

MARPOLE SPATIAL BOUNDARIES

The relationship of the Marpole culture type to populations outside of the Gulf of Georgia is, at present, unclear. As Carlson (1960: 254) has suggested, on a general level it may well be part of a larger pattern encompassing the entirety of the Northwest Coast extending into coastal portions of eastern Asia. As such, it would be one component of a specific form of Maritime adaptation and is not meant to imply a genetic or historical connection.

The distinctive antler unilaterally barbed harpoon which I have earlier suggested to be a relatively reliable diagnostic for Marpole is found in several assemblages at differing times outside of the region. In varying styles, they are reported for a number of stages of the Siberian Neolithic (Okladnikov 1964; Michaels 1958; Chard 1974), for the northern Northwest Coast (Clark 1966; deLaguna 1956; Fladmark 1975; MacDonald 1969; MacDonald and Inglis 1975), on the central coast (Hobler and Carlson 1976; Simonsen 1973), and in southern locales adjacent to the Gulf of Georgia (Dewhurst 1969, 1977). However, with exceptions, the remainder of most accompanying assemblages are considerably different. Also, as noted above, diverse time periods ranging from several thousand years ago up to and including the contact era are involved.

On a more specific level, probably the most striking external association with the Marpole complex as a whole is the Period I and II occupations at Prince Rupert Harbor (see MacDonald and Inglis 1975). Roughly contemporaneous with Marpole, the Period II stage (1500 B.C. to A.D. 500) includes a peak in the chipped stone industry, evidence for widespread trade, status differentiation, large house features, a similar range of harpoon styles and overlapping forms of personal ornamentation. With the beginnings of Period I (A.D. 500 to A.D. 1830), the full Northwest Coast culture pattern becomes fully entrenched. Present are massive pecked and ground artifacts, a slightly variant form of unilaterally barbed harpoon, the introduction of composite harpoons and ranked village structure has been inferred. Previously, these parallels had been noted by Borden (1969: 257) who suggested a large scale south to north diffusion beginning some time near the end of Marpole. Despite such similarities, there is little reason to argue for discontinuity in either region. In particular, the Prince Rupert Harbor sequence appears to illustrate at least a 5,000 year evolutionary development (MacDonald and Inglis 1975: 8) and, on the basis of preceding discussions,

Marpole also seems indicative of an intraregional manifestation.

Lacking major external relations, I would agree with Mitchell's (1971) arguments for a distinctiveness in archaeological materials from the Gulf of Georgia from at least the beginnings of Marpole. However, this pattern may be even more restricted than Mitchell has proposed. For instance, of the three areal divisions suggested by him (the southern Gulf, the northern Gulf and northern Puget Sound), only within the southern Gulf is there a truly identified Marpole element or, at least, one with several undisputed affiliated sites. It is to the intraregional distribution of Marpole components which I now turn (see Figure 8).

The most northerly claim for a Marpole culture type site in the Gulf of Georgia has been posited by Capes (1977). The site, Millard Creek, is situated three miles south of Courtenay in the Comox Valley along the eastern shore of Vancouver Island. Being multicomponent, its most recent component has a date coeval with the Marpole period and, subsequently, has been labelled Marpole-like. However, this affiliation remains unsubstantiated with specific diagnostics either rare or lacking true association (Capes 1977: Table VIII).

South of Millard Creek, though still within the northern Gulf subregion, is the already mentioned Deep Bay site (Monks 1977). Situated a few kilometres north of Qualicum Beach, its closest intraregional neighbour is the False Narrows site, a distance by water travel in excess of 80 kilometres. A terminal date of A.D. 1050 ± 90 (Gak 6036) (Monks 1977: 61), as stated previously, suggests a transitional or intermediate stage between Marpole and Gulf of Georgia culture types for this assemblage. Considering its spatial position, distance may also have had an effect on material culture variability. In this regard, it is again emphasized that many Gulf of Georgia culture type traits are found in earlier contexts within the Wakashan province (cf. Dewhurst 1969, 1977; Chapman 1977).

Recent excavations by MacMillan and St. Claire (1975, 1976) at the head of Alberni Inlet may help to clarify the northern boundary question when the site is fully reported upon. In addition, it could have a profound effect on our knowledge of westerly distributions for Coast Salish peoples, not to mention implications for trade. Historically the territory of a Nootkan speaking population, DhSe 2

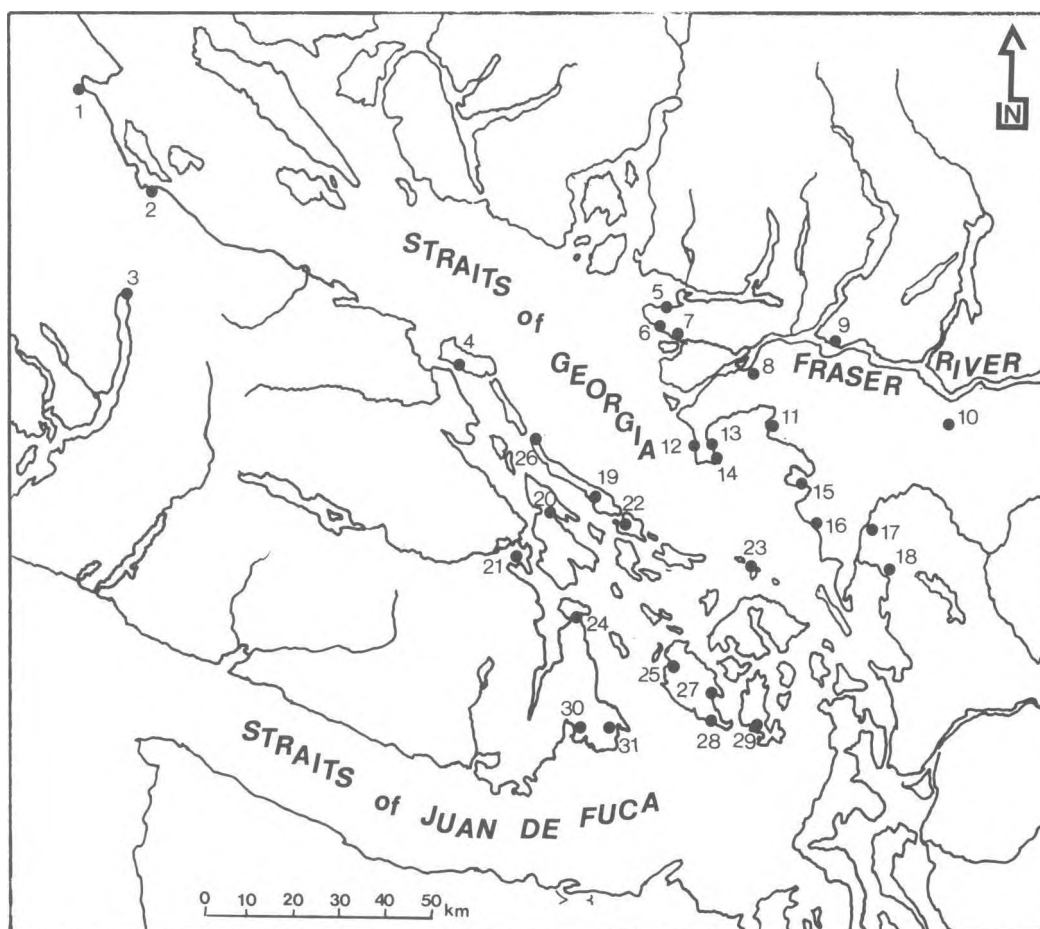


Fig. 8. Spatial Distributions for Possible Components of the Marpole Culture Type.

- | | |
|--------------------|--------------------|
| 1 Millard Creek | 17 Nooksack |
| 2 Deep Bay | 18 Bellingham Bay |
| 3 Shoemaker Bay | 19 Montague Harbor |
| 4 False Narrows | 20 Hill Site |
| 5 Point Grey | 21 Birds Eye Cove |
| 6 Musqueam Sites | 22 Helen Point |
| 7 Marpole | 23 Fossil Bay |
| 8 Glenrose Cannery | 24 North Saanitch |
| 9 Port Hammond | 25 Garrison Bay |
| 10 Sumas | 26 Dionisio Point |
| 11 Crescent Beach | 27 Argyle Lagoon |
| 12 English Bluffs | 28 Cattle Point |
| 13 Beach Grove | 29 Richardson |
| 14 Whalen Farm | 30 Maple Bank |
| 15 Birch Bay | 31 Cadboro Bay |
| 16 Cherry Point | |

revealed a 4,000 year old sequence. Surprisingly, cultural materials were similar more to assemblages from the Gulf of Georgia than other adjacent west coast locales (MacMillan and St. Claire 1975: 72). Specifically, abundant chipped stone artifacts including projectile points and microblades

as well as ground stone points and knives are considered anomalous in contemporaneous Nootkan material culture. They are not out of context to the east, however. Since this site is at the end of a long divide and is accessible overland via the Alberni Valley, it may not be necessary to

Table III
Shortest Travelling or Route Distances in
Kilometres Between Marpole Culture Type Sites.

	Deep Bay	False Narrows	Dionisio Point	Hill Site	Montague Harbor	Helen Point	Birds Eye Cove	North Saanitch	Cadboro Bay	Maple Bank	Garrison Site	Cattle Point	Argyle Lagoon	Richardson Site
Deep Bay	0.0													
False Na.	81.0	0.0												
Dionisio	102.0	21.0	0.0											
Hill	129.0	49.5	30.0	0.0										
Mont. Ha.	120.0	39.0	21.0	12.0	0.0									
Hel. Pt.	127.5	45.0	27.0	12.0	7.5	0.0								
Bird E.C.	126.0	48.0	27.0	37.5	39.0	33.0	0.0							
N. Saan.	145.5	69.0	46.5	28.5	28.5	22.5	22.5	0.0						
Cad. Bay	177.0	99.0	78.0	55.5	57.0	51.0	51.0	33.0	0.0					
Map. Bnk.	195.0	117.0	96.0	73.5	75.0	69.0	69.0	51.0	18.0	0.0				
Garrison	159.0	76.5	60.0	40.5	40.5	34.5	95.0	22.5	21.0	36.0	0.0			
Cat. Pt.	181.5	99.0	85.5	66.0	66.0	60.0	63.0	42.0	24.0	36.0	24.0	0.0		
Argyle	177.0	96.0	78.0	58.5	54.0	51.0	63.0	45.0	36.0	48.0	28.5	12.0	0.0	
Richard.	187.5	103.5	85.5	64.5	66.0	60.0	69.0	48.0	30.0	43.5	33.0	6.0	12.0	0.0
Fos. Bay	162.0	75.0	57.0	48.0	43.5	36.0	57.0	36.0	49.5	63.0	30.0	45.0	42.0	42.0
Pt. Grey	115.5	43.5	39.0	61.5	57.0	49.5	66.0	72.0	102.0	117.0	84.0	102.0	96.0	105.0
Musqueam	120.0	45.0	36.0	57.0	51.0	45.0	63.0	66.0	94.5	109.5	78.0	96.0	87.0	96.0
Marpole	124.5	48.0	39.0	54.0	49.5	42.0	66.0	63.0	93.0	108.0	75.0	90.0	90.0	93.0
Glenrose	139.5	57.0	51.0	57.0	51.0	42.0	78.0	69.0	96.0	111.0	69.0	84.0	78.0	87.0
Pt. Hamm.	159.0	78.0	75.0	81.0	75.0	66.0	99.0	91.5	127.5	142.5	93.0	108.0	102.0	111.0
Cres. Bh.	153.0	60.0	51.0	51.0	48.0	39.0	75.0	63.0	76.5	91.5	57.0	63.5	66.0	76.5
Bh. Grove	141.0	49.5	37.5	40.5	36.0	27.0	78.0	51.0	75.0	90.0	54.0	70.5	63.0	73.5
Whal. Fr.	144.0	54.0	42.0	42.0	37.5	30.0	64.5	54.0	70.5	85.5	51.0	67.5	60.0	70.5
En. Bluff	129.0	46.5	34.5	37.5	33.0	25.5	60.0	48.0	72.0	87.0	54.0	69.0	63.0	72.0
Birch Bay	159.0	75.0	60.0	54.0	51.0	52.0	75.0	60.0	72.0	87.0	51.0	63.0	57.0	66.0
Cherry P.	162.0	78.0	63.0	57.0	54.0	45.0	72.0	57.0	66.0	81.0	48.0	57.0	52.5	57.0
Belling.	195.0	108.0	90.0	75.0	78.0	69.0	90.0	72.0	78.0	93.0	60.0	57.0	51.0	54.0
Nooksack	207.0	120.0	99.0	84.0	87.0	78.0	90.0	84.0	87.0	102.0	69.0	67.5	61.5	66.0
Sumas	201.0	132.0	120.0	111.0	114.0	111.0	129.0	111.0	107.0	122.0	99.0	96.0	90.0	94.5

postulate a Marpole population on the west coast of Vancouver Island. Still, should it bear out as having a Marpole component, it would provide support for claims of a northern Gulf Marpole occupation.

Disregarding the Port Alberni site for the time being, the westerly distribution of Marpole sites seems to closely follow the spatial boundaries for Straits Salish. Several components are situated along the eastern and southern shoreline of Vancouver Island extending up to at least Esquimalt Harbor and probably further along (see McMurdo 1976; Blacklaws 1978). To the south, Marpole components are yet to be reported west of Puget Sound on the Olympic Peninsula.

As with the northern case, few positively identified Marpole culture type sites are known below the southern

Gulf subregion. Mattson has suggested a likeness between his Skagit Delta II phase at Pederson #2 (45 SK 51) and Marpole, albeit differing in "several important aspects" (1971: 50). However, his constituent components are neither fully quantified nor well dated and require further verification. I suspect that, on close scrutiny, less inter-phase cultural variability will be found.

If we accept Bryan's (1963: 81) observation that the southern terminus of major midden sites within the Gulf of Georgia follows a line drawn across the northern tip of Camano and Whidbey Islands, then the possibilities of finding a Marpole occupancy on the Skagit drainage are lessened. As well, Onat (1978, personal communication) has suggested that the delta proper may not have a great enough antiquity to include a site of this period. Even so,

the presence of a Gulf of Georgia culture type component at Fishtown (45 SK 99) (Onat 1976) may be indicative of an intertwined cultural development between the lower Fraser and lower Skagit drainages.

Finally, turning to the east, with but a few exceptions Marpole sites are restricted to the mainland shores or Fraser River mouth. The major anomaly is a site (45 WH 5) on the Sumas River near the international border. Reported by Grabert and Larsen (1975: 22-23), materials within the assemblage are distinctively Marpole. Since the component includes seven zoomorphic bowls, its present interpretation is one of a "trade and manufacturing seat". To my knowledge, the only other inland sites with possible Marpole affiliations are Port Hammond (H.I. Smith 1907) and 45 WH 34. Site 45 WH 34, seven miles from the mouth of the Nooksack River, would appear to have had intensive

clustered distribution at any one particular locale but a dispersal throughout the Gulf and San Juan Islands, Vancouver Island and the mainland of southern British Columbia and northern Washington (Figure 8).

To gain a measure of spatial extent, I have calculated the route distances (Table III) between individual Marpole sites with the exception of a few of the more contentious components previously mentioned. For almost all, a water route was considered to be the most optimal choice. Subsequently, these distances were scaled using two dimensions in a multidimensional scaling routine (see Kruskal 1964) and replotted using the dimensional loadings as co-ordinates. The end product (Figure 9) shows the relationship of route distances between sites as straight lines without the problem of interceding land forms or other barriers. Again, evidence for discrete spatial patterning appears to be absent. The dimensional plot does, however, blatantly illustrate the extreme peripheral position of the Deep Bay site.

Interjecting the time dimension, I have further calculated the mean centre of distribution (Hammond and McCullagh 1974: 34) for Marpole sites for three temporal intervals: pre 300 B.C.; 300 B.C. to A.D. 1, and A.D. 1 to A.D. 700 (Figure 10). Although the number of dated

Fossil C. Bay	Point Grey	Musqueam Sites	Marpole Site	Glenrose Cannery	Port Hammond	Crescent Beach	Beach Grove	Whalen Farm	English Bluffs	Birch Bay	Cherry Point	Bellingham Bay	Nooksack River	Sumas
69.0	0.0													
60.0	7.5	0.0												
57.0	15.0	6.0	0.0											
46.5	30.0	21.0	15.0	0.0										
69.0	51.0	42.0	36.0	24.0	0.0									
33.0	40.5	31.5	27.0	13.5	36.0	0.0								
33.0	33.0	24.0	21.0	16.5	42.0	13.5	0.0							
30.0	31.5	27.0	21.0	18.0	43.5	12.0	4.5	0.0						
34.5	37.5	24.0	24.0	18.0	43.5	16.5	3.0	7.5						
24.0	60.0	48.0	42.0	30.0	55.5	16.5	24.0	21.0	27.0	0.0				
19.5	63.0	54.0	48.0	37.5	61.5	24.0	30.0	27.0	33.0	11.5	0.0			
33.0	93.0	84.0	78.0	69.0	66.0	55.5	60.0	48.5	58.5	42.0	30.0	0.0		
45.0	102.0	93.0	87.0	78.0	75.0	64.5	19.0	66.0	72.0	51.0	39.0	12.0	0.0	
72.0	96.0	87.0	81.0	69.0	45.0	84.0	87.0	90.0	90.0	78.0	66.0	42.0	10.0	0.0

utilization as a habitation locale (Grabert and Larsen 1975: 23). The specific nature of this component awaits the full site report. Although Port Hammond has never been adequately excavated or analyzed, artifact illustrations by Smith (1907) argue for a Marpole occupancy.

The lack of major inland sites during Marpole and the contemporaneous interior pattern in the Fraser Canyon, the Skamel phase, raise several problems regarding the eastern perimeter of Gulf of Georgia cultures at this period. Only intensive research in the areas intervening between the mouth of the Fraser and the Canyon will clarify the situation.

From this discussion it is easily seen that, on the basis of present knowledge, the Marpole culture type may be proposed as a southern Gulf of Georgia pattern. Furthermore, within this zone there does not appear to be a

components is small, especially prior to 300 B.C. (n=4), a pattern does seem to be emerging. That is, while the mean centre for a combination of all Marpole components falls within the Strait of Georgia south of the Fraser River, there appears to be a temporal gradient away from the mouth of the Fraser progressing westward and, after A.D. 1, slightly northward. Provided further research substantiates this movement, it might be proposed that the complex as a whole originated, or at least was first manifest, in sites of the Fraser Delta. Subsequently, either through diffusion or some other mechanism, it spread outward into the Gulf of Georgia. It may not be surprising then that the only positively identified overlapping component of the Locarno Beach culture type comes from an island locale (Pender Canal). I suspect others may eventually be found.

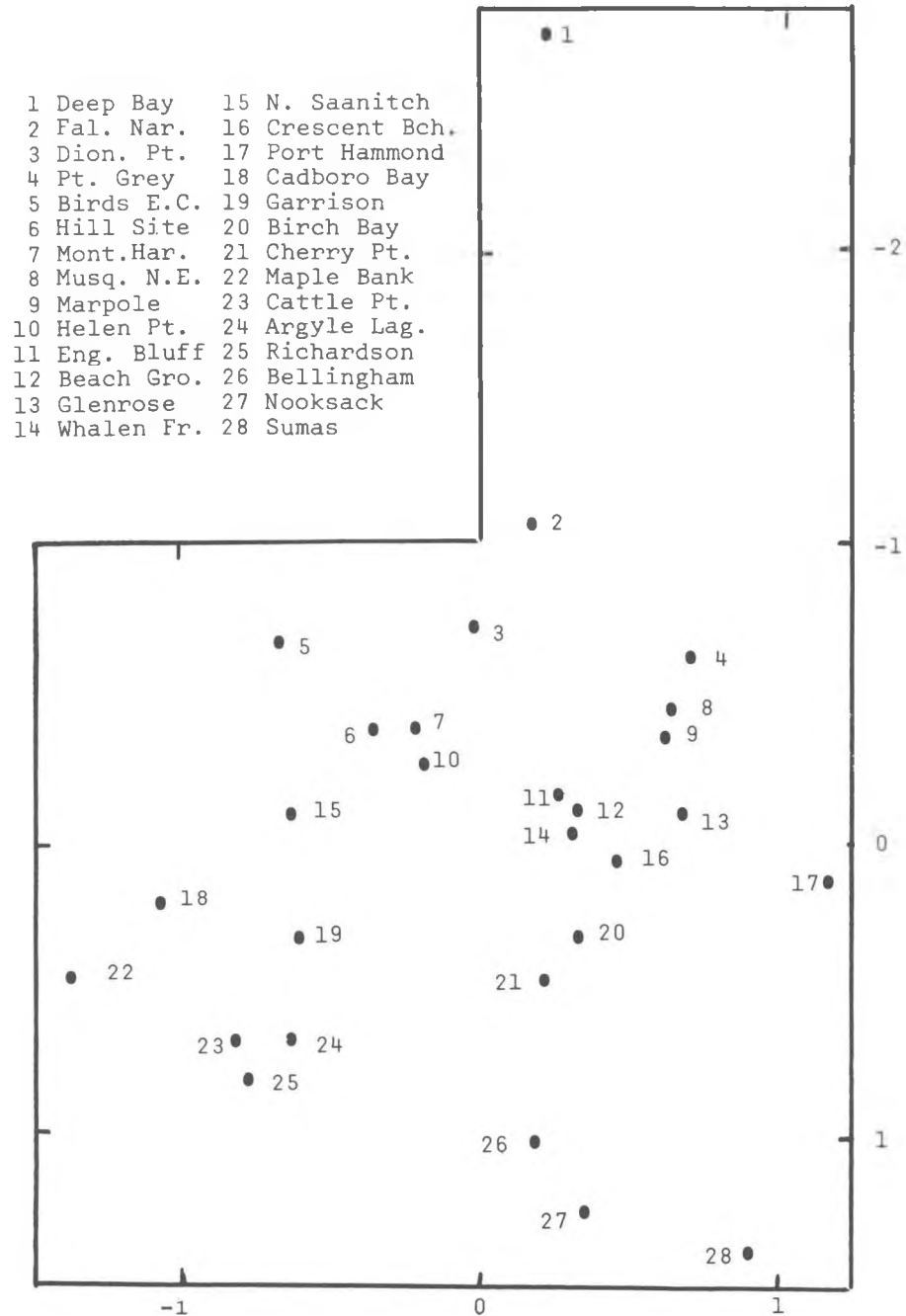


Fig. 9. Two Dimensional Plot of Scaled Distances Approximating Straight Line Intervals (Stress Value of 0.057 was achieved).

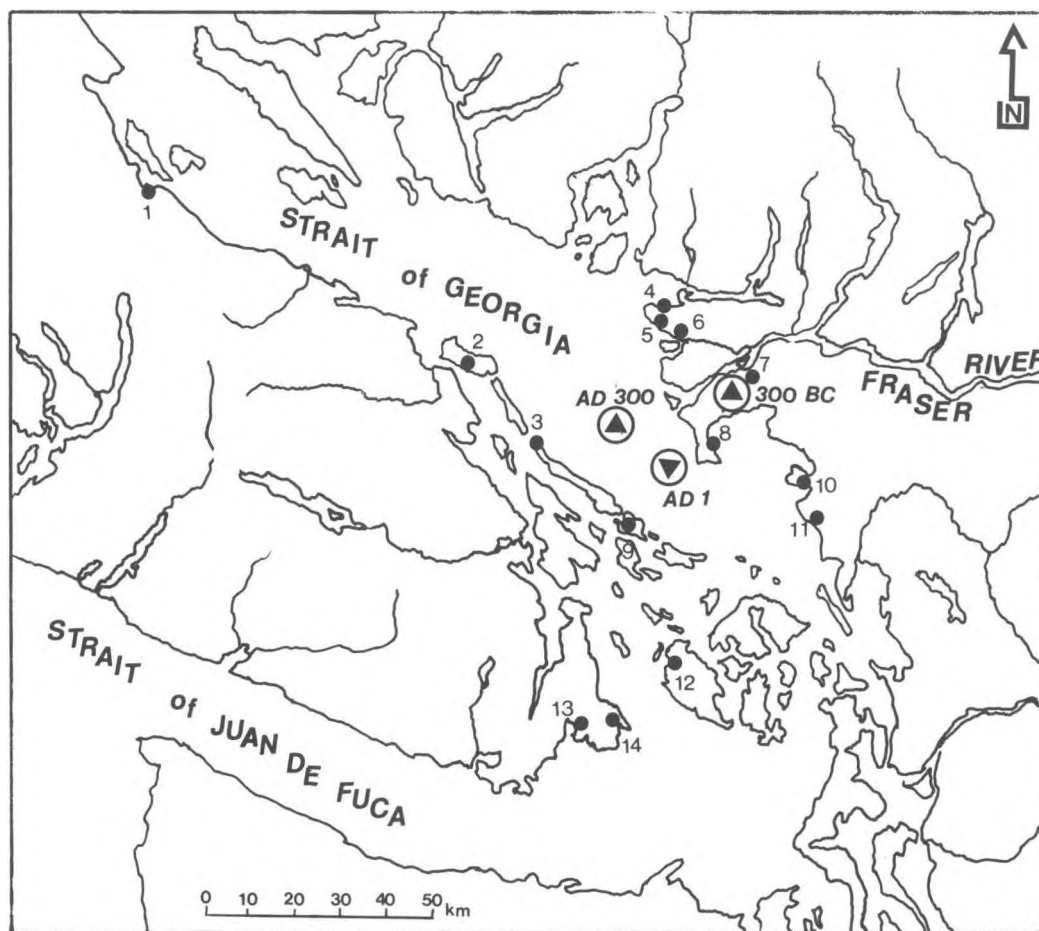


Fig. 10. Distribution of Dated Components of the Marpole Culture Type and Mean Centre Movement for Three Chronological Intervals.

1 Deep Bay	***	8 Beach Grove	**
2 False Narrows	***	9 Helen Point	**
3 Dionisio Point	**	10 Birch Bay	***
4 Point Grey	**	11 Cherry Point	*
5 Musqueam N.E.	*	12 Garrison Bay	**
6 Marpole	*	13 Maple Bank	**
7 Glenrose Can.	*	14 Cadboro Bay	***

- * First date for Marpole component occurs prior to 300 B.C.
- ** First date for Marpole component occurs between 300 B.C. and A.D. 1
- *** First date for Marpole component occurs between A.D. 1 and A.D. 300

With the exception of Glenrose Cannery, all components are assumed to have been occupied from their earliest Marpole component date up to the last interval (A.D. 1 to A.D. 300).