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THE WASHINGTON ARCHAEOLOGIST

NEXT MEETING: Seattle Chapter - Wednesday, Feb. 17, 1960 - 8:00 P.M.

MEETING PLACE: City Light's North Service Center at North 97th St. and Stone Avenue—2 blocks east of Aurora on North 97th St.

PROGRAM: IRVING HUMBER, an amateur photographer whose hobby is taking pictures of archaeological sites, will show a group of slides on Etrurian (Pre-Roman) Ruins and Excavations. Mr. Humber has taken more than 1500 slides of various excavations throughout Europe.

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MR. BILL HOLM, speaker at the January meeting of the Seattle Chapter, gave a very interesting and informative account of a potlatch which he and his wife, Marty, had been invited to attend in January 1959. This potlatch was given by Mongo Martin (Kwakiutl) and his wife, for Mongo's son, David Martin, the event being that David Martin was now assuming his rank and position in the tribe.

A potlatch is really a public assumption of a hereditary privilege, with payment of the witnesses present. Mr. Holm stated that while it is proper to return a potlatch, and if possible to give back more than you have received, nevertheless he does not think that it is necessary to give back 100% interest, as is commonly believed. We find an exaggerated version of the potlatch in most of the literature on this subject because most of these accounts were written at a time, around the turn of the century, when the potlatch was at its biggest. This exaggeration at that particular time was due to two things: One was the fact that there was a big decrease of Indian population around the turn of the century, cutting many lines of descent, thus causing a great deal of rivalry among the people for these hereditary positions. Secondly, the Hudson's Bay Company quite naturally encouraged this exaggeration of the potlatch because it increased their

trade in blankets and other articles to be given in the potlatch.

Fort Rupert was the center of these huge potlatches. Before then, around 1850, the affair was relatively simple, and the one which Mr. Holm attended is again simple and with less rivalry, being a more happy affair.

Mr. Holm gave a very complete account of the potlatch: Left Seattle January 1 for Victoria, where they set their clocks to "Indian Time" as the Indians themselves suggested.....go when you are ready, get there when you arrive. Steamer to Alert Bay. Spent 2 days amassing more food and money, loading bread potatoes, etc. Left as soon as the weather permitted, on a purse seiner. Unloaded at small village.....where they left Marty with the women who were gathering shellfish, baking cakes, and generally preparing food. The men in the village were getting the house ready and practicing dances.

In the meanwhile, Bill went with some of the men in a boat to other villages to invite them to the potlatch. As the boat neared the first village they shut off the motor and drifted in. One man stood up and gave a formal speech of invitation in the language of the Kwakiutl. Chief Willie Seaweed answered from the beach, inviting them in. They feasted and danced, and money was distributed according to rank. They then went on to the next village. In the meantime another boat was visiting other villages. When the boats finally returned, all the people came down to the beach to meet them and now the potlatch was about to begin.

The Mourning Song always begins the Winter Ceremony. This is to honor the dead, to take care of all trouble and worries, to clear the way for enjoying the rest of the ceremony. Then the dancing began. These dances are inherited and the right to perform them is passed down in families.

Bill and Marty were given new Indian names and invited to join in the dancing. After the dancing a great deal of time was taken to call the names of all the people present in the proper order and distribute gifts and sums of money in accordance with the ranks of the recipients. The order in which the names were called had been carefully prepared in advance.

The potlatch ended in the early morning hours with what the Holm's called the Happy Song, all the participants stood as they sang and tapped the legs of the chairs on the floor in accompaniment.

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OCCURRENCES OF STEATITE & SERPENTINE IN WASHINGTON

C. G. Nelson

References to ground stone objects in archaeological reports are a usual part of the description of the material culture. Ground stone objects are made from a variety of materials; harder stone being used for artifacts requiring favorable wearing characteristics; softer stone being used for artifacts the hardness of which is not a critical aspect in its ultimate usage. Because of the ease of working, the softer ground stone objects show more finish and are consequently more sophisticated. This class of artifacts becomes important because of the diagnostic aspects of art styles.

While there are relatively few published reports for sites in the State of Washington, the number of ground stone objects recovered has been many, the majority of these in private collections. A variety of materials has been reported, for example, serpentine, steatite and soapstone from the McNary Reservoir (Osborne, 1957, p. 31 and 246); steatite from Wakemap Mound (Butler, 1959, p. 134 and 127) (Caldwell 1956, pp. 137-139); steatite and soapstone from the upper Columbia (Collier, Hudson & Ford 1942, p. 73); soapstone and steatite from the Lower Grand Coulee (Osborne 1959, p. 70 and 116); greenstone (serpentine) used by the Okanagon (Tiet, 1930, p. 217); steatite from 45KT6 (Massey and Nelson, 1958, p. 31); and, steatite and serpentine from Osborne Bar, 45KT3, (Nelson, 1959). Since the availability of the material is related to the occurrences of the artifacts, the occurrences of the material is the subject under consideration.

Part of the problem is understanding the apparent ambiguity that both the terms of steatite and serpentine have associated with them. Steatite is currently listed as a variety of the mineral talc (Dana, 1895, p. 678) and is included by Dana in his System of Mineralogy (Dana 1895, pp. 1 and 669) under the broad group of Oxygen-Salts (VI), the general group of silicates (2), the specific group of hydrous silicates (B), and the "III. Serpentine and Talc Division."

Talc is described in a variety of terms: luster pearly on cleavage surfaces. Feel greasy. Color apple-green, sometimes bright green perpendicular to cleavage surface, and brown and less translucent at right angles to this direction; brownish to blackish green and reddish when impure. Subtransparent to translucent. Hardness 1 to 1.5, rarely 3. The terms soapstone, speckstein, potstone, talcum, talgsten, pyeallolite, rensselaerite, lapis ollaris, talcose slate, hydrosteatite, hampshirite, saponite, seifenstein are mineral names that have been used to refer to some of the varieties of talc, i.e., steatite. The preference shown by the archaeologist for the term steatite may stem from the origin of the word: Lat. steatitis, Gr. steatos meaning fat or tallow.

Serpentine, 481, (Dana: 1895, p. 669) is described in a variety of terms; luster sub-resinous to greasy, pearly, earthy; resin-like, or wax-like; usually feeble. Color leek-green, blackish green; oil- and siskin-green;

brownish red, brownish yellow; none bright; sometimes nearly white. Translucent to opaque. Hardness 2.5 to 4, rarely 5.5. The terms retinalite, vorhauserite, bowenite, antigorite, williamsite, marmolite, thermophylite, chrysotile, schillernder asbest, bostonite, picrolite, metaxite, zermattite, edler serpentin, porcellophite, tangiwai, sang-i-yashm, serpentine marble (verd-antique), lapis colubrinus greenstone, are mineral names that have been used to refer to some of the varieties of serpentine. The softer varieties of serpentine are confused with talc; the harder varieties confused with nephrite. Positive identification requires a laboratory analysis technique. Petrographic analysis is generally very positive. A series of twelve distinct varieties of Fraser River jade (nephrite) were examined petrographically by the author; one of the twelve was nephrite (jade) while the remaining eleven were definitely serpentine. The observation of Wahlstrom (1955, p. 390) is worth noting: "Serpentine is a rock in which extensive metasomatic alteration has produced a mixture of minerals of the serpentine group— Steatite consists largely of talc and seems to form as a result of additional alteration of serpentines."

Talc and serpentine are both minerals and rocks and therefore thought of in terms of two different but related disciplines.

Lindgren (1919, p. 393) described talc: "Talc is a hydrated magnesium silicate, but holds much less water than serpentine. It is a soft, crystalline, foliated or compact mineral of white, gray, or pale-green color and a greasy feel. --- Talc and soapstone are products of the hydration of magnesian rocks, either of distinctly igneous origin, like gabbro, pyroxenite, or peridotite, or crystalline schists rich in such minerals as enstatite and tremolite or other pyroxenes and amphiboles. --- In general serpentine forms from olivine and talc from pyroxene and amphibole, but this rule does not always hold."

Grout (1940, p. 241) groups serpentine rock, soapstone, garnet rock, amphibolite, and others resulting from metamorphism of essentially the same material. Hitchcock (1835, pp. 349 and 361) noted the disagreement among mineralogists about talcose rocks including steatite; and stated, "Perhaps there is no rock whose true nature and geological relations are so little known as serpentine." There has been considerable progress made since 1835 in the understanding of steatite and serpentine, however, definitive identification is a laboratory problem for the qualified expert. In the field the general relation of one to the other both in form and occurrence should be recognized. For the purpose of this paper, the occurrence of steatite and serpentine are considered together.

Plate 1 shows the areal distribution of a portion of the known or reported occurrences of serpentine and steatite in the State of Washington and nine sites from which ground serpentine or steatite objects have been recovered or found in situ.

The archaeological sites shown on Plate 1 are:

General Area	Site No.	Location		
Wakemap Mound	45-KL-26	T2N	R14E	Sec. 19
McNary Reservoir	45-BN-3	T5N	R29E	Sec. 1
Beverly	45-KT-6	T16N	R23E	Sec. 28
Osborn Bar	45-KT-3	T19N	R23E	Sec. 18
Northport	Site 46	T40N	R48E	Sec. 29
Northport	Site 47	T40N	R48E	Sec. 29
Spokane River	Site 8	T28N	R36E	Sec. 11
Windy Springs	45-GR-88	T24N	R27E	Sec. 13
Soap Lake	45-GR-74	T22N	R26E	Sec. 13

Neither the list of occurrences, Table 1, nor the above site list is complete. Valentine (1949, pp. 63 & 64) lists nine occurrences of olivine and thirty-nine of serpentine. No's 1 through 17 of Table 1 are occurrences of serpentine. Valentine (1949, p. 97) lists twenty-four occurrences of talc and soapstone. No's 18 through 30 of Table 1 are occurrences of steatite (talc). The particular occurrences of serpentine and steatite were listed to the exclusion of the others because of the possibility of aboriginal quarries being located in these areas. The actual location of aboriginal quarries is a problem for future research. The list of sites is incomplete partly because of the lack of published material. The private collections are replete with serpentine and steatite artifacts. For instance, the Simmons collection has material from 45-GR-75, 45-GR-77, Crescent Bar and other places. 45-KT-2 very likely had this type of material taken from it. There could have been recoveries from the Priest Rapids Reservoir; the same being true of the area from the Dalles to the Pacific Ocean. Before the distribution of this type of artifacts can be studied on an areal basis more data has to be made available.

BIBLIOGRAPHY

Butler, B. Robert
1959 Archaeological Investigations on the Washington Shore of The Dalles Reservoir 1955-1957. Report to the National Park Service. Contract no. 14-10-434-126.

Caldwell, Warren W.
1956 The Archaeology of Wakemap: A Stratified Site near The Dalles of the Collumbia River. Unpublished Ph.d. dissertation, Dept. of Anthropology, University of Washington.

Collier, Donald; Hudson, Alfred E.; Ford, Arlo;
1942 Archaeology of the Upper Columbia Region. University of Washington Publications in Anthropology, Vol. 9, No. 1.

Culver, Harold E.
1936 Geology of Washington, Part 1. Washington Division of Geology Bull. 32.

Dana, Edward Salisbury
1895 The System of Mineralogy of James Dwight Dana, 6th Edition New York.

Glover, Sheldon L.
1936 Nonmetallic Resources of Washington. Washington Division of Geology Bull. 33.

Green, Stephan H.
1948 Directory of Washington Mining Operations, 1948. Washington Division of Mines & Geology Inf. Cir. 16.

Grout, Frank F.
1940 A Handbook of Rocks, 6th Edition. New York.

Hitchcock, Edward
1935 Report on the Geology, Mineralogy, Botany and Zoology of Massachusetts. Amherst.

Lindgren, Waldemar
1919 Mineral Deposits. New York.

Massey, William C. and Nelson, C. G.
1958 Preliminary Report on Site 45-KT-6. Private Report.

Nelson, C. G.
1959 Field Notes for 45-KT-3 Excavations (Report in preparation).

Northern Pacific Railway Co.
1941 Tabulated summary of Special Geological Reconnaissance Reports of Washington and Northern Idaho, Land Dept. Geol. Division.

Osborne, Douglas
1957 Excavations in the McNary Reservoir Basin near Umatilla, Oregon. River Basin Surveys Papers no. 8.

Osborne, Douglas
1959 Archaeological Tests in the Lower Grand Coulee, Washington. Report to Department of Conservation and Development, State of Washington.

Shedd, Solon
1903 The Building and Ornamental Stones of Washington. Washington Geol. Survey Vol. 2, Annual Report 1902-1903.

Shedd, Solon
1924 The Mineral Resources of Washington with Statistics for 1922. Washington Division of Geology Bull. 30.

Smith, George Otis
1904 Mount Stuart Folio. U.S. Geol. Survey Geol. Atlas.

Smith, Harlan I.
1910 Archaeology of the Yakima Valley. American Museum of Natural History, Anthropological Papers, Vol. 6, Part 1.

Teit, James A.
1930 The Salishan Tribes of the Western Plateaus. 54th Annual Report of the Bureau of American Ethnology.

Valentine, Grant M.
1949 Inventory of Washington Minerals, Pt. 1, Non-metallic Minerals. Division of Mines & Geology Bull. 37.

Wahlstrom, Ernest E.
1955 Petrographic Mineralogy. New York.

Washington, State of
1934 Division of Geology Bienn. Report, 1933-34.

Waters, Aaron C.
1932 A Petrologic and Structural Study of the Swakane Gneiss, Entiat Mountains, Washington. Jour. Geology, Vol. 40, pp. 604-633.

Weaver, Charles E.
1911 Geology and Ore Deposits of the Blewett Mining District. Washington Geol. Survey Bull. 6.

Wilson Hewitt and Pask, Joseph
1933 Talc and Soapstone in Washington. Am. Inst. of Min. & Met. Eng. Contr. 99.

Works Progress Administration W.P. 1188, 1936.

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No.	Place	County	Location	Reference
1.	Sumas Mountain	Whatcom	T39N R4E Sec. 1	Works Progress Administration, 1939
2.	Burlington	Skagit	T35N R4E Sec 32	Washington, State of, 1933-34
3.	Oso	Skagit	T33N R3E Sec 20	Washington, State of, 1933-34
4.	Granite Falls	Snohomish	T30N R7E Sec 18	Washington, State of, 1933-34
5.	Wenatchee Mountains	Chelan	S,E & W of Mount Stuart Range	Culver, 1936, pp 50-51; Smith 1904, p 4, Weaver 1911, pp 34-41
6.	Tumwater Canyon	Chelan	T25N R17E Sec 9	Washington, State of,1933-34
7.	Entiat Mountains	Chelan	T25N R19E Sec 8	Waters, 1932
8.	Wagonroad Coulee	Okanogan	T35N R26E Sec 4	Washington, State of, 1933-34
9.	Similkameen River	Okanogan	T40N R25E Sec 16	Washington, State of, 1933-34
10.	Danville	Ferry	T40N R34E Sec 10	Washington, State of, 1933-34
11.	Republic	Ferry	T36N R34E Sec 24	Washington, State of, 1933-34
12.	Royal	Stevens	T32N R41E Sec 9	Glover 1936, p 111; Shedd 1903, p 124
13.	North American	Stevens	T31N R38E S 12 &19 T31N R39E S 24 &25	Glover 1936, p 111; Shedd 1903, pp 95-100
14.	U. S. Marble Co.	Stevens	T31N R39E Sec 9	Glover 1936, p 111; Shedd 1903, p 87
15.	Green Mountain Marble Co.	Stevens	T31N R40E Sec 13	Glover 1936, p 111; Shedd 1903, p 105
16.	Pacific Coast Marble,Tiling & Manufacturing Co.	Stevens	T31N R41E Sec 18	Glover 1936, p 111; Shedd 1903, pp 103-105
17.	Spokane Marble Co.	Pend Oreille	T30N R43E Sec 32	Glover 1936, p 111; Shedd 1903, p 106
18.	Skagit Talc, Inc.	Skagit	T36N R11E Sec 11 & 14	Glover 1936, p 111; Green 1948, p 32; N.P. Ry 1941, p 19; Wilson & Pask 1933, p 5
19.	Alvard	Skagit	T36N R11E Sec 15	Glover 1936, p116; Green 1948, p 32; N.P. Ry 1941, p 19; Wilson & Pask 1933, p 3
20.	McMyrl-Wilson	Skagit	T36N R11E Sec 21	Glover 1936, p 117; N.P. Ry 1941, p 19; Wilson & Pask 1933, pp 3-4
21.	Londonderry Mines Inc.	Skagit	T35N R11E Sec 16	Green 1948, p 117; N.P. Ry 1941, p 19
22.	Clear Lake	Skagit	T34N R5E Sec 16	Green 1948, p 29
23.	Ruth	Chelan	T26N R15E Sec 2	N.P. Ry 1941, p 19
24.	Entiat	Chelan	T26N R20E Sec 32	N.P. Ry 1941, p 19
25.	Roaring Creek	Chelan	T25N R20E Sec 8	N.P. Ry 1941, p 19
26.	Lockwood & Cole	Chelan	T25N R20E Sec 24	N.P. Ry 1941, p 19
27.	Johnson Creek	Okanogan	T35N R26E Sec 32	Glover 1936, p 116; N.P. Ry 1941, p 19
28.	Firminhac	Stevens	T30N R38E Sec 15	Glover 1936, pp 117-118; Wilson & Pask 1933, p 9
29.	C. W. Capps (Mondovi)	Lincoln	T27N R38E Sec 34	Glover 1936, p 115; N.P. Ry 1941, p 19 Wilson & Pask 1933, p 9
30.	Travis Farm	Lincoln	T24N R39E Sec. 6	Glover 1936, p 115; N.P. Ry 1941, p 19 Shedd 1924, p 139

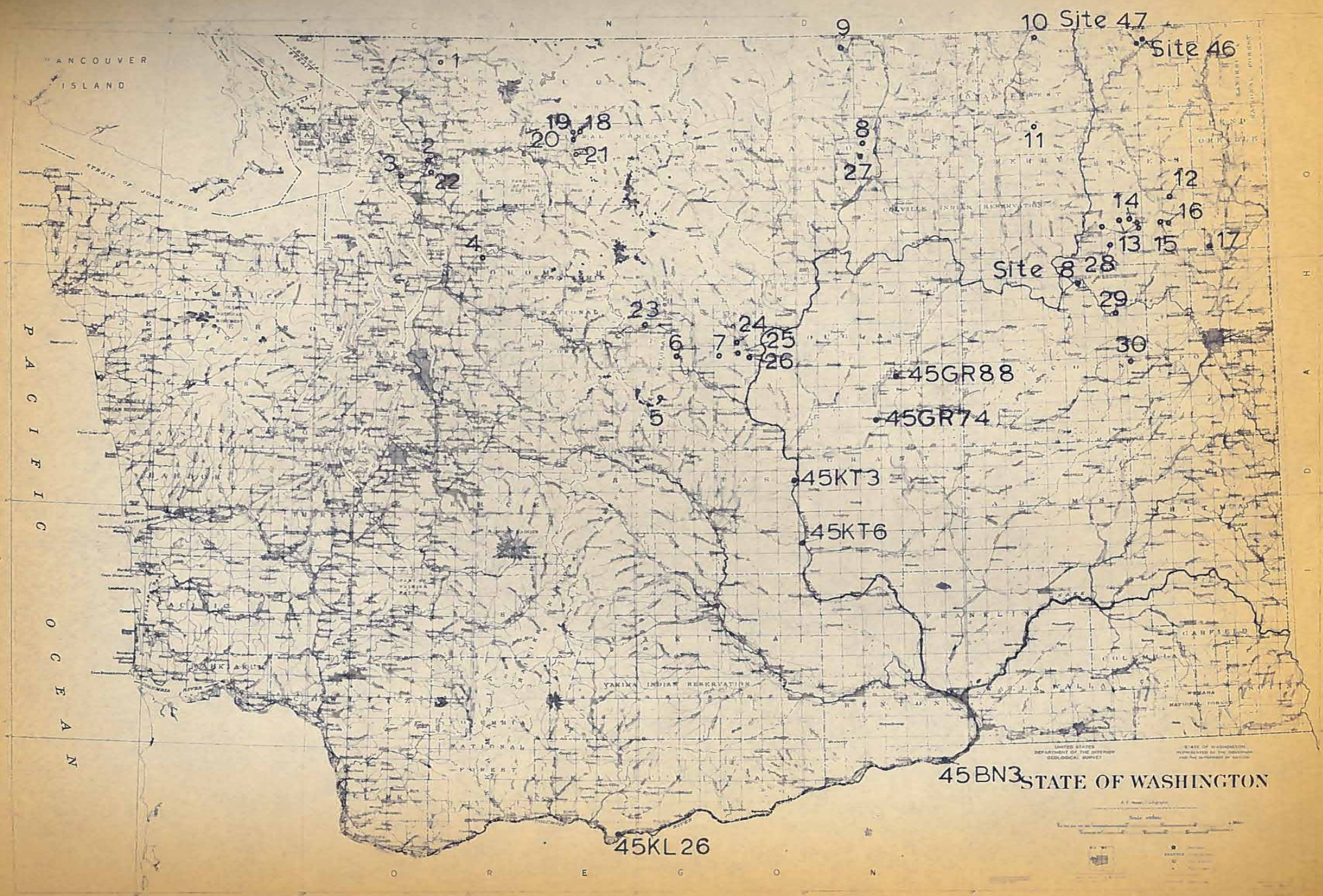

PLATE 1 — Areal Distribution of Serpentine & Steatite