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CALIFORNIA ATHABASCAN GROUPS

BY

MARTIN A. BAUMHOFF

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PREFACE

In March, 1950, the University of California assumed custodianship of an extensive collection of original and secondary data referring to California Indian ethnology, made by Dr. C. Hart Merriam and originally deposited with the Smithsonian Institution. Since that time the Merriam collection has been consulted by qualified persons interested in linguistics, ethnogeography, and other specialized subjects. Some of the data have been published, the most substantial publication being a book, *Studies of California Indians* (1955), which comprises essays and original records written or collected by Dr. Merriam.

The selection and editing of the material for the *Studies* volume made us aware of the extent of the detailed information on ethnogeography which a thorough survey of the Merriam data would provide. We therefore approached Dr. Leonard Carmichael, Secretary of the Smithsonian Institution, with the proposal that a qualified graduate student be appointed as research assistant to study and prepare for publication a discrete amount of Merriam record material, remuneration for this work to be paid from the E. H. Harriman fund, administered by the Smithsonian Institution for preparation and publication of Dr. Merriam's ethnological data. This proposal was approved, and Mr. Martin Baumhoff began his one year of investigation on September 15, 1955.

After discussion, we agreed that the area where tribal distributions, village locations, and aboriginal population numbers were least certainly known--and also a field where the Merriam data were fairly abundant--was the territory of the several Athabascan tribes of Northwestern California. Under our direction, Baumhoff patiently assembled all the available material on these tribes, producing what is certainly the most definitive study yet made of their distribution and numbers.

In this monograph the importance of the Merriam data is central, although they are compounded with information collected by other students of the California Athabascans. We believe that the maps showing group distribution represent the closest possible approximation to the aboriginal situation that can now be arrived at.

The Department of Anthropology hopes to be able to continue the work of studying and publishing the Merriam data on tribal distributions. It takes this opportunity to express its appreciation of the cooperation of the Smithsonian Institution in this undertaking.

A. L. Kroeber

R. F. Heizer

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MARTIN A. BAUMHOFF

INTRODUCTION

In 1910 C. Hart Merriam, already well known as a naturalist, came to California and began the study of California ethnography which was to occupy him for the rest of his life. Almost every year from then until his death in 1942 Merriam spent about six months in the field, talking to Indians and recording their memories of aboriginal times. All this field work resulted in an immense collection of data on the California Indians, most of which has never been published (see Merriam's bibliography in Merriam, 1955, pp. 227-229).

In 1950 the greater part of Merriam's field notes was deposited at the University of California, with the intention of making them available for study and publication. One volume of papers has already appeared (Merriam, 1955), and the present study is part of a continuing program.

The California Athabascans were selected as the first group for study at the suggestion of A. L. Kroeber, the reason being that the Athabascans have been and still remain one of the least known aboriginal groups in the State. This is not because they were conquered early and their culture dissipated, as is true of the Mission Indians; there were scarcely any whites in the California Athabaskan area before the 1850's. Indeed, as late as the 1920's and '30's there were many good Athabaskan informants still available. The reason for the hiatus in our knowledge lies in an accident in the history of ethnology rather than in the history of California.

The early work among the California Athabascans was done by Pliny Earle Goddard. Goddard began his studies of the Athabascans in 1897 at the Hoopa Indian Reservation, where he was a lay missionary. He stayed there until 1900, when he went to Berkeley to work for his doctorate in linguistics under Benjamin Ide Wheeler, President of the University of California. Between 1900 and 1909 Goddard was associated with the University as student and professor and during this time he visited the Athabascans periodically, until he had worked with virtually all the groups considered in this paper.

During this same period A. L. Kroeber was engaged in gathering material for his classic Handbook of California Indians. Because of the scarcity of ethnographers in those years Kroeber could not afford the time to work in the Athabaskan area and duplicate Goddard's investigations. Kroeber did study the Hupa and the Kato at either end of the Athabaskan area but, except for a hurried trip through the region in 1902, he did not work with the other groups, and the responsibility for the ethnographic field work therefore devolved upon Goddard.

Goddard, however, was not primarily an ethnographer but a linguist, and he directed his chief efforts toward linguistic investigations. He has published an impressive

body of Athabaskan texts and linguistic analyses but, except for his *Life and Culture of the Hupa* (1903a), almost nothing on the culture of the Athabascans.

The net result is that the California Athabascans are virtually unknown, and Merriam's fresh data provide an opportunity to piece together the available evidence.

The Merriam files, deposited at the Department of Anthropology of the University of California, contain information on each of the tribes of California, some of it being information gathered by Merriam himself, the rest clippings and quotations from various historic and ethnographic sources. The primary and secondary materials are easily distinguished, since Merriam gave scrupulous citations to his sources.

Merriam's own data consist of word lists, ethnogeographical material, and random notes on various aspects of native culture. I have not used his word lists, since their usefulness is primarily linguistic and I am not competent to perform the necessary linguistic analysis, but all the random ethnographic notes which he recorded for the Athabaskan groups are here included under the discussion of the appropriate tribes.

Most of the Merriam Athabaskan material is geographic, consisting of lists of villages and place names, of descriptions and lengthy discussions of tribal boundaries. Obviously Merriam attempted to gather a complete file of this sort of information, and he was largely successful. His work provides a good basis for establishing boundaries and for locating tribelets and villages.

Another important source of information, serving the same purpose, is the Goddard material. Evidently Goddard very much enjoyed the long horseback trips he made with an informant, who could point out the village sites, landmarks, and other points of interest of his native territory. This information, carefully recorded by Goddard, has proved extremely valuable in the present work, the more so since it represents firsthand observation.

Goddard's ethnogeographic work for three of the California Athabaskan groups has already been published (1914a; 1923a; 1924). Besides this, the present writer has been fortunate enough to have access to Goddard's unpublished notes, which contain information on several hundred additional villages in the area. These notes were in the possession of Dr. Elsie Clews Parsons, Goddard's literary executor, and on her death they were sent to the University of California by Dr. Gladys Reichard. They remained in the files of the University of California Museum of Anthropology until their use in the present work.

This unpublished material of Goddard's consists of a group of file cards, on each of which is typed the name,

location, and any other pertinent data for a single village. Some of the lists are accompanied by maps, showing precise location of the villages. In the lists for which there are no maps but only verbal descriptions of the sites, the township, range, and quarter section coordinates are given. The township and range coordinates have been changed since Goddard's time, in accordance with the more accurate surveys of the last thirty years, but county maps of the appropriate period provide a perfectly adequate way of locating Goddard's sites within a few hundred yards.

It is clear, on the basis of internal evidence, that there is or was more Goddard material than is now accessible to the present author. For the Kato, for instance, Goddard says that he recorded more than fifty villages (Goddard, 1909, p. 67); all that remain in his notes are two village cards numbered 51 and 52 respectively. There may also be some data, once recorded but now lost, from

the Lassik, Nongatl, and Shelter Cove Sinkyone. I have communicated with the American Museum of Natural History, where Goddard was a member of the staff, and with Indiana University, where some of his manuscripts are deposited, but neither of these institutions has any knowledge of the material in question.

The Merriam and Goddard material, taken together, provides a fair amount of information on the geography of the California Athabascan groups. We are now in the position of knowing a great deal about the location of the tribes, tribelets, and villages of these people, while we know very little about their way of life, except what can be gained by inference from the surrounding groups.

The author's thanks are due to Dr. A. L. Kroeber and Dr. R. F. Heizer, who gave their full cooperation through the preparation of the present paper. Dr. Henry Sheffé was kind enough to advise on the statistics used in the section on population.

ATHABASCAN CULTURE

The following sketch of Athabascan culture attempts to provide some background for the later discussion of the various groups. In this sketch I have not used the material from the Hupa, since they are virtually identical with the Yurok and not at all typical of the more southern Athabascans.

Subsistence.--For information on Athabascan economy I have relied heavily on Essene's account of the Lassik (1942, p. 84). There was, no doubt, variation among the different groups, but for the most part, they must have followed a similar pattern.

The most difficult time in the annual cycle of food production was winter. There were then few fish and almost no game animals or crops for gathering. From late November to early March people had to rely on food that had been stored the previous year. Essene's informant said that about every four or five years there would be a hard winter, but she could remember only one when people actually starved to death.

In February or March the spring salmon run began, and after that the danger of starvation was past. At about this time the grass began to grow again, and the first clover was eaten ravenously because of the dearth of greens during the winter.

The herb-gathering and salmon-fishing activity lasted until the spring rains ended in April or May, when the people left their villages on the salmon streams and scattered out into the hills for the summer. Usually only a few families would stay together during the summer, while the men hunted deer, squirrels, and other animals and the women gathered clover, seeds, roots, and nuts. Food was most plentiful at this season, and the places visited varied with the abundance of different crops. If a certain crop was good, the Indians would spend more time that summer in the area where the crop grew best. The next year they might go somewhere else. The vegetation of the Athabascan habitat is not well enough mapped to permit a precise delineation of these various summer camping grounds.

In September or October, when the acorns were ripe, the Indians would return to their winter villages and smoke meat for storing and probably store the acorns. Each family built a new house to protect it from the heavy winter rains. After the first rain in the fall the salmon run again in some of the streams of the region and were caught and smoked for winter storage.

It is evident that the crucial factor in the economy was the amount of food stored for winter and that this food supply was a controlling influence on the size of the population, since, in bad years, people starved. At least, this was so for the Lassik, and it was no doubt true among the other groups as well. Salmon, meat, and acorns were doubtless the chief foods stored, and thus population size would have responded quite sensitively to the quantity and condition of the salmon, deer, and oak trees.

Social organization.--For social organization I have had to rely mostly on Nomland's accounts of the Sinkyone and Bear River groups (1935, 1938). The primary social unit among the California Athabascans was the simple family, including a man, his wife, and his children. Although polygyny was known, at least among some groups, it was rare, and the possessor of two wives was reckoned a rich man. Most marriage was by purchase; the levirate and sororate were common. Divorce was also common and might be obtained by a man because of his wife's barrenness, laziness, or infidelity.

The next social group, larger than the family, was the tribelet. Kroeber (1932, p. 258) has defined the tribelet as follows.

Each of these [tribelet] seemed to possess a small territory usually definable in terms of drainage; a principal town or settlement, often with a chief recognized by the whole group; normally, minor settlements which might or might not be occupied permanently; and sometimes a specific name, but more often none other than the designation of the principal town. Each group acted as a homogeneous unit in matters of land ownership, trespass, war, major ceremonies, and the entertainment entailed by them.

This definition, given for the Pomo, fits the Athabascan area very well. Merriam usually refers to these groups as "bands," while Goddard calls them "sub-tribes." In the body of this paper I use the word "band" when quoting or paraphrasing Merriam, otherwise I call them "tribelet."

The tribelet was the largest corporate group in the area. A larger group, which I call the tribe, has been identified by most ethnographers. This latter group

ordinarily had no corporate functions, unless it happened to be coterminous with, and therefore indistinguishable from, the tribelet. The tribe, as the term is used here, was a group of two or more tribelets--or occasionally one single group--with a single speech dialect, different from that of their neighbors. The tribe was also culturally uniform, but not necessarily distinct from its neighbors in this respect. The similarity between people of a single tribe evidently gave them a feeling of community but had no further effect on their social or political organization.

The following tribes have been identified in the Athabaskan area, each including several tribelets, except for the Bear River tribe, which consists of one single tribelet.

- Kato: The Kato probably included at least 2 tribelets, but we have no information on this point.
 Eel River Wailaki: 9 tribelets.
 North Fork Wailaki: 6 tribelets.
 Pitch Wailaki: 4 tribelets.
 Lassik: Probably several tribelets, but there is no information.
 Nongatl: There is evidence of 6 subgroups of the Nongatl. Some of these may be dialect divisions, that is, tribes. The information is not sufficient to permit definition and they have therefore been grouped under Nongatl. The extent of Nongatl territory indicates that there must have been several tribelets.
 Lolangkok Sinkyone: There were at least 2, and possibly more, tribelets.
 Shelter Cove Sinkyone: There were at least 4 tribelets.
 Mattole: 2 tribelets.
 Bear River: The Bear River tribe consists of a single tribelet.
 Whilkut: The 4 subdivisions of the Whilkut--Chilula Whilkut, Kloki Whilkut, Mad River Whilkut, and North Fork Whilkut--all appear to be tribelets. It is possible that the Mad River Whilkut spoke a different dialect than the other groups and, if so, they should be given tribal status. The evidence is not clear on this point and I have therefore included them simply as a Whilkut tribelet.
 Hupa: 2 tribelets are to be distinguished for the Hupa proper. In addition, Merriam distinguishes the South Fork Hupa as a distinct dialect division. The linguistic separation is not supported by Goddard or Kroeber and I have therefore included the South Fork Hupa under the Hupa proper, but as a separate tribelet. This gives a total of 3 tribelets for the Hupa.

In general, it may be stated that the California Athabascans did not have the strong local organization characteristic of Central California. Emphasis on wealth, although present, was less strongly developed than among

the Yurok and therefore did not lead to the fragmented villages and tight family organization of that group. This statement, of course, does not apply to the Hupa, and probably not to the Whilkut, both of which were more like the Yurok.

Religion and the supernatural.--The clearest account of the religious practices of the Athabascans is given by Nomland (1938, pp. 93-98), who obtained her information from the Bear River woman, Nora Coonskin, herself a shaman. The account, however, may not be representative of the Athabascans as a whole.

The Athabascans thought that each person had a spirit which, leaving him when he died, might come back to earth as a small creature about two feet high. This returned spirit could communicate with shamans. When a person had a fainting spell, the spirit departed from the body and a shaman had to be called in order to get the patient's spirit back. If the shaman failed, the patient died. Shamans' spirits went to a special afterworld and were accompanied only by the spirits of other shamans.

Shamans were important among the Bear River people and probably among the other Athabascans as well. They might be either men or women; most often they were women, men being thought less powerful. The first signs of a shaman's power came in childhood, the visible signs being, for example, excessive drooling in sleep. If the childhood omens were proper, the training began about the age of twelve, under the direction of an older shaman, the main ceremony being a series of dances performed on five successive nights. Other ceremonies followed; then the girl was a full-fledged shaman. She was not supposed to use her power for a period of two to five years or it would harm her. The fee for training the initiate was large, 200 to 300 dollars in Indian money (perhaps a 6-8-ft. string of dentalia shells).

There were two types of shamans--curing shamans and sucking shamans. The curing shaman sang and danced for two nights while her spirit searched for the spirit of the patient. A shaman's fee was from five to ten dollars per night; if the patient died within two months, the fee had to be returned.

The sucking shamans could suck out pains which were causing illness. These shamans were paid more because they were more powerful; having greater power, they were in greater danger and had a shorter life expectancy.

Connections with other groups.--The foregoing account of economy, social organization, and religious practices does not by any means make up a complete picture of Athabaskan life, but it illustrates certain salient factors. In particular, the connections with Northwestern California are clear. So far as influence from Northwestern California is concerned the Athabascans may be divided into three groups: the Hupa and Whilkut on the north are an integral part of the northwestern culture center; the Wailaki and Kato on the south are essentially Central Californian; and the groups in between are transitional, but more northern than southern in their outlook.

ATHABASCAN BOUNDARIES

In evaluating boundaries I have relied most heavily on the information of Merriam (map 3) and Kroeber (map 1). Merriam's data are contained in a 1:500,000 map of California, together with a descriptive text. The map and the description were made up by Dr. Merriam's daughter, Mrs. Zenaida Merriam Talbot, during the years 1939 to 1946, from information in Merriam's notes and journals, the latter of which are not accessible to this writer. Often, where Merriam's boundaries disagree with those of Kroeber or other authors, Merriam's line will follow a stream, whereas the alternative follows a ridge or drainage diversion. When the evidence is inconclusive, I have usually followed Kroeber's method and chosen the

ridge rather than the stream as the boundary. In this area the streams are small and easily crossed during most of the year and therefore would not constitute a barrier sufficient for the divergence of dialects. On the other hand, the hills were visited only briefly for hunting and gathering; the population depended to a great extent on the products of streams for its subsistence, and consequently all the permanent villages were in the lowlands and canyons. For this reason, the ridges rather than the streams would tend to be boundaries. Kroeber has discussed this point more generally (1939, p. 216) and also in greater detail (1925a, p. 160).

EXTERIOR BOUNDARIES

The southern boundary of the Athabascans begins at Usal Creek on the coast and goes eastward for a few miles before swinging south to include the drainages of Hollow Tree Creek and the South Fork of the Eel in Kato territory. It turns north to enclose the headwaters of South Fork and proceeds along the ridge dividing Ten Mile Creek from the main Eel until it reaches the drainage of Blue Rock Creek; it then passes around north of the creek and crosses the Eel near the mouth of the creek. From this point it runs in an easterly direction around the drainage of Hulls Creek.

Kroeber's map in the Handbook shows the southern boundary beginning a few miles south of Usal Creek, but Merriam and Nomland both maintain that the creek itself is the boundary and Gifford (1939, p. 304) says that both Sinkyone and Yuki were spoken in the village situated at the mouth of the creek. The information of all four authors came from either Sally or Tom Bell, wife and husband, who are respectively Shelter Cove Sinkyone and Coast Yuki. I have accepted Merriam's boundary, since it agrees with Nomland's.

Merriam maintains that the western boundary of the Kato runs along the South Fork of the Eel and he is partly supported in this by Barrett (1908, map), whose boundary includes the drainage of South Fork but not the drainage of Hollow Tree Creek. Barrett, however, disavows any certainty on this particular boundary. Kroeber's line, which does include the drainage of Hollow Tree Creek in Kato territory, is supported by a specific statement from Gifford (1939, p. 296) that "Hollow Tree Creek did not belong to the Coast Yuki although they fished there." I have therefore accepted Kroeber's version.

All authorities agree on the southern and eastern boundaries of the Kato as far north as the drainage of Blue Rock Creek. Merriam claims this drainage for the Wailaki, whereas both Kroeber and Foster claim it for the ta'no'm tribelet of the Yuki. It is evident that this territory was disputed, for it was the scene of several of the wars involving the Wailaki, the Kato, and the Yuki (Kroeber, 1925a, p. 165; 1925b). Kroeber obtained a detailed list of place names in this area from a ta'no'm Yuki, whereas Merriam's Wailaki information is only of a most general nature. For this reason I have given the territory to the Yuki.

All the authorities, except Foster, agree on the rest of the southern boundary of the Athabascans. Foster has the Yuki-Wailaki line cross Hulls Creek about five miles from its mouth instead of passing south of its drainage. Both Kroeber and Merriam favor the more southern line, and Goddard (1924, p. 224) says that the Wailaki claimed a fishing spot in the disputed area, so I have accepted this version.

The eastern boundary of the Athabascans runs north along the ridge separating the drainages of the North Fork and Middle Fork of the Eel until it reaches the headwaters of the Mad River. Thence it runs in a northern direction along the ridge that separates the drainage of the Mad River from that of the South Fork of the Trinity until it reaches Grouse Creek, where it turns eastward to cross the South Fork of the Trinity at the mouth of the creek. It continues north on the east side of South Fork, following the crest until it crosses the main Trinity about five miles above its confluence with South Fork, and then follows around the headwaters of Horse Linto Creek and Mill Creek.

Merriam's eastern Athabaskan boundary conflicts with the one drawn by Kroeber, Foster, and Goddard in assigning the northern part of the drainage of the Middle Fork of the Eel to the Pitch Wailaki instead of to the Yuki. Merriam is almost certainly wrong here, for Goddard (1924) definitely does not include this area within Wailaki territory and his information in this region appears to have been especially reliable. Moreover, Merriam got his information from natives of the main Eel River, who were evidently not on good terms with their relatives to the east and knew little about them. I have therefore accepted the Kroeber boundary.

The next conflict is to the north of this, where Kroeber's boundary runs up the ridge separating the Mad River from the South Fork of the Trinity, whereas Merriam's runs along South Fork itself in the twenty miles from Yolla Bolly Mountain northwest to Ruth. Essene (1942) agrees with Merriam on this point, but his data add nothing to the argument, since he worked with the same Lassik informant as Merriam. I have accepted Kroeber's version because it is corroborated by both Goddard (1907) and Du Bois (1935, map 1), who agree in assigning the valley of the South Fork of the Trinity to the Wintun.

Kroeber and Merriam agree on the line running north of Ruth as far as a point about fifteen miles south of Grouse Creek, where Merriam's line drifts westward to follow the north-south channel of Grouse Creek for a short distance, whereas Kroeber's line follows due north along the drainage pattern. Essene supports Kroeber, but his informant did not come from this region so her testimony perhaps cannot be relied on heavily. I have accepted Kroeber's line because it follows the drainage pattern.

Kroeber's boundary also conflicts with Merriam's on the east side of South Fork. Kroeber's line runs along the ridge separating South Fork from the main Trinity whereas Merriam's runs along the Trinity itself. The testimony of Dixon on the Chimariko (1910, pp. 295-296) supports Kroeber, so I have accepted the latter's line.

The northern boundary of the Athabascans runs west, parallel to Mill Creek, crossing the Trinity a few miles south of its confluence with the Klamath, and then continues west until it reaches Bald Hills Ridge, which separates Redwood Creek drainage from Klamath River drainage. It continues north along this ridge and then turns east to cross Redwood Creek about ten miles south-east of Orick.

Goddard (1914a, pl. 38) indicates three Athabaskan summer camps on the Yurok side of the dividing ridge. This may mean that some Athabaskan territory was included in the Klamath drainage, but if so, it would contradict the testimony of the Yurok (Kroeber, 1925a, fig. 1; Waterman, 1920, map 2). However, the land away from the Klamath was little used by the Yurok (Kroeber, 1925a, p. 8), so it may be that this territory was claimed by both groups. I have accepted Kroeber's boundary here. Otherwise there are no conflicts on the northern boundary.

The western boundary of the Athabascans runs due south from Redwood Creek, following the 124th Meridian, crossing the North Fork of the Mad River at Blue Lake and crossing the main Mad River a few miles above the mouth of North Fork. From here the line follows south around the drainage of Humboldt Bay until it crosses the Eel River at the mouth of the Van Duzen, whence it runs south to Bear River Ridge, which it follows west to the ocean.

INTERIOR BOUNDARIES

There is no disagreement on the western boundary of the Hupa. It runs north and south along Bald Hills Ridge, dividing the drainages of Redwood Creek and the Trinity River. Merriam gives the Hupa two divisions--the Tinnung-hen-na-o, or Hupa proper, and the Tsa-nung-wha, or Southern Hupa. The line dividing these two groups lies just north of the main Trinity to the east of South Fork and along Madden Creek to the west of South Fork. Kroeber (1925a, p. 129) and Goddard (1903a, p. 7) do not give any support for a linguistic division, as indicated by Merriam, but there does seem to have been some cultural difference.

In the division of the territory west of the Hupa Merriam differs radically from Kroeber and Goddard, although all three scholars divide the area between two groups. Kroeber and Goddard call the northernmost group Chilula, an Anglicization of the Yurok word *tsulu-la* meaning "Bald Hills people," and the southern, Whilkut, from the Hupa word *hoilkut-hoi* meaning "Redwood Creek people" or "upper Redwood Creek people."

Merriam calls the first of his two divisions Hoilkut and says that they lived on Redwood Creek and on the

A major conflict in the western boundary of the Athabascans involves the drainage of the North Fork of the Mad River. Kroeber and Loud both assign this area to the Wiyot, whereas Merriam assigns it to the Athabascans. Neither Kroeber nor Loud gives specific data in support of his contention; thus Merriam's specific local information quoted below, renders his line preferable.

Sunday, August 11, 1918 . . . I found two old men of the same tribe, who were born and reared at the Blue Lake rancheria 'Ko-tin-net-- the westernmost village of the Ha-whil-kut-ka tribe.

I have therefore accepted Merriam's boundary.

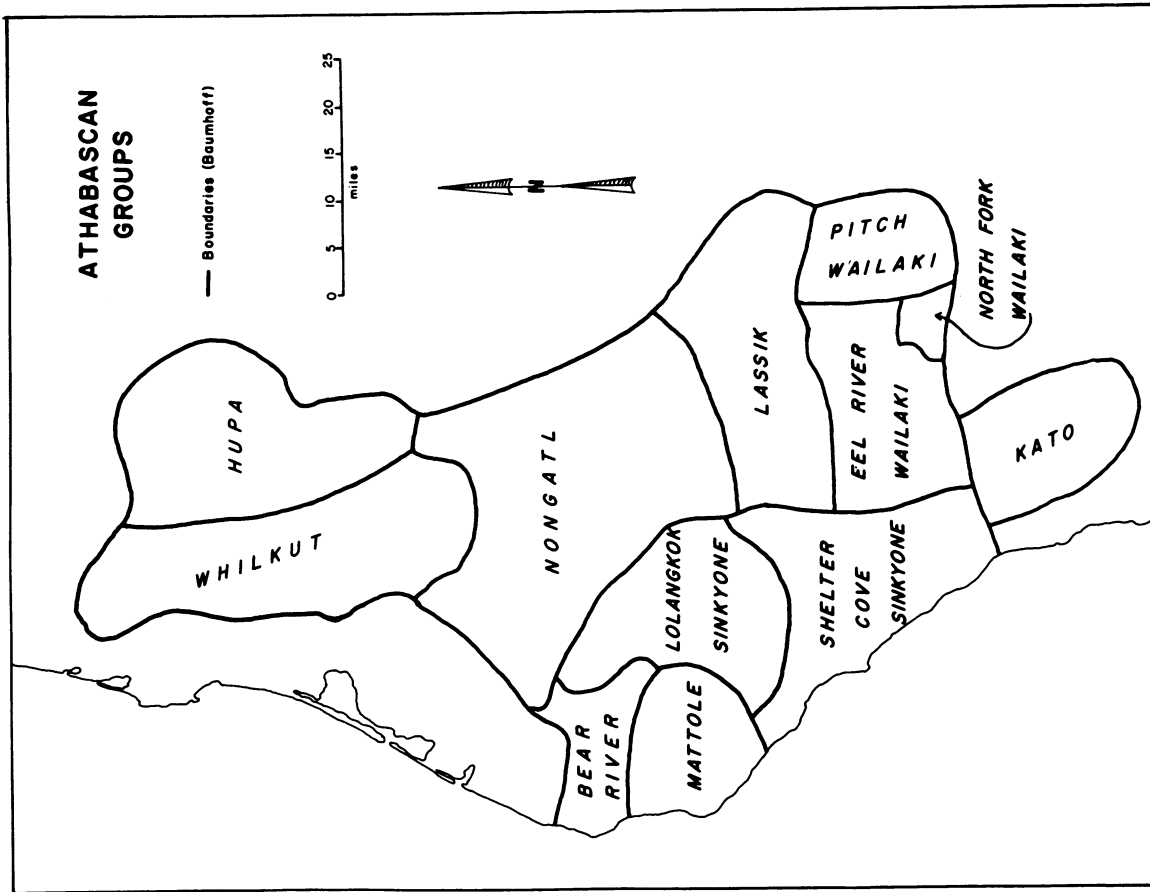
From the Mad River south to the Eel there is general agreement except that, as usual, Merriam's lines tend to follow the streams, whereas those of Kroeber and Loud follow the ridges. Another conflict comes at the crossing of the Eel River. Curtis (1924, 13:67) says the line crosses at the mouth of the Van Duzen. Nomland (1938, map 1), Loud, and Merriam all agree with this. Powers (1877, p. 101) and Kroeber both locate the line a few miles up the river from this point at Eagle Prairie, while Nomland's Wiyot informant (Nomland and Kroeber, 1936, map 1) places the line even farther south at the mouth of Larabee Creek. The weight of evidence indicates that the line was probably near the mouth of the Van Duzen; Goddard (1929, p. 292) states that there was a Bear River village near there.

There is also some disagreement on the northern boundary of the Bear River group. Nomland says that it is at Fleener Creek, about five miles north of Bear River Ridge, whereas Kroeber indicates a line about two miles north of Bear River Ridge. Loud, Merriam, and Goddard, on the other hand, all indicate that the boundary is Bear River Ridge itself. Nomland's boundary is almost certainly in error, since Loud gives Wiyot villages occurring south of that line. Most of the evidence points to Bear River Ridge as the line, and this version has been accepted.

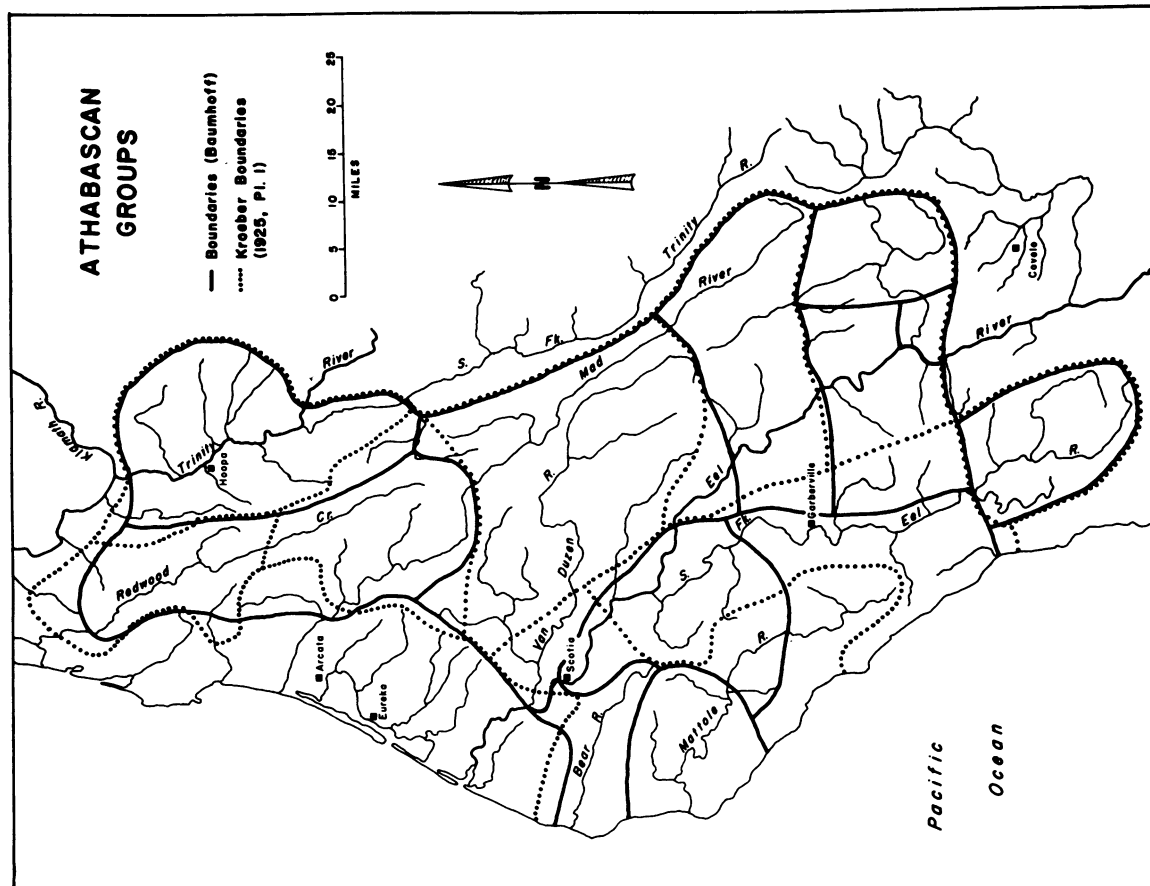
North Fork of the Mad. This group he further subdivides into three parts: one, living on lower Redwood Creek, corresponds to the Chilula of Kroeber and Goddard; another, on upper Redwood Creek, corresponds to part of Kroeber's Whilkut; and a third, on the North Fork of the Mad River, corresponds to a part of Loud's Wiyot.

Merriam calls his second division Ma-we-nok. They live in the drainage of the main Mad River and correspond to a part of Kroeber's Whilkut.

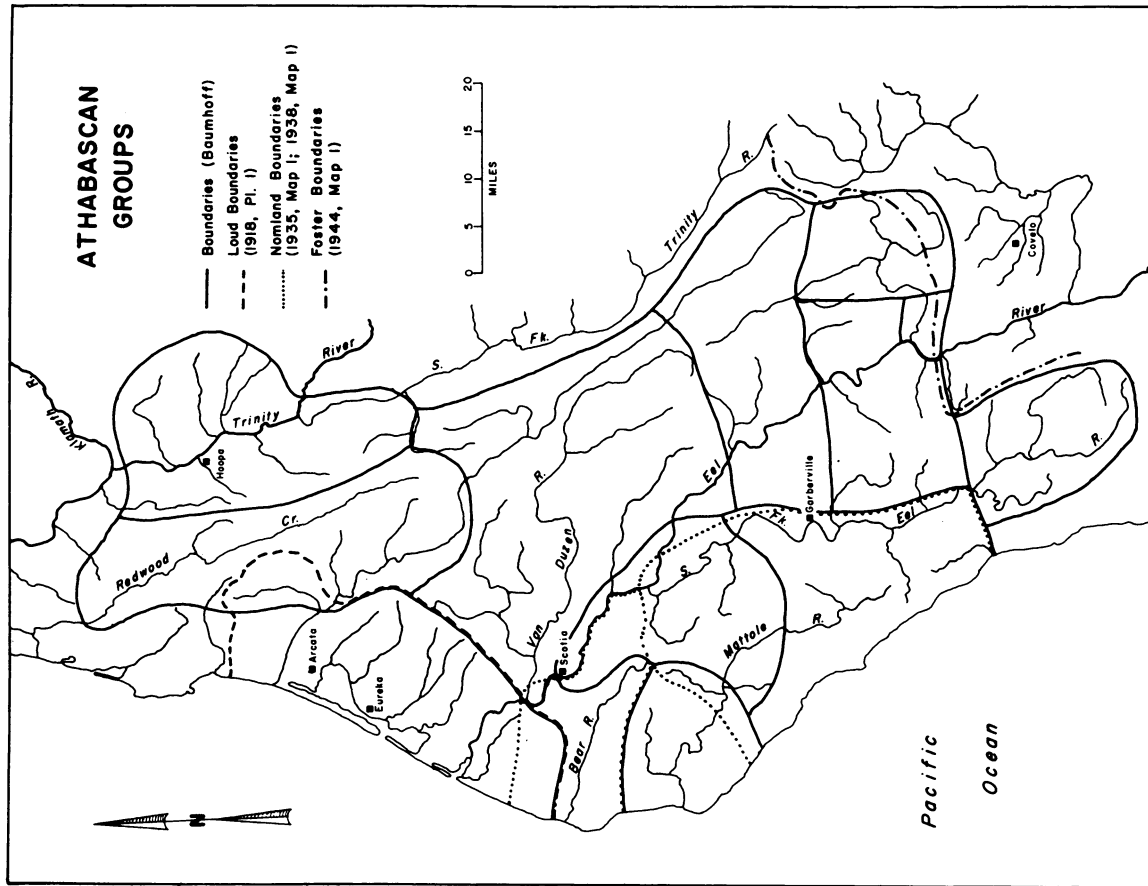
It would appear that, except for Goddard's Chilula information (Goddard, 1914a), Merriam's data are the most detailed and therefore preferable. He had informants from lower Redwood Creek, from the North Fork of the Mad River, and from the main Mad River. For this reason I have accepted his boundaries. I therefore propose that all the peoples previously included under the terms Whilkut or Chilula be called Whilkut. This seems justified by Merriam's statements, on the one hand, that the Mad River Ma-we-nok differed but little in speech from their Whilkut neighbors, and, on the other hand, that the other groups in the area called themselves hoilkut or terms related to this.



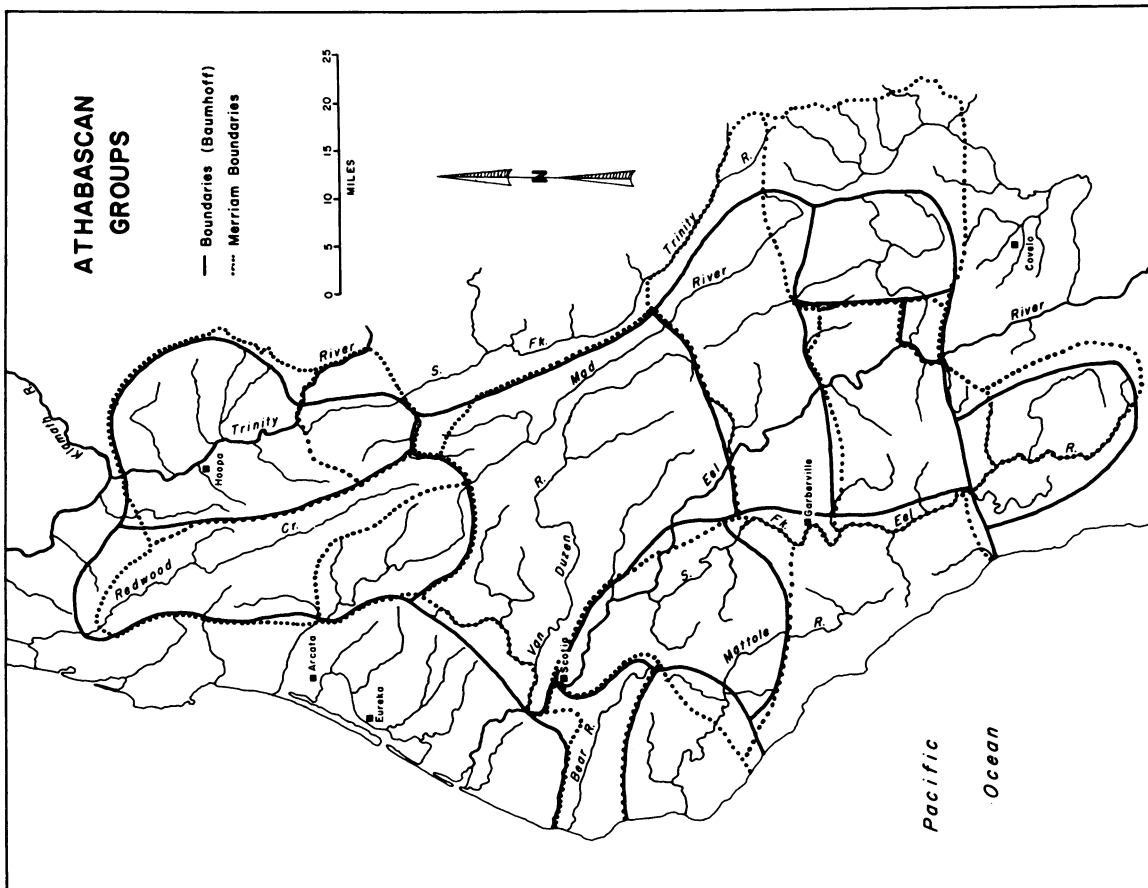
Map 2. Athabascan boundaries: Baumhoff.



Map 1. Athabascan boundaries: Kroeber vs. Baumhoff.



Map 4. Athabaskan boundaries: various authors vs. Baumhoff.



Map 3. Athabaskan boundaries: Merriam vs. Baumhoff.

If this proposal is accepted, the Whilkut may then be divided into four subgroups--the Chilula Whilkut, the Kloki Whilkut, the Mad River Whilkut, and the North Fork Whilkut. The Chilula Whilkut would occupy essentially the territory assigned to the Chilula by Goddard and Kroeber -- the drainage of Redwood Creek from about ten miles southeast of Orick to about a mile above the mouth of Minor Creek. Above them are the Kloki Whilkut, occupying the upper drainage of Redwood Creek. The name Kloki Whilkut means "prairie" Whilkut, a name used by these people for themselves, according to Merriam, and derived from the prairies that occur on upper Redwood Creek. The Mad River Whilkut would be the group in the drainage of Mad River from the mouth of North Fork as far up as Bug Creek above Iaqua Buttes. The North Fork Whilkut would then be the group in the entire drainage of the North Fork of the Mad River.

The northern boundary of the Nongatl begins in the west near Kneeland at the Wiyot boundary and runs southeast around Iaqua Buttes and the drainage of the Mad River, then northeast to Grouse Creek. Kroeber and Merriam agree on this boundary east of Iaqua Buttes, but west of that landmark Merriam's line takes a northeast-southwest direction whereas Kroeber's line runs due east-west. I have accepted Merriam's line here because he has more detailed information than Kroeber on the neighboring Whilkut. Neither has much information on the Nongatl themselves.

One of the main interior lines of the Athabascans is the one which, running north and south along the South Fork of the Eel, divides the coastal groups on the west from the interior peoples to the east. It begins at the mouth of the Van Duzen on the main Eel and runs south along the Eel as far as Scotia, dividing the Nongatl from the Bear River group. At Scotia it coincides with the Sinkyone-Nongatl boundary and then continues in a southerly direction but, instead of lying immediately on the river, it drifts slightly to the east to include also the land adjacent to the stream. It continues thus near to, but off, the main Eel until it crosses the river at about McCann, a few miles above the mouth of South Fork. After crossing the main Eel, the line goes south, including the immediate river valley of the South Fork of the Eel in Sinkyone territory, until it turns west to cross South Fork at the mouth of Hollow Tree Creek, continuing to the coast at Usal Creek.

This section of the Athabaskan boundary has been much disputed. It seems certain that the western side of the Eel from the mouth of the Van Duzen to Scotia was Bear River territory. This distribution is attested by Powers (1877, p. 107), who says that the Bear River group owned as far south as the mouth of South Fork, by Nomland's Bear River informant (1938, map 1), by Kroeber, and by Goddard, who says (1929, p. 291), "There was, however, one village at the mouth of Van Duzen creek which was allied to Bear River both in its dialect and politically." This evidence is fully in accordance with that of Merriam.

The eastern side of the river along this stretch goes to the Nongatl by default. Kroeber claims it for the Bear River people and Nomland's Wiyot informant claimed it for the Wiyot (Nomland and Kroeber, 1936, map 1) but except for these sources possession is denied by Wiyot, Bear River, and Sinkyone alike.

South of Scotia the area is also in dispute. Nomland and Kroeber claim that the eastern side of the Eel from Scotia to the mouth of South Fork is Nongatl. They say (1936, p. 40):

In any event, Eel river from Scotia to Larrabee was not Mattole, as Kroeber has it in map 1 of his Handbook, nor was it Sinkyone. Nomland's Bear River, Mattole, and Sinkyone informants were positive on the point. If Athabaskan, the stretch in question belonged to the Nongatl (Saia). Otherwise it was Wiyot.

Merriam, on the contrary claims that this territory was definitely Sinkyone.

We must evaluate the statements of the informants involved before reaching a decision on this point. Nomland's Bear River informant was evidently not particularly accurate on boundaries, for she placed the northern boundary of the Bear River group at Fleener Creek when it was almost certainly at Bear River Ridge (see p. 163). Therefore her testimony may be questioned on the present point also. Nomland's Sinkyone informants were from the Shelter Cove Sinkyone of the Briceland area to the south, and furthermore only one of them was said to be reliable. Merriam, however, presents detailed evidence in the form of place names obtained from George Burt, a very good informant who was born and raised among the northern Sinkyone at Bull Creek. I have therefore accepted the evidence of George Burt via Merriam, even though several of Nomland's informants deny it.

Actually, I have accepted Merriam's line as far south as Phillipsville on the South Fork of the Eel, even though it conflicts somewhat with the lines of Nomland and Kroeber. Merriam's information for this stretch of South Fork is supported in detail by Goddard's village lists. South of Phillipsville, Merriam's line runs along South Fork itself instead of lying slightly east of it. This line is contradicted by Goddard, whose informant, a native of the region, gave Goddard village names on both sides of the river as far south as Garberville. I have accepted the line indicated by Goddard's information along this stretch.

South of Garberville I have relied heavily on Nomland. She had three informants from the Shelter Cove Sinkyone-- Sally Bell, Tom Bell, and Jack Woodman, of whom she considered only the last reliable. Merriam seems to have relied entirely on Sally Bell for information about this group and his information should therefore be somewhat discounted.

The Bear River-Mattole boundary is not disputed. Merriam and Nomland agree that it begins on the coast at Davis Creek and then follows the ridge east to the headwaters of Bear River. The two authors do not agree on the Bear River-Sinkyone line. Nomland's boundary goes due east from Bear River headwaters to strike the South Fork of the Eel a few miles above its mouth. Merriam's line instead goes north to intercept the main Eel at Scotia. I have accepted Merriam's version on the basis of George Burt's evidence, even though Kroeber agrees with Nomland.

The Mattole-Sinkyone boundary begins at Spanish Flat on the coast and goes northeast from there, crossing the Mattole River just above the mouth of Upper North Fork, Mattole River, and continuing in that direction to the headwaters of the Bear River. I have altered Merriam's map on this point. It shows the Mattole-Sinkyone line reaching the coast at Big Flat, a point about six miles down the coast from Spanish Flat. Merriam's notes say, however, that the line ends at Spanish Flat. Merriam's line crosses the Mattole River near the town of Upper North Mattole about five miles below the mouth of Upper North

Fork, but Goddard's Mattole informant gave him villages as far up as the mouth of Upper North Fork and I have considered this fact to be decisive. Nomland's Mattole-Sinkyone line reaches the coast at Four Mile Creek, about five miles up the coast from Merriam's line at Spanish Flat. This line of Nomland's is probably a tribelet boundary, which Merriam and Goddard give as occurring at about that point (see Mattole Tribelets). Otherwise Nomland's boundary agrees with that of Merriam.

Merriam's line dividing the northern or Lolangkok Sinkyone from the southern or Shelter Cove Sinkyone begins in the east on South Fork Eel about a mile or two above the mouth of Salmon Creek, runs west from there through Kings Peak, and crosses the Mattole River just north of Ettersberg, intersecting the Mattole line a few miles from the coast. This line as given is the same as Merriam's, except that his begins in the east at Redwood Creek instead of at Salmon Creek. The change here is based on Goddard's village list, which indicates the present line.

The Lassik-Nongatl line begins in the east just below Ruth on the Mad River. It goes west from there around the headwaters of the Van Duzen River until it crosses the Eel at the mouth of Dobbyn Creek and thence west to the Sinkyone line. Kroeber and Merriam agree on the eastern part of this line but Essene disagrees with them, including a much larger portion of the drainage of the Mad and Van Duzen rivers in Lassik territory. I am at a loss to explain this version, since Essene's informant from the Lassik was the same one consulted by Merriam. It is not clear that Essene's boundaries were obtained from his informants, and this fact may explain the discrepancy. I have accepted the Kroeber-Merriam line here. To the west of this, Kroeber's line, instead of crossing the Eel, follows the river toward the northwest, so none of the main Eel River valley falls in Nongatl territory. Goddard gives villages on the main Eel which are said to be allied with others in the Blocksburg region, so the Nongatl must have claimed at least a small section of the Eel. I have therefore accepted the Merriam version.

The Wailaki-Lassik boundary begins in the east at the head of the Mad River and runs west to the North Fork of the Eel, which it crosses at the mouth of Salt Creek. It follows Salt Creek for a short way and then goes west to Kekawaka Creek, which it follows to its mouth on the main Eel. It crosses the Eel here and then goes west to intersect the Sinkyone boundary at the East Branch of the South Fork of the Eel. The boundary as given here is identical with the one given by Merriam, except that he includes part of the drainage of the Mad within Wailaki territory whereas Kroeber does not. I have accepted Kroeber's version, because it is supported in a negative way by Goddard (1924), who fails to include any Mad River drainage in Pitch Wailaki territory.

West of this area, Kroeber's boundary runs considerably north of Merriam's and of the boundary I have

accepted. Merriam's line seems preferable because it is supported by Goddard and because Merriam's information is more specific than Kroeber's.

According to the information of Merriam and Goddard, the Wailaki may be divided into three groups--the Eel River Wailaki, the North Fork Wailaki, and the Pitch Wailaki. The eastern group, the Pitch Wailaki, occupy the drainage of North Fork Eel River above Asbill Creek, Hulls Creek, and Casoose Creek. Their western boundary begins in the north on Salt Creek near its confluence with North Fork Eel. It runs south from this point along Salt Creek and beyond it, crossing the North Fork of the Eel just above the mouth of Asbill Creek and intersecting the Yuki-Wailaki line near Summit Valley. The northern border of the North Fork Wailaki begins in the west on the main Eel River at the mouth of Cottonwood Creek, about three miles north of the mouth of North Fork Eel, and runs from there eastward for about six miles, where it hits the western boundary of the Pitch Wailaki. The western boundary of the North Fork Wailaki is the main Eel River from the mouth of Cottonwood Creek south to the Yuki line near Bell Springs Railroad Station.

The Kato-Wailaki line runs from the head of Blue Rock Creek in the east to the mouth of Hollow Tree Creek on the South Fork of the Eel in the west. This is Kroeber's version of the boundary. Merriam's version places the line somewhat south of this, beginning at Rattlesnake Creek in the west and going eastward south of Blue Rock Creek. Since I have ceded the drainage of Blue Rock Creek to the Yuki (see p. 160) in accordance with the views of Kroeber, I must, as a corollary, accept the northern boundary of the Kato as given by him.

The net result of the foregoing discussion is that the line surrounding the Athabaskan peoples of Northwestern California remains much the same as Kroeber showed it in 1925, whereas the tribal boundaries are considerably changed. In the north, the Chilula and Whilkut occupy almost entirely different areas and the Hupa have been divided into two subgroups. On the coast, the Bear River and Mattole are divided, but this division had been shown by Goddard and Nomland previously. The Sinkyone have been divided into two subgroups and the Wailaki into three.

A really major difference is the accretion of territory by the Nongatl. This group is one about which least is known and this may be the reason why the map shows their territory as so extensive. It is very likely that data from a few good informants would show that the Nongatl actually comprise several distinct groups. There is a hint of this in Essene's account of Lassik war stories (1942, p. 91). He notes that the Nai'aitci, centering near the town of Bridgeville, were distinct from the Blocksburg people. Both of these groups are placed within the Nongatl area. No doubt more detailed information than we possess would show that the area which we have labeled Nongatl was actually occupied by two, three, or even more distinct groups.

GROUPS

KATO

The Kato are the southernmost of the California Athabascans (see pl. 11, e for a view of Kato territory). They are surrounded on three sides by Yukian peoples and consequently resemble culturally the peoples of Central California rather than those of Northwestern California. The name Kato appears to be of Pomo origin and it was first thought that the Kato language was a dialect of Pomo (Powers, 1877, p. 147). It was not until 1903 that Goddard showed their Athabascan affinity (Goddard, 1903b).

Information on the ethnogeography of the Kato is derived from several sources. Merriam's notes contain some information, which seems to have come from a man named Bill Ray, who was living near Laytonville on August 16, 1922. This man had been Goddard's informant in 1906, when Ray was already between sixty and sixty-five years old (Goddard, 1909, p. 68, pl. 9) and he served also as Kroeber's informant in 1923 (Kroeber, 1925b).

The Merriam notes contain, in addition to several village names, a few place and tribal names which I present herewith.

Kato: to-chil'-pe ke'-ah-hahng
 Jackson V. people (inc. Branscom): sin'-kōk
 ke'-ah-hahng
 Wailaki: we'-tahch
 Yuki of Round V.: chinch'
 Coast Yuki: bahng'-ke'-ah-hahng
 Southern Sinkyone: ketch'-ing ke'-ah-hahng
 Tribe on the N side of Rattlesnake Cr. and E of
 South Fork Eel division of Wailaki (?): tek'
 ke'-ah-hahng.
 Long V.: kin-tēhl-pe
 Laytonville: ten-tahch-tung
 Cahto Pond (now drained): to-chil'-pa
 Long V. Cr.: shah'-nah
 South Fork Eel R.: nahs-ling'-che
 Rattlesnake Cr.: tal-tlōl'-kwit
 Main Eel R.: tah-ke'-kwit
 Blue Rock: seng-chah'-tung
 Bell Springs: sēch-pis
 Round V.: kun-tel-chō-pe
 Jackson V.: kus'-cho-che'-pe; kas-tos' cheek'-be
 Branscomb Mt.: kīk; chīs'-naw

VILLAGES

The villages of this group are mostly taken from Barrett (1908, pp. 280-283) indicated below by (B). Those taken from Merriam's notes are distinguished by (M). The information given with each of the villages is sometimes a direct quotation but most often is paraphrased.

1. netce'līgūt (B). At a point about 9 mi. nearly due W of the town of Laytonville and about 3 mi. SE of the confluence of the E fork of the South Fork of Eel R. with the South Fork of Eel R. This village is on top of the ridge separating these two streams and is on the property of Mr. Jacob Lamb.

2. yictciLti'fkūt, "wolf something-lying-down creek" (B). On the S bank of Ten Mile Cr. at a point about 5 mi. WNW of the town of Laytonville.

3. sentca'ūkūt, "rock big creek"; or kave'mato (Northern Pomo dialect name), "rock big" (B). On Big Rock Cr. at a point about 1-1/2 mi. from its confluence with Ten Mile Cr., or about 5-1/2 mi. nearly due W of the town of Laytonville.

sen-chow'-ten (M). Kato name for their village at Big Rock, about 4 mi. N of their present rancheria in Long V.

4. ka'ibi, "nuts in" (B). On the NE bank of Ten Mile Cr. at a point about 3 mi. downstream from the town of Laytonville.

5. nebō'cēgūt, "ground hump on-top" (B). On what is known as the Wilson ranch at a point about 1 mi. W of Laytonville.

6. seLgaitceli'nda, "rock white run-out" (B). About 300 yds. E of the house on what is known as the "old" John Reed ranch about 1 mi. N of Laytonville.

7. būntcnōndi'lyi, "fly settle-upon under" (B). Just NW of Laytonville and but a short distance from the place now occupied by the Indians near Laytonville.

8. ko'cbi, "blackberry there" (B). About 1-1/2 mi. WSW of Laytonville and on the SW bank of the Ten Mile Cr.

9. tēibē'takūt, "fir tips creek" (B). About a mile SW of the town of Laytonville and about 1/2 mi. up the creek which drains Cahto V. from its confluence with Ten Mile Cr.

che-pa-tah-kut (M). A former village in the northern part of Long V. on the James White place.

10. distēgūt'slū, "madrona crooked under" (B). On the western side of Long V. at a point about 2 mi. SSE of Laytonville.

11. tōdji'Lbi, "water ? . . . in" (B). At the site now occupied by the Indians at Cahto. This site is on the W bank of the small creek running from Cahto into Ten Mile Cr.

12. būntctenōndi'lkūt, "fly low settle-upon creek" (B). On the N bank of the northern branch of the head of the South Fork of the Eel R. at a point about a mile SSW of Cahto.

13. kūcyi'ūyetōkūt, "alder under water creek" (B). On the N bank of the South Fork of Eel R. at a point about 3 mi. SW of Cahto. This site is about 1/2 mi. E of the ranch house on the Clark ranch.

14. ne'iyi, "ground under" (B), probably signifying that the village was situated under a projecting ridge. On the S bank of the South Fork of Eel R. at a point about 3 mi. S of Branscomb.
15. sēne'tckūt, "rock gravel creek" (B). On the NW bank of the small stream known as Mud Springs Cr., which is tributary to the South Fork of Eel R. This site is about 3 mi. a little S of E of Branscomb. There are on this creek, and not far from this village site, several springs which flow a very thin blueish mud, thus giving the creek its name.
16. tontce'kūt, "water bad creek" (B). About 1/4 mi. W of the South Fork of Eel R. and about 1 mi. SW of Branscomb.
17. senansa'nkūt, "rock hang-down creek" (B). On the E bank of the South Fork of Eel R. at a point about 1-1/2 mi. downstream from Branscomb.

In addition to this list, there are two other sources of information on villages. First, Curtis (1924, 14:184) presents a list of six villages, almost all of which it is impossible to locate. None of the names corresponds to any given by either Barrett or Merriam, and they are therefore suspect as village names, though they may be valid place names and are certainly good Athabascan. In the list below Curtis' orthography has been changed slightly. The changes follow the pattern set by Curtis in his Hupa village lists (Curtis, 1924, Vol. 13).

Curtis List (1924, 14:184)

- | | |
|-------------------------------------|--|
| chunsandung, "tree prostrate place" | 1-1/2 mi. W of Laytonville on the site of the cemetery |
| tsetandung, "trail emerges place" | At the foot of the mountain W of Laytonville |

- | | |
|--|--|
| totakut, "water center" | N of tsetandung. On a knoll down which water flowed on two sides |
| chekselgindun, "they killed woman place" | N tsetandung |
| yitscheLtindung, "they found wolf place" | |
| seyuhuchetsdung, "old stone house place" | |

The second source is the notes of Goddard, who did extensive work in the area in 1906 (Goddard, 1909), though mostly on language and myth. His notes contain information on two villages, neither of which can be located because the township and range coordinates have been changed since the time of recording and also because the name of the creek mentioned does not appear on maps in my possession. The two cards bearing the information have the penciled notations 51 and 52 written on their corners. This indicates that Goddard had recorded at least 50 other sites for the Kato, a conclusion which is further corroborated by his own statement (Goddard, 1909, p. 67). Our information on Kato villages is therefore correspondingly incomplete.

Goddard List (Goddard, Notes)

- | | |
|--|--|
| ne'ḷsoki, "ground blue tail" SW sec. 26, T. 22 N., R. 15 W. On a flat 200 yds. N of Blue Hill Cr. and 150 yds. W of the river. There are 3 deep pits on the eastern edge of the higher flat. Bill thought there were 3 others 100 yds. S where a white man's house had stood. ne'ḷsōkī kīyahūn. | |
| t'unītcintcki, "leaves black tail" W sec. 26, T. 22 N., R. 15 W. On the higher bank 50 yds. N of tūnītcintkwōt, the next creek N of Blue Hill Cr. and 400 yds. W of the river. There is timber W. Dr. Wilson used to live there. The site has been plowed. Bill counted six places where he thought houses had been. | |

WAILAKI

The Wailaki, the southernmost group of Athabascans on the Eel River, are as little chronicled as most of the Athabascan groups. As far as geography and language are concerned we have very good information (Goddard, 1923a; 1923b), but there is very little general ethnography. Kroeber was able to devote to them only a little more than three pages in the Handbook (1925, pp. 151-154), and we know scarcely more today.

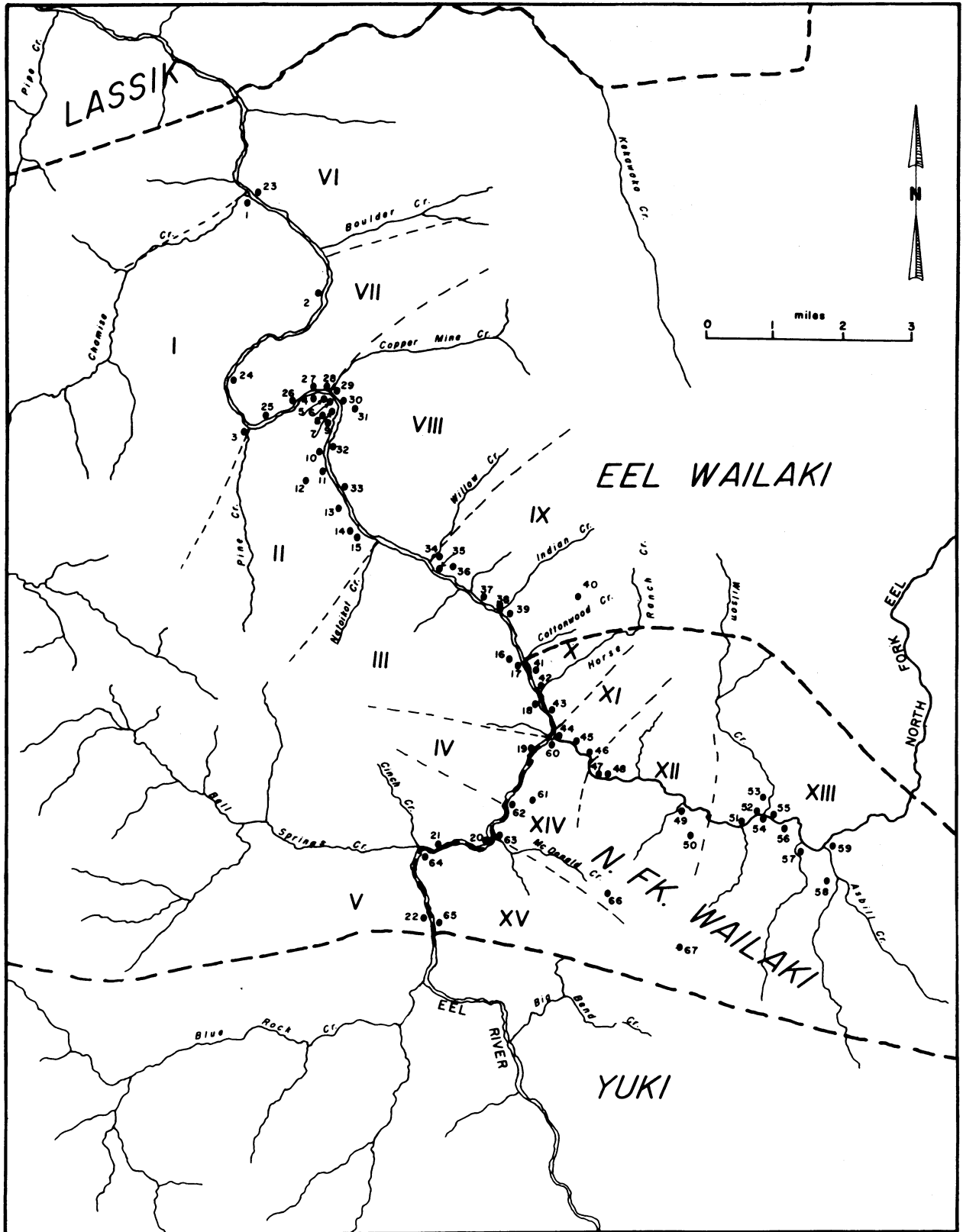
The territory of the Wailaki lies for the most part outside the redwood forest (pls. 11b, c) and for that reason they had access to a more abundant supply of the food, particularly acorns, used by the interior peoples than did most of the Athabascan groups. Perhaps for this reason, or perhaps simply because of proximity, the culture of the Wailaki shows considerable affinity with the culture of Central California and correspondingly less with that of Northwestern California. This affinity is particularly evident in their tribelet organization, which obtrudes itself in the accounts of both Goddard and Merriam. In the groups farther north such organization receives little attention.

Merriam's information on the Wailaki consists for the most part of ethnogeography, including villages, tribelets,

and place names. His informants in this group were Fred Major and Wylakki Tip. I have been able to find out nothing about Fred Major, but Merriam gives the following statement on Wylakki Tip.

My informant, known as Wylakki Tip, a full blood Tsennahkennes [Eel R. Wailaki, but see Kroeber's data, p. 229], whose father and mother were born and lived at Bell Springs, tells me that they belonged to the Bell Springs Canyon band known as Tsi-to-ting ke-ah, named from the neighboring mountain tsi-to-ting. He adds that from the mouth of Blue Rock Creek northward the Tsennahkennes owned the country to the main Eel, and that the present location of Bell Springs Station, on the west side of the river, is in their territory but that the east side of the river from Bell Springs Station to the mouth of Blue Rock Creek was held by a so-called Yukean tribe.

In Merriam's notes there is no general statement on the Bahneko or North Fork Wailaki; he was evidently somewhat undecided whether they were truly a distinct group. However, he comments on the Tsennahkennes, or Eel River Wailaki, as follows.



Map 5. Villages and tribelets of the Eel Wailaki and the North Fork Wailaki. Roman numerals indicate tribelets, arabic numerals village sites.

Tsennahkennes . . . A Nung-gah^{hl} Athapaskan tribe in north-central Mendocino County, California, occupying the greater part of the mountainous country on both sides of main Eel River from Red Mountain and the upper waters of East Branch South Fork Eel easterly to Salt Creek, and from a few miles south of Harris southerly to Rattlesnake Creek. Their territory thus includes the major part of Elkhorn Creek, the headwaters of East Branch South Fork Eel, Milk Ranch Creek, and Red Mountain Creek, practically all of Cedar Creek, and the whole of Bell Springs and Blue Rock Creeks. The old stage road from Cummings north to Harris, passing Blue Rock and Bell Springs, traverses their territory.

WAILAKI PHONOLOGY

It is clear that in recording Wailaki words Merriam followed the same principles that guided him in his published works on other Californian languages. In transcribing the Achomawi language he said (1928, p. vi), "All Indian words are written in simple phonetic English, the vowels having their normal alphabetic sounds." For a more precise determination I have made a comparison of words recorded by both Merriam and Goddard. The values of the symbols used by Goddard are taken from a list he gives in his Wailaki Texts (1923b, p. 77) together with Phonetic Transcription of American Indian Languages (Amer. Anthro. Assoc., 1916), a report which Goddard helped prepare.

A total of twenty-eight words recorded by both Merriam and Goddard were found. Although the discrepancies seem great, this is because Merriam used Webster's English orthography whereas Goddard used a technical one modified from the old Smithsonian system. Whatever the limitations of Merriam's orthography for considerations of grammar (which he did not try to obtain), his recordings consistently check Goddard's independent information and serve as complete identifications of places and ethnographic facts.

Goddard's Wailaki Phonology

		Labial	Apical	Frontal	Dorsal
Stops	fully voiced				g
	medium voiced	b	d		G
	voiceless non-glottalized		t		k
	voiceless glottalized		t'		k'
Affricates	non-glottalized		ts	tc	
	glottalized		ts'	tc'	
Spirants	voiceless		s	c	
	voiced				
Nasals			n		ñ
Semivowels		w		y	
Laterals	voiced		l		
	voiceless		ɬ		

Goddard gives the following vowels.

- i as in pique (written with an iota by Goddard)
- e as a in fate
- E as in met (written with an epsilon by Goddard)
- a as in father
- A as u in but (written with an alpha by Goddard)
- o as in note

Following is a rough correspondence between Goddard's and Merriam's orthographies.

Comparison of Orthographies

Goddard	Merriam
a	ah (occasionally a or e)
A	ah, e, u, i (in order of frequency)
ai	a, i
Ai	i
b	b
c	s (once sh)
d	d, t
e	e
E	e, ā
g	ɬg written as sk
G	does not occur
h	h
i	ē, ě (oi written i)
I	i, u
k	k (ky written ch)
k'	k
l	does not occur
ɬ	kl, often not recorded at all (ɬ written sk)
m	n (Goddard says n sometimes becomes m by assimilation. Evidently it is n phonemically)
n	n (occasionally ng, once not recorded at all)
ñ	ng (occasionally n, twice not recorded at all)
o	o (occasionally u)
s	s
t	t
t'	does not occur
tc	ch (once tch)
tc'	does not occur
ts	does not occur
ts'	does not occur
u	does not occur
w	does not occur
y	y, ky written ch, kiyah always written ke-ah or ka-ah

TRIBELETS

The subgroups of the Wailaki (map 5) are called bands by Merriam and subtribes by Goddard but it is clear that they correspond precisely to the definition of tribelet given by Kroeber (1932, pp. 258-259), a fact which Kroeber noted at the time (p. 257). Goddard says (1923a, p. 95):

[They] had definite boundaries on the river as well as delimited hunting grounds on an adjoining ridge. In the summer and fall they appear to have been under the control of one chief, and to have camped together for gathering nuts and seeds and for community hunting. In winter they lived in villages and were further subdivided.

I. There is close agreement on the boundaries of the northernmost Wailaki tribelet on the western side of the Eel. Merriam gives the names kun-nun'-dung ke'-ah-hahng, ki'-kot-ke-ah-hahng, ki-ketch-e kā-ah-hahng, and ki-ke'-che ke'-ah-hahng as designations for the group. He says the territory of this group runs from Chamise Creek in the north to Pine Creek in the south. Goddard gives the same name (rendered kaikitcEkaiya) and the same boundaries for the group.

The territory north of Chamise Creek on the west side of the river is assigned by Merriam to the taht'-so ke'ah tribelet of the Lassik. This attribution would seem to indicate that Merriam has put his northern Wailaki boundary too far north, that it should hit the Eel at Chamise Creek rather than at Kekawaka Creek. Goddard calls these people the daisokaiya, "blue ground people," which no doubt corresponds to taht'-so ke'ah. He says, "It is doubtful that they should be counted as Wailaki, but they were not Lassik and probably spoke the same dialect as the Wailaki."

II. This tribelet is called sē-tah'-be ke'-ah-hahng or sā-tah'-ke-ahng by Merriam. In one place his notes say that the territory includes land on both sides of the Eel, running south of Indian Creek on the western side. This is clearly not so, for he refers several times to a different tribelet occupying that area. That the tribelet was confined to the east side of the river is further indicated by Goddard, who gives Pine Creek on the north and Natoikot Creek on the south as the boundaries. Goddard's name for the tribelet is sEtakaiya.

III. Goddard says that there was a tribelet on the west side of the Eel whose territory was bounded on the north by Natoikot Creek and extended south to a point opposite the mouth of North Fork. His name for this group is taticcokaiya. Merriam's name for the group in this general area is tah-chis'-tin ke-ah-hahng. He does not give any boundaries for them.

IV. and V. Merriam gives the following names for the tribelet occupying the territory around Blue Rock and Bell Springs Creeks: tsi-to'-ting ke'-ah, from the name of Bell Springs Mountain; sen-chah'-ke'-ah; sē-so ke'-ah-hahng, "Blue Rock Band"; then'-chah-tung kā'-ah, "Blue Rock Band." On the other hand, he gives the following names for the people who occupied the west bank of the Eel for a mile or more south of the mouth of North Fork: nin-ken-nēch kā-ah-hahng; nung-ken-ne-tse' ke'-ah; nē-tahs' ke-ah-hahng. Goddard says that the entire stretch from the mouth of North Fork south to Blue Rock Creek on the west bank of the river was occupied by a single tribelet called nĭnkannitckaiya, a name clearly corresponding to Merriam's names for the people on the west bank of the Eel, south of North Fork. I am inclined to think that Merriam is correct and that there were two tribelets in this area. Merriam's notes include five different references to the southern tribelet as a separate group, so there is a distinct impression of autonomy. If Merriam is correct in separating the two groups, the division line no doubt falls a mile or two north of Bell Springs Creek.

VI. On the eastern side of the river Merriam gives two names for the tribelet holding the land south from Kekawaka Creek. He says the yu-e-yet'-te ke'-ah was the tribelet north of Chamise Creek. Their southernmost village, called sko'-teng, was on the east side of the river a half-mile or a mile south of Kekawaka Creek. The sko'-den ke'-ah Merriam gives as the name of the tribelet on the east side of the Eel River and about a half-mile south of Kekawaka Creek. Goddard gives ikodAñkaiya, corresponding to Merriam's sko'-den

ke'-ah, as the name of the group extending from about two miles south of the mouth of Chamise Creek nearly to the mouth of Kekawaka Creek. Both Merriam and Goddard indicate some doubt whether these people were Wailaki.

VII. Merriam gives the names chēs-kot kē-ah-hahng, chis'-ko-ke'-ah, and tōs-ahng'-kut for the tribelet living in Horseshoe Bend. The first two names come from the word chis-kot, the name for Copper Mine Creek. Goddard also gives these last two names for the group (written tciskokaiya and tosAñkaiya, "water stands people"), and he says their territory includes the land between Copper Mine Creek on the south and a point a mile or two south of Chamise Creek on the north.

VIII. Goddard says that a tribelet named slakaiya or sEyadAñkaiya occupied the territory between Copper Mine Creek in the north and Willow Creek in the south. Merriam gives the name nung-ken-ne-tse' ke'-ah to this group, which he locates on the east side of the Eel River at Island Mountain. He gives no boundaries for the group.

IX. Merriam gives two names for the tribelet occupying the Indian Creek region. The chen-nes'-no-ke'-ah was the band on chen-nes-no'-kot Creek (Indian Cr.) from Lake Mountain to the Eel River; he also writes this name ken-nis-no-kut ke-ah-hahng. His other name for the group has the variants bas-kā'-ah-hahng, bas-ki'-yah, bus-kā-ah-hahng. This group is said to have been on the east side of the Eel River a mile or two north of Indian Creek (in the Fenton Range country). Goddard gives the name bAskaiya, "slide people," corresponding to the last of Merriam's names, for the tribelet from Willow Creek south to Cottonwood Creek. The name refers to a hillside, usually of clay, which has broken loose and has slid down.

X. Merriam identifies no group as occupying the land from Cottonwood Creek south to the mouth of North Fork. Goddard says the region was occupied by a tribelet called sEhtchikyokaiya, "rock red large people."

XI. Merriam says the sā'-tan-do'-che ke'-ah-hahng was the name of a tribelet on the north side of North Fork and about a half-mile from its junction with the main Eel. The name means "rock reaching into the water." Goddard's name for this same group is sEtandoñkiyahAñ, a clear correspondence, and he indicates that their land was on about the last mile of North Fork.

XII. According to Merriam the next group up North Fork was named sē-cho ke'-ah-hahng. Its land was on the north side of North Fork a mile or more above its mouth. Goddard has the same name for the group, sEtcokiyahAñ; he says the people occupied both the north and south sides of a one-mile stretch of North Fork beginning a little way below the mouth of Wilson Creek and extending downstream from there.

XIII. Merriam says ki'-ye ke'-ah-hahng was the name of the tribelet on both sides of North Fork at the mouth of Wilson Creek. This is in accord with Goddard's data. He gives the name as kAiyEkiyahAñ. Neither Goddard nor Merriam gives the limits of this group up North Fork. Presumably they coincide with the tribal boundary.

XIV. According to Goddard a tribelet called nEhtcikyokaiya was in possession of the territory on the east bank of the Eel from McDonald Creek northward to the mouth of North Fork. Merriam does not record this group.

XV. The southernmost tribelet on the eastern side of the Eel is called sEĭgAikyokaiya, "rock white large people," by Goddard. They are said to have occupied the territory from McDonald Creek south to Big Bend Creek. This group is not recorded by Merriam.

VILLAGES

The list of villages which follows includes all those contained in Merriam's notes and also all those given by Goddard (1923a) that could be located with accuracy (map 5). Occasionally there is a conflict between Merriam and Goddard and then it has usually seemed best to accept Goddard's information, since he actually visited the sites of most of the villages he mentions.

All the data are either from Merriam or Goddard, as indicated by (M) or (G). Ancillary comment by myself is placed in square brackets. The notations (Tip) and (Maj) refer to Merriam's informants (see p. 167). The arabic numbers correspond with those on map 5, indicating separate villages. These run consecutively from north to south, first on the west side of the Eel (1-22) and then on the east side (23-67).

Villages on West Side of the Eel

1. The main village of the ki-ketch-e tribelet is said to have been on the S side of the mouth of Chamise Cr. (M).

kAntEltcEk'At, "valley small on" (G). The most northern village of the kaikicEkaiya, whose northern boundary was Chamise Cr.

[Both Merriam and Goddard give this as the native village of the wife of Wylakki Tip so there is no doubt that they are referring to the same village.]

2. kun-tes-che'-kut (M). Said to have been a Wailaki village on the W side of the Eel R. a half-mile N of Horseshoe Bend Tunnel, probably nearly opposite Horseshoe Bend Cr. (Tip).

[Horseshoe Bend Tunnel cuts out the meander of Horseshoe Bend. Horseshoe Bend Cr. appears to enter the Eel from the E about a mile S of Boulder Cr. If Goddard's kAntEltcEk'At is really kAntEltcEk'At, with the bar on the 'l' dropped in error, then these names are nearly the same. If so, kun-tes-che'-kut might be the name of village no. 1 even though the location differs slightly.]

3. basEtcEłgalk'At, "throw stone outside on" (G). On the western side of the Eel, just N of the mouth of Pine Cr.
4. sEdAkk'añdAñ, "rock ridge place" (G). On the point of the ridge around which the Eel turns toward the W at Horseshoe Bend.
5. kit-te-ken-ně'-din (Tip), kit-ken-ně-tung (Maj) (M). At or near the S end of Horseshoe Bend Tunnel. It was the biggest village of the tribelet and was said to have been the native village of the father of Wylakki Tip.

sě-tah'-be (M). A large village on the W side of the Eel River just S of Horseshoe Bend Tunnel near Island Mt. Station. It was nearly opposite the mouth of Copper Mine Cr.

tcInnagañtcEdai, "eye closed door" (G). At the base of the ridge described in no. 4. It was said to have been the home of Captain Jim.

[These names may or may not refer to the same village. If they do, it is likely that Merriam's kit-te-ken-ně'-din is the correct one. His sě-tah'-be evidently refers to the name of the tribelet, sEtakaiya, given by both him and Goddard. Goddard's designation looks as though it might very well refer to the tunnel and thus would be very modern.]

6. lacEłkocEdAñ, "buckeye small hole place" (G). This seems to have been only a few hundred yards S of Horseshoe Bend.
 7. kaigAntcik'At, "wind blows up on" (G). A big winter camp about 1/4 mi. S of Horseshoe Bend.
 8. sait'otcEdadAñ, "sand point on" (G). Also about 1/4 mi. S of Horseshoe Bend but was about 500 ft. above the river near a big spring.
 9. tcIbbEtcEki, "gather grass tall" (G). A little more than a mile S of Horseshoe Bend a very small stream runs into the Eel from the W. On the N side of the mouth of this stream was this house site where Captain Jim's father used to build his house some winters and live by himself.
 10. sEnanaitAnnik'At, "stone trail across on" (G). About a mile S of Horseshoe Bend.
 11. Isgaikyoki (G). About 1-1/2 mi. S of Horseshoe Bend a small creek called Isgaikyokot enters the Eel from the W. The village with this name was situated on the N side of the mouth of this creek. It was the home of the father of the wife of Wylakki Tip.
 12. IsgaidadAbbİñlai (G). N of the creek mentioned in no. 11 but on higher ground away from the river.
 13. łtAgtcEbi', "black oaks in" (G). About a mile N of Natoikot Cr. on a flat above the river.
 14. sEnagatcEdAñ, "stones walk around place" (G). About 200 yds. N of no. 15.
 15. sEłsokyok'At, "stone blue large on" (G). About 1/2 mi. N of the mouth of Natoikot Cr. There was said to have been a pond here.
 16. łtcicsEyEbi', "ashes rock shelter in" (G). This shelter was under a large rock which stood on the hillside a short distance downstream from no. 17. Two or three families used to spend the winter in it.
 17. bantcEki, "war [ghosts] cry" (G). On the W side of the Eel a little more than a mile N of the mouth of North Fork and opposite the mouth of Cottonwood Cr. It was close to a fishing place that the tribelet shared with the bAskaiya tribelet.
 18. tah-tēs-cho'-tung, tah-tēs-cho'-ting, tah-chis'-ting (M). 1/2 mi. or more N of the mouth of North Fork on the W side of the main Eel.
- taticcodAñ (G). In a grove of oaks about 1/4 mi. downstream from the mouth of North Fork on the W side of the Eel.

19. ne'-tahs, ning-ken-ne'-tset (M). Ne'-tahs is the name of the town on a rocky stretch of the river. The town ran for a mile or more S of the mouth of North Fork (Maj). Ning-ken-ne'-tset was the name of the village which was at the fishing place opposite the mouth of North Fork and extending S. It was also called "fishtown." Tip's mother lived there (Tip).

nEtacbi', "land slide in" (G). About a mile S of the mouth of North Fork on the W side of the Eel. It was a noted fishing place. Goddard says: "There is no mention in the notes of a village at this point, but several Wailaki were spoken of at times as belonging to the nEtacbi'."

20. sEłtcabi' (G). Nearly opposite the mouth of McDonald Cr. It was named for the large rock beneath which it stood.

21. tcołAttcik'At, "graveyard on" (G). A large village on the western side of the river a few hundred yards downstream from the mouth of djoñkot.

[The stream that Goddard calls djoñkot seems to be the one that appears on the modern maps as Cinch Cr.; that is the only one in the vicinity. On his map it is shown entering the Eel about a mile downstream from the mouth of Bell Springs Cr. but it is actually a tributary of Bell Springs Cr., joining that stream a scant hundred yards from its mouth. On the assumption that Cinch Cr. is, in fact, the stream that Goddard meant to indicate I have moved the village about a mile to the S.]

22. sa'kAntEłdAñ, "beaver valley place" (G). About midway between the mouth of Blue Rock Cr. and Bell Springs Cr. on a fine large flat.

Villages on East Side of the Eel

23. sEłkaibi, "make a noise in the throat" (G). Opposite the mouth of Chamise Cr.

24. tcadEtokInnEdAñ (G). Located only approximately-- in Horseshoe Bend at the point where the river turns toward the NE.

25. k'AcSAndAñ, "alder stands place" (G). About a mile downstream from the point where the river turns W at Horseshoe Bend.

26. sEłcokInnEdAñ, "rock large its base place" (G). About 1/2 mi. downstream from the point where the river turns toward the W at Horseshoe Bend.

27. nEłcEdEłcAñk'At, "ground rolling on" (G). A short distance W of the mouth of Copper Mine Cr. (Tunnel Cr.).

28. dAndaitcAmbi, "flint hole in" (G). On the downstream side of the mouth of Copper Mine Cr. (Tunnel Cr.).

29. taht-aht (M). On the E side of the Eel R. at Horseshoe Bend and opposite sē-tah'-be. It was a big town (Tip).

kaitcIIIñtadAñ, "Christmas berries among place" (G). There was a graveyard about 1/4 mi. N of the village and just beyond the graveyard was Copper Mine Cr.

30. to-chē'-ting (M). A big village on the E side of the Eel R. at Horseshoe Bend (opposite sē-tah'-be), only a short distance S of taht-aht (Tip). It was probably less than 1/4 mi. S of Island Mt. Station on the opposite side of the river.

kasłInkyodAñ. "spring large place" (G). On the E bank of the river about 300 yds. S of kaitcIIIñtadAñ, or about 1/2 mi. S of Copper Mine Cr.

[The names of these two villages are not the same at all and since Goddard gives many villages in the near vicinity the chances are good that the names do not represent the same village.]

31. kasłInkyobi, "spring large in" (G). A rock shelter near Goddard's kasłInkyodAñ. A family used to spend the winter here. Captain Jim's father-in-law was left here to die after he had been wounded by the whites.

32. skEłcEłkascanAñ, "mush thrown away sunny place" (G). Evidently situated about a mile S of Copper Mine Cr., where the river makes a slight turn toward the N. Here there is a flat 50 ft. higher than the river and 150 ft. from it, in which 17 house pits were counted. This village was just upstream from a rock called skEłcEłkaiyE. Each spring a mushlike substance appears on the face of this rock and is washed away each winter. The thickness of the deposit is supposed to indicate the abundance of the year's acorn crop.

33. ah-chahng'-ket (M). On the E side of the Eel a mile or two S of Horseshoe Bend. It was more than a mile S of to-che-ting (Tip).

akyañk'At, "right here on" (G). Some distance N of Willow Cr. and on the river.

[These two names doubtless represent the same village but neither Merriam nor Goddard gives a very exact location for it.]

34. slAsyanbi, "squirrels they eat in" (G). Only a short distance S of Willow Cr. and back from the river near nEłtcAnk'At. slAsyankot was an alternate name for Willow Cr. and the name of the village was derived from this.

35. nē-chung-ket' (M). On the E side of the river about 1/2 mi. S of ah-chahng'-ket (Tip). The inhabitants were called nē'-chung ke-ah-hahng (Maj and Tip).

nEłtcAñk'At, "ground black on" (G). Said to have been the second one S of Willow Cr.

[It is evident that both Merriam and Goddard have the same name here. Goddard's location is more precise and thus has been accepted.]

36. dabAstci'Añdañ, "ants' nest place" (G). A little way S of the mouth of Willow Cr. The name comes from the name of Willow Cr.--dabActci'Añkot.

37. dAstatcElai, "string (?) point" (G). Evidently only a short distance above Indian Cr. It was said to have been a large winter camp.
38. tcAksAl (G). Just N of the mouth of Indian Cr. was a sharp rock with this name; the Indians camped near this in the springtime.
39. tAidjInlai, "water clayey point" (G). On the S side of Indian Cr. The large village appears to have stood just a little E of the NW corner of sec. 36, T. 5 S., R 6 E. Its inhabitants were exterminated by mixed bands of white men and Kekawaka Indians.
40. tah-bus-che-sahng'-tung (M). A small village in the hills 1 mi. E of the Eel R. and 1 mile S of Indian Cr. (Maj).
41. sEhtcikyk'At, "red rock large on" (G). 1/4 mi. N of the first creek downstream from North Fork on the E bank of the main Eel.
42. chug'-ge'-tah (M). A small village on the E side of the Eel N of the mouth of North Fork (Maj). It was about 2 mi. S of Indian Cr.
- sEtaticaiya (G). A tall rock is situated N of the mouth of the first creek N of the mouth of North Fork. The village was just to the W of this rock and was named for it.
- [The villages given by Merriam and Goddard are in about the same place but Merriam's location is so indefinite that their identity is uncertain.]
43. kaitcitadAñ, "redbud place" (G). A short distance N of the mouth of North Fork a ridge runs down to the river. On the northern side of the ridge a village was situated.
44. tōn-klan'-be-ko-cho'-be (M). On the E side of the Eel on the northern side of the mouth of North Fork (Tip).
- tonĕmbi, "streams come together in" (G). Situated on a terrace N of the mouth of North Fork and on the E side of the main Eel. In the summer of 1922 10 house pits were counted there, 4 of them being large and deep.
- [These two sites are evidently the same, since both the names and the locations match.]
45. sā'-tan-do'-che ke'-ah-hahng (M). In a rocky stretch on the N side of the North Fork about 1/2 mi. above its junction with the main Eel. The name means "rock reaching into water."
- sEtandoftci, "rock runs to the water" (G). On the N bank of North Fork about 1/2 mi. above the mouth.
46. sEntciyE, "rock large under" (G). About 3/4 mi. above the mouth of North Fork. The rock for which it was named, with a large spruce tree, stands opposite the village site, on the S side of the stream.
47. sě-cho-ke'-ah-hahng (M). A village and band at sě-cho, "big rock," on the N side of the North Fork of the Eel a mile or more above its mouth. "Thousands of Indians killed here" (Maj).
- sEtolai, "rock large point" (G). On the N side of North Fork a little more than a mile above its mouth.
48. lacEnadailai, "horse chestnut stand point" (G). About 60 yds. upstream from no. 47. A house pit 4-1/2 ft. deep was seen there.
- [This site was no doubt included under no. 47 by Merriam's informant.]
49. About halfway between the main Eel and Wilson Cr. a small stream enters North Fork from the S (G). Near this there was a village before the whites came. An incident there is said to have occurred at a time when the informant's grandmother's grandmother was small.
50. stAstcok'At, "rope large on it" (G). Somewhat farther upstream than no. 49 and back a way from the bank of the stream, also on the S side. The village is said to have been a large one when the white people came to this region. In 1906 there was still a house on the site.
51. totAkk'At, "between water" (G). Summer camp a little way below the mouth of Wilson Cr. on the N side of North Fork.
52. sehtcidadAñ, "stone red mouth place" (G). An old village, occupied before the whites came. It stood between no. 11 and the mouth of Wilson Cr.
53. nolEtcotadAñ, "water falls large among" (G). On the N side of North Fork about 1/2 mi. below Wilson Cr. It was on two levels; one near the stream, the other on a terrace some yards N.
54. ki'-ye ke'-ah-hahng (M). On North Fork at the mouth of Wilson Cr. and covering both sides of North Fork and Wilson Cr. (Maj).
- [This name is evidently the same as Goddard's name for the triblet on North Fork above Wilson Cr.--kAiyEkiyahAñ.]
55. sEnEsbInnAñkai, "rock tall its slope" (G). On the northern side of North Fork and about midway E and W of sec. 12, T. 24 N., R. 14 W. is a tall rock called sEnEs. Just W of this was the village.
56. k'asolEtcobi, "arrowwood rotten flat" (G). On the S side of North Fork opposite the tall rock mentioned in no. 55. The informant said his uncle remembered the building of the dance house when he was a small boy.
57. sā'-yahs kun'-dung (M). A fishing camp for drying salmon at Fishtown Spring or Upgraff fishery on North Fork about 5 mi. up, "march till creek dries up."
- [Upgraff must be an error for Updegraff; the latter is a local place name whereas the former is not, so far as I can see.]

58. sEnEstconatAñkai, "rock tall large crossing" (G).
A small stream comes into North Fork about 1-1/2 mi. above Wilson Cr. The village of this name was situated 1/2 mi. S of North Fork and just to the W of this tributary. The village had not been occupied in the memory of the informants.

59. Another village not occupied in historic times was situated on the S side of North Fork just above the mouth of the stream mentioned in no. 58 (G).

60. sãh-gah'-ket, se-kah'-ke-ah-ahng, se-ki'-ah-hahng (M). A rancheria on the E side of the Eel R. on the S side of the mouth of North Fork (named for sã-gah-nah'-ting, the name of the land on the S side of the mouth of North Fork in the angle between the two rivers) (Tip).

kaihtcitadAñ, "redbud place" (G). This was apparently near Merriam's sãh-gah'-ket.

[These different names may not represent the same village. If these were two villages, they were very close together. Goddard gives kaihtcitadAñ as the name of another village N of North Fork (no. 43) so it may be an error here (see pl. 11, b for a view of this region).]

61. tsEgolkAllinseyE (G). A rock shelter situated back from the river a short distance above McDonald Cr. The Indians lived here in the winter.

62. ne-che'-cho-ket (M). On the E side of the Eel about a mile S of the mouth of North Fork. It was apparently opposite part of the elongate village ning-ken-ne'-tset (no. 19). "Salmon stop here; great fishing; rocky place; Red Hill ground" (Tip).

nEhtcikyok'at, "ground red large on" (G). On a point of land running down to the river on the E side just above nEtacbi', the fishing place of the region.

[Goddard adds some information which explains the statement of Merriam's informant. He says, "About two-thirds of a mile below the mouth of McDonald Creek a number of large rocks lie in the bed of the river. This place is called nEtacbi', 'land slide in,' and seems to have been a noted fishing place.'"]

63. sah-nah'-chung-kut, sah-nah-chin'-che ke'-ah-hahng (M). On the E side of the Eel R. 1-1/2 or 2 mi. S of the mouth of North Fork and near McDonald Cr. (Tip).

64. sel-di'-kot (M). On the E side of the Eel R. S of Bell Springs Cr. (Maj).

65. sě-ski'-cho-ding (M). Claimed as a Wailaki village on the E side of the Eel R. at White Rock near Big Bend. On the opposite side of the river from Bell Springs Station (Tip).

seiGaitcodAñ (G). On a flat on the E side of the river. "The east and west section line dividing sections 84 and 85 of T. 24 N., R. 14 W. was noted as passing through this flat."

[These two names doubtless represent the same village; the names are similar and the locations are the same.]

66. chin-to'-bin-nung (M). On the upper part of McDonald Cr., about 3 mi. up from the Eel (Maj).

67. chus-nah-teg-gul-lah chen-ne-tung (M). An old village about 2 mi. S of North Fork and 3 mi. E of the Eel.

PLACE NAMES

The following list includes ethnogeographic information taken from Merriam's notes in addition to information on creeks from Goddard (1923a), the latter being especially important because most villages are located with respect to streams. All streams and rivers may be found on map 5. Locations of other features have been given after consulting the appropriate United States Geological Survey (USGS) quadrangle but they are not shown on the map. For this area the quadrangles are Alderpoint (1951), Hoaglin (1935), Leggett (1952), and Spyrock (1952).

Asbill Cr. - - djoñot (G).

Bell Springs Cr. - - sAlt'okot (G).

Bell Springs Mt. - - tsi-to'-ting; si-to'-ting (M). This is the mountain cut through by Bell Springs Cr.

Bell Springs Station (native name for the site of the station) - - sah'-ten'-tě'-te; sah-ten-těhl-tě (M).

Bell Springs Station is on the W side of the Eel about halfway between Blue Rock Cr. and Bell Springs Cr., about the same place as village 22. In fact, Merriam's names for this site may correspond to Goddard's name for village 22, sa'kAntEñdAñ.

Big Bend Cr. - - dAndaikot (G).

Blue Rock - - sen-chah'-tung (M). Evidently this is near Blue Rock Cr.

Chamise Cr. - - sah-nah'-ting; shah-nah-ting (M). canAndAñkot (G).

Chamise Cr. crossing - - ses-ki'-be (M).

Chamise Cr., mouth of - - sun-ti'-che, soon-di'-che (M).

Cinch Cr. - - djoñkot (G). Goddard evidently has this creek placed incorrectly on his map. If I understand his description, it should be a tributary of Bell Springs Cr. rather than of the Eel R. directly.

Copper Mine Cr. (Tunnel Cr. on the more recent maps) - - chis'-kot, chēs-kot (M); tciskot (G).

Both Merriam and Goddard say that this name refers to red paint and was probably suggested by the color of the water in the creek. This is also responsible for the English name.

Cottonwood Cr. - - tgActcEkot (G). The English name is a translation of the Wailaki name. The creek is unnamed on USGS maps.

Dawson Flat - - choo'-e-kun-tes'-te (M). This flat was W of Lake Mt. between Horse Ranch and Fenton Ranch.

Eel R. - - tan'-cho-kut (M).

Eel R. valley - - bus'-be (M). This name refers to a part of the valley of the main Eel R., especially the E side, between Horseshoe Bend and North Fork.

Eel R., E branch of South Fork - - to-kā-kut (M).

Eel R., Middle Fork - - tahng-cho-skus (M). The junction of the Middle Fork with the main Eel was called tōs-kahs-kā.

Eel R., North Fork - - bah'-ne-kut (M); banikot (G).

Eel R.-North Fork junction - - chā-lin'-ding, klā-lin-ding (M).

Harris region - - tah-sahn-ting', tahs-ahng (M). Harris is a small town about 8 mi. W of the main Eel R. in the territory of the Lassik (according to Merriam's boundaries).

Hettenshaw Valley - - ken-tes'-tung (M). This valley is in Lassik territory about 12 mi. N of the Wailaki boundary. It lies between the headwaters of the North Fork of the Eel and the headwaters of the Van Duzen R.

Horse Ranch Cr. - - kus'-ken-tes'-be (M); canAñtcakot (G). These are clearly not the same names but sometimes streams have alternate names. Cf. Willow Cr. below.

Horseshoe Bend - - chēs (M). The bend is named for the red copper spring of Copper Mine Cr. ki'-ke-che (M) is the name for the western part of the loop of Horseshoe Bend. to-sahng'-kut, tōs-ahng-kut (M) is the name of the part of Horseshoe Bend N of Island Mt. Horseshoe Bend is the big switchback curve in the Eel R. about 6 mi. N of the mouth of North Fork.

Indian Cr. - - chen-nes-no'-kut, ken'-nis-no'-kut (M). The name Indian Cr. does not appear on any of the USGS maps but it is the name used by Merriam.

Island Mt. - - bahng-kut, bahn-kut (M); bañk'At (G). Island Mt. is a range of hills bordered on the E by the Eel R. and extending from the mouth of North Fork in the S to beyond Horseshoe Bend in the N.

Jewett Cr. - - sel-di'-kot (M); dAsk'Ekot (G).

Kekawaka Cr. - - kas-nā'-kot, kahs'-ne-kot (M); kasnaikot (G).

Lake Mt. - - sā-kahn-den, se-kahn'-ting (M). Lake Mt. is about 3 mi. E of the Eel and 3 mi. N of North Fork.

McDonald Cr. - - sah'-nah-chin-che (M); canAñtcIntci (G).

Middle Trail - - be-ten-na'-be (M). This trail was in the hills E of the Eel R. about a mile south of Indian Cr.

Mina - - to-les' cho'-be (M). Mina is a modern place name for a town about 2 mi. N of North Fork and 5 mi. E of the main Eel R.

Natoikot Cr. - - no-toi'-kut (M); natoikot (G). I have given this creek its Wailaki name because it has no English name and is not, in fact, located on modern maps. It is said to have run into the Eel R. about 1-1/2 mi. S of Island Mt. Station, which is on the southern side of Horseshoe Bend. It has been placed on the map in accordance with the topography shown on USGS Hoaglin Quadrangle.

Pine Cr. - - ten-di'-kot (M); lacEtcikot (G). Merriam was not certain that his name was correct.

Pipe Cr. - - taht-so'-kut (M).

Poonkinny Ridge - - nel-kis'-te (M). Merriam says this is the name of the open ridge between the main Eel R. and the northern part of Round V. That area is marked Poonkinny Ridge on the USGS Spyrock Quadrangle. It is in Yuki territory.

Rattlesnake Cr. - - to-nah'-ling (M). This creek is a tributary of the South Fork of the Eel R. and forms a part of the southern boundary of the Eel River Wailaki, according to Merriam.

Rockpile Mt. - - sen'-ning ah'-kut (M). This mountain is said to be on the E side of the Eel R. S of Alder Point, but the name does not appear on modern maps.

Round V. - - ken'-tes-cho'-be (M). The inhabitants of Round V. were called ken'-tes cho'-be ke'-ah, a locative rather than a tribal name.

Summit V. - - ken-tes'ł-be (M). Summit V. lies about 2 mi. SE of the bend of North Fork and seems to have marked the southeastern limit of North Fork Wailaki territory. It is said that there was once much camass there.

Willow Cr. - - dabActci'Añkot, slAsyañkot (G). The latter was used occasionally for the stream.

Wilson Cr. - - dat'olkot (G).

ETHNOZOÖLOGY AND ETHNOBOTANY

The following notes are from Merriam's records.

Badger is called ye-ku-gus-cho, "he pulls into his hole."

The Steller Crested Jay is called chi-cho, while the California Jay is chi-che. In speaking of related species the Indians often indicate the larger by the suffix cho, the smaller by che.

The Owl is called bis-chil-lo-che if it is small, the Great Grey Owl is bis-chil-lo-cho.

The Crow is kah-chan-che, the Raven is kah-chan-cho.

The Meadow Lark sings in the daytime; the Yellow-breasted Chit sings at night.

The Bluebird is a dangerous bird. If a person throws a stone at it, he should shout first to attract its attention, otherwise it will throw a pain to him.

The Junco is a great rustler, always busy hunting for food.

The Chewink, or Towhee, called Nahl-tse, was instrumental in procuring the first fire. In the very early days his parents threw him out. He located the fire and Coyote-man went and got it.

The Killdeer Plover is called nah-til yah-che, "necklace wearing."

The Toad is Rough Frog.

The Cicada is used as a remedy for headache. The live insect is pushed up into the nose, where, by kicking around, it makes the nose bleed, thus curing the headache.

The Dragonfly feeds rattlesnakes.

Oak galls, called kim-mos, are excellent for sore eyes, and also for suppression of urine in children. For weak eyes, the fresh juice of a green gall is dropped into the eye. (It is astringent and an excellent remedy and is a common eye drop among many California tribes.)

Oak mistletoe is used as a medicinal tea, also as a headwash, and sometimes for bathing the entire body.

The thick creamy juice of the milkweed is called "snake milk."

ETHNOGRAPHY

Each tribelet had its own chief and its own hunting, fishing, acorn, and seed grounds. In winter the families of each band were scattered along the river in small rancherias, each consisting of from four to seven families, mostly blood relations, living together in two or

three houses. Usually there were seven or eight people in each house.

The winter houses were of split pine slabs, standing upright or sloping in at the top to form a conical house (pl. 11, a).

PITCH WAILAKI

The Pitch Wailaki are close relatives of the Eel River Wailaki. They live in the drainage of the North Fork of the Eel above Asbill Creek. Virtually nothing is known of this group except their villages and tribelets, which were recorded by Goddard (1924). Presumably they are similar in culture to the Eel River Wailaki and the Round Valley Yuki.

Merriam's notes contain very little information concerning the Pitch Wailaki. He apparently was never in contact with any informants from that group and what information he gives is derived from the Eel River Wailaki. The following summary is presented verbatim from his notes.

The Che-teg-ge-kay. -- The most southeasterly of the southern Athabaskan tribes of California and consequently the southernmost of the Nung-gah^{hl} division. They call themselves Che-teg-ge-kah (Pitch Indians) and are nicknamed Si-yahng (sand-eaters). Neighboring tribes call them Che-teg-gah-ahng and Wylakke.

Beginning on the northwest just below the junction of Salt Creek with North Fork Eel River (a short distance southeast of Hoaglin Valley) their northern boundary extends from Salt Creek northeasterly along the south side of Rock Creek and of Van Horn Creek to its junction with Mad River, where it turns easterly, crossing the long ridge known as South Fork Trinity Mountain immediately south of Kelsey Peak, and continuing easterly to the upper waters of South Fork Trinity River, the west bank of which it follows upstream to the southwest of North Yolla Bolla Mountain, where it ends. From North Yolla Bolla the eastern boundary follows the crest of the high divide southerly past Hammerhorn Peak to Buck Rock (4 or 5 mi. north of Anthony Pk.) where it turns westerly. From this point the southern boundary runs west-northwest to North Fork Eel River, passing just south of Blue Nose Mountain and Hulls Valley to the northern part of Summit Valley just south of Bald Mountain, and crossing North Fork Eel River a few miles south of Mina. Salt Creek forms the principal part of the western boundary.

They had many summer camps but only two principal winter villages: To-nis-cho-be (named for an unidentified blue flower), a large village with a roundhouse situated on the site of Mina on what is now known as the Charley Moore place; and Uk-ki, situated on Hulls Creek at the southeast base of Bald Mountain. They always wintered on Bald Mountain Ridge.

They had also a permanent summer fishing camp called Ko-sen-ten, known to the whites as Fishtown, located on Fishtown Creek, a small tributary rising on Buck Rock and emptying into North Fork of Middle Fork Eel River directly east of Leach Lake Mountain.

Their houses were of bark and conical in form.

Among the enemies of the Che-teg-ge-kah was a related Athapaskan tribe which they called Theng-tah-hahn (called Then-chah-tung by the Settenbiden) vaguely described as on the main Eel River between Island Mountain and Bell Springs.

People dying at home were buried. Those dying at a distance were burned (cremated) and their burned bones were wrapped in buckskin, carried home in a packbasket, and then buried.

TRIBELETS

The rest of the information on the Pitch Wailaki presented here concerns tribelet and village organization and is taken from Goddard (1924). He lists four tribelets among the Pitch Wailaki (Roman numerals, map 6): I, t'odAnnAñ kiyahAñ; II, t'okya kiyahAñ; III, tc'i'añkot kiyahAñ; IV, tcokot kiyahAñ.

VILLAGES

The villages belonging to each of these tribelets are listed below (Arabic number, map 6). All are from Goddard's lists.

I. t'odAnnAñ kiyahAñ

1. t'otcadAñ. On the N side of North Fork not far below the mouth of Hulls Creek. The site was sheltered by ridges on the E and W and by the main mountainside on the N. Four pits were counted.

This was the only site visited but the names of other villages of the group were obtained. In their order downstream from Hulls Creek they are AntcAnyacbAnnAñ, "pepperwood slope;" sEtcAmmi'; nEYindAñ; lawasonk'ait; t'AntcanyodAñ. At this last there is said to have been a large conical earth-covered lodge and many dwellings.

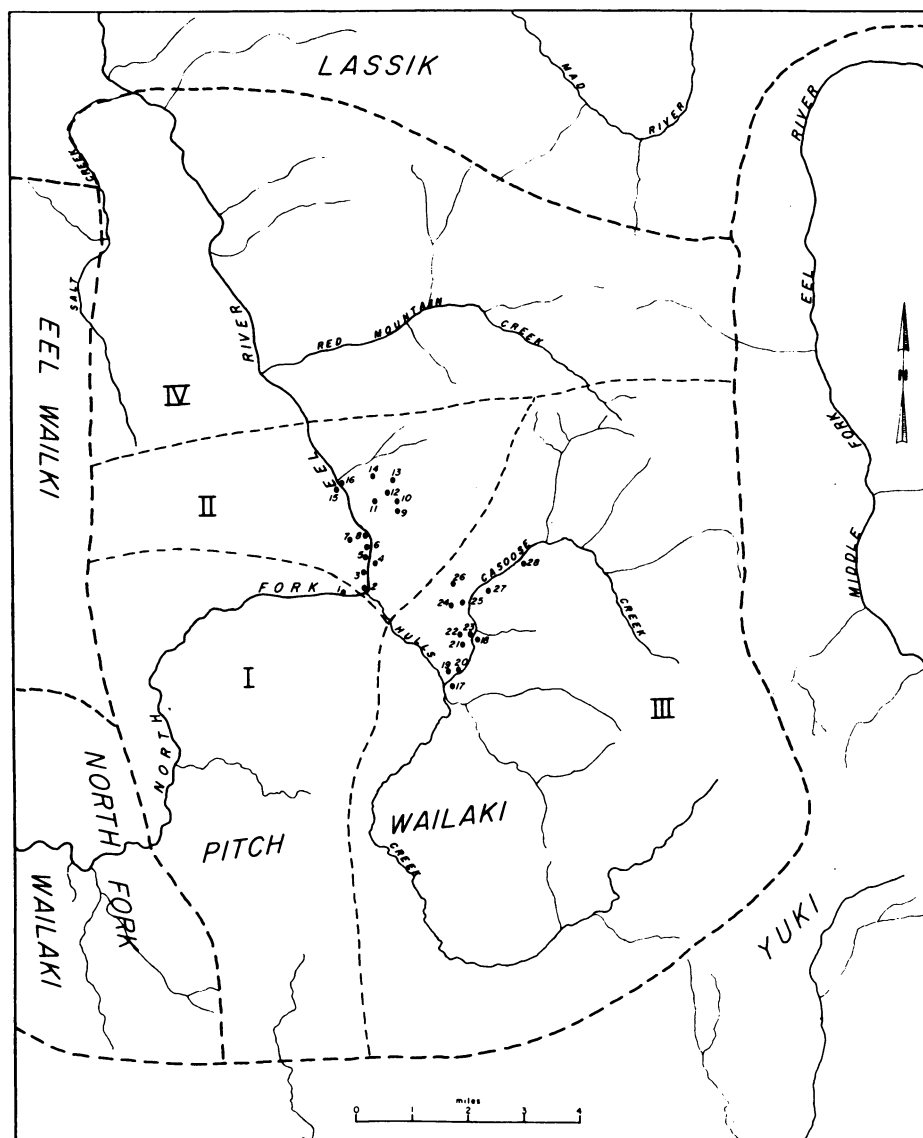
II. t'okya kiyahAñ

2. ðEliñkyobi', "streams flow together large in." On the W side of North Fork just upstream from the mouth of Hulls Creek, situated close to the hillside on a bench about 50 ft. higher than the river. The site is divided by a gulch on the upstream side of which, it was said, there had once been houses. Four distinct pits and 3 less distinct ones were seen there.
3. tAntcInyasbAnnAñ. Nearly opposite nando'ndAn on a point of land running toward the SW. About 75 ft. above the stream 2 pits, one above the other, were seen. No more could well have been accommodated.
4. nando'ndAñ. On the E side of the river and about 1/4 mi. above the mouth of Hulls Creek, 30 ft. above the bed of North Fork. Four house pits were counted there, one of which was 15 ft. in diameter and 5 ft. deep. This was the village of Goodboy Jack's father.
5. kAllata. Named for a big jagged rock standing N of the village site. It was on the W side of the river

- 1/4 mi. N of tAntcInyasbAnnAñ and 300 ft. higher than the river. A grove of oaks stands on a rounded point where 3 house pits were seen. A gulch on the southern side furnished water in winter.
6. tco'Ammi'. On the W side of the river about 1/4 mi. upstream from kAllata. The site is on a wide point of land covered with oaks and pepperwood trees. There is a sheer rock on the opposite side of the river. Three pits were seen here.
 7. tAltAskIñ. Named from a knoll, tAltAs. Situated on the slope of a large ridge around the end of which North Fork swings, from flowing SE, to S. It was about 500 ft. higher than the stream and distant from it about 1/8 mi. Here once stood an earth lodge, the pit of which was 30 ft. in diameter. The center post was said to have been 18 ft. high. The doorway was toward the N. Goodboy Jack remem-

bered going into this house when he was a small boy. Messengers had been sent out to invite people from a distance of two days' travel and Indians from the main Eel R. and from the north were present.

8. sAñ'AnyE. Named from a very large rock standing on the E side of the river. The village was on the W side a little downstream from this rock. On a bench 30 ft. above the river bed were seen 5 house pits and above were 6 more, one above the other, on the slope. In this village lived tAntcAnyacta', who had charge of the earth lodge at tAltAskIñ, and si'idonta, who was "boss" of all the villages of the t'okya kiyahAñ, especially when they camped together in summertime.
9. t'AntcAntantEldAñ, "pepperwood flat." About 100 yds. S of the large rock called kaitstotci on a small



Map 6. Villages and tribelets of the Pitch Wailaki. Roman numerals indicate tribelets according to Goddard (1929); arabic numerals mark village sites.

bench on the mountainside about 1,000 ft. above North Fork. Three pits were found. A rock shelter higher on the hillside and to the S was pointed out. At this village, shortly before the coming of white people, lived dA'ya'tco, "large beard," chief of this village and of annEnE'tcAñ, of all the t'okya kiyahAñ, in fact. He was succeeded by his son kissEke', who was killed by the whites.

10. kaihtsotci canAndAñ. Named for the large rock kaihtsotci, under the shelter of which the village stood. Four pits were seen here and N of a small ridge were 3 others.
11. annEnE'tcAñ. On the NE side of the river stand two huge rocks, the upstream one called sehtcAnnAn, the downstream one sAnAn. Between these two rocks flows a creek and on its N side, 75 ft. below the summit of the rocks, were 3 house pits in a hollow. A little S and 100 ft. higher were found in succession 3, 2, and 5 pits.
12. mAntc'aik'At. On the mountainside N of a large rough ravine and about 900 ft. higher than the bed of North Fork. Four pits were found.
13. mIstco'ca'nAndAñ. Up the hill from no. 12. It was not visited.
14. sEhtcAnnAnt'a. Named for a high rock, sEhtcAnnAn, on the S side of which there are 5 pits and, 100 yds. below, 6 more. The site is about 700 ft. above North Fork and has a wonderful outlook on the valley of that stream.
15. k'AckAntEhdAñ, "alder flat." On the W side of the river on a curving bench. Two pits were found close to the hillside, and 2 nearer to the stream. Downstream on a little bench there were also 2 indistinct ones, said by Jack to have been used long ago.
16. sEhtcAnnAñ yE. At the base of the rock mentioned in no. 14. Three pits were found on a small bench.

III. tc'i'añkot kiyahAñ

17. lonbAstEdAñ. On a flat on the S side of Casoose Cr. a short way above its mouth. There were some unoccupied buildings there at the time of Goddard's visit. The place was seen from the trail on the N side of the creek.
18. sEhtkantilai'. Mentioned as situated on the E side of the creek below no. 25.
19. Goddard gives no name or other information for this village but it is shown on his map.

20. sEhtcicikItdatdAñ, Named for a rock, settci. It was at the base of a mountain on the N side of the creek and just above the flood waters. It had a good SE exposure. Three pits in a row were found.
21. yIctAnnEbi', "wolf's road in." About 300 yds. below the large butte mentioned in no. 23. It was across an open knoll and back from the creek somewhat, so the sun reaches the spot. There are 2 pits there. Steelhead salmon are able to come up the creek this far.
22. kIlkokyodAn. On the S side of the butte mentioned in no. 23 and about 100 yds. distant. Four large pits were noticed.
23. kIkokyokInnEdAñ. Named for the bushy butte at the base of which the village stood. The site is 100 ft. higher than the creek, on its NW side just below a canyon. Three pits were seen.
24. mAñk'AtdAñ. Named from a small pond, near which are deserted buildings and an old orchard. A hundred yards NE of this pond, back against the hill, 4 pits were found in a row, 2 more above them, and 2 others near by, making 8 altogether. The last chief of this village was named tcAsnainñaita'.
25. It'Aktcibi'. Named from black oaks. It is nearer the creek than no. 24. The number of pits was not recorded but signs of a village there were unmistakable.
26. t'Antcigt'tcAñ. On the W side of the creek nearly opposite no. 27. It was N of a small creek with running water and of a ridge which runs down to the main creek and terminates in a great, nearly sheer cliff. The village site is about 500 ft. higher than the stream. Eight pits in two rows were counted.
27. k'aickontEhdAñ. On the E side of Casoose Cr. on a flat 100 ft. higher than the creek, which flows just below it. The village site is near a post which marked the old boundary between Trinity and Mendocino counties. Two pits were seen.
28. tc'iañmiyE. On the E side of and 100 ft. higher than Casoose Cr. It was 100 yds. downstream from the beginning of the canyon. Five pits were counted.

IV. tcokot kiyahAñ

The winter villages of this group were on Red Mountain Cr. Goodboy Jack said that he did not know the village names. The impression had been received that Salt Creek V. was inhabited but Jack said it was too cold to live there in the winter. Presumably it was the hunting ground of the tcokot kiyahAñ.

LASSIK

The Lassik occupied the drainage of the main Eel River between the mouths of Dobbyn and Kekawaka creeks and the territory east of there to the crest of the Coast Range. There is almost no ethnographic information on this group in the literature except a few notes

gathered by Essene (1942) when he was compiling a Culture Element List for the area. Even the geographic information on this group is weak. Merriam does not seem to have spent much time among them. Goddard may have recorded their villages but, if so, I have been able to find

only a small part of his data. What there is I give below.

Merriam records only random notes on the Lassik. His informant from that group was Lucy Young, the same woman Essene worked with so effectively (Essene, 1942; see also Kroeber's data, App. II). According to Merriam, she lived with her daughter, Mrs. William Clark, on a ranch about two miles south of Zenia; Mrs. Clark's husband came originally from Hyampom. Merriam seems to have visited Lucy Young in 1922. His only statement on the group follows.

Sit-ten-biden keah . . . Main Eel River from Fort Seward region on north, southerly to Harris and Kekawaka Creek; westerly to South Fork Eel River; easterly to Forest Glen and South Fork Trinity River near Kelsey Peak.

TRIBELETS

Merriam's notes contain no systematic information on the tribelets of this group but do give the following miscellaneous data.

Kos-kah-tun-den ka-ah is the Settenbiden name for a related tribelet in the Blocksburg region [the territory E of Alder Pt.], now extinct. Their language is the same as that of the Bridgeville group but with many words different from Settenbiden.

Sa-tahl-che-cho-be is the Settenbiden name for the band on the east side of the Main Eel River just below the mouth of Kekawaka Creek. This tribelet is the "sko-den ke-ah" of the Eel River Wailaki. Neither Merriam nor Goddard was sure whether the group ought not more properly to be included in the Lassik or the Wailaki.

Taht-so keah is the name of a tribelet to the north of the Eel River Wailaki which the latter said was related to them. This group, together with the sa-tahl-che-cho-be, is said to constitute the then-chah-tung tribelet of the Lassik.

VILLAGES

For the most part the Lassik villages recorded by Merriam (and listed below) cannot be located, hence they have not been placed on the map.

Kahsh-bahn. A Lassik village on the W side of the main Eel R. about 2 mi. above (S of) the mouth of Jewett Cr. This was a big town and there were lots of acorns near there.

Kes-tah-che. On the E side of the main Eel R. nearly opposite (a little above) the mouth of Jewett Cr.

'Ki-che-be. On the site of the present (1923) store at Ruth on the Mad R. This was a big town with many houses and a sweathouse. There were lots of deer, bear, and acorns in this area. During the cold weather, usually in January, a dance, which lasted three nights, was held in this village.

Sa-cho-yeh. A large village on the E side of the main Eel R. about 2-1/2 mi. S of Alder Pt.

Sa-tahl-che-cho-be. The name means "red rocks." On the E side of the main Eel R. about 1/2 mi. or a mile below the mouth of Kekawaka Cr. There were falls and a whirlpool there.

Tah-kah-ta-cho-be. On the E side of the Mad R. on a flat near the Hay place about 10 mi. above Ruth. It was a big town with a sweathouse.

Taht-so. On the Underhill ranch, which was owned by Glenn or Green at the time Merriam was in the area (1920's). Evidently it was somewhere in the Harris region W of the main Eel R.

Tha-cho-yeh. On the main Eel R. on a flat under a high standing rock. The rock is now called Cain Rock. It is on the E side of the river about 3 mi. S of Alder Pt.

Tha-ken-nes-ten. The name means "talking rock." The village was on the E side of the main Eel R. near a big rock which stood at a bend of the river at the Johnson place (near a big white house). It was a big town with a sweathouse.

Tha-tah-che. A large winter village in Soldier Basin on the North Fork of the Eel (near present Gilman place). This was a big town but had no sweathouse. In the winter they hunted deer and bear here.

To-be-se-a-tung. On the E side of the Mad R. above the Bushman place. It was about a mile above the river.

To-sos-ten. On the E side of the main Eel R. a mile or two above Alder Pt.

There is some ambiguity in Merriam's notes on the status of the Lassik living in the western part of their territory near the South Fork of the Eel. The Sinkyone George Burt told Merriam that a group called the To-kub'-be ke'ah or To'-kah-be held the land on the east side of South Fork from Rocky Glen Creek south to above Garberville. This tribe was said to be centered on the east branch of South Fork and in the Harris region and to be a different tribe from the one on the main Eel River at Alder Point and Kekawaka Creek, but Merriam himself has refused to accept this assertion.

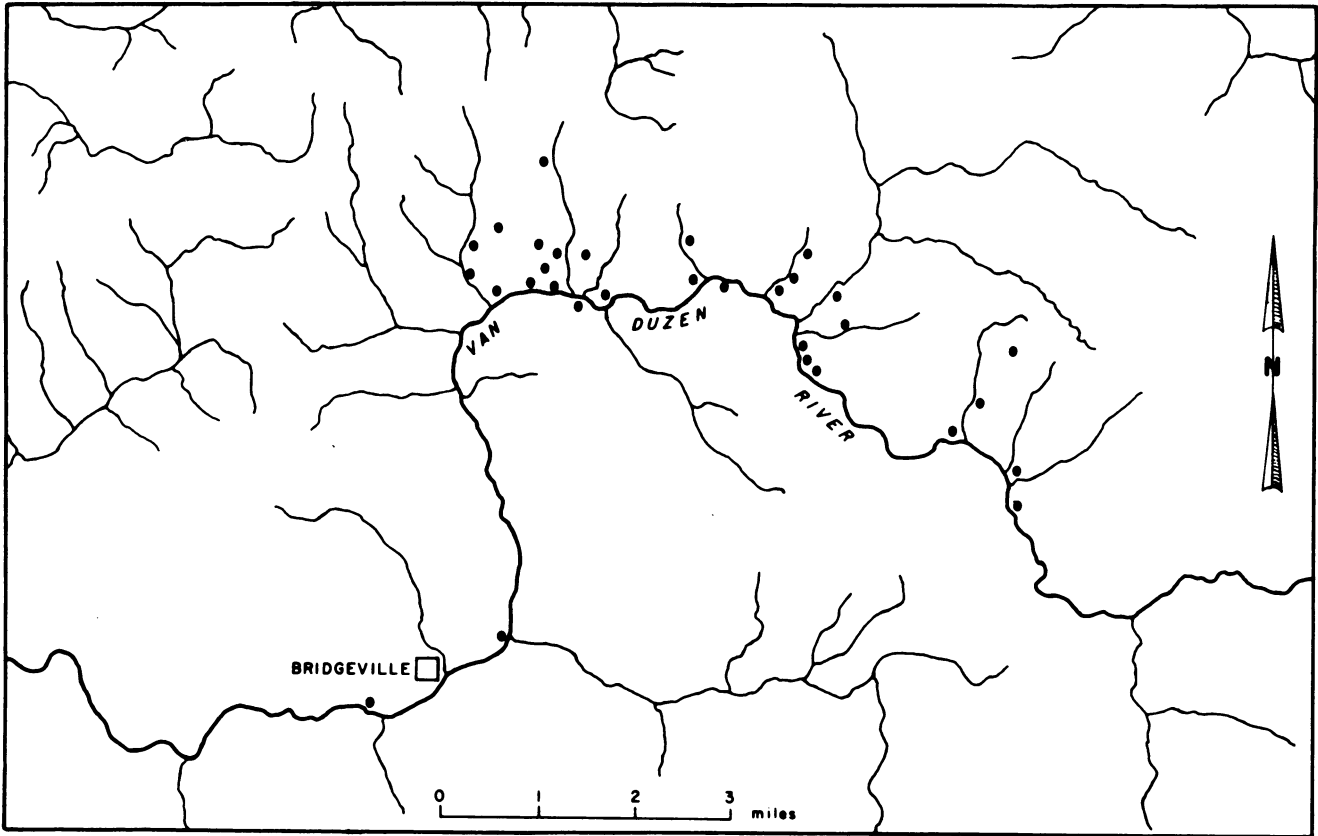
Goddard's information indicates that the east bank of South Fork was owned by the Sinkyone, and it is so detailed that it has been accepted here (see p. 164).

Goddard's unpublished material on the Lassik consists of a single map (here reproduced as map 8), which apparently shows the locations of 27 villages. A list of what are presumably the village names accompanies it, but Goddard changed the numbers on his map. Hence on our map the correct name may not be assigned to each site.

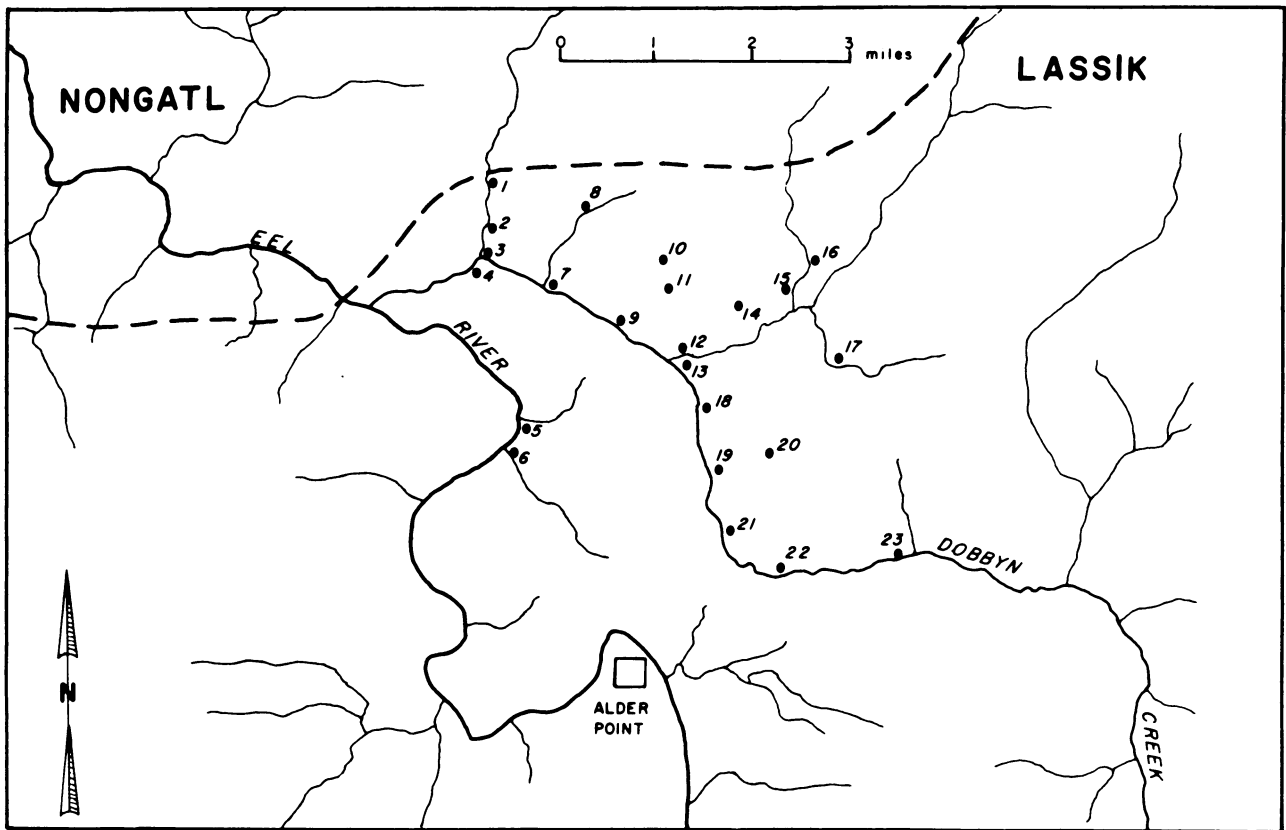
Goddard's Lassik Villages

1. gascikdũñ	13. tōtcadũñ
2. kōntel̥tcidũñ	14. saitōtci
3. satcin̥it̥cidũñ	15. n̥ns̥un̥l̥tcik̥kinne̥dũñ
4. naslintce	16. y̥istcūt̥cadũñ
5. ist'etac̥idũñ	17. tois̥ibi
6. tōkseye	18. lesbatc̥it̥dũñ
7. kiñk'utekōntel̥dũñ	19. k'ustc̥ik̥dũñ
8. k'uctōtōdũñ	20. t̥cūgg̥ustac̥i̥c̥
9. d̥iy̥ick̥k̥	21. lesbaitc̥i̥c̥
10. n̥nd̥ūkkat̥undũñ	22. setac̥i̥c̥
11. kōntel̥tcidũñ	23. kastōntc̥i̥c̥dũñ
12. gōsn̥ol̥indũñ	

Goddard lists other names, presumably for the Lassik villages, as follows: sekũine, tectatalindũñ, d̥ult̥c̥ikyacdũñ, t'o- toduñ, k'usnesdũñ, ne ga b̥i, k̥ūttantc̥it̥c̥ōdũñ. The sites corresponding to these names cannot be located.



Map 7. Presumed Nongatl villages in the Bridgeville region.



Map 8. Lassik villages in the Alder Point region.

NONGATL

The Nongatl are almost entirely confined to the drainages of the Van Duzen River and upper Mad River. Their culture is the least known of any group in northwestern California. Merriam evidently did not work in their area although he recorded a few of their words given him by George Burt's wife. George Burt was a Sinkyone, but his wife was born and raised near Bridgeville. Goddard recorded some villages for this group, whose names are given below. Nomland worked with someone from the Nongatl in 1928 (Nomland, 1938, p. 9), but her results have not been published.

The territory of the Nongatl lies, for the most part, east of the main redwood belt. It is therefore no doubt well supplied with oaks, and plant foods are thus readily available. Salmon are abundant in the Van Duzen River (pl. 10, c) and Yager Creek but not in the Mad River in eastern Nongatl territory. In much of their territory then, the subsistence patterns of the Nongatl must have differed from those of most of northwestern California, where fishing was of primary importance.

According to Merriam (1923) the word Nung-kah^{hl} is "a general or blanket name used by themselves for all the southern Athapaskan tribes, from Iaquia and Yager Creek on the north to the northern border of Round Valley on the south, thus including the Athapaskan Wilakke." In anthropological literature, however, especially in the work of Kroeber and Goddard, this name has come to be used for the group living between Iaquia Buttes and Mad River on the north and Dobbyn Creek on the south. Merriam's name for this group is Kit-tel'. He does not seem to have obtained any information from them although one of his notes mentions the fact that the wife of George Burt, his Lolankok Sinkyone informant, was a Kit-tel' woman.

At times Merriam seems to have confused the Nongatl with the Lassik. In his general statement on the Nongatl, which follows, he lists them as Lassik although the area in which he places them marks them as Kit-tel' or Nongatl.

Las'sik . . . Name (from Chief Lassik, now dead) in common use for a Non-ga^{hhl} tribe occupying a rather large area, extending from Iaquia Butte in the latitude of the mouth of Eel River, southerly to Dobbyn Creek and to the head of Van Duzen River, and from the eastern boundary of the Lolahnkok of Bull Creek and South Fork Eel River easterly to Mad River and the crest of the long ridge known as South Fork Mountain, and southerly to within about two miles of Ruth on Mad River; to the headwaters of Van Duzen River (but not reaching Kettenshaw Valley), and to Dobbyn Creek on the main Eel; thus including the entire course and drainage area of Larrabee Creek.

There is doubt as to the northern boundary of the so-called Las'sik for the reason that I have not been able to obtain the necessary vocabularies for comparison. Goddard's information points to a division south of the Bridgeville region but I have been told by both the Nek'-kan-ni' of Bear River and the Lolahnkōk of Bull Creek and South Fork Eel that the language is exactly the same from Iaquia Butte southerly and that the languages of the Nek'-kan-ni' and Lo-lahn-kōk do not differ essentially from that of the Larrabee Creek region.

The Indians over whom Chief Lassik held sway had no common tribal name but consisted of a number of bands or subtribes, now mostly or quite extinct, said

to have spoken the same or closely allied dialects.

However, since the entire drainage basin of Larrabee Creek is included in their territory, it may be desirable to adopt the term Kos'-ten ke'-ah, by which term the Larrabee Creek band was known to neighbors on the south--the Set-ten-bi'-den ke-ah.

SUBGROUPS

There is evidence of several subgroups among the Nongatl, but it is not known whether these were tribeslets or dialect divisions. Essene (1942, pp. 90-92) got information from the Lassik woman Lucy Young indicating that there was a distinct group around Blocksburg, which the Lassik called Kuskatundun, and another group around Bridgeville they called Nai'aitci. This latter group is said to have been a roving band which preyed on all the neighboring peoples.

Goddard's village data indicate six other groups but do not give boundaries. These were as follows.

būskōtkīya. In the neighborhood of Indian Cr. in the upper part of the drainage of Yager Cr. (map 9).

tcillūndūñ. On the upper reaches of North Yager Cr. (map 9).

būstcōbīkīya. In the vicinity of the junction of North and Middle Yager creeks. The language of this group was said to be the same as that of the tcittelkīya (map 9).

senūñka. On upper Larabee Cr. in the vicinity of Blocksburg (pl. 10, e, f). This no doubt is the same as Essene's Kuskatundun, which was the Lassik name for the group (map 10).

tcittelkīya. On the Van Duzen R. above Bridgeville. Appears to be the same name as Merriam's Kit-tel'.

na'aitcikīya. On the Van Duzen above the tcittelkīya group. This name appears on the Goddard map from which map 1 was taken but is not otherwise recorded. This is evidently the same as Essene's Nai'aitci.

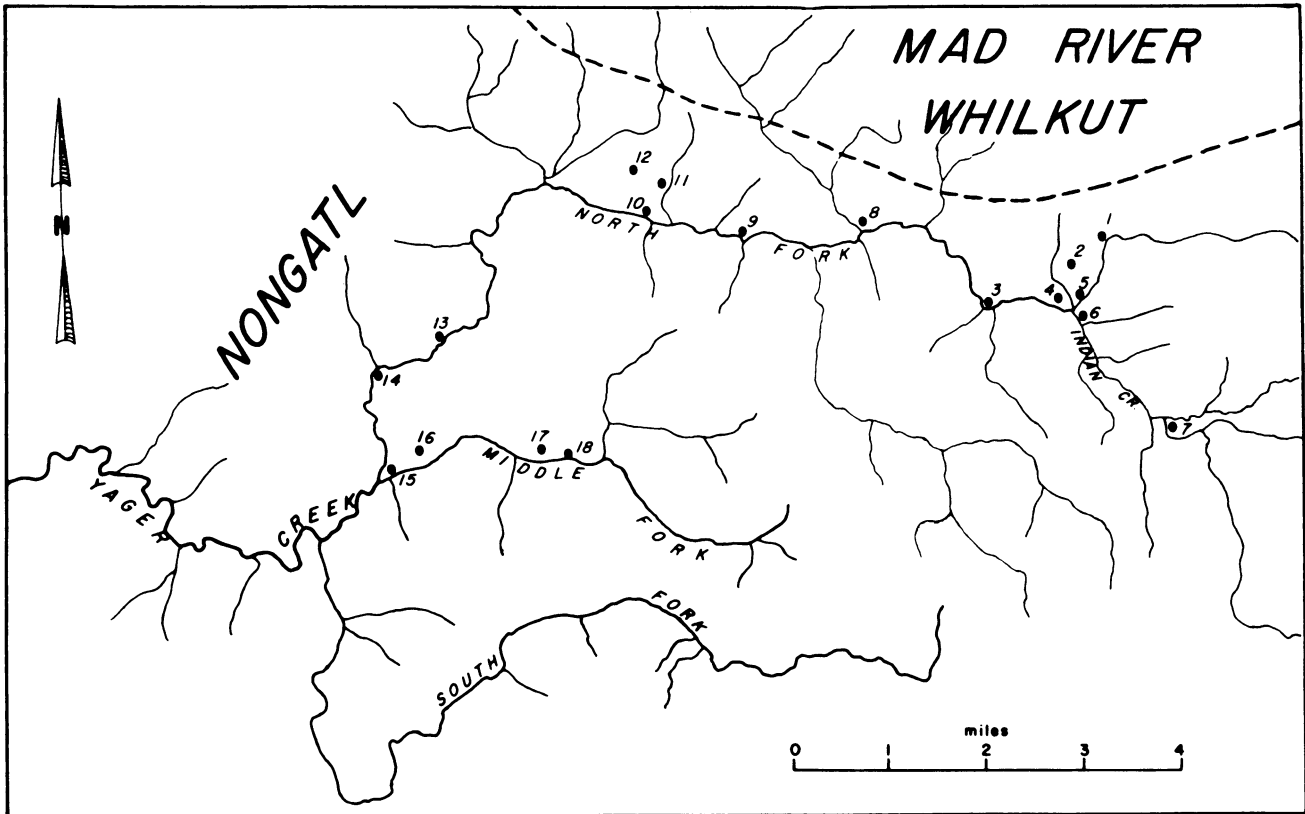
kōsdūñkīya. On the South Fork of the Van Duzen, including Larabee V.

VILLAGES

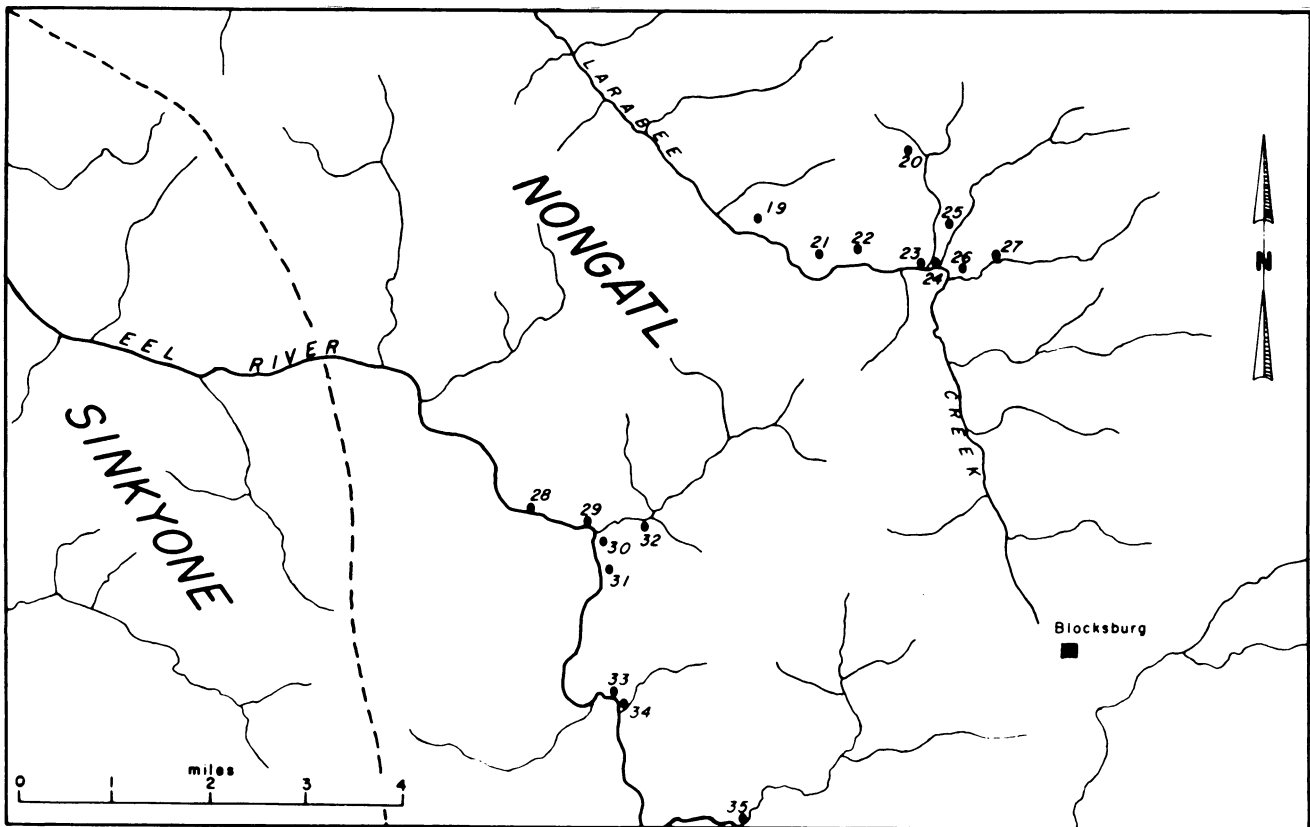
The Nongatl villages recorded below are all taken from Goddard's unpublished notes (maps 7, 9, 10). This is evidently far from a complete count but it is clear that there were about as many villages in the area covered by these maps as in other parts of the Athabaskan area.

būskōtkīya group (1-7, map 9)

1. In the swag of a large ridge running toward the SSE to the junction of the main components of Indian Cr., perhaps a mile from it. There is one deep pit. There is a flowing creek 200 yds. E.
2. A single pit found by Pete E of a small stream flowing south into Indian Cr. from the lowest place in the ridge at Big Bend of the Mad R. Nearly 1/2 mi. from Indian Cr. W of a hill above which the wagon road passes. This is where Goddard camped in



Map 9. Nongatl villages on Yager Creek.



Map 10. Nongatl villages in the Blocksburg region.

1906. He hunted all around here without finding other pits.

3. k'onúsebí'. On a point running down SSW toward Indian Cr. There were two pits near the creek and two more 200 ft. up the hill. A few large and small oaks were growing there. Water was to be had a few yards E. Pete saw a house there when he was a boy.
4. W of a small stream flowing into Indian Cr. from the N, and E of a large flat. There was a flat place with dirt thrown out in front of it but with no pit. About 1/8 mi. E on the round end of a ridge was a fairly evident pit and a sekal.
5. About 200 yds. E of the small stream mentioned in no. 4 were a few small pits.
6. One pit was on the W bank of a S-flowing branch of Indian Cr. Small ridges N and S of it form a small basin, giving it protection from the winds. Madrone and black oaks are growing there. It is possible that a depression on the southern ridge is also a house pit.
7. On a small ridge on the E side of the branch of Indian Cr., which flows from the S past Fork Baker ranch buildings. About 1-1/2 mi. north of these buildings Pete found 3 pits. He said there were small streams N and S of the ridge. Goddard did not visit the place but it was pointed out by Pete as W of a big Douglas spruce tree and a large rock. Goddard described it as above.

tcillúndúñ group (8-12, map 9)

8. On the slope N of North Yager Cr. close to the county road and about 100 yds. from the bridge. There are 2 pits close to the wagon road and 1 or 2 a little farther N. The site is 65 ft. higher than the bridge.
9. kactcōtcībī', "redwoods ... in." On the N side of North Yager Cr. at the W end of a flat of about an acre. There are a few redwoods on the opposite side of the creek. Six pits were found about 100 yds. back from the creek. Pete had heard of the flat but not that Indians lived there. A hunter told Goddard of the Indians being killed there by whites.
10. About 1/4 mi. up a branch which flows into North Yager Cr. from the north. On the W side of the creek on a rounded ridge were 3 pits, 2 of which were very distinct.
11. On a small flat on the N side of Yager Cr. and close to it Pete saw 2 large deep pits. They were about 1/4 mi. downstream from the branch where village 10 was found.
12. tse'dúttcīlbúttá'dúñ. A half-mile N of North Yager Cr. at the edge of Douglas spruce and tanbark oak timber. Stones used by the Indians were lying near the water and 2 pits were found there. To the W, on the crest of the ridge, there were 5 pits at the S end of the timber. A cabin stands there.

Goddard lists five more sites found in this vicinity on North Yager Creek but they are not named and their locations are indefinite so they will not be given here.

bústcōbīkīya group (13-18, map 9)

13. senindúscīmī. On the W bank of North Yager Cr. 1/4 mi. below a waterfall of the same name. Two pits were located 100 ft. above the creek in brush and timber. On the same side of the creek but 1/4 mi. downstream were 4 more pits, in one of which a sekal lay.
14. nakatōdúñ. On the E side of North Yager Cr., on a flat now covered with huckleberry brush. Pete found 2 pits here. On the W side of the creek, a little downstream, were 2 more pits. The flat had been badly washed away by freshets.
15. Two pits were found among the redwoods and thick brush at the junction of North and Middle Yager creeks.
16. ist'egabī', "madrone in." Just at the eastern edge of the timber on a point running down toward Middle Yager Cr. were 4 pits.
17. kōntcōwetcīkinnedúñ. About 1/4 mi. N of Middle Yager Cr. On a small flat on a hillside, facing SW in open timber above a small stream. There were 7 pits here. Pete had heard that there used to be a village so situated.
18. An overhanging rock on the N side of Middle Yager Cr. shows signs of occupation and there is a pit near by.

senúñka group (19-35, map 10)

19. On a little point 200 yds. N of Curless' house. There is one pit. Charlie Taylor's grandmother was born here, according to Curless, who showed the site to Goddard. This was the most northern village of the senúñka on Larabee Cr.
20. t'ōkintcabī'. On the hillside on either side of the stream which crosses the road about a mile S of Curless' place. It is nearly a mile from Larabee Cr. and is close to the timber. The village was in a line of Douglas spruce south of an oatfield. There were 7 large pits on the W side of the stream and 5 on the E side. With one exception these were N of the fence; others may have been filled by plowing.
21. t'ōkintcabī'. On the E side of Larabee Cr. a good-sized stream flows across the county road by a group of farm buildings. On the E side of the road close to the N side of this stream are from 4 to 6 pits. Douglas spruce and tanbark timber with brush obscured them. On the W side of the road is a large sheep barn. W of this barn are 4 pits, some quite uncertain because the ground has been cleared of large Douglas spruce timber. There is a large plowed flat 1/4 mi. W, near Larabee Cr. Andrew's wife told Pete of such a place where there used to be many Indians.

22. k'úcna'aidúñ (?). In a swag on the W side of a gulch lined with Douglas spruce and tanbark oak timber with exposure toward the S. There are 5 distinct pits.
23. On a point 200 yds. N of the junction of the two main components of Larabee Cr., W of a small stream. There were 4 pits, only one of which was large. The end of a pestle was lying in this one.
24. On the E side of Larabee Cr., between it and the county road, on the S side of a small stream. There was one pit. The building of the road may have destroyed others.
25. On a large flat N of the junction of the two components of Larabee Cr. and a little to the E. There were 10 pits. There is a cabin and a corral here and many pits may have been filled in.
26. On the hillside N of the eastern component of Larabee Cr. Pete thought there were 3 pits. There had been slides there and Goddard was not sure of them.
27. On the N side of a large branch of Larabee Cr. from the E, 200 yds. N of where it is joined by a stream from the N. The stream from the E is bústadúñköt. There were 3 pits among the Douglas spruce and black oaks.
28. On the E side of the Eel R. about 3/4 mi. N of the mouth of Coleman Cr. at the edge of timber on a small bench. There were 2 small house pits.
29. On the E side of the Eel about 300 yds. N of the mouth of Coleman Cr., 75 yds. back from the river and 40 ft. above it. There were 2 large deep pits. The exposure is SW.
30. canaki', "creek tail." On the E side of the Eel R. S of the mouth of Coleman Cr. There were 3 pits close to the creek but high above it on the bank, 2 on a flat 25 yds. S, and 2 more near a dry gulch 200 yds. S of the creek. Near the creek the brakes were so thick that many pits may have been overlooked. This place was mentioned by Charlie in 1908.
31. On the E side of the Eel R. about 500 yds. S of the mouth of Coleman Cr. on a flat close to the S side of a gulch lined with maple and peppernut trees. There were 8 pits here and 7 or 8 more from 50 to 75 yds. S.
32. N of the knoll which is just below the forks of Coleman Cr. There was 1 pit.
33. On the E side of the Eel R. about 300 yds. N of the mouth of Mill Cr. on a brushy point. There were 5 pits.
34. On the E side of the Eel R. N of the mouth of Mill Cr. just S of a big rock. There were 2 pits.
35. nadaitcúñ. This name was supplied by Charlie in 1908 as belonging to the village at the mouth of a large creek on the E side of the Eel R. above Coleman Cr.

SINKYONE

The Sinkyone occupied the territory on the west side of the South Fork of the Eel from Scotia south to Hollow Tree Creek. From the Mattole boundary at Spanish Flat south to the Coast Yuki line at Usal Creek they held the coast.

We have more ethnographic information about the Sinkyone than about most of the Athabaskan groups. Merriam's material and Goddard's data combined provide a virtually complete village list for the northern, or Lolangkok, Sinkyone and a few villages for the southern, or Shelter Cove, Sinkyone. Kroeber's Handbook (1925a, pp. 145-150) gives a fair amount of general ethnography and this is well augmented by Nomland's paper (Nomland, 1935).

Sinkyone territory is in the redwood coastal zone and this location no doubt reduced somewhat the supply of vegetal food. The Sinkyone were, however, well supplied with fish products by the Eel River, which not only had an excellent salmon run but also provided quantities of lamprey eel.

On the basis of Merriam's linguistic evidence the Sinkyone have been divided into a northern group, called Lolangkok after the native name for Bull Creek, and a southern group, called Shelter Cove after a sheltered spot on the coast midway between the Mattole and Yuki boundaries. This division is rendered somewhat questionable by the unreliability of Sally Bell, Merriam's Shelter Cove Sinkyone informant. It is doubtful, however, whether Sally Bell's linguistic information could be falsified. In any case, the separation is partly verified by

Goddard's data and I have therefore accepted it.

The Merriam notes contain a comparatively large amount of material on the Lolangkok Sinkyone. The following general statement on that group is taken verbatim from that source.

The Lo-lahn'-kōk. Information is from George Burt, a member of the tribe, who was raised on Bull Creek at the rancheria called Kabs-cho'-chin-net'-tah about seven miles upstream from Dyerville, at a place now known as Schoolhouse Flat, and who now lives near Fortuna (1922).

The territory of the Lo-lahn'-kōk began on the north at Shively and covered a narrow strip on the east side of the main Eel River to Dyerville, and a much broader area on the west side, and continued southerly on the west side of South Fork Eel River nearly to Garberville. On the west it not only covered the South Fork drainage, but continued over Elk Ridge to the head waters of Upper Mattole River.

The southern boundary ran a little north of Ettersburg, Briceland, and Garberville.

Informant states that on the east side of South Fork Eel River their territory included only the immediate river valley.

Merriam's informant from the Southern Sinkyone was Sally Bell. She had evidently lived at Briceland for more than thirty years when she was interviewed in 1923. Nomland (1935, p. 149) says of her that she was "born

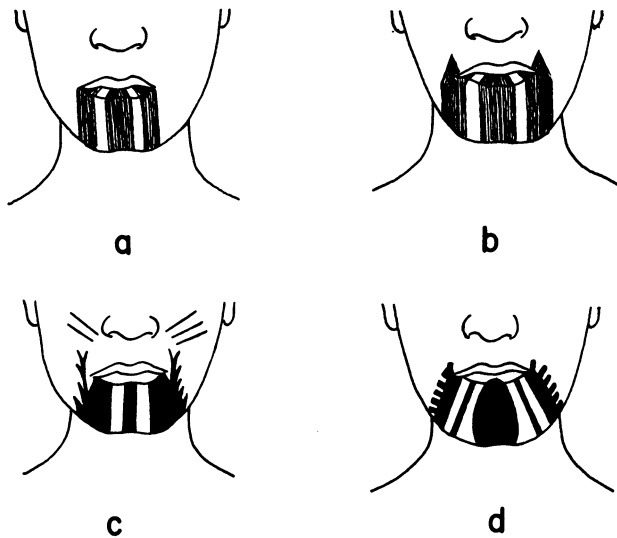


Fig. 1. Athabascan tattooing noted by C. Hart Merriam. a, b. Whilkut women. c. Bear River woman from a sketch made by Merriam in 1921. d. From a sketch made by Merriam of the Shelter Cove woman named Sally Bell.

Needle Rock; reared from childhood by white settlers, married Coast Yuki, Tom Bell; blind, senile, sees spirits in rafters, etc." (See fig. 1, d.) This group Merriam describes only in a brief general statement, summarized as follows.

To'-cho'-be ke'ah is their own name and the Lolahnkok name for the tribe (and village) in the Briceland region (between the South Fork of the Eel and the coast). It is used also in a larger sense for all bands speaking the same dialect from the west side of the South Fork of the Eel River (in the Garberville region) to the coast. The Set'tenbi'den [Lassik] call this group Yis-sing'-kun-ne. The name of the group is pronounced To'-cho'-be ke'ah by the Lolahn'kōk and Taw-chaw'-be-ke'ah by themselves.

TRIBELETS

None of the tribelets of the Sinkyone is described or located specifically enough to permit the drawing of boundaries. Hence they are merely listed here, with available location data. Nomland (1935, p. 151) says: "Two informants always gave names of land areas in place of village names." These names are no doubt those of tribelets.

chi-chin-kah ke-ah (Merriam). This is the name for the tribelet between the upper waters of Bull Cr. and Elk Ridge. Nomland gives the name chacingu'k for the group in the ridge N of Briceland, which is evidently Elk Ridge.

yese'kuk (Nomland). This is given as the Mattole R. area, possibly a tribelet designation.

The two tribelets listed above are the only ones noted in the area of the Bull Creek or Lolangkok Sinkyone. The

following, all from Merriam except where noted, are in the area of the Shelter Cove Sinkyone

to-cho-be ke-ah (taw-chaw-be keah). Name for the tribelet and village in the Briceland region between the South Fork of the Eel and the coast. Used in the larger sense for all the tribelets from Briceland south to Usal Cr. totro'bē (Nomland, 1935). This was the name of the Briceland area.

nahs-lin-che-ke-ah. This was the name of the tribelet on South Fork S of Garberville. senke'kut (Nomland). This is given as the area "to the South Fork from Garberville."

tahng-ah-ting keah. This was the Bull Creek Sinkyone name for the Shelter Cove and Point Delgada tribelet. They were called tahng-i-keah by themselves and by the Briceland Sinkyone. Kroeber (1925, p. 145) gives tangating as the place name for Shelter Cove.

Usal (Yosawl). This is the southernmost tribelet of the Briceland Sinkyone, said to extend from Usal Cr. to Shelter Cove. According to Kroeber (1925, p. 145) "This word seems to be from Pomo Yoshol, denoting either the Coast Yuki or the Mankya, both of whom are north of the Pomo; but yo is 'south' and shol 'eastward' in that language."

The following names are given by Nomland for Sinkyone areas. They do not correspond to Merriam's tribelets and are probably just place names.

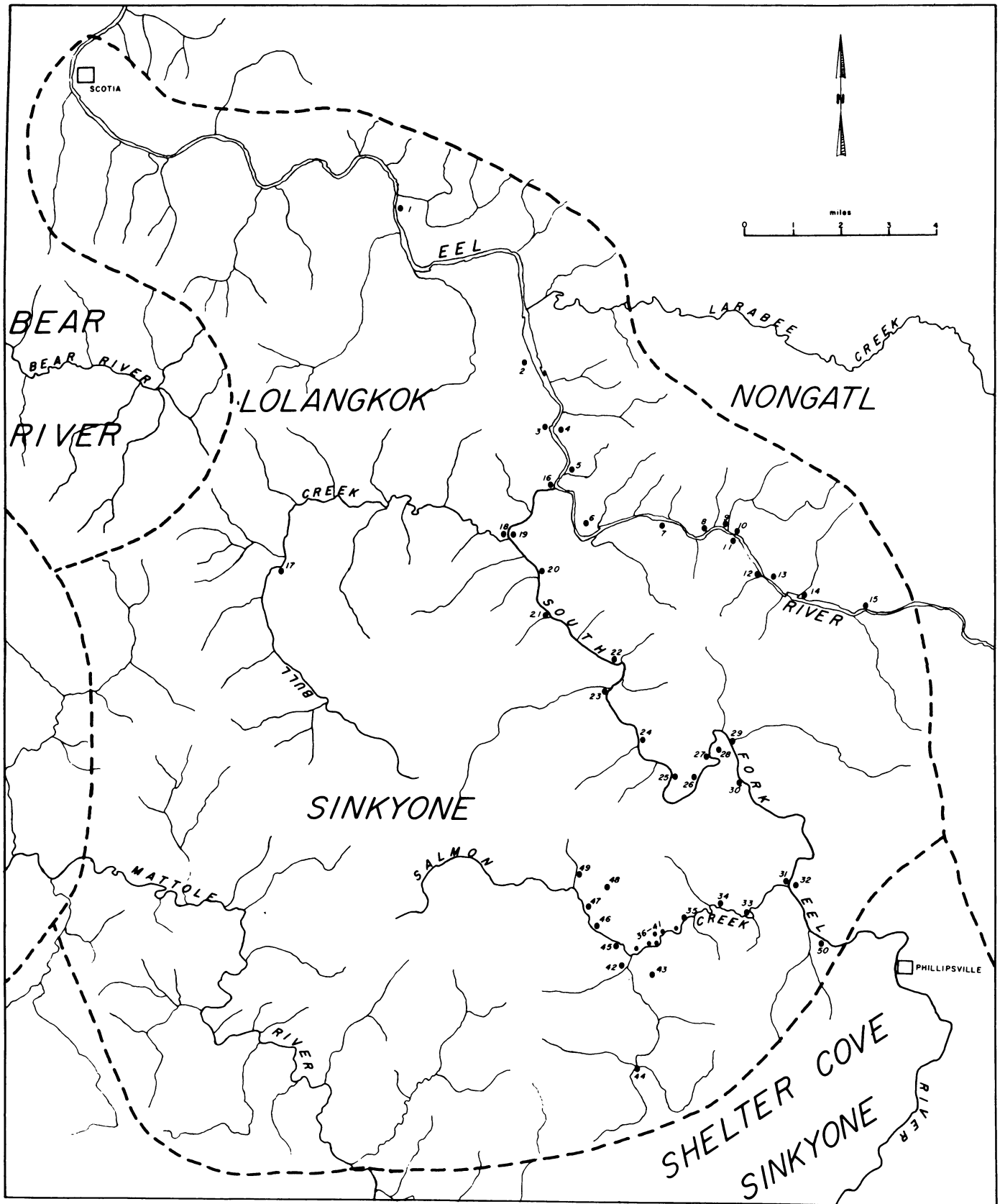
anse'ntakuk	The land south of Briceland
cusacic'ha	The region north of Garberville
yenekuk	The area southeast of Briceland
yese'	The coast area to the Mattole boundary at Four Mile Cr.

VILLAGES

Most of the Sinkyone villages given here are taken from Goddard's notes. A few are also given by Merriam. In the list the source is indicated by (G) for Goddard, (M) for Merriam. Merriam's notes contain, besides the village names, a list of place names on the Eel and on South Fork, running from Scotia to south of Garberville (see pp. 191-193, map 13). In areas where Merriam's material can be compared with Goddard's these place names nearly all turn out to be village names. It seems likely therefore that, in other areas also, nearly all are village names. In calculating population (see p. 216), I have occasionally used these to augment the village count.

Lolangkok Sinkyone villages on the main Eel (map 11).-- Of the following villages, the two north of the mouth of South Fork are from Merriam's notes, for which George Burt was the informant. Merriam also gives several place names for the area below the mouth of South Fork, and it seems probable that most, if not all, of these were actually villages rather than mere landmarks; this was certainly so farther south on South Fork.

Above the mouth of South Fork the villages are from Goddard's notes; the informant was Charlie and the



Map 11. Villages of the Lolangkok Sinkyone.

information was gathered in 1903 and 1908. It is possible that these villages are not Sinkyone. However, there is no specific evidence for attributing this region to the Nongatl and it is known that Charlie was a Lolangkok Sinkyone, so I have placed them in this latter group. Goddard has given the section, township, and range locations as he did for the preceding villages. These have been helpful in locating the sites, but I have omitted his notations because they are no longer accurate; the maps have been changed since the time of Goddard's original work.

1. lah-sā-se'-te (M). At Shively on the main Eel R.
2. kah'-li-cho'-be, "growing flat" (M). At a place now called Englewood, a small settlement 9 mi. E of Scotia bridge. The name is said to refer to things growing up there.
3. seŭstcelindūñ (G). On the S bank of the main Eel not far downstream from Dyerville.
4. tōnesdadūñ (G). On the NE bank of the Eel directly across from seŭstcelindūñ.
5. tetcinne (G). On the E side of the Eel upstream from tōnesdadūñ. A big rock, pointing downstream, is said to project into the river there.
6. tūggūstcō dasaŭke (G). On the E side of the Eel S of tetcinne. A large rancheria in an open place.
7. nalteŭñka (G). On the W side of Eel R. S of tūggūstcō dasaŭke. There is a big slide there. It is below Camp Grant on the S side, according to Charlie, 1903.
nahl-tsin'-kah (M). Camp Grant.
8. tōŭciŭyasta' (G). On the E side of the Eel about 1 mi. above nalteŭñka. A large rock stands back of the village site.
9. tadūttcī' (G). On the E side of the Eel not far above tōŭciŭyasta', at the mouth of a large creek in which salmon run (tadakōk, Thompson Cr.?). Above Camp Grant.
10. tcillūñdūñ (G). On the E side of the Eel 1/4 mi. above tadūttcī'. An open place without a creek. (Given as kīlūñdūñkīa by Charlie in 1903.)
11. ne'gakak, "moss"? (G). On the W side of the Eel opposite tcillūñdūñ.
12. ne'tcinkōk (G). At the mouth of a creek on the W side of the Eel some way above ne'gakak.
13. gactcōbi', "redwoods in" (G). In a large open flat among the redwoods on the E side of the Eel above ne'tcinkōk. Given by Charlie in 1903 as kūctcōbekīa on the S side.
14. On the E side of the Eel just S of a creek which flows down a steep rough bed on a rather high bench are 4 pits. The ground is black with refuse and cooking stones lie about. The river enters a canyon N of this creek. A round timbered butte is close to the mouth of the creek on the N. A great tim-

bered butte seems to occupy the E bank of the river for several miles.

15. seda'dūn, "rock mouth place" (G). On the E side (W also ?), where the river flows out between rocks. A small creek is there. About 2 mi. above gactcōbi'.

Lolangkok Sinkyone villages on South Fork (map 11).--

16. ɬcūnta'dūñ (G). Said to have been on the W side of South Fork and the S side of the Eel R., where the store and saloon of Dyerville now stand.
chin-tah'-tah (M). The flat occupied by Dyerville; this is no doubt the same as the name given by Goddard.
17. kabs-cho'-chin-net'-tah (M). A large village on Bull Cr. about 7 mi. upstream from Dyerville. The place is now known as Schoolhouse Flat.
18. ɬōlūñkī' (G). On the S bank of Bull Cr. at its mouth, in large redwood timber. There were 10 pits along the bank of South Fork and the pit of a yitco', 8 paces across, about 200 yds. W of the mouth of Bull Cr. A large redwood, hollowed by fire, had fallen, the floor being 4 ft. below the ground. Charlie remembered seeing Indians living in it. Charlie thought there used to be three or four houses on the S side of the creek, but we found no evidence of them. Three men were once killed here by whites, and a woman was shot through the hips; she lay here a day or two and died. One of the white men, named Steve, cut a piece from the arm of one of the Indians, built a fire, cooked it, and ate it. The best man of the Indians escaped.
lo-lahn'-kōk (M). Bull Cr. Merriam does not mention a village at its mouth.
19. ɬōlūñkōk yībañ (G). On the E bank of South Fork opposite and N of the mouth of Bull Cr. Two pits were seen directly across from Bull Cr. and 2 about 100 yds. downstream. They are in heavy redwood timber, but receive a good deal of sun because they are close to the river, which flows NW at this point.
20. sōsnoibūndūñ (G). On the E bank of South Fork about a mile S of the mouth of Bull Cr. Five pits were counted in small redwood timber, where there is a spring which supplied the village. There used to be a yitco' here, in which Charlie remembered dancing when he was a small boy.
21. nūnsūntcōtcī', "butte large mouth" (G). On both sides of the mouth of Brush Cr. (Canoe Cr.) in large redwood timber. On the N side are 6 pits, 5 of them in a row back about 30 yds. There are seven pits on the S side of the creek, some of them much plainer than others. The father of Albert's wife, Sally, came from this village.
nahn'-sin-cho'-ke (M). See Place Names.
22. sedjōcbī' (G). On the E bank of South Fork, which flows toward the W at this point. A stream from

the E (Feese Cr.) flows in a little above the village. There are many tanbark oaks growing near by, which Charlie suggested were the reason for the village's being located here. Seven pits could be distinguished; the clearing away of timber may have obscured some others. The name setcōsdīñ was also given by Charlie. Tcōs means vagina, "what woman has."

sā-chōs-te (M). See Place Names.

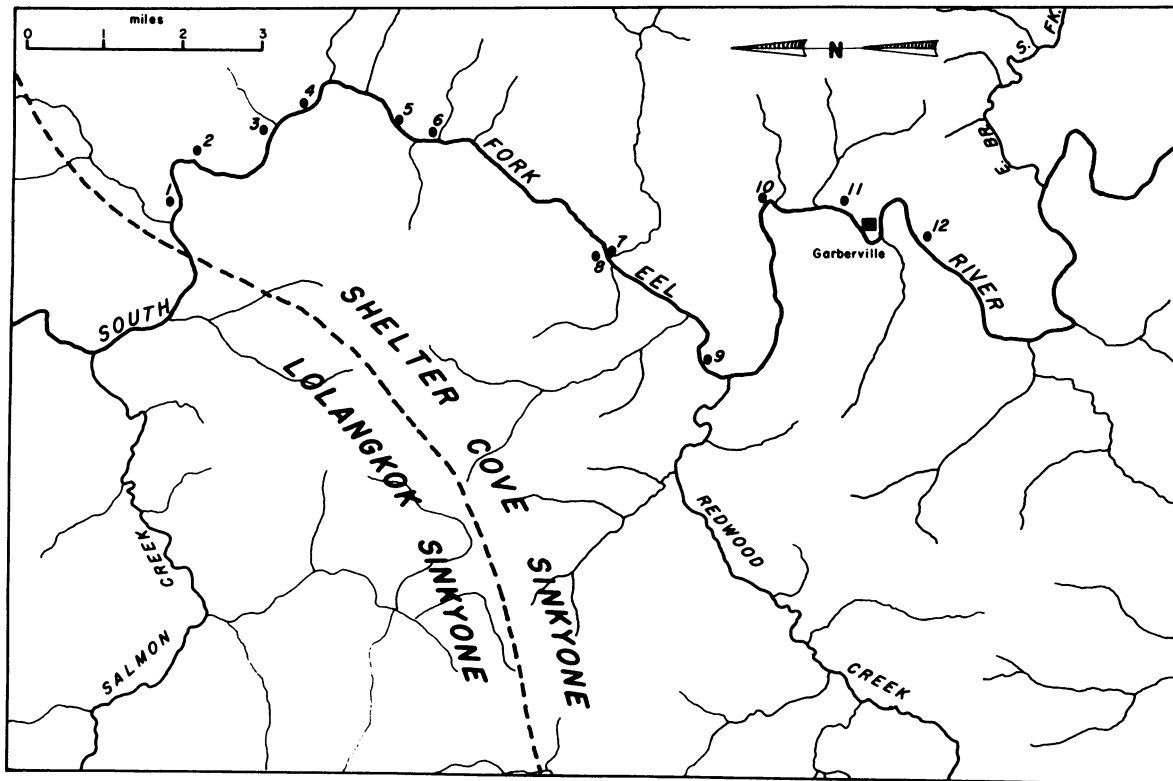
23. gūtta'būndūñ, named from a deep hole in the stream (G). On the W side of South Fork, where it flows toward the NE just below Myer's. The site has been completely washed away. Charlie's father belonged here and Charlie lived here when a boy. Jack, Charlie's half-brother, was born at this village. There used to be a yitco' and a large hollow tree in which a family used to spend the winter.
- kah-tah'-be (M). See Place Names.
24. tantañaiķī' būndūñ (G). On the E side of South Fork. A creek, along which are many tanbark oaks, flows into South Fork on the opposite side and a little above. The name of the creek is tantañaiķōk (Coon Cr.). The site is just below a garden. The place was so grown up with brakes it was impossible to count the pits.
25. tōdūñni', "water sings" (G). On the NW corner of Myer's Flat on the right bank of South Fork, where it completes its course toward the W and turns toward the NE. The site has been washed away. There used to be large peppernut trees growing there. A few are still left. The name of Myer's Flat is kūnteltcōbī. It is also mentioned as kontelkyōbī.
- ken'-tes-cho'-be (M). See Place Names.
26. sestcicbandūñ (G). On the right bank of South Fork on a narrow bench between the hill and that stream. There is an eddy in the river just above, which furnished good fishing, and many oaks are on the hills. The site received plenty of sun because the river flows W at this point. Four pits were seen. Also given as sūstcīcbī, "rough like a rasp."
- ses-che'-is-ke (M). See Place Names.
27. sebūggūnna', "rock around" (G). On the right side and close to South Fork just downstream from a rocky point around which the river changes its direction from S to NW. Fourteen or fifteen pits could be distinguished, most of them quite distinct.
- sā-bug'-gah-nah' (M). See Place Names.
28. sekōntcōbandūñ (G). On the left side of South Fork nearly opposite sebūggūnna'. The sandy bench is covered with brakes. Five pits were made out. Charlie lived here for four years after he came back from the reservation. Also mentioned as tafaibī.
29. sōldekōk būkkī'dūñ (G). On a small flat covered with large redwood timber on the N side of South Fork

and on the W side of Elk Creek (sōldekōk), which flows into it from the N. Seven pits were counted along the banks of the river and the creek.

sōl'-te-che (M). See Place Names.

30. senteltcelindūñ, "rock flat flows out place" (G). Close to the W bank of South Fork near a deep fishing place. There are three pits between the county road and the river. Also called senteldūñ.
- sen-tēch-be (M). See Place Names.
31. ca'nakī', "creek trail" (G). On the W bank of South Fork 100 yds. N of the mouth of Salmon Cr., in large redwoods. The river has washed the soil away so no evidence of occupation remains. Willow brush is now growing there. Also called natonankōk būttcī'dūñ.
- sah-nah'-kōk (M). Name for Salmon Cr. See Place Names.
32. tcīstcībi' (G). On the E bank of South Fork opposite the mouth of Salmon Cr. It is on the end of a ridge. Charlie had a ne'yik' here after returning from the reservation (village site not visited). This village was mentioned by Sam as his birthplace. His mother may have been from here. Also referred to by Charlie as canakī' and tcūstcēkōk.
33. nant'ō' (G). On the N side of Salmon Cr. in a bend. Large redwoods fill the valley of the creek as well as the particular site of this village. Five deep, distinct pits were seen. There are said to be one or two on the south side of the creek.
34. kōntełbī', "flat in" (G). On a large flat, through which Salmon Cr. flows. The village was on the N side of the creek near where Tomlinson's barn now stands. There is a spring there near a peppernut tree. This flat is now in peach orchard.
35. kaslintcō'dūñ, "riffle large place" (G). On the N side of Salmon Cr. about 400 yds. upstream from kōntełbī'.
36. setcinnabatse tcelindūñ (G). On the N side of Salmon Cr. in a basinlike flat. Four pits were seen near the creek and 4 in a row back about 50 yds. against the base of the hill. There were 2 more pits in front of the last 4, making 10 in all. There is heavy Douglas spruce and tanbark oak timber on the southern side of the creek. About 200 yds. upstream is a waterfall, which provided fine fishing, since large salmon could not jump the falls.
37. bandūñ (G). On the end of a ridge, W of a small run lined with peppernut trees. About 200 yds. NE of setcīndūñ. There were 5 pits, 2 of which were very large.
38. setcinnabatse (G). On a flattened end of the ridge E of setcīndūñ, 300 yds. S and a little W of it. Two pits were certain.
39. setcīndūñ (G). On the E side of a gulch, in which there was flowing water in July, about 300 yds. N

- of Salmon Cr. There were 4 or 5 pits. The ground is strewn with black stones.
40. tcebanedúñ (G). On the flattened portion of a ridge, with southern exposure. Black oaks and buckeyes are growing there. Seven pits were to be seen with black stones lying in them. Great broken rocks lie in a gulch to the west. About 350 yds. NNW of setcündúñ.
41. setcō'seye (G). A large rock, with the overhanging side facing SE. A rim of earth showed where the house wall used to be on the W. The E was left open. About 1/4 mi. W of the falls of Salmon Cr.
42. tōtelindúñ, "water flows together place" (G). On the flat W of Salmon Cr. and W of a large creek flowing into it from the S (South Fork Salmon Cr.). Four pits are close to the bank of Salmon Cr. and a fifth was partly caved in. One was seen on the lower part of the flat to the S.
43. nesdai'dúñ (G). Said to be on a side hill.
44. tōtelindúñ, "water comes together place" (G). Said to be where three creeks join, forming the South Fork of Salmon Cr., about 5 mi. from its mouth. Distinguished from the village at the mouth of the same creek by being called "small."
45. sesōsye' (G). At the end of a ridge running down to Salmon Cr. from the E. So close to the bank of the stream that one pit has been undermined. Four remain. About 1/2 mi. NW of tōtelindúñ.
46. ne'kañkī' (G). In the saucer-shaped end of a ridge, close to the E bank of Salmon Cr. and facing a little S of W. Opposite, a large creek, called ne'kañkōk, flows in from the W. There are 9 pits, which may still be seen. Five of them, situated close to the base of the hill, are very large and deep. Black oaks grow there
47. ne'igaldúñ, "land shinny-playing place" (G). On a flat close to the E side of Salmon Cr., which swings around it. A gulch heads in the cedar grove N of the Hunter ranch buildings. Twelve or 13 pits were counted, 5 of which were quite distinct.
48. seistcī' (G). About 1/2 mi. E of Salmon Cr. on the flattened southern slope of a ridge about 100 yds. from its crest. There are 8 pits in a row and 1 other, not in line with them. There is a gulch 100 ft. S of the row of pits. Cedars, black oaks, and buckeyes grow there. A small pond of water is E of the site.
49. mūñkksaikōk (G). On the W side of a branch of Salmon Cr. which flows from the N about 1/2 mi. W of the Burnell ranch house. Two pits are close to the stream and 4 or 5 are 10 or 15 ft. higher. The higher ones have good sun in the winter. The trail crosses the creek at this place.
50. setc'üntödúñ (G). On the W side of the South Fork of the Eel about 1/4 mi. above the mouth of Butte Cr. (nūnsūnkōk), which provided desirable fishing. A large rock stands there close to the river. There are said to have been four houses. This site was not visited. It was mentioned by Charlie as sesuftō; he said it was the most southerly village of his people. Sam called it senūnsīmkūk and said it belonged in Charlie's territory.
- The first name given by Goddard is evidently related to Merriam's sā'-chen-to'-te, "water against rock," which was said to be a place in the river near Goddard's setc'üntödúñ. See Place Names.
- Shelter Cove Sinkyone villages (map 12).--The following list of villages comes almost entirely from Goddard's notes (G); relevant comments by Merriam are noted (M). Goddard's informants were Sam, Albert, and Charlie, of whom the first two were Shelter Cove Sinkyone, the last Lolangkōk Sinkyone.
1. ke'kestcī' (G). Close to South Fork on the E side about 1/8 mi. S of the mouth of Fish Cr. (kekekōk). A large house with a garden is just below. A deep place in the river provided fishing, in addition to the creek. Three pits and a grinding stone were found. Plowing had probably filled in other pits. The first store of Phillipsville stood here. According to Sam (1903), this was the most northern village of his people.
 - kā-kes'-kōk (M). Fish Cr.
 2. kūtūdntelbī', "flat in" (G). At the NW part of the Phillipsville flat. It is said to have been a large village. There is fishing in an eddy just upstream. The site has been washed away and therefore was not visited.
 - ket'-tin-tel'-be (M). At a place called Phillipsville, 18 mi. S of Dyerville. The site is in an orchard on a ranch and has a fine redwood grove and a good camping place.
 3. sebīye, "at base of rock" (G). On the E side of South Fork at the upper end of the Phillipsville flat. The site has been plowed and was in fruit and garden when visited. One pit could still be seen. The river flows nearly W, hence the village has southern sun. Large redwoods occupy the left bank of the stream. A deep place here provided fishing.
 - sā-be-yě' (M). The flat on the E side of South Fork, S of Phillipsville. See Place Names.
 4. tcingūlgeldúñ (name of a tree) (G). On the right bank of South Fork just below a turn to the E. Between the road and the river two pits were seen. There is a schoolhouse on the E side of the road. Many eels were caught near this village.
 - chig-gel'-e-yes'-ke (M). A place 1.9 mi. S of Phillipsville. See Place Names.
 5. dañcimmündúñ (G). On the right (S) bank of South Fork, where it flows W around a long ridge sloping down from the E. Seven pits were counted between the county road and the river, which may have carried others away. A large creek, seyekok (Rocky Glen Cr.), empties N of this place. This village was mentioned as t'altcimmündúñ by Albert in 1907.



Map 12. Villages of the Shelter Cove Sinkyone.

sě-tes'-kōk (M). Rocky Glen Cr. See Place Names.

6. tca'lúñkī' (G). On the E bank of South Fork. A small stream flows down from the E. Three pits were found on the N side of it and two on the S side. The place had been plowed. Charlie said there used to be many houses there. This village was given by Albert as tca'lúntcī.

7. dañkaikōk (G). On a flat 50 yds. E of the county bridge across Buhne Cr. (now called Dean Cr.), along both sides of the stream. Seven pits were found on the S side of the creek and two on the N side. The road and plowed fields may have reduced the number. This village was mentioned by Sam in 1903 as a settlement of his people.

tahs-ki'-ke (M). Merriam attributes this village to the to-kub'-be people, who ranged E from here.

8. dañkaikī' (G). On the W side of South Fork, opposite the mouth of Dean Cr. Albert said there used to be a village there.

This is evidently the village Merriam refers to in the paragraph above on village 7.

9. ʔúgganōbī' (G). On a flat on the E side of South Fork about 1/4 mi. above the mouth of Redwood Cr. Goddard noted that the place had a favorable location, but did not find the pits. Albert said there used to be a village there.

stuk'-kan-no'-be (M). Name for the flat at this place. See Place Names.

10. kōscīkī (G). A short way below Garberville, according to Sam (1903). Charlie said it was named kōsetcī' or kōsetcī' and that it was just below Garberville on the E side of the river. There used to be a store there.

11. sebiyedadūñ, "rocks under . . . ? . . . place" (G). A village at Garberville.

12. kúnteñcōbī', "flat large in" (G). On a flat above Garberville.

ken-tes'-che tahng-ah'-te (M). A beautiful deep valley on South Fork just SW of Garberville.

13. Usal (not necessarily the native name). Not mentioned by Goddard, Merriam, or Nomland, but Gifford (1939, p. 304) says that both Coast Yuki and Sinkyone were spoken here (pl. 11, d).

Following are a number of Shelter Cove Sinkyone villages which I have not been able to locate precisely.

kahs'-cho-so'-be (M). A village of the Briceland Sinkyone on South Fork about 4 mi. S of Garberville and not in sight from the present highway. It may not actually be one of the Briceland Sinkyone villages.

kaicañkūk (G). On a ridge below Garberville. Information from Sam, 1903.

ʔcīkūk (G). On a ridge below seyadūñ on South Fork. Information from Sam, 1903.

tōkūbbī (G). On a ridge above Garberville. Information from Sam, 1903.

seya(e)dūñ (G). On a ridge on the E side of South Fork, probably below Garberville.

PLACE NAMES

The first list of place names below was taken by Merriam from George Burt in 1923. (See map 13.) It starts at Scotia, runs upstream to the confluence of the Eel and South Fork, and then runs up South Fork as far as Garberville. Many of the places indicated cannot be located from maps and it would even be difficult to identify them on the spot. Merriam seems to have driven by auto from Scotia to Garberville, marking locations in tenths of miles.

tah'-cho. Main Eel R.

hah'-tin cho'-be. A stretch of land on the S side of the main Eel extending from Scotia Bridge E at least to Brown's Mill, and S from the river to the top of the ridge.

kahn-so'-ti-yě', "under maple trees." A big loop of the river 2 mi. E from Scotia Bridge.

hah'-ting-kök. Jordan Cr., 2.2 mi. E of Scotia Bridge.

hah'-tin cho'-be. The prairie on top of the ridge S of Jordan Cr. An old Indian trail goes up there. [Harrow Prairie. Merriam gives the same name for the prairie and the stretch of land above. The stretch of land is probably a village named for the prairie.]

ahn'-sin ken-tes'-be, "Pepperwood Flat." A flat on the S side of the Eel, 3 mi. E of Scotia Bridge. [Pepperwood.]

lah'-sa tal'-kök, "Buckeye Creek." Bear Cr., nearly 6 mi. E of Scotia Bridge. "Used to be lots of salmon there."

lah-sā-se'-te. The present town of Shively.

bis'-kahl chum'-me. A bluff on Eel R. where the river makes a loop to the S. About 6.3 mi. from Scotia Bridge.

sā-tahs' chā-lin'-te. An extensive gravel flat on the N side of the Eel in the curve of a big loop in the river, 6.5 mi. from Scotia Bridge.

sā-tahs'-be. A bluff on the N side of the Eel at the railroad tunnel 6-3/4 or 7 mi. E from Scotia Bridge. Said to be a rough place.

ahn-sin'-tah'-be, "Pepperwood Flat." A flat on the S side of the river 7.5 mi. E from Scotia Bridge. Place now called Pepperwood.

ahn-sin-tah'-kök, "Pepperwood Creek." A small creek closely followed by the highway, about 7.5 to 8 mi. E from Scotia Bridge. [Evidently Chadd Cr.]

kahs-tes'-be. Holmes' lumber camp, on S side of Eel about 7.5 mi. E of Scotia Bridge.

slahn'-kō. Larabee Creek, entering the Eel from the E.

kah'-li-cho'-be, "growing flat." At a place called Englewood, a small settlement 9 mi. E of Scotia Bridge and continuing to Englewood Roadhouse at 9.8 mi. The name is said to refer to things "growing up" there.

tan'-kōs tah'-te (tan'-kōs means Equisitum). A long ford 10.5 mi. E of Scotia Bridge. It is a long gravel bar on the N side of the river. It is named for the abundance of Horsetail (Equisitum) found there.

sā' cho'-te (sa means "rock"). A big rock projecting into the river from the S side, 11.5 mi. from Scotia Bridge. [It appears to be what is now called High Rock.]

sā-tah'-ting. A redwood forest and flat near the rock sa cho-te and named for that rock.

chin-tah'-tah. An extensive flat on the S side of the Eel from the mouth of South Fork W, including Dyerville, 13 mi. from Scotia Bridge.

tsǎ-vel'-be. An area on the S side of the Eel immediately W of and adjoining chin-tah'-tah.

lel'-lin teg'-o-be. The junction of South Fork with the main Eel R.

sin'-ke-kök. The South Fork of the Eel R.

tah'-tung-i'-kut. South Fork railroad station.

nahl-tsin'-kah (nah-tsuk'-kah). Old Camp Grant.

'hles-yah'-kah (les-yah'-kah). Fruitland in Elk Prairie.

sā-tah'-be. Eel Rock, about 12 mi. up the Eel from its junction with South Fork.

tah'-cho. The main Eel R.

nah-tah'-ting i-kā. Dyerville Redwood Flat in the point between the main Eel and South Fork. The name means "pointed out," a descriptive term suggested by the geographical feature.

lo-lahn'-kök. Bull Cr.

kahs-cho' chi-net'-tah. Schoolhouse Flat, 7 mi. up Bull Cr.

sā'-es-chā-lin'-te, "rock run out." On the E side of South Fork 1/2 or 3/4 mi. S of Dyerville.

sit'-se-tahl'-ko. A small creek on the W side of South Fork about 1/2 mi. S of Bull Cr. [Evidently Decker Cr.]

sā'-es'-kuk, "on top rock." A hill on the E side of South Fork 0.9 mi. S of Dyerville.

lah'-sā-cho'-te. A straight shoot of South Fork beginning at sā'-es'-kuk Hill 0.9 mi. S of Dyerville. Lots of eels there in the spring.

to-be'-ah. Schelling Camp Flat (lumber camp, garden, and orchard) on the E side of South Fork beginning 2.2 mi. and extending about 1/2 mi. to the S. [Evidently this is the present town of Weott.]

- nahn'-sin-cho'-ke. The big hill to be seen on the E side of South Fork 3 mi. S of Dyerville.
- sā-chōs-te (sā-cho-stā), "vulva rock." A long gravel bar along both sides of the river and including a redwood flat 4 mi. S of Dyerville. Named for a mark on a rock resembling a woman's vulva, cho'-sā.
- che-ōs-cho'-te. A stretch of river 4.75 mi. S of Dyerville, including a small but good redwood flat. The name refers to foam on the water.
- sā'-boo-i-chan'-te. A big perforated rock in the river at a sharp bend 5.1 mi. S of Dyerville.
- kah-tah'-be. A stretch along both sides of the river 7.5 mi. S of Dyerville. It includes the State Redwood Park office building and adjacent redwoods.
- ken'-tes-cho'-be. Myers Flat, a little over 8 mi. S of Dyerville, including Myers Roadhouse. The Indians say this place was never covered with timber.
- ses-che'-is-ke. A place 8.7 mi. S of Dyerville, above ken-tes-cho-be.
- sā-bug'-gah-nah'. A place 9 mi. S of Dyerville where the river goes around rocks. [Evidently Eagle Pt.] George Burt once lived here and his son Guy Burt was born here.
- tub'-bel-chin'-tah chā-gel-kōk. A small creek 10 mi. S of Dyerville, entering South Fork from the E just S of a bend in the river. [Evidently Bridge Cr.]
- sōl'-te-che. A place at the mouth of Elk Cr., on the E side of South Fork. Includes the eastern part of Bolling Grove.
- sōl-te-kōk. Elk Creek, entering South Fork from the E in Bolling Grove, 10.3 mi. S of Dyerville.
- sen-tě^{ch}-be. A rock in the river at a small bend 11.2 mi. S of Dyerville.
- ni'-te-tě el-lah'-tě, "dog drowned"... A place where a new bridge is now (1923) being built across South Fork, 12 mi. S of Dyerville. [Evidently this refers to the bridge at Blair Grove.]
- suk'-ke-chōs kah'-me, "eagle pawn." A big flat on the W side of the river 12.5 mi. S of Dyerville.
- chah'-ni-che'. Another large flat on the W side of the river, 13.5 mi. from Dyerville.
- sah-nah'-kōk. Salmon Cr., entering South Fork from the W nearly opposite Miranda.
- kahs'-cho-boo'-ah'-me. This was a small settlement in a flat at Miranda, 14.5 mi. S of Dyerville.
- sā-nan-sung' (sā-nan-tsin'-kah). Bear Butte, a conspicuous peak on the W side of South Fork, about 18 mi. S of Dyerville.
- sā'-chen-to'-te, "water against rock." A place in the river 16 mi. S of Dyerville.
- kā-kes'-kōk (kě-kes'-kōk). Fish Cr., 16.9 mi. S of Dyerville.
- kin'-tes-tah'-te. A big flat, probably a mile long and very broad, on the W side of the river, 17.5 mi. S of Dyerville. Just N of Phillipsville but on the opposite side of the river.
- ket'-tin-tel'-be. A flat (now orchard and ranch) and village on the E side of South Fork, 18 mi. S of Dyerville, at a place now called Phillipsville. It comprises a fine redwood grove and a good camping place.
- sā-be-yě'. A flat on the E side of the river 0.7 mi. S of Phillipsville.
- A mile south of Phillipsville there is a good view of Garberville Ridge, sě-chung'-kuk, a fine ridge, part timbered and part open grassy hillside, which slopes west from Little Buck Mountain, nā-ah-ki'-kah, the highest point, some distance back on the east.
- to-be-yě, "prairie under." A small flat on the W side of the river 1 mi. S of Phillipsville.
- yen-nes'-be. A place 1.6 mi. S of Phillipsville.
- chig-gel'-e-yes'-ke. A place 1.9 mi. S of Phillipsville.
- sě'-chin-kōk'. A small stream probably 1.2 mi. S of Phillipsville. A possibility of error here. If the location is correct, the stream is probably Ohman Cr.
- sě^{hl}-ki'-kōk. A creek 2.1 mi. S of Phillipsville. The preceding location is probably an error and this is Ohman Cr.
- sě-ki'-ke. The land S of sě^{hl}-ki'-kōk Creek, reaching to 2.5 mi. S of Phillipsville.
- sě-tes'-kōk, "hard rock creek." Rocky Glen Cr., 2.5 mi. S of Phillipsville.
- ki-tes'-be, "hard brush." A place 2.9 mi. S of Phillipsville. There is a small ranch and orchard there now (1923).
- chan-tan-che'. A place a little more than 3 mi. S of Phillipsville. There are two big rocks and a creek there.
- sě-to'-be. A big rock facing a high bluff 4.3 mi. S of Phillipsville.
- sā-ken-nes', "talking rock." A big rock on a creek on the W side of the river, 5.6 mi. S of Phillipsville.
- tuk'-ke-tahk. A beautiful open and partly wooded hill on the W side of the river 6 mi. S of Phillipsville.
- tuk'-ă-tah'-be. A place on the E side of the river 6 mi. S of Phillipsville. Named from tuk'-ke-tahk hill.
- tahs-ki'-kōk, "white flag creek." Dean Canyon Cr., 6.4 mi. S of Phillipsville.
- tahs-ki'-ke. Village at the mouth of tahs-ki'-kōk creek. It belongs to the To-kub'-be tribe.

- to'-che-be. A flat on the W side of the river 7.8 mi. S of Phillipsville.
- bus'-ken-nes', "cliff talking." A cliff or bluff opposite to'-che-be.
- stuk'-kan-no'-be. A big semicircular grassy flat on the E side of the river beginning about 8 mi. S of Phillipsville. The present town of Redway.
- ahn'-chin-tah'-kōk. Redwood Cr.
- se'-ken-tě^{ch}-tě. A place 9.5 mi. S of Phillipsville.
- sah-nah'-che-chel'-le. A place and creek 9.7 mi. S of Phillipsville.
- bus-ki'-cho. A white bluff on the road 10 mi. S of Phillipsville.
- kōs-kun-tes'-kah. A sloping, grassy, open flat 10.3 mi. S of Phillipsville. There was a To-kub'-be village here.
- ko'-se-che'. The area on both sides of the river 10.6 mi. S of Phillipsville. Just N of the Garberville bridge across Bear Canyon.
- sā-gě'-chě, "egg rock." A bold upright rock at the N end of the Garberville bridge across Bear Canyon; 10.6 mi. S of Phillipsville.
- ken-tes'-che tahng-ah'-te. A beautiful deep valley on South Fork just SW of Garberville. The bridge across the river on the way to Briceland is in this valley.
- si-cho'-kuk. A large village of the To-kub'-be near the site of the bridge across South Fork on the way from Garberville to Briceland.
- nahs-lin'-che. An area and village in a loop of South Fork a few miles S or SW of Garberville.
- ken'-nah-lag'-gah-kōk (kan'-no-lig'-ah-kōk). East Branch of the South Fork of the Eel R.
- nā-yahn'-kah. A hill on the W side of South Fork near the bridge over East Branch.
- kahs'-cho-so'-be. A place and village on South Fork about 4 mi. S of Garberville and 3 or 4 mi. from the highway. Not in sight from the highway.
- kahs'-cho so'-ning-i'-be. A large redwood flat (Richardson Grove) on the W side of South Fork on the Humboldt side of the Humboldt-Mendocino County line.

West of South Fork Eel

Bear Buttes	sa-nan-sin-kah
Bear River	chahn'-kōk
Briceland	to-cho'-be
Elk Ridge	chi-chin'-kah
Mattole River mouth	tah'-che
North Fork Mattole	nahn-tsin-tah'-kōk
Rainbow Peak	tsa-che-be, tsa-bahng'-um
Rainbow Ridge	tsa-bung-ah
Taylor Peak	nahn-tsin'-kah
Upper Mattole	kun-sah'-ke

On or near the Van Duzen River

Alton	chen'-nā-che
Bald Jesse Mt.	kōng-kel-tel'-kah
Bridgeville	ahn'-sin-tah'-che-be'
Buck Mt.	nahn'-tsin'-kah
Carlotta	yah-hlahn'-che
Chalk Mt.	sā-til-bi'
Chalk Mt. Ridge	nē-chin'-tuk-kah, nā-chin'-tā-kah
Fort Baker	sā-shā-be
Iaqua region	kōng-tel-kil'-kōk
Iaqua Buttes	sēhl-kus'-ā-kuk (("two points"))
Larabee Buttes	yah-kah'-nik-kah (tā'-che-kah)
Larabee Cr.	slahn'-ko
Lawrence Cr.	yah-tlahn'-kōk (ye-tah'-nah-ling'-kōk)
Lassik Buttes	tse'-nahn-tsin'-kah
Lassik Pk.	ki'-chil-kahn-kah
Little Larabee Cr.	so'-kōk
Metropolitan	yah-hlahn'-kuk
Rohnerville	to-ti'-kah
Rio Dell	ken-tel-cho' (kin-tel'-te)
Scotia	kahs-cho ken-tel'-te
Showers Pass	sā-chā-be
Van Duzen R.	chin'-ne-kok (ken'-ne-kok)
Van Duzen R. mouth	kin'-ne-ke
Yager Cr.	yah-'hlahn'-kōk
Yagerville	chis-sis'-ahn'-tah

ETHNOGRAPHIC NOTES

Lolangkok Sinkyone.--The following notes on the Lolangkok Sinkyone are taken verbatim from Merriam's notes. The informant was George Burt.

The Lolahnkok did not fight much with other tribes but were sometimes attacked by the Chē-teg'-ge-kah of the region north of Round Valley [Pitch Wailaki]; and they think the Long Valley people also used to make raids on them to steal women.

Chief Lassik, whose name is often used in a tribal sense, belonged to the Kittel' tribe--a tribe reaching from Iaqua south to Dobbyn Creek [Nongatl].

Chalk Mountain was only a few miles east of the boundary between the Kittel' and the Lolahnkok, and the Lolahnkok were permitted to hunt there.

Shelter Cove Sinkyone.--Trees are felled by means of elkhorn chisels called beh-cho, and stone mauls called sā'tah--a very tedious and laborious operation. When the tree has fallen, the logs are cut in lengths by the same process. Planks are split off from these logs by driving the elkhorn wedges into the ends of the logs. After several planks have been split off, one below the other, another set is started at right angles to the first.

The dugout canoes are made of redwood logs dug out by means of the elkhorn chisels. After the greater part of the inside has been removed, fires are used to char the wood, which is then scraped away by the chisels. This is continued until the walls of the dugout are sufficiently thin. The fires are spread out thin in order not to burn too deeply at any one place.

Buckskin is tanned with deer brains, rubbed on with a stick rolled in ashes, after which the hide is

placed on warm ashes until dried. It is then soaked and rubbed until soft.

Wild tobacco (*Nicotiana bigelovi*) was always used by the Bull Creek Sinkyone. It was originally found growing on burned-over places and the people planted the seeds in ashes, usually on a burned place.

Buckeye nuts, called lah-sě', were cooked in a basket with hot stones after the manner of acorns. They were then mashed and kneaded into dough, which was buried for a while in fine sand.

Wild Ginger (*Asarum* sp.) is called tan-nas-bos'. It is good medicine for pain in the stomach. The leaves are pounded and soaked in cold water. The sick person drinks plenty of this water and vomits. After a little while he gets well and is hungry and eats.

A species of *Angelica* is called sōl. If a girl holds off, rub sōl on your hands, and if you get a chance rub her neck and she will give in. Sōl is strong medicine.

An aromatic Umbellifer (species not identified) is called sōl'-che-but-tah'; the root, sōl'-che. It is used for purification and as a disinfectant. The root is burned and the smoke wafted around to make the house more plentiful. It does not grow on Bull Creek or South Fork Eel River but grows on Rainbow Mountain and some of the other high ridges. The root is highly prized.

The Spotted Owl (*Strix occidentalis caurina*) is called kah-ko'. He is a bad bird. If he flies close to a person, the person will faint.

The Dove (*Zenaidura*) is called bi'-yu. His grandmother was burned to death. Bi'-yu was asked to gamble and replied, "I'll gamble every winter; in spring and summer I'll cry." Now we always hear the Dove cry in summer.

The Red-shafted Flicker (*Colaptes cafer*) is called mun'-chis-bul. He makes a rattling noise in the spring. He was told that by doing this he would make the horns of the deer grow. He was told also that when the deer became fat he would grow fat, but the people fooled him for he did not grow fat.

The Yellowbird (*Astragalinus tristis*) is called sin-sun-sě-gahng-ti-ne tahs'-che, "to take away pain." If the old folks were suffering, they would get him to sing to take the pain away.

The Kildeer (*Oxyechus vociferus*) is called ni'-til-yi'-che from the necklace, ni-tal-yah, on its throat. In the long ago time the water was very high and rough; big waves were coming in and the people were afraid to cross in their canoes, so they got the Kildeer to take them. He was a high person among the Water People and could handle a boat better than any of the others. The people talked about him and said he was the best and the only one to get them across. So he took them across and saved them.

The Coyote (*Canis latrans*), called shǔ'-bě, and the Shrewmole (*Neurotrichus* sp.), called ske'-cho, made the world and the people. The Coyote had a number of children. The Shrewmole said that when people died they should come back to live again. Coyote said, "No, there would be too many people; when they die they had better stay dead." The Shrewmole agreed.

After a while Coyote's children took sick and died. He wanted them to come back to life, but the Shrewmole said, "No; you said there would be too many people and you wanted dead people to stay dead, so your children cannot come back." Then Coyote cried.

The Raccoon (*Procyon lotor*) is called nah'-ke-gis'-chah. A long time ago he was a doctor. He was able to talk to persons suffering severe pains and could draw the pain out. He would dance and sing and pull out the pains and fall back. One time he took a flint out of a sick person.

In the olden time the people tried to make the Elk (*Cervus roosevelti*), called yēs'-cho, out of the Cottontail Rabbit (*Sylvilagus* sp.). They put horns on his head and sent him into the brush, but the horns stuck in the bushes and he could not move. Then the people called him sti'-che and told him he must always stay in the brush.

The Bat is called nah'-tǎ-bahn'-se. He wears a robe of bear hide over his shoulders. A long time ago when the First People were at war they wanted the Bat to make peace and they hired him to make peace. The people told him to fix up good. He did so and said, "I am the one who can talk big." He sang ho-wā'-nah han'-nah. The enemy agreed, and peace was made.

Our people have songs for the Elk, Deer, Coon, Otter, Mink, Bat, and some other animals.

Slugs (*Arion columbianus*) are called nah'-tos. To prepare [them] for eating, a slender stick is thrust through the head to hold the animal easily. It is then cut open lengthwise on the belly and the dark insides removed, after which it is dried. When wanted, it is roasted in hot ashes and eaten.

BOTANICAL NOTES

Shelter Cove Sinkyone. -- These notes are from Sally Bell of the Briceland-Shelter Cove region.

Acorns of the tanoak (*Lithocarpus densiflora*) form the principal vegetable food. Hazel nuts also are eaten.

Among the berries used for food are those of the Elder, Manzanita, Blackberry, Thimbleberry, Strawberry, Huckleberry, Salal, wild Currant and Gooseberry.

The sprouts of a species of *Angelica* are eaten raw in spring and early summer.

The bulb of the large red Tiger Lily is cooked and said to be very good. The same is true of the handsome *Brodiaea* sp.

The seeds of the Manroot (*Echinocystis*) are roasted and eaten. The seeds of *Godetia amoena* are used for making pinole.

Wild Tobacco does not grow along the coast and is not used.

The Wood Sorrel (*Oxalis*) is used for poultices.

Leaves of the narrow-leaf Iris (*Iris macrosiphon*) are used for cord and nets and are much better than the leaves of the broad-leaf species.

MATTOLE

The Mattole occupied the drainage of the Mattole River below the mouth of Upper North Fork and the

coast from Davis Creek south to Spanish Flat.

The village lists of Merriam and Goddard provide a

complete picture of the Mattole settlements but almost nothing is known of them aside from this. In the Handbook Kroeber reported (1925a, p. 142) that "not a single item of concrete ethnology is on record regarding the Mattole, other than the statement that they burned their dead." Almost nothing has been learned since that time, but Nomland (1938) has published a monograph on the neighboring Bear River group and the culture of the two groups was no doubt much the same.

The territory of the Mattole lies wholly within the cold coastal belt and consequently plant food was less abundant and no doubt less important. The products of the rivers, when taken together with sea mammals and other creatures caught in the ocean, provided an ample food supply.

When Kroeber published the Handbook (1925a), he lumped the Mattole proper with the Bear River group. Nomland (1938) and Goddard (1929) showed that these two groups were distinct. This division is supported by Merriam's data and I have therefore retained it.

Merriam appears to have spent a comparatively brief time among the Mattole. The only informant mentioned for this group is a man called Indian Joe Duncan, who is said to have lived at the mouth of the Mattole River below Petrolia. Merriam seems to have visited the area in 1923. His statement on these people, taken verbatim from his notes, follows.

The Bettōl' or Pet'-tōl', as they call themselves, (commonly called Mattōl'), inhabit the coast region from Davis Creek, about six miles south of Bear River, southerly to Spanish Flat, which is about 12 miles below the mouth of Mattole River. Their center of distribution appears to have been the Valley of Mattole River, at whose mouth the four or five survivors still reside.

They say that before the Whites came they numbered between 300 and 500 persons.

Their southern boundary, Spanish Flat, is the northern boundary of the Shelter Cove tribe, which reached thence southerly to or beyond Bear Harbor. The Mattōl' say that the Shelter Cove language is materially different from their own, and different also from that of the Briceland Tribe, and that the Briceland language is very hard to speak or understand. They declined to give the name of either of these tribes.

The eastern boundary of the Mattōl' I was unable to locate exactly. They gave it as along or near the west base of Elk Mountain Ridge, including the Valley of Upper North Fork Mattole River. At the same time they gave the names of two 'tribes' or bands as inhabiting the Rainbow Ridge and Elk Ridge region. The Elk Ridge tribe they call Să-bahng-kahng, the Rainbow Ridge people Sē-tso'-ik (from Sē-tso-ēk, Rainbow Peak). There is uncertainty as to the relations and geographic locations of these bands.

The tribe inhabiting the coast at Needle Rock they call E'-lē-tung. It is the same as the Shelter Cove tribe.

TRIBELETS

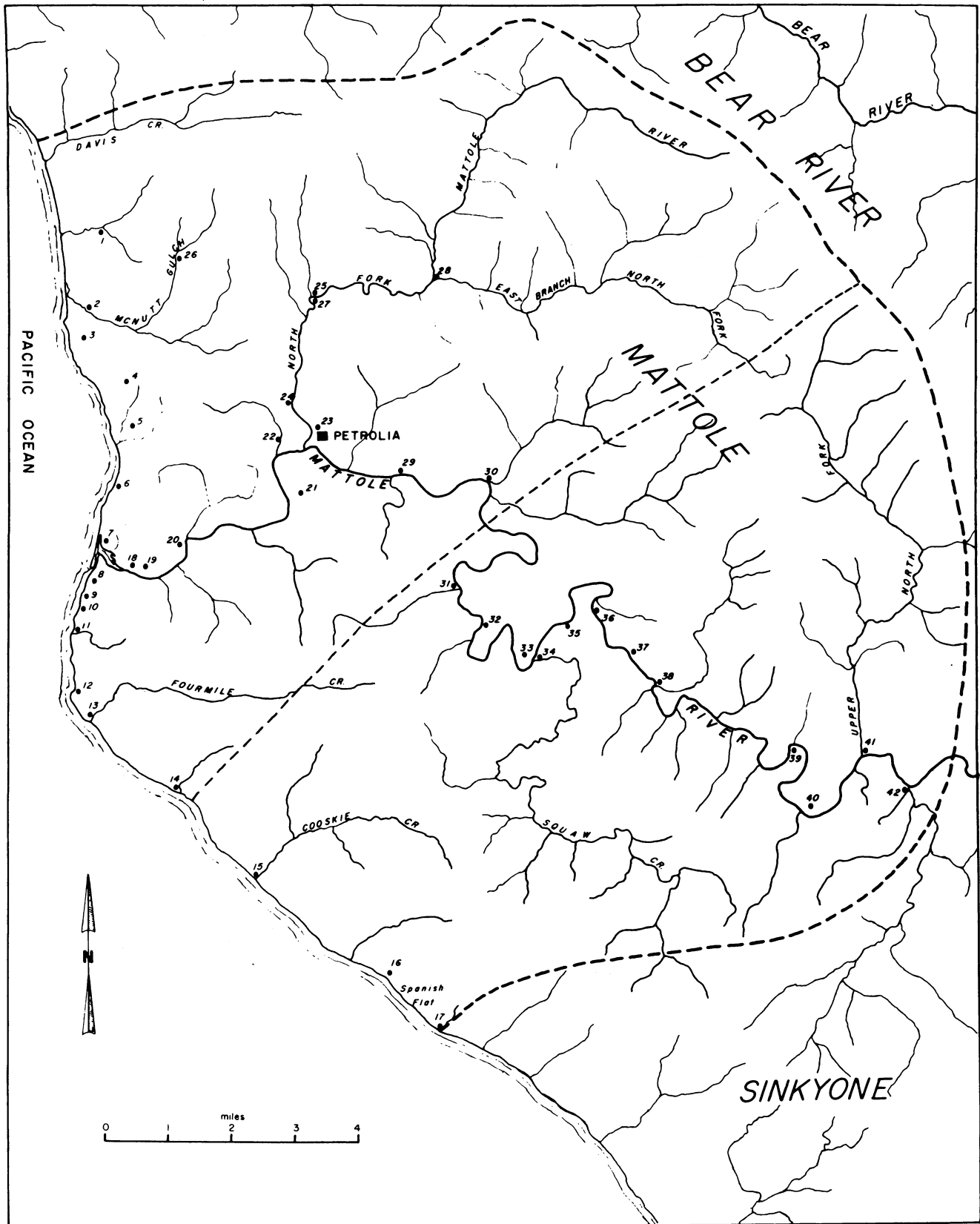
According to Merriam's data, the people at Cooskie Creek in the southern part of Mattole territory form a distinct band. This agrees with Goddard's village data, and Goddard also assigns to this group some of the villages on the upper Mattole. There is no evidence of further subdivision.

VILLAGES

Most of the information on villages of the Mattole is taken from Goddard's notes. (See map 14.). In addition, there are a few data recorded by Merriam. Below, Goddard's information is indicated by (G), Merriam's by (M).

1. sitcībī' (named from sand bar ?) (G). On the S side of Domingo Cr. nearly a mile from the surf. The county road leaves the coast at this point. Plenty of signs of occupation but no definite pits.
 2. sesnoikō', "rocks stand up creek" (G). About 1/2 mi. E of the line of the surf, close to the hill through which the stream in McNutt Gulch comes from the SE. A large quantity of cooking stones and shells have been exposed by the blowing away of the soil. Salmon run in the creek.
 3. sesnōt, "rocks stand up" (G). N of a large rock which is 30 or 50 ft. higher than the surrounding sand. Another large rock stands 300 yds. W, with a chain of rocks and ledge running out into the surf. Many shells and stones mark the village site. This village stood in the middle of a 2-mi. stretch of sandy beach, which reaches from gotxenin to a mile N of this village.
 4. sedjildaxdiñ (G). Close up under the hill. The wind has carried away the soil, leaving a great pile of shells. Just S, a stream comes down the hillside with only a gulch [La Rue Gulch], no valley.
 5. gotxenin (G). Known to white people as Mussel Rancheria. On a bench with Peter B. Gulch at the southern end and La Rue Gulch in the middle. A great quantity of shells were to be seen but no pits. Joe said the houses were scattered along for nearly a mile. Many rocks are in the surf.
 6. ne'bitt'a, "earth fold" (G). On a bench 1/2 mi. long in a cove a mile N of the mouth of Mattole R. There is a creek at the S end, a small gulch in the middle, and a larger one at the N end. These probably furnished water in winter. Joe said the houses were scattered along the whole length of the bench. [It is likely that this is part of no. 5.] Between 500 and 800 yds. from the shore is a large flat rock (tciyatcise) occupied by sea lions. The Indians used to swim to it and club the sea lions to death. They kept a fire going near a rock on shore to warm themselves afterward.
 7. sebiye (G). Perched on the steep mountainside just N of the mouth of the Mattole R. At the southern end two pits could be made out in the weeds. Slides had covered or taken away most of the evidences of occupation. The trail was evident and pieces of lumber were still lying about. The village was not burned, according to Joe. The burying place is 100 yds. N on a separate bench of the same mountainside.
- să-be'-ah (M). On the ocean beach 1 mi. N of the mouth of the Mattole.

Goddard and Merriam do not give quite the same location for these villages but Merriam's



Map 14. Villages and tribelets of the Mattole.

description is vague and the names are evidently the same.

8. bekenō'adiñ (G). This was 300 yds. S of the mouth of the Mattole R. and 100 yds E of the present surf line. There is an elevation of broken shells and other refuse on the sandy beach. Joe Duncan remembers seeing the village when it was inhabited.
 9. lasaidūk (G). On the sand of the beach 1/3 mi. S of the mouth of Mattole R., the second village S of there. The wind has blown the sand and soil away exposing the shell fragments.
 10. dzindiñ (G). By the mouth of a small stream 3/4 mi. S of the mouth of the Mattole R.
 11. sastecdiñ (G). On a small bench N of a little stream a mile S of the mouth of the Mattole R. Fragments of shells were to be seen.
 12. senalindiñ (G). About a mile and a half S of the mouth of the Mattole R.; on a small flat with a point of land S of it and a rocky bluff to the E. Broken shells are to be seen. There are now a hut and corral on this flat. The point S, a part of Punta Gorda, is called "Windy Point"; sevinnagintcin is the Indian name.
 13. kailisti (G). A flat of 3 or 4 ac. immediately N of the mouth of Four-mile Cr., about 2-1/2 mi. S of the mouth of the Mattole R.
 14. saitcibi^ε (G). On a bench on the coast S of a bold headland. A small stream here [Lion Gulch] has a large delta of gravel. This was the southernmost of the villages of the Mattole R. tribelet. A house and barn said to belong to John Mackey are on a higher bench.
 15. bitcibi^ε (G). On the N side of Cooskie Cr. (called kūsik by the Indians), 1/4 mi. from its mouth. Unlike most such streams, this one has something of a valley behind the bordering sea wall, through a gap in which it reaches the ocean. Salmon enter it. This was the northernmost village of the Cooskie tribelet.
- koos-ke (ko^{ch}kshe) (M). A very large band and village ("hundreds of people") formerly on Cooskie Cr. on or near the coast 2-1/2 mi. SE of Punta Gorda Lighthouse. Joe Duncan said these were the most warlike people of the region.
16. deci (G). On a large flat in a cove on the coast, immediately N of Spanish Flat. A row of shallow but evident pits are to be seen 200 yds. S of the northern end of the flat.
 17. yīnakī (yīnati) (G). On a flat, called Spanish Flat, 3/4 mi. long and 300 yds. wide between the ocean and the terrace. It has a creek at its southern end (Spanish Cr.), with a large deposit of gravel which has almost entirely buried a group of buildings. Plenty of evidence of Indian occupation but no decided pits. It is said to have been a very large village. The men of this village were killed by a band of white men who came down from the mouth of the Mattole R., which they had likewise occupied. An Indian ran down the coast to give warning but arrived too late. The women also were killed some years later.
 18. seyetcī (G). On a bench at the W end of a flat on the N side of the Mattole R. about a mile from its mouth.
 19. sedanadaaibi^ε (G). On the E end of the same flat on which seyetcī is situated. The site is now said to have been washed away.
 20. daxdeginkatik (G). On a rocky timbered point which is an extension of the hills N of the Mattole R. This point is 25 ft. higher than the main flat, called nestik. Several indistinct pits are still to be seen. The Goff buildings are close by and occupy part of the village site. This flat was plowed for the Indians in 186..(?). There is water in a gulch W (Jim Goff Gulch).
- nes-te'-be (M). On the present Goff Ranch on a bench on the N side of the Mattole R., about 3 mi. upstream from the ocean.
- The names are different but the locations are identical, so these are no doubt the same village.
21. daaibi^ε (G). On the SW part of the large flat W of Petrolia, on the S side of the river. It was here that the Indians settled when they came back from the reservation.
 22. bisyet'obi^ε, "slide place" (G). On a point on the N side of the Mattole R. W of Petrolia, overlooking Wright's place. Buckeye and peppernut trees are growing there. It has fine exposure toward the S. There are pits still to be seen.
 23. tcegitcexbi^ε (G). On the E bank of the North Fork of the Mattole R.; the site is now included in the village of Petrolia. It is said to have been a large village.
 24. sōlkaiye (G). On a large flat on the W side of the North Fork of the Mattole, E of the road to Ferndale. A white man's house, on a higher flat near the creek, has been burned. It was here the Indian village stood.
 25. djetxenī (G). On the N side of the North Fork of the Mattole just W of a creek flowing into it from the N. It is at the western end of a long crooked canyon. Under a point were five very large distinct pits. There were evidences of occupation on the point above (the creek is called Wild Goose Cr. ?).

26. djinsibbai, "elbow" (G). In the bed of the North Fork of McNutt Gulch. The inhabitants of sitcīcbī (no. 1) camped here in summer to hunt. Timber and brush.
27. djibbedaxtūkkabī^ε (G). On a point on the S side of North Fork of Mattole R. Opposite djetxenif. Joe saw people living here when he ran away from the white man who was taking him away for a slave.
28. natsinnadaat (G). At the junction of two streams which make up the North Fork of the Mattole (North Fork Mattole and East Branch, North Fork Mattole). The stream valleys are wide. The northern one (North Fork Mattole) is badly washed out, as is also the main valley of the combined streams. A group of ranch buildings belonging to Si Minor now occupies the village site, and Billy Wood once lived there. There was a pit on the W side of the stream from the N and two pits on the N side of the main stream 1/4 mi. below the junction.
29. sedjegūnkōlđiñ, "right angle" (?) (G). On a flat on the N side of the Mattole R. E of the bridge. It is now occupied by John Everts.
30. djegaslinabī^ε (G). At the mouth of the creek flowing into the Mattole R. from the N, 3/4 mi. W of the county bridge SE of Petrolia (Conklin Cr.).
31. dałoidiñ, "wild grape place" (?) (G). At the mouth of a creek (Indian Cr.) flowing into the Mattole R. from the SE at the northern end of a flat nearly a mile long. Saw what may have been pits, one on each side of the road by the duck pond near the buildings belonging to Cummings. This was the northernmost village of the Cooskie tribelet.
32. djanōldin (G). On a bench 1/8 mi. long and 200 yds. wide on the E side of Mattole R., which here flows N. It is at the ford.
33. saiqōtLūndiñ (G). On a long flat bordering the eastern side of the Mattole R. Joe said the village was at the southern end of the flat, which is now owned by Lee Minor.
34. gōdanindjaibī (G). Just E of the mouth of Squaw Cr., a large stream flowing into the Mattole R. from the S. The regular inhabitants were joined by others, who camped here to gather acorns.
35. nōwillenebī (G). On a large flat on the E side of Mattole R. upstream from the mouth of Squaw Cr. Exact location of village uncertain. The name may be that of the section, not of the particular village.
36. gōnsakke (G). A large flat through which the Mattole R. flows toward the NW. Roscoe lives on the N side. Exact location of the village is uncertain.
37. Lōitsiske (G). On a flat on the E side of the Mattole R. The river is here no distance from the road. "Joe got very angry when I wanted to look for pits."
38. īkediñ, "foot place" (G). On the N side of a small stream flowing into the Mattole R. from the E, at the SE side of a flat. There are two deep pits and several, less deep, on the E side of the wagon road. A large group of buildings are on a higher flat SE. There is a large flat on the W side of the river also. The whites killed all of the inhabitants while they were fishing for eels.
39. īgūcLūndiñ, "snakes many place" (G). Probably on the W side of the river where there is a large flat around which the river flows, keeping near the high bank on the E. The road runs along the eastern side of the river and climbs a considerable grade at the N.
40. iōnītcī, "middle of prairie" (G). On the S end of a flat on the E side of the Mattole R. Fifteen Indians were killed here by white people.
41. nōwilkeđiñ (gacđūlyaidiñ, "like a nectie") (G). Said to be situated between the Upper North Fork and the Mattole R.
42. djegūllindiñ (G). On the W side of the stream coming into Mattole R. from the S close to the Humboldt Meridian (Honeydew Cr.). Indians may also have lived on the E side of this stream. The application of this name is uncertain.
- Goddard also gives the following summer camps of the Mattole, which I have not been able to locate.
- djindillegaxye. A flat on the S side of Mattole R., near its mouth.
- innaslaibi. A long level bench crossed by the county road N from Petrolia, 1-1/12 mi. from that place. Indians used to camp here to gather tarweeds. An Indian battleground.
- kuntcegilcannebi. Sec. 32, T. 1 S., R. 2 W. On the E side of the county road. The section lines given by Goddard are not reliable.
- sekexge. A sloping place on one of the branches of McNutt Gulch.
- Upper Mattole villages.--The following village locations were given to Goddard in 1908 by the Sinkyone named Charlie. Goddard did not visit them so they cannot be accurately located. I am giving Goddard's township and range locations, but these were made by guess from an imperfect map, hence they must be used only with the greatest care.
- de'tci'. At the mouth of a big creek (de'kok) flowing into Mattole R. at Upper Mattole. Perhaps de'kok is Squaw Cr., mentioned in the Elk and Coyote stories. NW 1/4, sec. 30, T. 2 S., R. 1 W.
- ne'nūnyadūñ. On the E side of the river 3 mi. above de'tci'. There are two creeks there. This may be the village, and de'tci' the whole Upper Mattole flat. Notes say 3 mi. from Mattole, which is Charlie's name for Petrolia.
- k'atinta'. Above ne'nūnyadūñ on the Mattole R. at the mouth of kutsai'kok. NE 1/4, sec. 33, T. 2 S., R. 1 W.
- tcūlgūnnak'e'. Some distance above k'acinta' on Mattole R.

tcintcũskõdũñ. On a hill on the E side of Mattole R.

tcũstĩmĩ'. On the W side of the Mattole R. on a big flat, S of tcintcũskõdũñ. No creek empties there.

istannaladũñ. On a large flat on the Mattole R. No creek empties there.

setũggũttcĩ'. On the E side of the Mattole R. at the mouth of setuggukkok. Sec. 14, T. 3 S., R. 1 E.

tceliñkĩ'. On both sides of a small creek which enters a larger stream near the latter's junction from the E with the Mattole R. The valley of the river is wide at this point. A large group of buildings is now standing on this site. "I rode to this place in July, 1908, when hunting for Jack's place. The name was supplied by Charlie from my description." Sec. 31, T. 3 S., R. 2 E.

Lenillĩmi', "flow together in." At the junction of two streams on the W side of the Mattole R. There were formerly many grizzlies there, and the Indians were afraid of them. This was the last village S of the Mattole R. Sec. 7, T. 4 S., R. 2 E.

Merriam gives a number of other village names with rather vague locations. No doubt each of them corresponds to one of Goddard's, since both men used the same informant, but I have been unable to identify the villages either by location or name.

tah-tah'-ke-ke. On a small flat on the S side of the Mattole R. about 1/4 mi. back from the ocean.

tahn'-hrā'-lah-be. At the mouth of the Mattole R. (on a lagoon near Indian Joe Duncan's place).

yes-sā'-cheb'-be. On or near the site of an old barn S of the junction of the North Fork with the main Mattole R., near Petrolia.

e-nah-sal-li'-be. On a flat on Mattole R., 1/2 or 3/4 mi. S of Petrolia.

choo-wil^{ch}'-kah-be. On the North Fork of the Mattole R. at Petrolia. The name tek-ko-li-be is also given for a village on the site of present Petrolia.

BEAR RIVER

This small group, occupying the entire drainage of Bear River and the coast near its mouth, has been fairly well documented by ethnographers. Aside from linguistic material, our chief source, a paper by Nomland (1938), gives as complete an account as could be obtained at such a late date. Although some villages are noted by Goddard (1929), Nomland, and Merriam, they do not appear to have been recorded by any of the scholars in a systematic fashion. The village count therefore is probably not complete.

The resources of the Bear River group are substantially the same as those of the Mattole, except that the salmon run is smaller.

Merriam's information on the Bear River tribe is limited but it helps to augment the data now in print (Nomland, 1938; Goddard, 1929). Merriam's informant among these people was an old woman named Mrs. Prince. She came from Bear River, but at the time Merriam spoke to her (July and September, 1921) she was living at the Rohnerville Reservation. She used to visit her granddaughter, Ethel Hecker, at Scotia.

Merriam gives the following brief note about these people.

Nek'-an-ni' ... Athapaskan coast tribe formerly inhabiting Cape Mendocino and adjacent region from Bear River Hills southward to Mattole River, and reaching inland (easterly) to the headwaters of the Bear River. [Nek'-an-ni' was] their own name for themselves.

TRIBELETS

All evidence would seem to indicate that the Bear River people constitute a single tribelet as well as a single dialect group. Even the village on Oil Creek (village no. 7) was evidently in the same political

division; Goddard (1929, p. 291) says: "There was, however, one village at the mouth of Van Duzen creek which was allied to Bear river both in its dialect and politically."

VILLAGES

Some villages are given by Merriam (M), Nomland (1938) (N), and Goddard (1929) (G), but most of the locations are not very certain.

1. chal-ko'-chah (M). Name of the village N of the mouth of Bear R., used for both the place and the village.

tc'alko' (N). Largest and most western village in the area. It included the flat at the mouth of Bear R.

Goddard mentions two villages as being on the ocean N of the mouth of Bear R. -- t'adAlk'AsdAñ and goldElco'dAñ. He gives the word tc'alko as the word for Bear R. In Nomland's personal copy of Goddard's paper (1929) she has written the word "tchankok" as the word for Bear R. She gives the following explanation of the discrepancy (1938, p. 92): "In checking words given by Goddard with my Bear River informant, Nora Coonskin, it developed that most of his information (gotten from Nora's uncle, Peter) was not in accordance with hers. Upon close questioning, the latter told me that her uncle preferred to speak Mattole. I checked Peter's words with Isaac Duncan, my Mattole informant, and found this to be true."

2. sã-cho-tung (sẽ-cho'-tah) (M). On the ocean on the S side of the mouth of Bear R.

- setcodAñ, "rock big" (G). By the lighthouse, a populous place. The present-day lighthouse stands about 2 mi. S of the mouth of Bear R.
3. chil-shěck (N). On the site of the present town of Capetown.
- atcAnco'xEbi' (G). Said to have been where the store and hotel are at the town of Capetown.
4. chil-en-chě (N). Near the present Morrison Ranch.
- chul'-lō-ko (M). This was the name of the village at Morrison's, 5 or 6 mi. above the mouth of Bear R.
5. sels-che'o-ch (N). About 3 or 4 mi. up the river from the Morrison place. The site is now marked by a large red rock. It may correspond to Goddard's sEtcixEbi, "rock stand in the water", which is not located.
6. seht-lá (N). About 7 mi. up Bear R. from Capetown.
7. ko-stah-che' (kōs-tah-che') (M). Name of the camp on Oil Cr.

Each author gives some additional villages, which cannot be located.

esta-kana (N). On the largest flat in the upper valley, Gear's place.

IstE'Ynadaibi', "madrone stands place" (G).

klaht-el-kōs'-tah (M). Name of the village near the head of Bear R. (at least 15 or 20 mi. upstream). It was a large town with a big dance house.

†'adAlk'AsdAñ (G). Where a schoolhouse stands on Bear R.

tlanko (N). Above chil-sheck.

ETHNOGRAPHIC NOTES

At low tide in the spring the Bear River people waded out to lighthouse rock to gather the eggs of seabirds--gulls, shags, and others. They would climb up a sort of stairs in the steep rock, wrap the eggs in buckskin, and let them down with long ropes.

The illustration (fig. 1, c) is of an old woman, about ninety years old, from Bear River, sketched in the fall of 1921.

WHILKUT

As stated earlier in the discussion of boundaries (p. 164) I have, following Merriam's data, assigned the Whilkut different territory than has heretofore been customary. In the present scheme they occupy the drainage of Mad River from the mouth of North Fork Mad River to the mouth of Bug Creek, the drainage of North Fork Mad River, and all the drainage of Redwood Creek above the lower ten miles. The subdivisions of the Whilkut are: Chilula Whilkut (Kroeber's Chilula) on lower Redwood Creek, Kloki Whilkut (part of Kroeber's Whilkut) on upper Redwood Creek, Mad River Whilkut (part of Kroeber's Whilkut) on Mad River above the mouth of North Fork, and North Fork Whilkut (part of Kroeber's Wiyot) in the drainage of North Fork Mad River.

Goddard (1914a) and Merriam together give a fairly complete picture of the organization of villages and subgroups of the Whilkut but aside from this we have next to nothing in the way of ethnographic information. They were evidently closely akin to the Hupa in both language and culture. With the Hupa they form a dialect group as against the Tolowa on the north and the other California Athabascan groups on the south.

The territory of the Whilkut lies in the dense redwood forest of the northern coast of California. Thus their economy was based primarily on the produce of rivers, and this fact is reflected in the placement of their villages.

Merriam has left a relatively complete record of his visits to the group which I am calling Whilkut and which he called Hoil'-kut or How'-wil-kut and Mā'-we-nōk. (Merriam uses various spellings.) His first visit to these people was in 1910. The following account is taken from his California Journals for September 15, 1910.

Talked with several Indians at Blue Lake. The boundary between the Pah-te-waht [Wiyot] of Lower Mad River, and the 'Hoil'-kut or Ho-il-let-ha of Redwood Valley lies along North Fork of Mad River

near its mouth, between Korbelt and Blue Lake. The Pah-te-waht I saw today live on Mad River at Blue Lake (on south edge of town), while the Hoi-let'ha live on the extreme northeast beyond the town and cemetery.

Merriam's second visit there was in 1918 and the following quotation is from the California Journals for August 11, 1918.

Sunday, August 11, 1918 was foggy and misty in the forenoon; partly clear P.M. Took the early morning auto stage from Eureka to Korbelt, but got off between Blue Lake and Korbelt and went on an Indian hunt, landing back at Blue Lake without entering Korbelt proper at all. Returned to Eureka in afternoon.

Went particularly to get additional material from the Redwood Creek Indians ('How'-wil-kut'-ka or 'HWilkut tribe) who were living in this region when I was here in September 1910 (see Calif. Journals, Vol. 1, 90-93, Sept. 15, 1910). Tried to find O'Haniel Bailey and John Stevens of Redwood Creek, and Stevens' daughter Laura, from whom I got much information before. After a fruitless search over the old ground, learned that O'Haniel Bailey died several years ago; that John Steven is visiting in Hoopa Valley, and that his daughter Laura is married to a white man.

But after a while I found two old men of the same tribe, who were born and raised at the Blue Lake rancheria 'Ko-tin'-net, the westernmost village of the Hā'-whil'-kut-kā tribe. They call themselves and their language by the same name, 'Ho-tin'-net [North Fork Whilkut]. One is blind and both are old. The blind man's name is Nelinjak; the other's Denbrook. They were eating breakfast of fried

potatoes, dried fish, and coffee in their poor old shack. I got some good material from them and after some persuasion took their photographs.

The blind one said he dreamed last night that a white man with a book was coming to see them.

I got from them the names of some Pah-te-waht [Wiyot] villages on lower Mad River and about Arcata.

Merriam's third visit to this group was in 1920. The following account is from his notes.

About the middle of September, 1920, I visited the site of the old Hoilkut rancheria called T'chil-kahn'-ting (or T'ch-kahn'-ting) on the east side of Redwood Creek near the Berry ranch, about a quarter of a mile below the highway bridge on the road from Arcata to Willow Creek and Hoopa. It was then abandoned, the Indians having established another village on higher ground about a mile below, and like the old one, on the east side of the river.

The old site is on an open sand and gravel bar or flat a little above high water mark and very near the river. The living houses were square--never round. The house excavations were about two feet deep. The excavation for the ceremonial house ("sweat-house") was sixteen or eighteen feet across and deeper than the others, averaging about three feet below the surface. The ground floor within was covered with large flattish pebbles. The building had fallen but I was told that it had a low gabled roof, with entrance toward the river (on the west side). Under the north end and still plainly visible was a ditch or flume to supply air and for a draft when starting the fire. The fireplace was in the middle.

The graveyard is on the downstream end of the same flat.

The flat is in a forest of Douglas spruce, black and white oaks, maples, tree alders, and dogwood, with a dense undergrowth of hazel, spirea (*Spirea douglasii*), syringa (*Philadelphus lewisii*), huckleberry (*Vaccinium ovatum*), and the wild lilac (*Ceanothus integerrimus*). The "three-leaf" or "deerfoot" also called "sweet after death" (*Achlys triphylla*) is common throughout the shady forest.

In the immediate neighborhood the large gray tree squirrel (*Sciurus griseus*) was common, the big gray ground squirrel (*Citellus beecheyi*) was abundant, and a few red squirrels and chipmunks were running about.

Ruffed grouse, mountain quail, and many pigeons were seen; also crested jays, robins, and flickers.

A few days later I visited the modern inhabited rancheria, nearly two miles below the bridge. It is on a rather steep slope about 500 feet above the river.

Among the Indians present were two very old men, the Wilson brothers, and a half-breed named Ned Woodward from Blue Lake, and his wife, the former widow of Nathaniel Bailey--with all of whom I had worked in previous years. With their help I checked my former vocabularies and added many words.

At Blue Lake during the latter part of October of the same year I found a number of Indians, mainly Hoilkut, and obtained additional material, including village names from Ned Woodward. Worked also with others, especially the Hoilkut Chief, Frank Lowry, and his wife. She is a full blood with the

characteristic chin tattooing consisting of three broad vertical bars with a narrow one on each side between the middle and outer ones. [See fig. 1, a, b for different styles.] A married daughter had three children, a tiny girl and two boys -- one of three and the other five, both big for their age.

Also of interest are Merriam's ideas about the position of the Whilkut groups. The following excerpt, taken from his notes, is dated 1939, but refers to a trip he made to Blue Lake in September, 1910.

Mā'-we-nōk [Mad River Whilkut] ... An Athapaskan tribe on Mad River, reaching from the junction of North Fork with main Mad River near Korbelt (where they came in contact with the Pah'-te-waht of Lower Mad River [a Wiyot subgroup] and the h'Whilkut of North Fork and Redwood Valley) upstream (southward) for many miles to the ranch of a white man named John Ahlgren, where their territory ended. This is on or near Bug Creek.

It was told me by a h'Whilkut ('Hoilet'-hah) who stated further that the Mā'-we-nōk spoke a language so similar to his own that he could understand most of their talk.

The statement in the last paragraph comes from an informant Merriam had in Blue Lake in 1910. Merriam returned to the region in 1920 and at that time spoke to a member of the Mad River Whilkut group itself. Presumably the village list given for that group is derived from the second visit.

Merriam discusses the other Whilkut groups as follows.

The Hoil'-kut or Redwood Creek Indians (commonly called Chilula, Hwilkut, or Whilkut) were until recent years one of the dominant Athapaskan tribes of Humboldt County in northwestern California.

Their territory consisted of the whole valley of Redwood Creek and the adjacent mountains from a point on the creek 10 or 12 miles above its mouth to Chaparral Mountain at the head of the creek, and included also the North Fork of Mad River and a short stretch on the north side of the main Mad River between Blue Lake and Korbelt.

Their proper tribal name as spoken by themselves is Hoil^{ch}-let'-kah or Ho-ē^{ch}-kut-kā, usually slurred to Hoil'-kut. They also call themselves Ho-ē^{ch}-kut kew-yahn'-ne-ahm, meaning Redwood Acorn eaters.

There are three divisions or subtribes, more or less distinct according to the point of view: Upper Redwood, Lower Redwood, and Blue Lakes or North Fork Mad River Indians. In their own language they are:

1. The Ho-ē^{ch}-ke-e'-te (from Ho-ē^{ch}-kut, "Redwood", and e'-te, "north", the Northern or Lower Redwood Indians [Chilula Whilkut], inhabiting the valleys and adjacent slopes of Redwood Creek from its mouth upstream about 12 miles to the Tom Blair Ranch at the junction of Minor Creek--a distance in an air line of about 17.5 miles. Goddard thought this division was the whole tribe and called it Chilula, adopting the term from the Hoopa, Polikla [Yurok], and Nererner [Coast Yurok] Indians, who however apply it in a wider sense to both upper and lower divisions of the Redwood Creek tribe.

2. The Ho-ē^{ch}-ki'-e-nok (from Ho-ē^{ch}-kut, "Redwood", and e'-nok, "south"), the Upper or

Southern Redwoods [Kloki Whilkut], inhabiting the valley of Redwood Creek from Minor Creek (Tom Blair Ranch) up southerly to the head of the river, near Chaparral Mountain--a distance in an air line of nearly 20 miles. They also call themselves 'Klo-ke Ching'-ching-e'-nok, meaning "Prairie place south."

3. The 'Ho^{ch}-tin'-net (or 'Ko-tin'-net), the Blue Lake and North Fork Mad River Indians [North Fork Whilkut], inhabiting the valley of North Fork Mad River from its head to Korbelt and Blue Lake, and separated from the other divisions by a continuous lofty ridge 2,000 to 4,000 feet in altitude. At Blue Lake they had a large village called Kaw-cho'-sish-tin-tang.

South of the 'Ho^{ch}-tin'-net are the Mā'-we-nok [Mad R. Whilkut], a related Athapaskan tribe inhabiting the valley of Mad River from the junction of North Fork near Korbelt, southerly (upstream) to the Algrehn Ranch on Bug Creek--a distance in a straight line of about 21 miles. The 'Ho^{ch}-tin'-net and the Mā'-we-nok say that their languages are so similar that either can understand most of the words of the other.

The Hoilkut do not reach the coast, being separated from it by a long mountain ridge, on the west side of which dwell two tribes belonging to widely different linguistic stocks--the Nererner (the southwestern division of the Polikla or Yurok) and the Pahtewaht (the northern division of the Humboldt Bay Soolaheluk [Wiyot]).

The Hoilkut say that the coast tribe they call Teswan (the Nererner) owned the land fronting the ocean from Orick at the mouth of Redwood Creek south to Trinidad and extending up Redwood Creek for ten or twelve miles; and that farther south the Pahtewaht of the coast and lower Mad River owned the country up to Blue Lake--possibly to the mouth of North Fork Mad River--all of which agrees with what I have been told by members of these tribes.

The Hoilkut state that their lowermost (northernmost) villages, Ha-wung'-ah-kut and No-lě'-tin, were ten or twelve miles up from the mouth of the river. Below these they claim no territory. Above, they had twenty-three permanent villages.

The language is uniform throughout Redwood Creek Valley except for one or two slight differences of pronunciation. Thus the first syllable of the tribal name as spoken by the Upper Redwoods is Hoi'^{ch}; by the Lower Redwoods, Ho-ē'^{ch}.

VILLAGES

Most of the village names in the lists following were recorded by Merriam or Loud; some Chilula and Kloki Whilkut data from Goddard's works are added.

Mad River Whilkut villages.--All the names in this list were recorded by either Merriam or Loud (1918), respectively designated by (M) and (L). (See map 16.)

1. ti-keo-tchun'-tin (M). Village on the site of present Riverside.

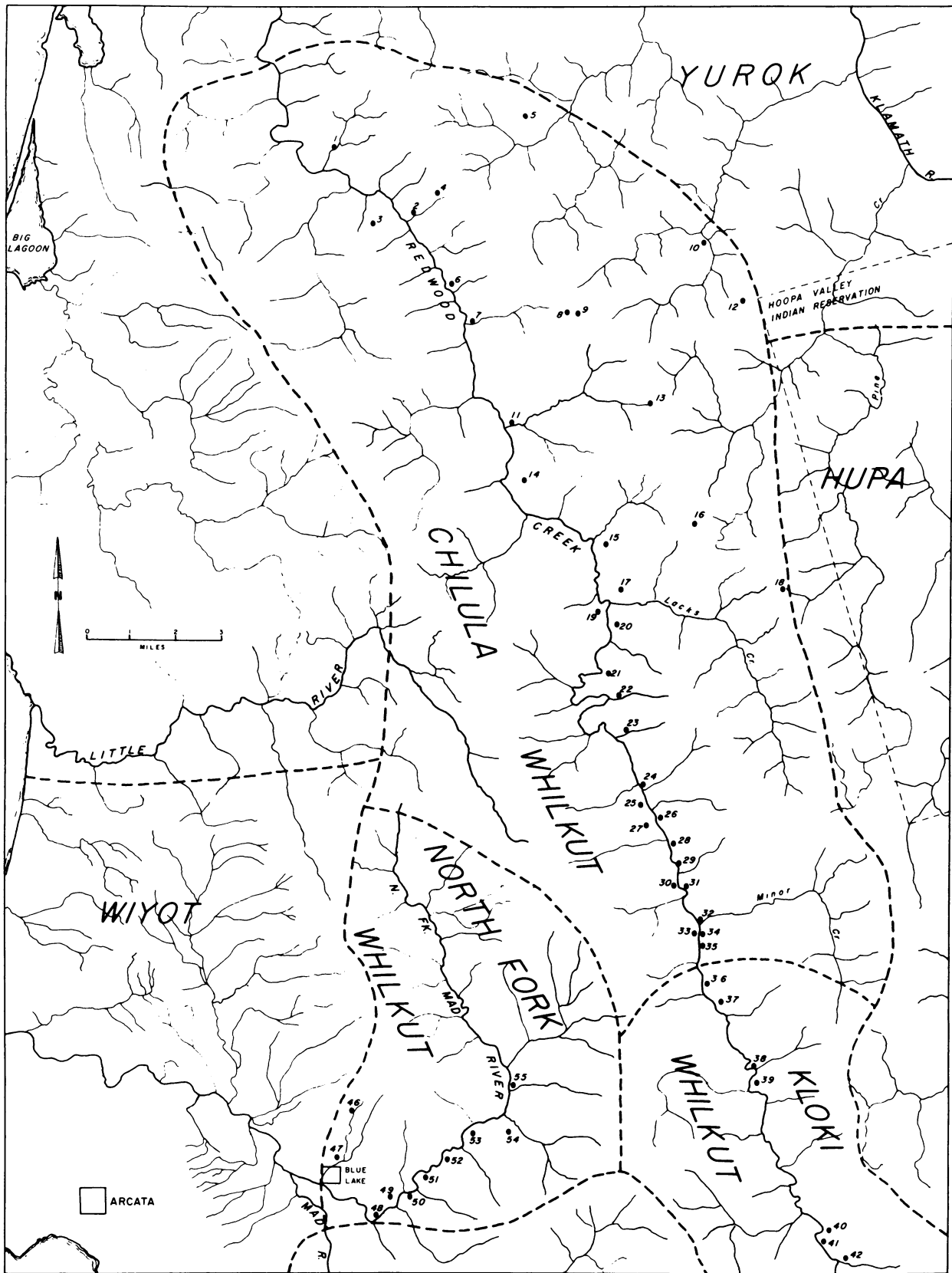
mis-kenē'huten, "bluff-?-place" (L).

The names are quite different but the locations are identical. One of them may be in error.

2. djinākhōe-ten (L). Name said to refer to a prairie.

3. tolkai'e-ten (L). Name said to refer to shining gravel.
4. dj'ëndjēe-ten, dj'ëndjē-whot (L). Name said to refer to a strong sweep of the wind at that place.
5. me'-kaw^{ch}-ting, me-ke'-aw^{ch}-ting (M). Village at Jim Anderson's place about 3 mi. S of Korbelt.
6. ārtēs-slandjēōlin-tin, "grasshopper-?-place" (L). Village at the mouth of Dry Cr.
7. ka-tahs-lah-ting, 'ke-ah-tahs-lah-ting (M). Village on the S side of Cañon Cr. (in air line about 3.5 mi. S of Korbelt).
- who'ntā, "houses" (L). Village at the mouth of Cañon Cr.
8. whotsdjōtāche-tin (L). Name said to refer to a low prairie. The village is 3 or 4 mi. below Maple Cr., just below Foster Cr. There were three houses there.
9. tsā'-te-tis'-ting (M). Camp on Mad R. at Fala ranch, 10 or 12 mi. S of Korbelt. It was a camp for catching eels.
- tsē-didis-ten (L). Village about 2 mi. below Maple Cr. There were ten or more houses there.
10. til-chwah-hew'-a-kut, til-tchwa-hū-ut (M). Village on Maple Cr. about 14 mi. (9 in air line) S of Korbelt. Large village.
- tilchēhūērkuṭ, dilchērhuērkuṭ (L). Village at the mouth of Maple Cr.
11. hotintēlime (L). Village at the mouth of Black Cr. The name is said to refer to a prairie near by, known as hinukerchenden.
12. yinālinōwhot (L). Village at the mouth of Boulder Cr. Merriam also lists a village at this place but he does not give its name or other information about it.
13. me'-mēh (M). Village at Three Cabins on Mad R. about 3 mi. above Maple Cr. On Tom Blair's Mad R. place.
14. Village near Mountain View, about 3.5 mi. S of Three Cabins.
15. tseng-nah'-neng-ahl'-ting, tseng-nah'-neng-ah-ten, "rocks across the river" (M). Large village at John Ahlgren's place on or near Bug Cr. [This may be the village site shown in pl. 10, b.]
16. ituke-nōle'-tin, "up-waterfall-place" (L). Village on Foster Cr. The same name also given to a prairie half a mile up the creek from its mouth; ituk means "up," also "east."

Chilula Whilkut villages.--The information on the villages and camps of the Chilula Whilkut comes from Merriam's notes and from Goddard's published material (1914). It appears that Merriam made a systematic effort to check Goddard's material, thereby enhancing the value of their combined work. (See map 15.)



Map 15. Villages of the Chilula Whilkut, North Fork Whilkut, and Kloki Whilkut (see also map 16).

1. ho-wung'-ah-kut (M). In the Bald Hills N of Redwood Cr. Northernmost and lowest village.

xōwūnnakūt (G). Village probably situated about a mile E of Redwood Cr. on a small flat S of a ridge along which the Trinidad trail used to run. A small creek a short distance S, entering Redwood Cr. from the E, would have furnished excellent salmon fishing. A depression resembling those characteristic of sweatshouses was seen. Tom Hill's oldest brother used to live at this village, which was deserted many years ago, probably because of its nearness to the trail.
2. no-lēh'-ting (M). Village on Redwood Cr. about 12 mi. from the coast. The name means "falls."

nōlediñ, "waterfall place" (G). This former large village remained occupied until 1888, when the Hill family left it and moved to Hoopa V. The site is at the foot of a long glade which slopes toward the creek nearly a half-mile distant. A spring N of the village site supplies water. In the edge of the timber, which approaches the village site within a few yards on the N, are two large redwood trees, hollow, with large openings toward the S. In these trees families used to spend the winter. During our visit in 1906 we spent a rainy afternoon in one of them in which a fire was maintained, the smoke escaping through the high opening in the side.

The village derived its name and perhaps its existence from a hole, or waterfall, a short distance up the stream. The creek bed was formerly choked with huge boulders, causing a fall, which was jumped by the salmon with difficulty. The fishing for both salmon and lamprey eels, carried on with nets below the fall, was excellent. Since the village has been abandoned, several of these boulders have been displaced so a fall of only 3 ft. remains.
3. yīsinneakūtciñ, "down hill on" (G). Camp site W of nōlediñ, about halfway up the ridge W of Redwood Cr. The Indians from nōlediñ used to camp there to gather the acorns of the tan oak, which are plentiful among the redwood trees.
4. Lōtsxōtdawillindiñ, "prairie water flows down place" (G). Summer camp about 1-1/2 mi. E of nōlediñ and 1/2 mi. W of the crest of the ridge. A hollow redwood tree used to be used as a camping place.
5. tciideedyediñ, "dancing place" (G). Glade on a ridge running toward the E near a branch of Roach Cr., a tributary of the Klamath. This camp was pointed out from a distance and its exact location is therefore uncertain. The Indians used to go there from nōlediñ in the summer to gather seeds and in the fall for acorns.
6. klo-tshim'-mēy (M). Camp on Redwood Cr. 1 mi. above no-lēh'-ting.

Lōtcimme, "small glade in" (G). A former village about a mile upstream from nōlediñ and 75 yds. E of Redwood Cr., where it stood in an opening of about an acre. Obscure depressions like house pits were seen on the N side of the glade near a stream which provided drinking-water. A weir for lamprey eels used to be built in Redwood Cr. near by.
7. ho^{ch}-tahn-ho-lah'-ting (M). On the E side of Redwood Cr. above klo-tshim'-mēy. There is some doubt as to its location.
8. king-keo'-'hli (king-keo'-hē-lā) (M). Summer camp on top of the hill or ridge in Bald Hills about a mile E of Jonathan Lyon's ranch house.

kiñkyōlai, "big timber point" (G). Large and important former village situated on the eastern end of a ridge above Jonathan Lyon's ranch house and about a mile E of it. There is timber on the northern slope of the ridge. At the edge of the timber is a spring which supplied the village with water. Besides the sweatshouse site, seventeen house pits were counted. This village was the home of the Socktish family, many of whom are now living with the Hupa. The head of the family at the time of the coming of white people was a man of influence and a noted warrior. His name was KiLtcil, "crazy." His wife was a Hupa woman and perhaps for that reason the family moved to Hoopa V.
9. senalmatsdiñ, "stone round place" (G). Summer camp for gathering seeds in the glade on the S side of the main ridge E of kiñkyōlai.
10. tesaikut, "projects to water" (G). Camp ground frequented in the fall of the year for gathering tanoak acorns and hunting deer by the Indians living at nōlediñ and kiñkyōlai. It is on the NE slope of the ridge W of Tully Cr.
11. king-yě-ke'-ke-ah-mung'-ah (king'-ke-kaw'-mung'-ah) (M). Village on the E side of Redwood Cr. at the mouth of Coyote Cr. a little above ho^{ch}-tahn-ho-lah'-ting, and a little above Lyon's place.

kiñyūkkyōmūña, "big timber near" (G). This site was not visited. It is said to be on the N side of Coyote Cr. below a large rock. There are said to be house pits there. Tom Hill said this was the village where the people who lived at kiñkyōlai spent the colder months of the winter. It is unlikely that two permanent villages were maintained by the same families. Perhaps the site of kiñkyōlai is the more recent and it was formerly only a summer camping place.
12. kitdiLwissakūt, "fire drill on" (G). Camp used in the fall for gathering acorns and hunting. Situated near the corner of the Hoopa reservation in a glade sloping toward the S, near a spring.
13. new-wil-tso'-me-ah, "coyote camp" (M). Spring and summer camp on Bald Hills Ridge.

nūwilsōlmīye, "ground in billows under" (G). Summer camping ground near a cold spring at the head of one of the branches of Coyote Cr. The Indians used to come here from nōlediñ.
14. ye-sin'-ning'-i-kut (e-tsin'-ning'-i-kut) (M).

yīsinniñ^c aikūt, "down hill ridge runs on" (G). Site of a former village 1/2 mi. E of Redwood Cr. and

- about 500 ft. higher than the creek. It is S of the main ridge S of Coyote Cr., at the western edge of a glade near a dry gulch. One pit was found. It is said that Tom Hill's father lived at this village and that it was not occupied at the time the white people came.
15. tsin'-tse-lah'-ting (M). Village below Stoffer's and below ho'-tach-ting.
- tsinsilladiñ, "bones lie place" (G). Former village not far from Redwood Cr. on a small flat where the ground shows signs of having slid. Little Henry's family are said to have lived at this village.
16. kittcūnamediñ, "its ear swimming place" (G). Summer camp on the W side of the main ridge, about 200 ft. below its junction with the E-W ridge N of Lacks Cr. There is a spring by a Douglas spruce which stands by itself.
17. tō'n-tě-nahn'-ting (tōn-din-nun-ting) (M). Old village on the E side of Redwood Cr. Ned Woodward, who was born here, tells me the village was on a side hill at or very near Stoffer's.
- tōndinūndiñ, "water facing place" (G). Village site on the sloping hillside about 700 yds. E of Redwood Cr. and 400 yds. N of Lacks Cr. Seven house pits were found here. The guide, Dan Hill, did not know of these pits, but located a village of this name considerably nearer Redwood Cr. The Albers place, probably the first settlement in this region, is just S of this village, on a flat between Redwood Cr. and Lacks Cr.
18. tcwūñxaladiñ, "dung stands up place" (G). On the western side of the main ridge near its crest. There is a spring in a small flat.
19. ming'-kah'-te-kě' (mung-kut'-te-kě) (M). At Fort Camp at the mouth of ho-tah'-ch-ting Cr. (Lacks Cr.), between Lyon's and Stoffer's.
- miñkūtdekeyimantcintciñ, "lake opposite side" (G). Summer camp among the redwood trees across the creek from Albers' place, opposite the mouth of Lacks Cr.
20. ho-tah'-ch-tin'-nek (ho'-nah^{ch}-tin-ă-kě or ho-nah^{ch}-tě-nā'-kěh), (M). Large village or summer camp right at Stoffer's on the ridge about a mile above (S of) tōs-kahtch-ting (Cold Spring) and approximately midway between Bair's and Berry's. At Stoffer's, formerly Hooker's, there is a place called koo^{ch}-mit-tah^{ch} or kew^{ch}-mit-tah^{ch}, meaning "between the alders," but it appears to be a place name only.
21. e-nok'-kă-no'-mit-să (M). Former village on the Howard place.
- yīnūkanōmittsedīñ, "south door place" (G). Former large and important village, often mentioned in myths and tales by both the Hupa and the Chilula. Pits were found on a flat near the creek about 1/8 mi. SW of the Howard ranch buildings. Other pits were said to have been obliterated near the middle of this flat.
22. tlō^{ch}-tī'k-hah-lah'-ting (M). Camp at an old school-house 1 mi. S of e-nok'-kă-no'-mit-să.
23. hōn-tě^{chl}-mě' (M). Camp on the E side of Redwood Cr. above Lacks Cr.
- xōnteLme, "flat in" (G). Former village situated on a large flat on the E side of Redwood Cr. The village is said to have stood where the farm buildings formerly belonging to Beaver are located. Because this flat had been cultivated a long time no pits were visible.
24. klo-chě-kā (M). Village on the E side of Redwood Cr.
- Lōtceke (G). Village which stood midway in a flat on the E side of Redwood Cr. near the stream. House pits were seen on the W side of the wagon road.
25. klitch'-hoo-ě-nah'-ch-ting ('hlit-choo-ă-nah^{ch}-ten; sit-choo-ě-nah^{ch}-ting) (M). Former village about 3 mi. above Beaver's on the W side of Redwood Cr. above Lacks Cr.
- Littcūwinnauwdiñ, "dust flies place" (G). Site of a former village on a long flat on the W side of the creek. It is surrounded by timber, but receives the sun from the S. Little Henry was living on the E side of the creek at the time, and said it was his father's home.
26. ki'-loo^{ch}-tah^{ch}-ting (M). Camp on the E side of Redwood Cr. about 1 mi. or less S of klitch'-hoo-ě-nah'-ch-ting, but on the opposite bank.
- kailūwta'diñ, "willows among place" (G). Said to have been a large village on a small flat about 1/4 mi. S of the last mentioned village. There were indications of 3 or 4 house pits. Molasses' wife said there was once a round dance house in this village, probably the same type as in the Upper Redwood and Mad River country.
27. kuff-keo'-mě (M). Camp on the W side of Redwood Cr. across from kī'-loo^{ch}-tah^{ch}-ting.
28. kailūwtceñeLdiñ, "willows project place" (G). Former village, which stood at the northern end of a long flat. Two plain house pits, one of them containing stone implements, were seen.
29. sik'-king'-choo-ma-tah'-ch-ting (M). Given as about 2 mi. below Tom Bair's place on the E side of Redwood Cr. Merriam says he could not find anyone who knew of it.
- sikkīñtcwūñmitta'diñ (G). Village occupied in 1914. At the time of Goddard's visit, it was the home of Tom, a famous blind medicine man.
30. hōs-tă'-chě-mě (M). Village or camp on the W side of Redwood Cr. about 2 mi. above kī'-loo^{ch}-tah^{ch}-ting.
31. ke'-nah'-hung-tah'-ch-ting (M). Former big village on the E side of Redwood Cr. just below Minor Cr.
- kinnaxōnta'diñ, "Yurok village place" (G). Important former village on a flat bordering Redwood Cr. on the E, about 1/4 mi. N of Tom Bair's ranch

house. Four shallow pits were found. A fight with the volunteer soldiers occurred at this village, in which one Indian was killed.

32. ke-tan-nah'-tah^{ch}-ting (M). Former village on the site of Tom Bair's place.
33. ho-un'-kut (M). Former village on the W side of Redwood Cr. about 1/2 mi. from ke-tan-nah'-tah^{ch}-ting but on the opposite side of the creek. The name is nearly the same as that of the lowermost village of the tribelet.
34. tah^{ch}-chā-nahl'-ting (M). Large village on the E side of Redwood Cr. just below Tom Bair's, near the big barn and sheep corral.
35. tahs-ung'-chā-kut (tah^{ch}-sahn-che-ting) (M). Former village about 200 yds. above tah^{ch}-chā-nahl'-ting on the E side of the creek.

There are also a number of villages for which the locations are uncertain. The following names are from Merriam's notes, and the villages are situated on or near the Bald Hills Ridge between villages 9 and 16.

tahnch-wing-es-hon-ting.

kahtch-wahn-to-ting. Summer camp.

ke-wah'-ahn-tis-ting. Camp on the ridge at the line fence between Lyon's and Stoffer's ranches.

tos-kahtch'-ting. Camp on the ridge at Cold Spring 1/2 mi. above ke-wah'-ahn-tis-ting.

tah^{ch}mah-no-ah'-ting. Summer camp on Bald Hills Ridge.

One more village is given by both Merriam and Goddard, transcribed dah'-sun'-chah-kut by the former and dasūntcakūt by the latter. They both say that it was supposed to have been near village no. 31. Goddard thinks that it was a separate name for a part of village 31 "as is customary in this region."

Kloki Whilkut villages.--Most of the information on this group comes from Merriam's notes. Goddard's account of the Chilula Indians of Northeastern California (1914a) goes only as far as the first two villages, which he maintains are part of the Lower Redwood group. Merriam claims they belong to the Upper Redwood group. I have accepted Merriam's version and these groups are rearranged on the basis of his information. Goddard's Chilula Texts (1914b) mentions a few villages of this group but no locations are given, so they have not been included. (See maps 15 and 16.)

36. mis'-mēh (M). Former village on the E side of Redwood Cr. 1-1/2 mi. below kah'-kus-tah^{ch}-ting.

misme, "slide in" (G). Former village situated near the creek on the E side. Many Indians were killed here by the white people. Perhaps that is why this village was not mentioned by some of the informants.

37. kah'-kus-tah^{ch}-ting (M). Former village on Redwood Cr. at the junction of Sweathouse Cr., whose name it bears. About 2 mi. below Berry Bridge.

kaxūsta'diñ, "Philadelphus among place" (G). Former village of importance on a flat of about 2 ac., near the creek level on the E side. Four house pits were found on the N side of the flat and four others in a row about midway of the flat. Two other pits, one of them near the creek, were probably sweathouses. The flat is called "Sweathouse Flat" by white people. This village is considered by the Hupa the last of the villages of the xōilkūtyīdexoi, or Chilula. It was the last toward the S from which Indians were allowed to witness the Hupa dances. The Chilula also seem to accept this as their boundary.

38. t'chil-kahn'-ting (t'ch¹-kahn'-ting; chis-kahn'-ting) (M). Village on the E side of Redwood Cr. just under the Berry ranch and about 1/4 mi. below the old covered bridge near Berry's. The village is now moved to a higher point on the high slope 1/2 mi. farther S.
39. e-nuk'-kā-cheng'-tish-ting (M). Former village where the Berry ranch house now stands, on the high ground E of Redwood Cr. Bridge.
40. es-tish'-chem'-mēh (M). Former village on the E side of Redwood Cr. about 4 mi. above Berry Bridge.
41. tsin'-tes-'ki'-mēh (M). Village on the E side of Redwood Cr. a little below mes-tā-tim'-teng.
42. mes-tā-tim'-teng (M). Former village on the E side of Redwood Cr. above es-tish'-chem'-mēh.
43. tah-nah'-nah-kut (M). Village on the E side back from the creek and above mes-tā-tim'-teng.
44. chim-mah'-non'-ah-kut (M). Former village on the E side of Redwood Cr. at Bonny Cragan's ranch.
45. ni'-is-'kwahl'-lā-kut (M). Former village at the head of Redwood Cr. The last and southernmost village of the group. A view of the territory here is shown in pl. 10, d.

Merriam lists for this group five other villages, which could not be located. Presumably they are in correct sequence between village no. 44 and village no. 45.

tsā'-nah-ti'-ā-kut. Village on the E side of Redwood Cr. far up, near Chaparral Mt.

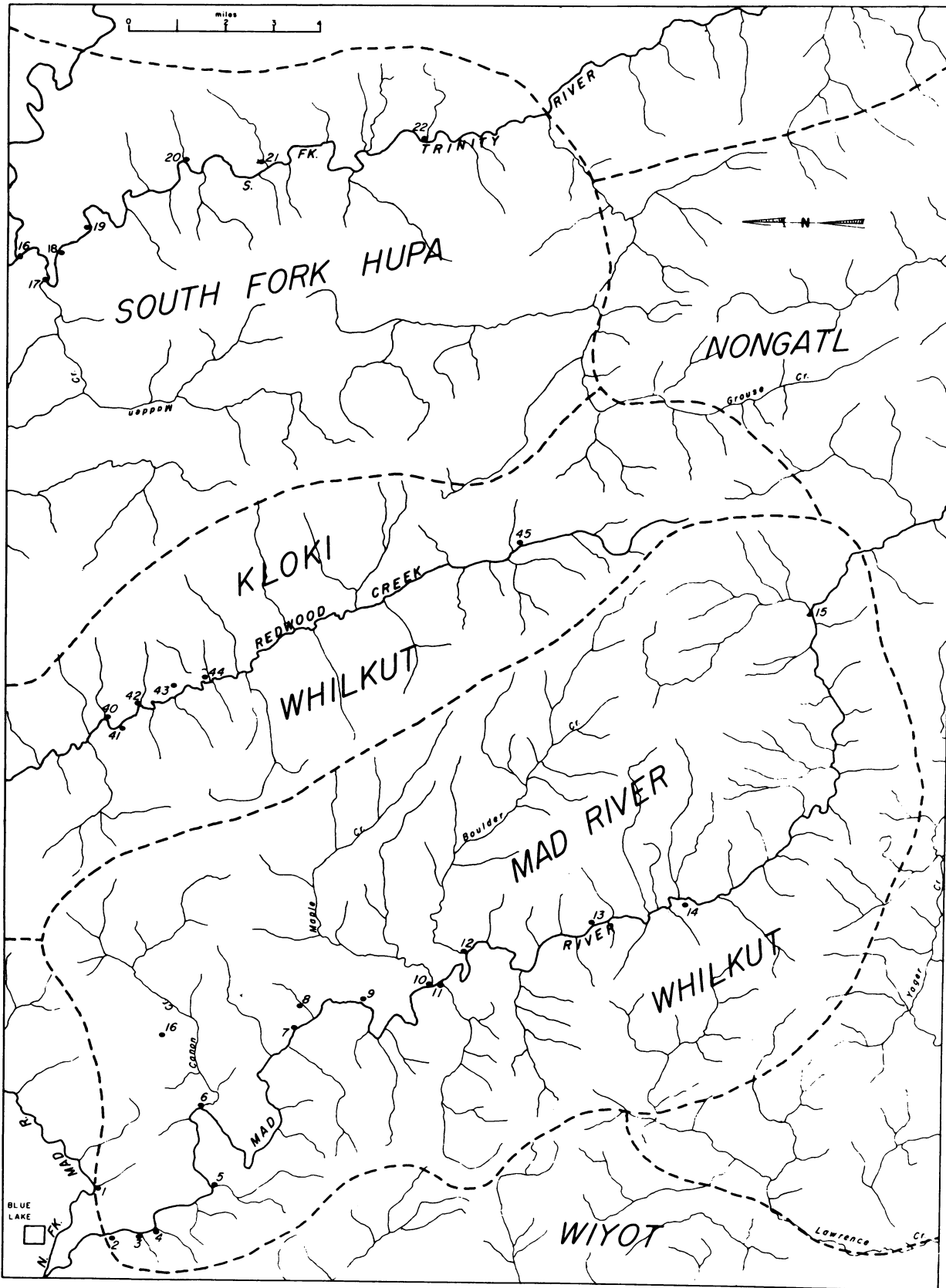
'klesh-mah'-kut. Former village on the ridge on the E side of Redwood Cr.

mā'-mā'-ā-kut. Former big village on mā'-ma-kut creek.

'klew-taw-mē-ting. Former village on the E side of Redwood Cr.

nahs-kah'-nah-kut. Former village high up on Redwood Cr.

North Fork villages.--The information on this group comes from Merriam's notes (M) and from Loud (1918) (L). (See map 15.)



Map 16. Villages of the Mad River Whilkut, the South Fork Hupa, and Kloki Whilkut. (See also maps 15 and 17).

46. klokeche (L).
47. kaw-cho'-sish-tin-tang (M). Large village at Blue L.
48. me-kā'-tā-met (M). Village on North Fork Mad R. between Korbel and Riverside (nearer Riverside).
- mikētime (L). Name said to refer to being behind North Fork of Mad R.
49. kā-tsi'-ā-too (M). Camp just below Big Rock at Korbel.
50. hoo-tso'-e-choo'-kah (M). Village (or camp) on the site of the present store at Korbel.
51. ki'loo-whit'-teng (M). Fishing camp on North Fork Mad R. 1/4 or 1/2 mi. above Korbel (where gum trees are, just below picnic ground).
52. kis-tā'-ā-kut (M). Camp for winter fishing on North Fork Mad R. at Korbel picnic ground (Camp Bar) about 1 mi. above Korbel.
- gestAkAt (L). Name said to refer to a deep fishing hole.
53. noo-lēh'-mēh (M). Fishing camp at falls about 1/2 mi. above Korbel picnic ground. Only one kind of salmon can get up these falls.
54. tsē-inātūlwo-ten (L). tse, "sticks," which were left there after a prayer.
55. khaiyame (L). Name said to refer to an eddy at the base of a waterfall.

ETHNOGRAPHIC NOTES

The following note is taken verbatim from the Merriam files.

The Nose Stick: The Redwood Hoi-let'-hah tell me that their tribe never perforated the nose during life, but when a person died they charred a piece of poison oak to make it strong, and sharpened it and bored a hole with it through the septum of the dead person's nose and then put handsome Dentalium shell money in the hole before burying the person.

The Tol-lo-wah of Crescent City and Karok of Upper Klamath River (Orleans Bar to Happy Camp) were the only Indians the Redwoods knew who dared wear the nose shell when alive--the other tribes were afraid to do so.

HUPA

The Hupa are the best known of the California Athabascan groups. They live in the drainage area of the Trinity River from a short distance above its mouth to a little above the mouth of South Fork Trinity and in the drainage area of the South Fork Trinity up to the mouth of Grouse Creek (pl. 10, a).

There have been a number of papers published on a variety of aspects of Hupa life but the main sources of general ethnography are Goddard's paper (1903a) and Kroeber's Hupa section in the Handbook (1925a, pp. 128-137). The Hupa are the same, in many ways, as the Yurok, so the sizable literature on that group is also useful.

The territory occupied by the Hupa differs in several respects from that of the other Athabascan tribes. The elevation of their lands is everywhere over 2,000 feet and in places rises to 4,000 or 5,000 feet. Because of the elevation there is a good deal of snow in the mountains surrounding the valley and this fact may have somewhat isolated the Hupa from their Athabascan neighbors during the winter months, although it is known that they were in close contact with some of the Whilkut.

The fish resources of the Hupa territory also constituted an important distinction. The Trinity is the only river in the Athabascan area in which there is both a spring and a fall run of salmon. This resource must have been very important to the Hupa. It is significant that in the many intensive studies of the Hupa there is no report of any summer camp away from the river. The Hupa were evidently even more firmly attached to their riverine environment than were the other Athabascans, and this fact may well have been due to the double salmon run.

Merriam's estimate of the position of the Hupa, given below, is taken verbatim from his notes.

The Tin'-nung-hen-nā'-o or Hoopah.--The Hoopah proper, who call themselves not Hoopah but Tin'-nung-hen-nā'-o, occupy the lower part of Trinity River and tributary streams from the mouth of South Fork Trinity northerly to Bull Creek--a distance of about 20 miles. On the west they extend to the summit of the long high mountain range known as The Bald Hills (altitude 4,000 ft.), which separates their territory from that of the Redwood Creek tribe, the 'Hwilkut [Chilula]. On the east they reach to the lofty mountain ridge culminating in Trinity Summit (altitude 6,500 ft.), the northern part of which separates the drainage area of Mill Creek from that of Redcap Creek; the southern part, the waters of Horse-Linto and Cedar creeks from those of the westerly branches of New River.

Their territory, therefore, is difficult of access, being protected in all directions by ranges of mountains or deep canyons, while its western border is about 20 miles from the coast, easterly from Trinidad. The entire region, except the beautiful Hoopa Valley, 6 miles in length and a mile or two in breadth, where most of the villages are located, is mountainous and most of it densely forested. There are one or two small open stretches on other parts of Trinity River, and a few grassy slopes on some of the ridges; elsewhere the forest is continuous.

The Tin'-nung-hen-nā'-o are in contact with five tribes belonging to three linguistic stocks, namely: the Po-lik'-lah (often called "Yurok") on the north; the Kar'ok on the northeast; the Athapaskan E'-tahk-nā'-lin'-nā'-kah on the east [I have not been able to identify this group. According to Merriam's map and according to his own testimony (Merriam, 1930) the Hupa are bordered on the east by the Shastan

Tlo-hom-tah-hoi]; the Athapaskan Ts'ă-nung-whă [Southern Hupa] on the south, and the Athapaskan 'Hwil-kut [Chilula] on the west.]

The Ts'ă-nung-whă.--(An Athapaskan tribe closely related to the Hoopah.) The territory of the Ts'ă-nung-whă lies directly south of the Tin'-nung-hen-nă'-o or Hoopah proper, embracing the drainage basin of South Fork Trinity River from Grouse Creek to the junction of South Fork with the main Trinity, and including also the rather narrow strip between South Fork on the west and the main Trinity on the east as far up as Cedar Flat. At the mouth of South Fork they crossed the main Trinity and claimed a narrow strip two or three miles in length on the north side of the canyon where two of their villages were located, Ti'-koo-et-sil'-lah-kut on the high bench opposite the mouth of South Fork, and Me'-mëh, on the site of the present Fountain Ranch about 1-1/2 miles east of the other. Their western boundary was the divide between the tributaries of South Fork Trinity and those of Redwood Creek (a little west of the courses of Madden Creek and Mosquito Creek). The eastern boundary was the deep canyon of Trinity River from the mouth of South Fork to Cedar Flat; the southern boundary, Grouse Creek and a line running from its mouth northeasterly and following Mill Creek to the main Trinity at Cedar Flat--thus including the Burnt Ranch country.

The land of the Ts'ă-nung-whă is mountainous and forested, and the principal streams flow in deep canyons. It is roughly circular in outline, and of small extent, measuring in an air line hardly 15 miles in either direction--north-south or east-west. Nevertheless it seems to have been rather well populated for there were at least a dozen villages--all situated on high benches overlooking the canyons.

Their language differs only slightly from that of the Hoopah.

The Tsa-nung-wha were in contact with four tribes: the Tin'-nung-hen-nă'-o or Hoopah on the north, E'-tahk-nă-lin'-nă-kah [Tlo-hom-tah-hoi] and Che-ma-re'-ko [Chimariko] on the northeast, the Che-ma-re'-ko on the east and south, the 'Hwi'l-kut [Chilula] on the west.

The following account of Merriam's first visit to the Hoopa Indian Reservation is taken from his California Journal, Vol. 2, September 5, 1898.

The present Hoopa Valley Indian Reservation Agency is built around a hollow square, formerly old Fort Gaston. In order to reach the agency we had to ford Trinity River, here more than a hundred feet broad, the agency being on the west or coast side. Purchased a number of sahad baskets.

The night before coming down into Hoopah Valley we camped on Trinity Mountain where we found a colony of *Aplodontia* [Mountain beaver], the Hoopah name of which is Nea't-saas.

The range west of Hoopah Valley between Supply Creek canyon and Redwood Creek is 3,400 feet in altitude; in other words, 3,000 feet above Hoopah Valley. This range is covered with a rather dense forest mainly of Douglas Fir, more or less mixed on the warmer slope with Ponderosa and Sugar Pines and Black, White, and Live Oaks, among which Madrones, Chinquapins, and Cedars occur.

On the slope east of Hoopah Valley the splendid *Rhododendron californicum* occurs. Here also two

species of *Cornus*, *nuttalli* and the black-berried *sessilis*, were seen, and in a gulch nearby we found the rather rare Lawson Cypress. On this range at an altitude of 3,250 feet is a stone pile around a post said to mark the west boundary of Hoopah Reservation.

On this same range the coast Plume Fern is common and the ground over a considerable area is carpeted with delicate *Vancouveria hexandra*.

At Redwood Creek we saw the beautiful ringed tail of a *Bassariscus*, which animal is said to be common here.

The Redwood (*Sequoia sempervirens*) common along the coast pushes up Redwood River to a point about two miles below the Bair ranch. The man at the ranch, W. F. Boyce, told me that during the previous year he had trapped in the region 32 Black Bear, 21 Coyotes, numerous Wildcats, 3 Panthers, and one Badger, besides killing any number of deer. Other mammals said to occur here in addition to Deer are Gray Fox, Otter, Fisher, Marten, Mink, big and little Skunks (*Mephitis* and *Spilogale*) in addition to the Ring-tail *Bassariscus*, here called kil-how'ch.

One of the commonest trees in Redwood Valley is the Tan Oak (*Lithocarpus densiflora*), the bark of which is used for tanning. Madrones also are common, many of them four feet or more in diameter.

The rare Cypress (*Chamaecyparis lawsoniana*) also occurs here but Douglas Fir is not only the dominant tree but grows to large size, thousands of them reaching diameters of five to seven feet.

VILLAGES

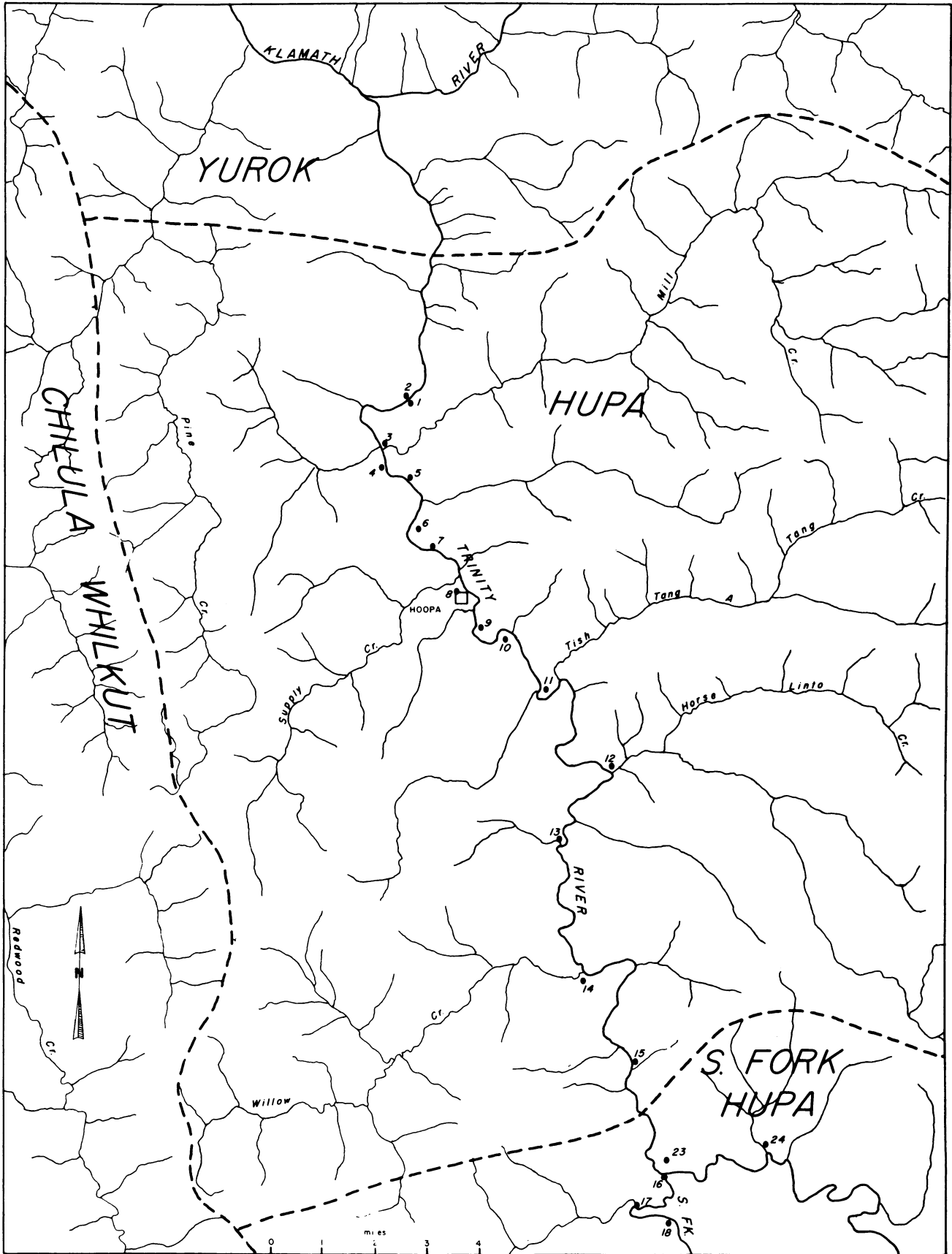
Although the information on Hupa villages comes from extremely diverse sources, there appears to be fair agreement among them. The basic material comes from Goddard (1903), and this is for the most part confirmed by Merriam and Curtis (1924, Vol. 13). In fact, Curtis' data coincide so closely with Goddard's that they may have been derived from Goddard's report. However, a few of Curtis' facts do not appear in Goddard's work so we are probably justified in considering them primary.

Besides these sources, there is a list of village names by Powers (1877) and also a manuscript map prepared by Gibbs in 1852, reproduced here as pl. 9; the original is in the Bureau of American Ethnology. Although this map is not particularly accurate and although the village names are given in Yurok rather than in Hupa, it still has special value since the number of houses is given for each village and we therefore have a check on the data presented by Goddard.

In the following lists the sources are thus indicated: Merriam (M), Goddard (G), and Curtis, 1924, Vol. 13, (C).

Natinuwhe Villages (map 17)

1. hon-sah-tung (M). Former village on the E bank of the Trinity R. at the N end of Hoopa V.
xonsadifi (G), "deep water place." Near the beginning of the canyon on the right bank at the N end of the valley.
honsading, "deep pool place" (C). On the E bank of the Trinity R. at the N end of Hoopa V.
Powers (1877) gives hun-sa-tung and Gibbs gives okenope, corresponding to oknutl, the Yurok name.



Map 17. Villages of the Hupa and South Fork Hupa (see also map 16).

Gibbs says there were 9 houses in the village while Goddard shows 11 houses.

2. dakisxankût (G). On the opposite side of the Trinity R. from xonsadiñ at the base of Bald Hill was a village, the site of which is now entirely grown up to trees and brush. Goddard shows 7 houses here.

takyishankut (C). On the W bank, opposite honsading.

3. kin-choo-whu-kut (M). On the E side of the Trinity near the N end of Hoopa V. and just below the mouth of Mill Cr.

kintcūwhwikût, "on a nose" (G). This village occupies a point of land on the E bank just below the mouth of Mill Cr. Eight houses are shown at this village.

kinchuwihikut, "its nose upon" (C). On the E bank just below the mouth of Mill Cr.

The Yurok name for this village is merperneritl (Kroeber, 1925).

4. cha-en-ta-ko-ting, "flopped out" (M). Former village on the W bank of the Trinity R. a little above Socktish Cr.

tceindeqotdiñ, "place where he was dug up" (G). This village was a short distance below meskut. Its name refers to a well-known myth (see Goddard, 1904). Goddard shows 12 houses at this village.

cheindekhoting (C), "dug out place." On the W bank between miskut and the mouth of Socktish Cr.

Powers (1877) gives the name chan-ta-ko-da for this village and its Yurok name is said to be kererwer (Kroeber, 1925).

5. mis-kut (M). On the E side below Hostler Cr.

meskût (G). This village was on the E side of the river and about a mile below takimiLdin. It "shows signs of once having been occupied by many houses." Nine of them are shown.

miskut, "bluff upon" (C). On the E bank on a bluff midway between Mill Cr. and Hostler Cr.

Powers (1877) gives mis-kut as the name of this village and Gibbs gives eh-grertsh, corresponding to the Yurok ergerits, and says that there were 6 houses here.

6. tah-kah-mil-ting (M). The head village of the tribe, situated on the E bank of the Trinity a little above Hostler Cr. Contained a large ceremonial house.

takimiLdiñ, "place of the acorn feast" (G). A short distance below Tsewenaldin on the E bank. It is known as the Hostler Ranch. This is the religious center for the whole valley. Here there still stand the xonta nikyao, "house big," and the taikuw nakyao, "sweathouse big." These are said to have been built by the people of long ago and to have sheltered the first dwellers in the valley; but inasmuch as they were burned by a party of Yurok

in the early part of the last century, the statement is to be interpreted as applying to the foundations only. At this village were held the acorn feast and two of the important dances, and it was the starting-point for the third (cf. Goldschmidt and Driver, 1940). Goddard shows 14 houses in this village.

takimilding, "cook-acorns place" (C). On the E bank a short distance above Hostler Cr. At the beginning of the acorn season the people of this village would gather a small quantity of nuts and prepare a feast of mush and salmon, which all the Hupa attended. The remnants of the feast were cast into the fire and the cooking stones were added to the accumulated heap of previous years. This is the present residence of the northern division of the Hupa, known as Hostler Ranch, and the ceremonial feast is still observed. A fishing weir was built in a long riffle near here.

Powers (1877) gives hos-ler as the name of this village and Gibbs gives ople-goh, corresponding to Yurok oplego (Kroeber, 1925), and says that there are 20 houses here.

7. tsa-wun-al-mit-tung (M). Former village on the E side of the Trinity in the middle of the valley.

tsewefaldin (G). This was a large settlement on the E bank about a mile below toLtsasdin. It is translated by English tongues into Senalton. There are many traces of houses here, but the people were all killed or scattered in the troubled times of the 'sixties. Six houses are shown here.

tsewenalding, "rock inverted place" (C). This was on the E bank about 1/4 mi. above takimilding. The locality is now known as the Senalton Ranch.

Gibbs gives the name olle-potl for this village, corresponding to the Yurok olepotl (Kroeber, 1925) and says there were 10 houses.

Tinuheneu Villages (map 17)

8. tol-skots-a-tung (M). Former village on the W side of the Trinity S of the mouth of Supply Cr.

tōLtsasdiñ (G). There are evidences of this village on the left bank a little S of the mouth of Supply Cr. It has long been deserted. A prison camp was maintained near this site by the military.

toltsasding (C). At the N side of the mouth of Supply Cr. It was inhabited until about the time of the military occupancy.

The Yurok name for this village is erlern (Kroeber, 1925).

9. ma-til-le-tung (M). In the upper part of Hoopa V. on the E side of the Trinity, 2 mi. from the S end of the valley. It was the largest village but not the head village, tah-ka-mil-ting being the head town. ma-til-le-tung was the big boat ranch of the Hupa and was named for ma-til, dugout canoe.

medildiñ, "place of boats" (G). Just below xowunkut the river swings back to the W, meets a spur of

the mountain, and then swings back to the E, forming a peninsula. Here, cut off from the rest of the valley, is medildin (Matilton Ranch). This village, with those to the S, forms the southern division of the Hupa people. This division manifests itself especially in religious matters.

medilding, "canoe place" (C). On the E bank of the Trinity R. about midway between Supply Cr. and Campbell Cr. It is the present settlement of the southern division and is known as the Matilton Ranch. The southern division fish weir is built in the river near here.

mi-til-ti is the name attributed to this village by Powers (1877) and Gibbs gives the name kahtetl, which is its Yurok name (Kroeber, 1925). Gibbs says it had 28 houses whereas Goddard shows 22.

10. ho-wung-kut (M). A village of the southern division, S of ma-til-le-tung and 1 mi. from the S end of the valley on the W bank of the river.

xowúñkút (G). About a mile downstream from Tish-Tang-A-Tang Cr. on the W bank of the river. Goddard shows 14 houses at this village. The site is now called Kentuck Ranch.

howungkut (C). On the W bank about 1 mi. below Campbell Cr.

This place is locally known as Kentuck Ranch. This appears to be the village called wang-kat by Powers (1877). Its Yurok name is pia'getl (Kroeber, 1925).

11. tish-tahng-ah-tung (M). On the E bank of the Trinity R. at the S end of Hoopa V. proper.

djictañadiñ (G). At the S end of the valley where the river emerges from the canyon is a point of land on the E side. This village, known locally as tish-tang-a-tang, was situated on this point. Just above this village Tish-Tang-A-Tang Cr. from the mountains on the E empties into the Trinity.

djishtangading, "promontory place" (C). On the E bank opposite Campbell Cr.

Powers (1877) calls this village Tish-tan-a-tan. According to Merriam's notes the Yurok name for it is Peht-sau-an and this is the name Gibbs uses for it. Gibbs says there are 9 houses here, whereas Goddard shows 13.

12. 'has-lin-ting (M). On the E bank of lower Trinity R. 3 mi. above Hoopa V. proper. This is the uppermost village classed as Hupa.

xaslindiñ (G). About 3 mi. S of the valley proper on the E bank of the river at the mouth of a creek of the same name (Horse Linto Cr.). Nine houses are shown at this village.

haslinding, "waterfall place" (C). On the E bank about 3 mi. above djishtangading and the same distance beyond the limits of the valley. The name is preserved in Horse Linto Cr.

Powers (1877) calls this village hass-lin-tung. According to Kroeber (1925, p. 129), the Yurok name for this village is yati but Waterman (1920, p. 188) gives wo'xtoi. This last would correspond to Gibbs's wauch-ta, which is shown with an approximately correct location except that it is on the wrong side of the river. This village is said to have had six houses.

13. seh-ach-pe-ya (Gibbs' map, pl. 9). This is no doubt a Yurok name, as are all those given by Gibbs, but no one else has recorded it. There are said to have been four houses here.

14. wang-ulle-watl (Gibbs' map, pl. 9). Again this is probably a Yurok name. There are said to have been three houses.

15. wang-ulle-wutle-kauh (Gibbs' map, pl. 9). This is probably a Yurok name. There is said to have been one house here. Kauh is a Yurok suffix meaning "opposite."

Gibbs also gives a town called weitspek on the W side of the Trinity just below the mouth of South Fork. There are said to have been three houses here. Merriam asked about this village and its existence was denied by his informants.

South Fork Hupa Villages (maps 16, 17)

16. hlah-tung (M). On both sides of the mouth of South Fork Trinity on high bench ground.

17. til-tswetch-a-ki (M). On the W side of South Fork at the mouth of Madden Cr. An old important town. About a mile below chil^{ch}-tal-tung.

18. chil^{ch}-tal-tung (M). On the E side of South Fork 1-1/2 mi. above its mouth.

19. os-tahn-tung (M). On the E side of South Fork 2-1/2 mi. above its mouth.

20. 'hilit-choo^{ch}-tung (M). On the E side of South Fork 5 or 6 mi. above its mouth.

21. klo-kum-me (M). On the E side of South Fork about 8 mi. above its mouth (two above 'hilit-choo^{ch}-tung).

22. tah-choo^{ch}-tung (M). On the E side of South Fork about 10 or 12 mi. above its mouth.

23. ti-koo-et-sil-la-kut (M). On the N side of the main Trinity on a bench opposite the mouth of South Fork, about 1-1/2 mi. below Fountain Ranch.

24. me-meh; me-a-meh (M). On the N side of the main Trinity on the site of the present Fountain Ranch about 1-1/2 mi. above the mouth of South Fork but on the opposite side of the river.

25. hoi-ti sah-ahn-me (M). At Hennessy Ranch, Burnt Ranch (Post Office in 1921).

26. e-nuk-kut-te-nan-tung (M). At McDonnell Ranch, Burnt Ranch. Name means "south slope place."

27. tin-noo^{ch}-tung (M). At Cedar Flat. Easternmost village of the tribe, near or adjoining the territory of the Chimariko.

ETHNOGRAPHIC NOTES

The following ethnographic data are taken verbatim from Merriam's notes.

According to the Hoopah, as told me by James Chesbro of Burnt Ranch, the First People are called Kit-tung'-whi or Devil People. They used to fight and kill and eat one another. Later they turned into animals. After the Flood real (Indian) people came.

In early days the Indians used to get drunk from inhaling the fumes of Indian tobacco (Min'-tā itch'-wah) which by deep breathing they would take into the lungs. Their word for drunk is Ho-nā^{ch}-wih^{ch}. The expression for "many people drunk" is Yah, ho-nā^{ch}-wē^{ch}.

The word for an old person is Kis'-te-ahn; for an old object, Tah'-ne.

There are two words for good: Chung-whoom for a good or kind person; and Noo-whōm for a good thing or object. A bad person is To choong-kōm, "not good person"; while a thing that is not good is To noo^{ch}-kōm, "not good thing."

Chin-tahs, "slow", is said to mean also "heavy"; but the word given me for heavy is Nit-tahs'.

The word Ho'-chit, meaning real or genuine, occurs frequently: Thus, deerskin tanned with the hair on is called Ho'-chit te, te being any blanket or toga. Similarly, the ordinary woman's apron made of pine nuts and braided grass is Ho'-che ke'-ah; the woman's hat, Hō-che kōs'-tahn, or real hat; moccasins, Hoch yā'-che-tahl; the bow, Hō-chē tsitch-ting; the stone arrow-point, Hō-chē tin-ti; Indian or wild tobacco, Hō-che Min'-tā-itche'-wah; the elk horn box or purse for valuables Hō'-che kin'-chah.

The Hoopah say that their people did not use the nose-bone or nose-stick, but had a name for it, which is Hun-choo whang-i. They say these were worn by the Indians farther north.

The women tattooed the chin, usually in three broad vertical bands similar to those of the Klamath River tribes. Tattoo marks are called Wil'-tahch'.

Place names: All place names along the rivers were at one time the sites of villages or rancherias. The village always takes the name of the place.

The name for house is Hōn'-tah or Hun'-tow; the ceremonial house, Mā'-min sin-til; the sweat-house, Tah'-'keo; the menstrual lodge, Mintch'; the brush wickiup, Mā'-nah-si; the brush blind or hut for concealing the hunter Kew'-wong wil'-min.

They say that they never burned the dead, but buried them in graves dug exactly knee-deep by measure. The grave was called Hot-yung ho-sin. The body was fastened to a slab of wood of the proper length, and when laid in the grave was covered with the belongings of the dead person and then with earth.

While they do not burn the bodies, they burn clothing and other belongings. But the Chemareko of Hyampom burn their dead.

They believed in an evil spirit or Devil called Kit-tung' hwoi.

A peculiar custom was practised in extending a certain courtesy to an enemy who wanted to cross the river but had no boat. If a person having a canoe

crossed the river, and his personal enemy found the canoe, he would go and sit down near it and await the return of the owner. When the owner came, he would back out into the stream and then push the bow ashore at the nearest point to his enemy, and the enemy would step in and sit down, neither speaking a word. The owner would then paddle across the stream to his own side, and the enemy would jump out and proceed without remark.

There were two kinds of doctors: the real doctor or shaman, sometimes known as "dance doctor," called Kit-ta tow, and the medicine doctor, who never danced, called Kim-mow-chil^{ch}-weh.

Gambling Game: the common gambling game, Kenow-we, was played with a bunch of slender sticks 7 or 8 inches long, called Hol-che-king. One of these, Hung ("ace" or "lucky stick"), has a black band around the middle. The game consists in guessing in which hand the opponent holds the marked stick. There are eleven points or guesses. One stick is given up at each wrong guess.

Small hailstones are called Klew-hahn min-nah from Klew-hahn, "an eel," and min-nah, "eyes," from the resemblance of small hailstones to the white eyes of the eel. Big hailstones are Ke'-lo-ung-hot.

An earthquake is Nin mah-ah tin-nī^{ch}-chwit, meaning "turns over on edge of world."

Money: The unit of value, which we call "money," consisted of the valuable kind of dentalium shells, long specimens of which reached from the base of the finger to the base of the terminal joint. This was called Ho'-che naht-te-ow or "real money." Small or broken dentalium shells, from half an inch to an inch in length, were called Mit-tatch, and were used for beads.

Scalps of the great pileated woodpecker or cock-of-the-woods (Ceophlaeus pileatus), called Kis'-tā-ke-'keo, also passed as money.

Names of mammals and birds.--The Grizzly Bear had two names: Mē-chā-e-sahn and Me-kwo ah.

The Mountain Lion or Cougar is called Min'-ning mi^{ch} 'hlā-til-loo, meaning "kills with his face."

They speak of a spotted Panther of large size called Kit-sah', which has not been seen for a number of years. It used to make a great noise.

They speak also of a Water Panther (mythical) called Ho-tsi'-tow, said to live in holes close to the water of lakes and pools, never in rivers or on land. Its head and shoulders were heavy and covered with long shaggy hair, but the hinder parts were nearly naked.

The Otter is called 'Klōk-e-te-til-le, meaning "he likes salmon."

The Weasel--and this is particularly interesting--is called Klew^{ch}-mū-hung, meaning "snake's husband"--a term doubtless suggested by its snake-like form and actions.

The Mole is called Min-ni' ē-ting, meaning "eyeless"; the Bat Haht-la nah-mut, "night flyer."

The Porcupine is 'K'yo. Its quills, usually dyed yellow, were used to ornament basket hats; and also to pierce the ears for earrings. When a quill was stuck lightly into the lobe of the ear, it would slowly work its way through.

The common gray Ground Squirrel (Citellus beecheyi) is called Tsé 'ket-yahng-a, meaning "rock sitting on."

The Jack Rabbit, oddly enough, is called Nah^{ch}-ah-tah 'hits-'hlah-hahn, meaning "dry ground deer."

A Hupa ceremonial gray fox skin.--The skin was cased (opened along the hind legs, the belly not slit lengthwise). The front feet had been cut off but the skin of each leg was slit in six or seven strands or narrow ribbons about three inches long.

The skin had been turned inside out and decorated in places; then turned and left with fur outside. The skin of the hind legs was painted deep red. The tail also had been slit open on the underside and the skin painted with the same red paint, and a tuft of pure white feathers four inches long was sewed to its tip.

The most surprising marking was a double ring or belt band of red and blue painted around the inside of the skin about two inches above the base of the tail (and therefore hidden when the skin was furside out). The two bands, each about half an inch wide, were in actual contact all the way around--the anterior one deep red, the posterior deep blue.

The skin itself is of interest as being unmistakably the dark northwest form of the species *Urocyon cinereoargenteus*. The upper parts are very dark grizzled; the dorsal stripe from neck to tip of tail is almost pure black and the tail is about an inch broad. The flanks, innersides of legs, and undersides of tail are fulvous, palest on the belly. The specimen is an adult male.

Sayings about birds.--Dove (*Zenaidura*). Called Mi-yo. Mi-yo, the Dove, was a great gambler. He always gambled all winter. Once when gambling someone told him that his grandmother was dead. He said there would be plenty of time to cry next summer. So he kept on playing. When summer came he cried for his grandmother. And every summer we hear him crying for his grandmother.

Hummingbird. Called Ko-sos. Ko-sos, the Hummingbird, was a war bird. His bill was like a long needle. With it he pierced his enemies. Once he told another bird to start from one end of the world and he would start from the other. They did this and met in the middle where they danced.

Notes on adjacent tribes.--Yin'-nah'-chin ("South People," Chemar'eko). Extended from Hyampom northerly to Cedar Flat, easterly along main Trinity to Canyon Creek; and northerly between the high mountains that form the divide between French Creek and North Fork Trinity River on the west to Canyon Creek on the east, as far north as Rattlesnake Creek. (Previously learned from the Nor'-rel-muk of Hay Fork, a Winton Tribe, that the dividing line on the west between themselves and the Chemareko, called by them Hyembos, lay along Minor Creek.) Language wholly different from Hoopah. The Hoopah say that the presence of this tribe on Trinity River west of Cedar Bar, and on lower New River, is a comparatively recent intrusion.

Klo'-mē-tah'-wha . . . Salmon River Indians. Ranges south over summit to Grizzly Creek and headwaters New River. Language wholly different.

Ho-ning wil-tatch (meaning "tattooed faces") . . .

"Yuke" of Covelo region, Round Valley. Also called Devils, Kit-tung-who--a name applied to the First People, who finally turned into animals. Language wholly different.

Geography.--There used to be a great fall in Trinity River at a huge rock which stood in the middle of the river at Burnt Ranch. Below the fall was a big pool and eddy, which at the proper season was full of salmon. Everybody came here to catch salmon.

Indians from several tribes met here and feasted and had a "big time." Finally a terrible earth slide came down the side of the canyon and moved the rock away. This destroyed the falls.

This occurred during the boyhood of my informant. He tells me that besides the Hoopah the Indians who used to visit the pool below the falls for salmon were Poliklah from Wetchpek on Klamath River, 'Hwilkut from Redwood Creek, and Chemareko from Hyampom. They used to camp a little below the falls.

Hoopah Geographic Names

Hoopah V.	Nah-tin-noo
Main Trinity R.	Hahn
Trinity R. "up and down"	Hahn-nuk-ki
Bull Cr.	Mis-tes-se ah-tung ("sliding place")
Mill Cr.	Mis-kut e-ta-e-tuk ne-lin-na-kah (correct name) and Tsol-tsah muk-kah (nick-name from rock with female mark)
Socketish Cr.	Chan-ta-kot ne-lin-na-kah
Hostler Cr.	Tsa-mit-tah ("between two rocks")
Site of present settle- ment in Hoopah V.	Toos-kahts-tung-kah
Campbell Cr.	Tish-tah-ah-tung mu-mahn- chung ne-lin-nuk-kah
Tish Tang A Tang Cr.	Tish-tahn-ah-tung ne-lin- nuk-kah
Horse Linto Cr.	Hahs-lin-nah-kak
Raccoon Cr.	Se ^{ch} -ki-uk-kah ("white rock")
Willow Cr.	Ho-whah-chal-tung
South Fork Trinity	'Hlal-tung (at junction with main Trinity)
South Fork Trinity	Ye-sin-ching-ki (whole river)
Madden Cr.	Tilch-wetch uk-kah
New R.	Ye-tok ne-lin-nuk-kah
Forks of New R.	Tsa-nah-ning-ah-tung
Ironside Mt. (east of New R. mouth)	Tsen-nen-kut
High Rocky Ridge (north- west of New R. mouth)	Ta-se-tahn-ne-kut
Trinity Summit Ridge	Mung-kin-ne-kow-a-kut
Berry Summit	Ho-e ^{ch} -kut mit-ta-kahn
Redwood Cr.	Ho-e ^{ch} -kut ne-lin-nu-kah

POPULATION

SOURCES

The earliest serious effort to estimate the aboriginal population of California was made by Powers (1877, pp. 415-416), who arrived at a figure of 750,000 persons for the entire state. This effort was followed in 1905 by a more sophisticated attempt on the part of C. Hart Merriam, whose figure for the state was 260,000 persons. Merriam's figures were based on an estimate of the population of the mission strip, from Spanish data, and a gross extrapolation from that to the remainder of the state.

The first attempt at population estimates in detail and with the use of a variety of data was made by Kroeber (1925). The figure he got for the whole state was 133,000 persons, and he still used that figure, although with some reservations, as late as 1939 (see Kroeber, 1939, pp. 178-179).

The problem has recently been reopened by S. F. Cook. In 1943 he published an evaluation of Kroeber's estimates, based on essentially the same data, and the result was to increase the estimate by about 10 per cent. In the last two years Cook has begun a more intensive investigation, the results thus far being new estimates for the San Joaquin Valley (1955) and for the Northern California coast (1956). The upshot of these last papers has been to double Kroeber's estimates in the areas under consideration. The basis of the new estimate suggested by Cook is a more intensive use of historical sources and readier acceptance of the observations found there. He says, "Evidence of misstatement should be looked for and, if found, should be discounted or discredited. Otherwise it should be admitted at face value."

Kroeber has recognized the discrepancy between his estimates and those based on historical statements. He agrees that, if the extrapolations from the latter are accepted, the Merriam figure of 260,000 persons would probably be more accurate. The difficulty there is that "if we accept 260,000, one-quarter of all United States Indians were in California; and this seems unlikely enough. Shall we then assume that Mooney and practically all American anthropologists computed far too low?" (1939, p. 179). Kroeber leaves the question un-

answered but Cook's recent work carries the implication that the answer is decidedly affirmative.

The estimate in this paper of the population of the California Athabascans agrees with Cook's results, raising Kroeber's estimates; in fact, it goes even further than Cook in that direction. But the estimates here, with one exception, have been based on village counts by ethnographers rather than on historical data. The fact that the estimates run so high tends to bear out Cook's contention that the Kroeber estimates should be raised.

In basing population estimates on village counts there are several sources of error. Among these are assumptions regarding the number of persons per house and the number of houses per village. I believe that all the assumptions I have made in this regard have been conservative and therefore would not result in overestimates. The number of houses per village can sometimes be calculated rather closely from the number of house pits seen in the sites. That is, the houses can be calculated closely if the assumption is correct that four-fifths of the number of house pits in a site represents the number of simultaneously occupied houses. Admittedly, this figure is rather speculative, but the best opinions I have been able to get grant that it is probably conservative.

A more serious possible source of error concerns the question of which and how many sites were simultaneously occupied. When there is a complete village count, I have excluded from consideration known summer villages, villages not on main salmon streams, and other villages of doubtful status. Even so, the villages run about one per mile along the salmon streams and the possibility presents itself of movement from site to site, perhaps in response to varying fishing conditions. If this was the practice, then the population estimates might have to be reduced by half or even more. But there is no concrete evidence to support such a theory and it is a fact that the Goddard material gives quite complete information of this kind. Therefore, if the present calculation is an overestimate, it is not a very great one.

ESTIMATES BASED ON VILLAGE COUNTS

Wailaki (Eel and North Fork).--The present list gives a total of 67 villages among the Eel River and North Fork Wailaki. For purposes of calculating population I have excluded 13 of them (nos. 6, 9, 16, 31, 38, 40, 51, 57, 58, 59, 61, 66, 67) because they are summer camps in the hills, rock shelters used only briefly, or specialized fish-drying camps. These places do not seem to have been used simultaneously with the main villages. This list appears to be a substantially complete count from Horseshoe Bend south, but it is clear that neither Merriam nor Goddard visited the area north of this, and the village count suffers as a result. There are about 16 river-miles south of Horseshoe Bend, including both the main Eel and North Fork, and there are 49 main villages on this stretch, yielding an average of 3.1 per river-mile.

If we apply this figure to the 7 river-miles above Horseshoe Bend, we get 21.7 villages for that stretch rather than 5, as given by ethnographers. We may reduce this figure to 15, because this stretch of the river appears to offer a less desirable location (Goddard, 1923a, p. 107).

This calculation gives a total of 69 villages for the entire group, considerably less than Cook's total of 87 (Cook, 1956, p. 104). The reason for the difference is that Cook bases his estimate on Goddard's data, with the territory of the Wailaki extending above Kekawaka Creek, whereas I have taken Kekawaka Creek as the boundary.

The house count per site for this group must be extrapolated from Goddard's house-pit counts (1923a, pp. 103, 105) on the sites of two of the tribelets. This figure has been calculated by Cook, who takes Goddard's house-

pit count for 20 sites as "92 pits." For two localities, however, Goddard specifies a certain number plus "several" others. "If we allow 4 to represent 'several,' in each of these, then the total number of pits is 100 and the average per site or village is 5.0" (Cook, 1956, p. 104). Cook then reduces the figure by 20 per cent to allow for the probability that not all the house pits represent simultaneously occupied houses. His average number of houses per site is 4, which would not appear to be an overestimate. If we take this figure, we have a total of 276 houses for the Wailaki as against Cook's figure of 348, which was based on a greater area.

Cook takes 6 persons per house as the average density for the Wailaki. This figure is arrived at in several ways. The figure of 7.5 per house is well established for the Yurok and sets an upper limit for the Wailaki area. Goddard appears to have based his population estimate on a mean of 4.5 persons per house, almost certainly too low, and Cook compromised at 6 per house. This figure is supported by independent observation by Foster on the Round Valley Yuki (Cook, 1956, p. 107). The social organization and the habitat of the Yuki and Wailaki are nearly identical, so the population per house should be the same for both groups.

Accepting the figure of 6 persons per house, we get a total population of 1,656 for the Eel Wailaki and the North Fork Wailaki, as compared with Cook's figure of 2,315 and Goddard's figure of between one and two thousand.

Pitch Wailaki.--Goddard (1924) records 33 villages for the Pitch Wailaki. For two of the four tribelets, the count is virtually complete. For a third tribelet, the T'odannañkiyahañ, Goddard lists 6 villages and indicates that there were probably more (1924, p. 225). If, to allow for these possible villages, we add 5 to the total above, we get a total of 38 villages for three tribelets, or an average of 12.7 per tribelet. Although the fourth tribelet, the Tchokotkiyahañ, had a poorer habitat than the other three (Goddard, 1924, p. 222), we may assume that it had at least 8 villages, an estimate which is probably conservative in view of its extensive territory. We then get a total of 46 villages for the Pitch Wailaki.

Goddard counted house pits in 22 village sites and got an average of 5 per site. If we reduce this to 4 to account for unoccupied pits, we have an estimate of 184 houses for the Pitch Wailaki, as against 172 estimated by Cook. On the basis of 6 persons per house this gives a population of 1,104 as against 1,032 by Cook and between 650 and 800 by Goddard.

For all Wailaki combined we get a total of 2,760. Cook's figure is 3,350, Kroeber's is 1,000, and Goddard's is between 1,650 and 2,800--average of 2,225. The difference between the figure presented here and Cook's figure is mostly due to the adjustment I have made in the Wailaki boundary from the one used by Goddard.

Mattole.--The village lists of Merriam and Goddard give a total of 42 villages for the Mattole. I have excluded 5 of these from calculation of population estimates, one because it is a summer camp and four others because the frequency appears too great, in places along the coast, to make simultaneous occupation likely. This leaves a total of 37, very likely a conservative estimate since Goddard gives a number of names of villages not located and therefore not included in our calculations.

Cook estimates 6 houses per village for the Mattole on the basis of comparison with the Wiyot, Yurok, Tolowa, and Chilula. Goddard counted house pits for a few sites of the Mattole and they appear to average less than that. Not much reliance can be placed on this average, because the sample was very small. However, the number of

houses per site is probably not as high as among the Yurok. I have compromised with a figure of 5.4, the same as the estimate for the Sinkyone, the eastern neighbors of the Mattole.

Cook takes Kroeber's Yurok figure of 7.5 persons per house in calculating Mattole population. The social organization here is more nearly like that of the southern Athabascans, so I have used 6 per house. This figure gives a total population of 1,200 as against 840 figured by Cook for the Mattole exclusive of Bear River. The difference here is due to the fact that Goddard's village lists were not available to Cook. If they had been, he would have obtained a figure of 1,665, or nearly double his actual estimate.

Lolangkok Sinkyone.--For the Sinkyone on the northern part of the South Fork of the Eel we have a nearly complete village count. South of Larabee Creek Goddard and Merriam give a total of 46 villages. North of Larabee Creek on the main Eel the village count is incomplete, but Merriam gives 8 place names. That these place names represent village names is clear from the Merriam place names farther south which can be checked against Goddard's data. Together, these give a total of 54 villages but leave out the areas of Bull Creek and the upper Mattole River. We may assume 5 villages in each of these, surely a conservative estimate in view of the density of sites on Salmon Creek and South Fork. We thus have an estimate of 64 villages for the Northern Sinkyone.

Goddard counted house pits in 24 of the sites he recorded. They come to a total of 162 or 6.7 per village. If we reduce this by 20 per cent to account for unoccupied pits, we get an average of 5.4 houses per site or a total estimate of 346 houses among the Lolangkok Sinkyone. At 6 persons per house this estimate yields a total population of 2,076.

Hupa.--In the present village list there are 11 villages in Hoopa Valley and 16 above the valley on the main Trinity and on South Fork. Of these sixteen, three have been rejected as being in Chimariko territory (nos. 25, 26, 27). Cook has argued, reasonably, it appears, that the villages in Hoopa Valley average 11 houses, whereas the villages above the valley average 4.5 houses each. This average gives a total of 193 houses for the Hupa.

Cook has estimated that there is an average of 10 persons per house among the Hupa. This figure is arrived at by the following line of reasoning: according to a census taken in 1870 there was a total of 601 persons in 7 villages at that time, of which 232 were male and 359 were female. This count indicates a disproportionate number of males and Cook therefore calculates a population of twice the number of females, or 718, as a more normal population. Goddard's data give the number of houses for these villages as 92, a figure Cook takes as representing the situation in 1850. This combination yields an average of 7.8 persons per house. Since there had certainly been a decline in population between 1850 and 1870, Cook proposes that the figure for the density of population be raised to 10 persons per house.

But Goddard does not say what period his figures represent, so I propose to follow a line of reasoning similar to that of Cook but to use different figures. The number of houses for 6 villages in 1851 is reported by Gibbs (see map, pl. 9). We may compare these to the 1870 population estimates as given by Kroeber (1925a, p. 131). If we adjust for male attrition by calculating population as twice the female population, or 640 (see table 1), we get a density per house of 7.8, exactly the same figure that Cook gets.

TABLE 1

Hupa Population, 1870*

Village	Males	Females	Houses
Honsading	25	30	9
Miskut	32	49	6
Takimitlding	51	74	20
Tsewenalding	14	31	10
Medilding	75	100	28
Djishtangading	14	36	9
Total	211	320	82

*Kroeber, 1925a, p. 131.

That there was a decline in population between 1850 and 1870 is agreed by all authorities. This fact makes it very attractive to accept Cook's proposed density of 10 persons per house for the Hupa in aboriginal times. But there are two objections to this procedure. For one thing, the population figures for 1870 may be inaccurate. In the census of that year, there were reported 874 Indians of all tribes on the Hoopa Reservation (Kroeber, 1925a, p. 131). But in the same year another agent reported only 649 Indians on the reservation. This is a 25 per cent reduction, and if we reduce the population estimate of 640 by 25 per cent, we get 480 as the estimate for 1870 and a density per house of 5.9. If we raise the population of 480 to account for the 1850-1870 reduction, we are again close to the figure 7.5 persons per house. This calculation is presented merely to indicate that the figures are not reliable.

The other objection to accepting Cook's proposed figure for density is that the established figure for the Yurok is 7.5 persons per house. According to Cook, this figure was based on an underlying assumption that "the social family in the usual monogamous tribe included the father, mother, children, and occasional close relatives" (Cook, 1956, p. 99). As a matter of fact, Kroeber's estimate is not based on this assumption but is an empirical estimate based on population counts and house counts (Kroeber, 1925a, pp. 16-19), and the figure is accepted wholeheartedly by Cook for the Yurok (1956, p. 83). But what is certainly clear is that the social organization, house type, and environment of the Hupa was virtually the same as that of the Yurok and therefore the population density per house must have been the same. It is therefore clear that we must accept either 7.5 persons per house or 10 persons per house as the population density for both the Hupa and the Yurok, and the question becomes one of comparing the reliability of the figures given for the Yurok with those given for the Hupa. Yurok figures appear to be intrinsically more reliable and are also earlier and I have therefore taken 7.5 persons per house as the density.

The population for the Hupa then comes to 1,475 as compared to 2,000 estimated by Cook and to less than

1,000 estimated by Kroeber.

Whilkut.--The number of permanent villages among the Whilkut has been estimated here at 69. This estimate excludes known summer camps and other villages away from the main salmon streams. For the Chilula Whilkut there are 23 villages. For the Kloki Whilkut there are 16 villages, including several which are not shown on the map but which are listed by Merriam as being on upper Redwood Creek. Ten villages have been taken from the North Fork Whilkut. Twenty villages are taken from the Mad River Whilkut even though only 16 are given in the village lists. Wherever both Merriam and Goddard worked the same area the latter has recorded substantially more villages than the former. I have therefore added 4 to the village count to make up for the presumptive lack, thus bringing the total up to 69.

House-pit counts from the Chilula Whilkut are listed for six villages by Kroeber (1925a, p. 138) as 17, 7, 4, 2, 4, 8, or an average of 7 per village. Kroeber reduces this average by a third, on the basis of his estimates for the Yurok and Hupa, to arrive at a figure of 5 houses per village. Cook (1956, p. 84) says the reduction should be only about 10 per cent, calculated on the basis of Waterman's study of the Yurok (Waterman, 1920), and he compromises, making a reduction of a seventh to use 6 as an average number of houses per village.

The sample used by Kroeber and Cook is so small that an estimate based on it of the average number of house pits per village is liable to considerable error. If we look at the figures for some of the surrounding groups, we find an estimate of 11 houses per village for the Hupa in Hoopa Valley, 4.5 for the Hupa outside the valley, 4 for the Wailaki, 4.5 for the Wiyot (Cook, 1956, p. 102), and 5.4 for the Lolangkok Sinkyone. The Whilkut terrain and culture is certainly more nearly like the region outside Hoopa Valley than inside it, so we are scarcely justified in estimating more than 5 houses per village.

On this basis we get a total of 345 houses for the Whilkut. Both Kroeber and Cook use the Yurok figure of 7.5 persons per house in calculating the population of this group. This figure may well be too high, and perhaps it should be more nearly the same as the estimate for the southern groups, but since I have no concrete evidence to support such a contention, I have also used the Kroeber and Cook figure. This gives a total population of 2,588 for the Whilkut.

Cook's figures for the groups which were formerly listed under the Chilula and Whilkut were 800 and 1,300 making a total of 2,100. Kroeber's figures were 600 and 400 for a total of 1,000. The difference between Cook's figures and those given here is partly due to the fact that Cook took the group on the North Fork of the Mad to be Wiyot, whereas I have them as Whilkut. Also Cook made a reduction of a ninth in his Mad River estimates because of the poor environment there. I have not done this because the Mad River region does not seem to me noticeably poorer than that along Redwood Creek.

ESTIMATES BASED ON FISH RESOURCES

For the six tribes just discussed, the ethnographic notes at our disposal offer a means of estimating the population, but we have also another basis for our calculations. Fishery was the most important single factor in the California Athabascan economy, hence the fish

resources of the region undoubtedly exerted a marked influence on population size. Therefore, before attempting to estimate the population of the remaining groups, for which we have scanty ethnographic information, I would like to present some data on the fish resources of the region.

I have attempted to calculate the number of stream miles of fishing available and thereby to form some estimate of the economic basis of each of the groups. Most of my information comes from Mr. Almo J. Cordone, Junior Aquatic Biologist of the California Department of Fish and Game, who was kind enough to gather the relevant data from the records of that organization. I have not included material on the freshwater trout, which was apparently too scarce to be important, or on the lamprey eel, on which we do not have sufficient information, although it was of some importance, especially in the Eel River and its tributaries.

The available stream miles of fishing may seem insufficient material on which to base estimates of fish resources and unquestionably it would be desirable to have some idea of the fish population per mile of stream in order to estimate the food value of the resources available to the people. On the other hand, this point may not be as crucial as it seems, for apparently the fish population was not a governing factor in the number of fish taken by the Indians. According to Rostlund (1952, p. 17), the aboriginal fishermen of California did not even approach overfishing. If this is so, then there must have been fish left uncaught even in the smaller salmon streams and it would therefore seem that one stream was nearly as good as another, if it carried salmon at all. An exception would be the Trinity River and its tributaries, the only streams in the Athabaskan area with both spring and fall runs of salmon. In other streams there is only a fall run.

The lists that follow include data, not only for the six tribes previously discussed (Wailaki, Pitch Wailaki, Mattole, Lolangkok Sinkyone, Hupa, and Whilkut), but also for the Nongatl, Kato, Shelter Cove Sinkyone, Lassik, and Bear River groups. The fish species is recorded, when it is known; when our source gives no identification of species, however, the generic term is used.

Available Stream Miles for Fishing in Tribal Territory

KATO . . . 29 mi.

South Fork Eel R. -- 19 mi. Quantities of steelhead and silver salmon go up at least to Branscomb and King salmon go at least to Ten Mile Cr. (Dept. of Fish and Game).

Hollow Tree Cr. -- 5 mi. There was fishing on this stream (Gifford, 1939, p. 304). Fish not specified, probably steelhead and salmon.

Ten Mile Cr. -- 5 mi. This stream appears to be large enough for salmon and there were villages on it. Also the Fish and Game information for South Fork implies fish in the stream.

WAILAKI (Eel R. and North Fork Wailaki) . . . 23 mi.

Eel R. -- 16 mi. There are good runs of salmon as far up as Lake Pillsbury (Dept. of Fish and Game).

North Fork Eel -- 7 mi. Salmon go up North Fork farther than 7 mi. (see Pitch Wailaki).

PITCH WAILAKI . . . 15 mi.

North Fork Eel -- 12 mi. See below.

Casoose and Hulls creeks -- 3 mi. The Dept of Fish and Game states that salmon do not ascend North Fork above Asbill Cr. but Goddard's informant (see Pitch Wailaki Village no. 21) said that fish got up into Hulls and Casoose creeks, the mouths of which are above Asbill Cr. The Dept. of Fish and Game information may refer to a more recent situation.

LASSIK . . . 25 mi.

Eel R. -- 17 mi. (See Wailaki.)

Dobbyn Cr. -- 8 mi. There would seem to have been fish in Dobbyn Cr., since it is a fair-sized stream and there were many villages on it.

SHELTER COVE SINKYONE . . . 67 mi.

South Fork Eel -- 39 mi. There were a good many fish in South Fork as far up as Branscomb (Dept. of Fish and Game).

Redwood Cr. -- 5 mi. According to Merriam the region around Redwood Cr. was a center for the Shelter Cove Sinkyone; therefore there must have been fish in the creek.

Mattole R. -- 11 mi. There is a partial barrier to salmon at the community of Thorn but some fish get up even beyond this (Dept. of Fish and Game).

East Branch, South Fork Eel -- 4 mi. King salmon and silver salmon go up at least to Squaw Cr. (3 mi.) and steelhead go up at least to Rancheria Cr. (4.5 mi., according to the Dept. of Fish and Game).

Sea Coast -- 8 mi. The Shelter Cove Sinkyone have 16 mi. of sea coast. The only reliable data on the density of sea coast population in relation to the riverine population are given by Kroeber (1925a, p. 116). According to his figures, the seashore is about half as productive as the rivers and I have therefore halved the sea coast mileage in the calculation of available fishing miles.

LOLANGKOK SINKYONE . . . 63 mi.

Eel R. -- 27 mi. (See Wailaki.)

South Fork Eel R. -- 16 mi. (See Kato.)

Bull Cr. -- 6 mi. According to Merriam, there was a large settlement on Bull Cr. It could not have been supported without fish.

Salmon Cr. -- 5 mi. Goddard mentions fishing on at least part of this stream.

Mattole R. -- 10 mi. The fish go beyond this stretch at least as far as Thorn (Dept. of Fish and Game).

MATTOLE . . . 38.5 mi.

Mattole R. -- 25 mi. The fish go considerably beyond here in the Mattole.

North Fork Mattole -- 5 mi. North Fork is a sizable stream and there were several villages along it, so it probably had fish in it.

Sea Coast -- 8.5 mi. The Mattole have 17 mi. of sea coast. This has been halved in accordance with the principle stated above.

BEAR RIVER . . . 21 mi.

Bear R. -- 18 mi. This figure is rather arbitrary since the information is poor for this stream. It is known that silver salmon and steelhead are caught there and that there is a fall run of King salmon (Dept. of Fish and Game).

Sea Coast -- 3 mi. The Bear River group has 6 mi. of sea coast, halved for present purposes.

NONGATL . . . 85 mi.

Van Duzen R. -- 40 mi. Steelhead go up as far as Eaton Roughs (40 mi.). Silver salmon go up as far as Grizzly Cr. (21 mi.) and probably as far as Eaton Roughs. There are no data on King salmon but it is known that there is a fall run of them here. Information from Dept. of Fish and Game.

Eel R. -- 5 mi. All 5 mi. of the Eel in Nongatl territory should provide excellent fishing.

Larabee Cr. -- 20 mi. There is no direct information on this stream, but it is of considerable size and there were many villages at least 20 mi. up.
 Yager Cr. -- 20 mi. Again we have no direct information but there are many villages far up on this stream. Twenty miles of available fishing is probably a conservative estimate.
 Mad R. -- 0 mi. There is a long stretch of Mad R. in Nongatl territory but, according to the Dept. of Fish and Game, no fish go up so far.

WHILKUT . . . 70 mi.

Mad R. -- 27 mi. There is a 12-ft. falls at Bug Cr. which represents a nearly complete barrier to salmon. This means that there are salmon in nearly all the territory of the Mad R. Whilkut.
 North Fork Mad R. -- 8 mi. According to Merriam, there were fishing camps nearly this far up on North Fork.
 Redwood Cr. -- 35 mi. There is no direct information on this stream. I have attributed salmon to nearly its whole length because of the size of the stream and the large number of villages along its upper course.

HUPA . . . 39 mi.

Trinity R. -- 27 mi. There are fish in this whole stretch (Dept. of Fish and Game).
 South Fork Trinity -- 12 mi. There are known to be salmon in South Fork, and presumably they go up as far as the border of Hupa territory.

TABLE 2

Area, Fishing Miles, and Population Estimates

Tribe*	Pop. Estimate	Area	Ln Area	Fishing Miles	Ln Fishing Miles
Wailaki . . .	1,656	296	5.69	23	3.14
Pitch					
Wailaki. . .	1,104	182	5.20	15	2.71
Mattole . . .	1,200	170	5.14	38.5	3.65
Lolangkok					
Sinkyone . .	2,076	294	5.68	63	4.14
Hupa	1,475	424	6.05	39	3.66
Whilkut . . .	2,588	461	6.13	70	4.25
Average . . .	1,683		5.65		3.59

*Relatively complete village counts.

TABLE 3

Area and Fishing Miles

Tribe*	Area	Ln Area	Fishing Miles	Ln Fishing Miles
Kato	225	5.42	29	3.37
Bear River . . .	121	4.80	21	3.04
Lassik	389	5.96	25	3.22
Nongatl	855	6.75	85	4.44
Shelter Cove				
Sinkyone	350	5.86	67	4.20

*Incomplete village counts.

GROSS ESTIMATE

From the preceding data we have obtained population estimates for certain of the California Athabascan groups. If these estimates are judged reliable, it would be desirable to use them as a basis for estimating the population of the remaining groups. When a detailed analysis of the ecological or demographical factors involved is lacking, it is sometimes necessary to fall back on rather simplistic assumptions to attain the desired end. Cook goes rather far in this direction, using simply the average population density per square mile of the known groups to estimate the population of the unknown groups.

It appears to this writer that a somewhat more satisfactory method of estimation would be based on simple linear regression theory. It is a fact that pertinent relationships in population studies can often be expressed in terms of simple exponential functions or in linear combinations of logarithms. Thus we might propose a relationship such as the following:

$$\text{population} = a + b (\ln \text{area})$$

or

$$\text{population} = a + b (\ln \text{fishing miles})$$

where a and b are constants to be determined and ln is the logarithm to the base e.

Of course we would not expect these relationships to be precise. The lack of exactness might be due to the crudeness of the various measurements involved or

perhaps to the fact that population depends on more than one such factor. To account in some way for the uncertainty, we might make a further assumption and propose the following relationships:

$$\text{population} = a + b (\ln \text{area}) + X$$

$$\text{population} = a + b (\ln \text{fishing miles}) + X$$

where X has a normal probability distribution with mean = 0 and some unknown variance = σ^2 . X is then, roughly speaking, the error involved in each observation. That the error would be distributed normally is quite reasonable under the circumstances. In situations where the uncertainty of the observation is due to measurement error or to a multiplicity of factors, the distribution obtained often assumes a normal form or a form sufficiently normal so that the normal distribution can be used as an approximation.

One additional assumption is necessary. We must assume that the sample used is taken in a random fashion from the population to be studied. In the present investigation, the sample is definitely not taken at random, since we are using all groups for which we have population estimates based on ethnographic information. The question is, then, whether this selection of groups would result in some bias. For instance, the groups for which we have ethnographic data might be the most numerous in the first place and might thus cause us

overestimate the population of the remaining groups. On the whole, it would seem to me that there is no such bias and that the assumption of a random sample is therefore not misleading, at least in the direction of overestimation. If we now consider each group for which we have no ethnographic data, we can see whether the lack of such data is due to an initially small population or to mere luck.

- Kato: The reason Kato population is being estimated in gross rather than from ethnographic data is that Goddard (1909, p. 67) obtained a list of more than 50 villages which are not available for calculation.
- Bear River: Here the lack of information is due simply to the fact that it was not collected. There have been several informants living until recently (see Nomland, 1938).
- Lassik: There was at least one good informant living until recently (Essene, 1942), but Merriam worked with her only briefly. Goddard evidently recorded a number of villages from this group, but his notes are lost.
- Nongatl: Goddard seems to have worked with at least two informants from this group, but he spent a very brief time in the area and some of his notes may have been lost.
- Shelter Cove Sinkyone: Several informants from this group have been alive until recently (see Nomland, 1935). No one saw fit to collect the appropriate data.

It is obvious from this summary that the main reason for our lack of information on these groups is the loss of Goddard's notes. If those were at hand, we would probably have complete information on the Kato, the Lassik, and probably the Nongatl. The absence of data on the Bear River and Shelter Cove Sinkyone is due to the ethnographers' oversight. None of these groups, therefore, seem to have been selected because of their small aboriginal population. If the following estimates are in error because the sample is not a random one, then the error is probably one of underestimate rather than overestimate.

Given the foregoing assumptions, the least squares estimate of the normal regression line may be obtained with the following formula.

P: population. A: area. F: fishing miles.

The equations of the lines are:

$$P = a + b (\ln A)$$

$$P = a' + b' (\ln F)$$

the estimate of b is (Bennett and Franklin, 1954, p. 224)

$$\hat{b} = \frac{\Sigma(X_i - \bar{X})(Y_i - \bar{Y})}{\Sigma(X_i - \bar{X})^2}$$

and of a is

$$\hat{a} = \bar{Y} - \hat{b}\bar{X}$$

where $X_i = \ln A$ for each group with known population and $Y_i = P$ for each known group.

Similarly the estimate of b' is

$$\hat{b}' = \frac{\Sigma(X_i - \bar{X})(Y_i - \bar{Y})}{\Sigma(X_i - \bar{X})^2}$$

and of a' is

$$\hat{a}' = \bar{Y} - \hat{b}'\bar{X}$$

where $X_i = \ln F$ for each known group and $Y_i = P$ for each known group. These calculations are shown in table 4.

TABLE 4

Calculation of Regression Lines Shown in Figure 2

Fishing Miles				
	$(X_i - \bar{X})$	$(Y_i - \bar{Y})$	$(X_i - \bar{X})(Y_i - \bar{Y})$	$(X_i - \bar{X})^2$
	-.452	-.027	.012	.204
	-.882	-.579	.511	.778
	.058	-.483	-.028	.003
	.548	.393	.215	.300
	.068	-.208	-.014	.005
	.658	.905	.595	.433
Total	1.291	1.723
Area				
	$(X_i - \bar{X})$	$(Y_i - \bar{Y})$	$(X_i - \bar{X})(Y_i - \bar{Y})$	$(X_i - \bar{X})^2$
	.041	-.027	-.001	.002
	-.445	.579	-.258	.198
	-.514	-.483	.248	.264
	.034	.393	.013	.001
	.400	-.208	-.083	.160
	.484	.905	.438	.234
Total873	.859

The results are the following equations, which are shown, together with the points from which they were calculated, on figure 2.

$$P = 1.02 (\ln A) - 4.06$$

$$P = .75 (\ln F) - 1.00$$

Thus, given either the area of a group or the fishing miles of a group habitat, we may estimate its population. From the diagram in figure 2 it appears that the estimates based on area have greater dispersion than those based on fishing miles and are therefore less reliable. This fact can best be made precise by using the above assumptions to obtain the confidence intervals for each of the estimates. The confidence intervals for the area estimates are given by the following formula (Bennett and Franklin, 1954, p. 229).

$$1.02 X_0 - 4.06 \pm t_{\alpha} S_a \sqrt{\frac{1}{6} + \frac{(X_0 - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}}$$

where the symbols have the following values and meanings:

- X_0 : the log of the area of the group for which the population is being estimated.
- X_i : the log of the area of each of the groups for which the population is already known.
- \bar{X} : the average of the X_i .
- t_{α} : the upper α -point of the t-distribution (Bennett and Franklin, 1954, p. 696) where $1 - \alpha$ is the confidence coefficient.

$$S_a = \sqrt{\frac{1}{4} \Sigma(Y_i + 4.06 - 1.02X_i)^2}$$
 where Y_i is the

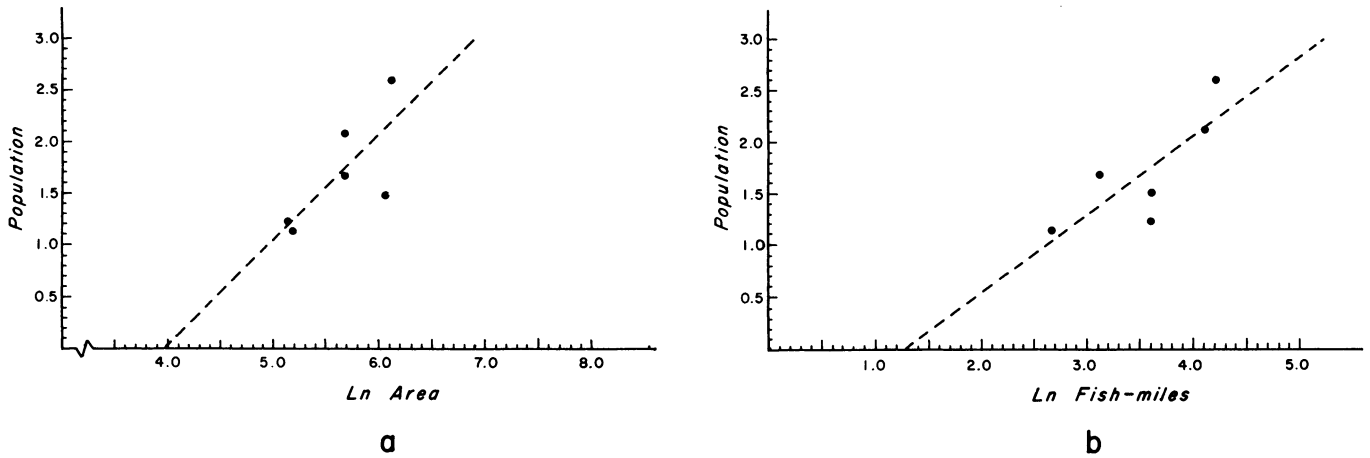


Fig. 2. Simple linear regression of population. a. Regression of population on ln area. b. Regression of population on ln fishing miles.

population of each of the groups for which population is known. This is the estimated standard deviation of population where the estimate is made from area.

$$\bar{X} = 5.56 \quad t_{.2} = 1.533$$

$$\Sigma(X_i - \bar{X})^2 = .859 \quad S_a = .3594$$

The calculations are shown in table 5. The comparable quantities in calculating the confidence intervals for fishing-mile estimates are

The confidence intervals for the fishing-mile estimates may be obtained in similar fashion -- simply substituting the words fishing mile for area and S_f for S_a .

$$\bar{X} = 3.70 \quad t_{.2} = 1.533$$

$$\Sigma(X_i - \bar{X})^2 = .932 \quad S_f = .394$$

For calculating the confidence intervals for area we have the following quantities:

The calculations are shown in table 6.

TABLE 5

Calculation of Confidence Intervals for Area

Tribe	X_o	$(X_o - \bar{X})$	$\frac{(X_o - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}$	$\sqrt{\frac{1}{6} + \frac{(X_o - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}}$	$t_{.2}S_a \sqrt{\frac{1}{6} + \frac{(X_o - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}}$
Kato	5.42	-.23	.0616	.4778	.263
Bear River	4.80	-.83	.8510	1.0088	.556
Lassik	5.96	.31	.1119	.5278	.291
Nongatl	6.75	1.10	1.4086	1.2551	.692
Shelter Cove					
Sinkyone	5.86	.21	.0513	.4669	.257

TABLE 6

Calculation of Fishing-Mile Estimates

Tribe	X_o	$(X_o - \bar{X})$	$\frac{(X_o - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}$	$\sqrt{\frac{1}{6} + \frac{(X_o - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}}$	$t_{.2}S_f \sqrt{\frac{1}{6} + \frac{(X_o - \bar{X})^2}{\Sigma(X_i - \bar{X})^2}}$
Kato	3.37	-.22	.0281	.4414	.267
Bear River	3.04	-.55	.1756	.5851	.353
Lassik	3.22	-.37	.0795	.4962	.300
Nongatl	4.44	.85	.4193	.7655	.462
Shelter Cove					
Sinkyone	4.20	.67	.2160	.6186	.374

The results of the calculations are given in table 7. The figures are point estimates with 80 per cent confidence intervals. This means that under the assumptions given earlier we expect that the tabled intervals will contain the true population 8 times out of 10. I have accepted the estimates derived from fishing miles because their confidence intervals are a bit shorter on the average.

TABLE 7

Population Estimates and Confidence Intervals

Tribe	Fishing-mile Estimate	Area Estimate
Kato	1,523 + 267	1,470 + 263
Bear River	1,276 + 353	840 + 556
Lassik	1,411 + 300	2,020 + 291
Nongatl	2,325 + 462	2,830 + 692
Shelter Cove Sinkyone. . .	2,145 + 374	1,920 + 257

The question of whether the fishing-mile estimates yield shorter confidence intervals than the area estimates brings up an entire range of problems pertaining to economy, settlement pattern, and the like. The obvious interpretation of the shorter confidence intervals would be that the economy of the people in question depended more on fish and fishing than on the general produce over the whole range of their territory. The question then becomes one of quantitative expression -- we would like to have some index of the extent of dependence on various factors in the economy. This might best be approached from the standpoint of analysis of covariance, where we would obtain the "components of variance." This technique is a combination of the methods of regression used in this paper and those of the analysis of variance. It would evidently yield sound indices of economic components, but it involves, for myself at least, certain problems of calculation and interpretation which will have to be resolved in the future.

Another problem of this kind turns on the question of

which factors are important in which area. Considering the State of California, for instance, we might want to know about such factors as deer population, water supply, the quantity of oak trees, etc. Any one of these factors or any combination of them might be important in a particular area; the problem of gathering the pertinent information then becomes crucial. Moreover, because the situation has changed since aboriginal times, we must combine modern information with available historic sources. S. F. Cook has shown that energetic and imaginative use of these sources yields very good results (e.g., Cook, 1955).

Finally, there is the problem of the assumptions we were required to make in order to obtain our population estimates. Although many of the assumptions in the present paper are difficult to assess, the two which I would like to discuss here were particularly unyielding -- the assumptions of the number of persons per house and the assumptions of the number of houses per village.

The question of how many persons there were per house has been dealt with extensively by both Kroeber and Cook. There is also a great deal of random information in the ethnographic and historical literature. I believe there are enough data now at hand to provide realistic limits within which we could work, at least for the State of California. This information should be assembled and put into concise and systematic form so that it would be available for use in each area. It would also be of interest in itself from the standpoint of social anthropology.

For the number of houses per village we have also a considerable body of information, but here we are faced with a slightly different problem. It often happens that we know, from ethnographic information or from archaeological reconnaissance, how many house pits there are in a village site but do not know how many of the houses which these pits represent were occupied simultaneously. In the present paper it has been assumed that four-fifths of the house pits represents the number of houses in the village occupied at any one time. This, however, is simply a guess, and one has no way of knowing how

TABLE 8

Population Estimates

Tribe	Area (sq. mi.)	Fishing Miles	Pop. Estimate	Area Density	Fishing-mile Density	Kroeber † Estimate	Cook ‡ Estimate
Kato *	225	29	1,523	6.77	52.5	500	1,100
Wailaki	296	23	1,656	5.59	72.0	600	2,315
Pitch Wailaki.	182	15	1,104	6.07	73.6	400	1,032
Lassik *	389	25	1,411	3.63	56.4	500	1,500
Shelter Cove Sinkyone* . . .	350	67	2,145	6.13	32.0	375	1,450
Lolangkok Sinkyone.	294	63	2,076	7.06	33.0	375	1,450
Mattole	170	38.5	1,200	7.06	31.2	350	840
Bear River *	121	21	1,276	10.55	60.8	150	360
Nongatl *	855	85	2,325	2.72	27.4	750	3,300
Whilkut	461	70	2,588	5.61	37.0	1,000	2,100
Hupa	424	39	1,475	3.48	37.8	1,000	2,000
Total.	3,767	475.5	18,779	4.99	39.5	6,000	17,447

*The population figures for these groups are estimated in the gross by the method indicated in the text.

†Kroeber, 1925a, p. 883. The breakdown has been changed somewhat to accommodate boundary changes; the total remains the same. The population density, according to Kroeber's figures, is 1.6 persons per sq. mi.

‡Cook, 1956. The breakdown has been changed somewhat to accommodate boundary changes; the total remains the same. The population density, according to Cook's figures, is 4.6 persons per sq. mi.

accurate a guess. The solution to this problem is simple but laborious. From each area of the State a random sample of villages with recorded house counts should be taken. Each of these village sites should then be visited and the house pits counted. A comparison of the two sets of figures would give us a perfectly adequate estimate, which could then be used subsequently over the entire area.

The corpus of information provided by the methods outlined above would be useful in two ways. First, it would clarify our definitions of the economic factors in the lives of hunter-gatherers. Functional hypotheses which postulate dependence of social factors on economy would be subject to objective, quantitative tests of their validity.

Second, the corpus of information would afford a suitable basis for inference from archaeological data. If we can determine what were the major economic factors in the lives of a prehistoric people, then we can make assertions about population, settlement pattern, and the like. Conversely, information about population and settlement pattern would imply certain facts about the economy. This technique has already been developed to some extent. For instance, Cook and Heizer, depending on assumptions derived from ethnographic data (Cook and Treganza, 1950; Heizer, 1953; Heizer and Baumhoff, 1956), have made inferences concerning village populations. These methods have such great possibilities for the conjunctive approach in archaeology that their use should be extended as much as possible.

APPENDIXES

APPENDIX I: THE TOLOWA

The Tolowa are an Athabascan group living on the coast from a short distance north of the mouth of the Klamath River to the Oregon-California boundary. Information on this group has not been included in the main body of the paper because the Tolowa are separated from the other California Athabascan groups and belong more properly with the Oregon Athabascans. It was thought, however, that Merriam's data on the Tolowa should be recorded and they have therefore been appended in this form. The following passages are taken verbatim from Merriam's notes.

HAH-WUN-KWUT NOTES

The following notes are from information given me by Sam Lopez and wife and Lopez' father at the Mouth of Smith River, Del Norte County, Sept. 16-17, 1923.

Name.--The tribe as a whole had no distinctive name for themselves except *Huss*, the word for people. But they had definite names for village areas. Those living at the mouth of Smith River call themselves *Hah'-wun-kwut*; those at *Burnt Ranch*, about three miles south of the mouth of Smith River, *Yahnk'-tah-kut*; those at *Crescent City Tah-ah'-ten*--and so on.

Location, boundaries, and neighbors.--The territory of the tribe as a whole extends from *Winchuk River (Um-sahng'-ten)* on the California-Oregon boundary south to *Wilson Creek (Tah-ges^{hl}-ten)* about eight miles north of the mouth of Klamath River.

The coast tribe immediately north (on the Oregon side of the line) is called *Cheet* or *Che'-te*. Their language differs materially from that of the *Hah'-wun-kwut*, though most of the words could be understood. Only a single woman survives.

The tribe on the south, from *Wilson Creek* to *Klamath River*, is called *Tah-che-ten-ne* and *Tet-le-mus (Polikla)*.

The tribe immediately east of the *Cheet* on the Oregon side of the California-Oregon boundary is called *Ka-Ka-sha*. Another name, *Choo-ne*, also was given but I am in doubt as to whether or not the same tribe was meant. The *Ka-ka-sha* live near *Waldo* on the north side of the *Siskiyou Mountains* and speak a language widely different from that of the *Hah'-wun-kwut*. They are said to be lighter in color than the coast Indians.

Dress and ornament.--The people used deer skin blankets called *Nah-hi-ne* tanned with the hair on, and also blankets of rabbit skin, called *Wa-gah hahs-nis-te*. Deer skins tanned with the hair on are called *Nah-ki-le*. The breech cloth formerly worn by the men was called *Rut-soo* and *tat-es-tat*. *Moccasins, Kus-ki-a*, of elk hide were worn by rich men.

The women wore a front apron called *Sahng*; and on dress occasions an ornamented cloak-like skirt (*Chah*) that extended all the way around and lapped over in front. They also wore basket hats, called *Ki'-e-traht'* and necklaces, the general term for which is *Ni-ta-kle-ah*. On occasions they wore ear pendants, *Bus-shra-mes-lah*, of elk or deer bone. Nose bones or shells, *Mish-mes-lah*, were sometimes worn; those of rich persons consisted

of one of the long *Dentalium* shells. The chin is tattooed with three narrow vertical lines called *Tah-ah rut^{hl}-tes*.

Houses.--The houses (*Munt*) were square and were built of planks or slabs hewn from redwood trees and stood up vertically, as in the case of those of the Klamath River Indians. The ceremonial houses are called *Nā'-stahs-mā'-ne*. They are square and have a ridge roof. During important dances the front side is removed. The sweat house is called *Shes'-klě* and is large enough to hold twenty people. It is square or rectangular, and the ground floor is excavated to a depth of about four feet. The roof is of hewn planks covered with earth.

Money.--The ordinary medium of exchange or "money" (*Trut*) consisted of shells of *Dentalium*, of which the valuable long ones are called *Tā'-tos*, the commoner short ones *Kle'-ah*. Clam shell disks or buttons are called *Nah'-set*.

Treatment of dead.--The dead are buried in a grave (*Chě'-slo*). The people assert that they never burned their dead. They say that a spirit or ghost, called *Nah-who'-tlan*, goes out of the body after death and becomes a ghost.

Ceremonial dances.--Dances are called *Nā'-stahs* or *Nesh-stahsh*. A puberty dance, *Chahs'-stah wā'-nish tahs*, was held for the girls. Other important dances are held. Some last 5 days; others last 10 days.

The ceremonial drums *Hah'-et-sah* differ radically from those of any other California Indians known to me. They are large cooking baskets about two feet in diameter. Only new baskets are used in order that they may stand the drumming.

Rattles called *Chah-pāt'-chah* are made of the small hoofs of deer. Cocoon rattles were not used.

Whistles, called *Tut'-tle-nik* are made of large quill feathers of birds, not of bone.

The stick game.--The stick game is a feature of the people, as in most California tribes. It consists of a number of slender sticks called *Not-trā'-le*, of which one, called *Chah-when'*, is marked. The counters are called *Chun'*; the man who keeps count, *Chun-ting*. A dressed buckskin is stretched tightly on the ground between the players, and when the game is called, the sticks are thrown down upon it.

Baskets.--The basketry is of twined weave called *Chet-too*. The big storehouse baskets, called *Hawsh-tan*, are closely woven and have a shallow saucer-shape lid. The large open work burden basket is called *Tus*, the large cooking basket, *Met-too'-sil^{ch}*, the small mush bowl *Hah'-tsah*, the large shallow meal tray *Mes-chet'-te-gah'*, the large open work shallow bowl *Tre-kwahs'-tuk*, the small open work plate or platter *Kah'-se*, the subglobular choke-mouth trinket basket *Net'-tah*, the milling basket *Ki'-e-sut*, the baby basket *Kah'-yu*, its shade *Ne'-whats-tah*, the women's basket hat *Ki'-e-traht'*. There is also a subglobular openwork basket called *I'-ă-loo'* with an arched handle for carrying on the arm.

The cooking bowls, mush baskets, and other small baskets are made of spruce roots, '*Hre'*, more or less covered with an overlay of bear grass (*Xerophyllum*,

called Too-tě^{chl}) and maiden hair fern (Adiantum) called Ke'-tsi-shah'-te, meaning Bluejay knees, because of the slender form and black color. The roots used in the carrying baskets, baby baskets, and other coarse baskets are of hazel, called 'Kun. The common black design in ordinary baskets consists of Spruce roots that have been buried in dark mud and are called Tah'-che-gut-kle-ah. They are ordinarily used in connection with the bear grass (Xerophyllum).

Fragments of Hahwunkwut myths.--Skum, Coyote man, made the world.

When the sun dropped down the Coon caught it up and it was hot, and blackened the insides of his hands.

When the world first floated there was just one big white Redwood tree called Kus-choo'-ke. A big Eagle was sitting on the tree and was king of the world.

The Falcon (Tah'-tes) won the battle for the people.

Hahwunkwut foods.--A large variety of foods are eaten: meat (Chā'-sun) of elk and deer, both fresh and dried, salmon and other fish, fresh and dried, marrow, tallow, salmon eggs (usually smoke-dried), clams of several kinds, mussels, fish milt both dried and fresh, acorn mush and bread, and a number of roots, berries, and other parts of plants. Among the food berries are strawberries, blackberries, salmonberries, huckleberries, salal berries, elder berries and manzanita berries.

Elder berries are mixed with blackberries and steamed in the ground oven; manzanita berries are mashed and mixed with smoke-dried salmon eggs.

Two kinds of kelp are eaten.

Root masses of the brake fern (Pteris aquilina, called Tah'-sohn-ki) are cooked in the ground oven. They are said to be like milk and have a fine flavor.

Salt is not used.

Wild tobacco is called Yahn-sě^{ch} yah-we and Sě^{ch}-yu. The pipe is straight and is called A-chah.

Hahwunkwut plant notes.--The Tree Maple (Acer macrophyllum) is called Chā'-she. Its inner bark is used for the ordinary everyday dress for women.

The Tanbark Oak is the dominant species in the northwest coast region and its acorns (Sohng'-cheng) are largely eaten by the people. Acorn meal before leaching is called Rut-ta-gaht. If it is allowed to become mouldy, the bitter taste disappears so that it does not have to be leached. Acorn bread cooked on hot ashes is called Ses^{hl}-te. The ordinary mush is called Ma-guts-kush.

Hahwunkwut animal notes.--The Bobcat (Lynx rufus) is called Ne'-ti-us ah'-nā. Its name is never mentioned in the presence of a baby. If the mother sees one before the baby is born, the baby will have fits and die.

The falcon or Duck Hawk (Tah'-tes) was a high personage among the First People. He won the first battle for the Indians, standing on the first Redwood Tree.

The California Condor (Tā-long-yi'-chah) is so big and powerful that he can lift a whale. His name shows this as it is from the name of the whale (Tā'-lah) and means "whale lifter."

The Dove (Sroo'-e-gun'-sah) cries for his grandmother, especially in the spring of the year.

The Purple Finch is called Klah'-nis-me'-tit-le, meaning "many brothers," because the birds go together in small flocks.

The Night Heron (Nah-gah' che yahs'-se) is known as the "sickness bird."

Hahwunkwut pits for catching elk and deer.--The Smith River Hah-wun-kwut used to catch elk and deer in pits, called Song'-kit, dug in the ground along the runways. These pits differ materially from those of the Pit

River Indians, being much shallower. No effort was made to make them deep enough to prevent the captured animals from jumping out, but an ingenious device was used to prevent them from jumping. The pits were only a little deeper than the length of the legs of the elk, but poles were placed across the top so that when the animal fell through, the body would rest on the poles so his feet could not touch the ground. This of course prevented him from jumping out.

When "set," the pits were lightly covered with slender sticks and branches and leaves, to resemble the surrounding ground, but the cover was so frail that an animal the size of a deer would at once break through.

Smelt fishery.--At Ocean Shore, Smith River, Calif., July 21, 1934. Vast numbers of smelt, a small surf fish, are caught in nets by the Hahwunkwut Indians. During a "run" at high tide flocks of sea gulls hover over the incoming fish, thus making their approach known. The Indians catch them with nets. After a preliminary drying on a circular mat of brush called the nest, the smelt are transferred to the fish bed, a long flat rectangular and slightly elevated area built up of sand and capped with a layer of small smooth stones. On this they are left till thoroughly dry.

Massacres of Huss Indians by the whites.--There were three notable killings by the whites.

The first killing took place at Burnt Ranch, three miles south of the mouth of Smith River, at the rancheria called Yahnk-tah'-kut, a name perpetuated by the district school house name. Here a large number of Indians were caught during a ceremonial dance and ruthlessly slaughtered. The Indians say this was the first killing.

The second killing was at the rancheria of Ā'-choolik on the big lagoon known as Lake Earl about three miles north of Crescent City [cf. Drucker's etchlet in Drucker, 1937, map 3]. The Indians were engaged in gambling at the time.

The third killing was at the large village of Hah-wun-kwut [Xawun hwut, Drucker, 1937, map 3] at the mouth of Smith River.

At the time of the Indian troubles in northwestern California Chief Ki'-lis (named for Ki-o-lus the Willow tree) was chief of the Hah'-wun-kwut tribe.

Three young men of the tribe were active in resenting the aggressions of the whites and were said to have killed several of the early settlers. They were very clever and neither the settlers nor the soldiers were able to capture them. Finally the officer in charge of the troops at Fort Dick (a log fort on Smith River, about three miles from the present settlement called Smith River Corners) told Chief Ki'-lis that he would be hung by the soldiers unless he captured the three young men in question.

It happened that the chief had two wives, who were sisters of the three young men. The chief was in great trouble and called a meeting of his head men. They said that if the people would contribute enough blood money (which consists of the long Dentalium shells) they could pay the two sisters the price necessary to atone for the killing in accordance with the law of the tribe. The people agreed to this and raised the necessary money. The nearest male relatives of the young men were chosen to do the killing, but the young men could not be found.

One day when one of the chief's wives was getting mussels near the mouth of Smith River one the young men appeared and told her that he and his brothers were hungry and wanted food. She designated a place on the point of a nearby ridge where she said she would take food, and it was agreed that the three brothers would come to get it in the late afternoon or early evening. She

then went home and told her husband, Chief Ki-lis, who in turn notified the nearest relatives of the young men; they went and concealed themselves near the spot. When the young men came and were looking for the food their relatives fell upon them and killed them. They were buried in the same place and the graves may be seen there to this day.

The officer in charge of the troops was greatly pleased. He and his soldiers arranged "a big time," giving the Indians plenty to eat and also some blankets. This ended the "Indian war" in that region.

There is a small island called Stun-tahs ahn-kot (50 acres or more in extent) in the lower part of Smith River, half or three-quarters of a mile from its mouth. On some of the early maps it bears the name Ta'-les after the chief. This island the officer gave to the Indians in

the name of the Government, telling them it would always be theirs, and gave the chief a paper stating that it was given in return for killing the three outlaw boys. Some-time afterward this paper was burned.

After the Indians had been driven to the Hoopa Reservation and had come back, they were not allowed to go to their former rancheria Hah'-wun-kwut, but were told to go to this island. Later the whites claimed the island and did not let the Indians have it.

The present Indian settlement, a mile or two north of the mouth of Smith River, was purchased for the Indians in or about 1908 by Agent Kelsey of San Jose, and paid for by the Indian Office from a part of an appropriation made by Congress for homeless California Indians. It is occupied at present (1923) by ten or a dozen families.

APPENDIX II: NOTES ON UPPER EEL RIVER INDIANS

By

A. L. Kroeber

YUKI "TRIBES"

The following data were got from Eben Tillotson at Hulls Valley, north of Round Valley, on July 12, 1938.

A. Eben said he was a Wi-t'u-knó'm Yuki. This was a "tribe" speaking a uniform dialect, having uniform customs, but embracing several "tribelets." Their general territory was along main (or middle) Eel R. where this runs from E to W, on both sides of it, and S of Round V. They also owned Oklá-č and Púnki-nipi-ť ("wormwood hole"), Poonkiny. The subdivisions or tribelets were:

1. Uši-člAlhótno'm ("crayfish-creek-large-people") on Salt Cr., S of Middle Eel.
2. Olkátno'm, at Henley or Hop ranch in S part of Round V., where the road enters the flat of the valley. They owned S to the Middle Eel and down it to Dos Rios confluence.
3. Alniuk'í-no'm, at W edge of Round V.
4. Ontítno'm, E of Henley ranch in Round V.; also Eden V. to S.

B. The following were not grouped together by the informant, but agree in having a southerly range:

5. LAlkú-tno'm, around Outlet Cr.
6. Tí'tAmno'm, eastward, across (S of Middle) Eel R., toward Sanhedrin Mt., W of the ridge which runs W of Gravelly V. Mountain people, without villages of size. Dixie Duncan was half of this group.
7. Ki-čilú-kam is Gravelly V. The Huchnom roamed in that.

C. East of Hull's V., extending nearly to Hammerhorn Mt., but this was Nomlaki.

8. ŠipimA'lnó'm, on a creek running from W into (S-flowing) Eel R.
9. I'mptí-tAmno'm, at an opening in the range--i'mp is a gap. They were across the Eel, on its E side.
10. Pi-lílnó'm, beyond (farther E or SE?), at Kumpí-ť, "salt hole," where salt was got,

also at Snow Mt. These were Yuki, but "talked something like" Nomlaki Wintun (who adjoined them, across the main Coast Range watershed). Their language was about as different from Yuki as was Huchnom. They were "half Stony Creek" (along which lived Salt Pomo, then Hill Patwin, then Nomlaki).

11. U-k'í-čno'm (added later by informant), in Williams V., "E" of Hull's V.
12. A Yuki group at Twin Rock Cr.--Eben had forgotten their name.

D. The real Yuki, centering in Round V., and coming N into the foothills only about as far as Ebley's Flat. To the N were the Onaino'm, Pitch Indians, Athabascans, who owned Hull V. ("here") and adjoined the ŠipimAlno'm (no. 8).

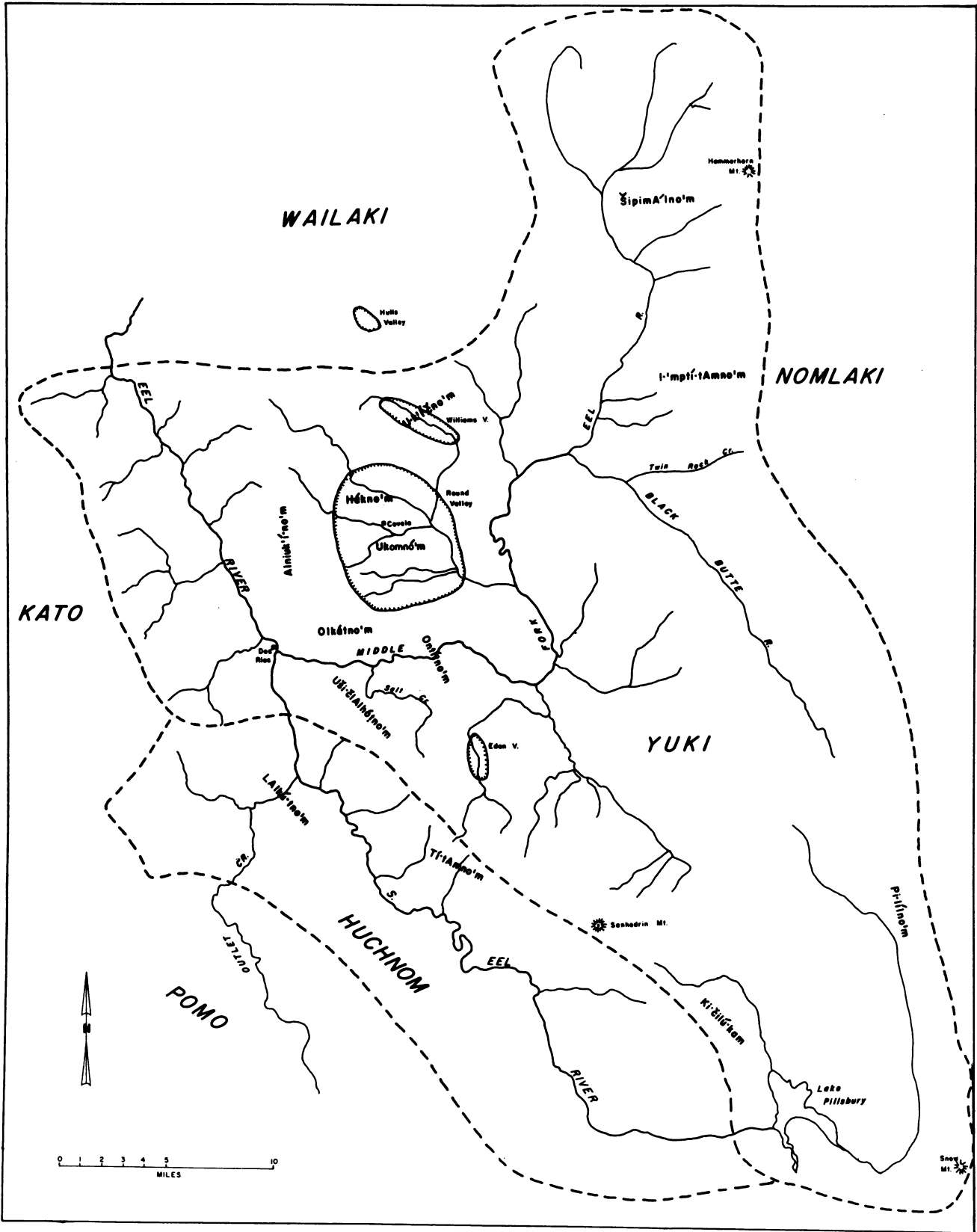
13. Háknó'm, in Round V., around Agency, in the N side of the valley.
14. Ukomnó'm, in middle of the valley. They did not own up into the mountains.
15. At TotimAl, W of Covelo, were a people whose name Eben had forgotten.
16. At NW end of Round V., another group whose name he could not recall.

It will be seen that the informant's knowledge was fullest for the part of Yuki territory S of Round V.

He thought that all the groups mentioned made the Taikomol and Hulk'ilAl initiations and performances.

Orthography Used

A	a mid-raised a, nasalized
ť	retroflex or palatal t
š	sh
č	ch
k' etc.	glottalized
.	long
ť	surd l, Athabaskan only
ŋ	ng Athabaskan



Map 18. Yuki "Tribes" according to Eben Tillotson.

ATHABASCAN DATA

DATA FROM EBEN TILLOTSON

Onainó'm were the Pitch Indians, a people of the rugged mountains, adjoining the ŠipimA'ino'm Yuki, and with Hull's Valley in their range. They were "half Yuki and half Wailaki," and spoke both languages.

The TA'no'm were at Spy Rock on main Eel R. They were also half Yuki and half Wailaki and bilingual. [But other Yuki cite them as Yuki who also knew Wailaki.] TAno'm were: Nancy Dobie, Sally Duncan, and Tip.

These two groups did not make Taikomol or Hulk'ilAl rites [this agrees with Handbook] but, probably knew about them from having seen them performed.

Between the Pitch people and the TAno'm, in the Horse Ranch country, lived the Ko'il, the Wailaki (proper). Most of the survivors of these spoke Yuki also.

DATA FROM LUCY YOUNG

The following notes, mainly on Athabascans, were obtained at Round Valley on July 13, 1938. Lucy Young, the informant, was born on Eel River at Tseyešentel, opposite Alder Point. Though listed by the Government as a Wailaki, she is actually what ethnologists call Lassik. Her father was born 3 mi. from Alder Pt.; her mother, at Soldier Basin, 22 mi. NE. Her mother's first cousin was T'a-su's, known to the whites as Lassik, from his Wintun name Lasek. He was chief for Alder Pt., Soldier Basin, (upper) Mad River. Mary Major, informant's contemporary, is from Soldier Basin and of the same tribe.

The following were obtained as names of groups of people, though some of them may be place names.

Setelbai, "yellow rock," Alder Pt., etc.

Nalša, "eat each other," downstream, around Fort Seward.

Košo-yaŋ, "soaproot eaters," farther downstream and on Van Duzen R.

Tenaŋ-keya, Mad R. Indians.

Kentetka(ŋ), Kettenchow V., a flat with roots.

Seč(i)enden-keya, at Zenia.

Ka-snoł-keya, S of Zenia, called Kikawake in Hayfork [Wintun].

Tok'(a)-keya, South Fork of Eel Indians [Sinkyone].

Sayaŋ, "lamprey eel eaters," the Spy Rock Wailaki [the Ko'il of Tillotson].

Djeh-yaŋ, "pinenut eaters," the Pitch Wailaki, on North Fork Eel R.

[The outlook seems to have been chiefly downstream and inland.]

Non-Athabascans

Čiyinče, Yuki.

Baikihaŋ, Hayfork Wintu.

Yaŋ-keya, the Wintu from Weaverville to Redding; their own name was Poibos. The same name Yaŋ-keya was applied also to the Cottonwood Creek Wintun, whom the Lassik met at Yallobolly Mt. to trade salt. [Wintu and Wintun were treated as one language.]

Yitá·kena, people of lowest Eel R., the Wiyot.

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Abbreviations

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BAE-B	Bureau of American Ethnology, Bulletin
SI-MC	Smithsonian Institution, Miscellaneous Collections
UC	University of California Publications
-AR	Anthropological Records
-IA	Ibero-Americana
-PAAE	American Archaeology and Ethnology

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PLATES

EXPLANATION OF PLATES

PLATE 9

Map showing the lower Trinity River and locations of Hupa villages. The map was made by George Gibbs, a member of the expedition of Colonel Redick McKee in 1852. The village names shown are in the Yurok language.

PLATE 10

Views of Athabascan territory. a. View of Hoopa Valley looking north. Photo by P. E. Goddard, 1901, UCMA 15-2917. b. Big rock on Mad River at Big Bend "taken from village site" (UCMA catalogue). Big Bend is in the southern part of Mad River Whilkut territory. There is no record of the site referred to. Photo by P. E. Goddard, 1906, UCMA 15-3166. c. Fishing place on Van Duzen River between Bridgeville and Old Fort Baker. Nongatl informant Peter is shown on the rock. This spot is somewhere among the villages shown on map 7. Photo by P. E. Goddard, 1906, UCMA 15-3156. d. Rock on ridge of Snow Camp between Mad River and Redwood Creek. It is about halfway between Kloki Whilkut village no. 45 and Mad River Whilkut village no. 15 on map 17. Photo by P. E. Goddard, 1906, UCMA 15-3165. e. Rock on Eel River near Blocksburg in southern Nongatl territory. Photo by P. E. Goddard, 1906, UCMA 15-3201. f. Indian house at Blocksburg in southern Nongatl territory. Photo by P. E. Goddard, 1903, UCMA 15-3017.

PLATE 11

Views of Athabascan territory. a. Model house (right) and sweathouse made for Goddard by the Wailaki Captain Jim. Photo by P. E. Goddard, 1906, UCMA 15-3281. b. Eel River in Wailaki territory, looking from the west. The mouth of North Fork Eel River is shown in the lower right-hand corner. Photo by P. E. Goddard, 1906, UCMA 15-3264. c. Picture taken from the Blue Rock stage road to Cummings. This is the hinterland of the Eel River Wailaki west of the Eel River. Photo by P. E. Goddard, 1902, UCMA 15-3011. d. A view of Usal, the southernmost village of the Shelter Cove Sinkyone. Photo by P. E. Goddard, 1902, UCMA 15-2922. e. A village site near Laytonville in Kato territory. The village is not known. Photo by P. E. Goddard, 1906, UCMA 15-3146.

Names & Positions of the "Ho-pah" or
 Lower Trinity villages.
 - 99 houses -

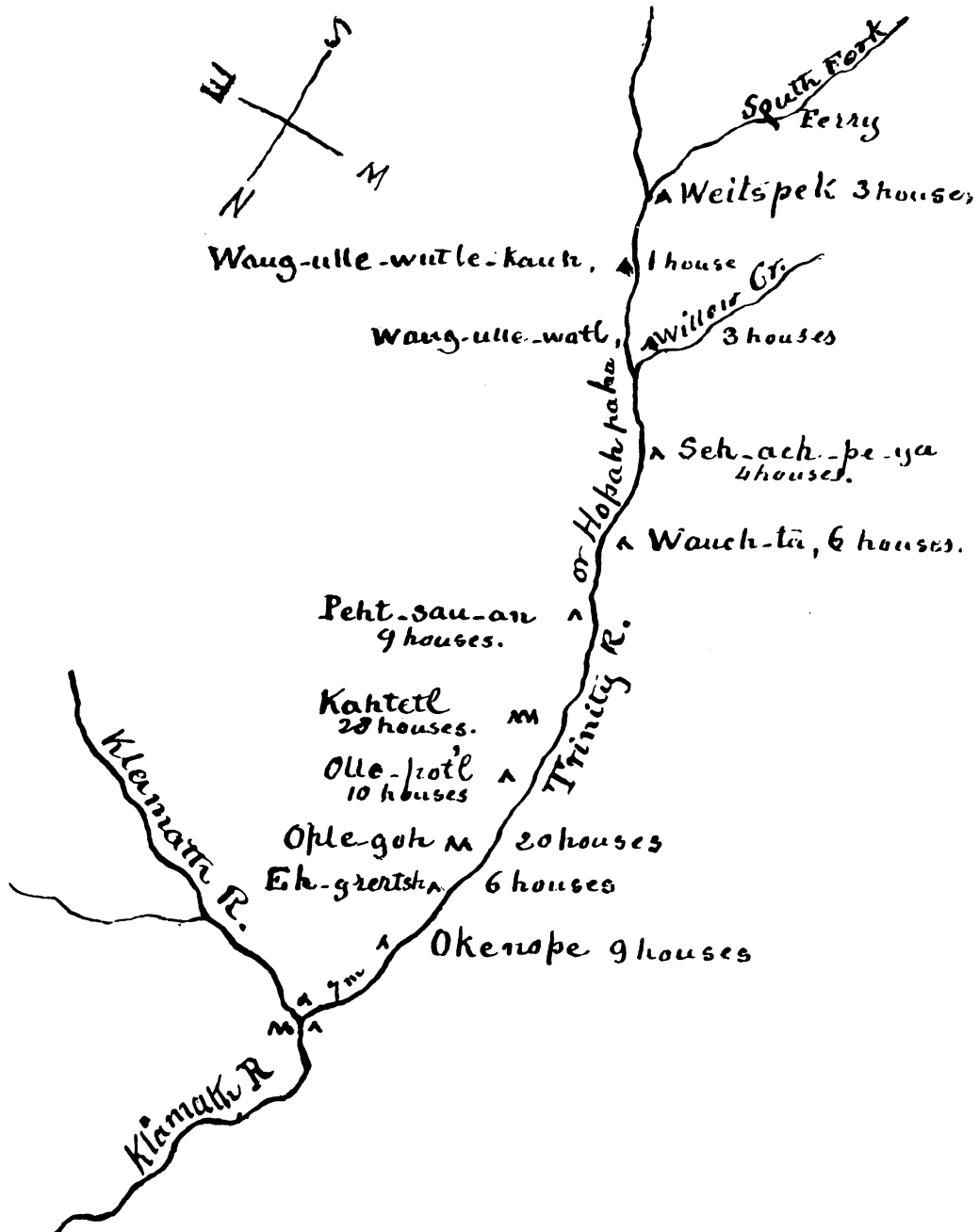
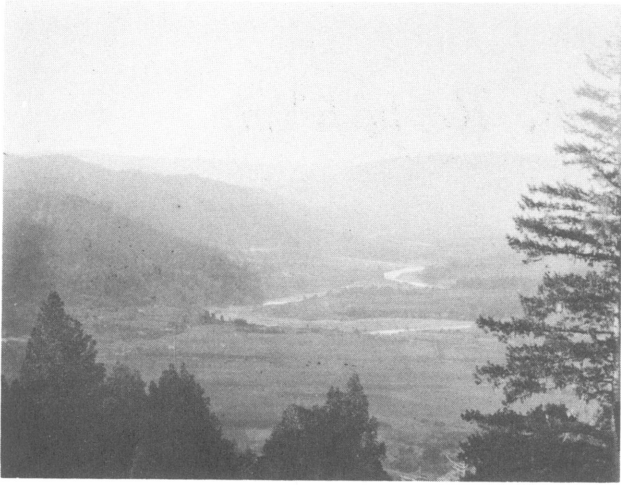
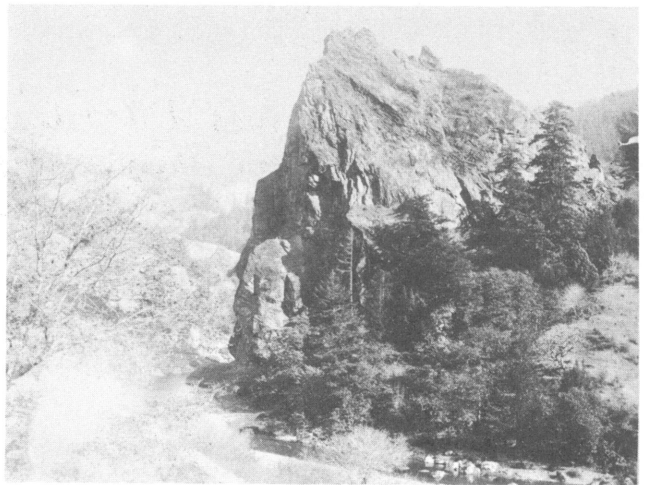


Plate 9. The lower Trinity River, showing the locations of Hupa villages.
 Map by George Gibbs, 1852.



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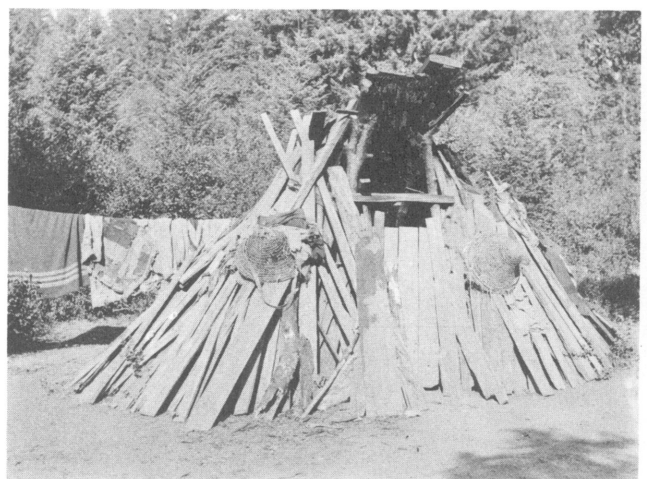
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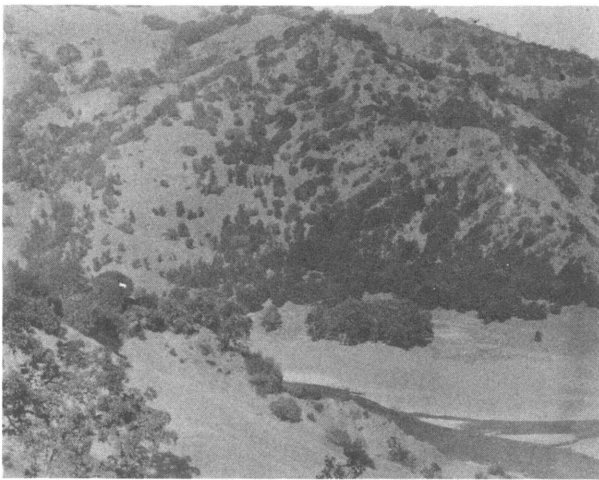


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Plate 10. Athabascan territory.



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Plate 11. Athabascan territory.