards settlement data recovery.

In the theoretical world of settlement archaeology, the 1960's and 1970's were buzzing with new ideas and struggling with definitions and concepts fundamental to the new research projects in settlement patterns and the reconstruction of prehistory.

Chang (1958,1962), Winters (1967,1969), and Trigger (1967,1968) were the predominant contributors to this growing branch of archeaology. Simultaneously, there was a need for new sampling procedures in order that the functional variability among sites

within a settlement system could be more accurately assessed. Thus began an escalating interest in spatial analysis as an inherent part of the new settlement pattern studies.

In 1971, J.V.Wright's "total" excavation of the fourteenth century Nodwell site signalled a change in Ontario archaeology, both in terms of extensive excavations and a concentration on longhouse excavation and analysis (Wright,1974). In his final report, Wright presented a great amount of distributional data and interpretations based on well-defined intra-longhouse features and associated artifacts (1974).

The archaeological project at the Draper site was in keeping with this type of excavation. Although the site had a previous history of excavation (Ramsden,1968; Latta,1974; Hayden 1977,1979), it was under the direction of Finlayson in 1975 and 1978 that the site was extensively "opened up". In his final report on the settlement patterns at Draper, Finlayson documents surely the most extensive and complete data on longhouse excavations to date (Finlayson, 1985).

The work at the Draper site set the stage for many such investigations that demonstrate the increasing emphasis on longhouse excavation and analysis. Examples include the work undertaken by Knight(1978) at the Ball site; M. Wright(1978) at Reid and Uren(1978); Fitzgerald at Christianson(1982) and MacPherson(pers.comm.); Ramsden(1977) at Benson; Smith(1977) at Southwold; Pendergast(pers.comm.) at McKewan site; and Finlayson(pers.comm.;pers.observation) at Keffer.

Most excavations that have focussed on the acquisition of settlement pattern data have been of large proto-historic and historic villages (Dodd,1984). This emphasis is, in part at least, due to the fact that ethnohistoric records are available for this time period and serve as an aid in the interpretations of archeological settlement data. Despite this bias, the development of the longhouse in the Ontario archeological sequence has been established by Dodd(1984), through the Early, Middle and Late Ontario Iroquois stages.

The trends in the developmental sequence for the Iroquoian longhouse depict an increase, followed by a decrease, in all house dimensions. House length, storage

length, house width, taper length, house wall post mould density, hearth spacing, and feature density all reach their maximum measurements during the Middle Ontario Iroquois stage. This trend then reverses itself through the Late Prehistoric-Protohistoric and Historic period. The greatest fluctuation is observed in house length, storage length, and hearth spacing (Dodd,1984:297). This is significant for investigating the social differentiation between houses, since:

> An increase in house length is generally associated with an increase in living space (hearth number and spacing, house width) and storage space (storage cubicle length, bench width) variables. Therefore, an increase in house length is not only associated with an increase in the number of occupants, but is an indicator of the wealth/status of the inhabitants... Apparently the more people a prominent person can have associated with his longhouse the greater his potential labour force, and amount of extra food-stuffs, increasing his ablity to maintain his status through control of access to trade items, and the redistribution of goods.(Dodd,1984: 296-297)

Regarding wealth/status, I suggest that there may also be a correlation between the pre-eminent family and the common occurrence of highest densities of features in the middle sections of longhouses, suggesting the locale of longest or most intensive occupation of the dwelling (see Hayden,1976). That is, I suggest that it is archaeologically possible to determine that the central hearth, with its associated high density of features, belonged to the head of the house. It would be here that people gathered and most activities were undertaken. Other than this disproportionate feature distribution, the longhouse through time displays little or no variation in the symmetrical layout, both side to side and end to end. This uniformity applies to positioning and number of support posts, wall posts, features and the alignment of hearths down the central corridor.

Interpretation of the settlement data for the Proto-historic and Historic periods is supplemented by ethnohistoric accounts of missionaries of the 17th century. It should be recognized that these data have some recording biases. The missionaries' accounts related their interpretations of the new and different culture from their own white European perspective and often overlooked information valuable to the archaeologist.

ETHNOHISTORIC ACCOUNTS OF THE LONGHOUSE

I have drawn from four ethnohistoric sources: the works of Jacques Cartier (Biggar,1924); the writings of Samuel de Champlain (Biggar,1929); the recorded accounts of Recollet Brother Gabriel Sagard during his stay with the Huron in A.D. 1623- 1624 (Wrong, 1939); and the various works authored by Jesuit missionaries,

collected together in *The Jesuit Relations* (Thwaites,1959). From these, a description of the Huron longhouse is constructed.

i) *The size of the Longhouse*. It is obvious that longhouse length varied a great deal, regardless of the fact that some early estimations probably were exaggerations

(Dodd,1984:319). Brebeuf remarked that "There are cabins or arbors of various sizes, some two brasses in length, others ten, others of twenty, of thirty, of forty..."(Thwaites,1959:8:107). This indicates a length range of between 3.1 metres and 74.0 metres (from Dodd,1984:319). The most frequently cited figure for the length of the longhouse was 25 to 30 fathoms or 50 paces (38.1m to 53.4m) (Biggar,1924:156; Biggar,1929:3:123; Wrong,1939;93).

The recorded widths of the longhouses were much more uniform. Estimates of width were almost consistently 6 fathoms (9.2m to 11.0m) (Biggar,1924:156; Biggar,1929:3:122; Wrong,1939:93). Brebeuf estimated a width of only 4 brasses (6.1m to 7.3m) and further indicated that this was also the height of the building (Thwaites,1959:8:107).

ii) *Internal Arrangements*. Both Champlain and Sagard stated that the central corridor or passage, which ran the length of the house, measured 10 to 12 feet across (Biggar,1929:3:122; Wrong,1939;93). Located along this corridor were a number of hearths, each of which provided for one family on either side (Biggar,1929:3:123; Thwaites,1959:15:153; Wrong,1939:94). The number of hearths per house varied

according to its length and number of families - du Peron reported five hearths (Thwaites,1959:15:153), while Champlain and Sagard reported twelve (Biggar,1929:3:123; Wrong,1939:94). Only Lalemant mentions that the hearths in Huron longhouses were usually spaced two to three paces apart(5 to 8 feet) (Thwaites,1959:17:177).

In Cartier's early account of the dwellings at the village of Hochelaga in 1535, there is a suggestion that the families lived in separate apartments within the longhouse. Cartier states: "... inside these houses are many rooms and chambers... the men retire to the above-mentioned quarters with their wives and children"(Biggar,1924:156). However, there is no similar observation made by the later missionaries. It is possible that Cartier's St. Lawrence Iroquois houses were different from Huron houses. Perhaps, for privacy, hides were used to fashion flexible, temporary partitions. As Sagard depicts: " At the two sides there is a kind of bench four
to five feet high, extending from one end of the lodge to the other, on which they sleep in summer... The whole space underneath the benches, they fill with dry wood to burn in winter..."(Wrong,1939:93-94). As Sagard and others suggest (Thwaites,1959:8:107-109) the area under the benches was primarily used for storage purposes.

The area under the benches was not the only storage facility of the longhouse. Accounts indicate that "porches" at the ends of the houses were used to store casks of dried corn and fish (Biggar, 1924: 158; Biggar, 1929: 3: 123; Wrong, 1939: 94). Sagard
comments that: "...they put away in casks their most precious possessions and bury them in deep holes dug inside the lodges, they cover them with the same earth..."(Wrong,1939:95). Similar holes were also dug to store food. This practice and the sweeping of their houses of soot and debris, was done in preparation for village attacks and the prevention of fire (Wrong,1939:156).

The majority of longhouse activities was communal and took place in the central corridor. These activities included cooking and eating (Thwaites,1959:15:153; Wrong,1939:93), sleeping (Biggar,1924:247; Biggar,1929:3:123; Thwaites,1959:38:247; Wrong,1939:93), and feasting, dancing at council meetings, and ceremonies (Thwaites,1959:15:173; Wrong,1939:115,152,161). Sweatbathing (Thwaites,1959:38:253;

Wrong,1939:197) and keeping bears in circular enclosures to be fattened for feasts (Wrong,1939:220) were also activities practised in the longhouses.

iii) *Construction.* Huron longhouses were most often described as being fashioned like "arcades or arbours" covered with bark (Biggar,1924:156; Biggar,1929:3:122; Wrong,1939:93; Thwaites,1959:8:105). As for the actual construction technique, little has been documented. Lalemant refers to walls and roofs of bent poles in which there was no separate roof structure (Thwaites,1959:17:17) and Bressani mentions that the bark walls were supported by beams (Thwaites,1959:38:247). The lodge built for Sagard was not built "in season" and hence there was "...not one single small corner in our hut where the rain did not come down as it did outside"(Wrong,1939:81). This poor construction might be due to the fact that the best time for building was during the spring season when, because the sap was running in the trees, the boughs would be more pliable and easier to bend in an "arcade-type" fashion (see Heidenreich,1971:120).

The design, or what we know of it, was relatively simple with interior support posts to stabilize the structure, an arched roof, no windows, smoke holes along the midline of the roof, and one door at each end of the house (Biggar,1929:3:124; Wrong,1939:93-95; Thwaites,1959:8:107;19:193). Only two features of the longhouse appear to individualize the houses. The first is that some entrances were sheltered by a small roof or porch overhead (Thwaites,1959:16:241); and the second is that the fronts of the houses were often painted with figures of animals, birds, men or beasts in red or black colours (Wrong,1939:98; Thwaites,1959:10:47).

iv) *Functional Difference between Houses.* Some longhouses within the village were noted as being particularly long. These were the houses of the village civil chiefs or war captains (Thwaites,1959:13:59; Wrong,1939:149,178). In addition to the primary function - to serve as a residence for their inhabitants - these houses had communal functions for the village as a whole, in accomodating large crowds assembled for council meetings, feasts, games and in providing lodging for visiting dignitaries (Wrong,1939:115,152,161; Thwaites,1959:8:93; 10:181,233,251; 15:173). Within these multifunctional longhouses, seating according to rank was apparently important. For example, during feasts men sat on mats at the " upper end and the

women and children next to them lower down" (Wrong,1939:111). Other examples of seating priority were noted by Sagard at torture ceremonies (Wrong,1939:161); at council meetings (Wrong,1939:149); and at dances and marriage ceremonies (Wrong,1939:123). If this seating priority were visible archaeologically, then this might be one way in which a chief's house could be recognized. However, Heidenreich (1971:121-122) comments that:

> Archaeologically, except on the basis of unusual size, such longhouses [that is, chief's houses] may be difficult to define. Judging from meagre descriptions, the interior of the chief's house differed little from any other longhouse (Thwaites,1959: 13:61). As yet, no unusual differences have been noted in the interior arrangement of Huron longhouses which would enable one to classify some of the council houses.

There are dangers in relying too heavily on ethnohistoric descriptions of longhouses. First are problems of incompatibility among the different ethnohistoric sources. Secondly, as missionaries were housed in chiefs' lodges as dignitaries, it is possible that their accounts describe the few unique houses, rather than the typical dwellings of the village. Finally, the missionaries were not motivated by an interest in ethnography, and as a result their records often lack accurate information important to the archaeologist. As suggested by Heidenreich, longhouse characteristics provided in the ethnohistoric accounts of the missionaries often are not recovered in the archaeological context. The ethnohistoric accounts coupled with the archaeological information have, however, provided the data base for the traditional interpretation of the settlement patterns of longhouses on Iroquoian sites.

The assumption, based on ethnohistoric records, that the longest house in the village is the 'chief's' house, needs to be tested. The artifact assemblages of houses within a village should reflect the different status of the chief and the different function of his house. The artifact assemblage analysis may, however, illustrate that other factors may produce the same results in the settlement patterns. One such factor is length of house occupation. This would then invalidate the common assumption concerning the identification of a chief's house.

The next section of this chapter will discuss the differences expected from the artifact assemblage of a typical house and a chief's house. The final section will

address the problems involved in artifact distributions as part of the archaeological context and their representation of the systemic context.

LONGHOUSE ARTIFACT ASSEMBLAGE

If the difference between a chief's house and an ordinary house is rooted in the different functions of those two houses, then we must examine the activities unique to each house and determine if the artifact assemblage reflects this difference.

i) *Typical Longhouse*: This designation refers to a house that functions solely as a domestic unit both in terms of sociopolitical and economic organization.

Wilk and Rathje (1982:622-631) suggest that the functions of a household are: 1) production; 2) distribution; 3) transmission; and 4) reproduction. But what does this mean in terms of on-the-ground daily activities? As mentioned in an earlier section, the communal life of the inhabitants centered on the central corridor of the dwelling. It was here that food was prepared, cooked and eaten[1]. It was here that people gathered in social interaction - talking over the day's events, telling stories, playing games[2]. It was here that people made their tools of bone or stone on rainy days or during the cold of winter. It might be expected that families within the longhouse were positioned spatially in order of rank. I suggest that the central hearth, which has archaeological evidence of longest occupation or most intensive use (Dodd,1984:296), was the site of the most prestigious family of the house group. This family would act like a magnet - people were drawn to them because of their social position. This family would attract the biggest gathering around the supper pot or for evening gossip (see Hayden, 1977:5). This greater amount of activity is recognized archaeologically in the settlement feature density and the artifact assemblage density. It seems more plausible that the central hearth belonged to the most prestigious family because of this archaeological evidence and because the middle hearth would most likely be the warmest, away from the drafts closer to the ends of the house. There

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[1] Hayden (1977) suggests that the members of a longhouse were a corporate unit that communally produced their food, which was stored in the ends of the house. This food was distributed among the longhouse members by the ranking family.

[2] These acts of socialization and transmission of knowledge and information fulfill another function of the household as outlined by Wilk and Rathje (1982).

is no archaeological evidence that suggests the ranking family would be at one end of the house, where they could control access to the storage area.

Given these typical activities of the longhouse members, the artifact assemblage should include a wide range of different artifact types. Hayden's distributional work on House 2 at the Draper site (1977) illustrates longhouse activity areas and the diagnostically associated artifacts. Here chipped stone manufacture was interpreted from the co-occurrence of cores, debitage and scrapers; floral processing from manos, scrapers and the absence of other materials; boneworking from ground material, ground phalanges, beads, scored material, scrapers, ground stone and debitage; recreational areas from ground and faceted phalanges, and "cup-and-pin" phalanges; and hideworking from awls, scrapers and projectile points (Hayden,1977:15-16).

ii) *Chief's House*. Along with the domestic function and activities and associated artifact assemblage of the typical longhouse, the chief's house had an additional dimension. It functioned also as a public house - a representation of the sociopolitical and economic organization of the village as a whole. In terms of production, distribution, transmission and reproduction, the chief's household worked at two levels: private (domestic) and public.

The ethnohistoric records provide numerous accounts of the activities that were specifically attributed to the chief's house (Wrong, 1939: 115, 152, 161; Thwaites, 1959: 8: 93; 10: 181, 233, 251; 15:173). These include, as outlined previously, such events as gathering for council meetings, feasts and dances, curing ceremonies, marriage ceremonies and tortures of prisoners of war. Again, these activities took place along the central corridor of the house. The village people gathered to watch and take part, seated on the benches or crowded along the length of the house close to the fires, as food was distributed and pipes passed. Again, it may be expected that the greatest portion of the ceremonies would revolve about the central hearth - the chief's hearth. This is suggested archaeologically by the high settlement feature density and artifact assemblage density found around the central hearth of the house.

The nature of the artifact assemblage of such houses would be a varied collection of private (domestic) as well as public items. Archaeologically, one would expect the intensification of features (especially hearths and sweatbaths) and post moulds, and similarly a greater density of artifactual remains, especially those associated with meal preparation and feasting. This assemblage would not be evenly distributed

through the length of the house and thereby be attributeable to a greater house population. Rather, it would be more likely that concentrations would be located near the central hearth and drop off towards either end of the house. In addition to this overall greater density of artifact, one would expect to retrieve more status/wealth or ritual related goods. Such artifacts might be turtle shell rattles, beaver or bear incisors, ground deer phalanges, bone beads, human skull gorgets, or pipes. These artifacts have been associated with Iroquoian ceremonialism and it is expected that a chief's house would yield these kinds of materials, as they would signal the high status, power and wealth of a house's leader.

Although these artifact types have social status value, the Hurons prized generosity and the equal distribution of goods as the greatest means of acquiring high social status (Ramsden,1981; Herman,1956). It is possible then that the expected distribution of artifacts in the chief's house (those associated with wealth and status) may not be apparent. However, the redistributional function of a chief presumably still would result in more debris (of shell beads and other decorative items) in his house. He would accumulate these items for a while, use them in personal display and eventually discard them within his house. Similarly, ritual items (pipes and rattles) would be used more in his house and therefore also presumably result in more debris. Regardless of whichever scenario is correct, either might not be visible in the archaeological record due to the depositional and post-depositional patterns that tend to obliterate the manufacture and use patterns of the artifacts.

ARCHAEOLOGICAL AND SYSTEMIC CONTEXTS

According to Whallon (1973:115), the basic underlying assumption of spatial analysis is that artifacts "...classified into separate tool types, should be differently distributed on prehistoric occupation floors as a result of their differential utilization in the various separate activities carried out by human groups at each location used or inhabited". This has been the working hypothesis of many archaeologists undertaking spatial analyses, including Binford (1962), Clarke (1968), Hill (1970a, 1970b), Longacre (1970) and many others. This notion that the archaeological record directly reflects the living culture is what Schiffer deems the "single most common

inappropriate transform" (1976:44). Schiffer instead proposes that there is a clear distinction. The 'systemic context' is "the condition of an element [ie. an artifact] which is participating in a behavioural system"(Schiffer,1972:157), while the 'archaeological system' is the condition in which materials "...have passed through a cultural system, and [which] are now the objects of investigation of archeologists" (1972:157). However, it has been commonly assumed that artifacts spatially associated in the archaeological context were also associated in the systemic context; that archaeological quantities are directly related to systemic quantities; similarly, that archaeological frequencies of distribution are directly related to systemic frequencies of distribution; and that internal variability within the archaeological remains directly corresponds to the systemic variablity (Schiffer,1976:44). But "... archaeological remains are not in any sense a fossilized cultural system. Between the time artifacts were manufactured and used in the past and the time these same objects are unearthed by the archeologist, they have been subjected to a series of cultural and noncultural processes which have transformed them spatially, quantitatively, formally, and relationally."(Schiffer,1976:11).

The 'non-cultural formation processes' or 'N-Transforms' are changes that occur to the archaeological record after deposition. These post-depositonal changes such as wind, water, rodent activity, and chemical action can alter site and artifact morphology (Schiffer,1976:15).

It is with the 'cultural formation processes' or 'C-Transforms' that Schiffer is most concerned. These transforms are the "laws that relate variables of an ongoing cultural system to variables describing the cultural deposition or nondeposition of its elements" (Schiffer,1976:14). Schiffer outlines a flow model for the life of an artifact in the cultural or behavioural system which includes five processes: procurement, manufacture, use, maintenance (which may involve lateral cycling - recycling or reuse of an item), and discard (1972:158-59). What is important and relates to the concept of C-Transforms is that there is a "... specifiable spatial location, or locations, for each process through which an element passes" (p.160). That is, at any time during these five processes, an artifact may be discarded and become 'refuse' within the archaeological context. Only 'primary refuse' is spatially distributed in the same location as the element's use-area. 'Secondary refuse' is the condition in which the location of the final discard is not the same as the location of use. An example of this may be artifacts that are swept towards the walls of the house or carried to a nearby

midden. 'De facto refuse' is the condition in which the element has not undergone the process of discard. This may occur when an artifact is lost or the site is abandoned and the artifact is left behind despite the fact that it is still usable.

Schiffer's argument is intended to warn archaeologists not to over-simplify the spatial distributions of artifacts on an archaeological site. Although I do not concern myself in this analysis with the complex statistical operations that Schiffer presents for determining the cultural process of discard, I have tried to take into account the possibility that my data are suggestive rather than conclusive in terms of distributional patterns. As for the problems of archaeological quantities, frequencies of distribution, and internal variablitity corresponding directly to that in the systemic context, I feel that any artifact assemblage is merely a sample of the survivors of the materials that were onced used. As such, the artifact assemblage can only offer general interpretations of what the original material collection involved. In gross terms, however, a comparative analysis of artifact assemblages should reflect significant differences in archaeological quantities, frequencies of distribution, and internal variablity. True, there may be some small discrepancies, but I do not believe these are of a magnitude to affect my results greatly. My aim in most cases is not to determine use-areas in the houses, but rather to get a general idea of the activities and of the artifacts that were once part of the houses' collection.

With these assumptions and goals in mind, and in an attempt to clarify the differential functions and associated social differences in the Draper longhouses, the investigation and discussion of activity areas and associated artifact assemblages must be approached cautiously. An effort must be made to incorporate a broader understanding of the behavioural system that formed the archaeological record.

In chapter 2, I outline the basis of the analysis - the actual questions that I will address and why I choose to address them in the fashion that I have. Chapter 3 addresses the observations of my analyses, in terms of artifact assemblage variation and distribution. Chapter 4 compares the assemblages and the distributions from the two houses and summarizes the results of the analyses. The final chapter draws conclusions and presents interpretations of the study of the two houses.

CHAPTER2: INTRODUCTION TO ANALYSIS

Before addressing the actual observations and results of my analysis, it is important to get a clear understanding of why the Draper site, the houses analyzed, and these particular artifacts were chosen in this study of Iroquoian social differentiation. In the following section I will outline my reasons for such decisions. This will provide the necessary foundation for my analysis.

The Site

The Draper site (AlGt-2) is a late fifteenth century Huron village, located on the west bank of the West Duffin Creek, in Pickering Township. This site was and is considered important since it is very large and partially undisturbed. These characteristics, coupled with the threatened destruction of the site by the proposals to construct the New Toronto International Airport, motivated the large scale salvage excavations of 1975 and 1978 through the Museum of Indian Archaeology, London, Ontario and the Archaeological Survey of Canada, National Museum of Man, Ottawa. Despite the history of the site's previous smaller excavations (Ramsden,1968; Latta,1974; Hayden 1977,1979), it was through these rescue operations that the site was completely "opened up", revealing its three components: the Main Village, the South Field, and Structure 42 (the so-called "special purpose" structure).

Finlayson undertook an extensive analysis of the settlement patterns at the Draper site (1985). In his report, he studied the internal layout of each house, and the orientation and clustering of houses within the village. From these data he presented a hypothesis on the sequence of village expansions, suggesting that defence was a principal factor in the organization of the village and that warfare was the cause for its growth. He further speculated on the clustering of houses with similar orientations as evidence of the presence of clan segments within the village. Each segment was associated with a civil and/or war chief's house. These houses were recognized through particular characteristics in their settlement patterns. Finlayson used the

1) being the longest or second longest
2) being the widest
3) having the highest estimated density of wall post moulds
4) having the highest density of sweat bath post moulds
5) having the highest density of interior house isolated post moulds
6) having the greatest average distance between hearths
7) having the greatest estimated area per person (based on the hearth spacing)
8) having a special purpose hearth inside one end of the house (and hence not associated with any of the side benches) (1985: 175-176)

Despite this long list of attributes, of the three designated "chief's" houses in the Main Village, only one characteristic was common to all three: "That is they were all the longest or second longest in their [village] segment" (Finlayson,1985:411). It seems clear that Finlayson considered this feature by far the most valuable in distinguishing a chief's house from the settlement data. Further, characteristics numbers 3, 4 and 5 could be more easily explained as a function of longer term occupation than diagnostic of a chief's house. It appears that there is confusion about differentiating between the two.

Given the extensive nature of the settlement analysis undertaken on this site, and the conclusions drawn from this investigation concerning civil and war chiefs, village segments, and the representation of these segments participating in village council meetings (1985:416), I chose the Draper site to examine the evidence for this hypothesis of social differentiation for Iroquoian villages.

The Houses

My aim was to choose two houses within the site that would allow comparison of the artifact assemblages in association with the internal settlement data of a "chief's" house and a "non-chief's" house.

House 12 is within the Main Village in Segment A (the core village, according to Finlayson). Based on his analysis of the settlement patterns of this house, Finlayson labelled this as a chief's house as it exhibited all of the above-mentioned diagnostic

characteristics. It is located in the undisturbed (ie. unploughed) portion of the site. The method of excavation involved the removal of sod, and hand digging through the topsoil by shovel in one meter squares. The topsoil was then screened by hand through 1.3cm mesh.

House 12 is 53.6 meters long and 7.9 meters wide. Its features and post moulds are densely distributed. These features often overlap down the length of the house. Seven circular clusters of post moulds are considered to represent sweat baths, which almost fill the entire length of the central corridor. A total of 9 hearth floors were identified in H12. Several of these formed 'hearth clusters', and were presumably used by the same house occupants who had moved their cooking hearth a number of times. One hearth is located 2.5 m inside the north-western end of the house. This hearth was interpreted by Finlayson as being a special purpose hearth as it is not associated with the bench lines and hence with a family or domestic activity (1985:154). In addition to the sweatbaths and hearths, there are also a total of 101 pits. Most of these are small pits[1] (n=99), although there are two large pits, that have a mean length of 167.5 cm, a mean width of 81.0 cm, and a mean depth of 24.0 cm. All but five of the 101 pits are located in the central corridor or just along the bench lines (ie. roughly 2m in from the house walls). The five pits that do not follow this pattern are adjacent to or within 1m of a house wall. It must be considered that the three small pits that are located right against the house walls may actually be an irregularity in the wall trench lines or merely a larger, irregular house wall post mould. There is also one dog burial from the central corridor 14.3 m from the southeastern end of the house, associated with several small pits just beyond the range of the last hearth cluster. Finlayson suggests that there is evidence of storage cubicles only in the southeastern end of the house (6 m that lack interior features). However, I suggest that other than the 'special purpose' hearth, the northwestern end of the house is also free from interior pits and can equally be interpreted as a storage area. Given the occurrence of these two end storage cubicles, the length of the central corridor is 44.3m long starting 6m inside the southeastern end of the house, and ending 5m before its northwestern end. Given the occurrence of 2m wide benches along the house walls (as indicated by several bench support post moulds located 2m inside either wall), the central corridor is

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[1]The sizes of these pits have a length range of 18-110 cm, and a width range of 7-81 cm (Finlayson, 1985: 156).

approximately 4m wide. With the large number of sweatbaths, hearths, pits and interior isolated post moulds (n=302) located through the central corridor, it is clear that the activity area of the house has a dense concentration of features and posts- 24% of the total space within this house (423 square metres) is taken up with features alone. See Figure 1 on page 24 for a floor plan of this house.

House 38 is also within the Main Village in Segment D (the second expansion to the core village, which is almost equal in size to the core village (Finlayson,1985:425)). This house is the shortest and narrowest in its segment, and does not have house wall trenches as does H12[2] . Although this house yielded 3 sweatbaths, 3 hearth floors, and 17 pits, it has a comparatively low density of internal features along its central corridor. A large open area to the east of this house, just north of Midden 53 created the village's second central plaza (Finlayson,1985:426). This house, like H12, is located in the undisturbed portion of the site. As a result, the excavation techniques employed were similar to those undertaken in H12. These involved hand digging the topsoil by shovel in one meter squares. The living floor deposits were waterscreened using 1.3 cm mesh.

House 38 is 26.8 metres long and 7.7 metres wide. The features and post moulds are concentrated along the central corridor. Three circular clusters of post moulds represent sweatbaths. Likewise, 3 hearth floors were recorded from the central corridor. In addition to these features there are 17 pits. Most of these are small (n=13), although there are 4 large pits with a mean length of 116.3 cm, a mean width of 82.3 cm and a mean depth of 25.5 cm. All pits are located either in the central corridor or just along the bench lines of the house (ie. approximately 2m inside the house walls, as indicated by the occurrence of several bench support post moulds). There were no burials found in this house. The lack of features and post moulds in the ends of the house is suggestive of two end storage cubicles. In H38, the northern end storage area

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[2] Trenches "...did not correlate with houses of particular size, nor did their presence or absence relate to a method of excavation" (Finlayson, 1985:172). Despite the occurrence of at least one house in each segment that exhibited footing trenches for its walls, this construction technique is not common at the Draper site, except for within Segment A (the core village), where five out of seven houses exhibited this technique. Perhaps these first houses of the village, in anticipating a long stay, adopted this sturdier technique of wall construction. If this is the case, then, evidence of a wall trench at H12 and not at H38, supports the idea that H12 was occupied for a greater length of time, or, rather, was meant to be occupied for a greater length of time.

is 8m long, while the southern end is 5m long. Given these storage area and bench line dimensions, the central corridor is only 15m long and 3.6m wide. Despite the occurrence of sweatbaths, hearths, pits and interior isolated post moulds along this shorter and narrower central corridor, H38 has a comparatively less dense distribution of interior features and posts than does H12 - only 8% of the total space (201 square metres) is taken up with features. See Figure 2 on page 25 for a floor plan of this house.

I chose these particular houses to compare because of their obviously distinctive and very different settlement patterns. Further, I aimed to control,as best as I could, the possible variables that might skew the artifact assemblage yields . Both H12 and H38 are from undisturbed portions of the site, on sand rich soils (1985:25). Similarly, both houses were excavated using the same techniques of earth removal and sreening (albeit H38 was waterscreened, both were hand and not mechanically screened). The fact that both houses were dug in one meter squares was crucial to my analysis of the distribution of artifacts within the houses - compering the yields of one meter squares with the yields of quadrants would have been like comparing apples and oranges.

I was not, however, able to control all the variables I would have wished. The fact that these two houses are from different segments of the village and thus represent differences in the length of house occupations, is worrisome. This factor indeed could skew otherwise very comparable artifact assemblages. That is, if differences occur between H12 and H38, it may be difficult to determine whether this is the function of social differentiation or of differences of length of occupation.

I believe that the affects of length of occupation have been poorly dealt with in the past. In many cases throughout my study, I have realized that differences found between the two houses under investigation easily could be the result of duration of occupation. Differences in the artifact assemblage size and variability, could be explained by this factor. A greater number of artifacts would be expected in a house that had been occupied for a longer time. Similarly, greater variety would also be expected since with a larger sample size, there is greater opportunity to have more variety of artifacts - ie. sample size is related to variety. A longer house occupation also could account for the differences in settlement data. This study adrresses length of occupation as an alternative explanation for the patterns observed in the two houses.

There is another variable that I could not control in my analysis of H12 and H38. House12 is 49 degrees West of North, and was labelled as a 'Group 1' house (1985:150).

House 38 is180 degrees West of North, and was labelled as a 'Group 2' house (1985:190). Finlayson differentiates houses according to orientation, arguing that they represent different clan segments within the village. Depending on the artifacts, differences that may occur between the artifact assemblages of H12 and H38 may be related to differences in clan association.

The Artifacts

For my investigation I wanted to compare the artifact assemblage and its distribution throughout the two houses. In order to do this I hoped to be able to look not only at a sample of each house's assemblage, as has been done in the past (see Tyyska,1969), but to look at the entire collection from the houses. However, in assessing the feasibility of doing this I had to modify my approach. To have analyzed every fragmentary sherd or every piece of charcoal would have left me with an enormous amount of data that may not have yielded any further insights into the question of social differentiation based on the artifact assemblages. My analysis dealt only with the following categories of artifacts:

1. Rim Sherds
2. Pipes
3. Chipped Lithics
4. Ground and Rough Stone
5. Bone Artifacts
6. Mammalian Faunal Material

It should be noted, too, that the faunal analysis was only of mammalian species. However, it is widely accepted that in Iroquoian faunal assemblages, mammal bone is easily the predominant component. Burns indicates that this assumption is applicable to the Draper site (Burns,1979: 124). In fact, given the excavation techniques of the two houses under investigation, only mammal bone would be adequately represented.

I examined the differential quantity and 'quality' of artifacts within the above-mentioned categories. In terms of quantity, I assessed the frequency of occurrence of various types in addition to noting the variation that existed. For example, I not only observed the total sample size of pipes within the house, but also the number of different types of pipes. In many instances I have correlated greater levels of variation of specific types with artifact abundance. The length of house occupation will often account for such variation since longer occupation will result in higher artifact yields, and hence a greater chance that the artifact types will be more varied.

The notion of variety within the specific artifact class in part deals with the way I recorded the quality of the artifact assemblage. Depending on the variation present and the different frequencies of some specific categories, I determined if this could be evaluated in terms of domestic versus public activities. That is, I intended to determine if differences in the artifact assemblage indicated different functions of the two houses in question. Further, I wanted to see if the artifact assemblages yielded insight into differential access to status-valued items. This might be indicated in a higher household percentage of such items as deer phalanges or effigy pipes.

In analyzing the material, I questioned the function of the artifacts, and how they might help in determining the activities of the household. Ceramic analysis has been used as the theoretical and methodological key to understanding Iroquoian archaeology. From this analysis, a site is defined in terms of its place in the culture history of an area. In examining the rims from houses 12 and 38, I concentrated not so much on the cultural or temporal aspects, but rather on the differences that one might expect to find between domestic versus ceremonial ceramic wares. Thus, I focussed on the extrapolated size of pots and the intricacies of neck and collar motifs. However, variety and abundance of rims might equally suggest a long occupation during which time many ceramic pots were used and broken in the course of daily activity.

The analysis of ceramic pipes also has been used most often to aid in defining a site's place in the culture history of an area. In my analysis of the pipes from houses 12 and 38, I was more interested in looking at the clustering of pipes and pipe types and their spatial relationships with sweat bath areas. Finlayson suggested that sweat bathing was an important integrative mechanism used by the men in the village (1985). If this is correct, any observed clustering of pipes (which have been associated with men's activities) is important to understanding of the household alliance networks. If there exists a striking difference in the number and kinds of pipes from

the two houses, then this may indicate differential house functions, in terms of feasts and ceremonies, and differential social status of the house's occupants who regularly partook in male gatherings.

Due to the paucity of locally available chert of suitable quality for chipping, the Draper people imported nearly all of their chipping stone. Onondaga chert was almost exclusively sought. Perhaps because of this, the chipped lithic industry and the raw material itself were highly valued. Poulton notes that the ways in which the Draper people attempted to maximize their chert resources

> ... may be seen in the use of the bipolar technique, in the high incidence of retouch and utilization of cores and debitage, and in the high frequency of multi-purpose tools and/or reused or reworked tools and tool fragments. (1985:37)

In my distributional analysis of the chipped lithics from houses 12 and 38, I focussed on the suggestion that this industry was status-laden. If there is a difference in the quantity and variety of chipped lithic objects, and disproportionate evidence of conservation techniques in the chipped lithic assemblage of the two houses, then this would represent differential access to the valuable raw material and ultimately social differentiation of the two houses' occupants.

In the ground and rough stone artifact collection, most items were natural rocks selected and used with little or no modification (Pearce, 1985:15). Those items that were deliberately and extensively modified prior to use (celts, beads, pendants, and discs), probably required much time and care in manufacture and likely were valued because of this. It has been suggested that celts or adzes had a special value in trade between villages. Kapches suggests that quarried celts often were widely traded and that "...tracing the distribution of the blanks or completed celts can assist in determining trade networks and travel routes" (1979:77). Further, it has been suggested that "...ground stone adzes [celts] may have been an important economic item manufactured at and traded out of Draper" (Latta, pers. comm. in Hayden, 1977:6). In my analysis I focussed on these specially modified ground stone artifacts. As for the remaining artifacts of this assemblage, I would suggest that they were employed in the daily

activities of domestic life within the house. If an abundance of these items is recovered from the houses, then I suggest that this is evidence of long term occupation.

Bone artifacts, like ground and rough stone artifacts, can be classified according to two types of functions. In analyzing this assemblage, I differentiated between bone tools (which are associated with domestic activities), and bone jewellry, games or tokens. I would expect to find at least some of these latter types of bone artifacts in any house, but would predict that there would be a greater number of them associated with a house whose occupants held a higher social status in the village.

Sagard wrote of the importance of feasting at ceremonies and dances. (Wrong,1939:111) Thus, in examining the mammalian faunal assemblages from the two houses, I was interested in the relative quantity and variety of species that were recovered. I attempted to determine if there were any differences in the diet of the people of H12 and H38, and further if there was any evidence for feasting activities. However, it may be difficult to distinguish between feasting activities and prolonged ordinary cooking activities. That is, variety and abundance of faunal material might alternatively suggest a long occupation.

With these questions in mind I analyzed these artifact categories and their respective distributions throughout the 'chief's' house (H12) and the 'non-chief's' house (H38) at the Draper site. Can social differentiation be accurately assessed using artifact assemblages in lieu of, or in conjunction with, the traditionally employed settlement data?

CHAPTER 3: ANALYSIS OF ASSEMBLAGE VARIATION AND ARTIFACT DISTRIBUTIONS

In this chapter I outline my analysis and the observations that came from the investigation of each artifact categories. The first part of the analysis is descriptive rather than comprehensive. My intent is to address the abundance, variation and the frequency of artifact types within the artifact asssemblages of each house.

The second part of the analysis is a locational study of the distribution of the artifact assemblages throughout the houses. To aid in this study, distribution maps of the precise location of artifacts within each category have been included. It should be noted that these maps are not artifact-specific, but rather group all rims, all pipes, etc. together. For a breakdown of artifact-specfic provenience locations, see the catalogue in Appendix 1.

It will be noticed that artifacts that are located outside the house walls often are included in these analyses. There is some uncertainty that these artifacts belong to the house' artifact collection. I have incorporated them as part of the house collection based on a study that tested for the degree of drop-off in artifact densities as one moves away from the house walls (see Appendix 2). The results suggest that these 'outside' artifacts do belong to the house's collection.

In order to discuss the distribution patterns in general, I subdivided the longhouses into the sections as follows (see Figure 1 and 2):

1) North/South Door
2) North/South End
3) North/South Half (or in the case of H12, North / Middle/ South Third)
4) Central Corridor
5) House Walls (ie. within 1-2 m inside or outside of the walls)
6) Bench Lines

DRAPER SITE: AIGt — 2

HOUSE 12

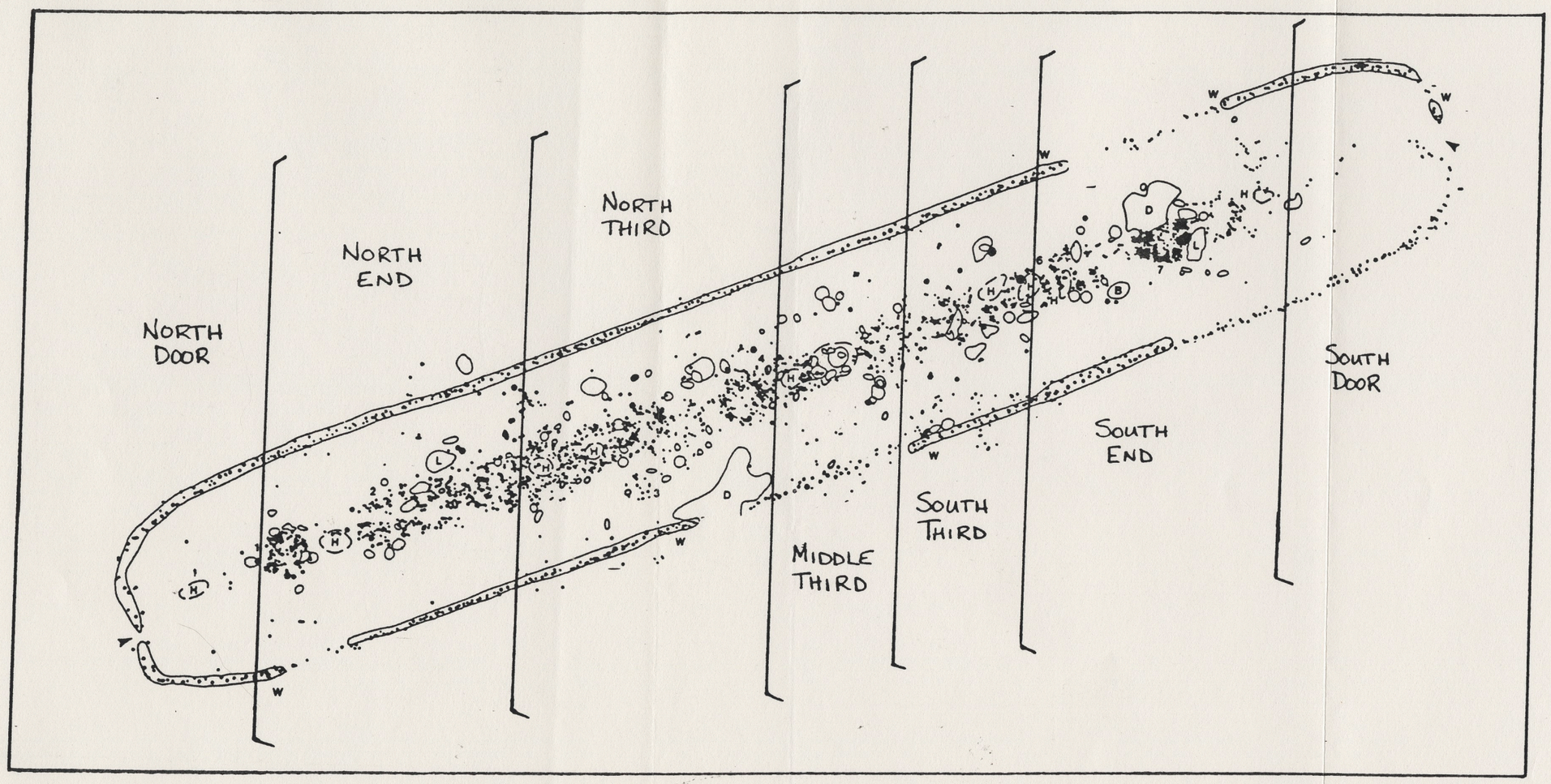


FIGURE 1: HOUSE 12 FLOOR MAP WITH HOUSE SECTIONS

DRAPER SITE: AIGt — 2

HOUSE 38

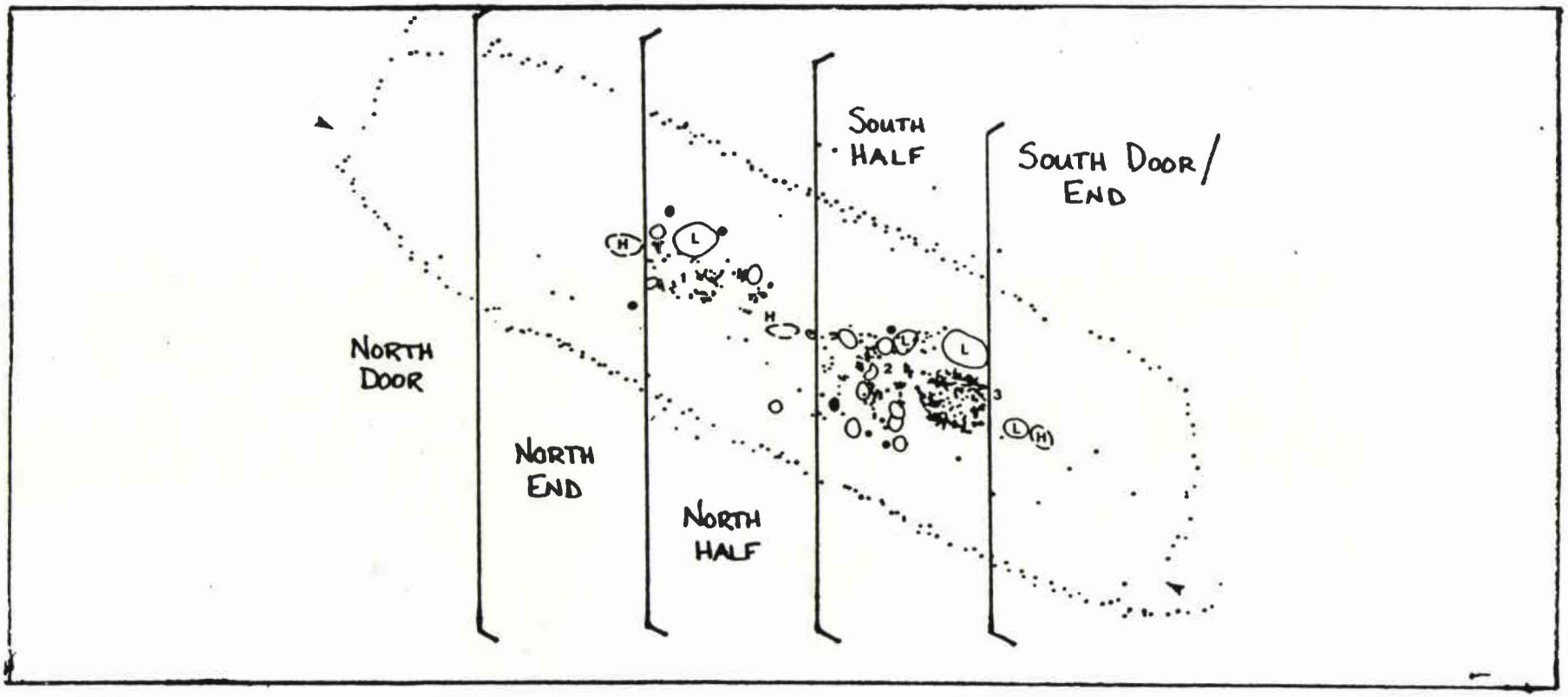


FIGURE 2: HOUSE 38 FLOOR MAP WITH HOUSE SECTIONS

Artifact frequency bar graphs have been also included in the distribution discussions as another visual aid in deciphering patterns of distribution. One bar graph groups the frequencies of artifacts using the house sections. To simplify this graph, numbers have been used to signify the sections. Thus, in H12 house section '1' is the south door area; 2 is the south end area; 3 is the southern third of the central corridor; 4 is the middle third (the 'band' of concentration); 5 is the northern third of the central corridor; 6 is the north end; and 7 is the north door area (with the 'special' hearth). In H38 the number of house sections is reduced as the central corridor is divided only into two halves, and the the south door and end area are combined (as there is no real difference between these two areas).

The second bar graph illustrates the frequency of artifacts by 5x5 metre squares. Here too, numbers have been used to signify these squares in order to simplify the graph. Like the house sections, '1' begins in the south door area, the very southwest square of the house. The graph plots the frequencies of the squares of the house moving west to east from the southern door to the northern door.

A comparative summary will be presented in chapter 4 in order to interpret the meanings of the distribution patterns.

RIM SHERD ANALYSIS

Method:

In studying the rim sherds of the two houses, my aim was to look for variation that may be socially significant in the collections. By examining both the elaborateness of the motif and the estimated size of the pot to which the rim belonged, I felt that I would be able to distinguish socially significant varieties of pots. Identifying the rims as particular types on the basis of the existing ceramic typologies (MacNeish, 1952), would have presented its own problems. Due to a lack of clear distinction between types, ceramic typologies are subjective and arbitrary in nature. (NOTE: a prime example of the differing results that can be produced when two researchers examine the same

collection are the interpretations of the Payne site presented by both Emerson and Pendergast (Emerson, 1968).) I therefore decided to undertake an attribute analysis of the rims. Smith's ceramic attribute coding system (1988) is a rigorous and accurate method of analysis. However, I felt that it was too intensive and cumbersome to be used for my simpler research goals. Ramsden's A Refinement of Some Aspect of Huron Ceramic Analysis(1977), presented a practical method that I could modify to emphasize my own interest in the data. He states that the use of attributes is more sensitive as an indicator of both spatial and chronological relationships: " The major practical advantage of attribute analysis is the ease of definition and mutual exclusiveness of attributes. Much of the subjectiveness and arbitrariness of type classification is absent, and thus more confidence may be placed in the ceramic analysis of other authors" (Ramsden, 1977: 18; see also Wright, 1967). His emphasis, like mine, is on the nonchronological causes of ceramic similarities and variations (p.22).

Initially I was recording six attributes: presence of collar; thickness of rim; height of collar; estimated orifice diameter; location of decoration; and motif. I decided, however, that some of these attributes were either inadequate for determining pot size or were redundant in examining the extent and elaborateness of the rim's decoration. Rim thickness is a misleading indicator of pot size as the collar may be regarded as a separate entity from the pot and, although it is unlikely that a very thick rim would be associated with a very small pot, there are better and more accurate methods of estimating pot size. Similarly, I found that collar height does not always correspond to the size of the vessel. Although it seems reasonable that a high collar would fit on a larger pot, I could not support this quantitatively. I was reluctant to use the estimated orifice diameter to infer vessel sizes, as I felt that this measurement was somewhat arbitrary - a matter of eye-balling - and further because it is known that Iroquoian pots often were not perfectly circular. However, a significant positive correlation between estimated orifice diameter and vessel volume was indicated in a sample of complete vessels found at the historic Neutral Grimsby cemetery (W. Kenyon, 1982). Using these data, Warrick suggests that "...it is likely that Neutral vessel mouth widths less than 22cm (i.e., about one to six litres) were small cooking pots that were used by individuals and nuclear families...Larger pots were presumably reserved for guests and household feasts"(1984:114). In my analysis, I divided inferred pot size (volume range) from orifice diameters into four categories of small, small to medium, medium, medium to large, and large.

When recording the motif of the rim sherd, I had to indicate where the decoration existed and so simultaneously recorded the presence of collar and the location of the decoration.

Although I noted the existence of interior and lip decoration, I did not categorize either. However, some interesting fluting and multiple scallop castellations often were present in addition to the regular incised lines and punctates. Collar motif was emphasized more than were neck and secondary motifs which I tended to group together in terms of extent of elaborateness. The following lists the possible variants that were recorded for collar, neck, and secondary motif:

A. collar motif-
1. Simple - Oblique to the Left
- Oblique to the Right
- Vertical
2. Opposed
3. Horizontal
4. Crossed
5. Hatched
6. Complex (Ramsden,1977:96-99)

B. neck motif-
1. horizontal
2. horizontal/?
3. oblique
4. opposed
5. complex (Ramsden,1977:114)

C. secondary motif-
1. frontal lip notching
2. upper punctates
3. lower punctates
4. basal notching
5. sub-collar notching
6. dividing punctates (Ramsden,1977:120)

It should be noted that I have moodified Ramsden's use of neck motif categories, using instead the designations used for collar motifs. I felt that this provided greater detail of motif variation.

Rim Assemblage:

a) HOUSE 12

The total sample size of rim sherds for H12 is 502 items. Some of these have been mended but I have recorded and plotted each separately. The following table illustrates how these were grouped according to their combined motif:

TABLE 1: HOUSE 12 RIMS BY ATTRIBUTE GROUPS

ATTRIBUTE GROUP	FREQUENCY OF OCCURRENCE	NUMBER
Plain	2.2%	11
Plain with Neck/ Secondary Motif	2.2%	11
Simple	20.5%	103
Simple over Simple/Hor/ Opp/Cross/Hatch	13.3%	67
Simple over Interrupted/ Complex	1.2%	6
Simple with Lip/		

Secondary Motif	6.0%	30
Simple over Simple/Hor/ Opp/Cross/Hatch with Interior/Lip/Secondary Motif	11.8%	59
Opposed	1.8%	9
Opposed over Simple/ Opp/Hor	4.8%	24
Opposed with Lip/ Secondary Motif	2.0%	10
Opposed over Hor with Lip/Secondary Motif	0.8%	4
Horizontal	0.2%	1
Horizontal over Simple/ Hor/Hatch	1.8%	9
Horizontal over Complex	0.2%	1
Horizontal with Lip Motif	0.2%	1
Horizontal over Hor with Lip Motif	1.2%	6

Crossed	1.6%	8
Crossed over Simple/Opp/ Hor/Hatch/Cross	2.0%	10
Crossed with Lip/ Secondary Motif	1.2%	6
Crossed over Complex	0.2%	1
Crossed over Simple/Opp/ Hor/Complex with Lip/ Secondary Motif	2.4%	12
Hatched	4.2%	21
Hatched over Simple/Hor/ Opp/Hatch	3.8%	19
Hatched over Complex	0.4%	2
Hatched with Lip/ Secondary Motif	4.0%	20
Hatched over Simple/Hor/ Opp with Lip/Secondary Motif	3.0%	15
Hatched over Complex/		

Interrupted with Lip/ Secondary Motif	0.6%	3
Interrupted	0.2%	1
Interrupted over Simple/ Hor	1.8%	9
Interrupted over Hor/Opp with Lip/Secondary Motif	0.8%	4
Complex	0.8%	4
Complex over Opp	0.4%	2
Complex with Lip/ Secondary Motif	2.6%	13
TOTAL	100.0%	502

The rims are extensively decorated. There is a roughly equal split in the frequencies of decoration categories. Of the collection, 31.5% have decoration only on their collars; 29.9% are decorated on both collar and neck; 22.1% are decorated on the collar and neck and have either motifs on lip and/or secondary decoration; and 16.5% are decorated on the collar, and also either on the lip or have secondary motifs.

I divided estimated orifice diameters into categories of small, small to medium, medium to large, and large. This creates a continuum of vessel sizes that are inferred from mouth diameters ranging from 5.1 cm to 40.0 cm. Not all rim sherds allowed for such a measurement. In H12, 251 measurements (50% of the total H12 rim collection) were recorded and plotted in the following table and histogram of frequency distribution (see Figure 3). These represent all measurable rims. Although these rims are not a statistically random sample of all the H12 rims, there was no conscious bias in the choosing of any one rim over another and so I believe this provides a representative sample of the total collection of rims .

From this, I defined four categories of vessel sizes: small, small to medium, medium to large and large. The average diameter for these categories was, respectively: 10 cm, 16 cm, 21cm and 37cm. There is some overlap in the ranges of diameters for these categories. The mean diameter from this sample was 17.1 cm. Most pots were interpreted as being small to medium-sized. The least abundant pot size was 'large', followed by 'small'. The following table lists the frequency of vessel sizes within H12:

TABLE 2: HOUSE 12 VESSEL SIZE FREQUENCIES

VESSEL SIZE	FREQUENCY OF OCCURRENCE	NUMBER
Small	18.7%	47
Small- Medium	48.2%	121
Medium - Large	27.5%	69
Large	5.6%	14
TOTAL	100.0%	251

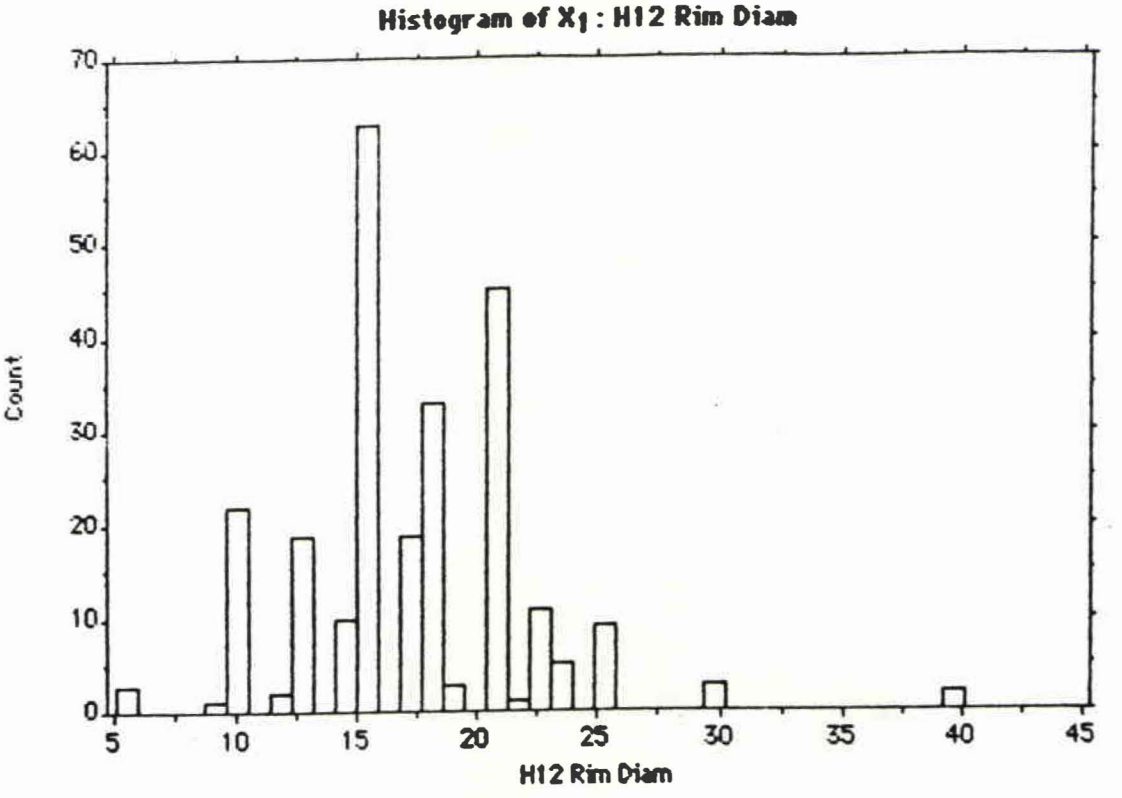


FIGURE 3: HOUSE 12 RIM DIAMETER BAR GRAPH

b) HOUSE 38

The total sample size of rims from this house is 64 items. Again, some of these have been mended but I have recorded and plotted each separately. The following table illustrates how these were grouped according to their combined motif:

TABLE 3: HOUSE 38 RIMS BY ATTRIBUTE GROUPS

ATTRIBUTE GROUP	FREQUENCY OF OCCURRENCE	NUMBER
Plain with Lip/Secondary Motif	6.3%	4
Simple	35.9%	23
Simple over Simple/Hor	12.5%	8
Simple with Lip/ Secondary Motif	6.3%	4
Simple over Simple/Hor/ Opp/Interrupted with Lip/Secondary Motif	10.9%	7
Crossed	1.6%	1
Crossed over Hor/Opp	4.7%	3
Crossed with Lip	1.6%	1
Crossed over Simple with Lip Motif	1.6%	1

Hatched	4.7%	3
Hatched with Secondary Motif	1.6%	1
Opposed	1.6%	1
Horizontal with Secondary Motif	3.1%	2
Complex with Interior/ Lip/Secondary Motif	7.8%	5
TOTAL	100.0%	64

The rims of this house are not extensively decorated. Slightly more rims show evidence of decoration on the collar alone. Of the collection 43.8% are decorated on the collar; 28.1% are decorated on the collar and either on the lip or have secondary motifs; 17.2% are decorated on the collar and neck of the sherd; and only 10.9% are extensively decorated on the collar, neck and lip or have secondary motifs.

In H38, only 18 orifice diameters could be measured (28% of the total rim collection). These are plotted in the following histogram of frequency distribution (Figure 4).

Again, this sample is not statistically random from all the H38 rims, but as no conscious bias influenced the choice of rims to measure, I believe this does provide a representative sample of the total collection of rims from this house. Similar to H12, the histogram of vessel size frequencies presents four peaks, or classes of vessel size. These size categories are small, small to medium, medium to large and large, with the respective average diameters of: 12.5 cm, 17.5 cm, 24 cm, and 30.5 cm. The mean diameter from this sample was 16.3 cm (only a 0.8 cm difference from that of the H12 collection). The range of diameters, 10.2 cm to 30.0 cm, was however, substantially smaller than that of H12. Equal numbers of pots fit into the small and the small to medium size category. These two categories comprised the majority of the pot sizes

found from this house. The following table lists the frequency of vessel sizes within H38:

TABLE 4: HOUSE 38 VESSEL SIZE FREQUENCIES

VESSEL SIZE	FREQUENCY OF OCCURRENCE	NUMBER
Small	38.9%	7
Small-Medium	38.9%	7
Medium-Large	16.7%	3
Large	5.6%	1
TOTAL	100.1%	18

Distribution Through the House:

a) HOUSE 12 (see Figure 5)

In general, the majority of rims in H12 were recovered from along the north co-ordinate line 185. This 'band' of concentration extends from the east wall through the central corridor to the west wall and beyond in the square 185-225. Similarly, the North third of the central corridor yields a large number of rim sherds. Many other

rims are found within 2m of the walls. There is also evidence of many items along the bench lines on both sides of the house. The north end demonstrates slightly higher numbers of rims than does the south end; and more rims are found in the north doorway than the south doorway. These patterns may be associated with the 'special hearth' of the north end of H12. The majority of features and post moulds that yielded rims are located along the central corridor associated with the busy activity areas of the house (see Figures 6 and 7).

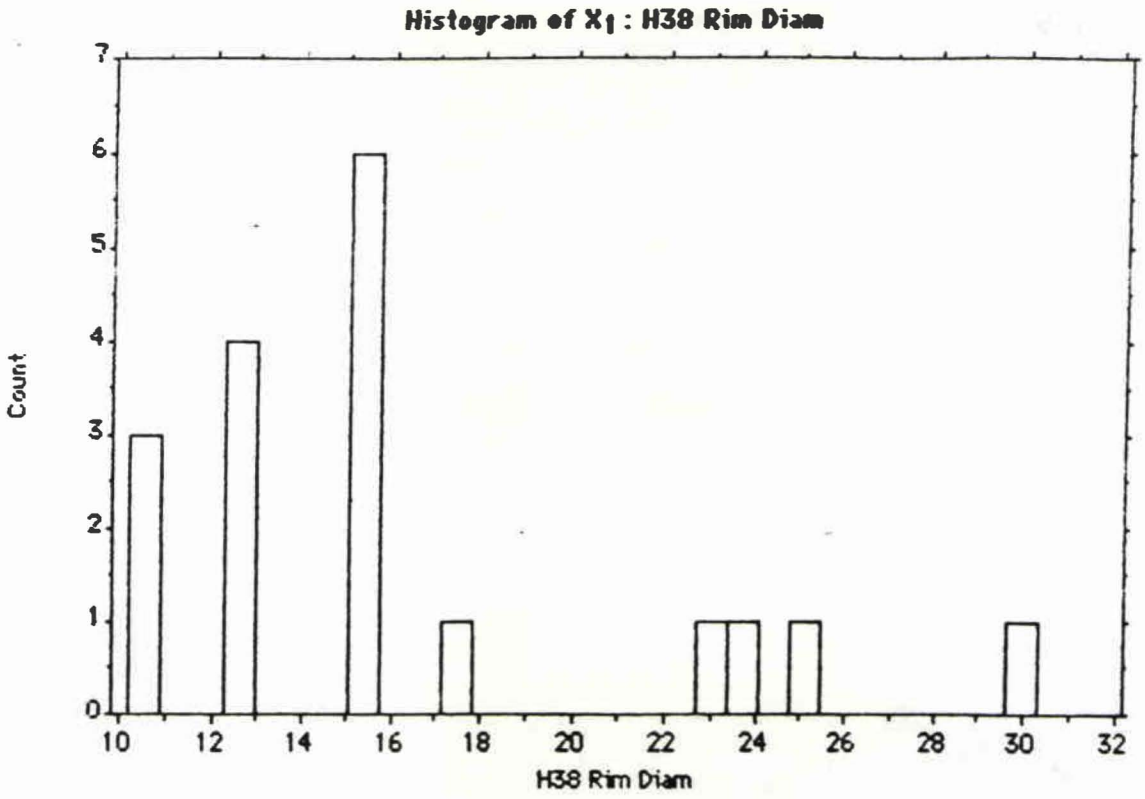


FIGURE 4: HOUSE 38 RIM DIAMETER BAR GRAPH

collared rims with secondary and/or neck decoration, but neither of these kinds of rims are found in the southern end of the house.

Simple collar rims make up the majority of this house's rim collection (103 rim sherds). Every area of the house yields some examples of this type. The greatest concentration is along the north co-ordinate line 185. There is also a small cluster located at the north doorway.

Most Opposed collar rims are located within 2m of the house walls. A small cluster of Opposed collar rims with neck decoration is found in squares 195-215, 195-220, and 200-220. There is no evidence for the usual pattern of high concentration of these items along the 185 co-ordinate line.

Horizontal collar rims are found along the house walls, through the length of the central corridor and along the bench lines. No area in the house has a high concentration of this type of rim.

Crossed and Hatched and Complex collar rims are found along the house walls and through the central corridor, and long the bench lines, primarily from the middle third of the house. Neither end yield any Hatched collar rims with neck motif.

Interrupted collar rims are found through the length of the central corridor. No concentration of this type occurs in H12.

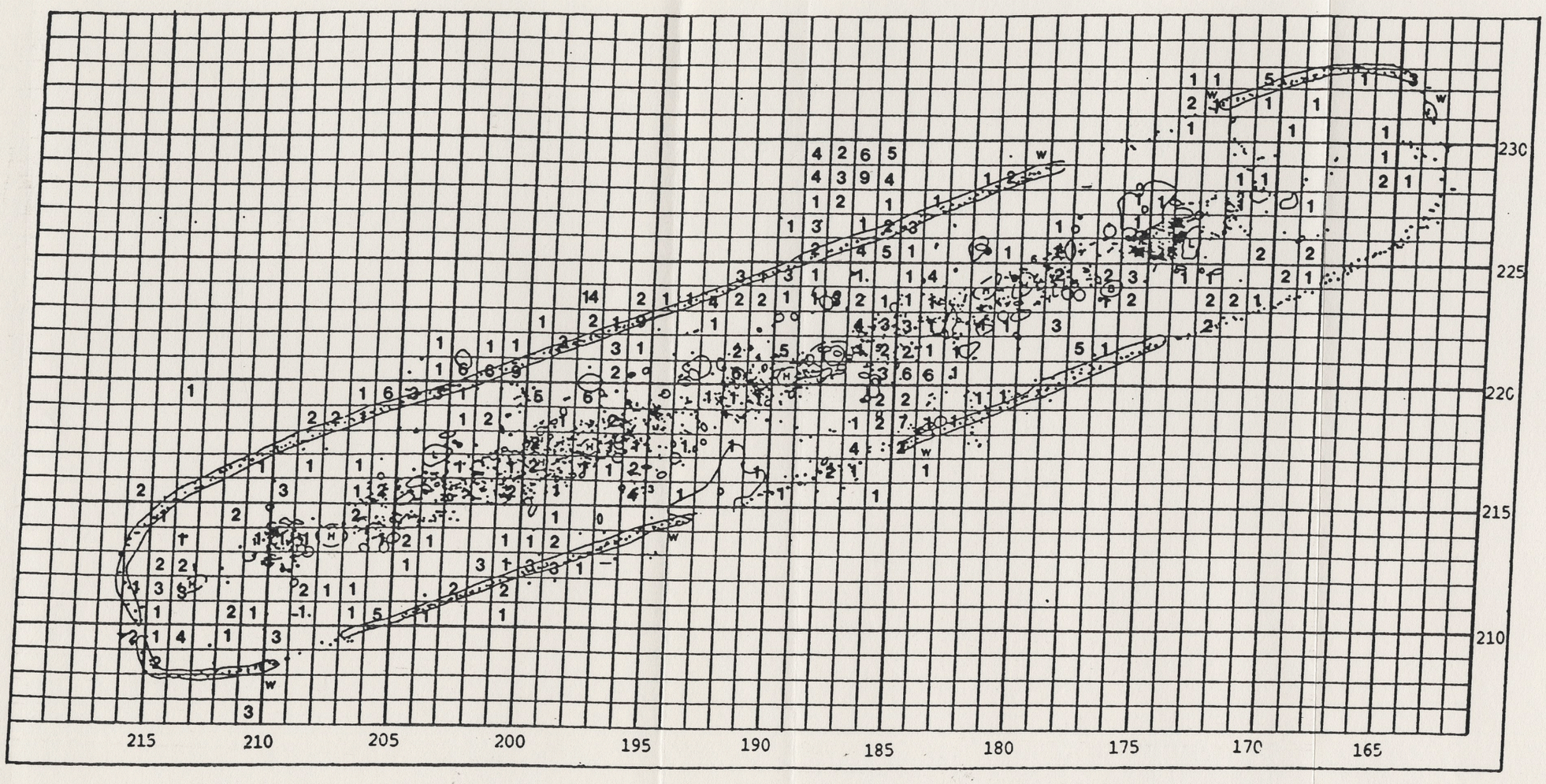
When the estimated size of the vessels is examined, it becomes apparent that all pot sizes are found more in the northern than the southern end, but the greatest concentration of all vessels is from the middle section of the house.

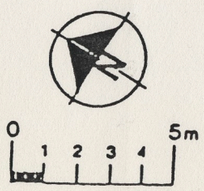
b) HOUSE 38 (see Figure 8):

In general, the north half of the central corridor in H38 yields the greatest number of rims sherds. Many other rims are found within 2m of the house walls and along the bench lines of both sides of the house especially in the middle section. Both ends yield only a few rims (see Figures 9 and 10).

DRAPER SITE: AlGt — 2

HOUSE 12





B Burial Pit

D Disturbed Area

1-7 Sweat Bath

W Wall Trench

Entrance

L Large Pit

Post Mould

H Hearth

Pit Feature

FIGURE 5: HOUSE 12 RIM DISTRIBUTION MAP

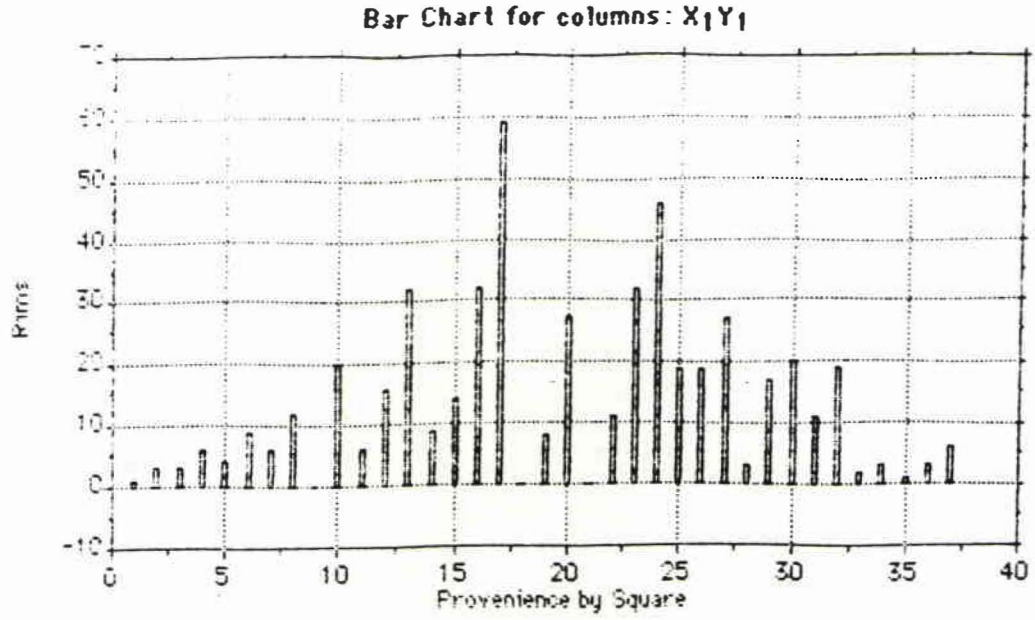


FIGURE 6: HOUSE 12 RIM FREQUENCY BAR GRAPH BY 5X5M SQUARES

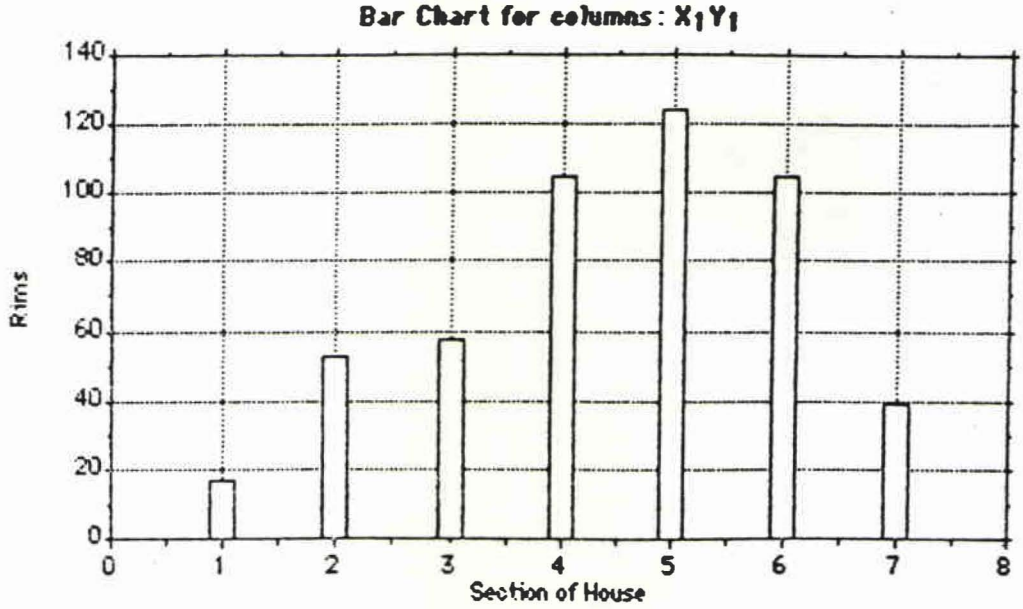


FIGURE 7: HOUSE 12 RIM FREQUENCY BAR GRAPH BY HOUSE SECTIONS

ATTRIBUTE GROUPS:

Plain collar rims generally are located within 1m of the house walls. Simple collar rims, which make up the largest part of this house's rim collection, are also found along the house walls. In addition, these rims are located in the central corridor, in the north half, associated with the busiest feature cluster. Opposed collar rims follow the same pattern. Crossed collar rims are recovered from along the bench lines of the house, while both Hatched and Complex collar rims are found towards the house walls, within 1-4m outside the house.

When the estimated size of the vessels represented is examined it becomes apparent H38 has very few large vessels and that these are found towards the walls of the house. There are small vessels from the central corridor activity areas, as well as from within 2m inside or outside the house walls. The majority of vessels from H38 are small and small to medium sized. Both the southern and northern end yield these vessels, but the concentration is from the middle section of the longhouse along the central corridor and against the walls in this section of the house.

PIPE ANALYSIS

Method:

To study the pipe fragments found in the two houses more easily, I broke the collection down into six categories. These categories included: Identifiable Pipe Bowls; Unidentifiable Pipe Bowls; Elbows; Stems with Mouthpieces; Stems without Mouthpieces; and Fragments. Identifiable Pipe Bowls offered the most information and,

consequently, the following observations deal mostly with the description of these pipe items[1]. I initially used Smith's coding system (1988) to analyze the Identifiable Bowls. However, this system is rather complicated and although it is probably more accurate and less subjective than most systems, I considered it to be too

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[1] I did record observations on both the shape of the mouthpiece of the stem, and the stem cross-section shape, using Von Gernet's (1985) coding method for these, but found that this yielded no significant insight for my questions of house function and social status.

DRAPER SITE: AlGt — 2

HOUSE 38

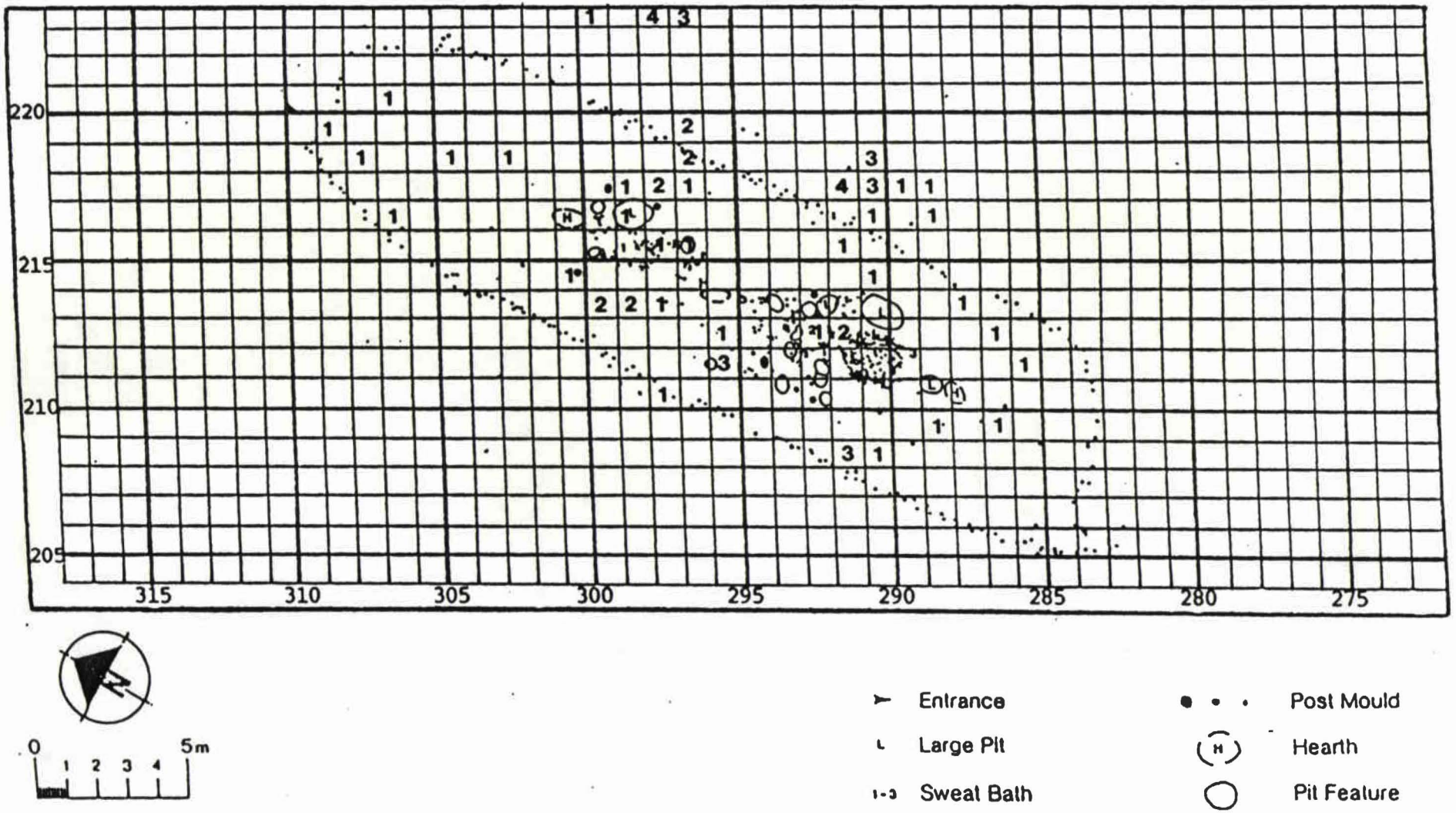


FIGURE 8: HOUSE 38 RIM DISTRIBUTION MAP

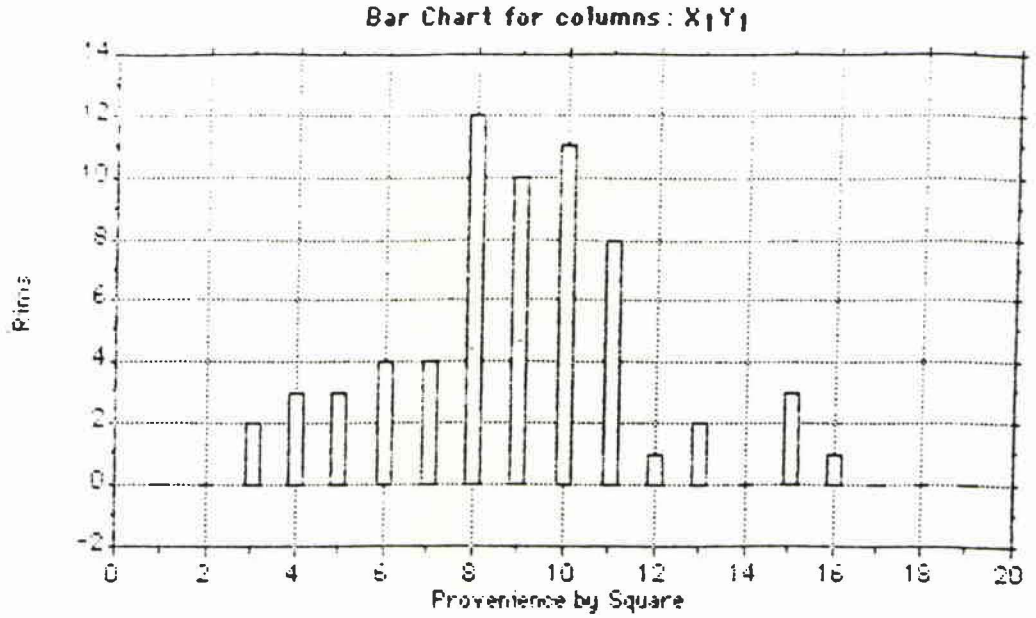


FIGURE 9: HOUSE 38 RIM FREQUENCY BAR GRAPH BY 5X5M SQUARES

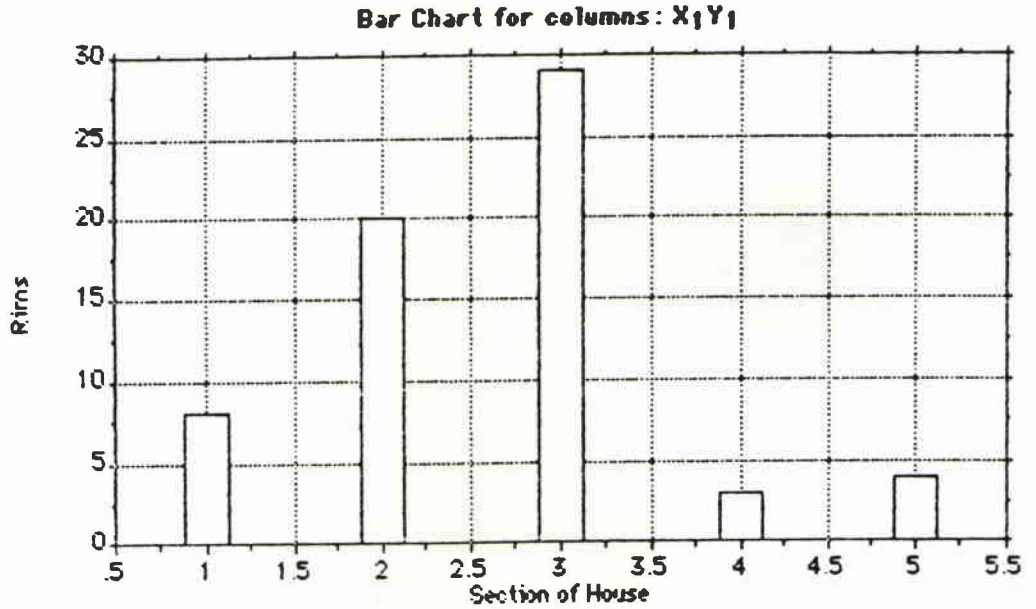


FIGURE 10: HOUSE 38 RIM FREQUENCY BAR GRAPH BY HOUSE SECTIONS

cumbersome for this simpler type of analysis. I decided on the use of Emerson's typology for coding pipes (1954, 1966). My decision to employ this typology is not without some misgivings. At times, I became frustrated with its limitations as I was forced to do some 'guess work', arbitrarily assigning an item to either Iroquois Ring or Conical Ring, despite the fact that the difference between these two types seemed almost imperceptible. Further, this typology was not exhaustive enough to accomodate some of the variation that was apparent in the collections. Because of this, it was necessary to 'create' new types in addition to those offered by Emerson. These new types include: a) Plain Outflaring, b) Conical Ring Variation, c) Plain Collared, d) Conical Punctate, and e) Cylindrical Plain[1]. As is obvious, these new types are merely spin-offs of Emerson's own typology.

Pipe Assemblage:

a) HOUSE 12

The total sample size of pipes for H12 is 107 pieces. Of this collection, 6 did not have precise proveniences, but were recorded as being from this house. The largest class of items was Identifiable Pipe Bowls (n=41 or 38.4%). The following table outlines how the collection was broken down into categories:

[1]The desription of these newly created pipe types are as follows: a) Plain Outflaring pipes are undecorated bowls that are straight-edged with a concave lip; b) Conical Ring Variation pipes have horizontal lines over many rows of punctates, with punctates also on the lip of the slightly concave bowl; c) Plain Collared pipes are undecorated bowls that are straight-edged with a poorly developed collar; d) Conical Punctate pipes are straight-edged to slightly concave with a row of punctates; and e) Cylindrical Plain pipes have large undecorated, straight-edged bowls.

TABLE 5: HOUSE 12 PIPE CATEGORIES

PIPE CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Identifiable Bowls	38.4%	41
Unidentifiable Bowls	9.3%	10
Elbows	14.0%	15
Stems with Mouthpieces	12.2%	13
Stems without Mouthpieces	16.8%	18
Fragments	9.3%	10
TOTAL	100%	107

Of these 107 pieces, 10 were juvenile pipes (thus representing 9.3% of the total pipe sample from H12).

As I indicated earlier, the majority of items were identifiable pipe bowls and were typed according to Emerson's coding method. It will be on this basis that I will discuss the distribution of pipes and the significance this may hold for an interpretation of the house function and the status of the household occupants. The following table lists the frequency of occurrence of identifiable pipe types found:

TABLE 6: PIPE TYPE FREQUENCIES

PIPE TYPES	FREQUENCY OF OCCURRENCE	NUMBER
Iroquois Ring	48.9%	20
Plain Outflaring	9.8%	4
Hard Rock Trumpet	7.3%	3
Conical Punctate	7.3%	3

Apple Bowl Ring	4.9%	2
Undecorated Trumpet	4.9%	2
Conical Ring	4.9%	2
Conical Ring Variation	2.4%	1
Vertical Outflaring	2.4%	1
Iroquois Ring Variation	2.4%	1
Collared Ring	2.4%	1
"Special"	2.4%	1
TOTAL	100%	41

b) HOUSE 38

The total sample size of pipes for H38 is 38 pieces. The sample was broken down into the following categories:

TABLE 7: PIPE CATEGORIES

PIPE CATEGORIES	FREQUENCY OF OCCURRENCE	NUMBER
Identifiable Bowls	28.9%	11
Unidentifiable Bowls	13.2%	5
Elbows	5.2%	2
Stems with Mouthpieces	13.2%	5
Stems without Mouthpieces	23.7%	9
Fragments	15.8%	6
TOTAL	100%	38

Of these 38 pipes from H38, 5 were juvenile pipes and thus represented 13.2% of the entire house pipe assemblage.

According to Emerson's typology (1954, 1966), the most common type of identifiable pipe found in House 38 was the Conical Ring pipe followed by the Iroquois Ring pipe. The table below lists the frequencies of all pipe types found:

TABLE 8: PIPE TYPE FREQUENCIES

PIPE TYPES	FREQUENCY OF OCCURRENCE	NUMBER
Conical Ring	36.3%	4
Iroquois Ring	27.3%	3
Plain Collared	9.1%	1
Collared Ring	9.1%	1
Cylindrical Ring	9.1%	1
Indeterminate	9.1%	1
TOTAL	100%	11

Distribution Through House:

a) HOUSE 12 (see Figure 11)

The total sample is similarly distributed. That is, where an elbow or stem is found, it is likely that there will be some other category of pipe in close association. Most occurrences are within 1-3m inside and/or outside the house walls. There is also a cluster of pipe items located in sq. 185-225 which is, except for 7 sub-squares, outside the eastern house wall. Similarly, along the north co-ordinate line 185 inside the house, there is a 'band' of concentrated pipe yields. In comparing the south

DRAPER SITE: AlGt — 2

HOUSE 12

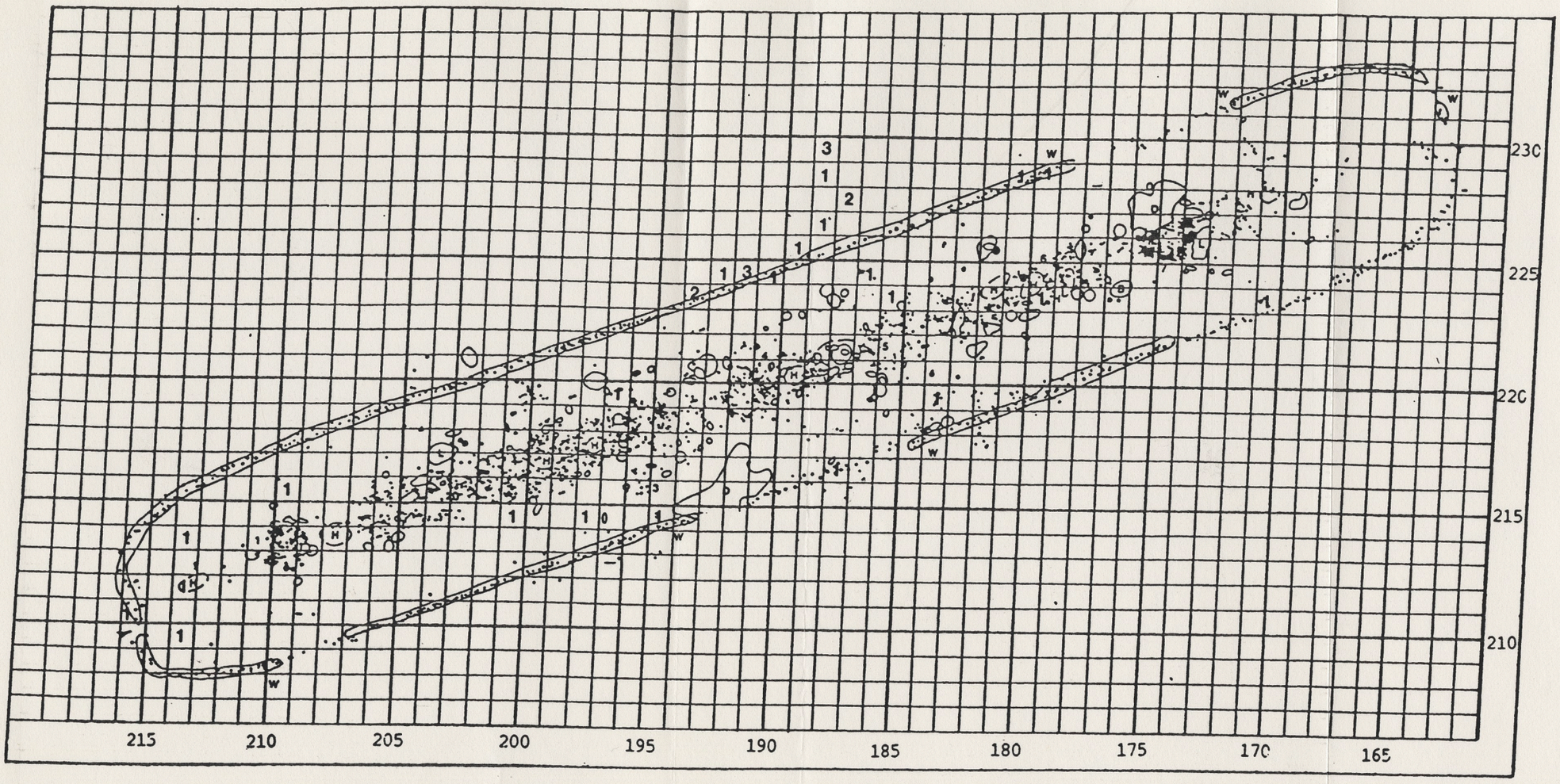


FIGURE 11: HOUSE 12 PIPE DISTRIBUTION MAP

doorway to the north doorway, there is a greater yield in association with the north end, clustering around the 'special purpose' hearth.

I have indicated that there are 42 pipe bowls that could be identified by Emerson's typology. The distributions of these bowls aid in interpreting the social atmosphere within the houses.

Although most common, Iroquois Ring pipes are not found in association with the busy central corridor and the clusters of hearths, sweat baths, and pits. Rather, they are found close to the walls both inside and outside. Notable exceptions are the three Iroquois Ring pipe items located at the north end of the house near the 'special purpose' hearth. All other ring-type pipes are located against the house walls and not within the central corridor. The distribution of the plain pipes also follows this pattern.

Four items are identified as trumpet pipes- 1 undecorated and 3 Hardrock. These are from the central corridor, two from the sq. 185-220, which is roughly the longitudinal middle of the house and the area of highest concentration of features. The single punctate pipe is also located in the central corridor, but further south than the densely clustered activity areas yielding the trumpet pipes.

Unfortunately, the two unique pipes of H12 - one with side barbs and one with a human effigy carved on the bowl - were given only a general provenience and lacked the appropriate recording of square and subsquare.

There are four items from features, located along the north co-ordinate line 180 (ie. roughly longitudinal middle). Two of these are Conical Punctate pipes, one is Iroquois Ring and one is Conical Ring (see Figures 12 and 13).

b) HOUSE 38 (see Figure 14)

Most of the pipe sample from H38 is from within 2m the house walls, especially in the south half of the house. There are a few pipes in both north and south doorways, not associated with any post moulds or features. Only some stems with mouthpieces and unidentifiable bowls are located in the central corridor of the house. These are from the more northerly and less dense of the two clusters of activity areas in the central corridor.

It should be noted that 6 items lie approximately 5m or so outside the north end of the house. These pieces were included in the study and in the calculations of

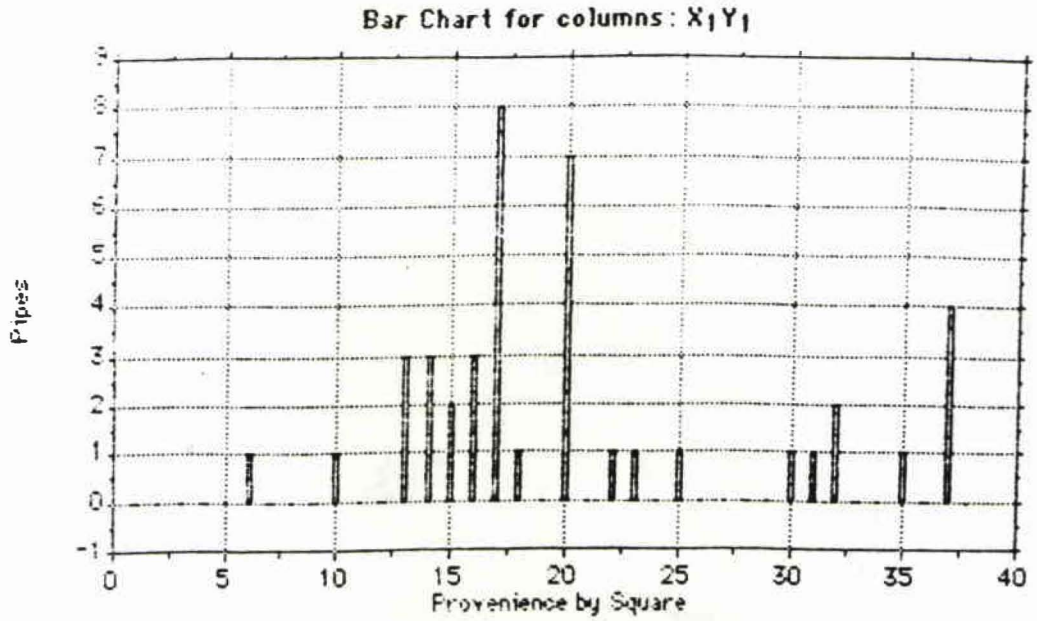


FIGURE 12: HOUSE 12 PIPE FREQUENCY BAR GRAPH BY 5X5M SQUARES

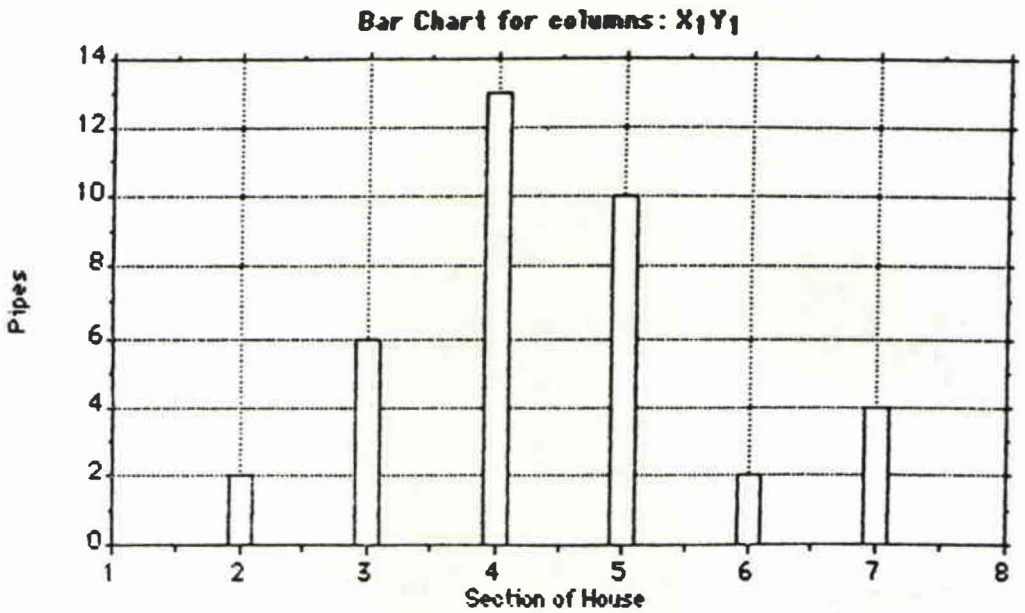


FIGURE 13: HOUSE 12 PIPE FREQUENCY BAR GRAPH BY HOUSE SECTIONS

DRAPER SITE: AlGt — 2

HOUSE 38

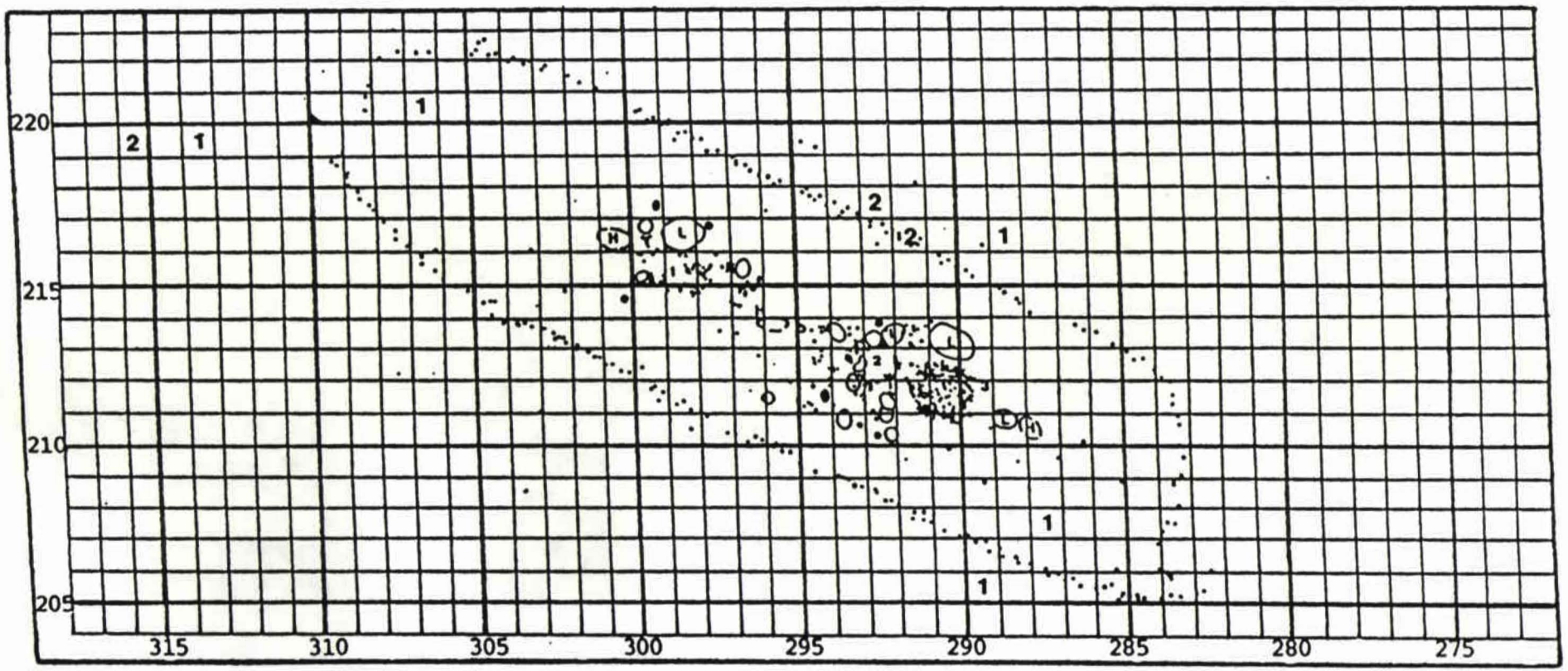


FIGURE 14: HOUSE 38 PIPE DISTRIBUTION MAP

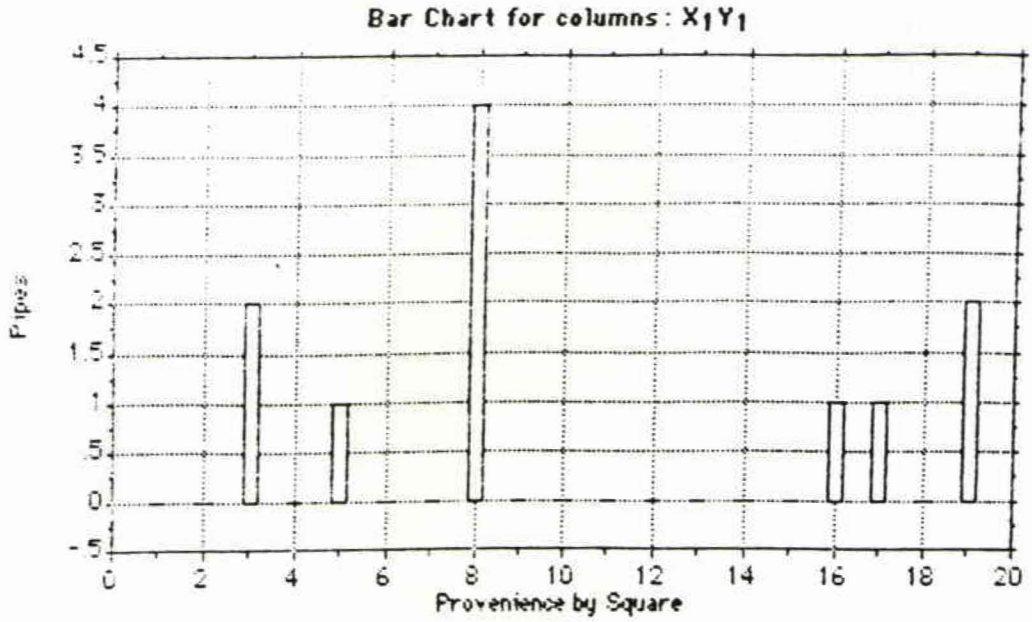


FIGURE 15: HOUSE 38 PIPE FREQUENCY BAR GRAPH BY 5X5M SQUARES

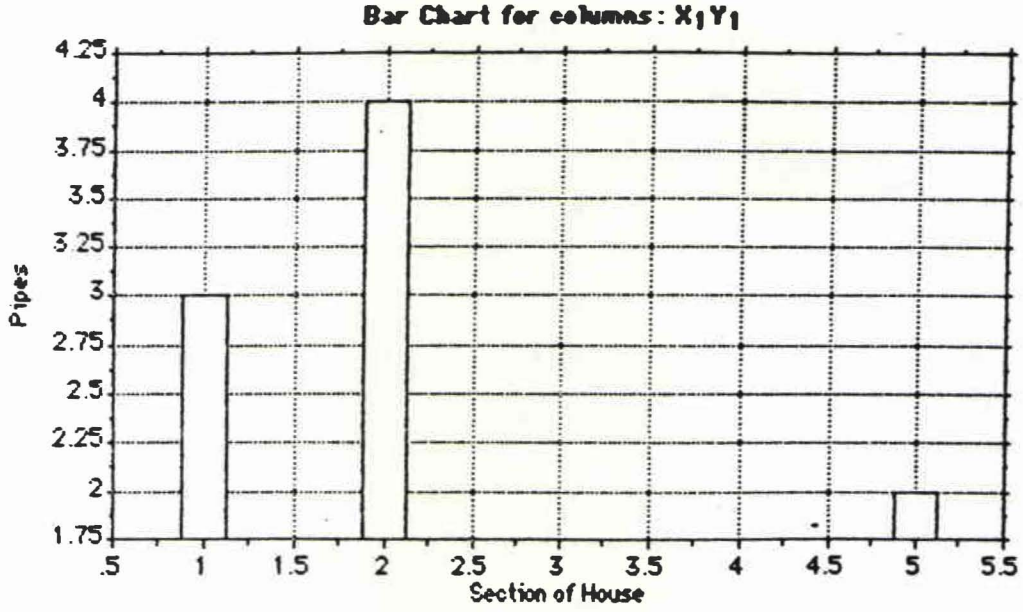


FIGURE 16: HOUSE 38 PIPE FREQUENCY BAR GRAPH BY HOUSE SECTIONS

frequencies of occurrences, because I considered them to be part of H38's artifact assemblage.

I have indicated that 11 pipe bowls could be identified using Emerson's typology. None in this sample is found within the central corridor, and none is located in a feature or post mould. Rather, except for 3 items (of Iroquois Ring and Plain Collared pipes) found 5m outside the north end of the house, all identifiable pipe bowls are against the walls, within 2m inside or outside the house. It must be kept in mind, however, that this is a very small sample and so it is not surprising that there are no obvious clusterings (Figures 15 and 16).

CHIPPED LITHIC ANALYSIS

Method:

Poulton's Analysis of the Draper Site Chipped Lithic Artifacts (1985) is a meticulous and in-depth study. I decided to make use of Poulton's analysis and code sheets rather than do a 'hands-on' investigation. However,I did not use all the data recorded by Poulton but instead selected that information which most suited my goals. I was interested in compiling the description of the artifact varieties that were yielded from the houses. I was also interested in recording the type of chert used in the manufacture of these items, and the extent of conservation as reflected by reuse, retouch and the use of multi-functional tools. Some of the categories of lithic items are functional, while others are descriptive. For example, 'strike-a-light' indicates what the tool was used for, while 'biface' describes the knapping technique used to produce this item. In some cases a descriptive label is used because the function of the item could not be determined, or because the tool was multi-functional.

Chipped Lithic Assemblage:

a) HOUSE 12

The total sample of chipped lithics from this house is 217 pieces. The following table outlines the various categories of chipped lithics found and their frequency of occurrence:

TABLE 9: HOUSE 12 CHIPPED LITHIC CATEGORY FREQUENCIES

LITHIC CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Scrapers	16.1%	35
Projectile Points	0.9%	2
Wedges	11.5%	25
Utilized Flakes	5.5%	12
Bifaces	0.5%	1
Strike-a-light	0.5%	1
Perforator	0.5%	1
Chipping Detritus	46.1%	100
Non-Flint Detritus	16.1%	35
Cores	2.3%	5
TOTAL	100%	217

As evidence of conservation, the chipped lithics from H12 illustrate tool reuse and retouch, bipolar technique of knapping and evidence of many multi-functional tools. Examples of this are observed in the scraper collection, where 10 items have secondary functions or have been turned into wedges. Likewise, one of the two projectile points was reused as a knife. Further, 4 of the 5 cores yielded evidence of bipolar technique in knapping.

All but two pieces are of imported Onondaga chert. The two exceptions are one piece of detritus in local Chalcedony-like chert, and a Flake End Scraper on a Biface Fragment of Collingwood chert.

b) HOUSE 38

The total sample of chipped lithics from this house is 34 pieces. The following table lists the various categories and their frequency of occurrence through the house:

TABLE 10: CHIPPED LITHIC CATEGORY FREQUENCIES

LITHIC CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Scrapers	20.6%	7
Projectile Points	2.9%	1
Wedges	11.8%	4
Utilized Flakes	2.9%	1
Bifaces	11.8%	4
Chipping Detritus	50.0%	17
TOTAL	100%	34

There is no evidence of conservation of chipped lithic artifacts from this house. Only one item provides evidence of reuse: a biface trimming flake. None had multiple functions or were reused.

All of the chipped lithics from H38 were of imported Onondaga chert.

Distribution Through House:

a) HOUSE 12 (see Figure 17)

For this part of the analysis, I grouped the chipped lithics into classes of Formal Tools, Informal Tools, and Debitage.

The Formal Tools include scrapers, projectile points, and wedges. The overall distribution is uniform. That is, there are no obvious clusters of chipped lithic tools, although there is a slightly higher density of tools located in a 'band' along the north co-ordinate line 185. Scrapers are located along both house walls in the northern and

DRAPER SITE: AlGt — 2

HOUSE 12

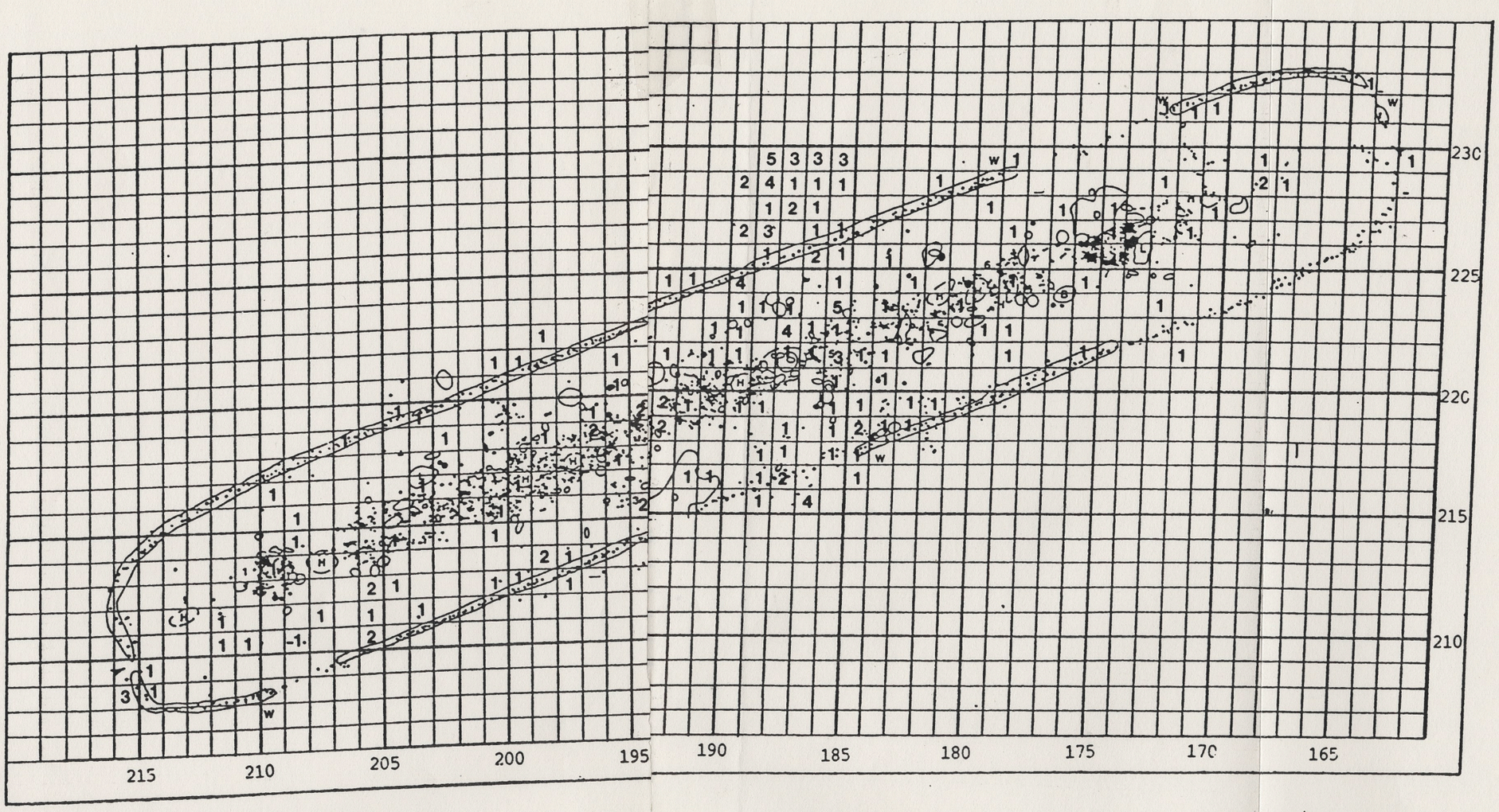


FIGURE 17: HOUSE 12 CHIPPED LITHICS DISTRIBUTION MAP

southern half, they are also found in both north and south doorways, and are scattered throughout the length of the central corridor. The greatest concentration of scrapers is along the 185 line. Both projectile points are within 2m inside and outside of the house wall along the line 185. The 25 wedges have a somewhat different distributional pattern. There are no wedges south of the line 180 in the southern half of the house, save for 2 items located at the southern doorway. The majority of wedges are within 2m inside and outside of the house walls.

The Informal Tools include utilized flakes, the single biface flake, strike-a-light, and perforator. The overall pattern observed with Informal Tools again depicts a 'band' of concentration along the north co-ordinate185, but also suggests a small clustering of these chipped lithics in the sq. 205-210, close to the western wall of the house.

The Debitage includes chipping detritus, non-flint detritus, and cores. It is interesting that one of the 4 cores from this house is within the small cluster of sq. 205-210. One other is found in the northern half of the house along the central corridor. The last two are located in the 'band' along the 185 line. There is no area that does not yield chipping detritus. Both doorways have small clusterings of detritus; both east and west walls, 2m inside and outside, have detritus against them; and all along the length of the central corridor, there is chipping debitage. But the greatest concentration of chipping detritus is found in the 'band' along the north co-ordinate line 185.

The chipped lithic items from features and post moulds also follow this pattern. Although the greatest yield of chipped lithic producing features is within the 'band' along the 185 line, there are lithics from features that are in both the northern and southern half of the longhouse, in the central corridor and along the walls of the house (see Figures 18 and 19).

b) HOUSE 38 (see Figure 20)

Since there is only one Informal Tool, a single utilized flake, the distribution of Formal and Informal Tools will be analyzed together. Bifaces are included in the Formal Tool class for H38. The distribution pattern for these chipped lithics illustrates that the northern half of the house is relatively bare. Indeed, all scrapers, projectile

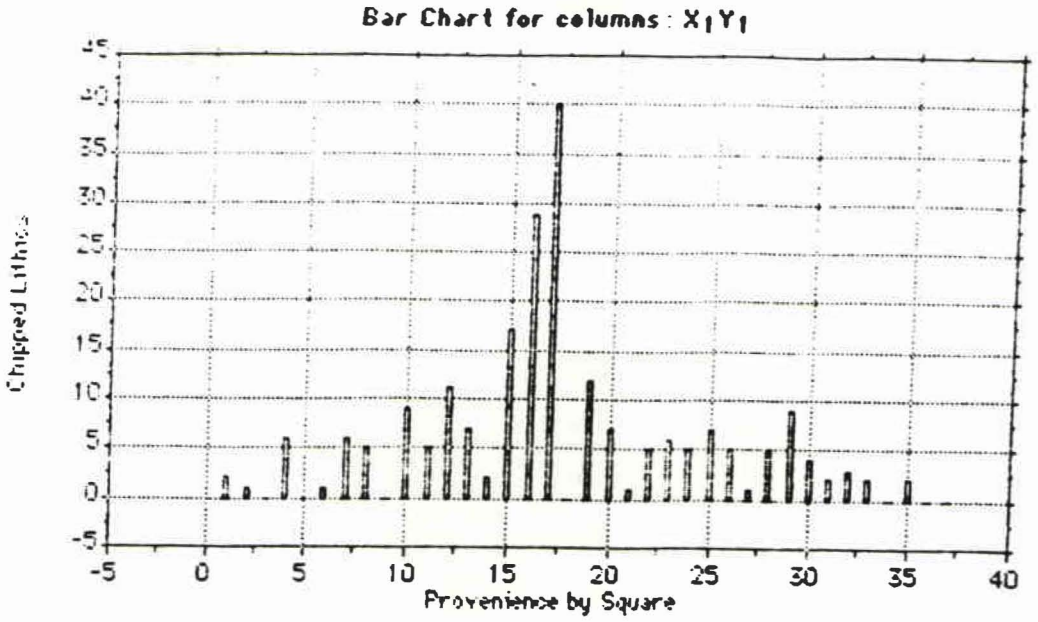


FIGURE 18: HOUSE 12 CHIPPED LITHICS FREQUENCY BAR GRAPH BY 5X5M SQUARES

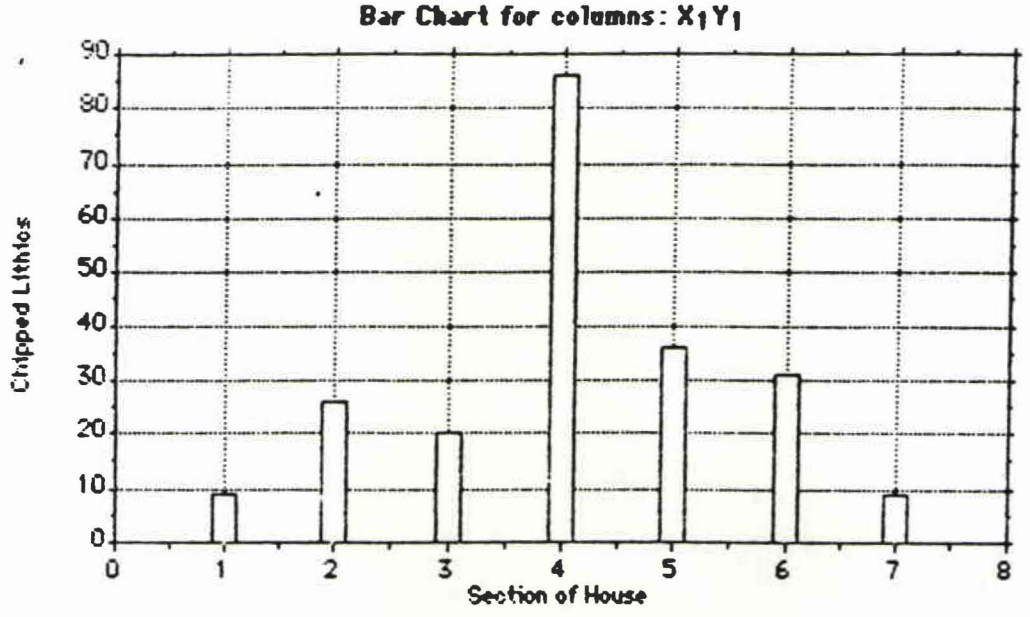
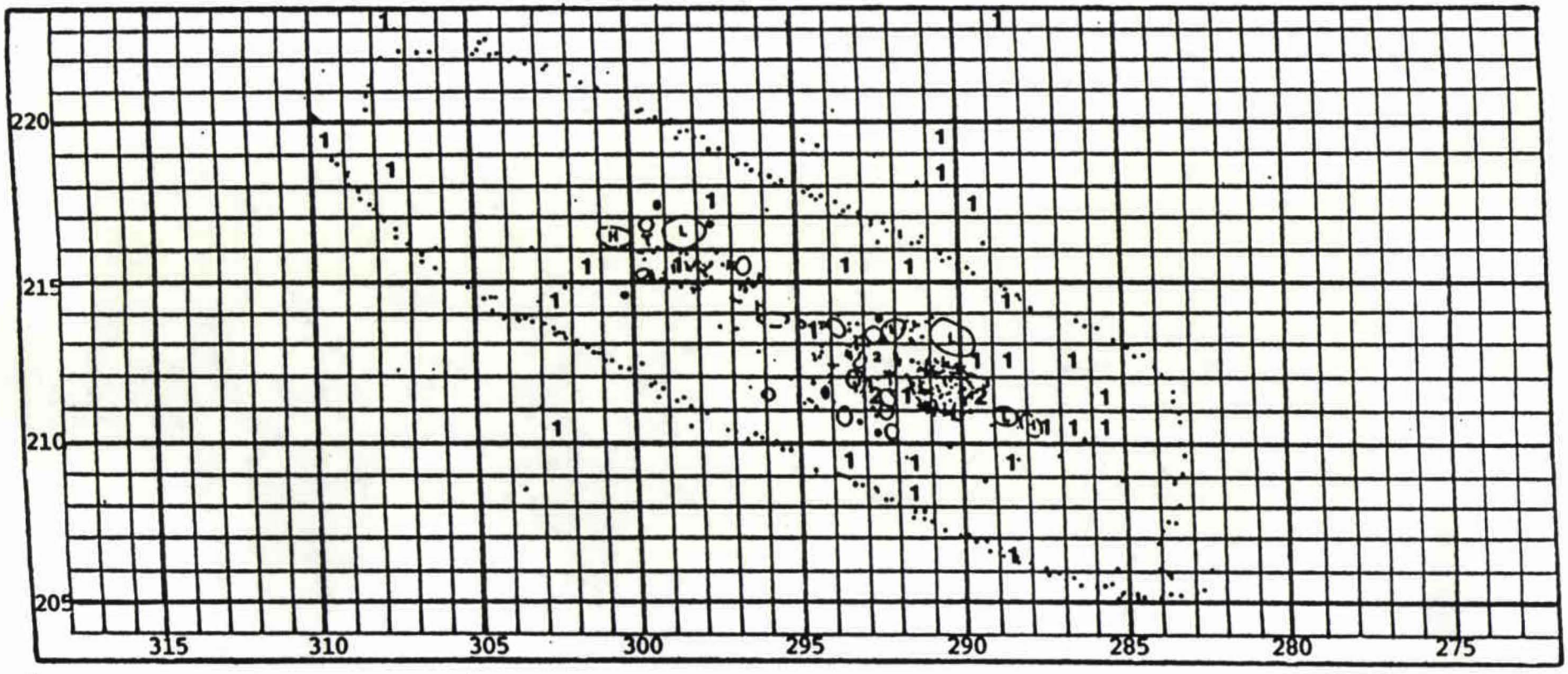


FIGURE 19: HOUSE 12 CHIPPED LITHICS FREQUENCY BAR GRAPH BY HOUSE SECTIONS

DRAPER SITE: AlGt — 2

HOUSE 38



Entrance

Large Pit

Sweat Bath

Post Mould

Hearth

Pit Feature

FIGURE 20: HOUSE 38 CHIPPED LITHICS DISTRIBUTION MAP

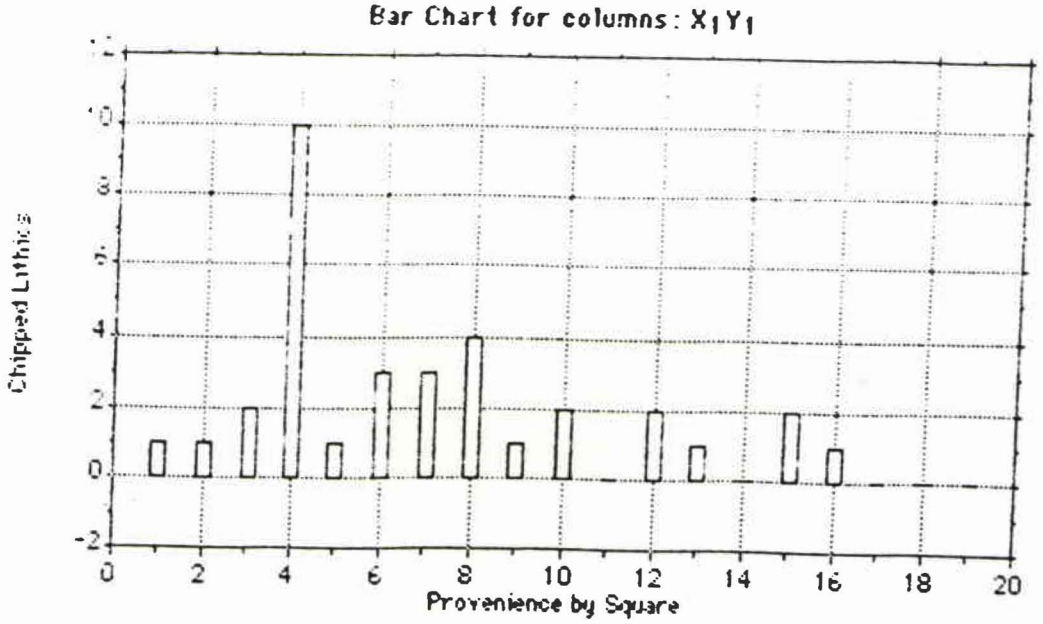


FIGURE 21: HOUSE 38 CHIPPED LITHICS FREQUENCY BAR GRAPH BY 5X5M SQUARES

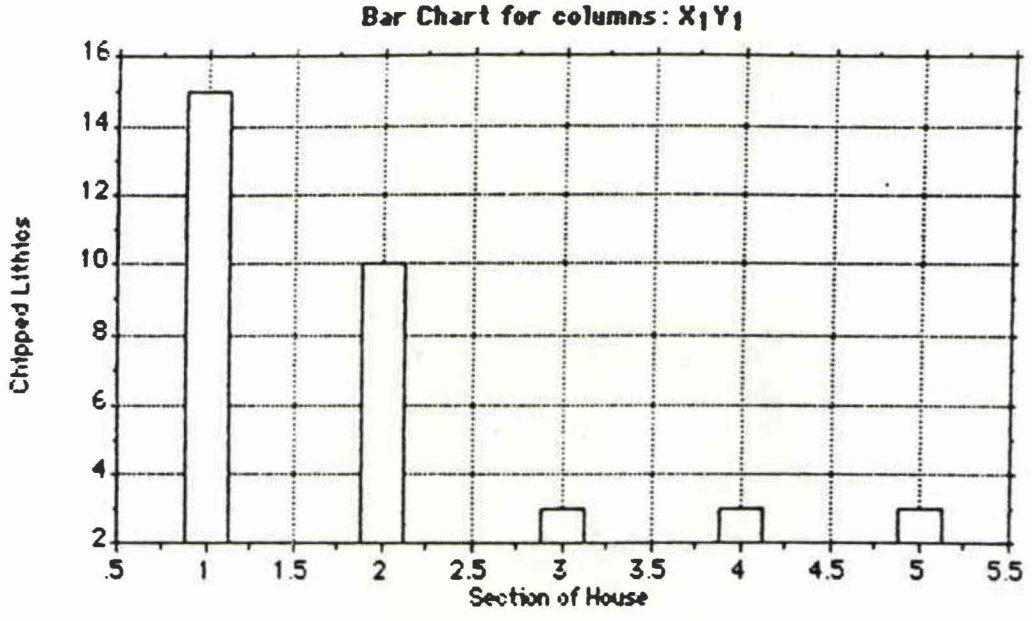


FIGURE 22: HOUSE 38 CHIPPED LITHICS FREQUENCY BAR GRAPH BY HOUSE SECTIONS

points, bifaces and the utilized flake are from the southern half of the house, either from the central corridor or just beyond in the middle of the feature-free south end. Three of the 4 wedges from this house are located along the western wall in the northern half of the house.

This pattern is imitated by the distribution of chipping detritus. Although there are several pieces of debitage located in the northern half of the house, the majority are from the southern half of the central corridor, in the middle of the southern end or up against the walls (see Figures 21 and 22).

There are no chipped lithics from either features or post moulds in H38.

GROUND AND ROUGH STONE ANALYSIS

Method:

My goals for this section of analysis were to examine the variety within the ground and rough stone assemblage and to determine the level of complexity involved in manufacture and the extent of use-wear and re-use. I used as a guideline Pearce's Draper Site Ground and Rough Stone Artifacts (1985). I found, however, that this rigorous analysis was more extensive than I needed and consequently I used only selected definitions of use-wear from Pearce.

I was also interested in identifying the type of rock preferentially used, aided by Chesterman's Field Guide to North American Rocks and Minerals (1979). Over half of the items were of schist/amphibolite, and limestone had the second highest frequency of occurrence. Other minerals represented were sandstone, gniess, slate, and diabase.

Ground and Rough Stone Assemblage:

a) HOUSE 12

The total sample size of ground and rough stone from this house is 109 pieces. The collection is broken down into the following categories and frequency of occurrences:

TABLE 11: HOUSE 12 GROUND AND ROUGH STONE CATEGORY FREQUENCIES

G/R STONE CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Celts	34.9%	38
Hammerstones	15.6%	17
Abraders	14.7%	16
Anvil-Hammerstones	7.3%	8
Ground Stone Fragment	6.4%	7
Misc. Modified Stone	4.6%	5
Cobble Spalls	3.7%	4
Game Balls (?)	1.8%	2
Manos	1.8%	2
Pestles	1.8%	2
Stone Pendants	1.8%	2
Stone Beads	1.8%	2
Anvils	1.8%	2
Stone Pipe	0.9%	1
Metate	0.9%	1
TOTAL	100%	109

The celts exhibit a wide variety of manufacture techniques which include 15 different combinations of grinding, flaking, pecking, carving, polishing, and sawing. Despite this multitude of techniques, there does not appear to be any preferential procedure in manufaturing celts, as no combination of methods occurs more than five times in the collection of 38 celts.

Hammerstones, anvils, anvil-hammerstones and abraders are generally natural rocks (ie. there was no manufacturing involved). There is, however, some degree of variability in these items' extent of use-wear, although most were not extensively used. Most hammerstones were used on one or both ends but were not used repeatedly to produce continuous use-wear along all edges. Anvils were used only on one side, and anvil-hammerstones were used on two sides for both functions but not to the extent that

there was evidence of continuous wear along all edges. Abraders, in contrast, had evidence of extensive use-wear. Many of these were worn flat, indicative of abrading a flat tool such as a celt, while many also exhibited striations or grooves - indicative of shaping or sharpening bone awls or celt bits.

Two of the four cobble spalls were used as scrapers.

The item recorded as a stone pipe is very small and so it is not without some hesitancy that I have labelled it as such. Likewise, the two game balls are egg-shaped smoothed 'balls', but whether these were naturally shaped or modified and used in some type of game is unclear.

b) HOUSE 38

The total sample of ground and rough stone for this house is 10 pieces. The following table lists the categories of items yielded and the frequency of occurrence:

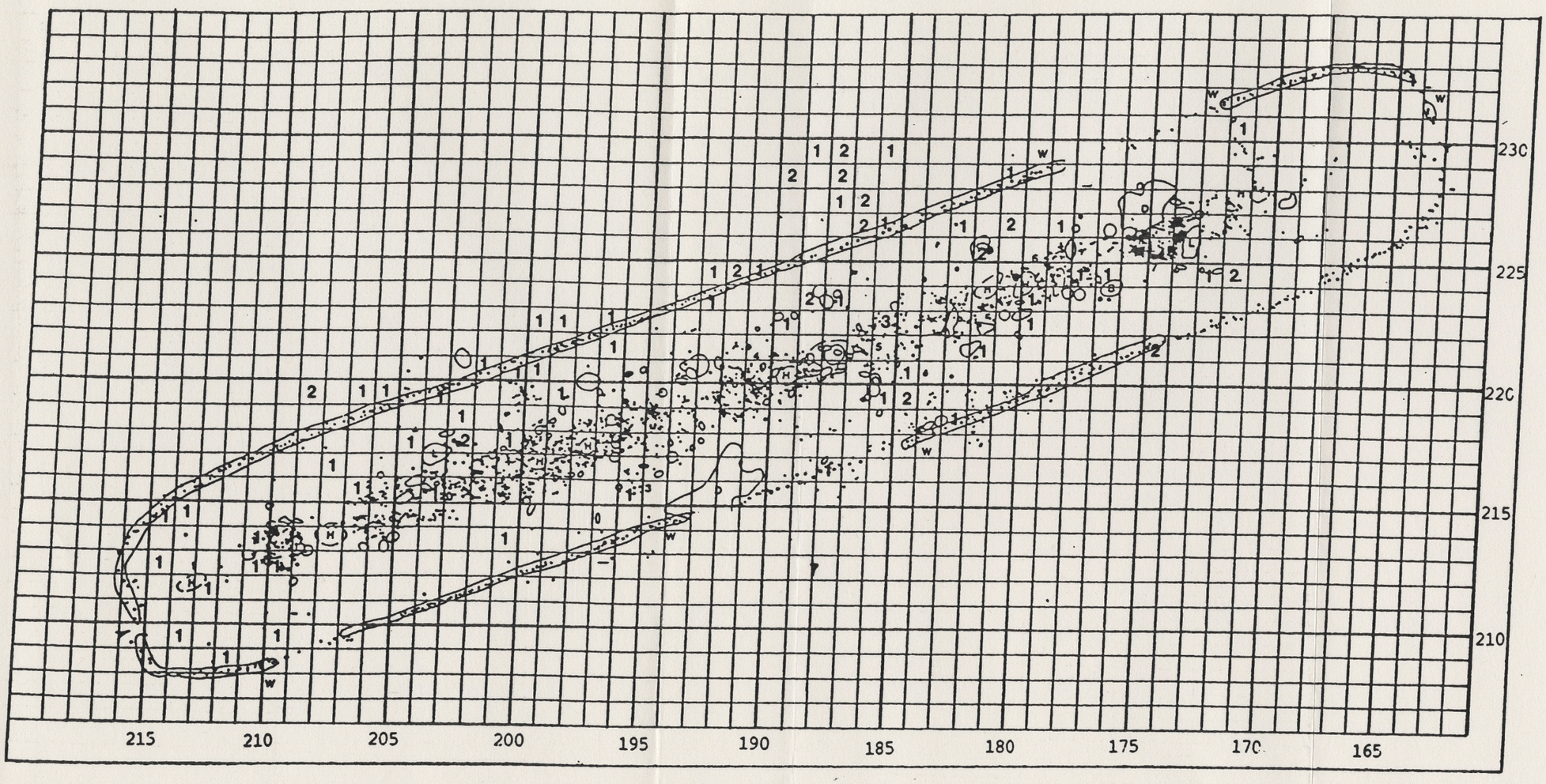
TABLE 12: HOUSE 38 GROUND AND ROUGH STONE CATEGORY FREQUENCIES

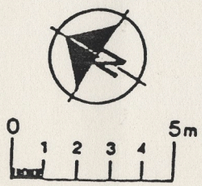
G/R STONE CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Celts	60.0%	6
Ground Stone Fragments	40.0%	4
TOTAL	100%	10

Despite the small number of celts, there is still a range of manufacture techniques exhibited which combine grinding, polishing, pecking and flaking. Again there is no preferential combination of methods observed.

DRAPER SITE: AlGt — 2

HOUSE 12





B Burial Pit
D Disturbed Area
1-7 Sweat Bath
➢ Entrance
W Wall Trench
L Large Pit
Post Mould
(H) Hearth
Pit Feature

FIGURE 23: HOUSE 12 GROUND/ROUGH STONE DISTRIBUTION MAP

Distribution Through House:

a) HOUSE 12 (see Figure 23)

For this part of the analysis, I grouped the assemblage into two categories: stone tools and debitage, and stone ornaments and game balls.

Hammerstones, abraders and celts make up the majority of the ground sone tools. One of the complete celts is located in the northern half of the central corridor in sq. 205-215, as are a large number of the celt fragments and two of the four celt blanks or preforms, suggesting a manufacturing area. There is another cluster of celt items located within the 'band' along the north co-ordinate line 185. Abraders closely follow the distribution pattern of the celt pieces, clustering along the north co-ordinate line 185. There is also a cluster in the northern half of the house along the eastern wall. Generally the southern half of the house lacks abraders. Hammerstones are somewhat more evenly distributed throughout the length of the house. Most are located along the house walls although there are some in the north end of the house associated with the 'special purpose' hearth, in the northern cluster.

The ground stone ornaments include one stone pendant, one stone bead, and two game balls. These are located in the northern half of the house just east of the longitudinal cross-section of the corridor, and within the 'band' along the 185 line. Some of these items are found 2m inside or outside the house walls.

In general, the distribution pattern of ground and rough stone in H12 involves the absence of items in the southern doorway; a small clustering near the northern doorway associated with the 'special purpose' hearth; a clustering along the 'band' of concentration in the Middle third of the central corridor; a clustering in the northern half from line 190 to 205 inclusively (the north third of the central corridor and the north end) from the longitudinal midline to the east wall; and the even distribution in the southern half from line 170 to 185 inclusively (the south end and south third of the central corridor), both under the wall benches and within the central corridor. This represents a much greater concentration of ground stone activity toward the northern end of the house (Figures 24 and 25).

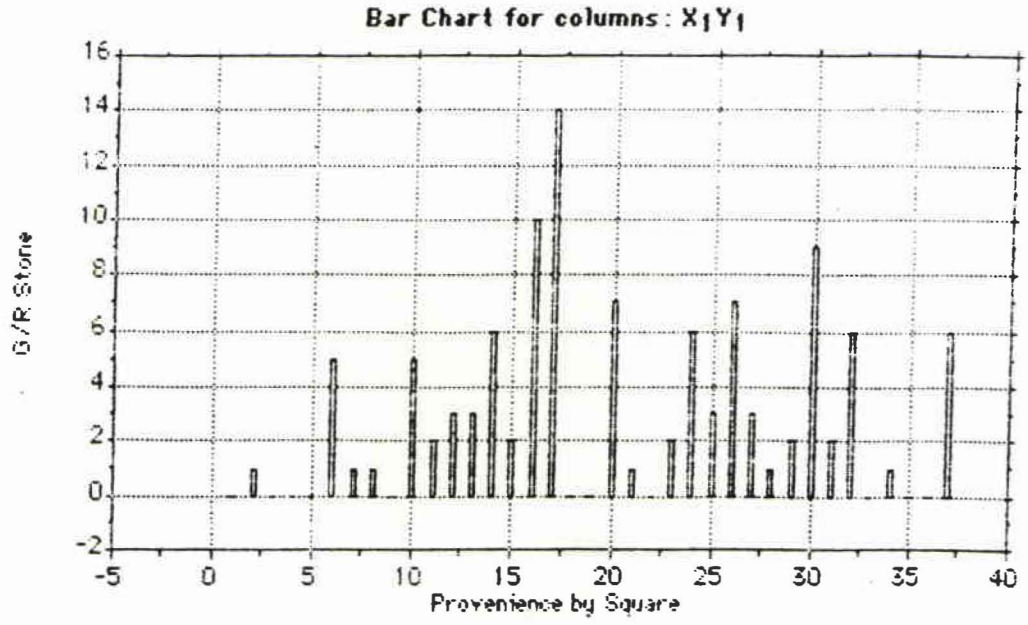


FIGURE 24: HOUSE 12 GROUND/ROUGH STONE FREQUENCY BAR GRAPH BY 5X5M SQUARES

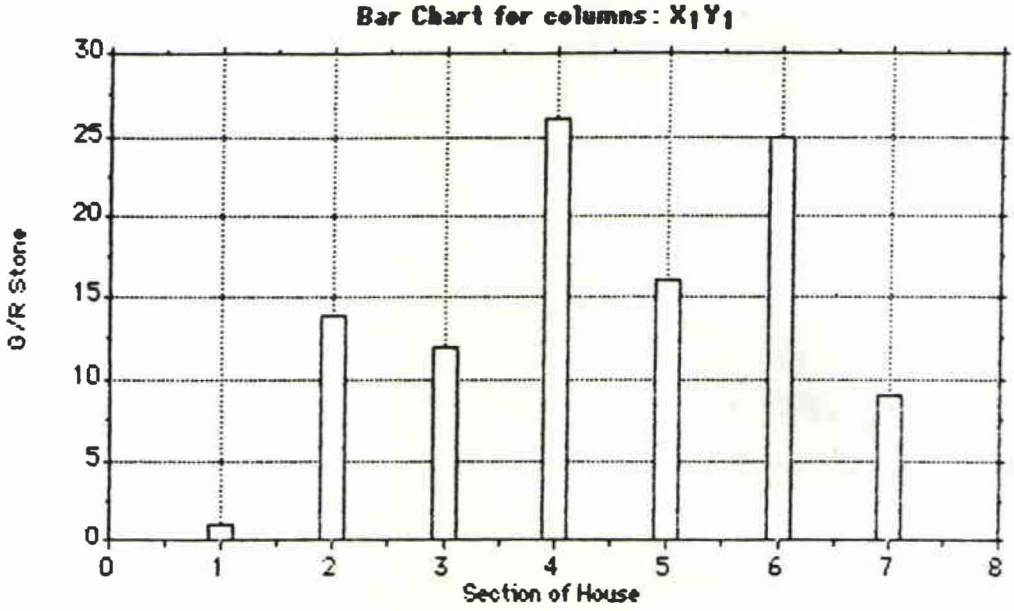


FIGURE 25: HOUSE 12 GROUND/ROUGH STONE FREQUENCY BAR GRAPH BY HOUSE SECTIONS

DRAPER SITE: AlGt — 2

HOUSE 38

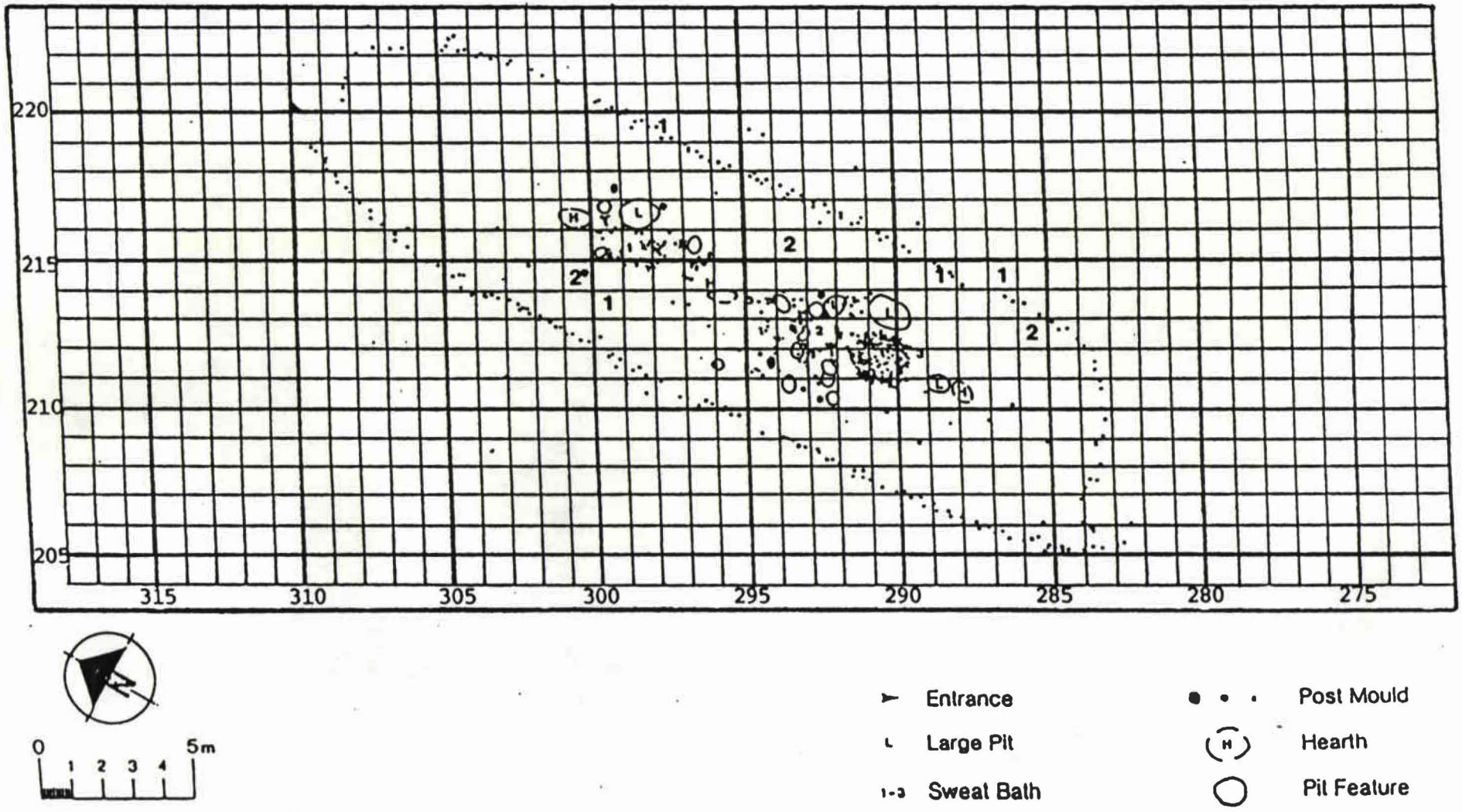


FIGURE 26: HOUSE 38 GROUND/ROUGH STONE DISTRIBUTION MAP

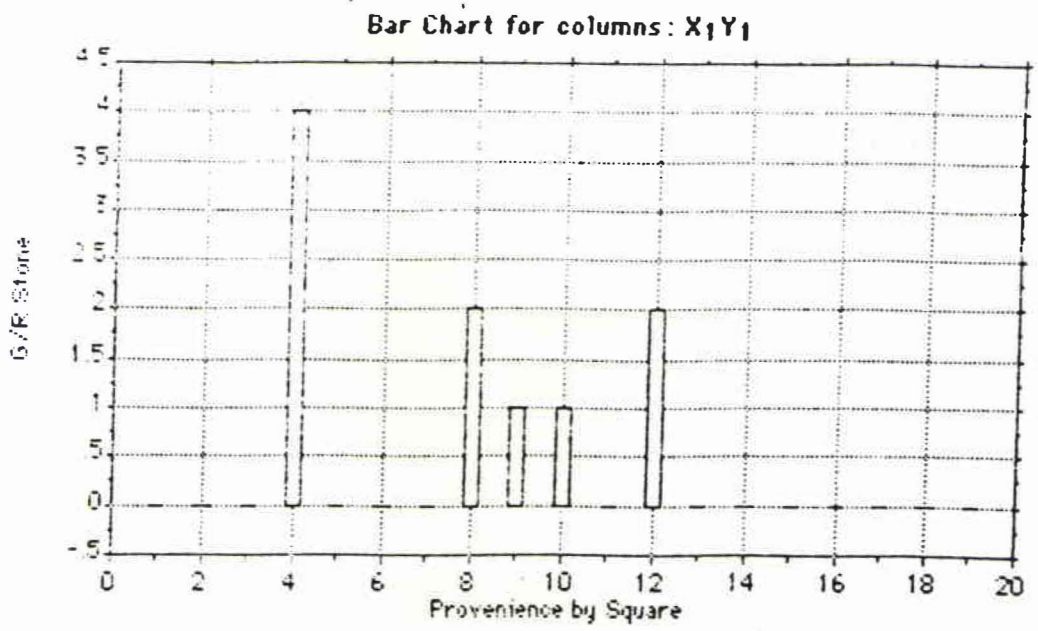


FIGURE 27: HOUSE 38 GROUND/ROUGH STONE FREQUENCY BAR GRAPH BY 5X5M SQUARES

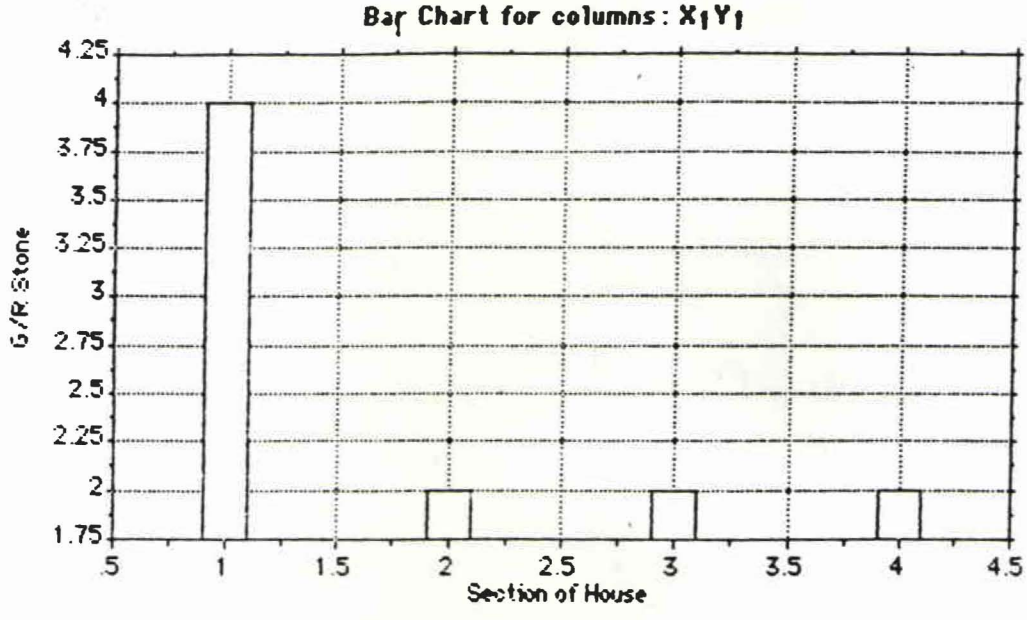


FIGURE 28: HOUSE 38 GROUND/ROUGH STONE FREQUENCY BAR GRAPH BY HOUSE SECTIONS

b) HOUSE 38 (Figure 26)

Both the celt and ground stone fragments that form together. That is, where a celt item is located, there is also a ground stone fragment. The distribution is suggestive of sweeping, in that all the ground stone fragments and all but two celt items are located within 2m inside or outside of the house walls, especially in the south end/door. These two pieces came from the same subsquare in the longitudinal middle of the house. There are no celt or ground stone fragments located in either of the doorways, nor in any features or post moulds (Figures 27 and 28).

BONE ARTIFACT ANALYSIS

Method:

The bone artifact collections were not available to me as they are presently being analyzed by Bruce Jamieson. I was, however, able to make use of Jamieson's analysis, using his revised catelogue and comments on the assemblages for both House 12 and 38. I merely recorded the information provided by Jamieson and plotted the various bone artifact types on the house floor maps.

Bone Artifact Assemblage:

a) HOUSE 12

The total sample of bone artifacts from this house is 101 pieces. The following table lists the categories of bone artifacts from this house and their frequency of occurrence:

TABLE 13: HOUSE 12 BONE ARTIFACT CATEGORY FREQUENCIES

BONE ARTIFACT CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Bone Beads	46.5%	47
Modified Deer Phalanges	19.8%	20
Modified Bone Fragment	9.9%	10
Bone Awl	7.9%	8
Modified Beaver Incisor	5.0%	5
Corn Husking Pin	2.0%	2
Corn Scraper	2.0%	2
Antler Flaker	2.0%	2
Antler Handle	1.0%	1
Modified Tooth	1.0%	1
Decorated Arm Band	1.0%	1
Human Skull Gorget	1.0%	1
Modified Antler Fragment	1.0%	1
TOTAL	100%	101

I grouped the bone artifact assemblage into classes of Decorative Items (Jewellery and Games), Bone Tools, and Bone Debitage.

The first of these classes was the most common, and included bone beads, modified deer phalanges, the decorated arm band and the human skull gorget. Interestingly, bone beads were the most common bone decorative item from this house. Possibly, these were associated with special dress and are thought to have had social value. Modified deer phalanges are the next most common item. McCullough's work on the deer phalanges at the Draper site (1978) was of little help to me as she did not address the issue of provenience locations in her analysis. However, she, with others (Jamieson, pers. comm.; Ramsden, pers. comm.), has indicated that there are several interpretations for the use of deer phalanges. McCullough (1978:98) suggests that:

> All lines of evidence seem to indicate that modified deer

> toe bones were multipurpose items in the material culture of the Draper inhabitants. This suggestion is based upon the multiuniformity in modification from pieces only marked by burning to specimens almost completely ground away. It is also possible that, while some specimens may be ornamental, others probably performed more of a utilitarian function. The extent of modification on a number of specimens indicates a great deal of time and effort involved in the manufacture of these artifacts. On the other hand, the manner in which the phalanges were readily discarded, being found all over the site with the majority in garbage dumps does not suggest any symbolic or esoteric value associated with the artifacts.

The decorated arm band and human skull gorget are suggestive of prestige and social status. Both these items are often associated with special events such as ceremonies and feasts. The skull gorget could have been worn as a pendant around the neck of a person with high status, or made into a rattle to be used in religious events. However, the possibility that these items had lesser significance cannot be ruled out.

Bone Tools include awls, corn husking pins, corn scrapers, flakers, a handle, and modified teeth. These items are all domestic in nature and are associated with the daily activities of the normal household in food processing.

Bone debitage includes both modified bone and modified antler fragments. The distribution of these items may indicate the locale of bone artifact manufacture or repair.

b) HOUSE 38

The bone artifact assemblage for this house is 14 pieces. The following table lists the types of bone artifacts yielded from this house and their frequency of occurrence:

TABLE 14: HOUSE 38 BONE ARTIFACT CATEGORY FREQUENCIES

BONE ARTIFACT CATEGORY	FREQUENCY OF OCCURRENCE	NUMBER
Modified Deer Phalanges	42.9%	6
Bone Awl	21.4%	3
Modified Beaver Incisor	14.3%	2

Bone Bead	14.3%	2
Modified Bone Fragment	7.1%	1
TOTAL	100%	14

Due to the high pecentage of modified deer phalanges in this house, the number of decorative bone artifact items is again the largest grouping of bone artifact classes.

The bone tools consist only of awls and the modified beaver incisors. The presence of only one piece of modified bone fragment suggests that there was no manufacturing of bone artifacts in H38.

Distribution Through the House:

a) HOUSE 12 (see Figure 29)

There is a cluster of items within the 'band' along the north co-ordinate line 185 which includes items from the sq. 185-225, that is almost entirely outside the east wall of the house.

Of the 47 bone beads, 25 come from sq. 185-225, and 19 of these are from subsquare 4 alone. The remainder of the beads are located in the middle of the house, between line 185 and line 200.

The modified deer phalanges are also distributed through the 'band' along the 185 line, as well as in the central corridor activity areas and against the eastern wall in both the north and south halves of the house.

The single human skull gorget is associated with the bone bead concentration, in sq. 185-225, perhaps representing a broken necklace.

The decorated arm band is the one decorative bone artifact that does not follow the pattern. It is located in the northern end of the house, associated with the 'special purpose' hearth.

As for the bone tools, awls, corn husking pins, corn scrapers, flakers, the modified beaver incisor, and modified tooth are all found in the 'band' of artifact

DRAPER SITE: AlGt — 2

HOUSE 12

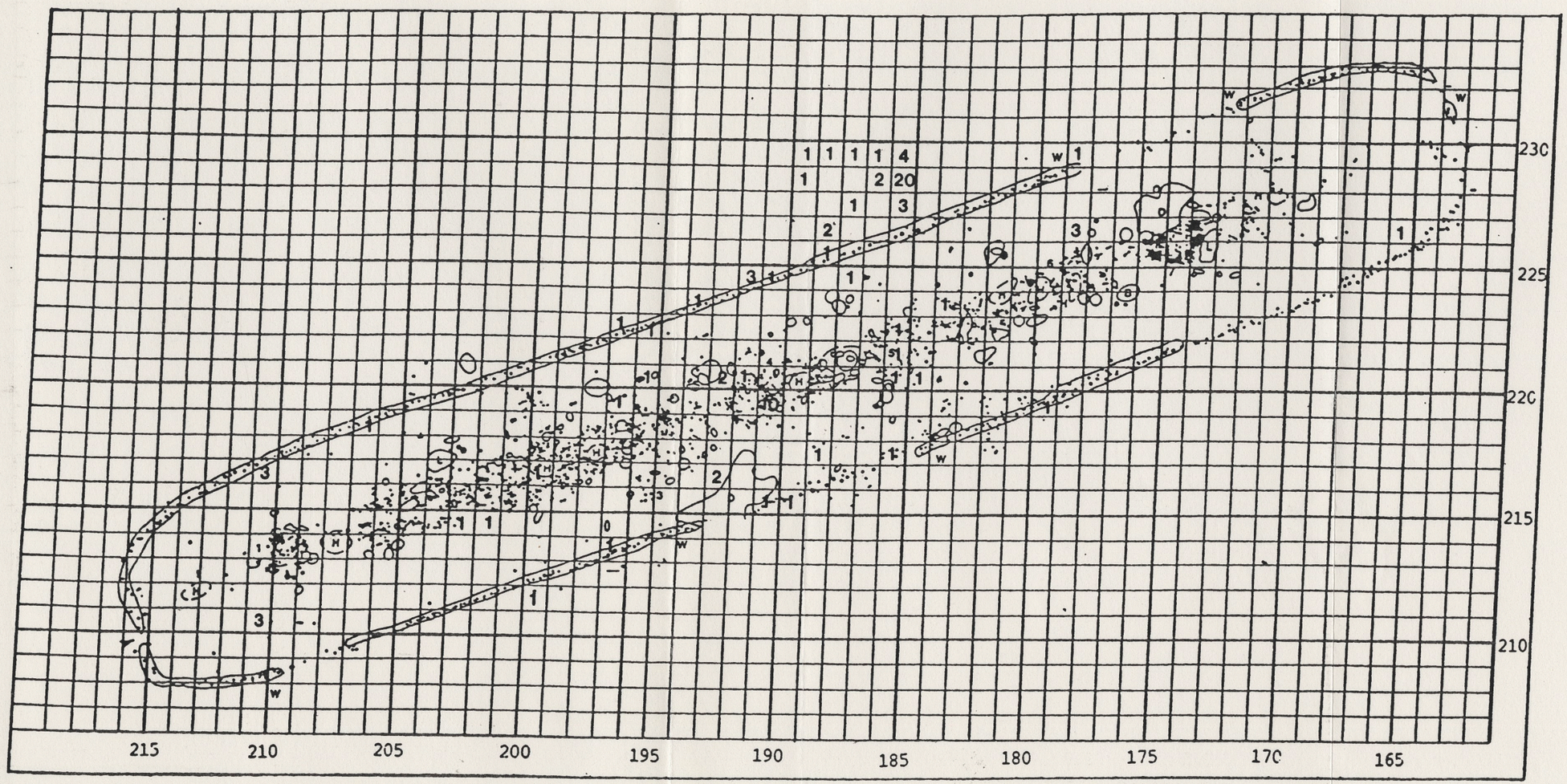


FIGURE 29: HOUSE 12 BONE ARTIFACT DISTRIBUTION MAP

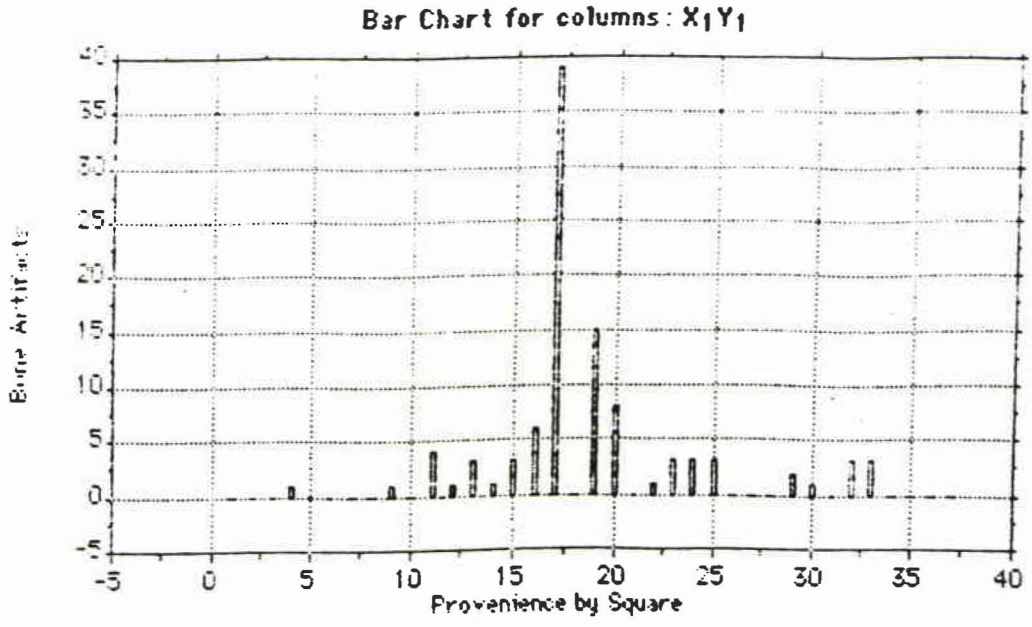


FIGURE 30: HOUSE 12 BONE ARTIFACT FREQUENCY BAR GRAPH BY 5X5M SQUARES

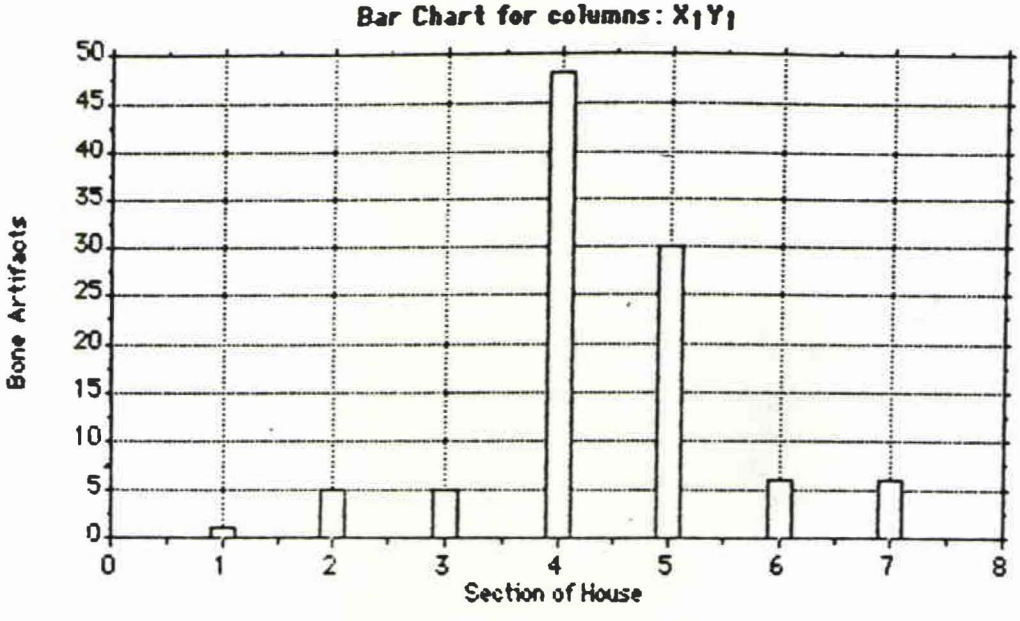


FIGURE 31: HOUSE 12 BONE ARTIFACT FREQUENCY BAR GRAPH BY HOUSE SECTIONS

DRAPER SITE: AIGt — 2

HOUSE 38

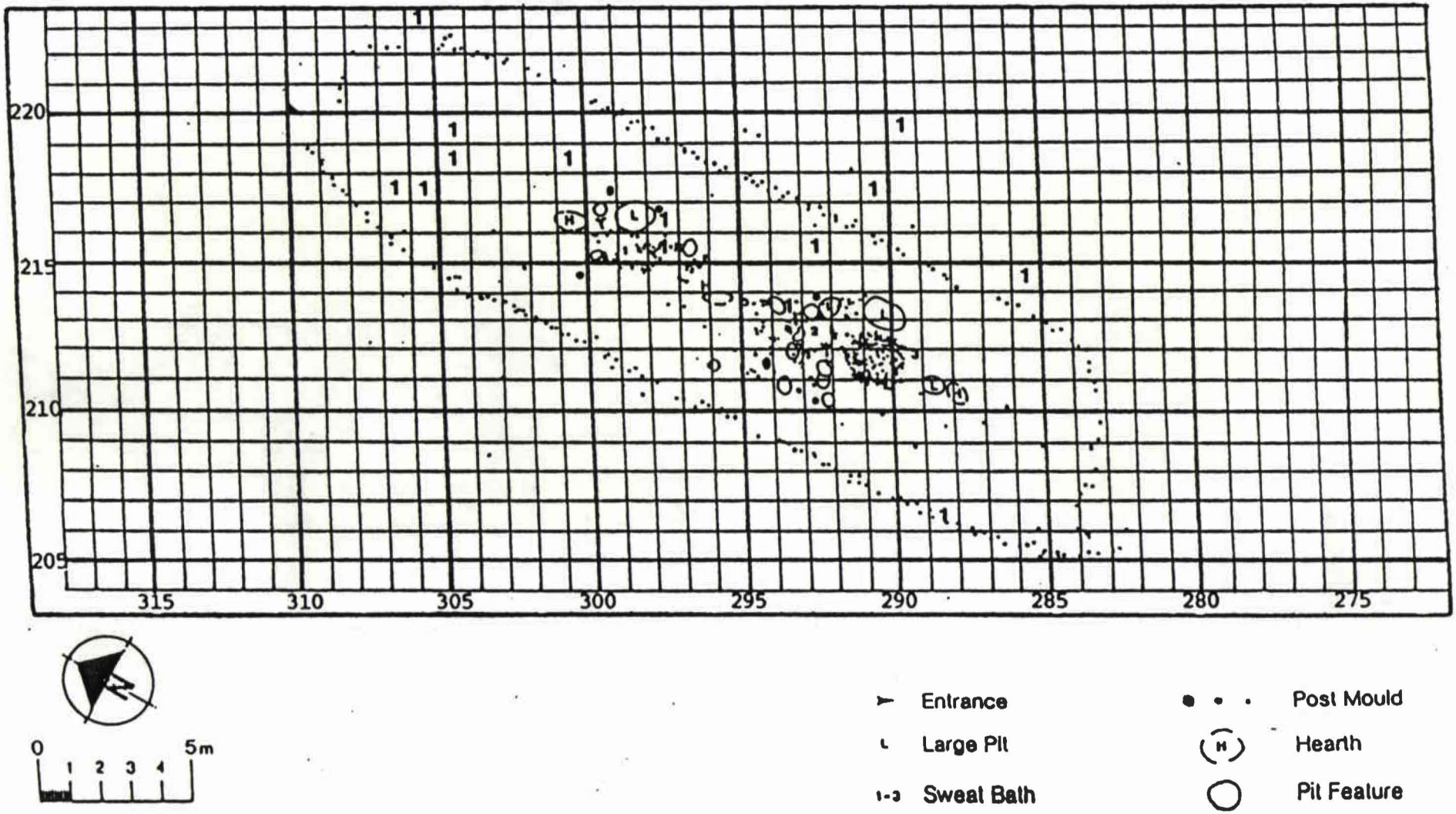


FIGURE 32: HOUSE 38 BONE ARTIFACT DISTRIBUTION MAP

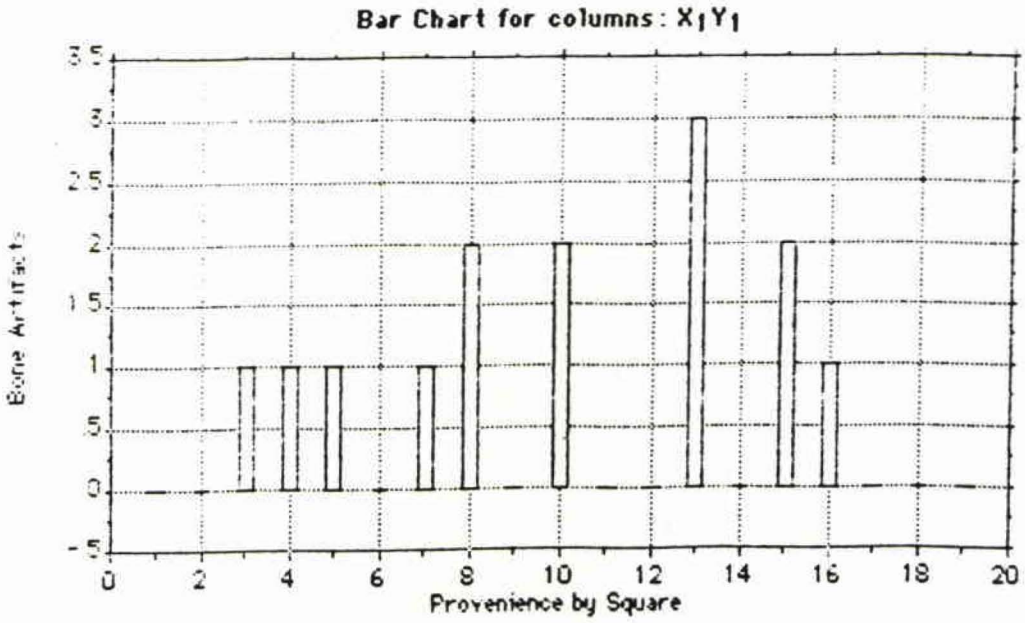


FIGURE 33: HOUSE 38 BONE ARTIFACT FREQUENCY BAR GRAPH BY 5X5M SQUARES

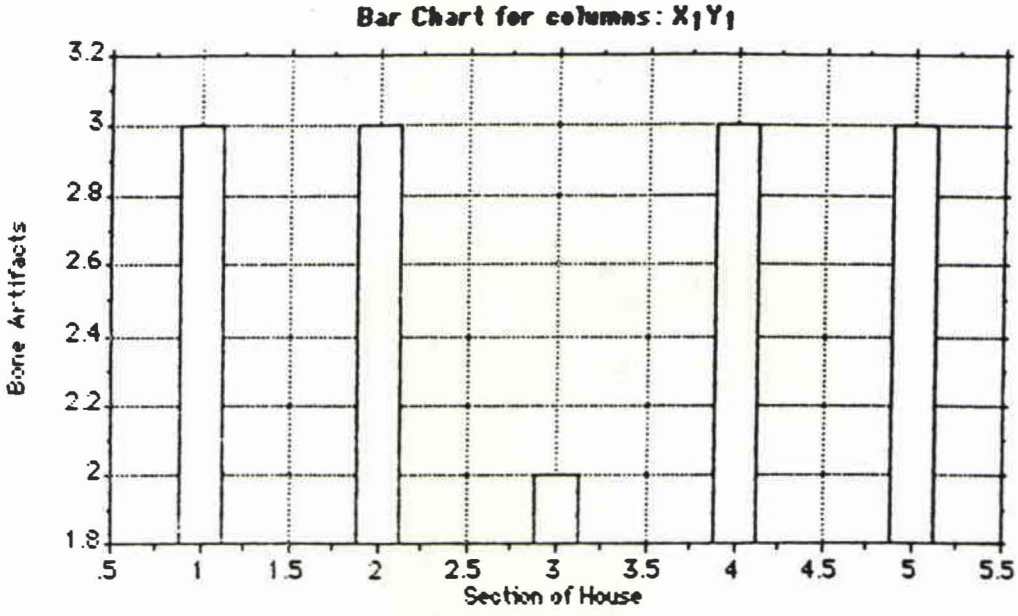


FIGURE 34: HOUSE 38 BONE ARTIFACT FREQUENCY BAR GRAPH BY HOUSE SECTIONS

concentration along line 185. Some awls also are from the northern end of the house up against the walls.

Bone debitage is found throughout the house. There are some items in the 'band', others against the walls in both halves of the house, and one piece located in the north doorway.

Bone artifacts from features and post moulds follow the pattern of high concentrations in the longitudinal middle of the house, within the 'band' along north co-ordinate line 185 (Figures 30 and 31).

b) HOUSE 38 (Figure 32)

The bone artifact assemblage of H38 is very small, but there is some clustering in the distribution of these items. Although very few items were found in the south end/door, none were found in the southern half of the house. The items associated with the central corridor activity areas are from the northern cluster of the two central corridor feature/hearth groupings.

Modified deer phalanges, beads, and awls are from the nothern cluster of feature/hearths in the central corridor of the house. One awl and the two beaver incisor chisels are located in the north doorway of the house. The single piece of bone debitage is located 4m outside the east walls of the southern half of the house (Figures 33 and 34).

There are no bone artifacts from features or post moulds in H38.

MAMMALIAN FAUNAL ANALYSIS

Method:

Burns' Preliminary Faunal Analysis of the Draper Site Mammalian Bone Remains(1979), is a meticulous and in-depth study. I did not, however, use all the data

recorded by Burns but instead selected that information that most suited my analysis goals. I was interested in compiling the description of the artifact varieties from the houses, in an attempt to reconstruct, if only partially, the diet of the house occupants. I also wanted to see if any preferences were apparent which might give an indication of the value of some species over others in their diet. To facilitate this goal, I recorded the following characteristics:

1. species type
2. part of body- indeterminate
   - skull
   - forelimb
   - hindlimb
   - limb (indeterminate)
   - extremity
   - axial
3. age- indeterminate
   - old adult
   - adult
   - subadult
   - juvenile
4. sex- indeterminate
   - male
   - female
5. firing- charred
   - calcined
   - not

Having recorded all of the above characteristics, I concluded that some of these were not applicable to my analysis, since in both H12 and H38, no sex was identified for the faunal material, and further, all ages that were recorded were either indeterminate or subadult.

It should be noted that I will be using only the common names in the following observations. A list of those species yielded from both houses with their scientific names is given below:

Indeterminate
White-tailed Deer (Odocoileus virginianus)
Dog (Canis familiaris)
Muskrat (Ondatra zibethicus)
Woodchuck (Marmota monax)

Black Bear (Ursus americanus)
Grey Squirrel (Sciurus carolinesis)
Grey Fox (Urocyon cinereoargenteus)
Beaver (Castor canadensis)
Wolf (Canis lupus)
River Otter (Lontra canadensis)
Eastern Cottontail (Sylvilagus floridanus)
Raccoon (Procyon lotor)
Snowshoe Hare (Lepus americanus)
Wapiti (Cervus canadensis)
Red Squirrel (Tamiasciurus hudsonicus)
Fisher (Martes pennanti)
Human (Homo sapiens)

Mammalian Faunal Assemblage:

a) HOUSE 12

The mammalian faunal assemblage for this house is 1486 pieces. Of this collection, there were 543 identifiable items, comprising 16 different species. The following table lists those species and their frequency of occurrence:

TABLE 15: HOUSE 12 MAMMALIAN FAUNAL SPECIES FREQUENCIES

SPECIES	FREQUENCY IN TOTAL ASSEMBLAGE	FREQUENCY IN IDENTIFIED ASSEMBLAGE	NUMBER OF ITEMS
Indeterminate	63.5%	--	943
White-tailed Deer	29.3%	80.3%	436
Woodchuck	2.2%	5.9%	32
Dog	1.7%	4.8%	26
Black Bear	1.1%	2.9%	16
Beaver	0.8%	2.2%	12

Muskrat	0.3%	0.9%	5
River Otter	0.3%	0.7%	4
Human	0.1%	0.4%	2
Grey Squirrel	0.1%	0.4%	2
Grey Fox	0.1%	0.4%	2
Snowshoe Hare	0.1%	0.2%	1
Eastern Cottontail	0.1%	0.2%	1
Raccoon	0.1%	0.2%	1
Red Squirrel	0.1%	0.2%	1
Wapiti	0.1%	0.2%	1
Wolf	0.1%	0.2%	1
TOTAL	100.1%	100.1%	1486

No particular body part is singularly preferred. Of identified bones, extremities accounted for 34.9%, skull 24.6%, hindlimb 20.8%, forelimb 13.7%, and axial 5.4%. Less than 1% was indeterminate. In white-tailed deer, as with many of the larger species from this house, the predominance of extemities, limbs and skulls is suggestive of butchering away from the habitation site. The frequent occurrence of skulls may be associated with rituals and ceremonies, or may be associated with hide-tanning processes. The human skull fragment and leg, which are not associated with a burial, suggest some special activity or event (ritual?). House 12 has a large proportion of skull fragments in its mammalian bone assemblage. It should be noted that the relatively high frequency of skulls observed may simply be due to the fact that they are easier to identify, first as cranial and second to a particular species (Spence, pers.comm.).

b) HOUSE 38

The mammalian faunal assemblage for this house is 176 pieces. Of this collection only 33 items could be identifed, representing 7 species. The following table lists these species and their frequency of occurrence:

DRAPER SITE: AIGt — 2

HOUSE 12

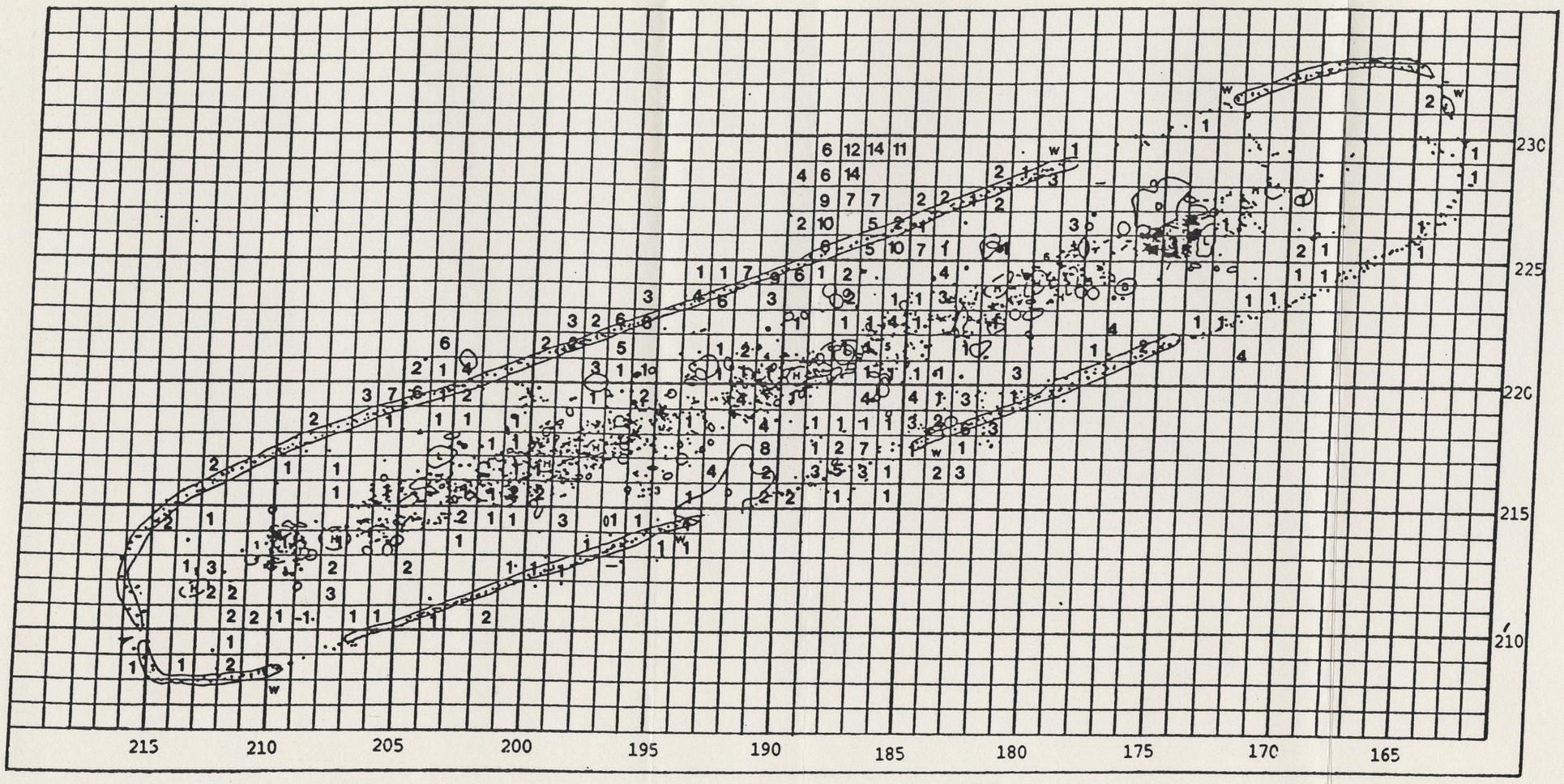


FIGURE 35: HOUSE 12 MAMMALIAN FAUNAL ASSEMBLAGE DISTRIBUTION MAP

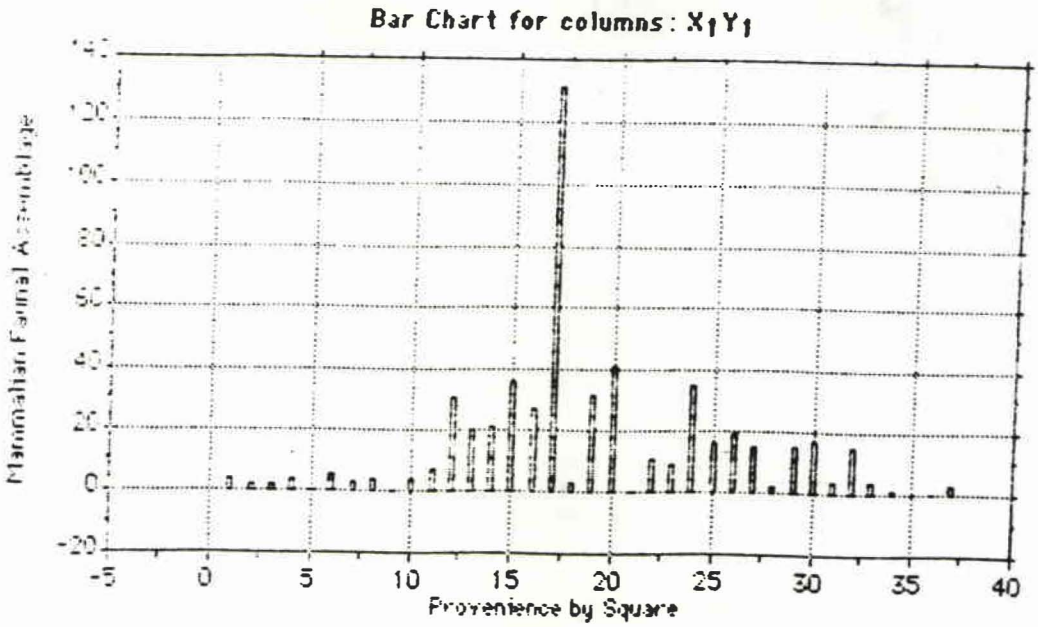


FIGURE 36: HOUSE 12 MAMMALIAN FAUNAL ASSEMBLAGE FREQUENCY BAR GRAPH BY 5X5M SQUARES

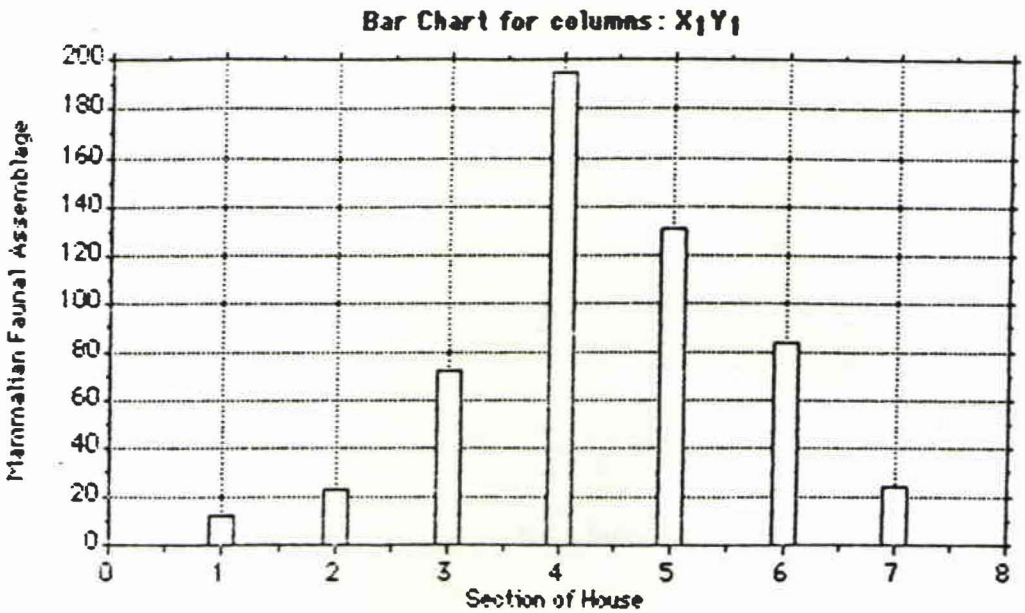


FIGURE 37: HOUSE 12 MAMMALIAN FAUNAL ASSEMBLAGE FREQUENCY BAR GRAPH BY HOUSE SECTIONS

TABLE 16: HOUSE 38 MAMMALIAN FAUNAL SPECIES FREQUENCIES

SPECIES	FREQUENCY IN TOTAL ASSEMBLAGE	FREQUENCY IN IDENTIFIED ASSEMBLAGE	NUMBER OF ITEMS
Indeterminate	81.3%	--	143
White-tailed Deer	15.3%	81.8%	27
Black Bear	0.6%	3.0%	1
Woodchuck	0.6%	3.0%	1
Dog	0.6%	3.0%	1
Beaver	0.6%	3.0%	1
Snowshoe Hare	0.6%	3.0%	1
Fisher	0.6%	3.0%	1
TOTAL	100.2%	99.8%	176

As in House 12, the majority of bone items cannot be identified to species. Further, in House 38, 27 of the identifiable items were white-tailed deer, while all the other species were represented by only one item.

The part of the body most often recorded was the extremities (32.3% of the identifiable collection). The other pieces were evenly distributed among skull (19.4%), forelimb (16.1%), hindlimb (16.1%), and axial (16.1%). White-tailed deer had a very low proportion of skull fragments, while black bear, dog, beaver, and fisher were represented only by skull fragments.

DRAPER SITE: AlGt — 2

HOUSE 38

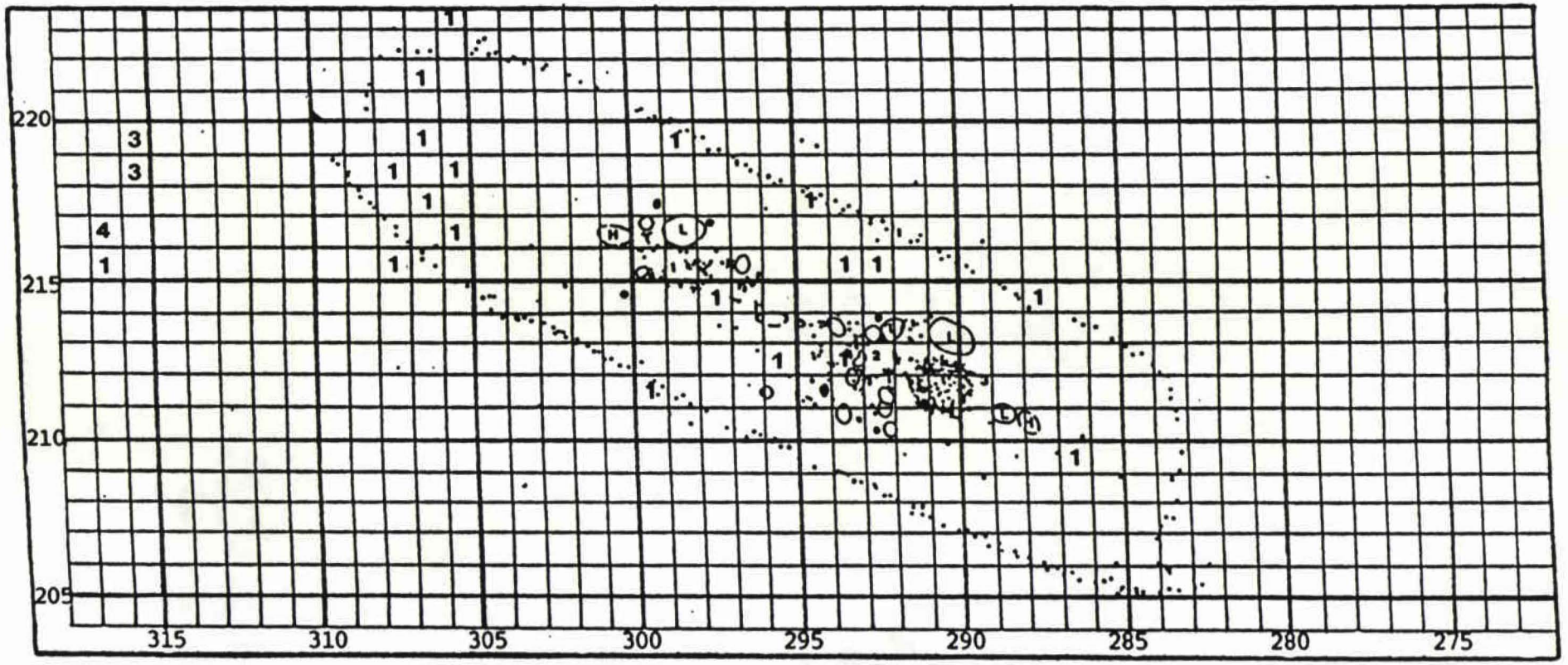


FIGURE 38: HOUSE 38 MAMMALIAN FAUNAL ASSEMBLAGE DISTRIBUTION MAP

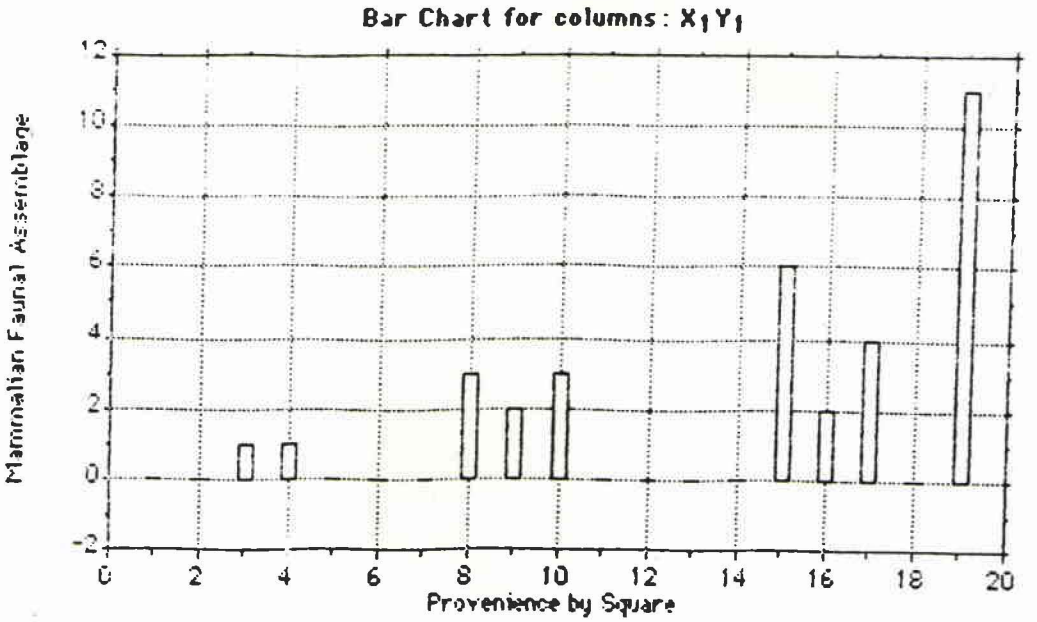


FIGURE 39: HOUSE 38 MAMMALIAN FAUNAL ASSEMBLAGE FREQUENCY BAR GRAPH BY 5X5M SQUARES

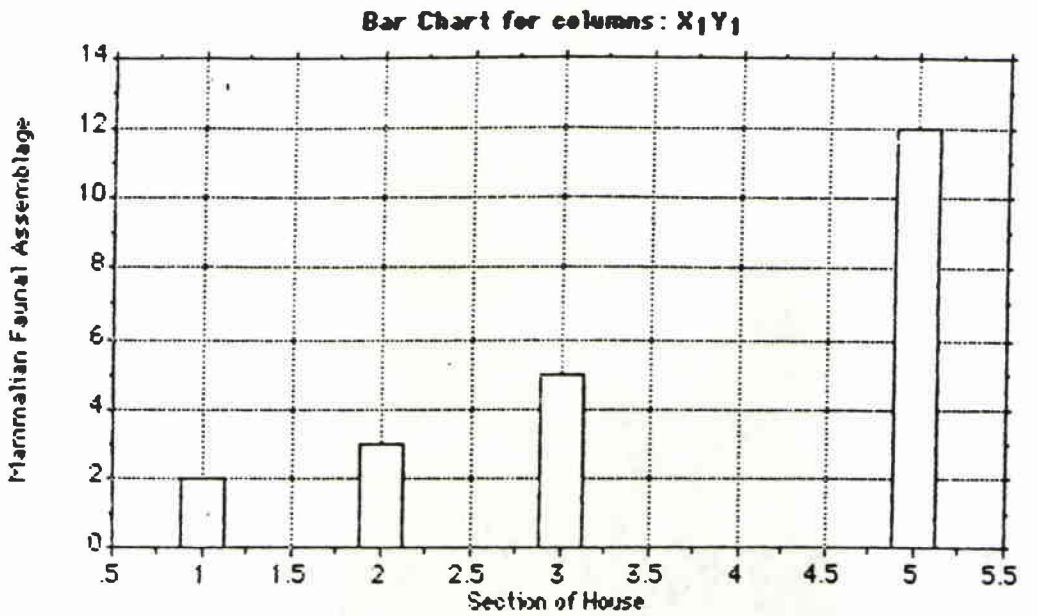


FIGURE 40: HOUSE 38 MAMMALIAN FAUNAL ASSEMBLAGE FREQUENCY BAR GRAPH BY HOUSE SECTIONS

Distribution Through House:

a) HOUSE 12 (Figure 35)

The overall distribution of the identified mammalian faunal assemblage depicts a concentration of items along the north co-ordinate line 185, along the house walls, and in the north end of the house.

Species such as snowshoe hare, eastern cottontail, raccoon, red squirrel, wapiti, and wolf, as well as some pieces of beaver, black bear and white-tailed deer are located within 2m inside and outside the house walls.

Species such as grey fox, grey squirrel, human, river otter, and muskrat are from the 'band' of concentrated artifact density along the line 185. Likewise some beaver, black bear, dog, woodchuck, and many pieces of white-tailed deer are found in this part of the house.

There is evidence of black bear, dog, and white-tailed deer in the north end of the house. Many of these remains are associated with the 'special purpose' hearth.

The faunal items from features and post moulds are similarly distributed in the 'band', and northern end of the house, as well as along the walls of the house under the bench lines. Also of note, there is more dog yielded from features and post moulds.

In general, there are more white-tailed deer, black bear and dog in the central corridor activity areas. Other species are found more consistently along the walls of the house (Figures 36 and 37).

There is no evidence of feast pits, ie. pits with dense faunal remains. The total number of both identified and unidentified faunal items recovered from the 30 pits that produced faunal remains is only 61 pieces. Another 25 pieces of the faunal assemblage were recovered from posts. However, it should be noted that features and post moulds that produce artifacts may have a different significance: material in posts may have simply been used as fill, while materials in features suggest a portion of a meal's discarded remains.

b) HOUSE 38 (Figure 38)

The overall distribution of the identified mammalian faunal assemblage in H38 indicates that the north end was more productive of faunal items, suggesting more butchering, cooking, and/or eating activities at this end of the house. Further, the central corridor is relatively bare of faunal items, although there is a small cluster along the bench lines of the central corridor. There is also a cluster of faunal remains in sq. 315-215, which is 7m outside the north end of the house. There is a possibility that these items are not associated with H38 but with some other house or some outdoor activity (Figures 39 and 40).

Many of the white-tailed deer are from the bench lines area of the central corridor, not associated with the activity areas of features and hearths. Woodchuck and snowshoe hare are also found in these areas of the house. Other deer items are located 7m outside the north end of the house in sq. 315-215, as are the single pieces of fisher and beaver. There is also a cluster of white-tailed deer fragments in the northern end of the house. Black bear and dog are also found in this cluster.

There is no faunal material from features or post moulds in House 38.

The following chapter will discuss and compare the overall distribution patterns of the various artifact types from both houses. Some conclusions and interpretations will be offered based on these comparisons.

CHAPTER 4: HOUSE COMPARISONS AND SUMMARY

In this chapter, I will discuss the distribution patterns of the artifact assemblages for each house and compare these patterns between the houses. I also compare the artifact assemblages of H12 and H38. The aim of this chapter is to examine the two artifact collections and their distribution patterns to try and offer explanations for the differences observed. Perhaps the differences are due to different activities that took place within the houses - ie. the houses had different functions. Or perhaps they reflect a different social status of the house leaders. A final alternative explanation for the observed differences between H12 and H38 may be the differences in the length of time the two houses were occupied.

DISTRIBUTION PATTERNS

In describing the spatial distributions of the artifact assemblages in the houses in Chapter 3, I made observations based on the visual examination of 1x1m square plot maps of each artifact class. From these I described patterns that 'cluster' around the hearth, are concentrated along house walls, etc., or are 'randomly' distributed. In order to verify these observations, I performed Poisson tests for random distribution of artifacts in 5x5m units through each house and calculated chi-square values to test for significant differences between the expected (random) and observed distributions.

> Tests for non-random patterns have been devised, based on the property that for a random pattern the numbers of quadrats [5x5 m squares] containing 0, 1, 2, ...etc. points are determined by the Poisson function (Greig-Smith, 1964: 61). The number of quadrats containing 0, 1, 2, ...etc. points can be counted, and this observed frequency distribution can be directly compared with the Poisson distribution corresponding to the same density of points, by means of a goodness-of-fit test and X^2 statistic...(Hodder and Orton,1981:33-34).

Poisson will test the probability that the observed pattern and the apparent clustering happened only due to chance - ie. will test to see if the pattern really is random.

Following this, I summarize the distributions of artifact groups in each house, and discuss their patterns. I then compare these patterns between the houses. For this, I used only the house section subdivisions (see Figures 1 and 2 of Chapter 3 on pgs. 24 and 25).

House 12:

Poisson charts for each artifact class are found in Appendix 3. In order to calculate chi-square values, it was necessary to combine cells in order that none were less than 5.

> The X^2 goodness-of-fit test will not be effective if the number of quadrats is small or the density is low. Because this test is only approximate and does not hold sufficiently accurately for 'small' expected values (i.e. when the predicted number of quadrats containing a certain number of points each is small), then if the number of quadrats predicted by the Poisson model to have (for example) k points each is less than five, this group must be merged with another (for example, those predicted to have k-1 points each) and so on, until all groups have at least five quadrats.
> (Hodder and Orton, 1981:37-38)

Therefore, the 'Observed Frequency Tables' for each of the artifacts below are the result of the combination of the complete Poisson charts found in Appendix 3. In these tables, Column 1 represents the 'Grouped Observed Distribution Frequencies' and Column 2 represents the 'Grouped Poisson (Random) Distribution Frequencies'. In each case, the Research Hypothesis is that the two variables are dependent (ie. the distribution is not random). The Null Hypothesis is that the two variables are not dependent (ie. the distribution is random). The test statistic (for chi-square) is as follows:

$$X^2 = \frac{\Sigma (O - E)}{E}$$

Where O is the observed frequency and E is the expected frequency.

Rims

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	5	6.256E-4	5
Row 2	6	2.21E-2	6.02
Row 3	5	.62	5.62
Row 4	5	10.04	15.04
Row 5	7	24	31
Row 6	9	2.37	11.37
Totals:	37	37.05	74.05

Total Chi-Square - 29.221

Degrees of Freedom - 5

Critical Value at 0.02 level of significance - 13.388

Null Hypothesis - REJECTED

∴ Distribution is NOT RANDOM

Pipes

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	20	12.2	32.19
Row 2	9	13.54	22.54
Row 3	8	11.28	19.28
Totals:	37	37.01	74.01

Total Chi-Square - 3.363

Degrees of Freedom - 2

Critical Value at 0.02 level of significance - 7.824

Null Hypothesis - REJECTED

∴ Distribution is NOT RANDOM

Chipped Lithics

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	7	.1	7.11
Row 2	9	2.41	11.41
Row 3	8	14.76	22.76
Row 4	6	10.92	16.92
Row 5	7	8.82	15.82
Totals:	37	37.02	74.02

Total Chi-Square - 14.14

Degrees of Freedom - 4

Critical Value at 0.02 level of significance - 11.668

Null Hypothesis - REJECTED

∴ Distribution is NOT RANDOM

Ground and Rough Stone

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	11	1.94	12.94
Row 2	6	5.71	11.72
Row 3	5	8.43	13.43
Row 4	6	18.01	24.01
Row 5	9	2.92	11.92
Totals:	37	37.01	74.01

Total Chi-Square - 16.336

Degrees of Freedom - 4

Critical Value at 0.02 level of significance - 11.668

Null Hypothesis - REJECTED

∴ Distribution is NOT RANDOM

Bone Artifacts

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	18	2.14	20.14
Row 2	6	6.59	12.59
Row 3	8	17.08	25.08
Row 4	5	10.83	15.83
Totals:	37	36.64	73.64

Total Chi-Square - 17.946
Degrees of Freedom - 3
Critical Value at 0.02 level of significance - 9.837
Null Hypothesis - REJECTED
∴ Distribution is NOT RANDOM

Mammalian Faunal Remains

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	5	1.560E-5	5
Row 2	7	1.00E-2	7.01
Row 3	6	3.00E-2	6.03
Row 4	7	22.22	29.22
Row 5	5	14.23	19.23
Row 6	7	.33	7.32
Totals:	37	36.82	73.82

Total Chi-Square - 36.324
Degrees of Freedom - 5
Critical Value at 0.02 level of significance - 13.388
Null Hypothesis - REJECTED
∴ Distribution is NOT RANDOM

In summary then, H12's artifact assemblage is not randomly distributed. That is, the observed patterns of clustered distribution are unlikely to happened by chance (ie. could only have happened by chance 2 times out of 100).

The following chart illustrates the location within the house of the greatest concentrations of the artifact groups:

TABLE 17: HOUSE 12 CONCENTRATION DISTRIBUTIONS

ARTIFACT GROUP	CONCENTRATION WITHIN HOUSE
Rims	- along 'band' (185 north co-ordinate line) ie. Middle third of central corridor - in North third of central corridor - along walls (within 1-2m in- or outside of house walls) - along bench lines - in North doorway (associated with the 'special purpose' hearth)
Pipes	- along walls (within 1-2m in- or outside of house walls) - along 'band' (185 north co-ordinate line) ie. Middle third of central corridor - in the North third of the central corridor - in North doorway (associated with the 'special purpose' hearth)
Chipped Lithics	Formal Tools- randomly distributed Informal Tools- along 'band' (185 north co-ordinate line) ie. Middle third of central corridor - in a cluster at sq. 205-210 ie. in North end

	Debitage- randomly distributed (there is no area within the house without chipped lithic debitage)
Ground and Rough Stone	- in North end, especially in a cluster at sq. 205-215 (associated with the 'special purpose' hearth) - along 'band' (185 north co-ordinate line) ie. Middle third of the central corridor
Bone Artifacts	Tools & Ornaments - along 'band' (185 north co-ordinate line) ie. Middle third of central corridor Debitage- randomly distributed (there is no area of the house without bone debitage)
Mammalian Faunal	- along 'band' (185 north co-ordinate line) ie. Middle third of central corridor - along walls (within 1-2m in- or outside of house walls) - in North end (associated with the 'special' purpose' hearth?)

In general then, four areas within the house yield concentrations of different artifact groups. These include the area I have called the 'band' of artifact concentration along the 185 north co-ordinate line; along the walls of the house; and in the North end of the house associated with the 'special purpose' hearth. In addition to these three areas, there is also what appears to be a ground and rough stone manufacture area in the North end of the house. This is apparent through the

concentration of ground and rough stone tools and debitage in this area. It is likely that these artifacts are associated with the 'special purpose' hearth, as I will discuss later.

Certainly the richest yielding area of the house is through the Middle third section of the central corridor. This band, lying as it does along the 185 north co-ordinate line, cuts across the longitudinal middle of the longhouse. The hearth and surrounding activity area of this middle section of the house is the most intensively and extensively used area. I believe that this is the head of the house's hearth. As Hayden (1977:5) states:

> If we make the reasonable assumption that the density of small post holes, pits, and fire reddened earth, are positively correlated to the intensity and size of meal preparation, it is possible to argue that these concentrated features represent a residential locus of unusually intense feasting activity which in turn one finds associated with big or head men and chiefs throughout the world.

This would explain why this area was used so intensively. Given what I have already mentioned about the use of the headman of the longhouse's hearth, it is likely that this would have been the pivotal meeting and eating place, away from the cold drafts of winter at the ends of the house and surrounding the family with the highest status within the house.

A great number of artifacts are located within 1-2m of the house walls. It is possible that some activities were performed under the benches, resulting in the debris found by the walls. However, I do not believe that much activity took place here because of the relative lack of features and pits - the central corridor was the area where most tasks were performed. Rather, I believe that this distribution along the walls reflects the activity of sweeping debris under the benches in order to keep the central corridor relatively clean. Hayden and Nelson (1981), using ethnoarchaeological data, suggest that residential refuse tends to accumulate mostly in areas near the walls of structures. That some of these items are outside of the house, is probably a case of post-depositional movement. When houses fell into disrepair and disuse and eventual decay, it is probable that debris near house walls experienced the greatest amount of post-depositional movement. These artifacts are, however, part of the house artifact assemblage.

The cluster of artifacts in the north end/doorway and ground stone working cluster along north co-ordinate lines 205 and 210, are probably associated with the 'special purpose' hearth. This hearth is in square 210-210 - 'isolated' in the sense that it is an unusual location within the house (so near the doorway), and is not associated with benches on either side. Within the central corridor, hearths are considered 'domestic' because they are thought to be used by the two families that occupy the benches on either side of the hearth. This suggests that this 'isolated' hearth had a function other than ordinary domestic activities. Because of the abundance of artifacts in this area, I suggest that this indicates that 'special' activities were taking place by this hearth. The concentration of ground stone items indicates that manufacture/repair of ground stone artifacts was being performed here. Similarly, the abundance of mammalian faunal items, as well as the high occurrence of ceramic rims and pipes in this area, indicates that at least some feasting took place here. Ceramic vessels that held the foods of the feast may have been broken and hence the evidence of many rim sherds in this area is suggestive of cooking and eating. It is not clear why these activites would have been performed here, at a hearth that seemingly did not 'belong' to any one family. But it is clear that this hearth had a special function, distinct from the domestic hearths of the central corridor[1].

House 38:

Poisson charts for each artifact class are found in Appendix 4. As in H12, in order to calculate chi-square values it was necessary to combine cells in order that none were less than 5. Therefore, the 'Observed Frequency Tables' for each of the artifacts below are the result of the combination of the complete Poisson charts found in Appendix 4. Again, in these tables, Column 1 represents the 'Grouped Observed Distribution

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[1] It is possible that the fire and the animal grease were used in the polishing of the celts as Kapches (1979: 67) explains that:

> Polishing can be achieved by other techniques, such as using organic materials to create a lustre (Skavlem in Pond, 1930 and Roberts, 1975). By rubbing the surface with charred tree ash and a chamois coated with animal grease a high polish was created. Roberts heated the celt during this procedure. This process coats the surface and covers the irregularities.

Frequencies' and Column 2 represents the 'Grouped Poisson (Random) Distribution Frequencies'. In each case, the Research Hypothesis is that the two variables are dependent (ie. the distribution is not random); and the Null Hypothesis is that the two variables are not dependent (ie. the distribution is random). The test statistic (for chi-squares) is as follows:

$$X^2 = \frac{\Sigma (O - E)}{E}$$

Where O is the observed frequency and E is the expected frequency.

Rims

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	6	.65	6.65
Row 2	7	10.08	17.08
Row 3	6	8.27	14.27
Totals:	19	19.01	38.01

Total Chi-Square - 5.213
Degrees of Freedom - 2
Critical Value at 0.02 level of significance - 7.824
Null Hypothesis - NOT REJECTED
∴ Distribution is RANDOM

Pipes

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	13	10.65	23.65
Row 2	6	8.35	14.35
Totals:	19	18.99	37.99

Total Chi-Square - 0.617
Degrees of Freedom - 1
Critical Value at 0.02 level of significance - 5.412
Null Hypothesis - NOT REJECTED
∴ Distribution is RANDOM

Chipped Lithics

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	5	3.17	8.17
Row 2	6	5.68	11.68
Row 3	8	10.15	18.15
Totals:	19	19	38

Total Chi-Square - 0.672
Degrees of Freedom - 2
Critical Value at 0.02 level of significance - 7.824
Null Hypothesis - NOT REJECTED
∴ Distribution is RANDOM

Ground and Rough Stone

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	14	11.23	25.23
Row 2	5	7.77	12.77
Totals:	19	19	38

Total Chi-Square - 0.904

Degrees of Freedom - 1

Critical Value at 0.02 level of significance - 5.412

Null Hypothesis - NOT REJECTED

∴ Distribution is RANDOM

Bone Artifacts

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	10	9.09	19.09
Row 2	9	9.78	18.78
Totals:	19	18.87	37.87

Total Chi-Square - 0.075

Degrees of Freedom - 1

Critical Value at 0.02 level of significance - 5.412

Null Hypothesis - NOT REJECTED

∴ Distribution is RANDOM

Mammalian Faunal Remains

Observed Frequency Table

	Column 1	Column 2	Totals:
Row 1	10	3.33	13.34
Row 2	9	15.67	24.67
Totals:	19	19	38

Total Chi-Square - 5.134

Degrees of Freedom - 1

Critical Value at 0.02 level of significance - 5.412

Null Hypothesis - NOT REJECTED

∴ Distribution is RANDOM (but close to being clustered)

In summary then, H38's artifact assemblage is randomly distributed. That is, the observed pattern of clustered distribution could have happened by chance more often than 2 out of 100 times.

It should be noted that the statistically tested random distribution of most of H38's artifact collection maybe due to the very small size of that collection. I believe that the visual aid of the distribution maps is useful at this point to examine the distribution patterns that do exist.

The following chart illustrates the location within the house of the greatest concentration of the artifact groups:

TABLE 18: HOUSE 38 CONCENTRATION DISTRIBUTIONS

ARTIFACT GROUP	CONCENTRATION WITHIN HOUSE
Rims	- in the North half of the central corridor - along walls (within 1-2m in- or outside of house walls) - North and South halves of house yield random distributions
Pipes	- along walls (within 1-2m in- or outside of house walls), especially in the South half of the house

Chipped Lithics	- in South half of house
Ground and Rough Stone	- along walls (within 1-2m in- or outside of house walls), especially in the South end/door
Bone Artifacts	- in North half of house
Mammalian Faunal	- in North half of house

There is a concentration of artifacts along the walls of the house, which includes those items located within 1-2m inside or outside of the house walls. As well there is a concentration of specific artifact types in the North half of the house, including bone artifacts and mammalian faunal remains. Chipped lithics, in contrast, cluster in the South half of the house. Perhaps these concentrations represent the beginnings of work areas.

In H38 there are two loci for activity in the central corridor - two clusters of posts, pits, and sweatbaths. The north activity area is not as densely used as the south one - there are fewer pits and posts and there is only one sweatbath, which does not appear to have been re-used to the extent of those in the south activity area of the central corridor. I would have expected that all of the clusters of artifact groups would be associated with the southern activity area, as it is more intensively re-used. This is not the case, however, as the majority of bone artifacts and faunal material are from the northern activity area. However,when the north and south halves visually are compared using the distribution maps, the overall distribution pattern of the artifacts in this house is random.

It must be kept in mind that the artifact assemblage from H38 is far smaller than that of H12, and that this, at least partially accounts for the lack of any apparent clustering.

COMPARISON OF HOUSES' DISTRIBUTION PATTERNS

In both houses many artifacts are located at the house walls (including those items within 1-2m inside or outside of the house walls). This may be evidence of sweeping and that those items that were found outside the walls were swept and then subjected to post-depositional movement. H38's central corridor, however, was far cleaner than that of H12, and more artifacts along the walls indicate evidence of sweeping debris towards the house walls in H38. I believe that this illustrates that H38 was younger than H12 - H12 was occupied for a greater length of time and more artifacts were trampled into the living floor than were in H38.

The distribution pattern of North end productivity and the stone working cluster in squares 205-210 and 205-215 in H12 are unique and can be interpreted as a manufacture and repair area around the isolated hearth in the north end of the house. This kind of work area does not occur in H38, suggesting that in H12, activities were performed that did not take place in H38. However, this may again be due to a difference in the length of time both houses were occupied - had H38 been occupied as long as H12, it too may have exhibited special work areas. Although the data from H38 are not conclusive, there is a suggestion that the concentration of bone artifacts and mammalian faunal remains in the north half, and the clustering of chipped lithics in the south half may be the early beginnings of special work areas.

The 'band' of high yields along the 185 north co-ordinate line in H12 is the result of the activity around the head of the house's hearth. This accounts for the intensity of both artifacts and features in this area where people often gathered. The hearth in the 'band' is very large (3.3m x 1m), suggesting a long period of use and re-use. There are more than 10 small pits near the hearth alone, either under- or overlying it. Further, there is one sweatbath within this high density area. Surprisingly, it is not as intensively used and re-used as some of the other sweatbaths in the longhouse. I

suggest that this is because the focus of this activity area, with its very high artifact yield, was centered on the activity at the hearth.

How does this compare to the distribution pattern of H38? In this house the central hearth - the head of the house's hearth - is between the two clusters of activity areas. In fact, none of the three hearths in this house are within these activity area clusters. This seems to imply that the intensity of activities at the hearth was not great - people did not gather around the hearth to any great extent. Rather, activities took place between hearths - if sweatbaths were only built for use on particular occassions, then this area would be free for other activites most of the time. In considering the artifact assemblage, only one artifact was found within 1m of a hearth. Again, this seems to illustrate a lack of focus around the hearth areas. The central hearth of H12 apparently was more intensively used in feast and other activities. This function may be related to the status of the house leader.

In comparing the distribution patterns of H12 and H38, it should be kept in mind that the artifact assemblage in H38 is far smaller than that found in H12. This may account for the lack of any apparent artifact clustering in H38. However, the distribution patterns of H12 do strongly suggest that special activities were taking place.

ARTIFACT ASSEMBLAGES OF H12 AND H38:

I have just stated that there is a large difference in the artifact assemblage sizes of the two houses. This may be the cause of the random distribution pattern exhibited in H38. It may also be the reason for the lesser variability of artifact types and mammalian species within the H38 artifact collection. Before addressing the artifact assemblages of the houses, it is necessary to investigate further this question of sample size versus the samples' internal variability.

House 12 yields a distinctively larger sample with a greater number of types of artifacts. Further, some of the types that are unique to the H12 sample are somewhat rare (eg. a human effigy pipe, a human skull gorget or a decorated arm band). It is necessary to determine whether the difference in the observed variability of the samples is merely a function of the difference in sample sizes.

In order to test for this, I calculated 'Z Scores' (Table 19) for each of the artifact groups (rims, pipes, chipped lithics, etc.). This kind of analysis "... addresses the question of the likelihood that an observed difference could have arisen by chance. The "z" test is the simplest example of a statistical test and examines the difference between a sample and a population, when the variable is a measured quantity"(Norman and Streiner,1986:27). For this purpose, I called the larger H12 assemblage the 'population', and the smaller H38 assemblage the 'sample'. This will test whether the smaller H38 sample with its lower level of variability, is merely a 'subset' of the H12 sample.

My results showed that in some artifact groups the lack of internal variability of types in H38 is simply due to the small sample size. These groups include Pipes, Chipped Lithics, and Bone Artifacts. However, some groups tested showed that the internal homogeneity of types in the H38 assemblage is not due to the small sample size. These groups include Rims, Ground and Rough Stone and Mammalian Faunal Remains. In these cases it must be assumed that the lack of internal variability of types is the result of some other factor.

TABLE 19: Z SCORES

$Z = \frac{x - u}{S.E}$ where x = the number of types in H38, and u = the mean number of types in H12 when the sample size is equal to that of the H38 sample.

Ho = the mean of the H38 sample is equal to the mean of the H12 population
ie. that the two collections are from the same assemblage

ARTIFACT CLASS	X	U	S.E	Z	P	NULL HYPOTHESIS
Rims	14	20.1	0.2	30.5	< 0.0001	REJECTED

Pipes	6.0	5.2	0.5	1.6	0.055	NOT REJECTED
Chipped Lithics	6.0	6.0	0.2	0.0	0.0	NOT REJECTED
Ground/Rough Stone	2.0	5.6	0.3	10.6	< 0.0001	REJECTED
Bone Artifacts	5.0	5.4	0.5	0.8	0.206	NOT REJECTED
Mammalian Faunal Assemblage	7.0	3.8	0.3	10.7	< 0.0001	REJECTED

N.B. if the probability (P) $\geq$ 0.05, then the Null Hypothesis cannot be rejected.

The following chapter will conclude by discussing the explanations for the differences observed in the artifact variability, as well as the assemblage size and the settlement data.

CHAPTER 5: CONCLUSIONS

Social differentiation on Iroquoian sites has traditionally been determined through the archaeological analysis of house settlement data. In these studies, characteristics such as longest house and greatest density of wall posts, internal house pits, and post moulds, have been used to interpret specific houses as chiefs' houses.

By completing an artifact analysis, I have attempted to evaluate the traditional assumption that a chief's house can be determined through settlement pattern analysis alone.

In comparing Houses 12 and 38 from the Draper site, I found considerable differences in the settlement patterns, the artifact sample sizes, and the internal variablity within the artifact samples. In my analysis, I have suggested that such differences may be explained by various hypotheses. These alternative explanations include: 1) a difference in the house function; 2) a difference in the amount of status held by the headman of each house; and 3) a difference in the length of occupation of each house and the number of occupants at any one time.

Z scores have indicated that the difference in the internal variability within the Pipe, Chipped Lithic, and Bone Artifact assemblages is the result of the difference between the two sample sizes. The Z scores also indicated that the difference in the variability within the Rim, Ground and Rough Stone, and Mammalian Faunal assemblages is not the result of the difference between the two sample sizes. It must be assumed that some factor, other than duration, is the cause for these dissimilarities.

The settlement data provide independent evidence that indicates that H38 was occupied for a shorter time than H12. H38 is in a later village segment than H12 and hence is a younger house. By using the number of house pits as an intensity measure of the size and duration of house occupation, H12 with 101 pits compared with H38 with 17 pits, a ratio of 6:1 is achieved. This ratio can then be used as a baseline for evaluating other measures. Thus, H12 has proportionately fewer hearths, sweatbaths (and thus more space per family), and pipes than H38, but more rims, ground and rough stone and mammalian faunal items. Based on house size and hearth counts, H12 has twice as many families living in it as H38 - a ratio of 2:1. With an intensity ratio of

6:1, that suggests that H12 was occupied 4 times as long as H38. This represents a significant difference in duration. This seems unlikely.

In determining the sequence of the village expansions, Finlayson (1985) examined three sets of data. The relationship of the segments to each other was analyzed by determining whether palisade posts were obscured when they crossed houses. Thus, he determined when palisades were taken down to allow for the building of additional houses. Based on the assumption that greater densities of wall, sweatbath, and interior post moulds as well as interior pits resulted from longer occupation, he predicted the sequence of segment expansions. Finlayson correlated this with the decreasing space devoted to housing and the estimated area per person within the village as the number of village segments grew. Based on these analyses, he predicted that Segment A (H12) was the core village and that Segment D (H38) was the second expansion, in a total of five expansions of the main village. Therefore, H38, though younger than H12, is still a relatively early house. It is not likely to be four times younger. Therefore, the difference in duration could not cause all the differences observed in the settlement data, assemblage size and artifact variability.

In the previous chapter, I have discussed the different distribution patterns of the two houses. The concentration of artifacts around the special purpose hearth in the north end of H12 indicates special activities. These are the manufacturing and repair of ground and rough stone, and feasting as indicated by the abundance of mammalian faunal items as well as the concentration of rim sherds. The concentration of artifacts associated with the central hearth of H12 also suggests intensive activity, with special emphasis on feasting. By summarizing the artifact assemblages of the two houses in terms of the activities and overall function of the houses and the status of the house leaders, there is strong evidence to suggest that H12 is a chief's house.

Rims:

Is it possible to distinguish domestic from ceremonial ceramic wares? This may help to interpret house functions- for example, public activity such as ceremonial feasting. To this end, I analyzed the estimated size of pots based on the estimated orifice diameter, and the extent and variety of motifs.

H38 yielded primarily pots that are small and small to medium sized (77.8% of the assemblage). H12 has, however, comparably more small to medium and medium to large sized pots(75.7% of the assemblage). This suggests that more feasting activities took

place in H12, than in H38 (see Warrick, 1984:114). The number of families in each house also may be a significant factor for the discrepancies in the average pot sizes.

With regard to the extent and variety of motifs, H12 has, without doubt, a far greater number of different kinds of motifs on the collar, neck, lip and interior of the rim sherds. Further, H12 rims have a greater frequency of more complex designs and more rims with greater extent of decoration(ie. there are more rims that have a combination of collar, neck interior, lip, and secondary motifs). Does this suggest that these potters had a wider variety of social influences as reflected in the differences and elaborateness of ceramic motifs? Evidence of wider kin and trading alliances, might be expected within a chief's house. Similarly, more elaborate decoration may reflect the high status of the chief and his family.

Pipes:

Pipes often have been used as indicators of male activity and status. There is a greater variety of pipes in the H12 collection, but my Z tests show this is merely a function of the differing sample sizes of the two houses.

The special or rarer types of pipes found in H12 may suggest that a person of higher status lived here, but may be merely the result of the much larger sample of pipes from H12, probably because of a longer occupation. I would suggest that the pipe collection does not tell us much about the activities or special function of the houses.

Chipped Lithics:

There is evidence that there was a shortage of good raw resources available for manufacturing chipped lithics (Poulton, 1985). Because good chert was probably a valuable resource, means were employed to conserve and possibly to control access to this resource.

H12 has a random distribution of chipped lithics, with the greatest concentration along the north co-ordinate 185 line, and a high density through the central corridor. This is probably because chert debris, smaller and heavier than other artifacts, may not be moved as easily by random sweeping. Within this house there is a great deal of evidence of conservation of chipped lithic artifacts. Many artifacts have evidence of secondary uses and re-use; and four of the five cores show evidence of bipolar

technique in knapping. The evidence of conservation in H12 suggests that the occupants did not have direct control over the supply of this resource and hence did not gain any special status from a monopoly of this resource.

In H38 the majority of chipped lithics are located in the south half of the house, associated with the richer of the two activity areas in the central corridor. This suggests the importance of this industry in terms of the activities of the house, and the lack of evidence of conservation suggests that these occupants had an adequate supply of chert.

Ground and Rough Stone:

Generally, ground and rough stone is associated with domestic activity, except for the possibility of celts as special valued trade items (Kapches, 1979 and Latta pers. comm. in Hayden, 1977). I believe that the manufacture and possible trade of celts from H12 reflects a high social status of the headman who ultimately controlled this kind of trade. H38's collection of ground and rough stone is substantially smaller and has significantly less internal variability. The contrast in the two collections helps to further reinforce the significance of the clustering - the manufacture area - found in H12.

Bone Artifacts:

Status is usually associated with bone artifact jewellery. H12 has a large number of decorative bone artifacts - predominantly beads, but also modified deer phalanges, a decorated arm band and a human skull gorget. All of these were possibly associated with special events and with a person of high status. I would suggest that the bone artifact collection from H12 might be indicative of special ceremonial dressing and, further, might be associated with a person of high status who would have worn special apparel in a feasting situation.

Mammalian Faunal Remains:

This artifact group is useful in determining whether special feasting activity was associated with one of the houses. The species as well as the part of body found may indicate that a house had a special function. House 12 has a 24.6% frequency of skull fragments in its mammalian bone assemblage. Even without calculating the Minimum Number of Individuals in the faunal assemblage, I would suggest that this proportion is fairly high. This might be associated with rituals and ceremonies, hide-tanning practices that make use of the animals' brains, or simply may be a bias in the identification process, as these items are easier to identify, first as cranial, and second to a particular species. However, ethnohistoric data suggest that during feasts "Strangers, and those who had come from other villages, were given the best portions of what was available, while the heads of animals were reserved for the highest ranking headmen"(Trigger,1976:85). I believe that this indicates that H12 was inhabited by a person of high status. The human skull fragment and leg are also indicative of some special event. Of interest is the presence of white-tailed deer, black bear, and dog in the north end of the house associated with the 'special purpose' hearth. These species also are predominantly found along the central corridor (especially along the 185 north co-ordinate line). Dog is the most frequent species in features. Bear and dog are known to have had a special place in rituals and ceremonies.

The Z scores of Mammalian Faunal Remains indicate that H12 has significantly more different species within its larger collection. With the evidence of possible ritual feasting reflected in the makeup of the assemblage, it seems reasonable that H12 had a special function associated with special feasting activities. However, there may also be another explanation. H38 does have occurrences of skull fragments and does have evidence of those species thought to be associated with ritual feasting. Perhaps then, the differences between the two houses lies in the fact that H38 had not been occupied for as long a time as H12 - perhaps given a longer occupation period and a larger number of occupants, H38's faunal assemblage would have closely resembled that of H12.

The abundance and variability observed in the H12 artifact collection, as well as the concentrations associated with the special purpose hearth and the central hearth, indicate that special activities were taking place in this house, that this house had a

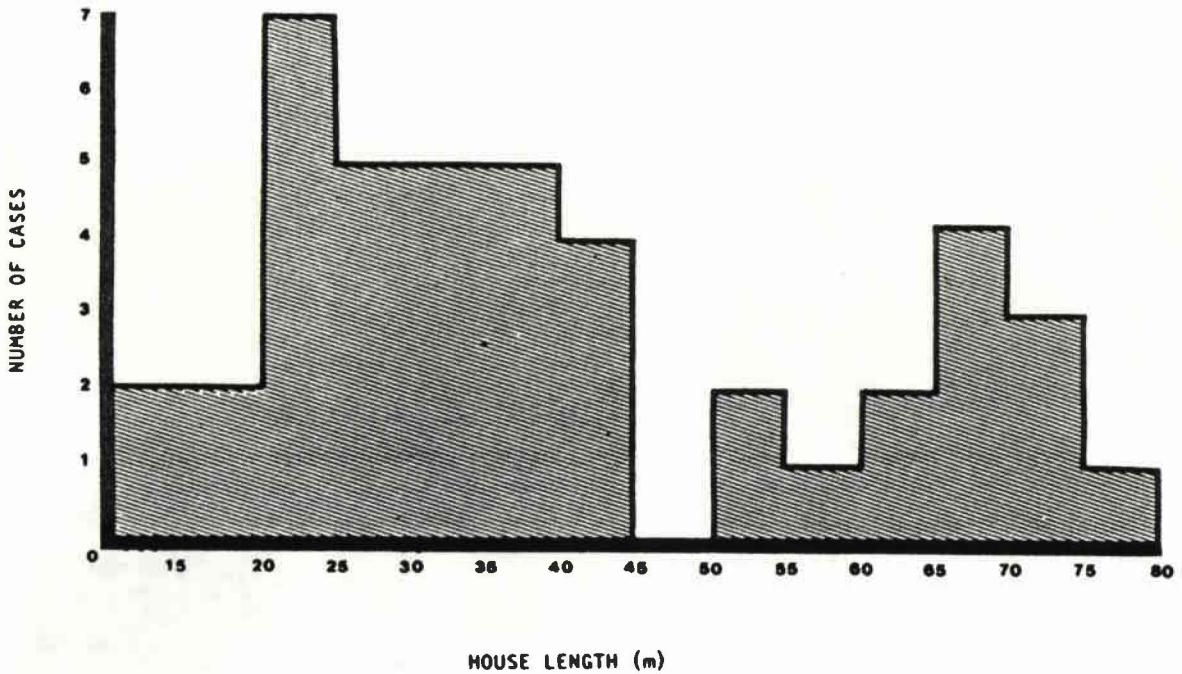
special function. I believe that this special function reflects the high status of the house leader. The assemblage variation and artifact distribution analyses provide independent evidence that H12 is a chief's house.

The chief of a village would hold a position of high status. Status among the Iroquois is, in good part, a matter of the strength of one's support network. It follows, then, that a chief would have a larger household size, since his status is in part a function of the size of his kin/ support group. A larger household population would account for a larger artifact assemblage. That is, the house with more people would yield evidence of more intensive occupation. The chief's house would necessarily be longer in order to accomodate the greater household population. Further, if part of the role of the chief was to hold feasts and festivities for the community, then a comparatively higher density of internal features and posts should be expected.

This model introduces some interesting insights into the issue of Iroquoian status differentiation. Iroquoian houses do not come in only two custom-ordered sizes of large and small, but rather portray a wide range of house lengths. In general, the length of the houses within a village, both before and after house expansions, can now be viewed in terms of gradations of status as a function of estimated household population sizes (Figure 41). For this study, the implications are that H12 was the house of someone with very high status and H38 was not.

The occupants of H12 built their home in the initial phase of the village's lifetime. They may have intentionally allowed room for house expansions, such that in two or three generations (the life of the village) their household - ie. kin/support group- would be larger and require more space within the house. This assumes that this core group would initially live in what would finally be the longitudinal middle of the house corridor, and that as the group grew larger, would expand spatially to either end of the house, and when required, would physically expand the house to accomodate the "new people". Similarly, if a group entered an established village, they would not build their house with the expectation of expansion, since they would not have time to increase their household population enough to warrant expansion.

It seems reasonable to suggest that a chief and his kin/support group were among the initial core group of the village. Further, because of, and as a result of, his high status, the chief had the longest house in order to accomodate his followers. In the Huron society, chieftainship is a partially inherited status position - from maternal uncle to nephew. It follows logically because of the rules of inheritance, and the



NOTE: INCLUDES ORIGINAL AND FINAL LENGTHS OF ALTERED HOUSES.

FIGURE 41: FREQUENCY OF HOUSE LENGTHS AT THE DRAPER SITE

(FROM FINLAYSON, 1985: 401)

necessity of having a very long house to shelter the chief's kin/support group, that the intial 'chief's' house would always remain the 'chief's' house, throughout the life of the village. This would suggest that the existing understanding of the matrilineal/matrilocal society of the Huron peoples is not entirely correct. Perhaps such rules did not apply to 'chiefly' families - ie. in such cases a chief would not leave his natal longhouse but rather his wife would leave hers. Trigger (1978:58) observes that "...Though it is nowhere stated that Iroquoian chiefs practiced avunculocal residence, it may be that men belonging to lineages from which clan segment chiefs were selected continued to live in their lineage's longhouse after marriage, so that they might be among the people they represented. To accomplish this some women would have had to leave their natal dwelling in order to marry such men".

Archaeologists have used the concept of a 'chief's' house as a demonstrable reality. It has been an assumption that certain characteristics of the settlement patterns are enough to determine a chief's house. I believe that the assemblage variation and artifact distribution analyses provide independent evidence that suggests that H12 is a chief's house. I feel that these analyses are essential in evaluating the differences and the causes for the differences between houses. Without these analyses, duration of occupation alone could explain the differences observed in the settlement data. Despite the difference in occupation duration, I believe that these analyses have proven that H12 of the Draper site was the house of a chief.

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APPENDIX 1

Catalogue of Specific Artifact Types and their Proveniences

Rim Sherds

1. House 12

Specific Artifact Type	Provenience Unit	Number of Items
Plain	165-230 ss.8	1
	170-230 ss.3	1
	175-220 ss.12	1
	180-225 ss.22	1
	185-215 ss.8	1
	185-220 ss.2	1
	195-215 ss.9	1
	195-220 ss.13	1
	200-215 ss.1	1
	200-215 P.M.10	1
	205-210 ss.1	1
Plain with Neck/ Secondary Motif	170-220 ss.14	2
	185-220 ss.14	1
	185-225 ss.5	1
	185-225 ss.10	1
	190-220 ss.14	1
	200-210 ss.3	1
	200-210 ss.8	1
	200-210 ss.19	1
	200-220 ss.11	1
	205-215 ss.5	1
Simple	general house provenience	2

	165-220 ss.20	1
	165-225 ss.16	1
	165-230 ss.21	1
	170-220 ss.9	1
	170-220 ss.13	1
	170-220 ss.20	1
	170-225 ss.1	1
	170-230 ss.2	1
	170-230 ss.3	1
	170-230 ss.12	1
	175-220 ss.5	2
	175-220 ss.9	1
	175-220 ss.10	1
	175-220 ss.12	1
	175-225 ss.2	1
	175-225 ss.16	1
	180-215 ss.10	1
	180-215 ss.23	2
	180-215 ss.24	1
	180-220 ss.11	1
	180-220 ss.23	1
	180-225 ss.4	1
	185-215 ss.4	2
	185-215 ss.7	1
	185-215 ss.8	2
	185-220 ss.2	1
	185-220 ss.7	1
	185-220 ss.8	2
	185-220 ss.14	1
	185-220 ss.20	1
	185-225 ss.1	2
	185-225 ss.2	1
	185-225 ss.3	1
	185-225 ss.4	1

	185-225 ss.5	1
	185-225 ss.9	3
	185-225 ss.10	1
	185-225 ss.14	2
	185-225 ss.21	1
	190-215 ss.2	1
	190-215 ss.14	2
	190-220 P.M.23	3
	195-210 ss.18	2
	195-210 ss.19	2
	195-210 ss.20	1
	195-210 ss.24	1
	195-215 ss.2	1
	195-215 ss.19	1
	195-215 ss.22	1
	195-215 ss.23	2
	195-215 ss.25	2
	195-220 ss.3	3
	195-220 ss.4	1
	195-220 ss.7	1
	195-220 ss.11	4
	195-220 ss.17	1
	200-210 ss.24	1
	200-215 ss.1	1
	200-215 ss.2	1
	200-215 ss.25	2
	200-215 P.M.7	1
	200-220 ss.1	1
	200-220 ss.6	1
	205-205 ss.25	1
	205-210 ss.1	1
	205-210 ss.17	1
	205-210 ss24	1
	205-215 ss.1	1

	205-215 ss.5	1
	210-205 ss.1	1
	210-205 ss.17	1
	210-205 ss.19	1
	210-205 ss.24	1
	210-210 ss.1	1
	210-210 ss.21	1
	210-210 ss.23	1
	215-205 ss.4	1
	215-205 P.M.5	1
	215-215 ss.1	1
Simple over Simple/Hor/ Opp/Cross/Hatch	160-230 ss.22	1
	165-230 ss.1	1
	170-220 ss.13	1
	175-220 ss.10	1
	180-215 ss.19	1
	180-220 ss.8	1
	180-220 ss.16	2
	180-220 ss.18	1
	180-220 ss.20	1
	180-220 ss.22	1
	180-220 ss.23	1
	180-220 F.14	1
	185-215 ss.1	1
	185-215 ss.9	1
	185-215 ss.12	1
	185-220 ss.1	1
	185-220 ss.9	2
	185-220 ss.14	1
	185-220 ss.19	1
	185-225 ss.1	2
	185-225 ss.5	1

	185-225 ss.6	3
	185-225 ss.10	1
	185-225 ss.13	1
	185-225 ss.15	1
	185-225 ss.16	1
	190-215 ss.15	1
	190-215 ss.16	1
	190-220 ss.5	1
	190-220 ss.6	2
	190-220 ss.10	2
	190-220 ss.19	1
	195-210 ss.18	1
	195-210 ss.23	1
	195-220 ss.3	1
	195-220 ss.11	1
	195-220 ss.13	1
	195-220 ss.23	1
	195-220 E.2	1
	200-210 ss.2	1
	200-210 ss.8	1
	200-215 ss.12	1
	200-215 ss.20	1
	200-220 ss.1	1
	200-220 ss.11	2
	205-210 ss.10	1
	205-215 ss.9	1
	205-215 ss.14	1
	205-215 ss.17	1
	205-215 ss.21	1
	210-205 ss.1	1
	210-205 ss.20	1
	210-210 ss.17	1
	210-210 ss.22	1
	210-215 ss.20	1

	215-205 ss.4	1
	215-205 P.M.7	1
Simple over Interrupted/ Complex	180-220 ss.20	1
	195-220 F.1	1
	195-220 F.2	2
	200-220 ss.11	1
	205-215 ss.5	1
Simple with Lip/ Secondary Motif	160-230 ss.230	1
	165-225 ss.16	1
	170-230 ss.17	1
	170-230 ss.18	1
	175-220 F.6	1
	175-225 F.5	1
	180-215 ss.24	1
	180-220 ss.21	1
	180-220 ss.22	1
	180-220 ss.23	1
	180-225 ss.1	1
	185-220 ss.8	1
	185-220 F.16	1
	185-225 ss.17	1
	195-210 ss.23	2
	195-215 ss.3	1
	195-215 ss.16	1
	195-220 ss.6	1
	195-220 F.2	1
	200-210 ss.4	1
	200-210 ss.12	1
	200-215 ss.20	1
	200-220 ss.2	1

	200-220 ss.16	1
	205-210 ss.4	1
	205-210 ss.12	1
	205-215 ss.1	1
	210-205 ss.20	1
Simple over Simple/Hor/ Opp/Cross/Hatch with Interior/Lip/Secondary Motif		
	165-220 ss.25	1
	165-225 ss.5	1
	170-220 ss.4	1
	170-220 ss.18	1
	175-220 ss.12	1
	180-220 ss.16	2
	180-220 ss.21	1
	180-220 ss.24	1
	180-225 ss.4	1
	180-225 ss.22	1
	185-215 ss.8	1
	185-220 ss.1	1
	185-220 ss.3	1
	185-220 ss.8	1
	185-220 ss.22	4
	185-225 ss.2	1
	185-225 ss.4	1
	185-225 ss.5	1
	185-225 ss.9	1
	190-215 ss.10	1
	190-220 ss.4	1
	195-215 ss.9	1
	195-215 ss.15	3
	195-215 F.3	1
	195-215 F.12	1

	195-220 ss.3	1
	195-220 ss.11	3
	195-220 ss.17	1
	195-220 F.2	1
	200-210 ss.1	1
	200-210 ss.8	1
	200-215 ss.9	1
	200-215 F.2	2
	200-220 ss.1	2
	200-220 ss.6	1
	200-220 F.1	1
	205-210 ss.1	1
	205-210 ss.6	1
	205-210 ss.7	1
	205-215 ss.7	1
	205-215 ss.21	1
	210-210 ss.6	1
	210-210 ss.10	1
	210-210 ss.17	1
	210-210 ss.18	2
	210-210 ss.22	1
	210-210 ss.25	1
	210-215 ss.2	1
	215-205 P.M.5	1
Opposed	180-215 ss.14	1
	180-215 ss.24	1
	185-225 ss.10	2
	185-225 ss.15	1
	190-220 ss.9	1
	190-220 ss.14	1
	195-215 F.9	1
	205-210 ss.16	1

Opposed over Simple/ Opp/Hor	170-225 ss.1	1
	170-225 ss.9	1
	180-215 ss.17	1
	185-220 ss.1	1
	185-220 ss.25	1
	185-225 ss.14	1
	185-225 ss.19	2
	185-225 ss.20	1
	195-210 ss.13	1
	195-215 ss.15	1
	195-220 ss.8	1
	195-220 ss.11	1
	195-220 F.2	1
	200-220 ss.1	2
	200-220 ss.6	1
	200-220 F.1	1
	205-205 ss.25	1
	205-210 ss.10	1
	205-215 ss.21	1
	210-205 ss.20	1
	210-205 ss. 24	1
	215-215 ss.1	1
Opposed with Lip/ Secondary Motif	170-225 ss.8	1
	170-225 ss.23	1
	185-215 ss.12	1
	185-225 ss.4	1
	185-225 ss.17	1
	185-225 ss.19	1
	195-215 ss.22	1
	200-220 ss.6	1

	210-205 ss.1	1
	210-205 ss.25	1
Opposed over Hor with Lip/Secondary Motif	180-215 ss.25	1
	195-215 ss.7	1
	200-210 ss.16	1
	210-210 ss.10	1
Horizontal	200-210 ss.1	1
Horizontal over Simple/ Hor/Hatch	170-230 ss.16	1
	170-230 ss.18	1
	175-220 ss.5	1
	185-220 ss.3	1
	190-220 ss.9	1
	195-215 ss.25	1
	205-210 ss1	2
	205-210 F.1	1
Horizontal over Complex	195-220 ss.11	1
Horizontal with Lip Motif	195-220 ss.11	1
Horizontal over Hor with Lip Motif	185-215 ss.21	1
	190-215 ss.8	1
	195-220 ss.3	1
	195-220 ss.11	1
	205-210 ss.1	1
	205-210 ss.19	1
Crossed	175-225 F.2	1

	180-220 ss.12	1
	185-220 ss.25	1
	1285-225 ss.10	1
	185-225 ss.20	1
	195-220 ss.3	1
	200-215 ss.15	1
	205-205 ss.25	1
Crossed over Simple/Opp/ Hor/Hatch/Cross	170-225 ss.4	1
	180-220 ss.19	1
	180-220 ss.20	1
	185-220 ss,3	1
	185-225 ss.4	1
	185-225 ss,6	1
	190-215 F.9	1
	195-215 ss.2	1
	205-215 ss.6	1
	210-205 ss.10	1
Crossed with Lip/ Secondary Motif	175-225 ss.17	1
	185-215 ss.5	1
	185-225 ss.5	1
	200-210 ss.23	1
	200-220 ss.6	2
Crossed over Complex	205-215 ss.14	1
Crossed over Simple/Opp Hor/Complex with Lip/ Secondary Motif	175-220 ss.12	1
	185-225 ss.17	1
	190-220 ss.4	1

	190-220 ss.10	1
	195-220 ss.11	1
	195-220 ss.17	1
	200-210 ss.24	1
	200-210 F.2	4
	200-215 P.M.10	1
Hatched	165-220 ss.25	1
	165-230 ss.17	1
	170-220 ss.9	1
	170-220 ss.18	1
	170-230 ss.3	1
	175-220 ss.4	2
	185-220 ss.18	1
	185-220 ss.25	1
	185-225 ss.4	1
	185-225 ss.7	1
	185-225 ss.9	1
	190-220 ss.7	1
	195-215 ss.1	1
	195-215 ss.8	1
	195-215 ss.15	1
	195-220 ss.11	1
	200-220 ss.1	1
	205-210 ss.17	2
	210-210 ss.6	1
Hatched over Simple/Hor Opp/Hatch	170-220 ss.18	1
	175-225 ss.3	1
	180-215 ss.5	1
	180-220 ss.17	1
	180-225 ss.21	1
	185-220 ss.3	1

	185-220 ss.22	1
	185-225 ss.20	1
	190-215 ss.5	1
	190-220 ss.7	1
	190-220 ss.13	1
	195-215 ss.15	1
	195-215 ss.25	1
	195-220 ss.3	1
	195-220 ss.4	1
	200-220 ss.11	1
	205-215 ss.5	2
	215-210 ss.2	1
Hatch over Complex	185-220 ss.9	1
	195-215 ss.1	1
Hatch with Lip/ Secondary Motif	160-225 ss.24	1
	160-230 ss.22	1
	165-225 ss.4	2
	170-230 ss.3	1
	170-230 ss.13	1
	175-220 ss.7	1
	175-220 ss.20	1
	180-215 ss.24	4
	185-225 ss.13	1
	1845-225 ss.19	1
	195-215 ss.12	1
	200-210 ss.12	1
	200-220 ss.7	1
	200-220 ss.11	1
	205-215 ss.5	1
	210-210 ss.22	1

Hatched over Simple/Hor/ Opp with Lip/Secondary Motif	170-220 ss.15	1
	170-230 ss.3	1
	175-220 ss.20	1
	180-220 ss.16	2
	180-220 ss.25	1
	185-220 ss.10	1
	185-225 ss.20	1
	190-220 ss.24	1
	195-220 ss.6	1
	195-220 F.2	1
	200-210 ss.2	1
	200-215 ss.9	1
	200-215 ss.20	1
	210-205 ss.20	1
Hatched over Complex/ Interrupted with Lip/ Secondary Motif	185-225 ss.9	3
Interrupted	185-225 ss.16	1
Interrupted over Simple/ Hor	165-225 ss.18	1
	180-220 ss.3	1
	180-220 F.4	1
	185-220 ss.4	1
	190-215 ss.18	1
	200-215 ss.14	1
	200-215 ss.25	1
	205-215 ss.10	1
	210-210 ss.4	1

Interrupted over Hor/Opp with Lip/Secondary Motif	180-225 ass.18	1
	180-225 ss.22	1
	200-220 ss.17	1
	210-210 ss.23	1
Complex	180-215 ss.25	1
	185-215 ss.5	1
	185-225 ss.1	1
	195-220 ss.7	1
Complex over Opp	180-220 ss.21	1
	185-220 ss.24	1
Complex with Lip/ Secondary Motif	175-220 ss.12	1
	180-220 ss.20	1
	180-220 ss.21	3
	180-225 ss.9	1
	195-215 ss.1	2
	195-220 ss.2	1
	195-220 ss.7	1
	195-220 ss.11	1
	195-220 P.M.	1

Rim Sherds

1. House 38

Specific Artifact Type	Provenience Unit	Number of Items

Plain with Lip/Secondary Motif	285-215 ss.17	1
	295-215 ss.17	1
	295-220 ss.20	1
	305-215 ss.19	1
Simple	285-210 ss.2	1
	290-205 ss.9	1
	290-210 ss.5	1
	290-215 ss.2	1
	290-215 ss.3	3
	290-215 ss.4	3
	290-215 ss.8	1
	295-210 ss.3	1
	295-210 ss.11	1
	295-210 ss.14	1
	295-215 ss.6	1
	295-215 ss.11	1
	295-215 ss.18	1
	295-220 ss.10	1
	295-220 ss.15	1
	300-210 ss.5	1
	300-215 ss.24	1
	305-215 ss.7	1
	305-220 ss.6	1
Simple over Simple/Hor	290-205 ss.4	1
	290-210 ss.8	1
	290-215 ss.8	1
	295-210 ss.2	1
	295-210 ss.19	1
	295-210 ss.24	1
	295-215 ss.8	1

	295-220 ss.25	1
Simple with Lip/ Secondary Motif	285-210 ss.8	1
	290-215 ss.6	1
	295-210 ss.24	1
	300-215 ss.14	1
Simple over Simple/Hor/ Opp/Interrupted with Lip/Secondary Motif	285-205 ss.10	1
	290-205 ss.9	2
	290-210 ss.8	1
	290-210 ss.13	1
	295-210 ss.2	1
	305-215 ss.20	1
Opposed	295-210 ss.2	1
Crossed	285-215 ss.23	1
Crossed over Hor/Opp	285-210 ss.14	1
	290-215 ss.8	1
	295-210 ss.19	1
Crossed with Lip Motif	285-215 ss.18	1
Crossed over Simple with Lip Motif	285-205 ss.20	1
Hatched	290-215 ss.8	1
	295-220 ss.10	1
	295-220 ss.15	1

Hatched with Secondary Motif	295-220 ss.10	1
Horizontal with Secondary Motif	295-215 ss.13	2
Complex with Interior/ Lip/Secondary Motif	295-215 ss.9 295-215 ss.10 295-220 ss.15	2 2 1

Pipes

1. House 12

Specific Artifact Type	Provenience Unit	Number of Items
Iroquois Ring	180-225 F.2	1
	190-220 ss.10	1
	190-220 ss.5	1
	185-220 ss.10	1
	190-220 ss.19	2
	170-220 ss.4	1
	210-205 ss.20	1
	185-225 ss.13	1
	185-225 ss.19	1
	195-215 ss.10	1
	180-215 ss.10	1
	190-220 ss.15	1
	180-225 ss.4	1
	190-220 ss.10	1

	210-210 ss.17	1
	210-210 ss.19	1
	185-225 ss.13	1
	general house provenience	1
	205-215 ss.21	1
Plain Outflaring	195-210 ss.15	1
	185-225 ss.20	3
Hard Rock Trumpet	185-225 ss.17	1
	185-220 no ss. information	1
	185-220 ss.4	1
Conical Punctate	180-220 F.13	1
	175-220 ss.24	1
	180-220 F.13	1
Apple Bowl Ring	185-215 ss.12	1
	190-220 ss.10	1
Undecorated Trumpet	general house provenience	1
	200-210 ss.5	1
Conical Ring	180-220 F.14	1
	185-225 ss.21	1
Conical Ring Variation	190-210 ss.25	1
Vertical Outflaring	general house provenience	1
Iroquois Ring Variation	180-225 ss.9	1
Collared Ring	215-210 ss.1	1

'Special'	general house provenience	1

2. House 38

Specific Artifact Type	Provenience Unit	Number of Items
Conical Ring	290-215 ss.7 290-215 no ss. information	2 2
Iroquois Ring	310-215 ss.20 315-215 ss.5 285-205 ss.21	1 1 1
Plain Collared	315-215 ss.5	1
Collared Ring	285-215 ss.17	1
Cylindrical Ring	285-205 ss.13	1
Indeterminate	305-220 ss.6	1

Chipped Lithics

1. House 12

Specific Artifact Type	Provenience Unit	Number of Items
Scrapers	170-230 ss.7 170-230 ss.12 170-230 F.1	1 1 1

	180-215 ss.24	2
	200-215 ss.20	1
	165-225 ss.19	1
	175-225 ss.23	1
	180-215 ss.22	1
	185-215 ss.4	1
	185-215 ss.16	1
	185-220 ss.8	1
	175-220 ss.7	1
	180-220 ss.4	1
	195-220 ss.18	1
	205-210 no ss. information	1
	185-220 ss.25	2
	185-225 ss.1	1
	185-225 ss.5	1
	190-225 ss.8	1
	195-210 ss.13	1
	195-220 ss.23	1
	205-210 ss.3	1
	210-210 ss.7	1
	170-225 ss.23	1
	175-220 ss.13	1
	185-220 ss.3	1
	185-220 ss.23	1
	190-215 ss.14	1
	200-215 ss.14	1
	205-205 no ss. information	1
	205-205 ss.24	1
	205-215 ss.3	1
	215-210 ss.3	1
Projectile Points	185-215 ss.3	1
	185-225 ss.8	1

Wedges	160-225 ss.20	1
	160-230 ss.22	1
	175-220 F.7	1
	180-220 ss.19	1
	185-220 ss.25	1
	185-225 ss.5	1
	185-225 ss.16	1
	190-220 ss.2	1
	190-220 no ss. information	1
	195-210 ss.14	1
	200-210 F.3	1
	205-210 ss.16	1
	210-215 F.55	1
	190-215 ss.7	1
	190-220 ss.10	1
	200-210 ss.3	1
	205-210 ss.1	1
	205-210 ss.20	1
	170-230 F.1	1
	180-220 ss.22	1
	180-225 ss.16	1
	180-215 ss.10	1
	185-225 ss.7	1
	195-215 ss.22	1
	195-220 ss.1	1
Utilized Flakes	165-225 ss.19	1
	170-225 ss.14	1
	180-215 ss.14	1
	180-225 ss.9	1
	185-220 ss.1	1
	185-225 ss.2	1
	185-225 ss.9	1
	190-215 ss.25	1

	195-215 ss.19	1
	205-210 no ss. information	1
	170-225 F.2	1
	170-225 ss.3	1
Biface	195-220 ss.22	1
Strike-a-Light	175-225 ss.20	1
Perforator	195-210 ss.1	1
Chipping Detritus	165-225 ss.14	1
	165-225 ss.20	1
	165-225 no ss. information	3
	170-220 ss.14	1
	170-225 ss.7	1
	170-225 ss.22	1
	170-230 ss.2	1
	175-225 ss.8	1
	175-220 ss.2	1
	175-220 ss.12	2
	175-220 ss.15	1
	175-220 ss.18	2
	175-225 ss.17	1
	180-215 ss.19	1
	180-215 ss.23	1
	180-220 ss.15	1
	180-220 ss.16	1
	180-220 no ss. information	1
	185-215 ss.12	1
	185-215 ss.13	1
	185-215 ss.14	1
	185-215 ss.18	1
	185-215 ss.25	1

185-215 no ss. information	2
185-220 ss.2	3
185-220 ss.4	2
185-220 ss.5	1
185-220 ss.7	1
185-220 ss.12	1
185-220 ss.13	5
185-220 ss.19	1
185-220 ss.24	1
185-220 no ss. information	2
185-225 ss.4	1
185-225 ss.5	1
185-225 ss.10	3
185-225 ss.13	1
185-225 ss.14	1
185-225 ss.15	3
185-225 ss.17	2
185-225 ss.18	1
185-225 ss.19	4
185-225 ss.20	3
185-225 ss.22	2
185-225 ss.24	2
185-225 F.23	1
190-215 ss.2	1
190-215 ss.14	1
190-215 ss.15	1
190-215 ss.18	1
190-215 ss.25	1
190-220 ss.3	1
190-220 ss.12	1
190-220 ss.15	1
190-220 F.19	1
195-210 ss.19	2
195-215 ss.3	1

	195-215 ss.9	1
	195-220 ss.2	1
	200-210 ss.5	1
	200-210 ss.25	1
	200-210 F.1	1
	200-215 ss.17	1
	200-215 ss.25	1
	200-220 ss.2	1
	205-210 ss.12	1
	205-215 ss.9	1
	205-215 ss.16	1
	205-215 ss.22	1
	210-205 ss.24	1
	210-210 ss.1	1
	215-210 ss.3	1
	200-210 ss.17	1
	185-220 F.7	1
Non-Flint Detritus	175-220 ss.5	1
	180-215 ss.22	1
	180-215 ss.25	1
	180-220 ss.17	1
	185-215 ss.5	1
	185-215 ss.6	4
	185-215 ss.12	1
	185-215 ss.17	1
	185-215 ss.20	1
	185-220 ss.4	1
	185-220 ss.22	1
	185-225 ss.6	2
	185-225 ss.13	1
	185-225 ss.17	1
	185-225 ss.20	2
	185-225 F.23	1

	190-215 ss.10	1
	190-215 ss.15	1
	190-215 ss.21	2
	195-215 ss.9	1
	195-215 ss.10	1
	200-210 ss.23	1
	205-205 no ss. information	3
	205-210 ss.3	1
	210-205 ss.25	1
	210-210 ss.6	1
	210-215 ss.3	1
Cores	185-215 F.7	1
	185-220 ss.25	2
	205-210 no ss. information	1
	200-215 ss.1	1

2. House 38

Specific Artifact Type	Provenience Unit	Number of Items
Scrapers	285-210 ss.6	1
	285-215 ss.23	1
	285-220 ss.25	1
	290-205 ss.20	1
	285-210 ss.1	1
	285-210 ss.8	1
	290-215 ss.4	1
Projectile Point	285-210 ss.18	1

Wedges	300-210 ss.15	1
	290-215 ss.16	1
	300-215 ss.6	1
	305-215 ss.14	1
Utilized Flake	280-215 ss.6	1
Bifaces	290-210 ss.12	1
	300-210 ss.11	1
	285-210 ss.22	1
	290-215 ss.6	1
Chipping Detritus	285-205 ss.17	1
	285-205 ss.20	1
	285-210 ss.2	1
	285-210 ss.11	1
	285-210 ss.20	1
	285-210 ss.22	1
	285-210 ss.23	1
	290-205 ss.9	1
	290-205 ss.10	1
	290-210 ss.7	1
	295-210 ss.24	1
	305-220 ss.15	1
	290-210 ss.12	1
	295-215 ss.16	1
	290-215 ss.5	1
	295-215 ss.13	1
	305-215 ss.25	1

Ground and Rough Stone

1. House 12

Specific Artifact Type	Provenience Unit	Number of Items
Celts	200-215 ss.20	1
	200-215 ss.13	1
	180-225 ss.2	2
	205-215 no ss. information	1
	205-215 ss.19	1
	160-230 ss.17	1
	185-225 ss.15	1
	190-220 ss.10	1
	195-215 ss.20	1
	195-220 ss.8	1
	185-225 ss.2	1
	185-225 ss.8	1
	185-220 ss.3	1
	180-225 ss.6	1
	195-220 ss.18	1
	200-220 ss.6	1
	185-225 ss.5	1
	180-215 ss.25	1
	205-215 no ss. information	1
	180-215 ss.25	1
	210-210 ss.12	1
	185-220 ss.19	1
	190-220 ss.15	1
	180-215 ss.14	1
	185-220 ss.14	1
	190-220 ss.14	1
	170-220 ss.22	1
	200-215 ss.3	1
	185-220 ss.3	1

	210-210 ss.4	1
	175-220 ss.5	1
	200-210 F.2	1
	205-215 ss.12	1
	210-210 ss.20	1
	185-215 ss.12	1
	170-225 F.2	1
	180-225 ss.6	1
Hammerstones	200-215 ss.23	1
	210-210 ss.25	1
	200-220 ss.1	1
	185-220 no ss. information	1
	170-220 ss.10	1
	210-205 ss.20	1
	205-210 F.9	1
	205-205 ss.25	1
	general house provenience	1
	175-220 ss.23	1
	175-225 ss.17	1
	190-220 P.M.23	1
	195-220 no ss. information	1
	170-220 ss.10	1
	205-215 ss.19	1
	190-225 ss.8	1
	195-215 ss.1	1
Abraders	205-215 no ss. information	1
	185-220 ss.1	1
	205-210 ss.23	1
	185-215 ss.5	1
	200-210 F.2	1
	170-220 ss.15	1
	190-220 ss.10	1

	200-215 ss.14	1
	205-215 ss.5	1
	200-215 ss.13	1
	195-220 ss.23	1
	180-220 no ss. information	1
	180-225 ss.12	1
	185-225 ss.24	1
	190-220 ss.5	1
	general house provenience	1
Anvil-Hammerstones	185-225 ss.24	1
	185-220 ss.23	1
	185-225 ss.14	1
	185-220 F.12	1
	175-220 ss.24	1
	185-225 ss.15	1
	185-220 ss.19	1
	175-220 F.6	1
Ground Stone Fragment	175-220 ss.10	1
	180-225 ss.4	1
	185-220 ss.3	1
	185-225 ss.7	1
	200-220 no ss. information	1
	210-205 ss.9	1
	210-210 ss.3	1
Misc. Modified Stone	180-220 ss.7	1
	185-225 ss.7	1
	190-220 P.M.23	1
	200-210 ss.4	1
	215-205 P.M.5	1
Cobble Spalls	210-210 ss.23	1

	185-225 ss.13 general house provenience general house provenience	1 1 1
Game Balls(?)	170-220 ss.22 general house provenience	1 1
Manos	185-225 ss.14 175-225 F.5	1 1
Pestles	170-230 ss.6 195-220 ss.7	1 1
Stone Pendant	185-225 ss.8 200-215 ss.16	1 1
Stone Bead	205-215 ss.6 205-215 ss.10	1 1
Anvil	180-220 ss.21 185-225 ss.20	1 1
Stone Pipe	general house provenience	1
Metate	195-220 ss.21	1

2. House 38

Specific Artifact Type	Provenience Unit	Number of Items
Celts	290-215 ss.16	2

	300-210 ss.5	2
	285-210 ss.3	1
	295-215 ss.15	1
Ground Stone Fragments	285-210 ss.3	1
	285-210 ss.10	1
	285-210 ss.20	1
	295-210 ss.24	1

Bone Artifacts

1. House 12

Specific Artifact Type	Provenience Unit	Number of Items
Bone Bead	180-220 F.21	1
	185-215 ss.3	1
	185-215 ss.18	1
	185-220 ss.2	1
	185-220 no ss. information	1
	185-220 ss.15	1
	185-225 ss.13	1
	185-225 ss.17	2
	185-225 ss.3	2
	185-225 ss.4	19
	185-225 ss.5	1
	185-225 P.M..23	1
	190-215 ss.5	6
	190-215 F.9	1
	190-220 ss.11	1
	195-210 ss.9	1
	195-215 ss.10	1

	195-215 F.15	1
	195-220 ss.3	1
	200-210 ss.15	1
	205-210 F.5	1
	165-225 ss.2	1
Modified Deer Phalanges	175-225 ss.17	1
	175-225 ss.20	1
	185-220 F.1	1
	185-225 ss.5	1
	185-225 ss.16	1
	185-225 ss.10	1
	190-215 ss.17	2
	190-215 F.9	1
	190-220 ss.6	1
	190-220 ss.10	3
	190-220 ss.11	1
	195-215 ss.22	1
	195-220 ss.8	1
	200-210 ss.10	1
	210-215 ss.2	3
Modified Bone Frag.	175-215 ss.25	1
	175-225 ss.17	2
	185-225 ss.14	1
	185-225 ss.5	1
	185-225 ss.3	1
	190-215 ss.5	1
	190-220 ss.24	1
	200-210 ss.1	1
	210-210 ss.1	1
Bone Awl	185-220 ss.18	1
	185-225 ss.15	1

	190-215 ss.5	2
	195-220 ss.1	1
	205-210 F.5	1
	205-215 ss.9	1
	210-210 ss.1	1
Modified Beaver Incisors	180-220 ss.19	1
	185-215 ss.21	1
	185-225 ss.5	1
	185-225 ss.24	1
	190-215 ss.1	1
Corn Husking Pins	180-215 F.1	1
	185-225 ss.14	1
Corn Scraper	180-225 F.2	1
	185-225 ss.25	1
Antler Flaker	190-220 ss.5	1
	185-220 ss.3	1
Antler Handle	180-220 ss.21	1
Modified Tooth	190-215 ss.5	1
Decorated Arm Band	210-210 ss.1	1
Human Skull Gorget	185-225 ss.4	1
Modified Antler Frag.	185-225 ss.2	1

2. House 38

Specific Artifact Type	Provenience Unit	Number of Items
Modified Deer Phalanges	285-205 ss.17	1
	290-210 ss.19	1
	290-215 ss.3	1
	295-215 ss.12	1
	305-215 ss.8	1
	305-220 ss.4	1
Bone Awl	285-210 ss.5	1
	290-215 ss.11	1
	300-215 ss.25	1
Modified Beaver Incisor	300-215 ss.24	1
	305-215 ss.3	1
Bone Bead	295-215 ss.11	1
	300-215 ss.4	1
Modified Bone Frag.	285-215 ss.25	1

Mammalian Faunal Remains

1. House 12

Species	Provenience Unit	Number of Items
Indeterminate	general house provenience	4
	160-225 ss.15	1
	160-225 ss.22	10
	160-230 ss.16	1
	160-230 ss.22	1
	165-220 ss.20	1
	165-225 ss.16	1
	165-225 ss.21	4
	165-225 ss.25	1
	170-215 ss.20	3
	170-220 ss.5	1
	170-220 ss.9	1
	170-220 ss.14	1
	170-220 ss.18	1
	170-225 ss.9	1
	170-225 ss.21	9
	170-230 ss.3	4
	170-230 ss.13	1
	170-230 ss.23	2
	175-215 ss.25	3
	175-220 ss.2	1
	175-220 ss.8	1
	175-220 ss.10	2
	175-220 ss.12	2
	175-220 ss.22	1
	175-225 ss.16	3
	175-225 ss.17	2
	175-225 ss.20	2
	180-215 ss.4	1

	180-215 ss.5	1
	180-215 ss.7	1
	180-215 ss.9	4
	180-215 ss.14	6
	180-215 ss.15	1
	180-215 ss.17	1
	180-215 ss.18	1
	180-215 ss.19	1
	180-215 ss.22	1
	180-215 ss.24	5
	180-215 ss.25	1
	180-220 ss.6	1
	180-220 ss.12	1
	180-220 ss.17	1
	180-220 ss.20	1
	180-220 ss.21	9
	180-220 ss.22	1
	180-220 ss.23	14
	180-220 ss.24	1
	180-220 ss.25	1
	180-220 F.1	1
	180-220 F.17	3
	180-220 F.20	2
	180-220 F.21	2
	180-225 ss.4	1
	180-225 ss.6	1
	180-225 ss.8	1
	180-225 ss.9	3
	180-225 ss.12	1
	180-225 ss.18	6
	180-225 ss.21	1
	180-225 ss.22	2
	180-225 F.2	1
	180-225 F.3	1

	185-215 no ss. information	3
	185-215 ss.1	2
	185-215 ss.2	1
	185-215 ss.4	3
	185-215 ss.5	3
	185-215 ss.6	10
	185-215 ss.7	1
	185-215 ss.8	13
	185-215 ss.11	1
	185-215 ss.12	9
	185-215 ss.13	4
	185-215 ss.16	2
	185-215 ss.17	1
	185-215 ss.20	1
	185-215 ss.21	2
	185-215 ss.25	2
	185-215 F./P.M.50(?)	1
	185-215 F./P.M.(?)82	1
	185-220 no ss. information	2
	185-220 ss.2	2
	185-220 ss.3	11
	185-220 ss.4	2
	185-220 ss.5	6
	185-220 ss.6	3
	185-220 ss.12	2
	185-220 ss.13	1
	185-220 ss.15	2
	185-220 ss.16	1
	185-220 ss.19	1
	185-220 ss.20	5
	185-220 ss.22	2
	185-220 ss.24	2
	185-220 ss.25	33
	185-225 ss.1	25

	185-225 ss.2	12
	185-225 ss.5	18
	185-225 ss.6	13
	185-225 ss.7	9
	185-225 ss.8	25
	185-225 ss.10	48
	185-225 ss.13	34
	185-225 ss.14	18
	185-225 ss.15	40
	185-225 ss.16	8
	185-225 ss.17	18
	185-225 ss.18	23
	185-225 ss.19	16
	185-225 ss.20	29
	185-225 ss.21	7
	185-225 ss.22	10
	185-225 ss.24	23
	185-225 F.1	1
	190-210 ss.20	3
	190-215 no ss. information	1
	190-215 ss.2	4
	190-215 ss.4	1
	190-215 ss.8	2
	190-215 ss.10	2
	190-215 ss.12	1
	190-215 ss.13	3
	190-215 ss.19	1
	190-215 F.1	2
	190-220 no ss. information	2
	190-220 ss.2	1
	190-220 ss.3	3
	190-220 ss.5	2
	190-220 ss.9	6
	190-220 ss.10	3

	190-220 ss.11	4
	190-220 ss.13	1
	190-220 ss.14	6
	190-220 ss.15	1
	190-220 ss.16	1
	190-220 ss.18	1
	190-220 ss.19	4
	190-220 ss.20	2
	190-220 ss.24	3
	190-220 F./P.M. 22	2
	190-220 F./P.M.23	4
	190-220 F./P.M.25	2
	195-210 ss.20	1
	195-210 ss.23	3
	195-210 F./P.M. 25	1
	195-215 ss.2	1
	195-215 ss.3	2
	195-215 ss.5	1
	195-215 ss.8	1
	195-215 ss.15	3
	195-215 ss.21	1
	195-215 F.9	1
	195-220 ss.2	3
	195-220 ss.3	2
	195-220 ss.4	4
	195-220 ss.6	1
	195-220 ss.8	3
	195-220 ss.13	1
	195-220 ss.17	2
	195-220 ss.18	1
	195-220 ss.22	1
	195-220 ss.23	1
	195-220 F.2	7
	200-210 ss.2	2

		200-210 ss.3	1
		200-210 ss.4	1
		200-210 ss.5	2
		200-210 ss.6	5
		200-210 ss.9	1
		200-210 ss.12	1
		200-210 ss.15	1
		200-210 ss.16	1
		200-210 ss.18	1
		200-210 F.2	4
		200-215 ss.1	2
		200-215 ss.3	1
		200-215 ss.4	1
		200-215 ss.6	1
		200-215 ss.9	1
		200-215 ss.14	1
		200-215 ss.15	2
		200-215 ss.20	1
		200-215 ss.23	2
		200-215 ss.25	3
		200-220 ss.1	5
		200-220 ss.2	4
		200-220 ss.7	1
		200-220 ss.11	4
		200-220 ss.17	7
		200-220 F.1	1
		205-205 no ss. information	2
		205-205 ss.25	1
		205-210 no ss. information	3
		205-210 ss.2	1
		205-210 ss.6	1
		205-210 ss.7	2
		205-210 ss.8	1
		205-210 ss.10	1

	205-210 ss.11	1
	205-210 ss.15	1
	205-210 ss.16	1
	205-210 ss.21	1
	205-210 ss.23	2
	205-210 ss.24	2
	205-210 F.11	3
	205-210 F./P.M. (?) 239	1
	205-215 no ss. information	2
	205-215 ss.3	1
	205-215 ss.5	4
	205-215 ss.7	3
	205-215 ss.10	3
	205-215 ss.11	1
	205-215 ss.12	3
	205-215 ss.19	4
	210-205 no ss.information	2
	210-205 ss.19	12
	210-205 ss.24	2
	210-210 no ss. information	3
	210-210 ss.1	2
	210-210 ss.2	1
	210-210 ss.6	2
	210-210 ss.12	3
	210- 210 ss.13	2
	210-210 ss.14	1
	210-210 ss.15	2
	210-210 ss.17	6
	210-210 ss.18	1
	210-210 ss.21	1
	210-210 ss.22	4
	210-210 ss.25	1
	210-215 ss.2	13
	210-215 F./P.M.(?)2	6

	215-205 ss.4	2
	215-205 F./P.M.(?)5	1
	215-210 ss.1	4
	215-210 ss.2	2
	215-210 ss.4	1
White-tailed Deer	general house provenience	3
	160-225 ss.14	1
	160-225 ss.15	1
	160-225 ss.21	1
	160-225 ss.22	1
	160-230 ss.22	2
	165-220 ss.20	1
	165-220 ss.25	1
	165-225 ss.16	1
	165-225 ss.21	2
	165-225 ss.23	1
	170-220 ss.4	1
	170-220 ss.9	1
	170-220 ss.13	1
	170-220 ss.18	1
	170-225 ss.21	3
	170-230 ss.3	3
	170-230 ss.16	1
	175-220 ss.2	2
	175-220 ss.12	1
	175-220 F.6	1
	175-225 ss.17	3
	175-225 ss.20	1
	175-225 ss.24	3
	180-215 ss.5	1
	180-215 ss.9	2
	180-215 ss.12	2

		180-215 ss.13	1
		180-215 ss.14	6
		180-215 ss.15	2
		180-215 ss.17	1
		180-215 ss.19	2
		180-215 ss.23	1
		180-215 ss.24	3
		180-215 ss.25	4
		180-215 F.1	1
		180-220 ss.8	1
		180-220 ss.12	1
		180-220 ss.16	1
		180-220 ss.19	2
		180-220 ss.20	4
		180-220 ss.21	1
		180-220 ss.23	1
		180-220 F.21	2
		180-225 ss.4	1
		180-225 ss.6	1
		180-225 ss.8	2
		180-225 ss.9	2
		180-225 ss.12	1
		180-225 ss.16	1
		180-225 ss.18	1
		180-225 ss.21	7
		180-225 ss.22	1
		180-225 ss.23	2
		180-225 F.2	1
		185-215 ss.1	1
		185-215 ss.4	1
		185-215 ss.5	3
		185-215 ss.6	1
		185-215 ss.7	2
		185-215 ss.8	5

		185-215 ss.12	3
		185-215 ss.13	1
		185-215 ss.14	1
		185-215 ss.17	2
		185-215 ss.19	1
		185-215 ss.21	2
		185-215 ss.25	1
		185-215 F.8	1
		185-220 no ss. information	1
		185-220 ss.3	3
		185-220 ss.4	1
		185-220 ss.6	1
		185-220 ss.8	1
		185-220 ss.14	1
		185-220 ss.15	1
		185-220 ss.20	1
		185-220 ss.23	1
		185-220 ss.25	5
		185-220 F.1	1
		185-220 F.2	1
		185-225 ss.1	10
		185-225 ss.2	2
		185-225 ss.5	7
		185-225 ss.6	2
		185-225 ss.7	3
		185-225 ss.8	7
		185-225 ss.10	14
		185-225 ss.13	4
		185-225 ss.14	14
		185-225 ss.15	10
		185-225 ss.16	3
		185-225 ss.17	9
		185-225 ss.18	7
		185-225 ss.19	4

	185-225 ss.20	4
	185-225 ss.22	2
	185-225 ss.24	4
	185-225 F.1	1
	190-210 ss.19	1
	190-210 ss.20	1
	190-210 ss.24	1
	190-215 no ss.information	2
	190-215 ss.2	2
	190-215 ss.10	4
	190-215 ss.19	1
	190-215 F.5	1
	190-215 F.9	1
	190-220 no ss.information	1
	190-220 ss.4	2
	190-220 ss.5	8
	190-220 ss.6	1
	190-220 ss.10	7
	190-220 ss.12	1
	190-220 ss.14	5
	190-220 ss.19	3
	190-220 ss.20	1
	190-220 ss.24	1
	190-220 F./P.M.(?)23	1
	190-220 F.11	1
	195-210 ss.5	1
	195-210 ss.10	1
	195-210 ss.14	1
	195-210 ss.18	1
	195-210 ss.20	3
	195-210 ss.23	1
	195-210 F./P.M.(?)25	2
	195-215 ss.5	1
	195-215 ss.21	2

	195-215 ss.22	1
	195-215 F.7	1
	195-215 F.14	1
	195-215 F.9	1
	195-220 ss.1	1
	195-220 ss.2	3
	195-220 ss.3	6
	195-220 ss.4	3
	195-220 ss.6	1
	195-220 ss.8	5
	195-220 ss.11	3
	195-220 ss.13	2
	195-220 ss.17	2
	195-220 ss.18	3
	195-220 ss.22	2
	200-210 ss.5	1
	200-210 ss.6	2
	200-210 ss.10	1
	200-210 ss.14	1
	200-210 ss.15	2
	200-210 ss.16	1
	200-210 ss.23	2
	200-210 F.1	1
	200-210 F.2	3
	200-215 no ss. information	1
	200-215 ss.3	1
	200-215 ss.6	1
	200-215 ss.8	1
	200-215 ss.14	1
	200-215 ss.15	2
	200-215 ss.19	1
	200-215 ss.20	1
	200-215 ss.25	6
	200-220 ss.1	1

	200-220 ss.2	1
	200-220 ss.11	4
	200-220 ss.16	1
	200-220 ss.17	6
	200-220 ss.21	2
	205-205 no ss. information	2
	205-210 no ss. information	1
	205-210 ss.6	1
	205-210 ss.12	3
	205-210 ss.14	1
	205-210 ss.16	1
	205-210 ss.21	1
	205-210 ss.24	1
	205-210 F.11	1
	205-210 F.5	1
	205-215 no ss. information	1
	205-215 ss.4	1
	205-215 ss.5	7
	205-215 ss.10	3
	205-215 ss.11	1
	205-215 ss.12	1
	205-215 ss.19	2
	205-215 ss.22	1
	210-205 ss.9	2
	210-205 ss.10	1
	210-205 ss.19	1
	210-210 no ss. information	3
	210-210 ss.1	1
	210-210 ss.6	2
	210-210 ss.7	2
	210-210 ss.12	1
	210-210 ss.18	1
	210-210 ss.25	2
	210-215 ss.2	2

	210-215 F./P.M.(?)2	2
	215-205 ss.4	1
Woodchuck	180-220 no ss.information	1
	185-215 ss.2	1
	185-215 ss.7	1
	185-215 ss.9	1
	185-215 ss.12	1
	185-220 ss.25	1
	185-225 ss.15	1
	190-215 ss.3	8
	190-215 ss.4	4
	190-215 ss.12	4
	190-215 ss.16	1
	190-215 F.9	4
	190-220 ss.7	1
	205-210 ss.13	2
	210-210 ss.15	1
Dog	180-215 ss.12	1
	180-220 F.17	1
	180-220 F.20	1
	185-215 ss.12	1
	185-215 ss.18	1
	185-220 no ss. information	1
	185-220 ss.3	1
	185-220 ss.12	1
	185-220 ss.14	1
	185-220 ss.15	1
	185-225 ss.5	2
	185-225 ss.6	1
	185-225 ss.16	1
	185-225 ss.18	1
	190-220 ss.7	1

	190-220 ss.14	1
	190-220 ss.15	1
	190-220 F./P.M.(?)25	1
	195-210 F./P.M.(?)25	1
	195-215 ss.5	1
	195-215 ss.15	1
	195-220 ss.2	1
	200-215 ss.4	1
	200-215 F.7	1
	205-210 ss.10	1
Black Bear	170-220 ss.13	1
	180-215 ss.9	1
	180-220 no ss. information	1
	180-220 ss.24	1
	185-220 ss.7	1
	185-225 ss.5	2
	185-225 ss.13	2
	185-225 ss.15	1
	185-220 ss.20	1
	190-220 ss.5	1
	195-220 ss.2	1
	200-215 ss.2	1
	210-210 ss.1	1
	210-210 ss.12	1
Beaver	180-215 ss.17	1
	180-220 ss.19	1
	180-220 F.20	1
	180-225 ss.18	1
	185-215 ss.12	1
	185-215 ss.13	1
	185-225 ss.7	1
	185-225 ss.16	1

	185-225 ss.19	1
	190-220 ss.19	1
	195-220 ss.8	1
	200-210 ss.3	1
Muskrat	185-220 F.6	1
	185-225 ss.7	1
	185-225 ss.13	1
	185-225 ss.17	1
	185-225 ss.20	1
River Otter	185-215 ss.5	1
	185-225 ss.6	1
	185-225 ss.18	1
	190-220 ss.11	1
Human	180-215 ss.15	1
	200-210 F.2	1
Grey Squirrel	185-220 ss.13	1
	205-210 F.11	1
Grey Fox	180-215 ss.20	1
	200-215 F.2	1
Snowshoe Hare	185-215 ss.17	1
Eastern Cottontail	185-225 ss.16	1
Raccoon	185-225 ss.19	1
Red Squirrel	185-225 ss.6	1
Wapiti	185-215 ss.8	1

Wolf	190-220 ss.4	1

2. House 38

Species	Provenience Unit	Number of Items
Indeterminate	285-205 ss.10	2
	285-210 ss.1	2
	285-210 ss.12	2
	290-210 ss.3	1
	290-215 ss.6	1
	290-215 ss.13	1
	290-215 ss.17	2
	290-215 ss.23	1
	295-215 ss.1	1
	295-215 ss.6	2
	295-215 ss.8	2
	295-215 ss.9	1
	295-215 ss.17	1
	295-215 ss.18	1
	295-215 ss.20	1
	295-215 ss.24	1
	295-215 F.3	7
	295-215 F./P.M.(?)105	1
	300-215 ss.4	1
	300-215 ss.19	1
	300-215 ss.21	3
	300-215 ss.23	1
	300-215 ss.24	3

	300-215 ss.25	1
	305-215 ss.1	1
	305-215 ss.2	12
	305-215 ss.3	9
	305-215 ss.4	2
	305-215 ss.5	2
	305-215 ss.8	12
	305-215 ss.11	1
	305-215 ss.13	1
	305-220 ss.17	2
	310-215 ss.5	3
	310-215 ss.11	2
	310-215 ss.12	2
	310-215 ss.25	16
	315-215 ss.4	19
	315-215 ss.5	10
	315-215 ss.6	2
	315-215 ss.7	7
White-tailed Deer	285-205 ss.10	1
	285-210 ss.15	1
	290-215 ss.16	1
	290-215 ss.23	1
	295-210 ss.3	1
	295-210 ss.18	1
	295-215 ss.15	1
	295-215 ss.22	1
	305-215 ss.2	1
	305-215 ss.4	1
	305-215 ss.8	1
	305-215 ss.10	1
	305-215 ss.11	1
	305-215 ss.14	1
	310-215 ss.25	4

	315-215 ss.4 315-215 ss.5 315-215 ss.6 315-215 ss.7	3 1 1 4
Black Bear	305-220 ss.12	1
Woodchuck	295-215 ss.20	1
Dog	305-220 ss.4	1
Beaver	315-215 ss.5	1
Snowshoe Hare	290-215 ss.11	1
Fisher	315-215 ss.5	1

APPENDIX 2: FALL-OFF STUDY

Fall-Off Study (see Figure 42)

As a general rule, I have considered artifacts within 1-2 metres outside the house walls as part of the house collection. If the artifact yields of these squares was ≥ 30 items in total, then I extended the boundaries by 1-2 metres further away from the house walls until I reached a total artifact count that was less than 30 pieces. This averages out to less than 5 items for any of the six artifact classes.

Under this rule, 4 subsquares which I have included as part of the H12 artifact count are somewhat suspect. For the following reasons I have kept them in the analysis.

Subsquare 25 of square 185-225 may be associated with House 29. This square has a total of 24 items. As I have suggested, this is less than the cut-off point of yield quantities for H12 and H29. But as subsquare 24 has sixty items, I suggest that subsquare 25 represents the fall-off of the rich band of concentrated artifact yields along the 185 north co-ordinate line of H12.

Subsquares 10, 15, and 20 of square 185-225 may also be associated with H29. The large number of items from these three subsquares, suggests that this material is again associated with the rich band of concentrated artifact yields along the 185 north co-ordinate line of H12. I suggest this for two reasons. First, this area is not in line with H29's central hearth - the area that one would expect to find the greatest concentration of artifacts, as was found in H12 along the 185 north co-ordinate line. Second, this area is not close to any door of H29 and therefore cannot be considered a dump-spot of H29 artifacts. These three subsquares are equal distance between H12 and H29, but for the reasons just presented, I believe that this material should be included in H12's artifact assemblage.

DRAPER SITE: AIGt — 2

HOUSE 12

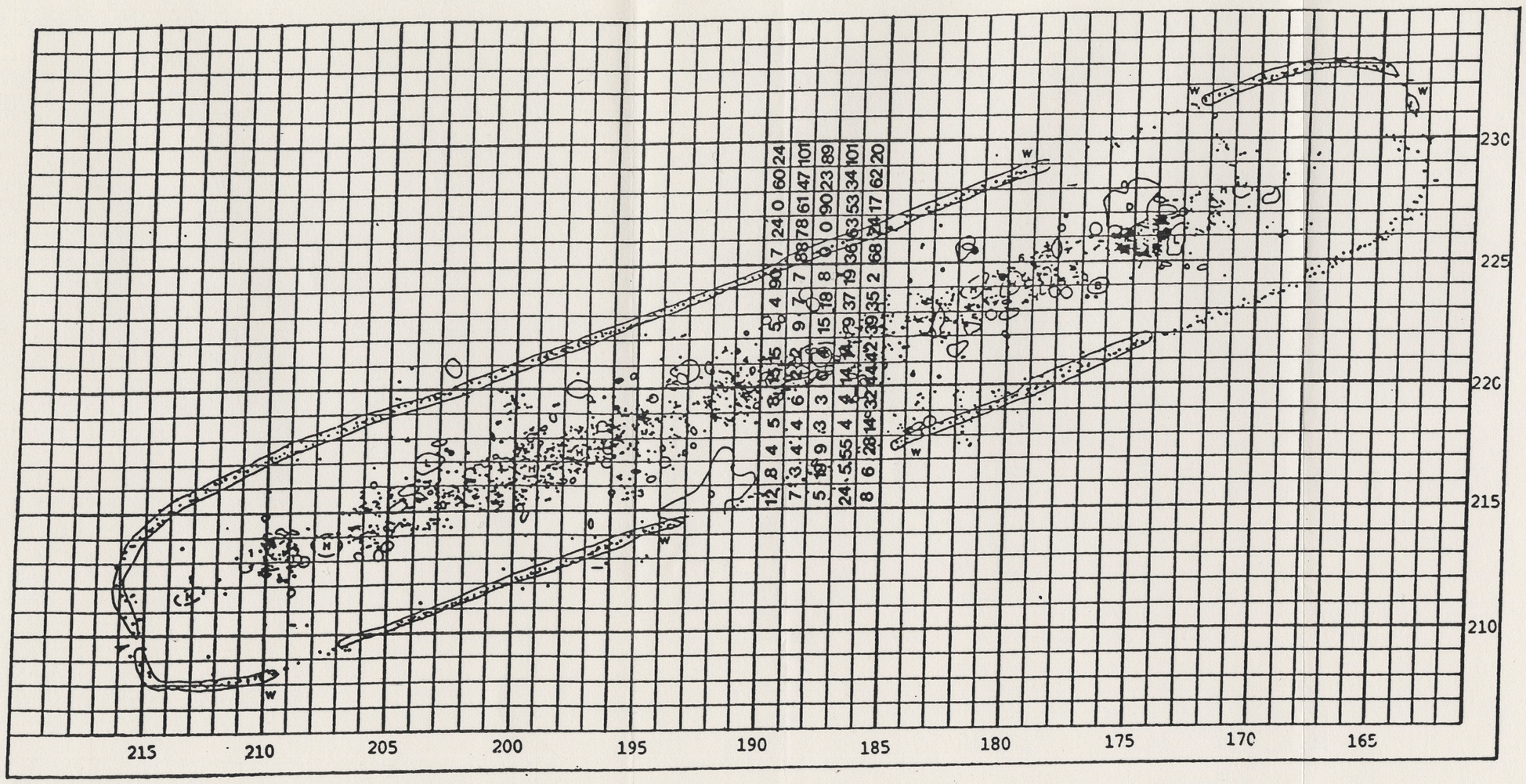

FIGURE 42: HOUSE12 DISTRIBUTION ALONG THE 185 NORTH CO-ORDINATE LINE

APPENDIX 3: HOUSE 12 POISSON CHARTS

	K (Number of Rims)	Observed	Random (Poisson)
1	0	3	4.26000E-5
2	1	2	5.8300E-4
3	2	1	.0040
4	3	5	.0181
5	4	1	.0621
6	5	0	.1700
7	6	4	.3870
8	7	0	.7560
9	8	1	1.2930
10	9	2	1.9650
11	10	0	2.6870
12	11	2	3.3400
13	12	1	3.8070
14	13	0	4.0050
15	14	1	3.9120
16	15	0	3.5670
17	16	1	3.0490
18	17	1	2.4530
19	18	0	1.8630
20	19	3	1.3410
21	20	2	.9170
22	21	0	.5970
23	22	0	.3710
24	23	0	.2210
25	24	0	.1260
26	25	0	.0690
27	26	0	.0360
28	27	2	.0180
29	28	0	.0090
30	29	0	.0040
31	30	0	.0020
32	31	0	.0010
33	32	3	4.0000E-4
34	33	0	2.0000E-4
35	34	0	6.1000E-5
36	35	0	2.40000E-5
37	36	0	9.00000E-6
38	37	0	3.00000E-6
39	38	0	1.00000E-6
40	39	0	4.00000E-7
41	40	0	1.00000E-7
42	41	0	4.77900E-8

	K (Number of Rims)	Observed	Random (Poisson)
43	42	0	1.55600E-8
44	43	0	4.94900E-9
45	44	0	1.53800E-9
46	45	0	4.67500E-10
47	46	1	1.39000E-10
48	47	0	4.04400E-11
49	48	0	1.15200E-11
50	49	0	3.21600E-12
51	50	0	8.79600E-13
52	51	0	2.35900E-13
53	52	0	6.20300E-14
54	53	0	1.60100E-14
55	54	0	4.05400E-15
56	55	0	1.00800E-15
57	56	0	2.46200E-16
58	57	0	5.90700E-17
59	58	0	1.39300E-17
60	59	1	3.22800E-18

	K (Number of Pipes)	Observed	Random (Poisson)
1	0	20	12.195
2	1	9	13.537
3	2	2	7.513
4	3	3	2.780
5	4	1	.771
6	5	0	.171
7	6	0	.037
8	7	1	5.000E-3
9	8	1	1.000E-3

	K (Number of Ch. Lithics)	Observed	Random (Poisson)
1	0	7	.105
2	1	4	.613
3	2	5	1.801
4	3	1	3.523
5	4	1	5.170
6	5	6	6.070
7	6	3	5.938
8	7	3	4.980
9	8	0	3.654
10	9	2	2.383
11	10	0	1.399
12	11	1	.746
13	12	1	.365
14	13	0	.165
15	14	0	.069
16	15	0	.027
17	16	0	.010
18	17	1	3.000E-3
19	18	0	1.000E-3
20	19	0	3.4500E-4
21	20	0	1.0100E-4
22	21	0	2.8300E-5
23	22	0	7.6000E-6
24	23	0	1.9000E-6
25	24	0	5.0000E-7
26	25	0	1.0000E-7
27	26	0	2.5010E-8
28	27	0	5.4380E-9
29	28	0	1.1400E-9
30	29	1	2.3070E-10
31	30	0	4.5150E-11
32	31	0	8.5490E-12
33	32	0	1.5680E-12
34	33	0	2.7900E-13
35	34	0	4.8160E-14
36	35	0	8.0770E-15
37	36	0	1.3170E-15
38	37	0	2.0890E-16
39	38	0	3.2280E-17
40	39	0	4.8580E-18
41	40	1	7.1290E-19

	K (Number of G/R Stone)	Observed	Random (Poisson)
1	0	11	1.937
2	1	6	5.715
3	2	5	8.429
4	3	4	8.289
5	4	0	6.113
6	5	2	3.607
7	6	4	1.773
8	7	2	.747
9	8	0	.276
10	9	1	.090
11	10	1	.027
12	11	0	7.000E-3
13	12	0	2.000E-3
14	13	0	3.9700E-4
15	14	1	8.4000E-5

	K (Number of Bone Artif.)	Observed	Random (Poisson)
1	0	18	2.414
2	1	6	6.590
3	2	1	8.895
4	3	7	8.185
5	4	1	5.587
6	5	0	3.050
7	6	1	1.388
8	7	0	.541
9	8	1	.185
10	9	0	.056
11	10	0	.015
12	11	0	4.000E-3
13	12	0	8.640E-4
14	13	0	1.8100E-4
15	14	0	3.5400E-5
16	15	1	6.4000E-6
17	16	0	1.1000E-6
18	17	0	2.0000E-7
19	18	0	2.6750E-8
20	19	0	3.8430E-9
21	20	0	5.2460E-10
22	21	0	6.8190E-11
23	22	0	8.4630E-12
24	23	0	1.0050E-12
25	24	0	1.1430E-13
26	25	0	1.2480E-14
27	26	0	1.3100E-15
28	27	0	1.3250E-16
29	28	0	1.2920E-17
30	29	0	1.2160E-18
31	30	0	1.1060E-19
32	31	0	9.7440E-21
33	32	0	8.3130E-22
34	33	0	6.8770E-23
35	34	0	5.5220E-24
36	35	0	4.3070E-25
37	36	0	3.2660E-26
38	37	0	2.4100E-27
39	38	0	1.7310E-28
40	39	1	1.2120E-29

	K (Number of Mam. Faunal)	Observed	Random (Poisson)
1	0	5	1.5600E-5
2	1	1	2.2900E-4
3	2	3	1.680E-3
4	3	3	8.230E-3
5	4	6	.030
6	5	1	.089
7	6	0	.217
8	7	1	.455
9	8	0	.835
10	9	1	1.362
11	10	0	2.000
12	11	1	2.668
13	12	0	3.264
14	13	0	3.686
15	14	0	3.865
16	15	3	3.783
17	16	1	3.471
18	17	1	2.980
19	18	0	2.168
20	19	1	1.889
21	20	1	1.386
22	21	1	.969
23	22	0	.647
24	23	0	.413
25	24	0	.307
26	25	0	.148
27	26	0	.084
28	27	1	.046
29	28	0	.024
30	29	0	.012
31	30	0	6.000E-3
32	31	1	3.000E-3
33	32	1	1.000E-3
34	33	0	5.710E-4
35	34	0	2.4700E-4
36	35	1	1.0300E-4
37	36	1	4.2200E-5
38	37	0	1.6700E-5
39	38	0	6.5000E-6
40	39	0	2.4000E-6
41	40	0	9.0000E-7
42	41	1	3.0000E-7

	K (Number of Mam. Faunal)	Observed	Random (Poisson)
43	131	1	0

APPENDIX 4: HOUSE 38 POISSON CHARTS

	K (Number of Rims)	Observed	Random (Poisson)
1	0	6	.6540
2	1	2	2.2030
3	2	2	3.7120
4	3	3	4.1690
5	4	2	3.5130
6	5	0	2.3680
7	6	0	1.3300
8	7	0	.6400
9	8	1	.2700
10	9	0	.1010
11	10	1	.0340
12	11	1	.0100
13	12	1	.0030

	K (Number of Pipes)	Observed	Random (Poisson)
1	0	13	10.649
2	1	3	6.166
3	2	2	1.785
4	3	0	.345
5	4	1	.050
6	•	•	•

	K (Number of Ch. Lithics)	Observed	Random (Poisson)
1	0	5	3.173
2	1	6	5.679
3	2	4	5.083
4	3	2	3.033
5	4	1	1.357
6	5	0	.486
7	6	0	.145
8	7	0	.037
9	8	0	8.000E-3
10	9	0	2.000E-3
11	10	1	2.9530E-4

	K (Number of G/R Stone)	Observed	Random (Poisson)
1	0	14	11.229
2	1	2	5.906
3	2	2	1.553
4	3	0	.272
5	4	1	.036

	K (Number of Bone Artif.)	Observed	Random (Poisson)
1	0	10	9.093
2	1	5	6.702
3	2	3	2.470
4	3	1	.607

	K (Number of Mam. Faunal)	Observed	Random (Poisson)
1	0	10	3.335
2	1	2	5.804
3	2	2	5.049
4	3	2	2.929
5	4	1	1.274
6	5	0	.443
7	6	1	.129
8	7	0	.032
9	8	0	7.000E-3
10	9	0	1.000E-3
11	10	0	2.3400E-4
12	11	1	3.7000E-5

APPENDIX 5: LONGHOUSE DEVELOPMENT IN ONTARIO IROQUOIS CULTURE HISTORY

THE LONGHOUSE DEVELOPMENT IN ONTARIO IROQUOIS CULTURE HISTORY

J.V. Wright's (1966) expanded and revised version of MacNeish's in situ theory(1952), defined the Ontario Iroquois Tradition. In this widely accepted scheme, Wright divides and outlines the developmental sequence of Iroquoian culture in three stages: Early(A.D.1000-1300), Middle(A.D.1300-1400) and Late(A.D.1400-1650) (Wright,1966:101). Recent excavations have called into question the validity of these dates. Noble's excavation of the Porteous site proposes that Early Ontario Iroquois should more accurately be dated at A.D.700-1300 (Noble,1975:38). Similarly, the date for the emergence of groups ancestral to the historic Huron and Neutral has been pushed forward to A.D.1450 (see Finlayson and Byrne,1975; Jamieson,1979; Smith,1977). Therefore, the Middle Ontario Iroquois stage dates at A.D.1300-1450, and the Late Ontario Iroquois stage dates at A.D.1450-1650.

Although excavations at Middle Woodland sites, such as the Donaldson site (Wright and Anderson,1963) and Summer Island (Brose,1970), have indicated evidence of small rectangular dwellings with hearths and few other features, the clear sequence of the longhouse development begins in the Early Ontario Iroquois stage with the Glen Meyer and Pickering cultures (A.D.700-1300). These two contemporaneous and geographically distinct cultures possessed similar settlement pattern characteristics. Longhouses were comparatively small with centrally aligned hearths and large scattered refuse pits. Bench lines are not apparent, although there are feature-free spaces, one to two metres in from both house walls which Rozel, at the Gunby site, suggests may indicate sleeping areas (1979:126-127). Kenyon offered similiar findings at the Miller site, stating that each house was "...characterized by a door at one end only, an irregular line of poorly defined hearths down its centre and an absence of other internal structural features" (Kenyon,1969:18). Other examples of Early Ontario Iroquois houses can be seen in Noble's reports on the Porteous site(1975b) and the Van Besian site (1975a), as well as M. Wright's report on the Reid site (1978).

The Middle Ontario Iroquois stage (A.D.1300-1450), is marked by the Uren and Middleport substages. During this period there is evidence of remarkable growth in

longhouse size. In fact, Dodd's research (1984) suggests that characteristics such as house length, width, taper length, wall post density, hearth spacing and feature density reach their maximum during this stage (1984:297-298). The Nodwell site (Wright,1974) illustrates 12 houses with very intensively distributed features, hearths and post moulds through the central corridor, under the bench lines and in the end cubicles of the houses. Further, the house lengths and widths are relatively large (see 'Floor plan of the 1971 excavations' for the overall lengths and widths of the houses, p.5). Crawford Lake (Finlayson and Byrne,1975) provides similar evidence of unusually large and intensively occupied houses.

The Late Ontario Iroquois stage can be divided into three periods: Late Prehistoric, Proto-historic and Historic. The problem underlying the ill-defined boundaries of these three periods revolves around the dating of European goods on Iroquoian sites (see Trigger,1976:449) During this stage there is a marked trend of decreasing house size, within an increasingly large village with more deliberate village planning (Warrick,1984:131). During the Historic period there are distinct cultural differences in the longhouse characteristics of the Huron and Neutral groups. This can be observed archeologically by comparing Huron sites, such as Draper (Finlayson,1985), Benson (Ramsden,1977), Ball (Knight,1978), LeCaron (Johnston and Jackson,1980), with Neutral sites, such as Southwold (Smith,1977), Lawson (Pearce,1980), and Christianson (Fitzgerald,1982). Two features are specifically diagnostic of historic Neutral longhouses: interior house end stains and "slash pits" associated with sleeping benches (Noble,1984:7).