Cariboo College

ARCHAEOLOGICAL EXCAVATION

on the
South Thompson River:
A Report

By
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and
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when looking at aerial photographs of the South Thompson River, one can see hundreds of pock marks or small craters lining either side of the bank. These pit houses of the early Indian inhabitants are very interesting because they tell a great deal about the life these people led. They range anywhere from four to forty feet in diameter and some are still as much as six feet deep. There has been little excavation in the Thompson area, and the small amounts that have been done properly are buriel sites. Any pit houses that have been "excavated", were done with picks and shovels; occasionally people used bulldozers. These people were solely interested in the occasional artifact that might turn up. Consequently any other information that could have been obtained from a site was lost forever. In fact, most people preferred to destroy a burial ground rather than weste their time with something like a pit house.

The only published information we could obtain about pit houses was in Teit's book of the Thompson Indians (1900). So, in order to learn more about these habitations, we decided to excavate one ourselves. It took a long time to decide on the right place; we had to consider many factors. It had to be a place that we could get to with little trouble, and on private land. It had to be enough out of the way so it would not be torn apart by relic hunters, because it was going to be a long time before we could finish the excavation, since the actual digging could only be carried on during week-ends and the occasional holiday. The Kamloops Museum Association is supporting the excavation financially and provides a place where the materials can be studied and displayed.

In the Spring of 1969 we were ready to begin excavation at the site we had chosen. It was first owned by a rancher named A.G. Pemberton. He had the land from 1863 to 1907, when he died. His estate was bought up

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by real estate agencies, and they planned to start a large orchard (Sunnyside), and build up a community. But a few years later the water rights lapsed and the company went bankrupt. In 1910 the land was bought by the Bostock family, and today is part of the Ned Creek Ranch. It is still used for ranching and all of the sites on this land are in very good condition. But, never the less, it is not completely immune from artifact hunters, and many of the pits have become marked with shovel holes and torn apart by unauthorized people, during the two years of excavation.

View of part of village site EeQx:2, looking south.

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The village site, EeQx:2, is located on the north bank of the South Thompson river. It is 0.8 mile downstream from the bridge that crosses the river at Pritchard. There is a seldom used gravel road which goes almost all the way to the village, and is probably incomplete. From the end of that to the village site, a dirt road crosses the small bridge over Pemberton Creek. In some places the gorge is 20 feet deep, and for most of the year there is only a trickle of water passing through it. The water is dammed at the small lake five miles from the mouth of the creek for irrigation purposes, but at one time there must have been quite a sizeable creek flowing down the gorge.

The village is on the large flood plain below the clay cliffs, formed by Glacial Lake Thompson (Fulton, 1965). The whole of the South Thompson valley is like this, and there are no known pits on the lake bench above the flood plain.

PRESENT PLANT AND ANIMAL LIFE

The life of the area now, is probably much the same as it would have been during Indian habitation. The obvious difference is the presence of cattle. They have had quite an effect on the plant life in the area. Most of the area that is now ranch land, used to be covered with bunch grass. Over-grazing had led to the extermination of bunch grass on range lands, and now there, the regular dry belt grasses have replaced it. The main type of bush is the sagebrush, although there is not as much of this in Pemberton Village as there is in the village about a mile down stream. In the other village there is also cactus. There are only three small trees in the village site, and other than that, there is little vegetation except mullein plants.

In the village downstream there are numerous large cottonwood trees and smaller bush-like trees. These are hawthorn trees, the same as the three in Pemberton Village. No pine trees are found near either The villing street Sequels of longered on the north benk of the South shown reverses the second street what arosenes them reverses the bridge that arosenes the second street was first and the second street was street with the second street was stree

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of these villages, but the tench overlooking the flood plain is covered with the Ponderosa pine common to the area, and it is partially logged out.

The animals of the area include mule deer, black bear, coyote, mink, porcupine, marten, beaver and other rodents, most of which played an important part in the economy of the early Indians. One of the most important items is the fish life of the area. Sockeve salmon and Chinook are seasonally the most numerous varieties present in the Thompson today. There are also trout, whitefish, squaw, and suckers. There are also many different types of migratory water birds that use the river; these include Canada goose, snow goose, swans, and a wide variety of ducks. Most of these were more important than the year-round birds like grouse, and ptarmigan.

The climate near Pritchard is extreme. In the spring and summer months, it is always very hot or very windy, and in the fall and winter the temperature goes very low. Beacause of the way the land in the village is situated, and projects out into the river, there is no protection from the wind that sweeps down the valley in an east to west direction. The lew larger poplar and cottonwood trees that remain, stand a good chance of being blown down in the annual spring winds. The hawthorn trees which are lower to the ground, are a much better survival risk.

EXCAVATION METHODS

Our first year of excavation was one of experimentation in field techniques, digging and recording. We were guided mainly by Heizer's "A G IDE TO ARCHECLOGICAL FIELD NETHODS". We started running a trench across the pit house, from South to North. The trench consisted of 4'X4' squares, taken down in 8" layers. We devised a symbol method for marking down all relevant artifacts, including detritus materials such as besalt flakes, fire-cracked rocks and bone fragments, shells, and other faunal remains. Trowels were used for digging and the

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boog a basta valence to all sever a sacrate that refer to a layers from 8" layers, and marking concentrations of detritus and microstand off about grants from and it sweb work water to constituted materials, instead of recording each bone fragment, basalt . Mair isvivrus modules out three times as much vol-

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that seemed to be of any importance when first touched were uncovered with a brush and fine pointed tool, and photographs and/or drawings made ns beyeld working to from straight to the stra

A fence was erected to prevent the late Brigadier Bostock's cattle analy tofrom breaking down the walls of the trench and their own necks in the desire for galage and it was as broading is established process. Unfortunately we still had some problem with this, to a results that the trench was raised. Because of the difficulty

> The beginning of the second season brought the refinement of 4" ume as the previous year, owing to our experience and refined techniques.

STRATIFICATION

This site revealed only one cultural level which was evidently donord a walnum a same aw process of the same several interesting points which Ro meducation of data of data many the eds about have shown up in the wall and floor stratifications (see drawings). modification Cloderge is because aw , areas "8 the eweb median regarder" Ax The stratification of the 'D' trench is very similar to that of the 4' There are three main types of soil. The lowest type consists of

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a led may one cultured level with was avidentily nere are several interesting point is . and floor stratifications (see drawings). TEXT one 'I' treath is very similar to that of the '4" There are three main types of soil. The Rowest type consists of

the natural stratified layers of sand and gravel. It did not contain any artifacts or other remains except in one place that we believe to have be n a rodent hole. The gravel and sand layers come to an abrupt end and are replaced by the cultural level, showing clearly where the old inhabitants dug out their pit.

The next layer is not directly above, but more to the perimeter of the hole. It contained artifacts and other remains, but its only difference from the main habitation layer is that the soil is sandier and probably a transition between the type of soil which surrounds the pit house and that which is in it. The main layer is darker with far more humus, and contained most of the artifacts. At one spot, between sections D-4 and D-5 in the 'D' trench, this layer drops sharply into the natural sand and gravel layers. There is no composition change in this depression, but it could possibly have been a small storage pit within the pit house. Between the main layer and the gravel layers there is a layer of very dark soil. As this contained many very small pieces of charcoal and much fire-cracked rock, this was probably the fire place.

In the third layer of the '4' trench there was a light patch about 11" wide that ran for almost 10". Cross-sections of it are seen in the stratification drawings.

The large storage pit (?) which is cut in half by the '4' trench is very interesting in terms of stratification. It cuts off the shell layer that is located in that side of the pit house and also the other stratification layers. The composition of the main layer of the storage pit is similar to that of the pit house. It is also characterized by World ava series of dark and light coloured soil layers which extend far deeper into the gravel layers than the lowest habitation level of the pit house. The way in which it cuts off the pit house stratification is one of the reasons why we believe the storage pit is more recent than the pit house.

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The other reason is the layer of almost sterile (it contains small pieces of shell and bone) gravel located directly above sections A-4 and most of X4. Because of the extra depth of the storage pit, there must have been a great quantity of gravel and dirt, so it was just thrown onto the edge of the pit house, raising that end almost 6 inches above the datum stake at the other end of the pit house.

Probably the reason for the more than 2 feet of continuous inhabitation layer was seepage of dirt through the roof. According to Teit (1900), there was a great deal of seepage of insulating soil. He said that there was a warning cry before entry into a pit house to enable exposed food and tools to be c vered. The resulting shower of dirt, coupled with socke and poor light, could quite conceivably cover up small artifacts such as projectile points, awls and even needles. This seepage could explain the unlayered habitation level because 2 feet of earth could easily come down within the years of use of the pit house.

ARTIFACTS

We have found many more artifacts than we had expected, and most of them fit into what is termed the Kamloops Phase (Sanger). To date there are 127 artifacts from the excavation and 93 stone surface finds. The surface finds will be dealt with separately. The type of artifacts found in the dig are chipped stone, abrasive stone, bone, antler and tooth. To contrast with these primitive stone age tools, a modern shot shell was found in the turf of one square.

PROJECTILE POINTS

This category alone included 48 artifacts, 7 of which are broken tips and cannot be classified as any particular type. The remaining were categorized on the basis of outline, giving eight different types.

The most common is a small triangular side notched point with one or more notches on either side. They range from 0.8" to 1.3" long, and from 0.4"

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to 0.7" wide. Black basalt was the material used for making most of these, but one point was made from semi translucent quartz and one of the tips was of orange agate.

Another of the more common type of point is the leaf shape. This is divided into three categories, leaf, stemmed leaf, and flat based leaf. The main material used is again black basalt, but several are of a woodgrain basalt which is usually brownish. Some of the points are very crudely chipped, while others have been very finely worked by pressure flaking.

The length ranges from 1.6" to 2.0" and the width is 0.5" to 1.8". There were 4 triangular points found that look as though they could have been unfinished side notched or stemmed points. They were all of black basalt. Only two pentagonal points were found in the excayation and three stemmed points. Both are relatively rare in the Kamloops Phase. One of the stem ed points is made from chalcedony and the others are made from basalt.

Several very large types of tips were found in the excavation and most of them were very crudely worked. Judging from the angle of the two remaining sides which form the point, they were probably spear points or extremely large arrowheads. But the possibility remains that they could have been scrapers or large knives.

SCRAPERS

There are many varied pieces of chipped basalt found that can only be classified as a type of scraper or knife, or both. These are nearly all apparently made from any spall or flake that might have been on hand and were worked to whatever shape was needed at the time. A few are shaped in such a way, that they were probably hafted at one time or exother. The rest did not need any special shape other than a shapp

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edge, because of the adaptability of the human hand.

There were in all, six end scrapers which had a shaft portion for mounting. They are very thick at one end with long vertical grooves struck out of the end. These were probably used for harder substances like wood. They are made from woodgrain basalt or black basalt, and are up to one and a half inches long.

The most common type of scraper found was the one worked on one side and one face only, but a few were worked on both faces. Most are long and narrow, up to $2\frac{1}{4}$ long and $\frac{3}{4}$ wide. Most of them could have doubled as cutting edges like a knife, and were probably used for both cutting and scraping.

Another common type of scraper was the one worked on both edges for almost the total circumference of the scraper and only on one face. The largest one is about 21 long and 12 wide, and quite thin. It is made from a woodgrain type of rock. They are not usually worked all of the way around and have one flat end. In fact there were no really large oval or discoid scrapers found in the dig. The only ones of that shape were about one inch long.

Four very crudely worked or possibly unfinished pieces were found, all approximately the same shape and size. They are 2" long and 1" thick. Two are made from woodgrain chalcedony and two of black basalt.

AWLS AND DRILLS

All the awls and drills were made of black basalt. By awl, we mean a tool used for punching or scratching holes, and not necessarily used for drilling. The awls come to a point more gradually than the drills, but, in fact, none of the drills we found have long straight eides and a flat tip.

There are 5 drills and the longest is about 2" long. The smallest

ciffe and the longist is show a Pagg. The first

is very exquisitely worked and has a very fine sharp point. The blunt end of the drills are usually worked, but in this instance it is unsmoothed.

HAND AXE

There is only one hand axe type of tool. This was found in the A-4 square and is not finely finished like most adzes. But rather, it is a slightly retouched spall of agate, with a crystalline core and a rough exterior. The distal end is flat, giving a cross section of the interior. The working at the sharp end takes advantage of the natural shape of the rock. It was probably used for cutting wood or small branches.

ABRASIVE STONES

Only two examples of abrasive sandstone tools were found in the whole excavation; the larger is of a finer grained sandstone than the smaller. It is six inches long by three inches wide and about one half inch thick. The corners are almost all square, so it makes a large rectangle. The two ends are snapped off and are flat, but both of the long sides are rounded and smoothed off. This was found in conjunction with several other tools and a worked piece of bone, and will be discussed later.

The other abrasive tool is approximately a two by two inch square, three quarters of an inch thick. It has grooves running horizontally and vertically on both faces and almost all sides. There are approximately ten individual grooves. It was most likely not a naturally shaped square, but rather, fashioned that way to make best use of all six faces.

SMOOTH OR POLISHED ROCK

Several pieces of rock were found that could have been from a

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there is no band are type of tool. This was found in the A-A squere and in the like most adses, but rather, it is a slightfully setor ad spall a sgets, with a crystall, a core and analystation. The listal end is flat, giving a cost cotton of the latural terior. The working at the sharp end takes advantage of the natural shape of the rook. It was probable if nor setting wood or small branches.

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polished metamorphic rock artifact. None of the three found were related to each other, and the largest is only about an inch long. Most of them have a slight curvature on the smooth face. The most interesting piece of polished or smoothed rock is a chunk that is about ½ x² x² inches. The smooth surface has two completely flat levels, one very slightly above the other. There are very small longitudinal scratches running along the surface which might indicate the type of smoothing technique used, or the actual use of the rock itself. The underside and all of the edges are very rough, showing the natural structure of the rock. Only one whole polished rock was found. It has a very smooth surface and a small fracture at one end. It is 2½ inches long and 1½ inches in diameter. This rock might have been a tool flaker, but the ends are not very battered and, judging from the glossy surface, it might have been used for polishing.

HAMMER STONES

There was only one pestle found in the excavation. It is a natural granite cobble about 5 inches long and 2½ inches in diameter. The exterior of the rock is reddish in colour, and there are small mica particles throughout the rock. It was found very close to several molar teeth of elk or deer and some were shattered. Both ends of the hammer or mall are battered and it was not preshaped for use like most of the hammers common near the Thompson River. It was situated with the teeth and three basalt flakes and a few small pieces of bone, between the lowest level of habitation and sterile gravel layers.

TOOL FLAKER

It is surprising that only one definite chipping pebble was found in the excavation. This pebble is almost spherical and is battered

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polished metamorphic nock artifact. None of the three found were rested to each other and the largest is only at at inch long. Most them have a sligh annyature on the emoot. Lac. The most interesting piece of polished or secrethed rock is a chunk that is about \frac{1}{2} x\frac{1}{2} \text{ inches and the emoot state is about \frac{1}{2} x\frac{1}{2} x\frac{1}{2} \text{ inches and the emot is a chunk that is about \frac{1}{2} x\frac{1}{2} \text{ inches and inches are second to the emotthing and the emotthing and the emotthing and the ease are second nough, showing the natural atructure of the second and a small fracture at one and. It is 2\frac{1}{2} inches long and 1\frac{1}{2} \text{ inches long and 1\

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heavily on one half. It is a coarse grained type of rock and fairly heavy for its 1½ inch diameter. Almost any shape and size rock could have been used for flaking basalt as long as it didn't crack itself from the impact, and it is probable that most of the other cracked rocks found in the excavation were used for this purpose.

ANTLER ARTIFACTS

The antler industry does not seem to be very extensive. There were only two antler artifacts found and neither had any ornamental designs. These were both wedges. They are both the same type of wedge and are in very good condition. One is 5 inches long and the other is 4 inches long, and they taper from the blunt end to the point very smoothly. The larger is two inches wide at the proximal end and the smaller is only 1 inches. The antler cortex runs the whole way along the center of each wedge almost to the point, so they are the shape of half a cone. The proximal ends are well battered from being hammered, and both have had pieces flaked off. The tips are polished from use, and on the larger wedge the tip is cracked perpendicularly to the long axis of the wedge. They were found two feet from each other in the same layer and very near to the centre of the pit.

One interesting piece of antler, in fact the only other one found, is what appears to be the waste product of the manufacture of a wedge. It is the stub or crown of an antler that has been removed from the main part which would have been cut in half lengthwise and fashioned into one or two wedges. Cutting marks incise the hard outer part of the antler around the whole circumference, and the softer cortex was snapped off.

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BONE ARTIFACTS

There were 12 bone artifacts found in the excavation. Some were very near the bottom of habitation and others were close to the surface. Eight of the twelve are points, two are needles, one is a bone tube, and one an unfinished tool found with the tool kit. Much of the bone has a darker texture than the other and is more porous. This could indicate that they have weathered before being buried. All of the pieces are polished from much use and are very smooth. There are no ornamental incisings on any of the artifacts.

NEEDINES

Two needles were found, both from opposite ends of the 'D' treach. One was found in four separate pieces and later reconstructed. The tip and a section of the eye were not recovered. It is 5 inches long and 3/8 of an inch wide, and if unbroken would have been approximately six inches. Both ends would have been pointed. The eye is scratched through from both sides and is located an inch from the remaining end. It was made from a rib and is darker and probably older than the other needle. The needle has a quarter of an inch of curvature. All of the pieces were located in the first layer of excavation, just below the sod layer.

The second needle is in far batter condition than the first. It has the same basic shape as the other, but was probably rade from a longitudinally split long bone or cannon bone as it has no curvature. It is very light in colour and was probably less used than the dark needle. There are no signs of workings on either one, but this one is especially smooth. It is exactly 6 inches long and ½ inch at the widest point near the eye. This eye is also scratched through from both sides and is about ½ of an inch long compared to the other one which is ½ inch long. Both needles are 1/16 inch thick.

BUTE ARRITMACES

There are 12 bone iffects found in the encaration. Some were ery are the bottom of test in and others were close to the surface.

Bight of the 'walve are 'ste, the are needled, one is a bone wate, and one as unfir 'shed tool and with the tool bit. Nuch of the boar was a terker texture than the other ad is now perces. This could indicate that they have resthered infer being lardel. All of the picce are polices are noticed in one way about. There are no court mixed incisings or my of the other way, about. There are no court mixed incisings or my of the others.

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Two no less were found, both from opposite only of the for tranch. One was found in four reparate places and later receasing the first time. and a section of the cya ware and average. It is 5 inches Arts and 3/8 of an inch wide, and by a time would have been approximately six inches. Para mould have a jest the Rie syn is constabled through enw di . Sao prinseso - - mori - hai - hit cod ef bin made from a light ond to death a translate olde other through a collection occides. The accide has a quarter of the deal of remains. All if the passes rero located in the filmsh layer of ercay i in, just i or the act layer. TI very call and indistruct worked act of at elbeer broker add has the same basic share as the other, but was probably waste long trudingily apith long both or earlies being as it in a religious Mass con mach form east willedown ass bas wester at their ward at ti nesdie. There are no signs of workings on sither can, but this or his especially smooth. It is exactly 6 inches long ort & inch at W ! ! !dest point ceer the aye. This eye is else con taked throng farm both and the lines ? of an implications compared to the edges the thint to the long. Both needles are 1/16 unch thick.

BONE POINTS

There was only one large awl found in the dig. It is made from a long-bone splinter which is yellowish-white, as is the unbroken needle. It is approximately 8 inches long and has a finger and thumb hold that are polished smooth from use.

The medium sized awl is 4½ inches long and made from the same type of bone as the large awl. Its tip has been ground to a very sharp point, not like the larger awl which was fashioned from a naturally shaped splinter

Four of the small type of awls were made by the same method as the medium sized awl, and one is only the broken tip of a larger awl.

One bone point, approximately 2 inches long and pointed at both ends, could have been used in a fish hook. It is notched around the center, probably to allow for hafting.

TUBE

The only bone tube was found very close to where the storage pit cut into the pit house. It is 2 inches long and ½ inch in diameter. The walls of the hollow tube are 1/16 of an inch thick. Both ends were cut off by cutting and scratching, but one was cut straight off, and the other end was probably snapped as well because it is irregular: Similar tubes have been found in the Chase area. There are longitudinal scratches running along the whole circumference of the tube.

TOOL KIT

This tool kit consists of four parts; an abrasive stone, a basalt knife, a beaver tooth incisor and a half-completed bone tool. The tooth, knife and bone were all resting on top of the stone.

The abrasive stone (23 a) is made from a fine grained hard sandstone. It has been worked to a definite shape, and may have been used

BORTS POINTS

There was only one isnge out found in the dig. It is made from a cong-pone splin or which is yould white, as is the unbroken needle It starsarbely 8 inches long and has a finger and thus bold that are polithed among from we.

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The medium wised two and one is only the broken it of a legger enl.

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The abrasive evone (23 a) is nede from a fine grained bend andstone. It has been worked to a definite snape, for yew have been past like a jade saw at one time. Both ends have been snapped off. It not shows signs as having been used as an abrader; a shallow groove runs near the center on each face.

The basalt knife (23 b) is a flake with wood-grain type banding in it. It shows very little retouching, only one small edge, and what are possibly worn chips on another. It seems likely that it was a graving tool, used for making grooves to break bone accurately (as with the bone in this set) and to make needle-eyes.

A beaver tooth (23 c) was part of the tool kit. This tooth had been extensively re-ground, indicating much use. The point has been ground down on the inside face. This part has rough scratch marks on it. The inside edges 1 inch from the tip have also been ground down, tapering towards the end. This part has a polished glossy face, not like the rough, coarse scratches near the tip. This was also a graving tool.

The last of the group is a half-finished bone tool (23 d). One face and both edges are completely covered with rough coratch marks. On the opposite face a long straight groove runs the length of it. There are also a few scratches on this side. At one end there is a partially sharpened tip, made by grinding down the edges.

The took kit is one of the most interesting finds of the encavetion, and one that is most unusual, because its position was undisjurbed
from the time the craftsman left his work. It seems rather unlikely
that this set of tools would have been left like this under normal
circumstances.

PAUNAL REVAINS

The greatest amount of material found in the excavation was of faunal origin. However, this category refere only to the unworked faunal material. This includes bone, another tooth, and shell. Some

like (ade saw at one vime. Both ends have been enapped off. It now shows your set as the constant a shallow groovo rung near the property on the contract of t

the baseaus built. 23 b) is a field with word-grein type bruding in 1 c shows went listly requesting, andy one small edge, sed what are jos they note that went listly note to the control of the control

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of the material was burnt and charred, but most was not.

None of them are very large because they have been splintered, so that the average is about 1½ inches long; but there are several pieces that are from 6 to 7 inches in length. With most of the bones being so small, accurate identification of each is almost impossible. The highest concentration of bone was in the central part of the pit, as were the artifacts; there was less concentration nearer the perimeter of the hole.

There was quite a large percentage of fish bone coattered throughout the pit. Some was found in almost complete spinal columns, but the majority was dismembered. Approximately 25 gorge teeth and 400 fish vertebrae were found.

Several mouse jaws and larger redent jaws were discovered; some were probably remains from the later inhabitants of the pit house.

Roughly six beaver incisors were found, all unworked.

Smaller pieces of antler were categorized with bone because of their similarity, and the fact that so little of it was probably antler.

Many small pieces of molar teeth from deer, and possibly elk, turned up in the screens. Most were not whole individual teeth, but cracked into many sections. Only one portion of a jaw containing teeth was found in the excavation. It seems surprising that not more than one was found, because, in all, there was quite a large variety of animal bone found.

The only type of shell found in the excavation was the fresh water clam (Anodonta. Sp.). It was found in largest concentrations near the perimeter of the excavation, especially where the storage pit cut into the pit house. At first this large band of shell appeared to be part of the storage pit, but after complete excavation it was clear in the stratification that this layer of shell was deposited earlier than the

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storage pit. Shells were deposited at the side of the pit after being emptied; this is evident because of the way the shells were stacked into each other. A large quantity of the shell was burnt and flaking apart, indicating that much of the clam was cooked right in, or over the fire. This shell layer is approximately 5 ft. wide and 3 to 4 inches deep in most places. The only shell found in the central part of the pit house was very small and finely crushed, making the dark soil sparkle in some spots.

DETRITOUS MATERIALS

Large amounts of unworked rock were found in the soil. Most were either natural water-worm pebbles, or rocks cracked from being used in the fireplace. The other type of rock flaked from the manufacture of stone implements.

Most of the flakes were basalt which showed no signs of alteration. Other types were obsidian, chalcedony, agate and "wood-grain" basalt. Usually these chips were very small and thin, but some spalls are 2½ inches long. These were all very irregular in shape and were found scattered about everywhere in the pit.

The fire-cracked rock was usually between 4 and 5 inches long with some up to 9 inches in length and relatively uncracked. Most was very coarse grained and rough in texture, with flat fractures. Some clumps of rock were found near the edge of the pit, but most was located in the central portion. There were no definite "fireplaces", but the whole central region had large concentrations of charcoal. The only pieces of wood found in the excavation were very small and completely charred. The only large piece of charcoal was 8 inches long and 4 inches thick, with a small amount of unburnt wood intact in the central.

storage pit. Shalle were deposited at the side of the pit after being amptied; this is evident because of the way the shalls were stacked into such other. Perfo quantity of the shall was burnt and flaking apart. Idinating the one of of the clear was cooked right in. or over the fire. This hall yet as a proximately 5 ft. wide and 3 to 4 inches deep in most places. We only shall found in the central part of the pit house was very small and finely orached, making the dark soil spark of in some spots.

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None of this charcoal would have been suitable for radio-carbon dating, as it was almost all completely permeated with small rootlets. Some of these cracked rocks could have doubled as bone crackers, which could explain the wide scattering of this type of rock.

SURFACE FINDS

During seasons of low water, the gravel beach at the site stretched out for fifty yards in some spots. This provided excellent relief from the semetimes boring excavating, and also contributed to the numbers of artifacts found. Altogether there were 88 stone surface beach finds, as compared with only 5 stone surface finds inside the village. There were no bone surface finds because of the decomposition of exposed bone.

Most of the projectile points were either side-notched or stemmed; there were only a few wholly leaf shaped points. The main material used was black basalt, but there was also "wood-grained" basalt, chalcedony, agate and quartz.

There were 12 side-notched points, 11 stemmed points, and 3 triangular-shaped points. These three may be drille, but the tips are
not smooth. There were 14 tips found that could not be classified.
Of the leaf shaped variety only 4 were bipoints. Two of the others
were stemmed and 3 had flat bases.

There were 9 drills and swls found; some were worked for hafting but most were hand held. All of the rest (35) were classified as scrapers or knife-like tools. Of these, 13 were bifactal with all edges worked; 3 were bifactal with only one edge worked; 5 were worked on one face and two sides; 7 were worked on only one face, and one side; 7 were worked on one face, and this side was rounded.

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Vone of this charactal would have been suitable for radio-corbon dethny, as it was almost all comp tely permeated with small rootlets.

Some of these cracked roots could have doubled as bone crackers, which could emptain the wide seattering of this to set roots.

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of this pit house other than the shape. No signs of post holes were found, and there was almost a complete absence of wood. There is not enough charcoal and ash to suggest that the wood structure was burnt, so perhaps it was removed by the inhabitants or other people. There is also the possibility that the wood was washed away in a flood, or that it completely decayed on the surface. The storage pit was definitely erected after the pit house, and possibly after it collapsed.

A rough estimate of the length of occupation of the pit house is approximately ten years. The bone and shell deposit would probably have been far greater if it was inhabited for much longer. Of course much of the waste could have been hauled outside, but there is no evidence of a midden heap; the roof, if anything, was probably used for this purpose.

All of the artifacts conform to what is already known about the Late Kamloops Phase. There is a close similarity to those tools found at the Chase Burial EeQw:1, excavated by Sanger. He approximates this period to last from 1250 A.D. to roughly 1800 when a good quantity of post-contact trade goods were finding their way into the Interior Plateau. The whole village site was probably in semi-continuous use for a few hundred years, and it would be impossible to get the exact date, except from carbon-14 dating. However, the pit is no doubt a maximum of 400 to 500 years old, judging from the amount of surface erosion and the quality of preservation of some of the small wood samples.

Much more work should be done on pit houses, because they are capable of yielding excellent information about the daily lives of the early Indians. If more trained people do not study these van-

We are not able to make only concide conclusions about the structure area of for feed to sugar of. . Ogene out wells wedge esued tip ald in THE PROPERTY OF THE PROPERTY OF uplete abeane of wood. Chere is not destruction sendents food to the transmission of Synthesis sopration (1) So parbaus its sae - S ed to the Inhabited on other people. There the state of the season and season in a flood, or desails that osis ed - the artace. The etorago pit was dering itely ared to arter a the pile and are and seasing arter and arter. of the tength of coefficients at the pictorial and e entres a comme of ten years. The bone and cheil a goot would probably f it - a unhabited for door longer. Of course T 0072 T on ex erest tud westerto bellad geed oven b 44,86 heap; the cost, is colling, was pronchly used Lor will .0800 the are facta confirmed where a knowly known about the Cherry is the standarthy to those costs toung THE STREET ONLY SE soft entendance of the second of the second to ytitasup toog is dody to by glazur- it. ha Gesties per Joseph Labt v wolvessi add force the tieft seet to be about 47 798.X te exatity w onT eau successance impt n - Redour humored years, and it would be impositable to get the chast de nel copt from contact action-is desire. However, the pis is no declar ac destinue of 400 to 500 years old, judging free and appears of curries eroct cerd the unlity of predervation of mass of the certification

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ishing sites, the expanding development of the Thompson Valley will soon erase them forever. The Provincial Government must also enforce its Archeological Sites Protection Act, because the vast majority of people do not realize the damage they do with pick and shovel on weekend afternoons.

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We would like to extise our gratitude to the meny bas goldevsome odd ddiw as and are add to tog ong to e this dip possible. Most ar par te de de Blaridge and Mr. gninob gnivinh to relie to the to redw and Mrs. er begind even ofte the have helped ne their week Title of transportation are Mr. & Mrs. तिनाम मिल्ला है। Mrr. Meadham, Mrs. Middleton, Mrs. Rose, tuggine d dom Sbrowi, a few man we sould also like to thead the ear people eve thes to two dirt-covered students while in atom a the reside limb-hiring. The excave on was supported by the Mamioops Margun and one to coals a tetigans only yeld has tatoosaA information recover do to correlated. Curates Mrs. Mary Balf has been the gret seet belg with proof-reading, typing and general all round encouragement Mrs. Rose also helped tremendo. My with the Myging.

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Toyot Dayor					Type Single S. Sing Ec2:2-95 Ec2:2-96 Ec2:2-102 Ec2:2-61 Ec2:2-67 Ec2:2-100	Length le F. l.1.0 l.4 l.5 2.3 2.4 l.9	.5 .7 1.1 1.5 .9	Thickness	Loca Section A-4 A-4 D-2 G-4 G-4	tion Layer 4a 4a 5b 4 3b 5a 5a
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					E-91:2-23 E-91:2-30 E-91:2-30 E-91:2-30 E-91:2-35 All S. All F. E-91:2-31 E-91:2-31 E-91:2-31 E-91:2-31 E-91:2-30 Table 4	1.2 1.7 1.1 2.9 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	.66 1.6 1.6 1.2 1.2 1.1 1.2	Thickness	D-5 R-4 D-5 D-2 D-4 B-2 D-2 D-4	30 50 10 50 50 24 44 60 40

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Table 5	HANI	HAMTER	STONE		
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Table 7	BONE P	OINTS			
Туре	Length	Width	Thickness		
Large EeQx:2-36	8.1	.8	•4	D-5	36
Medium EeQx:2-38	4.5	.6	ol _t r	D-5	3b
Small EeQx:2-41 EeQx:2-120 EsQx:2-22 EsQx:2-125 EeQx:2-89	2.6 3.0 (3.2) 2.2 (2.8) 1.6 1.0	.6	.3 .1 .2 .2	D-2 X-4 D-1 X-4 A-4	5a 4b 2 5a 3a
Fish Barb EeQx:2-21	2.0	.3	•3	D-1	2
Table 8	TUBE			•	
	Length	Width	Thickness		
EeQx:2-107	2.0	.6	.1	24	15
Table 9	WORKED I	ONE (Uni	(inished)		•
	Length	Width	Thickness		
EeQx:2-23d BeQx:2-24	7.1 6.3	.6 1.0	.3 1.0	D-2 D-3	2
Table 10	WEDGES				
	Length	Width	Thickness		•
SeQx:2-20 EeQx:2-25	4.8 4.0	2.0	.7	D-3 D-3	4.
Table 11	WORKED A	NTLER (m	nfinished)		
EeQx:2-66	2.7	3.6	1.9	G-4	3b
	4	10 grant 10	the second of th	interior de la compansión de la compansi	

	***************************************	Sub table to her in-	Compagnish of each	194 96	
on Layer	Eccetic Section		Widt	Length	3eQx:2-123
SÜ	1.1	2.5	2.2	G.A	Land to the same of the same o
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ďÇ	A Market	4 · 4	3.6	5.5	36-8:3808

Table 12	BEAT	VER TEETH			
·	Length	Width	Thickness	Loca: Section	ti e n Layer
EeQx:2-23c EeQx:2-119	1.2	.3	.2	D-2 X-4	2 4a
Table 13	OTHER	TEETH			
	Length:	Width	Thickness		•
Polished EsQx:2-117	. ප්	.6	.4	1980 A	
Notched EeQx:2-129	.9			Z-L	2 b
Unworked	• 7	.2	.2	D-2	3
EeQx:2-124	2.1	2.0	.6	X-4	5a
Table 14	POLISHI	ED ROCKS			. 1
	Length	Width	Thickness		• 1
EeQx:2-130 EeQx:2-131	1.0	.7	.5 .4	B-4	40
EeQx:2-116 EeQx:2-137	2.4	1.8	1.6	A-4 A-4 B-4	1a 4b 5b
Table 15	TOOL FL	AKER			
EeQx:2-136	Length	Width 1.7	Thickness 1.7	C-4	5a
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Table 18	WE:	IGHTS OF B	ONE, SHELL,	AND	BASALT,	(ounce
Layer	B.&A.	Shell	Basalt		•	
D-1, 1	3.0	1.0	2.5			
D-1, 2	3.5	4.0	1.0		•	
D-1, 3	1.0	4.0	0.5			
D-1, 4	3.0	0.25	0.5			
D-1, 5	•		400		• 1	
D-1, 6	-		***			•
D-2, 1	3.0	0.5	0.5			•
D-2, 2	3.5	1.5	0.5			•
D-2, 3	9.0	4.5	2.5		t say in Arg	e Para service
D-2, 4	7.0	14.5	2.5	••		
D-2, 5	4.0	1.0	0.5			
D-2, 6	3.5	0.5	0.5			
D-3, 3	3.0	0.5	2.5	•		
D-3, 4	8.5	0.25	4.0		•	
D-3, 5	6.5	0.25	1.0			
D-3, 6	•	•	400			
D-4, 3	3.5	699	0.5			
D-4, 4	8.5	0.5	1.5			•
D-4, 5a	2.5	•	1.0			
D-4, 5b	1.5	480	0.5			
D-4, 6	•	•		•		
D-5, 3a	1.0	A Marie Company	0.5			•
D-5, 3b	3.0	3.5	2.0		•	
D-5, 4a	2.5	12.0	2.0			
D-5, 4b	3.0	11.5	1.5			
D-5, 5a	5.0	10.0	0.5		• •	
D-5, 5b	1.0	0.5			•	
D-6, 6	€		* 1			

AMD BASALT,	ON SHELL.	H 19 JIM	O. C.	Table 16
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Table 18 con	t.	•	
Layer D-6, 1	B.&A. 1.0	Shell 0.25	Basalt 0.5
D-6, 2	3.0	1.5	0.25
D-6, 31	1.0	0.5	1.5
D-6, 4	0.5	5.0	0.25
D-6, 5	0.25	1.0	0.25
D-6, 6	€#		•
C-4, 3a	2.0	*	· 1
C-4, 3b	5.5	69	0.5
C-4, 4a	8.0	69	1.0
C-4, 4b	9.5		1.25
C-4, 5a	5.0	0.5	1.0
G-4, 5b	1.0	0.25	0.25
C-4, 6	₩	650	
B-4, 2	2.5	· •	0.5
D-4, 3a	7.0	0.25	0.5
B-4, 3b	.9.0		1.0
B-4, 4a	7.0	439	1.0
D-4, 4b	2.5		1.5
B-4, 5a	2.5	469	0.5
B-4, 5b	1.5	0.5	0.5
B-4, 6	N39	***	
A-4, *1	0.5	0.25	0.25
A-bo la	5.0	0.5	0.5
A-4, 15	1.0	689	0.5
A-6, 2a	1.5	·	o 659
A-4, 25	7.0	(3)	3.0
A-4, 3a	3.5	2.0	0.5
A-6, 30	1.0	13.0	2.5
A-A, 48	2.0	13.5	2.0
A-4, 4b	1.0	9.5	0.5
A-A, 5a	1.0	21.0	0.5
A-4, 5b	0.5	2.5	0.25
A-3, 6	®	•	68

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Totals

Layer	B.&A.	Shell	Basalt
X-4, +1	0.5	0.25	0.25
X-4, la	0.7	0.25	***
X-4, 1b	3.0	0.5	1.5
X-4, 2a	0.5	3.5	459
X-4, 2b	3.5	27.5	0.5
X-4,3a	1.5	24.0	0.25
X-4, 3b	2.0	21.0	2.5
X-4, 4a	2.5	39.0	0.5
X-4, 46	1.5	22.0	1.0
X-4, 58	8.0	1.5	0.5
X-4, 50	496	1.0	1.0

12 1b. 17 1b. 3 1b. 7 oz. 1 oz. 3 6z.

Dia. #1

Table M. cont.

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PROJECTILE POINT OUTLINES







Stemmed

Stemmed Leaf

Plat Base Leaf









Leaf

Side notch

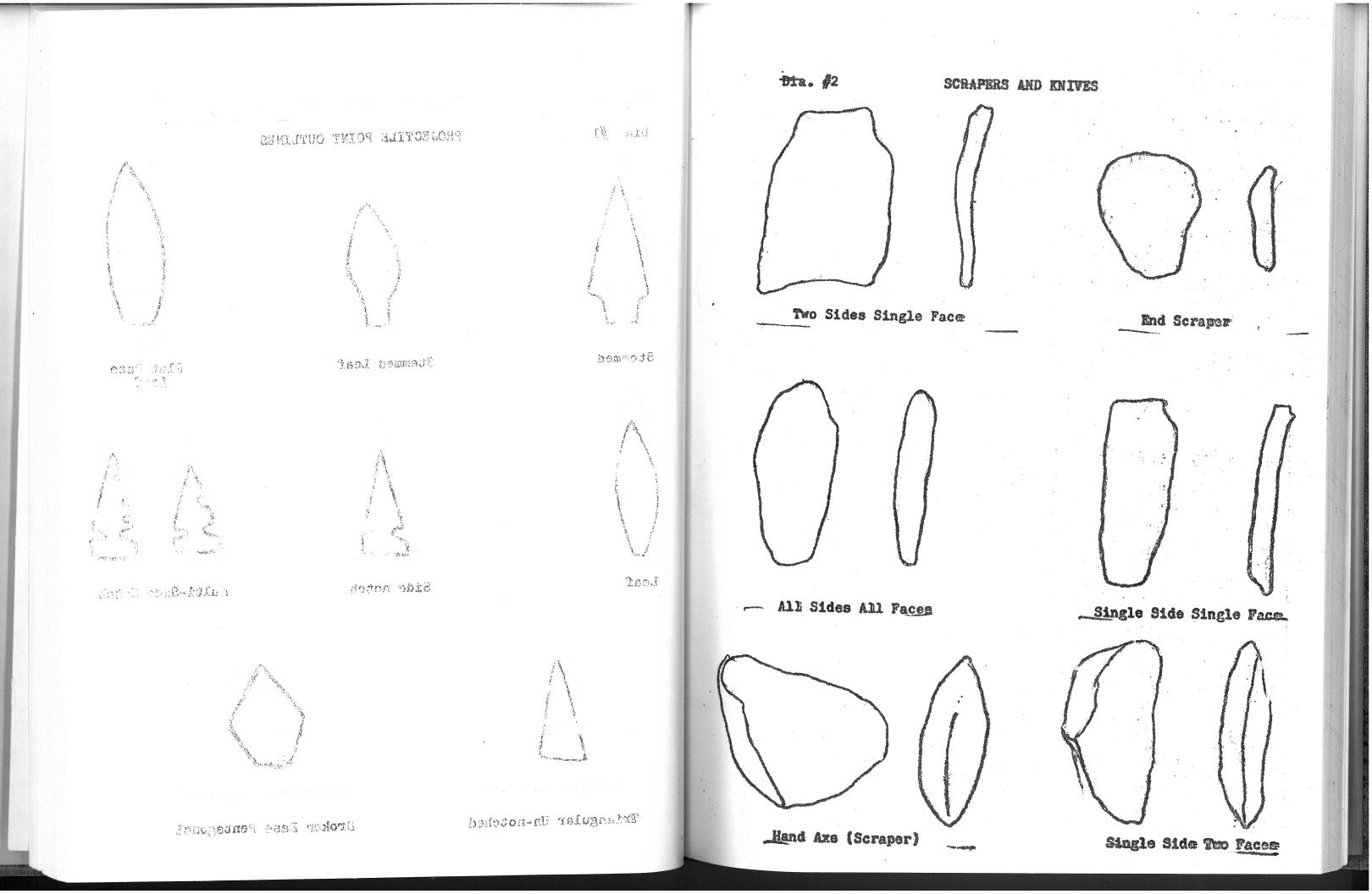
Multi-Side Notch

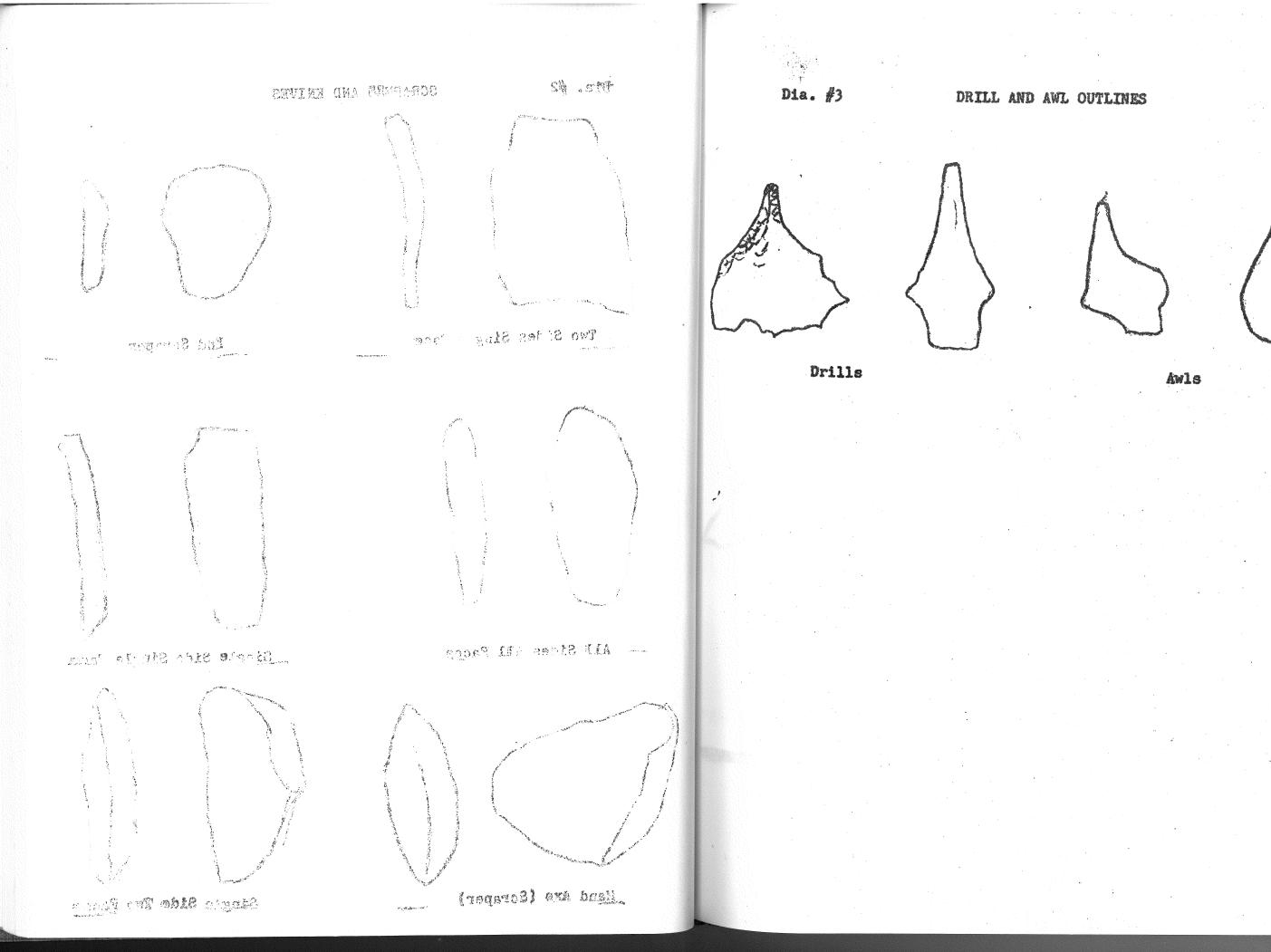


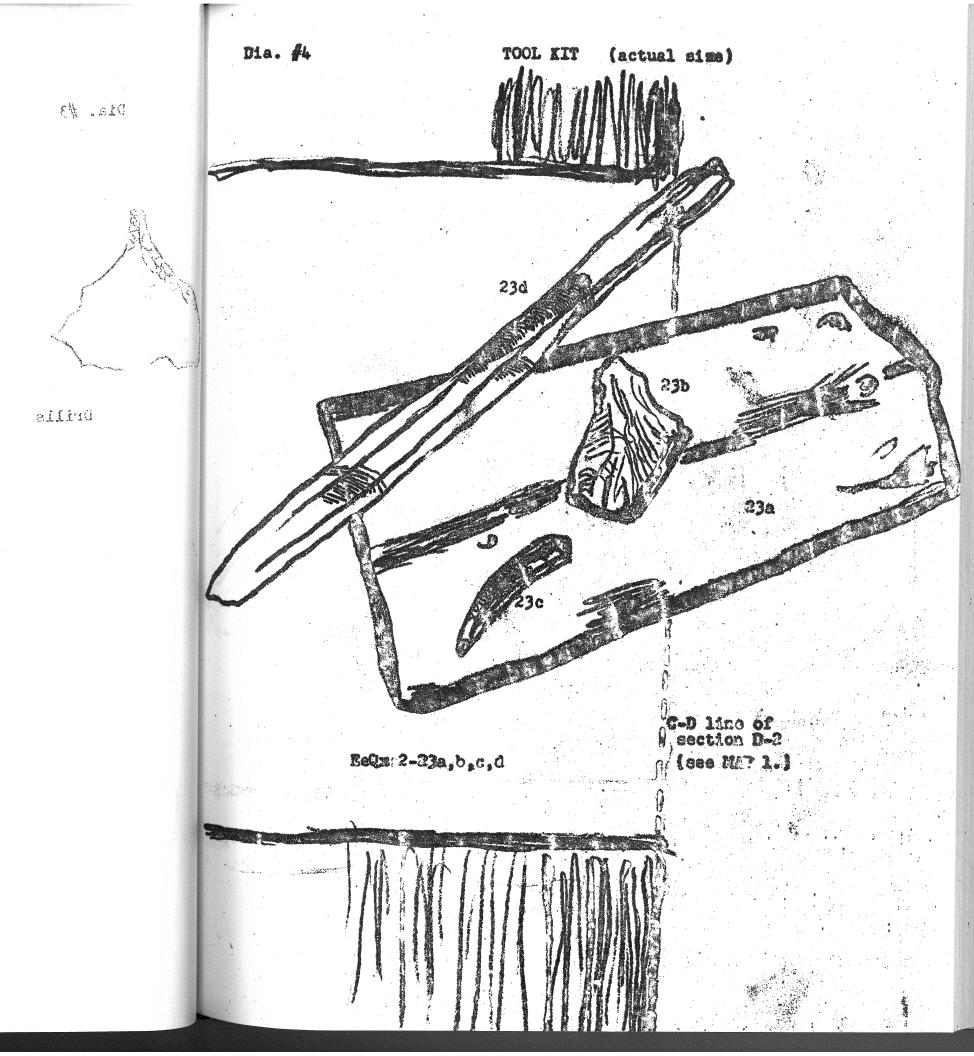


Triangular Un-notched

Broken Base Pentagonal

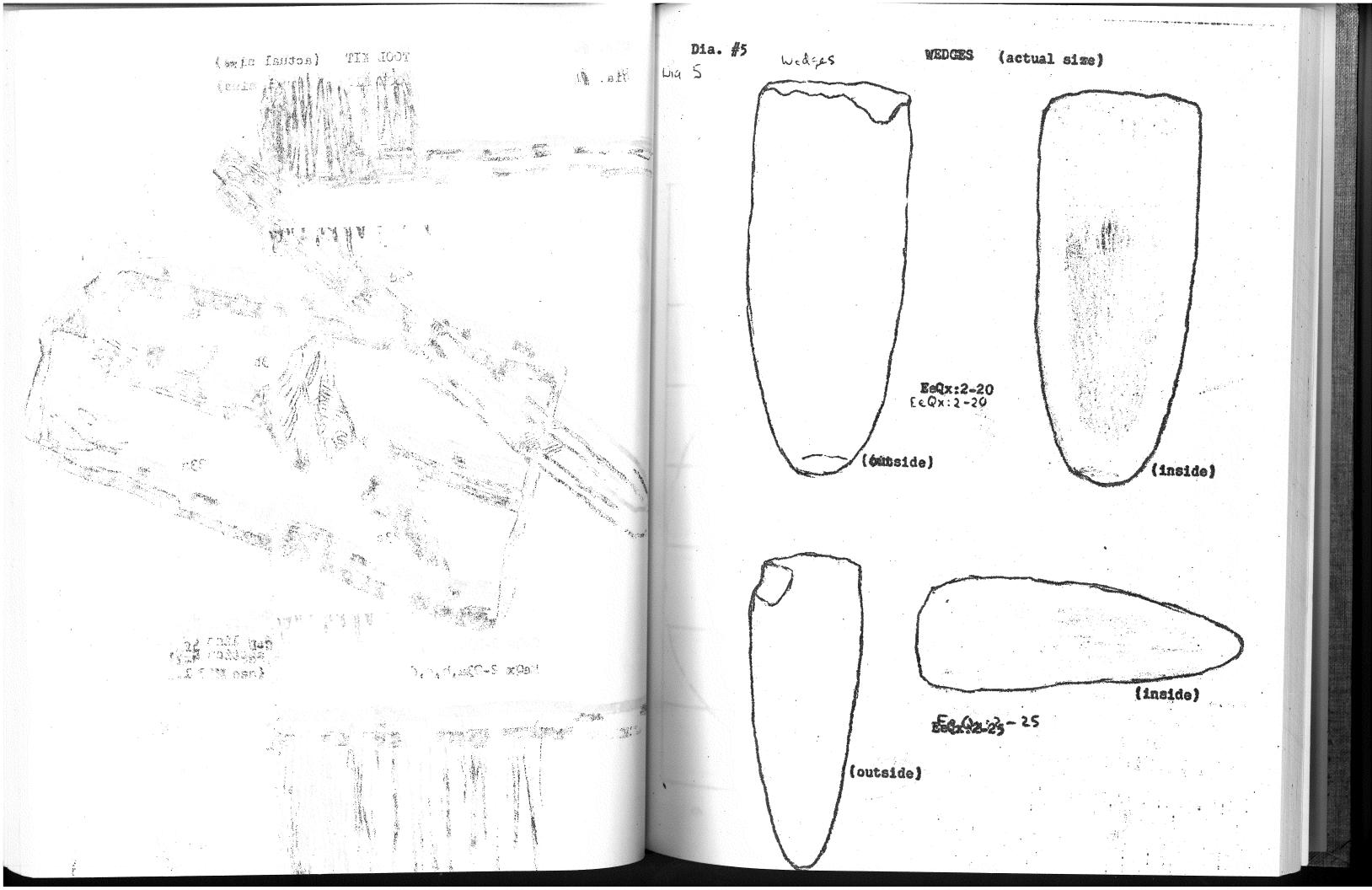


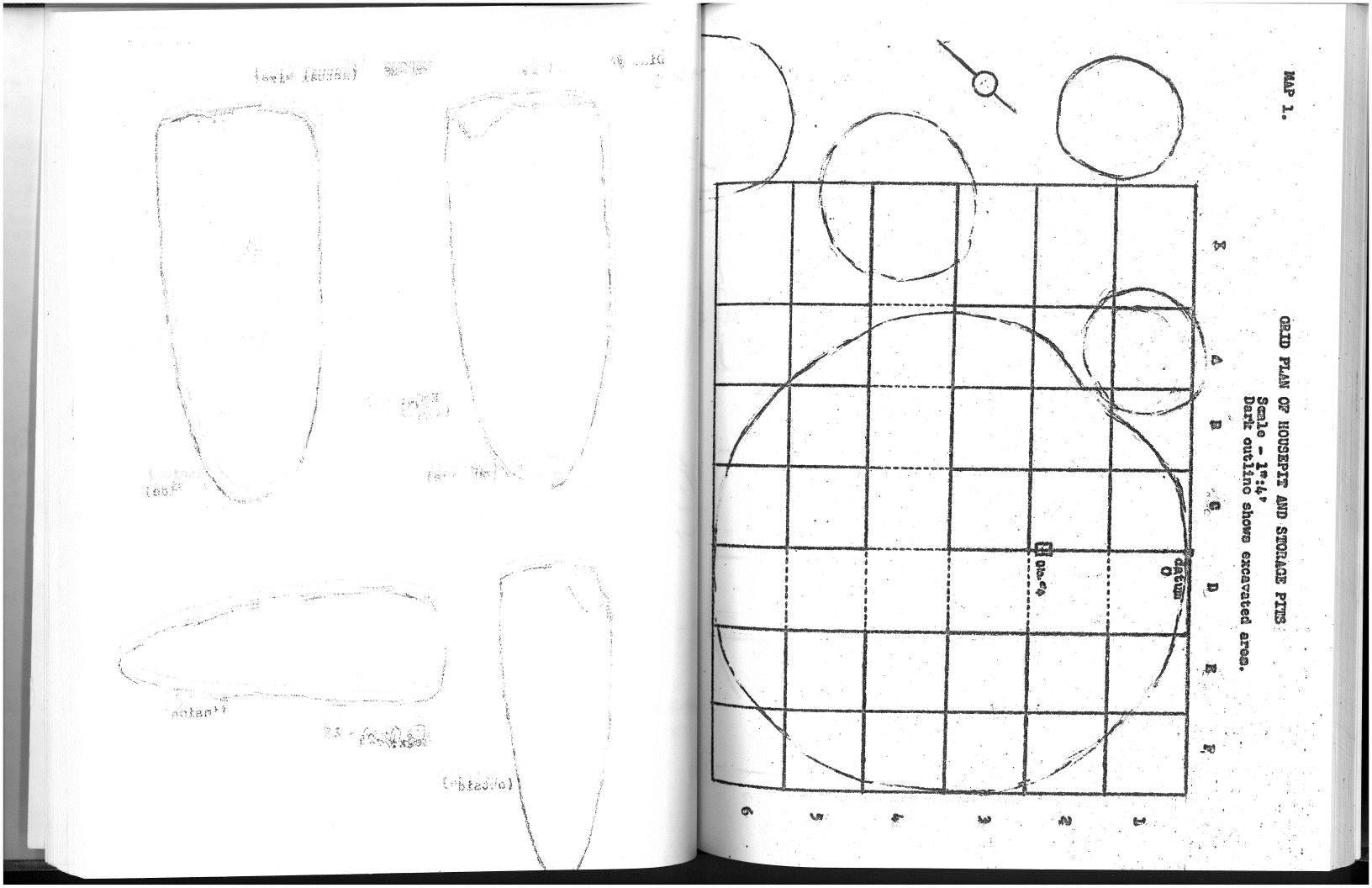


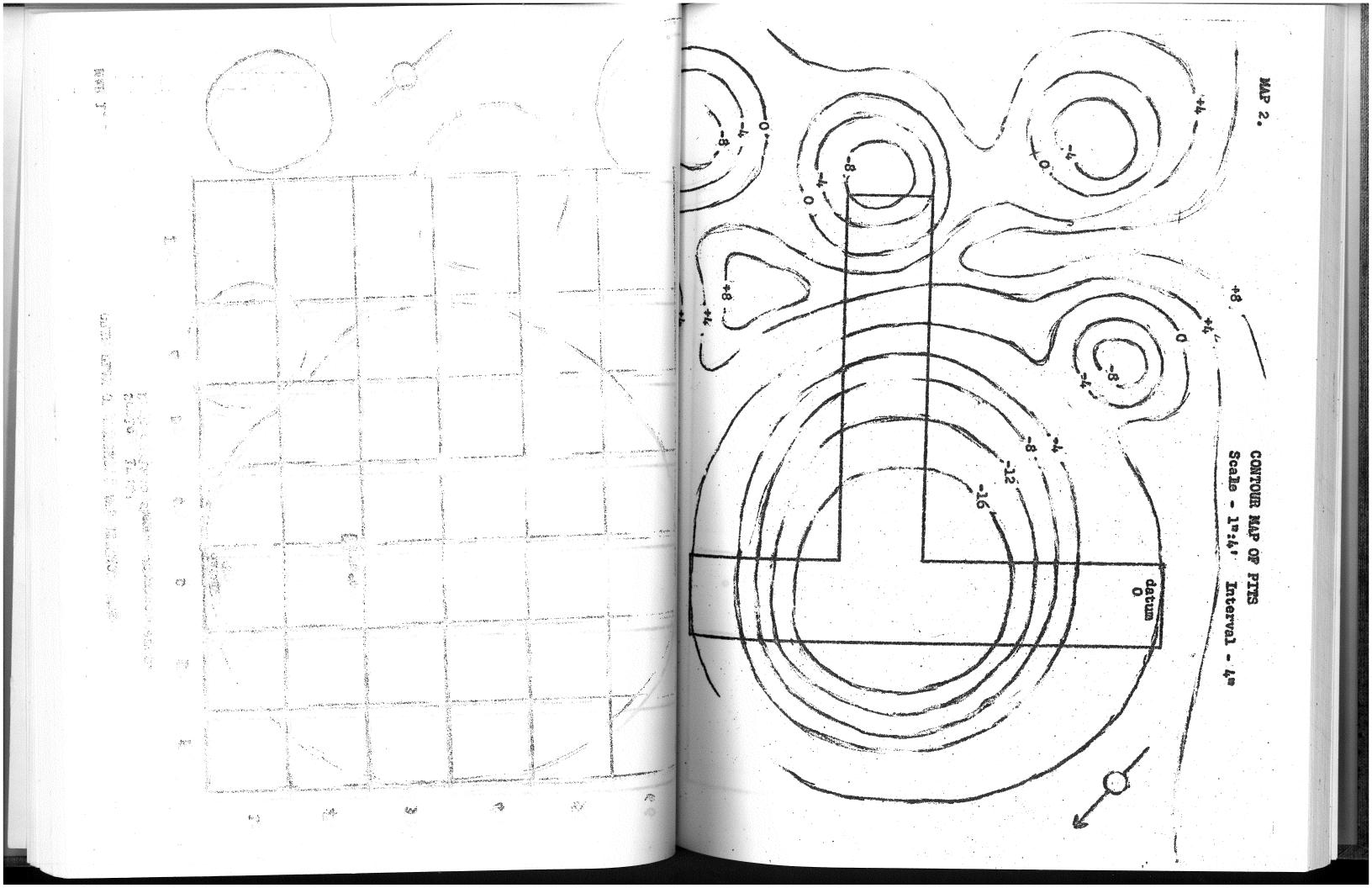


DRILL AND ATE OUTLINES

Awls







BONE AND ANTLER DISTRIBUTION

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Smill DISTRIBUTION

Scale - 1":4"

One dot represents approx. 202.

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