

Harlan Smith and the Houses at the Beach Grove Site

Don Welsh

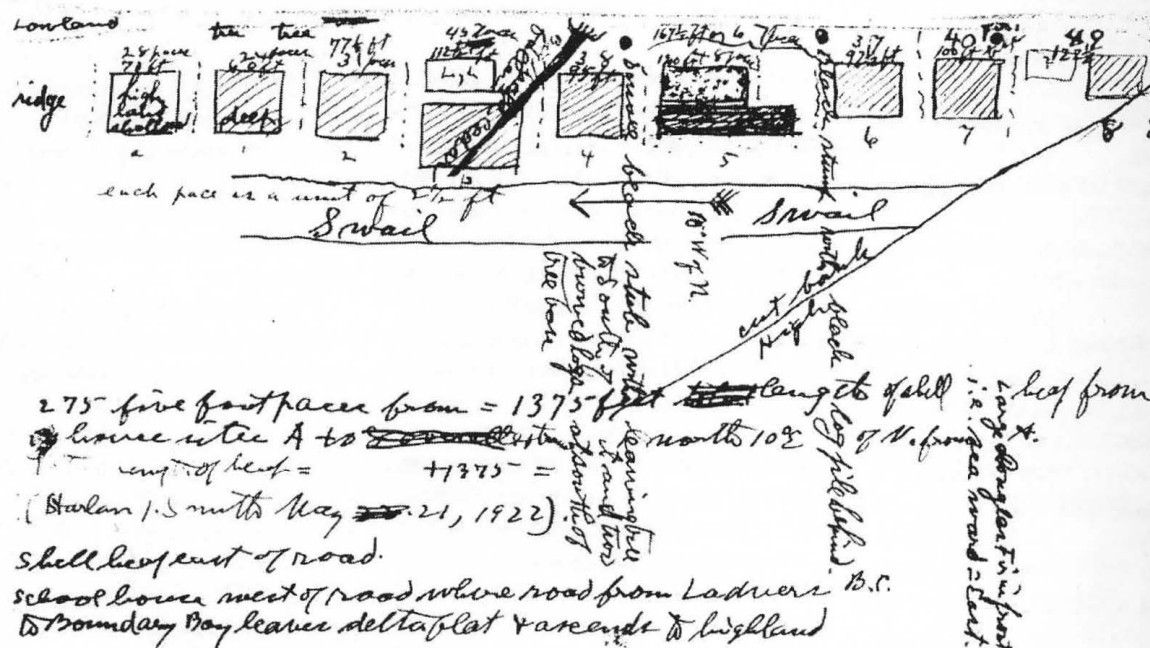


Figure 1. Harlan Smith sketch map of the "School House Road Site", May 21, 1922, (Smith Fieldnotes: Box 10, File 3, Page 58).

Pioneer archaeologist Harlan I. Smith first visited the Beach Grove Site (DgRs 1) in 1898 while working as part of the Jesup Expedition, in response to information from a Dr. Walker about shell heaps at Point Roberts (Smith to Boas, Oct. 5, 1897). However, although his work is included in his *Archaeology of the Strait of Georgia* published by the Jesup Expedition, the Beach Grove site is barely mentioned. He had collected several artifacts which he listed in his field notes as from the "Schoolhouse Road Site," his name for the Beach Grove site. He continued to visit the site in his later job as archaeologist for the National Museum of Canada. In the spring of 1922 he visited the site with his friend, Dr. Ralph Roys, a Vancouver resident with an interest in archaeology. It was during this visit that he prepared a sketch map of the house depressions remaining on the site (Figure 1) and took three photographs (Plates 1 - 3).

The reproduction of these Harlan I. Smith photographic plates from the Canadian Museum of Civilization archives was in part made possible through a small grant to the author by the ASBC.



Plate 1. Harlan I. Smith photograph no. 56859: Panoramic view of site, southern end.

The photos have a lot of spots on their surface, which is probably the result of the deterioration of the surface gelatin on the old photographic plates. Smith, as well as being a pioneer archaeologist was also a pioneer photographer. He complained bitterly about the quality of photographic plates he received during the Jesup Expedition in a letter to Franz Boas (Smith n.d.). This fact explains why there are so few photographs of the lower mainland portion of the Jesup Expedition as compared to the Lytton area—the plates just never turned out.

Smith wrote descriptions of two panoramic photographs in his journal. His picture, no. 56859, of the southern end of the midden is reproduced as Plate 1 and the north end; his picture 56860 is Plate 2. He wrote:

56859 and 56860. Left of southern end, and right of northern end, respectively, of panoramic view from the east and south of east of the southern end of the shell-heap on the east side of the main road south from Ladners, B.C., to Point Roberts and Boundary Bay.

The school house is opposite the shell-heap at a point near the right or north part shown in 56860. The road within the scope of these views leaves the lowland which is on the same level as the foreground of this picture, and ascends the cut bank which can be seen beyond the shell-heap at the left.

This cut bank follows towards the right turning westward about where the trees show thickest in the background near the right edge of 56860. This cut bank marks the northern edge of the highland of the tied-on island known as Point Roberts.

These views show depressions marking ancient house sites. The shell-heap is lowest in the middle of the eastern of foreground side of each of these depressions. There are ten depressions in a row, two of which have depressions behind them. The two trees on the extreme right are to the foreground side or in front of the second depression, numbered 1 on the plan. The dark roots of the upturned tree near the center of 56860 are in front of the 5th depression, counting from the north, numbered 4 on the plan. The top of this tree lies across the rear one of two depressions, fourth from the north, numbered 3 on the plan.

(6 1/2 x 8 1/2 negatives by Harlan I. Smith, on Anthropological Expedition of the Victoria Memorial Museum, Ottawa, Canada. May 21, 1922. [H.I. Smith Field notes: Box 10 File 3 Page 70]).

This view shows high ground to the left and is the most southerly view. It is hard to discern if the mounds in the foreground are midden mounds, tree throws or the result of clearing the forest to provide pasture for livestock. This area is now a



Plate 2. Harlan I. Smith photograph no. 56860: Panoramic view of site, northern end.

golf course.

This is the more northerly of the two panoramic shots. Smith mentions a road constructed just past the trees on the right, most likely Hurd Road. Today, the area shown in this view includes areas of the golf course to the left and the two lots preserved by the Archaeology Branch to the right.

The third photograph (Plate 3) shows Smith's friend, Dr. Ralph Roys, posed beside a tree stump and is the most interesting as Smith has noted it in several ways. The spot where Dr. Roys is standing is where the archaeological deposits intersect with the old beach deposits. We now know that the cultural deposits extended at least two meters below the last beach deposits. Water-rolled shell mixed with fire-cracked rock indicates earlier use of the foreshore when water levels were lower.

Harlan Smith wrote:

56961 Looking north at a stump of a large Douglas Fir tree standing on the northern end of the shell-heap on the eastern side of the main road south from Ladners, B.C., to Point Roberts and Boundary Bay. This is a little to the north of opposite the school house. The school house is where the road leaves the low delta deposit and ascends to the highland of the tied-on island known as Point Roberts. Mr. Ralph Roys of Vancouver is standing so that his feet

mark the place where the shell-heap rests upon the old sand spit upon which it is built. This Douglas Fir stump is 6 feet, 6 inches measured east and west; 6 feet 3 inches measured north and south; 19 feet, 7 inches in circumference at the top. The annual rings were counted by both Smith and Roys and numbered 420. A wood pile may be seen to the right of the middle of the picture in a space from which the shell-heap has been excavated. The shell material has been taken away to use in making roads and for chicken feed. This view is looking towards a barn which may not show and which is far beyond.

The next stump south of the one shown in this picture and which is not shown is of a Douglas Fir, 4 feet, 7 inches in diameter from north of west to south of east; 3 feet, 5 inches in diameter from west of south to east of north. The shell-heap here reaches a height of 9 feet, 3 inches and nearby is nowhere less than 5 feet, 5 inches in height, possibly more. The greatest depth was measured from the natural sand of the sand spit. The annual rings on this stump not shown in this picture were counted by both Smith and Roys. Smith made the count 243, Roys 238.

(6 1/2 x 8 1/2 negative by H. I. Smith, on Anthropological Expedition of the Victoria Memorial Museum, Ottawa, Canada. May 21, 1922. [H.I. Smith Fieldnotes: Box 10,



Plate 3. Harlan I. Smith photograph no. 56861: Dr. Ralph Roys on old beach deposits.

File 3, Page 71]).

Smith used this same picture as one of the illustrations of an article published in *Saturday Night* July 21, 1923. The title of the picture reads:

Where Canadian Sculpture Many Hundreds of Years Was Found. The caption reads: Tree stump over 400 years growth on top of seven feet of Indian village refuse under which was found the largest unbroken sculpture of the human form ever unearthed in Canada, found on south side of the Fraser delta near Vancouver.

The caption in *Saturday Night* indicated this was the spot where the sculpture of the so-called "hunchback man" was found. A careful inspection of the panoramic view photos fails to locate a similar combination of stumps, mounds and trees. This confirms the notation, which places the view in Plate 3 in the area on the north side of Hurd Road, now 16th Avenue where shell mining for feed and road construction was taking place. Recent archaeological investigations indicate cultural deposits in this area predate the Marpole age house depressions. The sculpture could, therefore, have originated in the older Locarno Beach Culture deposits or even earlier in Charles culture deposits.

The following illustration (Figure 2) has been extensively

processed through Adobe Photoshop. The two panoramic shots have been combined, the contrast balanced and much of the surface deterioration retouched. Significant landmarks on the sketch map have been linked to their image on the photos. Both photos show lens distortion common on panoramic views. The images in the center of the photo are larger than the images on the margin. This is most noticeable on the right or north side. The image could have been further processed, by distorting the panorama until the house spaces equaled the measurements on the sketch map. This was not done as it goes a little further than the Museum of Civilization policy that no image can be distorted, altered or modified except for minor correction or the removal of technical defects.

Ham and Broderick's Reconstruction of Smith's Field Notes

The Ham and Broderick map was prepared by Mike Broderick after a visit to the site with Len Ham (Ham 1981: 21; Matson and Coupland 1995:207). The legend on the map cautions that this is an approximate map and contains "possible" house depressions. Broderick's map covers 1489.8 feet while Smith's map covers 1375 feet. In fact, Ham and Broderick have hypothesized one more house than Smith, which could account for the differing length although Smith's field sketch indicates

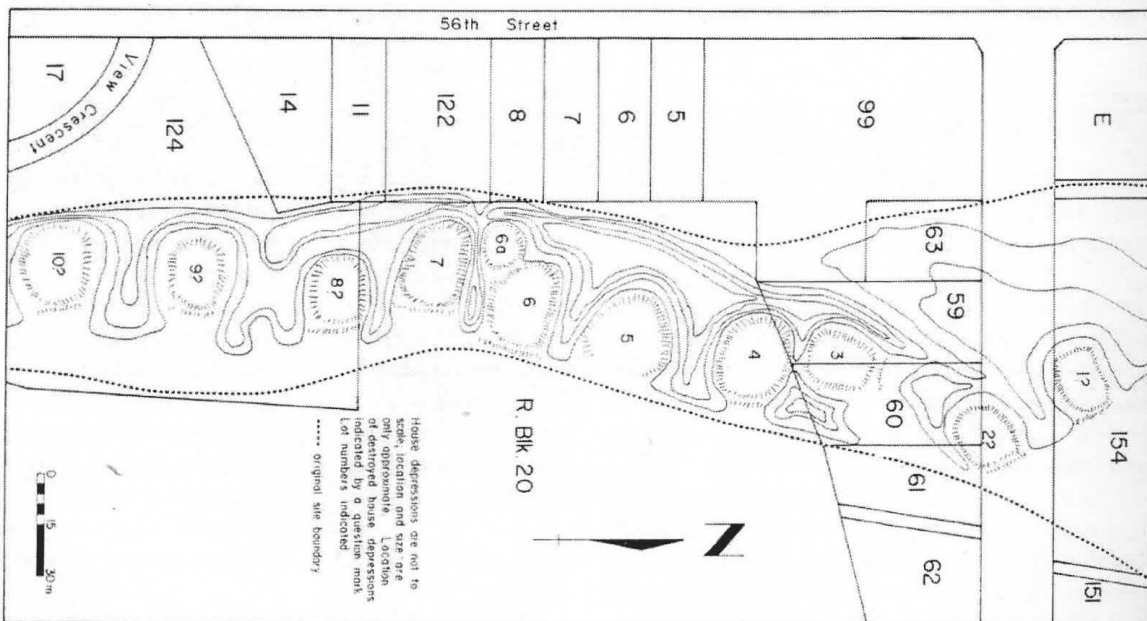
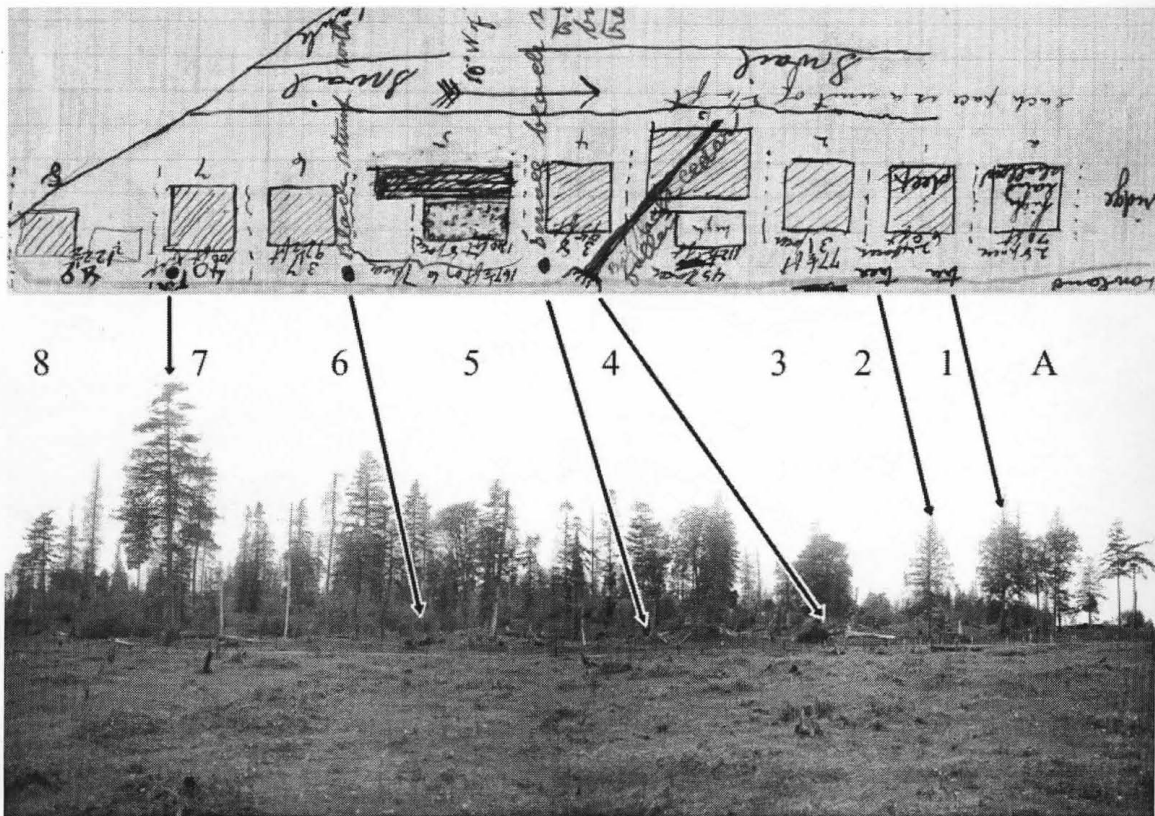


Figure 2. Comparison of Harlan I. Smith's 1922 Sketch map and photographs (upper) with Ham and Broderick's reconstruction of Smith's field notes superimposed on the Lot Plan (lower).

a cut bank and high ground immediately after House 8. Smith does mention ten houses in a row in his text while his sketch shows eight houses with an additional house (House A) at the far right. Smith's sketch appears to show two structures at each of the locations he numbered Houses 3, 5 and possibly 8. Ham and Broderick show double houses at 3 and 6.

If the double House 5 from Smith's map is taken as a starting position, it could correspond with House 6 on Broderick's map. Running south, we have Houses 6, 7 and two spaces within which to place the double House 8. Running north, we have Houses 4, 3, 2, 1 and "A". Unfortunately, there is no double house indicated at depression 3. Looking at Smith's sketch however, a rectangle encloses the word "high" at House 3. The actual house depression is shaded. If Smith meant that there was an area of high land immediately in front of House 3, this interpretation would correspond to the actual situation. This interpretation also is compatible with Smith's statement that the road construction was to the north of the house sites.

Ham's reconstruction fits the Corporation of Delta lot map (Figure 3) but the double house depressions numbered 3 and 5 by Smith are either not clear or in the wrong location. Even if this reconstruction is not correct, it can only be out by one house site. Smith speculated that further house depressions existed to the south and had been destroyed by shell miners. Tentative house outlines have been added in this area on the Ham and Broderick map. Further excavations and destruction of the site have taken place since Ham prepared this map in 1981, however, his map accurately locates the 1957 excavations.

Grier's Mapping of Remaining Depressions at the Beach Grove Site

During March of 2000, Colin Grier, with a crew from UBC, prepared a wire frame map (refer Figure 4) of the remaining house depressions using a total station (Grier 2003:185-86). This map recorded the actual situation on the ground in 2000. Grier's numbering system differs only in naming the unnamed depression House 2b. He measured House 3 at 13 m x 10 m (43' x 33') and House 4 at 11 m x 11 m (36' x 36'). From Figure 4, House 2b appears to measure 30 m (98') along the north-south axis (or 32 m and 105' skewed 45° west). These measurements do not correspond with Smith's measurements. Smith measured House 3 at 112' and House 4 at 95'. Other measurements provided by Smith include: House "A": 70'; House 1: 60'; House 2: 77 1/2'; House 3: 112'; House 4: 95'; House 5: 167 1/2'; House 6: 97 1/2'; House 7: 100'; and House 8: 122 1/2'. If it is assumed that Smith was measuring the distance between the peaks of the ridges, a better fit can be imagined but still no one-to-one correspondences occur. Ridge peak distances in 2000 are interpolated as 65', 92' and 105' for Houses "A", 3, and 4, respectively.

Discussion of the Size and Type of Houses at the Beach Grove Site

In an effort to find correspondences with Grier's measurements based on the area of each house calculated from measurements reported by Smith, each single house depression was assumed to be square with the following results: House "a" =

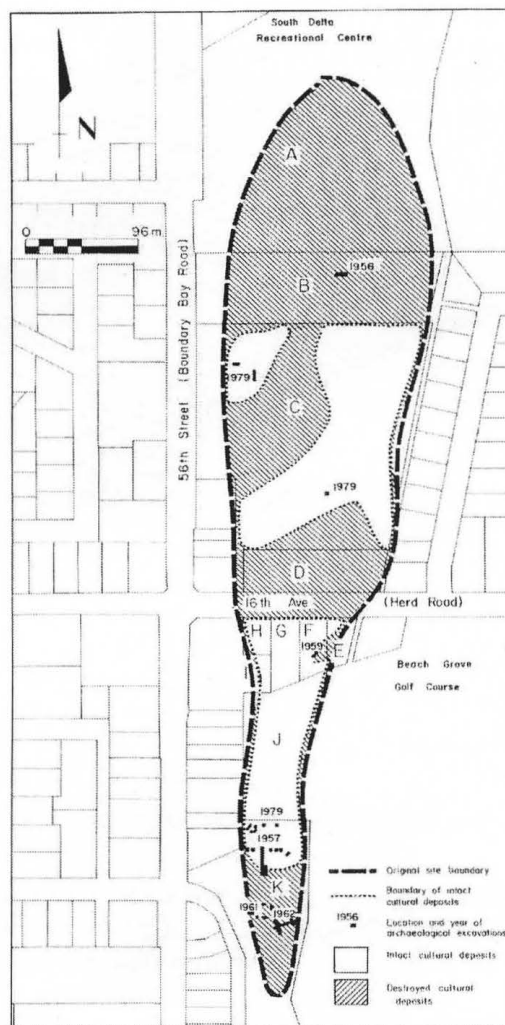


Figure 3. Beach Grove houses and intact deposits after Ham (1981).

4900 ^{±2} (453.7m²), House 1 = 3600 ^{±2} (334.9 m²), House 2 = 6006 ^{±2} (557 m²), House 3 = 12,544 ^{±2} (1165 m²), House 4 = 9025 ^{±2} (900 m²), House 5 = 14,400 ^{±2} (1338 m²), House 6 = 8556 ^{±2} (795 m²), House 7 = 10,000 ^{±2} (929 m²), and House 8 = 1464 ^{±2} (136 m²). The average house area is 7173 ^{±2} (676 m²). All of these figures are substantially larger than Grier's figures and are in fact larger than the depressions at Dionesio Point, which Grier assumes to be larger than those at Beach Grove. The assumption of "squareness" made here (that because the hole is square therefore the house is also square) could account for these larger figures.

If we assume that the Beach Grove site house were plank houses of ethnographic dimension, we would expect them to be about 8 to 10 m wide and roughly rectangular. If we take Smith's measurements to be the length of the house and we first multiply each by a ten foot width and secondly by an eight foot width, we get the floor area of equivalent ethnographic houses in two size ranges. Smith's lengths by ten metres results in the following: House "A" = 213 m², House 1 = 183 m², House 2 = 236 m², House 3 = 341 m², House 4 = 289 m², House 5 = 278 m², House 6 = 282 m² and House 7 = 304 m² and House 8 = 372 m² with an average of 228 m². Remultiplying Smith's lengths by eight metre width results in the following: House "A" = 170 m², House 1 = 146 m²,

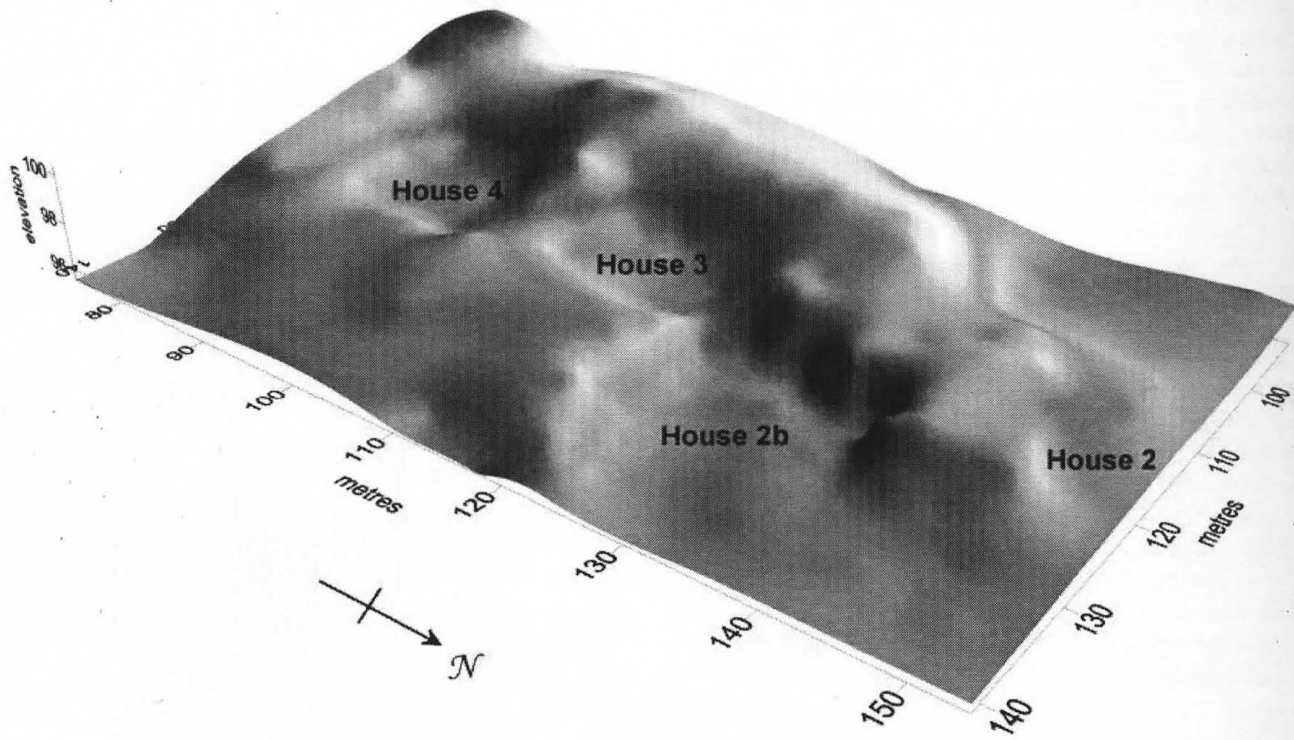


Figure 4. Surface map of remaining depressions at the Beach Grove Site (after Grier 2003).

House 2 = 189 m², House 3 = 273 m², House 4 = 231 m², House 5 = 222 m², House 6 = 226 m², House 7 = 243m², House 8 = 296 m² with an average of 197 m². These figures are quite close to Grier's estimate of 200 m² for houses at Dionisio Point.

Comparisons with Other Archaeological Houses

King reported house outlines at Cattle Point (King 1950:73). Although he noted no post moulds to support the assertion of houses, he did assume two depressions were habitations that had been constructed, while other depressions represented natural blowouts, which were later inhabited. The two assumed houses were 65.3' x 34.05' and 56.5' x 31.3'. In area, these house outlines were 2223.5'² (206.8 m²) and 1768.5'² (164.5 m²). These figures are in line with Grier's figures for the house sizes for Dionisio Point.

Harlan Smith also reported pit features from the Whalen Farm Site (DfRs 3), south of the Beach Grove Site on the Canada/US border on Point Roberts. He reported them as 10 m² and 5 m deep with stone linings and burials (Smith 1907: 393). These features, at 10 m², are smaller again than the examples preserved at Beach Grove. From what little information Smith provided and from the size, these are most likely grave houses rather than habitations.

It should be noted that the house depressions at Beach Grove have been excavated only by Abbott and there is no certainty that there were post moulds to support the assumption that these are house locations. The depressions at Beach Grove may represent temporary mat lodge locations used over and over. Abbott (1962:13-14) notes:

In their shape and arrangement the hollows suggest strongly the appearance that would result from the decay or removal of square wooden houses built in a row along the spit. Midden accumulated around the houses would have slumped down onto the edges of the former floors of the houses once the support of the house walls had gone. There are, however, facts which argue against this interpretation. First of all, the loose nature of the material in the bottoms of the hollows is quite unlike the typical, hard-packed, dirt "house floor" of dwellings previously excavated in this area even though its apparently high organic and low shell content is exactly what would be expected in house floor accumulations. Perhaps it is inevitable that this deposit should remain unpacked since it rests directly on sand and itself consists principally of sand particles. Roots and burrowing animals may also have contributed to keeping this soil loosened. Less easy to explain is the height of the midden ridges surrounding the square depressions, which would appear, in some cases, to be too great to have been piled against house walls. Difference in elevation is in some cases ten feet. The correct interpretation of these depressions will have to await further excavation. No attempt was made to solve this problem in 1961 and, although pits were dug in the third depression from the south in 1957, as I remember, no definite evidence was found which would settle the question of its origin.

As such, the Beach Grove site depressions may be similar to Cattle Point rather than Dionisio Point. King's assumption is that the Cattle Point evidence suggests these were temporary

dwellings reoccupied over time. Abbott also discussed the possibility that the Beach Grove site represented a seasonal camp rather than a winter village.

While it remains difficult to make conclusive determinations for the Beach Grove evidence following this discussion, we should proceed with caution in assuming house size or type from the limited data available. The data presented above indicate similar size houses at Beach Grove, Cattle Point and Dionisio Point and the possibility of houses considerably larger also being present.

Although Grier's data from Beach Grove comes from the actual size of two remaining depressions on the south of Hurd Road, there is no conclusive way to find correspondence between Smith's 1922 sketch and the remaining depressions, although Smith's notes do suggest that all the depressions were south of Hurd Road. As there is no clear correspondence between the two sets of data, we must assume modifications to the lot since Smith's time.

Acknowledgements

I would like to thank Martin Villeneuve and Frederic Paradis, both from the Canadian Museum of Civilization in Ottawa, for locating the images and expediting their release for publication. In accordance with the stated museum policy, they are presented in unmodified form.

Bibliography

Abbott, Donald N.

1962 *Preliminary Report on the Beach Grove Site, Dgrs 1*. Unpublished Report. British Columbia Provincial Museum of Natural History and Anthropology, Victoria B.C.

Ham, Leonard

1981 *The Beach Grove Site: A Battered Heritage Gem*. *Datum* 6[4]:18-23.

Gardner, George Clinton

1857 George Clinton papers. Gardner to Parke: September 3, 1857. Bancroft Library.

Grier, Colin

2003 *Dimensions of Regional Interaction in the Prehistoric Gulf of Georgia*. p 170-187, in: Matson, Coupland and Mackie, eds, *Emerging from the Mist: Studies in Northwest Coast Culture History*, UBC Press, Vancouver.

King, Arden R.

1950 *Cattle Point: A Stratified Site in the Southern Northwest Coast Region*. *Memoir of the Society for American Archaeology*, Number 7. Mensha, Wisconsin, USA.

Matson R. G. and Gary Coupland

1996 *The Prehistory of the Northwest Coast*. Academic Press, San Diego.

Smith, Harlan I

1872-1940 *Archaeological Sites Vancouver Area Part II, Fraser River District to New Westminster: Box 9, File 10*. Unpublished field notes. Canadian Museum of Civilization, Gatineau, Quebec.

1872-1940 *Archaeological Sites Vancouver Area Part III, Pitt Lake to International Boundary: Box 10, File 3*. Unpublished field notes. Canadian Museum of Civilization, Gatineau, Quebec.

1897 Unpublished Letters of Harlan I. Smith 1897-1899. American Museum of Natural History, accession file 1897-27.

1907 *Archaeology of the Gulf of Georgia and Puget Sound. The Jesup North Pacific Expedition*, Franz Boas, ed., *Memoir of the American Museum of Natural History, Vol. II - Part VI*, New York.



Drawing of Harlan I. Smith by Hilary Stewart that was originally published in The Midden in 1979, alongside an article about his legacy. See Don Bunyan's article "Harlan I. Smith: Pioneer Contributor to Western Archaeology," 11(3):5-8.