A PRELIMINARY REPORT ON EARLY DORSET OCCUPATIONS ON THE WEST COAST OF NEWFOUNDLAND

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RESUME: Fouille entreprise par l'auteur a l'ete 1981 sur la cote ouest de Terre-Neuve. La collection du site Factory Cove (DlBk-3) est datee typologiquement entre 400-600 av. J.-C. Par contre des traits plus anciens sont aussi présents. Une quantité considérable de débitage suggère que le site était non seulement un site d'habitation mais aussi un atelier. La collection se situe dans la phase du Dorsétien ancien telle que manifestée a Terre-Neuve entre 3000 et 2400 ans avant aujourd' hui.

INTRODUCTION

The excavation of an Early Dorset site in Cow Head, Newfoundland, continues the exploratory work undertaken by Dr. James Tuck, Archaeology Unit of Memorial University of Newfoundland, during the summers of 1976 and 1978.

The bulk of this preliminary report covers the site description, the excavation, the lithic remains and associated archaeological surveys. The purpose of this research

is to supplement our meager knowledge of the early Dorset culture in Newfoundland. This is achieved through the 1981 season main objectives, which were:

I Adding material to the 1976/1978 collection.

II Delimiting the extent of the occupation at the site.

III Obtaining samples for C^{14} dates.

SITE DESCRIPTION

The Factory Cove site (DlBk-3) is located at 49°55' North and 60°10' West (Figure 1). The general setting is a tree-covered peninsula extending in the Gulf of St. Lawrence.

The cultural remains lie on a fairly level terrace 9.20 m above sea level. Grass and moss make up 70 percent of the surface vegetation while the remaining 30 percent is a growth of windswept evergreens. The natural features at the site offer some protection against the northerly and easterly winds; however, we observed that for May and June the dominant winds come from the south and west, which are the sea sides. Fresh water is readily available nearby since the higher grounds drain in a bog contiguous to the site. The bog is wet throughout the year and a surplus runs on the surface after heavy rainfalls.

THE EXCAVATION

I Methods

Excavation at the Factory Cove site concentrated on four different areas (Plate 1). Although we continued from the previous one-metre grid system laid in 1976, our excavating unit was a two-metre square.

The excavation principle was to follow the artifact distributions in order to have a coherence between them and the architectural features. We recorded both the artifacts and the rocks by natural levels. Besides the mapping of these architecturally significant stones, we made a thorough photographic coverage. Stratigraphic cuts throughout the site supplemented these data.

We dug 116 squares metres in four areas, bringing the total to 160 metres for the three seasons.

II Excavated Areas

A - Area I

The excavation in area I (Plate 1) is adjacent to those of the previous field seasons. Since the artifact and flake distribution from the previous years had been made for every square before the 1981 season, we had an idea of where to start. Therefore, we concentrated first on the east and southeast part of area I. We considered the investigation of this

area as being our best chance to discover defined habitation features. So, we added another 50 square metres to the 42 already excavated.

Unfortunately, except for a rock pattern suggesting a tent ring with a fireplace at its center, most of the area is a rock jumble. Since we can see as many patterns as we wish, I prefer to await further analysis for their interpretation. Some smaller stone features, such as intact and fragmentary fireplaces, were also found.

This intensive occupation and the amount of lithic material suggest that we may have multiple occupations at this portion of the Factory Cove site.

STRATIGRAPHY

Level I is the present sod level with an average thickness of 8 cm. Level Ic, at the base of the sod, is a discontinuous angular pebble level. Level II is a brownish humus averaging 10 cm in thickness and present throughout area I. We noticed a number of discontinuous angular pebble lenses within this level. Level III is a local gravel level. Level IV is a black stained humus averaging 4 cm in thickness. It contains bits of charcoal. Level IVa is also a black stained humus but it is localized underneath level III. The sterile level V is a mixture of angular pebbles with limestone blocks piercing

here and there.

In summary, level IVa is stratigraphically the earliest occupation layer. It contains a component earlier than levels II and IV. Next of interest is level IV, first identified in the profile of a fireplace. The sporadic horizontal distribution and the charcoal content of this level suggest that it is the remains of combustion areas associated with level II. Level II is the result of an extensive occupation. Its cultural content shows a high degree of homogeneity. The pebble lenses within this level would come from the decomposition of architectural material such as sod blocks.

B - Area II

The possibility of a semi-subterranean house in this area (Plate 1) was mentioned after the exploratory work of 1976/1978. We therefore decided to make this area our second priority. Consequently, we started to excavate on the edge of what was a shallow depression. Even though there was not any rock pattern associated to this depression, the result is that there may be some evidence of a semi-subterranean house shown in the profiles as a ring of loose humus mixed with sand. An estimate of the house dimensions from the distribution of this level would be that it is rectangular, approximately 4 m long by 2.50 m wide. As in area I the extensive destruction

gives many rock configurations which are still open to interpretation.

STRATIGRAPHY

Level I is the present sod averaging 9 cm in thickness. The discontinuous level Ic at the base of level I is made of angular pebbles and it is 2 cm thick. Level II is a brownish humus level throughout area II. It varies in thickness from 6 cm to 16 cm. Level IIb is a mixture of sand and humus and was found only sporadically. Level IV is a black stained level containing bits of charcoal.

Our hypothesis of a semi-subterranean house in this area is possibly supported by the nature of level IIb, a layer of sandy humus that forms a ring around a shallow depression. In summary, the pattern of occupation in this area seems to involve the initial excavation of a semi-subterranean house followed by multiple overlapping occupations as suggested by the thickness of level II. The level IV found sporadically at the base of level II suggests the presence of fireplace areas.

C - Area III (Plate 2)

We discovered area III while trying to delimit the extent of the occupation at the site. This area is marginal by comparison to areas I, II and IV. Before we started any work, we noticed a wet depression averaging 50 cm lower than

the surrounding grounds.

Once we opened the first test-pit in this area, we found an abnormally high quantity of finished tools and very few flakes. We decided, therefore, to expand the excavation hoping to have some well defined architectural remains in order to put these artifacts in context. We ended up with 24 square metres excavated and not many more artifacts than those found in the first test-pit.

The reward of this heavy task is that we have a single occupation circled by three bedrock outcrops with a low stone wall between two of them. The cultural level was buried by a rock jumble after the wall had collapsed. The absence of hold-down rocks in front of the habitation suggest that the front was semi-movable. There was also evidence of a hearth. Furthermore, we found a storage pit in this area. This feature within the limit of the occupation has a conical shape 80 cm wide at the top and 40 cm deep. The bone preservation within this feature was favoured by the impermeable clay forming the sterile level.

STRATIGRAPHY

The stratigraphy in area III shows a single occupation of lean-to structure. The cultural level II is a black humus buried under 40 cm of peat. At the periphery of this cultural

level and partly overlying it are the levels Id and Ie. Level Id is a brownish organic clay and Level Ie is a grayish clay. We interpret these two levels as being the remains of wall construction material. They evidently slid towards the centre after the abandonment of the lean-to.

D - Area IV

Little can be said about area IV except that it is a featureless area which produced thousands and thousands of flakes. We selected this place in order to have a sample from the centre of the site and at slightly higher elevation than the three previous areas. We felt some stones through the sod as we walked in the area which suggested the existence of a single tent ring. Unfortunately, the schedule did not allow us to open more than 12 square metres, which was insufficient to expose any pattern. Given the large amount of debitage, two hypotheses were considered: a) that we were digging at the center of an outside activity area of a dwelling adjacent to it, or b) simply that the building materials associated with those cultural remains were carried away.

STRATIGRAPHY

The stratigraphy in area IV comprises the present sod (level I) some 10 cm in thickness and an underlying black

humus (level IIa) approximately 7 cm thick, with some leaching at its base.

LITHIC ARTIFACTS

During the season, 116 square metres were excavated to depths varying from 15 to 75 cms, and 1034 finished, unfinished, and fragmentary tools were recorded and catalogued. We estimate the amount of flaking debris to be ca. 100,000 specimens or 250 kg. No doubt, more tools will be found during the debitage analysis. This debitage was recorded by natural levels within 50 cm quadrants. We expect to use the debitage and artifact distributions to pinpoint activity areas within the features.

The unusually high frequency of debitage suggests that Factory Cove is a workshop as well as a living site. Since the only exotic material is Ramah chert, of which we have but 3 specimens, it seems very likely that the profusion of local raw material was a major attraction to the Dorset people. Most tools are made of local cherts found in beds on the peninsula or in big chunks on the beach. There is a wide range of quality and color in these cherts. Thus, the general trend is that the finer grained material served to make delicate tools such as the end blades, microblades and burin like tools. On the other hand, every unfinished tool,

representing 31.4% of the collection, is made of porous black chert.

The artifact frequency is reported in Table 1. Since the analysis is still in progress, one should consider these categories as descriptive only.

TABLE 1

LITHIC ARTIFACTS FROM FACTORY COVE

Category	Number	Percent
Unfinished Tools	325	31.4
Blades	210	20.3
Retouched Flakes	128	12.3
End Blades	92	8.8
Scrapers	65	6.2
Hammerstones	57	5.5
Knives	43	4.1
Cores	44	4.2
Burin-like Tools	35	3.3
Side Blades	10	1
Whetstones	4	.4
Bipoints	3	.3
Crystals	3	.3
Adzes	2	.2
Unifaces	2	.2
Perforator	1	.1
Miscellaneous	10	1

I.UNFINISHED TOOLS

The frequency of unfinished tools (Plate 3) makes the collection very intriguing. We lump in this category both of those classes of artifacts called "blanks" and "preforms". Although there is considerable vagueness in the literature surrounding these categories, a blank is apparently the first state in the tool manufacture, whereas a preform is a more nearly completed tool. In order to eliminate this confusion, three quantifiable attributes - edge retouch, flaking character and edge regularity - are used to describe these artifacts. The two last attributes are ranked on a scale 1-4.

While the edge retouch is simply an evaluation of the unifaciality or bifaciality of the piece, the 1-4 ranking is applied to flaking character and edge regularity. It represents the degree to which each attribute is carried out. For example, on Plate 3:1,3 the flaking character is primary retouch which on the scale is ranked at one, while on Plate 3:2 where the flaking is carried further the rank is two, and even further on Plate 3:4 which is three. The rank four is applied to a piece which has primary and secondary retouch all over. The edge regularity scale is the evaluation of the edge straightness, e.g. there is an irregular contour, it would be low on the scale. We anticipate being able to compile information on

reduction techniques, with the two numerical extremes showing two degrees of manufacture. Of course, one should also expect to have intermediates.

II. BLADES

All but two of the blades are made of local fine-grained chert. Using a 11 mm threshold, we have 13% blades and 87% microblades. Very few show any hafting modification such as a stem. However, some specimens have ventral retouch.

III. END BLADES

The dominant type of end-blade is the plano-convex side-notched style (Plate 4:1-4). Placement of notches differs, however, on two general classes of end blades. On the one hand, there are high side-notched examples (Plate 4:3) which compare to what Tuck has described from the early Dorset phase at Big Falls site, Saglek Bay, northern Labrador (Tuck 1975: Plate 22:1-3), dated sometime prior to 2500 years ago (ibid:178). On the other hand, the low side-notched variety (Plate 4:1-2,4) is comparable to what appears at site E, southern locus stratum 1, also at Saglek Bay around 2500 B.P. (Tuck 1975: Plate 3) or to what Fitzhugh 1972: Plate 82).

IV. BURIN-LIKE TOOLS

A total of 35 complete and fragmentary burin-like tools was recorded. They all show extensive polishing with, in some cases, chipping along the edges (Plate 4:5-7). The

association of some specimens (Plate 4:6) with finely chipped tools suggest that they may have been used for fine workmanship or lithics.

V.SIDE BLADES

There are two types of side blade in the Factory Cove collection. One is a small, biconvex variety with serrated edge while the other is broad, semi-lunate, with flat faces (Plate 4:9-10).

FAUNAL REMAINS

Bone preservation at Factory Cove was generally poor, owing to acid soil. Specimens were recovered from two distinct areas, some from level IV in area I and the rest from area III. In the particular case of level IV, the bones are completely surrounded by bits of charcoal. After discussion with a conservation specialist, both parties had the same observations on preservation in microenvironments. We agree that the charcoal would neutralise the acids and thus protect the bones. The other case of bone preservation, which is, by the way, unusual in Newfoundland's generally acidic soils, comes from a storage pit in area III. This case is special: an impermeable clay substratum apparently retained water to create an oxygen free milieu which, added to 40 cm of insulating peat, kept the bones well preserved.

Since the osteological analysis is not yet complete, we can only mention the species recognised during the excavation. These include caribou, seals, and birds. However, if we refer to the remains of the 1976 excavation, Stewart (1979) suggests that the adult harp seal specimens identified would have been killed on shore around April. These data are supplemented by the presence of bird bones, which, if identified as migrant birds, could support the idea of a late winter/ early spring occupation.

SURVEYS

The surveys carried out covered the southern portion of the Cow Head peninsula and about 2 km of shoreline north of Cow Head (Figure 1). A surface find one-half km from Factory Cove was followed by test-pitting. The area around the find is an eroding terrace at 6.50 m a.s.l. and we believe there is not much left of the site. The artifact is a side-notched knife, bifacially retouched, with one convex and one concave edge. It duplicates a specimen from the early Dorset component at Factory Cove. The other survey along the shoreline north of Cow Head did not lead to any discovery.

SUMMARY

Without drawing a firm conclusion before submitting the C^{14} samples it appears that there may be two occupation

phases at Factory Cove. The earlier is indicated by transversally flaked artifacts from level IVa, area I (Plate 4:11), and from area III (Plate 4:12). This technique is comparable to the one from an isolated feature at the Cow Head site which Tuck (pers. comm.) dates typologically back to 3000 years before present. Some other traits such as a bipoint (Plate 4:8) would also support this idea of an early occupation.

Overall, the goals for the 1981 season were met. We have in hand an early Dorset component with some earlier traits which should be used to demonstrate the continuity between late Pre-Dorset and early Dorset.

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Finally the comments on earlier drafts of this report from Drs. Stuart Brown and James A. Tuck are truly appreciated.

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FIGURE 1

Cow Head Peninsula

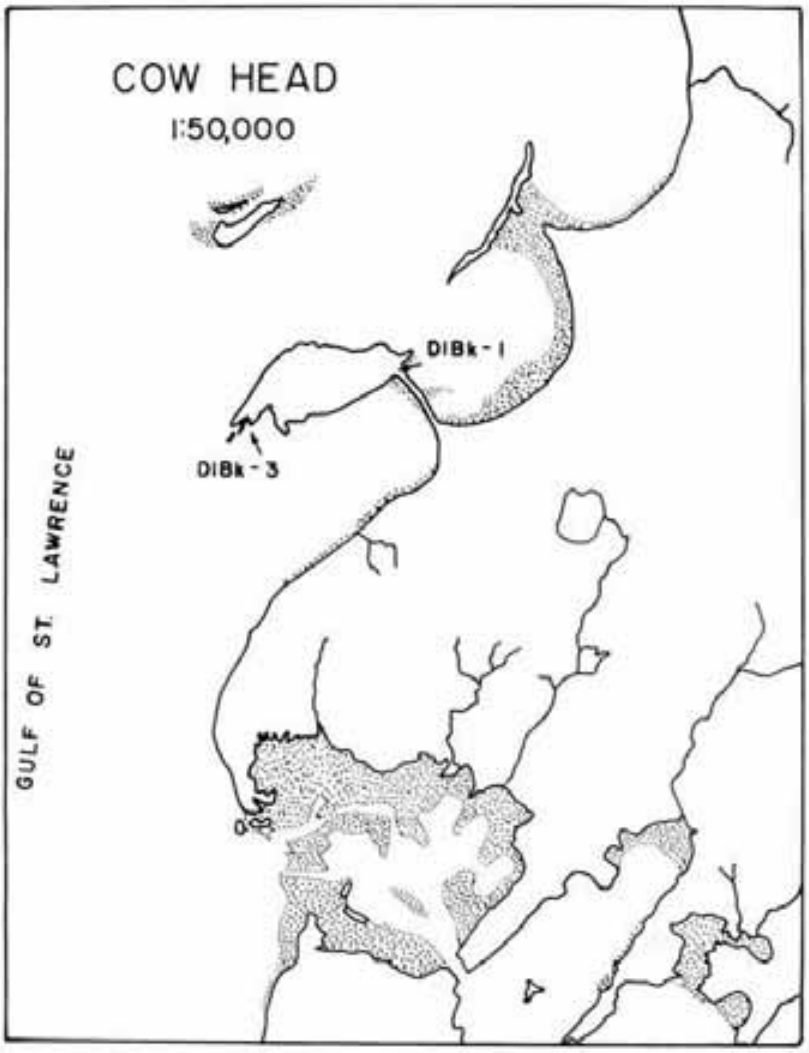

PLATE 1

General view of the Factory Cove site (DlBk-3). Looking east.

PLATE 2

Lean-to in Area III.


AREA-3
AREA-4
AREA-2
AREA-1

PLATE 3

DlBk-3. Unfinished tools 1-4.

PLATE 4

1,2,4. Low side-notched endblades

3. High side-notched endblade

5-7. Burin-like tools

8. Bipoint

9,10. Sideblades

11,12. Transversally flaked bifaces

1 2 3 4

1 2 3 4 5 6 7 8 9 10 11 12