THE ARCHÆOLOGY OF THE SOUTHERN INTERIOR OF BRITISH COLUMBIA.

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I. INTRODUCTION.

GEOGRAPHY, ARCHÆOLOGICAL SITES, AND RESOURCES EMPLOYED BY THE PREHISTORIC PEOPLE,

Our present knowledge of the archæology of the southern interior of British Columbia is largely based upon the work of two institutions: the Canadian Geological Survey and the American Museum of Natural History. The work of the former was conducted by Dr. George M. Dawson, who investigated the large burial-ground on the sand terrace, between the Fraser and Thompson Rivers, near Lytton, while engaged in geological work in southern British Columbia, during the years 1877 and 1888-90. The results are recorded in "Notes on the Shuswap People of British Columbia" in the Transactions of the Royal Scciety of Canada, Section II., 1891. The collections made by Dr. Dawson are in the Museum of the Geological Survey of Canada at Ottawa.

The work of the American Museum of Natural History, I conducted as a party of the Jesup North Pacific Expedition, which was sent out from the museum to investigate the anthropology of the north Pacific Coasts of America and Asia. Investigations were conducted during the years 1897 and 1898 as described in *Science* for April 14, 1899, and during 1899 as outlined in *The American Anthropologist* for July-September, 1900. The results, from which this paper is an extract, are published in detail with illustrations in Parts III. and VI. of Volume II. of the Memoirs of the museum, and the collections are pre-

served in the same institution.

The explorations were conducted at Spences Bridge and Kamloops in June, and at Lytton in July, 1897. In May 1898 and May 1899 these sites were revisited. In October 1899 an exploring trip was made from Spences Bridge, near the mouth of the Nicola River, to Nicola Lake. On this trip Mr. James Teit was of the party. The chiefs of all the Indian bands of the region rendered valuable assistance in carrying on the work.

Dieck, the botanist, collected some stone carvings from the region below Lytton. These are now in the Royal Ethnographical Museum at Berlin. Various individuals throughout British Columbia and the west possess cabinet specimens from the region, and in the Provincial Museum at Victoria, B. C., is a collection. These are the results of casual visits to the burial places near Lytton and Kamloops.

Geography.—Lytton is situated at the mouth of the Thompson River, below which the Fraser breaks through the Coast Range, forming a deep cañon. Above Lytton the Thompson, flowing through the plateau, has cut in its lower course a deep valley, which in some places is a true cañon. The climate is dry, and so vegetation is scanty, but on the high lands there is open timber. Greasewood, sagebrush and cactus are found here; bunch-grass grows on the hill-sides, and roots and berries are found in the mountain valleys. Bear and deer were plentiful in the vicinity. The salmon ascend both rivers to spawn. They are much used as food by the present inhabitants.

Spences Bridge is in the Thompson Valley, twenty-two miles above Lytton, and about a mile below the mouth of Nicola River. It is below Spences Bridge that the river forms a cañon; above it, the banks are comparatively low. The climate and natural resources resemble those of Lytton.

Kamloops is also in the Thompson Valley and is ninety-five miles above Lytton at the confluence of the north and south branches of the river. The bottom land here is wide and the surrounding country a rolling plateau. The altitude of the valley is about eleven hundred feet. The climate and natural resources resemble those of Lytton and Spences Bridge, but timber seems more scanty. The hill-sides are favorable for grazing. The Indians state that formerly great herds of elk inhabited these hills. The salmon ascend to this region, but not in such great numbers as to Lytton, as many that turn from the Fraser into the Thompson go up Nicola River and smaller streams. A few miles below Kamloops the Thompson widens into Kamloops Lake, where wild fowl and fish abound.

Nicola Valley near its mouth is deep and narrow, while at Nicola Lake it is high on the rolling plateau and similar to the region each side of the valley at Kamloops, which is about thirty-five miles to the north. The lake is about two thousand feet above sea level. The mouth of Nicola Valley, about eight hundred. The river is, consequently, rapid, and it is also shallow. The Indians of the valley have commercial intercourse with Kamloops to the north, the Okanagon to the east, Similkameen to the south, and with Lytton and Boston Bar to the west.

ARCHÆOLOGICAL SITES.—The main burial place and village site at Lytton is situated on the sand-hill that is found along a terrace between the cañons of the Fraser and Thompson Rivers, and immediately to the north of their confluence. This is by far the most important site near Lytton. The hill is about one hundred feet above the river, and is about five hundred feet in length by two hundred feet in width. A large pine tree is growing on the crest of the hill, in the middle of the burial place. An Indian trail passes to the west of the area, and the government road bounds it on the east. No definite age can be assigned to any of the remains secured, a

the wind, which sweeps strongly up the cañon of the Fraser River, is continually shifting the light, dry sand from place to place. It uncovers the graves, disarranges them, and sometimes re-covers the remains. Miners and Indians often camp at this site, and the objects left by them are scattered on the surface and often covered by the shifting sand. All these objects must be distinguished from the undisturbed burials of the prehistoric people. The surface is strewn with human bones which have been uncovered by the wind. There are also scattered about shell beads, wedges made of antler, scrapers and chipped points of stone such as were used for arrows and knives, grinding-stones, celts and other material similar to that found in the graves. There is a large box at this place in which the Indians deposit the bones and objects as they are uncovered by the wind, but sometimes they bury them. The bones they consider to be those of Indians, although they do not know whether they are of their own ancestors or not. It is reasonably certain, judging from the complete absence of European objects in the undisturbed graves, that they antedate contact with the whites. A number of them must be several hundred years old.

Extending to the north from the hill, and on the same terrace, were found old hearths, indicated by broken and crackled fire-stones, large slabs of grinding-stones, and remains of underground houses. A few human bones were secured from the edge of the gravel-pit made by miners near an Indian cemetary, known to be modern by the portions of the fence which still remain.

Southward from the sand-hill, on the level of the terrace, were found traces of similar hearths, charcoal, and rolls of birchbark partly burned. Here were also remains of underground houses. There were two large bowlders, which the Indians report were used in the ceremonials performed by young men, or by youths when reaching maturity. It is said that these youths were required to cover the distance from one bowlder to the other in a prescribed number of leaps.

About half a mile below Lytton, on the high gravel terrace on the east bank of the Fraser River, was found a second village-site. The Canadian Pacific Railroad cuts through this site.

A third village-site was located on the high terrace on the east bank of the Fraser River, about two miles north of Lytton. The place is a meadow in an open pine forest, east of the government road. South of it, is a small brook, ending lower down in a marsh. This may have determined the location of the site, since it affords a supply of fresh water high above the Fraser River.

A fourth site was on the east side of the Fraser, nearly opposite Stein Creek.

A fifth ancient village and burial place were located at the north side of the mouth of Stein Creek, which empties into the Fraser River from the west, at a point about four miles above

Lytton. This place is on the tableland overlooking the Fraser River, and near the present Indian village of Slame. Here were human bones, fragments of pecten shells, fragments of steatite pipes, and wedges of antler, scattered by the wind. On the lower terrace, close to Stein Creek, are remains of ancient houses, which measured from fifty to sixty feet in diameter.

Some attention was given to a sixth site, which is marked byburials and traces of habitations, on the low sandy terraces onthe west bank of the Fraser River, about opposite the main burial place. These sites may or may not have been occupied

at the same time.

All through this region are evidences of prehistoric habitations, located at varying distances from the larger village-sites. This suggests that the mode of life of the prehistoric people was similar to that of the present Indians, among whom one or two families often live at some distance from the main villages.

At Spences Bridge a single grave was the most interesting site explored. It was located on the edge of the first terrace overlooking Thompson River from the north, about a quarter of a mile above the ferry. There are numerous old graves near by, on an island near the north bank of Thompson River, which the Indians did not wish us to explore; while they had no knowledge of the first grave, and assisted in exploring it. This grave contained no evidence of contact with whites. On the other hand, there is no positive evidence pointing to great antiquity. Fabrics that were buried with the body, and wooden posts in the surrounding soil, were still in a fair state of preservation.

About four miles above Spences Bridge, on the north side of the valley, are several pits surrounded by embankments, which mark the sites of ancient underground houses. Excavations in these pits resulted in finding broken bones of deer, bear, bison, etc., charcoal, burned and crackled stones, and other

evidences of occupancy.

At Kamloops attention was directed particularly to the large burial place and camp-site on the Indian Reserve, on a low sandy stretch north of Kamloops Bridge. Except where held in place by an occasional sagebrush, the light yellowish grey sand is ever shifting over this site, so that the depth of the remains varies daily, and the original order of burial has been much disturbed. Burned and crackled bowlders hold in place conical piles of sand twenty to thirty feet in diameter. These are evidently the places where stones have been heated to be used in cooking roots, or for boiling food in baskets. Strewn over the entire site are found the bones of food-animals, stray bones from graves, burned and crackled fire-stones, and other objects, such as dentalium shells, copper beads, and flat oblong beads made of bone. The last named were usually found in little patches near traces of fires, and were frequently charred. Chipped points for knives, arrows, etc., wedges made of antler, and stone pestles or hammers were also discovered.

At intervals along the river-bank, from the western limit of this site to the Government Indian School, about two miles to the east, are remains of underground houses, which are most numerous near the school. They vary from fifteen to thirty feet in diameter, and close to them are traces of caches five or six feet in diameter. There are also remains of underground houses at the south end of the bridge.

The "Government Site" is located north of the slough, on a flat at the base of the foot-hills close to the school. Here the shifting sand has exposed the remains of cremated children, together with dentalium shells, flat oblong bone beads, and chip-

ped cache forms of glassy basalt.

The "Government Hill Site" is located on the brow of the foot-hills leading to the mountains, about a hundred feet above the flat northwest of the school, and northeast of the large burial place.

The first whites to reach this vicinity were the Hudson Bay Company's agents, who built a block-house on the point west

of the mouth of North Thompson River.

About two miles below this point, on the northern side of the river, is a wind-swept sand-knoll, where evidences of a village-site were found. Near the mouth of Tranquille River, on the north side of Kamloops Lake, above the red paintings on Battle Bluff, were evidences of still another village-site.

In Nicola Valley, about nine miles above the mouth and on the east side of the river, were a number of graves. The bodies had been placed upon the surface at the foot of a rock-slide or talus slope, and were covered by disturbing the slope sufficiently to cause rocks to slide down over them. These graves are usually marked by a few rocks piled upon them; but the pile is so low, that it is difficult to distinguish it from other parts of the talus slope. In some cases a branch was inserted among the rocks over the grave, and extended down to the body. One skeleton, resting upon the rock-slide, was in a lodge of poles, covered with mats made of the spikestalk of the common cat-tail. The rock-slide had been worked down around the lodge to a height of about two feet over the skeleton. There were no objects found on the body or in the lodge. Another grave was without a lodge, but contained a celt and chipped basalt points.

At a point four miles farther up the valley, or thirteen miles from its mouth, is a rocky bluff called "Shooting Rock." At the southern base of it, is a talus slope in which are a number of burials marked by twigs. There are house-pits about a mile below this place, also about a quarter of a mile above it, and at various camping-places throughout the valley. They are so numerous that notes of all the sites were not taken. At some of them are cache-pits and saucer-shaped depressions, which mark sites of summer lodges. The former are deep, and surrounded by an embankment composed of the earth thrown out

of the pit.

The graves of two children were explored on the terrace overlooking Nicola River from the south, at the mouth of Nicola Lake. These graves were about eighteen inches deep, and above each of them was a pile of five or six bowlders. Red pictographs were reported by the Indians to be on a rocky promontory which we saw near the middle of the lake, on its northern shore.

On the Indian Reserve, at the eastern limit of Nicola Lake, is an outcrop of rock in the Meander Hills. There are three main talus slopes between this knoll and the lake, in all of which were graves marked by sticks and twigs. Charlie Tcilaxitca, who is about sixty years of age and a brother of the chief of this reserve, related that when he first saw the place, it resembled a patch of small dead trees, so numerous were the twigs marking graves on the slope. The rocks were piled up over the graves, but the piles were so low that they were difficult to find, except when marked by twigs.

RESOURCES EMPLOYED BY THE PREHISTORIC PEOPLE.—The resources of the prehistoric people of this region, as indicated by the specimens found in the graves, hearths, and about the village-sites, were chiefly stone, copper, shell, bone, antler, teeth, the skins of animals, and vegetable substances.

Quartzite pebbles were used for scrapers, hammers, and similar objects. Quartz crystals were found in the sites, and may have been used for drills and charms. Argillite was made into fish-knives, points for arrows, etc. Glassy basalt, agate, chalcedony, and yellow, red, and green jasper were used for various kinds of chipped implements. The material commonly employed for the chipped objects, however, was basalt. Steatite was made into pipes, perforators, etc. Sheets of mica were made into pendants. Serpentine and nephrite into celts. Tons of stone were seen along the Fraser and Thompson Rivers, in this vicinity, of which samples prove to be nephrite. Bowlders of nephrite, resembling the same material from the Thompson River, were found by the writer on the beach at the mouth of Nootsack River, in the State of Washington. Flat pebbles of the same material, sharpened and partly cut into strips to form celts, were also found. It seems that these bowlders are widely distributed, and that where found they were used for making implements.

Siliceous sandstone of a rather coarse structure was used for making smoothers for arrow-shafts, for stones for grinding grooves into nephrite and serpentine in order to cut it into convenient forms for implements, and for grinding-stones. Copper clay was used for blue paint, and white, calcareous and yellow earth and red ochre, for paint of those respective colors. Red ochre occurs in this vicinity.

Fragments of rock bearing galena were found at Kamloops. Copper was much used for ornaments, and may have been obtained from the mountains north of Lytton, where native copper is found.

Many evidences of animals, probably used for food, or materials for clothing and implements, were found in the villagesites and burial-places. Bone of the whale was imported from the seacoast, and made into war-clubs. It is possible that it was imported through the Chilcotin country, from the region north of Vancouver Island. This is further emphasized by the absence of clubs of this character along lower Fraser River.

The pecten shell was found, but no olivella-shell objects were seen above Lytton. It seems that the use of dentalium shells was much more extensive in the interior, than it was in prehistoric times in the delta of the Fraser River, and they, like the bone of the whale, probably came from the sea by a northern route. Shells of the fresh-water clam were found in little patches, about three feet in diameter, at the four largest sites at Kamloops, in sufficient numbers to indicate that this animal was used for food.

Vegetable substances include charred pieces of wood from the hearths, and other charred fragments, which had probably been portions of canoes, tent-poles, etc., that were found around graves and in various parts of the village-sites. Pieces of wood were found rolled in copper, and preserved by the action of the copper salts.

Birch bark, charred or preserved by the dryness of the climate, was found in the graves as lining or covering, and in the form of rolls. Probably it was also used for dishes. A kind of gum, that was found in a shell spoon and on a bone handle for a stone knife, resembles that from the fir and pine. Digging-stick handles indicate that roots were dug for food.

Fragments of matting made of cat-tail stalks, fabrics of sagebrush-bark, fibre of cedar and charred bearberries, were found in the graves.

The bones of the whale, and varieties of shell above mentioned, were imported from the seacoast, by intertribal trade, or by expeditions for the purpose; and these formed an important addition to the natural resources of this interior region.