The Archaeology Unit at Memorial University carried out four excavation or survey projects under contract to various institutions during 1982. Although complete reports are on file with the contractors it seems worthwhile to review these projects briefly in this annual report since publication of these reports may not ensue. Therefore, each is described briefly below. The location of these and other projects described in this report are shown on p.1 of this publication.

**CAT ARM HYDRO DEVELOPMENT**

This was part of the continuing monitoring of the Cat Arm hydroelectric development now under construction on the west side of White Bay, Newfoundland. The development is being undertaken by Newfoundland and Labrador Hydro which was the agency contracting this survey, aimed at assessing the impact of a narrow transmission line corridor from the powerhouse at Devils Cove to Corner Brook.

Preliminary study of aerial photographs and 1:50,000 maps of the area as well as a preliminary helicopter reconnaissance in 1980 suggested that the corridor was unlikely to be productive of archaeological material since it does not approach the coast where archaeological sites are concentrated, since access from the coast is limited and difficult, and since the area traversed by the corridor is either rugged upland or low-lying marsh and bog. For these reasons it was decided to precede an expensive and time-consuming ground survey of the 180+ km corridor by a low-level helicopter survey of the line following clearing but prior to the start of actual construction. This was carried out by Douglas Robbins during early November 1982.

The results of this survey were entirely negative. Careful inspection revealed not a single location likely to produce archaeological remains. The northern section of the corridor proved to be as inaccessible and rugged as predicted and the central area equally unsuitable since the transmission line passes almost entirely through bog and marshland. Even between Deer Lake and Corner Brook, where the route follows the west side of Deer Lake and the lower Humber River and where access is relatively easy and resources such as salmon are plentiful, the
transmission line is located on high rugged terrain, well away from the lake and river. Hence no locations of even moderate archaeological potential were observed.

For these reasons further archaeological work, including a ground survey, was not recommended.

MARY'S HARBOUR-LODGE BAY ROAD

In September, 1982 Memorial University was informed by the Planning and Research Division, Department of Transportation, Government of Newfoundland and Labrador, that a road connecting the Labrador communities of Mary's Harbour and Lodge Bay was about to proceed to the construction stage. Subsequently a survey of the area was carried out by Reginald Auger and Stephen Mills to determine: (a) whether any archaeological sites were threatened by actual road construction; and (b) to conduct a more general survey to locate sites which could then be marked and avoided during construction.

Two days were spent walking the right-of-way between Lodge Bay and Mary's Harbour. Although much of the area is boggy and unattractive, several areas where archaeological sites might conceivably have been present were noted, particularly along the bank of the Charles River at Lodge Bay. Despite a careful inspection of all natural exposures and test-pitting in areas where vegetation or other factors obscured the ground no traces of aboriginal or other remains were found.

The second part of the project was somewhat more successful, although no sites of significance were reported. An area near the school in Mary's Harbour where local residents reported finding a side-notched projectile point of glossy whitish chert was inspected and test-pitted but no additional cultural material was found. At a small site on the west side of the river about 100 m north of the bridge to Mary's Harbour about 130 flakes and three artifacts were recovered from patches of vegetation growing in cracks and fissures in the bedrock. The artifacts include: a flat, asymmetric biface of Ramah chert, probably of Palaeo-Eskimo origin; a fragment of a second Ramah chert biface too small to allow even a guess at its cultural affiliations; and a thick ovoid biface of banded and speckled grey chert which may be of Indian manufacture. Little remains of this site and a systematic excavation is unlikely to be repaid.
Finally, at Burnt Point north of Mary's Harbour and on Great Caribou Island, boulder beaches proved to contain a number of large pits of uncertain function and containing no cultural remains. Those at Burnt Point are five in number, about 3 m in diameter and about 60 cm deep. At the latter location approximately 20 pits were observed in a boulder beach now about 12 m above sea level. These were somewhat smaller in diameter (c. 1.5 m) and deeper (c. 1.0 m) than those at Burnt Point, but yielded no more information as to their possible function or origin.

Since sites were found neither in the right-of-way nor in areas likely to be threatened by borrow pit or other construction no further work was recommended in this area.

**SHAMBLERS COVE - GREENSPOND CAUSEWAY**

Considerably more productive were survey and excavations carried out in connection with the construction of a causeway connecting Greenspond Island with the Island of Newfoundland at Shamblers Cove in Bonavista Bay. The area was identified by the Historic Resources Division, Department of Culture, Recreation and Youth as one of high archaeological potential, hence a contract was made between the Planning and Research Branch, Department of Transportation and Memorial University to conduct a preliminary reconnaissance in the area. The survey, carried out in June, 1982 by Reginald Auger and Clifford Evans proved that the assessment of a high archaeological potential was indeed accurate.

At Greenspond, which was settled as early as the late 17th or early 18th century, no material dating earlier than the late 19th century was recovered. However, since the survey was limited to a small portion of the island, it is expected that these results are not representative of the true archaeological potential of Greenspond Island.

At Shamblers Cove, however, surface collecting and test-pitting quickly produced evidence of not only recent European occupation but artifacts from Middle Dorset Eskimo, Groswater phase Palaeo-Eskimo, and Recent Indian habitation as well. Since at least three of the areas where this material was found appeared to be potentially productive of new information and were threatened with road construction, further excavations were carried out between August 1 and 19, again funded by the Department of Transportation. Fieldwork was directed by Reginald Auger, assisted by Allen Angeconeb, Trudy Butt, Carmen Cameron, and Karen Power.
Excavations were centered in the three areas designated 1, 5 and 7, which were immediately threatened by construction. A brief description of the results at each area follows.

Area 1 was identified by a scatter of flakes and artifacts of the Middle Dorset period, with a buried concentration of such material in a portion of the site. In this area 64 one metre squares were excavated to sterile subsoil or bedrock. In every square European disturbance was noted and a forest fire reported to have taken place in the 1940's further destroyed the context of the archaeological material. Artifacts from this area are predominantly of the Middle Dorset period including 11 harpoon end blades, 4 end scrapers, a biface knife, a tip-flute flake, 22 microblades, and a quartz crystal blade core. Evidence of other occupations includes two biface and one uniface fragments of possible Groswater phase origin, a flake scraper perhaps made by Recent Indians, a white glass seed bead identical to those recovered by Ralph Pastore (this volume) from a contact period Beothuk site in Notre Dame Bay, and a number of recent European objects.

Area 5 also produced primarily Middle Dorset material and a smattering of recent European artifacts. The latter were near the top of a humus layer up to 25 cm thick while the former were contained within a thin buried culture layer also containing a rock hearth which produced wood charcoal subsequently dated at 2340+260 B.P. (Beta-5372). This determination seems too old to be associated with the Middle Dorset triangular end-blades, side-notched knives, end scrapers, ground slate scraper (?), prismatic blades, and a quartz crystal blade core found in the same narrow occupation layer. It is discussed in somewhat more detail below.

Area 7 was the most productive of the three major areas systematically excavated during 1982. The stratigraphy was not unlike that in Area 5, in that most of the cultural material was compressed into a single narrow band. An exception was a lower humus zone, apparent only intermittently, but which contained a scattered hearth and wood charcoal dated at 3040+140 B.P. (Beta-5371). Both a Middle Dorset asymmetric knife and an ovate biface of Indian manufacture were found near this feature which is thought to date an early Indian occupation (again, see below).

Two other features were also recorded and dated. These include a probable scattered tent ring with a central hearth dated at 720+70 B.P. (Beta-5370).
Associated with this was a small stemmed projectile point similar to Recent Indian Little Passage complex material (Penney 1981). The third feature from Area 7 was also a rock hearth, this time in good association with Middle Dorset material which produced a date of 1890±100 B.P. (Beta-5369) which, while somewhat early, is not far removed from the bulk of Middle Dorset dates from the Island of Newfoundland.

Artifacts from this area were also more numerous than from other areas of the Shamblers Cove site. They include evidence of recent European, Middle Dorset, Groswater phase, and several Indian occupations.

The Indian material includes two side-notched projectile points (Plate 1a, b) of unknown cultural affiliations, a corner-notched example (Plate 1c) now attributed to the Recent Indian Beaches complex (Tuck n.d.), two Little Passage complex projectile points (Plate 1d), and the unique example illustrated on Plate 1e. Eleven bifaces or biface fragments include a variety of styles as shown on Plate 1f-1. A considerable chronological range for this material is suspected but the meagre sample and lack of good associations with C-14 samples render it impossible to be more precise at this time.

Ten artifacts from the Groswater phase of the Early Palaeo-Eskimo tradition, while small in number, provided a remarkably complete chipped stone inventory. They include: a side-notched, plano/convex end blade; a minute semi-lunar side blade; four bifaces; a triangular end scraper assigned to this culture by virtue of partial edge retouch on the ventral surface; two uniface knives, and a burin-like-tool. Most are illustrated on Plate 2. All are virtually identical to examples recovered elsewhere in Newfoundland (c.f. Auger 1982) where they have been dated between about 2500 and 2150 B.P. Moreover all are manufactured from the same fine-grained cherts as other Groswater phase assemblages from both Newfoundland and Labrador, which seem, at least on first inspection, to be remarkably similar to cherts from the Cow Head region in western Newfoundland.

In contrast to the small but representative collection of Groswater phase material the Middle Dorset collection from Shamblers Cove is large but not representative of other nearby Middle Dorset sites. Although the artifacts recovered at Shamblers Cove compare stylistically to those from the Beaches site some 30 km to the south (c.f. end blades on Plate 3), the relative frequencies of various functional classes vary considerably.
A distribution of the Shamblers Cove collection is as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>chipped end blades</td>
<td>50</td>
<td>35.2</td>
</tr>
<tr>
<td>ground slate end blades</td>
<td>4</td>
<td>2.8</td>
</tr>
<tr>
<td>end blade preforms</td>
<td>9</td>
<td>6.3</td>
</tr>
<tr>
<td>tip-flute flakes</td>
<td>16</td>
<td>11.3</td>
</tr>
<tr>
<td>microblades</td>
<td>50</td>
<td>35.2</td>
</tr>
<tr>
<td>biface knives</td>
<td>8</td>
<td>5.6</td>
</tr>
<tr>
<td>scrapers</td>
<td>5</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>142</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Although figures from the Beaches site (Carignan 1975) are not strictly comparable a few estimates of artifact percentages are instructive. For instance:
- chipped end blades = c.17%
- ground end blades = c.0.6%
- end blade preforms = c.38%
- blades = c.14%
- scrapers = c.16%

Comparing these two sets of figures it can be seen that hunting equipment is grossly over-represented at Shamblers Cove leading to the conclusion that in Middle Dorset times the site served as a seasonal hunting camp, probably for harp seals. Although lacking the faunal remains which might support this hypothesis, it seems clear that harpoon maintenance, the finishing of end blades from preforms, and butchering were important activities at Shamblers Cove. The high frequency of prismatic blades is slightly more difficult to explain although they could also have figured in the skinning and butchering process. Also, it seems as if other manufacturing and maintenance activities, such as those employing scrapers, gravers, hammerstones, etc. were not important at Shamblers Cove. Finally, the roughly similar artifact percentages from Area 1 suggest that the relative frequencies reported from this area are real and not a function of sampling error.

The dating program from Shamblers Cove requires a few words of explanation since two of the four dates obtained do not agree with the original assessment of their cultural affiliations. The dates obtained, with their original assessments are:
Looking briefly at each date we can see that the first two are what archaeologists would call "acceptable" and the latter two "not acceptable" because they either fit, or do not fit, our preconceived notion of the culture history and chronology of an area. In this regard the date of 1890±100 B.P. (A.D. 60) needs little further comment since it is within the range for Middle Dorset culture to which it was originally attributed. It is, however, earlier than any Middle Dorset date from western Newfoundland where the most extensive dating program has been carried out. This may be explained by an hypothesis proposed by Douglas Robbins (personal communication) who suggests that the first Dorset Eskimo migrants to Newfoundland travelled along the east coast of the Northern Peninsula (rather than the west), hence we should expect to find the earliest sites and dates on the northeast coast. This hypothesis is intriguing and might explain two other early dates from Trinity and White Bays but at present can only be provisionally accepted since it requires further testing.

The second date, 720±70 B.P. (A.D. 1230), requires little comment as it accords well both with the initial appraisal of its association with Recent Indian material and previous determinations for the Little Passage complex. It adds Bonavista Bay to the list of areas where this complex has been dated which now includes Notre Dame Bay, Bonavista Bay, Trinity Bay, and the south coast of Newfoundland. Curiously absent from this list is western Newfoundland, particularly that area north of Bonne Bay which is well known archaeologically but has yet to produce any archaeological material more recent than about A.D. 1000.

The date of 3040±140 B.P. (1090 B.C.) requires some explanation. It was originally expected to date the Middle Dorset occupation and a reading of between 2000 and 1500 was anticipated. The assay of greater than 1000 B.C. is clearly too early, however, and it is difficult to imagine how some sort of contamination could be responsible for the old reading obtained. More likely, it seems that the compression of more
than 2,000 years of prehistory into a culture layer only a few centimetres thick has led to some confusion in interpretation. It seems probable that the date does reflect human habitation at Shamblers Cove more than 3,000 years ago. The question of just what group was responsible for the construction of this hearth is difficult to answer but a clue may be provided by a single white chert biface which was associated with the feature. It may be, therefore, that this relatively early date pertains to an Indian, rather than Palaeo-Eskimo, occupation of Shamblers Cove. It would be gratifying if the two side-notched projectile points suspected on stylistic grounds to date from about this time, had been found near this feature. Unfortunately they were not, so the question of which archaeological culture this feature dates must remain unanswered unless further work is undertaken at Shamblers Cove.

The final date obtained, 2340±60 B.P. (390 B.C.) also requires some explanation. At the time of collection it, too, was expected to date the Middle Dorset occupation. Once again, however, the date appears too early, this time by at least 3-400 years. The date would be quite acceptable for the Groswater phase component described above, but unfortunately the entire assemblage comes from Area 7, hence there is no association.

In summary, then, the radiocarbon determinations from Shamblers Cove do not present the coherent picture we would have liked. Despite this, however, they are an interesting series for they do suggest the possibility of Indian occupation around 3000 B.P., a relatively early date for Middle Dorset on the northeast coast, and provide an additional chronological determination for the Recent Indian Little Passage complex.

In summary, then, the Shamblers Cove site provided evidence of occupation by at least two Indian and two Palaeo-Eskimo groups in addition to the recent European habitation. Although restricted to areas directly threatened by road construction the amount of information recovered was considerable, particularly that pertaining to the special purpose hunting camp of the Middle Dorset period. A significant portion of the site remains unexcavated and test pitting indicates that sizeable buried components exist in these areas. For this reason, and because the locations of these areas are now well-known, it has been recommended that excavations at Shamblers Cove continue, to prevent the loss of this potentially important information.
BROOM POINT

Surveys conducted in western Newfoundland during the mid-1970's revealed evidence of a Middle Dorset Eskimo component eroding from beneath a small fishing store at Broom Point in Gros Morne National Park. In connection with a program of interpretation involving human exploitation of marine resources Memorial University was contracted by Parks Canada to undertake preliminary excavations during 1982. These were carried out in May and June under the direction of Reginald Auger assisted by Stephen Mills, Perry Moulton, and Lloyd St. Croix.

Extensive test-pitting showed the site to be much larger than originally estimated and now seems to include some 400 m² of cultural deposits. Excavations were concentrated in two areas. Stratigraphy at each is described briefly below.

Area 1 included a modern sod and brown humus zone containing objects of recent European origin, and a thin dark ancient humus with prehistoric material overlying the sterile beach gravel.

In Area II the stratigraphy was essentially the same with the addition of a thin lense of fine gravel between the recent humus and the prehistoric culture layer. This is interpreted as resulting from the excavation of a shallow depression by Middle Dorset people.

A single feature, in the form of a concentration of charcoal and burned earth was revealed immediately atop the beach gravels in Area I which yielded a C-14 date of 2285+100 B.P. (Beta-4770). While this is earlier than the Middle Dorset occupation which dominates the artifact collection, it may be explained by the presence of a chipped and ground burin-like tool, a bifacially trimmed end scraper, a thin asymmetric knife, and a thin "blank" with broad, flat surface flaking, all characteristic of the Groswater phase of the Early Palaeo-Eskimo tradition (c.f. Auger 1982). The date of 335 B.C. is in accordance with similar determinations from the nearby Factory Cove site and probably pertains to a brief occupation by these Palaeo-Eskimo people.

In Area II two features were recorded. The first may be the remains of a tent ring which was scattered during construction of the shed where the site was first observed. The second was a similar feature, between 3.8 and 4.0 m in diameter within which were two concentrations of wood charcoal suggesting small hearths. A sample from one of these concentrations was dated at 1650+90 B.P. (Beta-4771) which agrees closely with numerous
other Middle Dorset dates from western Newfoundland.

The artifacts from Broom Point, except for the four Groswater phase specimens mentioned above, include virtually a full range of chipped and ground stone tools and weapons. Frequencies and percentages of each class are shown in Table 1.

<table>
<thead>
<tr>
<th>class*</th>
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<tbody>
<tr>
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<td>20</td>
<td>10.4</td>
</tr>
<tr>
<td>ground end blades</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>biface knives</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>end scrapers</td>
<td>22</td>
<td>11.5</td>
</tr>
<tr>
<td>side scrapers</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>burin-like tools</td>
<td>5</td>
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</tr>
<tr>
<td>burin-like tool preforms</td>
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<td>0.5</td>
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<tr>
<td>prismatic blades</td>
<td>68</td>
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<td>blade cores</td>
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<tr>
<td>blanks</td>
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<td>7.3</td>
</tr>
<tr>
<td>preforms (end blade)</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>tip-flute flakes</td>
<td>13</td>
<td>6.8</td>
</tr>
<tr>
<td>hammerstones</td>
<td>12</td>
<td>6.3</td>
</tr>
<tr>
<td></td>
<td>192</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*"retouched flakes" (n=8) and "utilized flakes" (n=27) are not included in these calculations.

Since in almost every case these artifacts compare closely with Middle Dorset specimens described elsewhere from western Newfoundland, individual descriptions will be omitted from this report. Instead some general comments on particular classes or individual specimens are offered in lieu of the tedious detail which can be found in the complete report.

End blades, with the exception of two notched examples (Plate 4c, d) are triangular in form and most are tip-fluted. Two are minute examples made from reworked tip-flute flakes as shown on Plate 4a, b. The single ground slate example (Plate 4k) is also typical of Middle Dorset examples usually identified as lance points.

End scrapers are triangular in form, unifacially flaked and have convex working edges with angles between 70 and 80 degrees.

"Knives" are all fragmentary but seem to conform to the asymmetric,
side-notched specimens from other sites of the same period.

In contrast to Groswater phase burin-like tools the Broom Point specimens are made from black to greenish nephrite, often banded, which may derive from the outcrops at Trompe l'Oeil in Pistolet Bay (Robert Stevens, personal communication). They are almost completely ground and equipped with notches for hafting.

Blades and blade cores are of both fine-grained cherts and quartz crystal and none shows any evidence of hafting modification or obvious use wear.

Blanks include bifacially flaked cores or flakes of high quality cherts not yet far enough along in the manufacturing process to indicate their intended form while preforms include triangular artifacts in process of being reduced by tip fluting which were intended as harpoon end blades.

Two retouched flakes were roughly side-notched for hafting while the remainder showed purposeful (?) flaking on one or more edges.

The entire assemblage is typical of Middle Dorset culture in western Newfoundland, at least insofar as this may be ascertained without a detailed comparison with other collections. It might be noted in passing that such a detailed study is long overdue particularly since recent excavations elsewhere on the Island have indicated some significant regional differences in Middle Dorset culture (c.f. Robbins, 1982) which require clarification and explanation.

Finally, it seems as if the Broom Point site represents a small encampment of Middle Dorset people whose equipment included all those chipped and ground stone tools and weapons necessary for maintenance and survival. More precise information is doubtless available at Broom Point but only additional excavation will make it available to us, perhaps as a beginning of the detailed investigations of Middle Dorset culture mentioned above.

In conclusion, thanks are offered to the Department of Transportation, Newfoundland and Labrador Hydro, Parks Canada, and to those individuals from these organizations who made these researches possible. Contract archaeology during 1982 was successful in salvaging material and information threatened by construction activities, in providing new pieces to the puzzle of Newfoundland and Labrador prehistory, and in providing "working capital" for Memorial University which will use the profits from these contracts to pursue researches elsewhere in the province.
REFERENCES

AUGER, Reginald

CARIGNAN, Paul C.

PENNEY, Gerald

ROBBINS, Douglas

TUCK, James A.

PLATE 1
Indian artifacts from Shamblers Cove:

a,b side-notched projectile points
 c Beaches complex corner-notched projectile point
d Little Passage complex projectile point
e unique stemmed projectile point
f,g ovate bifaces
h-l miscellaneous bifaces
PLATE 2
Groswater phase artifacts from Shamblers Cove.
  a side-notched end blade;
  b side-blade;
  c-f bifaces;
  g scraper;
  h flake tool;
  i uniface tool;
  j burin-like tool.
PLATE 3

Triangular Middle Dorset harpoon end blades from Shamblers Cove.
PLATE 4

End blades from Broom Point.

a, b miniature end blades made from tip-flute flakes;
c, d notched end blades;
e-j Middle Dorset triangular end blades;
k ground slate lance blade.